

Terminal Evaluation

Promotion and up-scaling of climate-resilient, resource efficient technologies in a Tropical Island Context, Seychelles

Implemented and executed by UNDP Seychelles and the Seychelles Energy Commission

GEF Project ID 5316 / UNDP Project ID 4913

This report presents the findings of a review of project documentation, interviews and site visits in the Seychelles for the evaluation of the project. Findings are listed according to the component of the evaluation they relate to (project design / formulation; Implementation; and Results), and are each based on information retrieved from documents, provided by one or more interviewees and/or through site visits. I am grateful for the assistance provided by UNDP Seychelles, the Seychelles Energy Commission, the project manager and the GOS_UNDP project coordination unit, representatives of the Government of the Seychelles and all stakeholders who shared their views and observations.

This terminal evaluation was conducted by Frank Klinckenberg
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Acronyms and Abbreviations

AFD	Agence Française de Développement
APR	Annual Project Review
AWP	Annual Work Plan
CDR	Combined Delivery Reports
CER	GEF CEO Endorsement Request
CO	UNDP Country Office
DBS	Development Bank of Seychelles
GEF	Global Environment Facility
GHG	Greenhouse Gas
GOS	Government of Seychelles
MCB	Mauritius Commercial Bank
MEECC	Ministry of Energy, Environment and Climate Change
MFTBE/MFTEP	Ministry of Finance, Trade and the Blue Economy (formerly: Ministry of Finance, Trade and Economic Planning)
MTR	Mid-Term Review
NGO	Non-Government Organization
PDF	Project Development Facility
PIF	Project Identification Form
PIMS	Project Information Management System (UNDP GEF)
PIR	Project Implementation Review
PCU	GOS-UNDP GEF Project Coordination Unit within the Ministry of Environment, Energy and Climate Change
ProDoc	UNDP Project Document
PUC	Public Utilities Corporation, Seychelles
REEM unit	Renewable Energy and Energy Management unit of the Seychelles Energy Commission (listed as Energy Efficiency and Renewable Energy unit in the ProDoc and CER)
RET	Resource efficient technologies
RSE	Resource efficient technologies
SEC	Seychelles Energy Commission
SBS	Seychelles Bureau of Standards
SEEREP	Seychelles Energy Efficiency and Renewable Energy Programme
SIT	Seychelles Institute of Technology
SMART	Specific; Measurable; Achievable; Realistic; and Time-bound indicators
S4S	Sustainability for Seychelles
TE	Terminal Evaluation
UNDP	United Nations Development Programme

1. Executive Summary

Project evaluations are based on the assumption that an agreed project document presents a reasonably accurate and comprehensive strategy and outline for the project and that it includes targets which are reasonable and SMART and appropriate for the development context of the country. Unfortunately, the project document for this project fell short in several important aspects (see section 1.4 for a further summary of this, and section 4.1 for a detailed discussion). As a result, this terminal evaluation worked with the UNDP country office and the project team to re-establish a baseline for the project and targets for its core objectives (which had not been defined), and these have been used to assess the project's impact and progress towards targets. Further, this terminal evaluation was conducted before operational closure of the project and some activities were ongoing. This included some crucial regulatory work which the project had then just started, results of which were not yet available and not expected to be finished before the end of the project period. These activities could therefore only very partially be included in the terminal evaluation. The reader is advised to keep in mind that there may have been changes in the last two months of the project's implementation that could not be captured in this report.

1.1. Project Summary Table

The following table provides key data about the project "Promotion and up-scaling of climate-resilient, resource efficient technologies in a Tropical Island Context".

Project Title:	Promotion and up-scaling of climate-resilient, resource efficient technologies in a Tropical Island Context			
GEF Project ID:	5316		<i>at endorsement (Million US\$)</i>	<i>at completion (Million US\$)</i>
UNDP Project ID:	PIMS 4913	GEF financing:	1.77	1.62
Country:	Seychelles	IA/EA own:	0.08	Unknown
Region:	Africa	Government:	9.73	Unknown
Focal Area:	CCM	Other:	0.15	Unknown
FA Objectives, (OP/SP):	CC-SP1	Total co-financing:	10.26	Unknown
Executing Agency:	Seychelles Energy Commission	Total Project Cost:	12.03	Unknown
Other Partners involved:	Ministry of Environment and Energy, Ministry of Finance, Trade & Economic Planning, Public Utilities Corporation, Development Bank of Seychelles	ProDoc Signature (date project began):		13 June 2014
		(Operational) Closing Date:	Proposed: 30 June 2018	Actual: 30 June 2019 (assumed – this TE is conducted before operational closure of the project)

Co-financing levels at completion have not been established due to missing and unreliable information about the amounts actually provided by stakeholders, including Government. UNDP also has not provided its delivered amount of co-financing (nor is it tracked in its CDR reports).

1.2. Project Description (brief)

The five-year project (originally four years, extended by one year to account for delays in the first year of implementation) has been designed with an overall project objective to “significantly reduce the rate of electricity consumption and water usage in Seychelles among underserved communities in the residential sector”.

The project focuses on improving policy, regulatory and financial framework for resource efficient technologies; awareness raising and education; training for resource efficient technologies (RET) market development; and implementing financial mechanism to support adoption of resource efficient technologies.

The project has four components and related outcomes as described below:

- Component 1: Improved policy, institutional, legal / regulatory and financial framework for resource efficient technologies
 - Outcome 1: Comprehensive and strengthened policy and legal frameworks adopted to promote residential resource efficient appliances
- Component 2: Awareness- raising and educational campaign on resource efficient appliances
 - Outcome 2.1: Enhanced national awareness of the benefits of resource efficient appliances and verified behaviour change across target groups regarding reduced energy and water use
 - Outcome 2.2: Consumers of RSE appliances aware of goals and conditions of the financing schemes for RSE technologies and of financing options available through these programs
- Component 3: Training schemes to support market development and maintenance of resource efficient technologies
 - Outcome 3.1: Platforms established for training of technicians in the installation, operation and maintenance of residential resource efficient technologies
 - Outcome 3.2: Capacity of key stakeholders improved to monitor and enforce the Minimum Energy Performance Standards (MEPS) and new energy labelling scheme
- Component 4: Financing mechanisms to support adoption of resource efficient technologies in the Seychelles
 - Outcome 4.1: Regulations in place (linked to financing schemes) for safe disposal on non-EE residential appliances
 - Outcome 4.2: Underserved consumers accessing specially designated financial products for purchase of resource efficient appliances

1.3. Evaluation Rating Table

Several parts of the project have been rated for this evaluation, in accordance with GEF and UNDP evaluation guidelines. These ratings are summarised here, and are substantiated in the sections of the report discussing the various rated aspects. The rating for overall project results factors in all individually rated elements.

Rating project performance		
Criteria	Comments	Ratings
Monitoring and Evaluation:		
Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)		
Overall quality of M&E	(rate 6 pt. scale)	Unsatisfactory (U)
M&E design at project start up	(rate 6 pt. scale)	Unsatisfactory (U)
M&E Plan Implementation	(rate 6 pt. scale)	Unsatisfactory (U)
IA & EA Execution:		
Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)		
Overall Quality of Project Implementation/ Execution	(rate 6 pt. scale)	Unsatisfactory (U)

Implementing Agency Execution	(rate 6 pt. scale)	Unsatisfactory (U)
Executing Agency Execution	(rate 6 pt. scale)	Unable to Assess
Outcomes: Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)		
Overall Quality of Project Outcomes	(rate 6 pt. scale)	Moderately Unsatisfactory (MU)
Relevance: relevant (R) or not relevant (NR)	(rate 2 pt. scale)	Relevant (R)
Effectiveness	(rate 6 pt. scale)	Unsatisfactory (U)
Efficiency	(rate 6 pt. scale)	Moderately unsatisfactory (MU)
Sustainability: Likely (L); Moderately Likely (ML); Moderately Unlikely (MU); Unlikely (U).		
Overall likelihood of risks to Sustainability	(rate 4 pt. scale)	Moderately Unlikely (MU)
Financial resources	(rate 4 pt. scale)	Moderately Likely (ML)
Socio-economic	(rate 4 pt. scale)	Moderately Unlikely (MU)
Institutional framework and governance	(rate 4 pt. scale)	Unlikely (U)
Environmental	(rate 4 pt. scale)	Likely (L)
Impact: Significant (S), Minimal (M), Negligible (N)		
Environmental Status Improvement	(rate 3 pt. scale)	Minimal (M)
Environmental Stress Reduction	(rate 3 pt. scale)	Minimal (M)
Progress towards stress/status change	(rate 3 pt. scale)	Negligible (N)
Overall Project results	(rate 6 pt. scale)	Unsatisfactory (U)

1.4. Summary of conclusions, recommendations and lessons

This project struggled from the beginning, in its design, in implementation and it struggled to produce results. Part of that is due to an overambitious project design, which tried to do too much with a too small budget and with a government without much experience in regulations. This also raises the question to what extent the Government of the Seychelles was ready for a complex regulatory project at the time of the project's design, and how ready it would be now. The project has given the Seychelles some useful and important steps forward, such as more attention for resource efficiency in the media, a retail sector more used to factoring in product efficiency and a government more used to supporting resource efficiency in its policies. On some core regulatory aspects, however, many gaps that were present before the project remain: a strategy to address product regulations in the Seychelles market, the capacity to independently design and develop a regulatory framework and technical requirements and the capacity to implement and enforce regulations. It is not yet clear if and when the Seychelles would be ready to handle such regulatory challenges.

A core barrier the project faced relates to subsidised electricity tariffs, which are harmful for the core tenet of the project's approach, which was to bring the market towards more efficient, more expensive appliances which pay for themselves through electricity savings. Tariff reforms had started before the project started, however, were abandoned around the time the project commenced. That would have required a strategic rethinking of the project, which unfortunately did not happen. In addition, the project's strategy was poorly developed, with a too large number of components, indicators that did not match outcome objectives, poor timing of activities and insufficient attention for the need to assess and find solutions fitting the Seychelles market before commencing on the implementation of regulation. For this Terminal Evaluation, a reconstructed set of SMART indicators and targets was created to have a relevant basis for assessing project results.

The project struggled to maintain focus during implementation, with a wide range of activities started, by a too small team, and many not continued or not finished. Technical regulations, training of stakeholders, awareness raising and a financial mechanism all have not delivered their intended results, for various reasons. Overall, this has resulted in a project that seriously underdelivered both on its (original and reconstructed) targets and by what might otherwise have been expected of a project of this size and duration. It was certainly not helpful, and very likely directly linked to the underperformance of the project, that the Government's Department of Public Administration decided to block the staffing pledged, and needed, for the Renewable energy and energy management unit at the Seychelles Energy Commission, the executing agency for the project.

Together, this has resulted in a situation in which the country still needs to build up capacity for the development and implementation of regulations, initiate the training of stakeholders in working with those regulations and direct financial instruments to make the market introduction of regulations easier. Those achievements, which would also have built experience within government agencies and market parties around efficiency regulations, were supposed to be delivered by the project. Now that these mechanisms are not in place, it is much harder for the Government of the Seychelles to reach the original objectives of the project in coming years.

The project's overall environmental impact adds up to approximately 3 – 5 kton CO₂ equivalent direct impact, over a 10-year impact period. This impact is negligible at a national scale, even for a small island state.

This evaluation has resulted in the following recommendations for UNDP, the Government of the Seychelles and the GEF, for this and future projects:

- 1) Project designs need better reviews, including checks on internal consistency and whether baseline information is complete and has been adequately addressed in the project's strategy. This should also include a check on the project's strategy and whether this is aligned with the experience and capacity of a country's government and market parties.
- 2) In complex markets, it is needed to carefully assess the policy approach. For the Seychelles, that would have needed to include a response to its situation as a small island nation, with limited government capacity, a small, relatively unorganised market and complicated trade relationships. Support of international expert groups might be needed to develop a suitable approach for such situations.
- 3) It might be useful to explore whether the Seychelles can develop a collaboration with an established standards and labels programme in a country it has trade relations with. That might make it easier to continue its approach without having to build up the extensive technical knowledge needed to do so independently.
- 4) Results of the project in communication and through its VAT mechanism need to be measured, through household surveys or similar means and through completion of the VAT exemption database.
- 5) Staff levels at the Renewable energy and energy management unit of the Seychelles Energy Commission urgently need to be brought up to planned levels, so that there is capacity to carry out the regulatory, communication and training activities planned, but not completed, under this project.
- 6) The Government should speedily introduce the necessary framework legislation for resource efficiency regulation, and then introduce those regulations as well as soon as a comprehensive strategy for their implementation has been established. The VAT mechanism can then be readjusted to smoothen the introduction of those MEPS.
- 7) It would be useful to explore extending the Lamps for LED exchange campaign, to more lamps and/or to other appliances also. Such approaches are beneficial in particular to low-income households, can offer specific national benefits when electricity tariffs are subsidised and may have a role in tariff restructuring.
- 8) Future policy or regulatory projects for resource efficiency are not recommended at this point, given that several more years may be needed to reach the objectives of this project and the experience gained with that would be needed for new projects.

2. Introduction

2.1. *Purpose of the evaluation*

The terminal evaluation is intended to assess the relevance, performance and success of the project. It will look at early signs of potential impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The terminal evaluation is also supposed to identify and document lessons learned and to make recommendations that might improve the design and implementation of other UNDP/GEF projects. Furthermore, the terminal evaluation is to make forward vision recommendations related to the sustainability of project outputs.

2.2. *Scope & Methodology*

The evaluation aimed at assessing the projects relevance, performance and success, early signs of impact and sustainability of results, identifying lessons learned, and making recommendations for the sustainability of project outputs and for future projects. For this, evaluation questions have been developed, based on the evaluation issues relevant for UNDP/GEF Final project evaluation. During the evaluation, fact-finding focuses on collecting data regarding these evaluation questions (next to general qualitative and contextual information about the project), and during the analysis the projects results are valued against project targets and their indicators, as well as evaluation questions. Information gathered through stakeholder interviews and site visits was combined with data obtained through the review of project documentation.

Aspects of the project have been rated according to the assessment of the project on achievement of targets and indicators, and performance on the various evaluation questions. Ratings, and the evaluation in general, have followed the UNDP-GEF Terminal Evaluation guideline “Project-level evaluation, Guidance for conducting terminal evaluations of UNDP-supported, GEF-financed projects”. In addition, GEF guidance has been used for the calculation of energy and CO₂ impacts.

The results achieved with the project have been assessed against the project documents (GEF PIF, GEF CEO Endorsement Request and UNDP project document), and – as it was concluded that the overall target and objective for this project were poorly defined – also against what could be expected from a project with the given size and duration in the context of a Small Island country. This latter assessment is not founded on a formal baseline, and as such is to be considered as indicative only. In the evaluators’ opinion, however, it is the only realistic assessment possible of the project’s achievement of its overall target, under the circumstances. It should be noted that this re-assessment of achievement of targets also takes into account new GEF guidance on the calculation of the CO₂ impacts of energy efficiency projects.

The evaluation included the following steps:

- The desk review of (all kinds of) project documentation, including the project document, implementation and progress reports, and technical outputs. This review has served to (a) generate an overview of the project, its context, proceedings, outputs and outcome; (b) develop a list of evaluation questions for the assessment of the project; and (c) to collect data regarding the evaluation issues and questions. A review of the UNDP project archive has been conducted to track implementation issues and management decisions during project execution, and to track financial aspects of the project. A list of reviewed documents is included in annex 6.4 (List of documents reviewed).
- Interviews with project officers and (representatives of) major stakeholders involved in the project. The interview schedule is included in annex 6.2 (List of persons interviewed). These interviews have served to (a) complete the overview of the project, in its context, and the relevance and (future) impact of the projects outcomes according to the involved organizations and stakeholders; (b) complete the fact finding regarding the evaluation issues and

indicators; and (c) assist in the assessment of the project by asking the involved organizations about their impression of the projects results on specific issues (indicators), where relevant. A questionnaire, developed during the desk review phase, was used for these interviews (semi-structured interviews) (see annex 5).

- The analysis of the collected information, and assessment of the project's relevance, performance, success and potential impact. Collected data have been analysed and structured according to the evaluation indicators. Where target values for evaluation indicators exist (in the project document) the observed results of the project have been compared to these target values. Where these target values did not exist, a status quo description has been given and an assessment of the projects results based on a review of the project documentation (and the implied assumptions in it), reference information from similar developments in other situations, stakeholders' opinions and the evaluators judgment. Ratings have been assigned based on this information. Together with the overview and contextual information, this formed the basis for this terminal evaluation report.

A draft terminal evaluation report has, via the UNDP Seychelles country office, been circulated with the project team and the main stakeholders of the project. Comments and additions have been included in this final version of the report.

2.3. *Structure of the evaluation report*

This report presents, after a brief overview of the project (section 3), an overview of findings in three major areas: Project design & formulation (section 4.1); Project Implementation (section 4.2); and Project results (section 4.3). The final section presents Conclusions, recommendations & Lessons learnt (section 5).

Annexes for this report include: the Strategic Results Framework (Project Logical Framework, section 6.1); a list of persons interviewed (section 6.2); a summary of shop visits (section 6.3); a list of documents reviewed (section 6.4); the evaluation consultant agreement form (section 6.5), and the terms of reference for the evaluation (section 6.6 – separate document).

3. Project description and development context

3.1. *Project start and duration*

The Republic of Seychelles is a small island nation with around 90,000 inhabitants. It is located approximately 1,000 km east of mainland Africa. After the 2007 – 2009 economic decline, Seychelles implemented economic reforms and managed to return to a stable economic growth. In 2015, Seychelles gained a World Bank status of a high-income country. Despite the newly gained high-income country status, there still is a significant number of households with limited financial capacity.

Seychelles is highly dependent on imported oil to meet its energy needs. The Project Document indicated that 90% of the primary energy supply in the Seychelles comes from imported fuel, mainly fuel oil for electricity generation. Although rich in rainfall, Seychelles collects only 2-3% of the rainfall water for utility distribution. During dry seasons, rainfall water supply is not sufficient to meet growing demand, and an electricity intensive desalination plant at Mahé needs to be put into operation to minimize water shortages.

Seychelles committed itself to implement energy efficiency and renewable energy in its 2010 Energy Policy 2010-2030, with a target of 15% share of renewables in 2030 energy demand, and an indicative target of 30% energy savings. Seychelles strive to strengthen the renewable energy target and have developed a roadmap for 100% share of renewables by 2035. The GOS established in 2009 the Seychelles Energy Commission and in 2010 approved the Seychelles Energy Commission Act that formalized the establishment of SEC and its responsibilities, including energy efficiency. The GOS lifted in 2010 the 15% import tax and 15% Goods and Services Tax (later changed to VAT) on eligible energy efficiency appliances and renewable energy technologies. In 2012, the GOS enacted the new Energy Act.

The country has launched uptake of renewable energy, namely wind energy and photovoltaics. A new 6 MW wind farm was constructed with funding from the Abu Dhabi Fund for Development in 2013. Another GOS-UNDP-GEF project was implemented between 2012 and 2016, that facilitated adoption of Grid-connected Roof top PV system Installation; It is through that project that the “net-metering” scheme was established as well as the PV rebate, a total of 1.8 MW of roof-top photovoltaics was recorded by the end of the project in 2016.

The project has been developed against a background of structural economic reforms and a growing concern about the dependence of the Seychelles on the importation of fossil fuels for energy production, and the impacts of that dependence on the national economy, energy security, and climate change risks. The project objective is to reduce the rate of electricity consumption and water usage in Seychelles across domestic households through improved awareness and financial incentives for the uptake of selected resource (i.e. energy and water) efficient residential technologies.

Expected outcomes of this project include increased market penetration of energy-efficient appliances and practices in the residential market. Indicators of success include estimated quantity of energy saved, tones of CO_{2eq} emissions avoided, and the adoption of energy efficiency standards and labels. Among the expected direct impacts of the project is improved efficiency of energy use in the residential sector. In addition to its direct impacts, the project will develop capacities, policies and consumer awareness that are expected to result in indirect effects attributed to structural changes in government energy policy, changes in availability of resource efficient products in the marketplace, and consumer awareness and behavior.

The project was first conceptualised in 2012 and submitted to the GEF on 21 February 2013. After one iteration of the project concept (PIF), it was resubmitted on 19 March 2013 and included in the GEF work programme. The UNDP project document (ProDoc) and CEO endorsement request (CER) were developed during 2013 and early 2014 and the CER was initially submitted on 3 April 2014. It was resubmitted on 21 April 2014 with relatively minor alterations and accepted by the GEF. It should be noted that the PIF was relatively long and detailed (32 pages), and that the CER

builds on this document and extends the project strategy as presented in the PIF in various places, however, does not provide a discussion of and justification for the totality of the project. The UNDP project document, however, does include this full discussion.

The project is a Medium-sized project, with a GEF budget of \$1.8M and initially (at PIF stage) \$ 8.8M in co-financing, later increased (at CER stage) to \$ 10.3M co-financing. The project duration remained at 4 years between PIF and CER stages, and executing partners remained the same as well. The project started formally on 13 June 2014 with a planned closing date of 13 June 2018. The planned closing date changed, without further justification, from 13 June 2018 to 30 June 2018 between two versions of the 2017 PIR report. On 31 October 2017, the UNDP regional technical adviser requested a one year, no cost extension of the project to UNDP head office – erroneously stating 30 June 2018 as the original closing date. This request seems to have been granted.

The project inception meeting was held on 24 November 2014, five months after the start of the project. The inception workshop report erroneously states a start of the project in October 2014, with the recruitment of a project manager. No activities seem to have taken place between June and October 2014, apart from the recruitment of the project manager. During the TE review of the project, only a draft report of the inception workshop was available; the final version of the report (without material changes) was later supplied. The report provides a – somewhat verbatim – overview of the discussion, however, no analysis of stakeholder comments or their implication for the project's design or implementation.

It can only be assumed (in the absence of further information) that the (then) project manager presented the project as designed and proposed to the GEF at this workshop. That project includes the following components (based on the UNDP ProDoc, resubmission, 21 April 2014):

Component 1 addresses an “improved policy, institutional, legal/regulatory and financial framework for resource efficient technologies” and includes six outputs. The first output (not in the original PIF) is completed baseline studies on the markets for resource efficient appliances in the residential and small and medium enterprise sectors, given the lack of data on market penetration and usage patterns for RSE appliances in the country. The baseline studies will take place in year 1 of the project and will be collected in a basic database; high priority information will be updated and collected in the database on an annualized basis. During the PPG phase the absence of comprehensive baseline database on resource efficient technology penetration was cited as a major constraint in accurately targeting and measuring the proposed interventions and hence the need for this output.

- Output 1.1: Baseline studies completed on residential and SME markets for Resource Efficient appliances
- Output 1.2: Energy Efficiency and Renewable Energy Unit within SEC operating with sufficient training and resources
- Output 1.3: Energy Efficiency Strategy and Energy Efficiency Implementation Plan approved and implemented
- Output 1.4: Approved and enforced policies and regulations on importation of residential Resource Efficient technologies
- Output 1.5: Established and effectively enforced Minimum Energy Performance Standards (MEPS) for residential Resource Efficient technologies covered under the project
- Output 1.6: Measuring, Reporting, and Verification (MRV) system in place for resource efficiency programs in Seychelles

Component 2 addresses “awareness-raising and educational campaign on resource efficient appliances” and has four outputs (compared to three during the PIF). The first output is the successful implementation of the approved action plan for the Seychelles Energy Education and Communication Strategy (SEECs), focused on educating various target groups on the benefits of EE appliances and the emerging market for such appliances in the country. In addition, GEF funds will be used to include a new component in the SEECs focused on domestic water usage reduction. The second output is to establish at least five demonstration projects where energy efficient appliances and water saving devices are on display and can be viewed by the public, and to organize an annual trade fair for EE appliances and water

saving devices to showcase these technologies. This activity was added as a result of extensive stakeholder consultations with consumers and energy stakeholders during the PPG phase that indicated that general knowledge of the MFTBE –funded Netrawatt study and the technologies supported under the 10 household test pilot (prominently mentioned in the PIF¹) was very low and that the majority of Seychellois citizens had never seen an EE appliance and that even retail stores and importers had little knowledge of such technologies. Each demonstration project site will be completely retrofitted with the 5 energy efficiency appliances targeted by this project, as well as the water saving devices (low-flow showerheads and toilets), and possibly rain water harvesting. An analysis will be done before and after the installation of this equipment to measure and showcase the savings achieved in electricity and water usage. Design of the demonstration projects (which will be funded by GEF) will build on the 10 household project implemented by Netrawatt in 2010 and an on-going project to improve energy and water efficiency at the Montagne Posee prison being implemented by Sustainability for Seychelles. In addition to the demonstration projects, the SEC and local businesses will also organize an annual trade fair for EE appliances and water saving devices to showcase these technologies.

- Output 2.1: Action Plan for implementing the Seychelles Energy Education and Communication Strategy (SEECs) developed and adopted, including component on reducing residential water use
- Output 2.2: Demonstration Projects and Trade Fair for residential energy efficient appliances and water saving devices
- Output 2.3: National energy label system for resource efficient appliances launched and operational across Seychelles
- Output 2.4: Strategy for promoting absorption technologies developed and approved

Component 3 encompasses “training schemes to support development of market for energy efficient appliances and water saving devices” and has three outputs. This component has remained mostly similar to that presented in the PIF but includes an additional output. The first output will be that importers and retailers of appliances have the market and technical knowledge necessary for procurement, marketing and servicing of RSE appliances, as well as the information necessary to participate in the financing schemes for RSE appliances being supported through the project. The information provided to importers and retailers will cover how to find reliable and competitively priced sources of energy efficient appliances and water saving devices that are practical to promote, comply with the MEPS, and that are most well-suited to the country given its unique location, limited land space, and warm climate. The second output will be an operating and certified vocational training program for persons who wish to be employed in the installation, repair and maintenance of energy efficient appliances and water saving devices, as well as training in disposal and recycling of old appliances, in particular in protocols for dealing with hazardous substances, such as ozone depleting substances. Finally, the third output (which has been added) will result in a trained group of officers of the Customs Division and Seychelles Revenue Commission who are able to inspect imports of RSE technologies and ensure that they comply with the MEPS and national labelling scheme, and that they are assessed (or exempted from) the appropriate taxes and duties.

- Output 3.1: Importers and retailers of appliances have market and technical knowledge necessary for procurement, marketing and servicing of resource efficient appliances and participation in financing schemes
- Output 3.2: Vocational training program on installation and maintenance of resource efficient appliances developed and established, with appropriate curriculum approved and operational
- Output 3.3: Customs and Revenue authorities trained to confirm that imported resource efficient appliances match documentation and are in compliance with regulations developed

Component 4 of the project consists of “financing mechanisms to support adoption of resource efficient technologies in the Seychelles” and includes three outputs. The first output will establish the policy framework for the recycling and disposal of non-resource efficient residential appliances, including creating the necessary guidelines, mechanisms and technical capacities, so that such appliances are automatically taken out of service after they have been replaced by EE appliances and are retired in a safe manner (this is a requirement of SEEREP). The second output will be that

¹ As part of that pilot program 10 representative households on Mahe Island received (free of charge): 1) installation of an energy efficient (class A) refrigerator; 2) water saving shower heads and an EE washing machine; 3) solar thermal warm water systems; 4) replacement of old bulbs with energy efficient bulbs; and 5) a rain water harvesting system

financial institutions and commercial banks have the technical capacities needed to enable implementation of the various financing schemes for RE technologies that are envisioned as part of this project. The third output will be to support the successful operationalization of these platforms to provide financial support for uptake of resource efficient technologies among underserved communities.

- Output 4.1: Policy framework – including rules, mechanisms and monitoring system – in place for recycling and disposal of non-resource efficient residential appliances in compliance with international norms
- Output 4.2: Capacity-building for financial institutions and commercial banks in the Seychelles on the effective implementation of financing schemes for RE technologies, including approved eligibility lists for products covered.
- Output 4.3: Key partnerships and platforms developed and operational providing financial support for uptake of resource efficient technologies among underserved communities.

By end of project at least 8,500 households or SMEs will have purchased or received one or more RSE technologies from at least one of the platforms mentioned (SEEREP alone is targeting 8,500 households).

At PIF stage, the project also listed output targets for the overall market uptake of efficient appliances:

- Direct investment in new resource efficient equipment of up to SCR5 225 million (17.8 million USD) repayable within 5 years from the Credit Risk Fund
- 13,300 MWh/yr of electricity and 1,225,000 m³/yr of water saved per year by end of project from appliances purchased under 6 financial schemes

These targets were removed at CER stage, with the given rationale (CER, Table 2) that “energy savings targets are now included in the section on GEBs (Global Environmental Benefits). Section Global Environmental Benefits lists the following targets for potential energy savings from adoption of EE appliances covered under SEEREP (CER, Table 3)

Electrical appliances	A. Number of households targeted under SEEREP	B. Normal electrical consumption kWh/Year	C. Electricity consumption with energy efficient appliances kWh/year	D. Reduction in electricity consumption kWh/year (B-C)	E. Potential Total Energy saved in kWh/year (A*D)
Lights	8,500	700.8	262.8	438	3,723,000
Washing machine 7kg with hot water	5,160	468	200	268	1,382,880
Water heater	2,127	970.9	0	970.9	2,065,104
Fridge/freezer 270 litres	8,500	650	350	300	2,550,000
Air-conditioning 9000 BTU	1,040	1,606	700	906	942,240
Total		4,395.7	1,512.8	2,882.9	10,663,224

Additionally, energy savings are expected from water savings, of 1,633,275 kWh/year. These values have been included in the project’s objective. The investment target, however, has not been introduced elsewhere in the project’s targets.

The project is, at the time of the terminal evaluation, ongoing and has now lasted almost 5 years. It is scheduled to be finished by 30 June 2019, at which point it would have lasted 5 years and 3 weeks – close enough to the extended duration of 5 years. Not all project activities are completed by the time of the TE, and it is yet unclear how some

activities will turn out. The project coordination unit, tasked with managing the project, mentioned that six ongoing project activities (related to regular project activities, not to project closure) will continue after project closure. Five of these are expected to finish during July 2019; the remaining activity by November 2019.

3.2. *Problems that the project sought to address*

The project concept note (PIF) states the problems that the project sought to address, as follows:

“Given the Seychelles’ overwhelming dependence on imported fuel and the associated energy security concerns – as well as its high vulnerability to the adverse effects of climate change, namely predicted water shortages – there is urgent nation-wide need to reduce the rate of electricity consumption and water usage, particularly in the residential sector (which accounts for 30% of all energy supply and which has received little investment in energy efficient measures to date).”

The PIF refers to an evaluation study entitled “*Resource Efficiency Program for the Residential Sector in Seychelles*” that was carried out in March 2012 and was completed in June 2012 by the IFC Resource Efficiency and Climate Advisory Team. That report also analysed data from the 10 households energy efficiency test pilots and revealed that the pilot showed some positive results. The baseline study showed that the largest consumption of electricity in each household came from three appliances: refrigerators; water heaters; and air conditioners. A post-implementation evaluation showed average monthly savings per participating household of 18% on electricity and 24% on water; maximum savings were estimated as high as 27%. The total investment per house (the technologies were provided free of charge) was SCR 33,760 (US\$2,600)² with an average SCR 5,135 in annual savings (US\$400) with a simple pay-back of 6.6 years. The 10 house pilot showed that savings from resource efficient technologies were possible and more importantly doable. The major drawbacks were that it was fully subsidized by the government; there was little local capacity to install and maintain the equipment; and the level of awareness by the consumers was shown to be very low.

The study spurred a discussion on the key conditions to induce domestic demand for resource efficient applications and a consensus has emerged that four key barriers need to be addressed to catalyse uptake of such applications as part of a broader suite of policy reforms:

- Barrier 1: Lack of an enabling policy framework for Residential resource efficient technologies
- Barrier 2: Financial Barriers
- Barrier 3: Information Barriers and Lack of Awareness
- Barrier 4: Vocational training and after-sales support

The project aimed to address these barriers with a mix of baseline and incremental activities.

3.3. *Immediate and development objectives of the project*

Neither the UNDP project document, the Project Identification Form (PIF) nor the CEO Endorsement request clearly state the immediate and development objectives of the project. These can be somewhat derived from the project document, however, which states, under the project objective:

“A market for energy efficient appliances is just beginning to develop in the Seychelles, based in large part on the rapidly rising cost of electricity for most consumers. However, this market is constrained in many ways, including: a lack of consumer awareness about EE appliances; extremely limited purchase options for EE appliances (apart from energy saving lights); the inability of consumers to get store credit for the purchase of high-value EE appliances (such as air conditioning units, refrigerators/freezers, and washing machines); and the absence of any standards or labelling schemes or requirements for EE appliances in the country. For this reason, the proposed GEF project will provide

² Calculated at the exchange rate of 1 USD = 13 Seychelles Rupees (SCR), valid at the time of the PIF. At the date of this report, the UN official exchange rate is 1 USD = 13.5955 Seychelles Rupees (SCR).

technical assistance for regulatory, standards setting, educational, data collection and training needs to help set the stage for the growth of the energy efficient appliances market in the country

In addition, the project will provide critical catalytic support to several programs designed to provide concessionary financing for energy efficient appliances and water saving devices in the Seychelles have been recently launched or will commence during this year. These programs include the recently established Seychelles Energy Efficiency and Renewable Energy Program (SEEREP), a financing scheme developed by the Seychelles Ministry of Finance, Trade and Investment (MoFTI) to partner with participating commercial banks to encourage the domestic sector to adopt energy efficient home appliances, photovoltaic solar panels, solar water heaters and other forms of renewable and energy efficient technology. In addition to the SEEREP scheme, the Development Bank of Seychelles (DBS) is establishing a credit facility to provide concessionary finance for the adoption of energy efficient technologies in the commercial sector, focused on Small and Medium Enterprises (SMEs). The Agence Française de Développement (AFD) is launching a green loan facility for energy efficient appliances.

Finally, the Public Utilities Corporation (PUC), with support from the European Investment Bank (EIB), is preparing to launch the Neptune Program, which will provide concessionary financing for the purchase of water saving devices. The proposed GEF project will play a critical facilitating role for all of these financing programs, through developing the necessary policy frameworks, providing capacity building for financial institutions, banks and other participants to enable their participation in the programs, and increasing public awareness about the programs and the opportunities and options for end users to purchase resource efficient technologies with concessionary financing."

It should be noted that these statements are more operationally worded than is generally recommended for the objective of a project, providing the project with little guidance for the adaptive management of its implementation towards overall developmental and project objectives.

3.4. Baseline Indicators established

The project document lists seven main indicators to monitor the impact of the project:

Impact to Be Monitored	Indicators	Verification Means
GHG Emissions from the Seychelles power sector	139,590 tons of reduced CO ₂ emissions from the power sector (compared to the project baseline)	Project's annual reports, GHG monitoring and verification reports
Reduced electricity usage among PUC customers in the Seychelles	12,296 MWh of electricity saved per year (or 184,443 MWh for appliance lifetime)	PUC data, Project final evaluation
Reduced water usage among PUC customers in the Seychelles	446,250 m ³ of water saved per year (or 6,693,750 m ³ for device lifetime)	PUC data, Project final evaluation
Reduced importation of non-energy efficient appliances	Restrictions (ban or limits) in place on imports of non-energy efficient appliances	Published regulations and amendments
National capacity to support market for energy efficient appliances	At least 25 technicians trained to install and maintain energy and water efficient technologies	No. of certificates issued from vocational training course
Old household appliances being retired in a safe manner	Disposal and recycling of non-EE residential appliances mandated in policy and institutional responsibilities and with active	Approved policy and action plan

	program managed by Landscape and Waste Management Agency	
Concessionary financing scheme for purchase of EE appliances by households	<p>8,500 household loans facilitated for purchase of energy efficient appliances through SEEREP</p> <p>11,000 households or SMEs have purchased or received RE technologies from at least one of the platforms mentioned (SEEREP, DBS, Neptune or AFD Green Loan Scheme – if operational)</p>	<p>Reporting by MoFTI and/or Central Bank of Seychelles</p> <p>Project and stakeholder reporting</p>

Some core indicators of the project are defined in operational terms (“technicians trained”, “disposal and recycling mandated”, “loans facilitated”) rather than in outcome terms, as should have been the case. This would tie the project to achieving activities, not reaching measurable results in the market and society. Several of these indicators are therefore not useful for monitoring the impact of the project.

Baselines for these indicators are all assumed to be zero (according to the project strategic results framework). This is remarkable, as it assumes that, in the absence of the project, not a single consumer would purchase an energy or water-efficient appliance and no technician would receive training in energy and/or water saving technologies, over several years. That assumption is not realistic, since global markets continually innovate and provide more efficient technologies which benefit also countries without a policy framework in place (such as the Seychelles).

The Project strategic framework / Logical framework mentions targets for CO₂ emission reduction from reduced energy demand.

Goals and objectives of the project as defined in the project strategic framework / logical framework are as follows:

Strategy	Indicators	Baseline (Year 0)	Target	Sources of Verification
<p><u>Project objective:</u> To significantly reduce the rate of electricity consumption and water usage in Seychelles among underserved communities in the residential sector</p>	<p>Amount of reduced CO₂ emissions from the power sector (compared to the project baseline)</p> <ul style="list-style-type: none"> • Direct emissions reductions • Cumulative total electricity saved (MWh) • Cumulative total water saved (m³) 	<ul style="list-style-type: none"> • 0 • 0 • 0 	<ul style="list-style-type: none"> • 139,590 tons CO₂eq • 12,296 MWh per year (or 184,447 MWh for appliance lifetimes) • 446,250 m³ per year (or 6,693,750 m³ for device lifetime) - 20,060 tons of CO₂eq over their lifetime. 	<p>Project’s annual reports, GHG monitoring and verification reports</p> <p>PUC data, MRV system, Project final evaluation</p> <p>PUC data, project M&E reports</p>

Target values for CO₂ emission reductions, energy and water savings are overly precise, and should have been rounded, though that has no material impact on the usefulness of the targets. More serious issues include:

- The baseline for savings is poorly defined and follows the assumption that, without the project, there would be no energy demand reduction at all and no reduction in the energy and water use of any of the targeted appliances. It seems reasonable to assume that, in the absence of policy, there would be no introduction of minimum performance regulation, financial incentives or regulations for the environmentally sound disposal of refrigerators. It should also have been assumed, however, that the energy performance of household appliances would have gradually improved over time, as a result of exporting countries tightening energy standards and general technological improvement. This issue was not commonly included in impact calculations at the time of writing of the project document; however, it is a core part of (now more than 10 years old) GEF guidance regarding the calculation of impacts.
- Projected energy savings only factor in the purchase of appliances with financial (loan) support through the SEEREP mechanism. No attempts were made to assess the impact of core components of the project, such as mandatory minimum energy performance standards, energy labels and VAT incentives. These are substantial omissions in the assessment of impacts of the project, leading to a target value that is largely meaningless for an assessment of the true impacts of the project. NB The GEF calculation method for this type of project has changed drastically (before the conceptualisation of this project was finished).
- Project objectives and the target for its overall goal fail to mention what the project aims to achieve around the introduction of minimum energy performance standards and energy labels (MEPS and labels). Only at output-level is a target stated, to have MEPS approved by parliament (by the end of year 1 of the project) – without an indication of these MEPS also being effectively implemented or what these are supposed to achieve in the market.

On balance, the project did not define useful baseline indicators or target values, and actually failed to properly assess its baseline situation. Target values and achievements will need to be redeveloped, taking into account the baseline situation as it actually was and the appropriate calculation method for CO₂ impacts. See section 3.6, expected results, for a further discussion of this issue.

It is further noteworthy that the Mid-Term Review failed to mention any of these omissions, thus not providing the project with an opportunity to re-establish itself on a stronger foundation during implementation.

3.5. *Main stakeholders*

The main stakeholders of this project, as listed in the project document, include the Seychelles Energy Commission; the Ministry of Environment, Energy and Climate Change; the Public Utilities Corporation; the Ministry of Finance, Trade and Investment; the Development Bank of Seychelles; the Seychelles Bureau of Standards; the Seychelles Institute of Technology; the Clinton Climate Initiative; ESCOs and private sector companies; and various members of the environmental NGO community (Sustainability for Seychelles, SIDS Youth Aims HuBS - Seychelles). Other Government departments are not listed as stakeholders, however, have been involved in project steering committees and other relevant meetings.

3.6. *Expected Results*

The project had a stated goal “to significantly reduce the rate of electricity consumption and water usage in Seychelles among underserved communities in the residential sector”, through minimum energy performance standards and energy labels; education and awareness raising; training of retailers and installers; and financial support.

Remarkably, the project has formulated objective level targets for energy use based only on a loan programme, which is one output (out of many), and intended to be a transitional one during the transformation of the market for household appliances to higher energy performances. Additionally, water savings targets are based on the impacts to be achieved by another project, implementation of which was not part of the project strategy and for which there was no obvious coordination mechanism in place. Interestingly, also, is that the overall objective of the project is to reduce

electricity and water consumption among underserved communities in the residential sector, however, the SEEREP loan programme, the sole stated contributor to the overall impact of the project, is set to target only high and middle income households (525 high-income, 3,325 middle income households; with a possible extension to a further 5,000 households later on during the project). There is no obvious explanation for this mismatch, however, it leads to the conclusion that the overall objective of the project is not based on any achievable outcomes.

Additionally, the project has formulated only a few quantified targets at outcome level, for smaller parts of its strategy. For most of the project's strategy, only output-based indicators are defined, largely quantified at activity level (e.g., report produced; number of certificates issued; number of demo sites realised). Such targets are useful for project management, however, in the absence of a clear cause and effect tree between activities, outcomes and objective, provide no guidance for the assessment of overall impacts and the expected results of the project.

As a result, this evaluation, which must assess achievement of expected results, cannot do so based on the strategic results framework developed for this project. Therefore, this terminal evaluation has re-assessed baselines and targets for the project, taking into account relevant GEF guidance for assessing the impact of policy-driven energy efficiency projects, at the objective and outcome level. This re-assessment uses targets set in the PIF, CER and ProDoc as much as possible, whilst also comparing the situation in the Seychelles to that in a neighbouring country (primarily Kenya, from which the Seychelles receives a significant share of its appliances and which developed an appliance energy efficiency project a few years before the Seychelles).

Reconstructed objectives and targets for the project

This section sets out reconstructed targets for this project, based on the overarching market transformation goal. A full discussion of the rationale for the reconstructed indicators is included at the end of section 4.1, which discusses the original project design.

The reconstruction of the overall impact target follows the GEF methodology as set out in "Calculating Greenhouse Gas Benefits of the Global Environment Facility Energy Efficiency Projects, version 1.0" (STAP, March 2013), Standards and Labeling module. Baseline data are derived from the project document, with additional assumptions regarding the efficiency of newly imported new and used refrigerators based on the project document for a similar project in the African region from the same period (Development and Implementation of *Standards and Labelling in Kenya, with replication in other East African Community Countries*, UNDP, 2006; in particular section 2.1.3 baseline information for the most appropriate products).

Reconstructed indicators	Reconstructed targets	Reconstructed means of verification
1 - baseline studies <i>Market monitoring and monitoring of financial incentives established for resource efficient appliances</i>	Ongoing monitoring of energy efficiency developments in the market for household appliances set up by the end of year 1, with regular updates during project implementation, and a monitoring system for financial incentives operational by the end of year 2	Market monitoring reports by year 1 and by end of project Monitoring system for financial incentives operational
2 - EE & RE unit <i>EE & RE unit established for the implementation of appliance resource efficiency policies</i>	EE / RE unit mandated to develop MEPS and label regulations and staffed with at least 3 trained engineers by the end of year 1	SEC mandate from Ministry Staff level and qualifications Staff training plan
3 - MEPS regulations	MEPS and labels approach developed by the end of year 1	Project implementation reports

MEPS and Label regulations implemented and operational for five major household appliances	Technical specifications and administrative procedures developed by the end of year 2	Reports on technical and administrative procedures
4 - national energy label – separate from MEPS	Energy labels introduced in year 3	
See no 3	MEPS adopted by the end of the project	
5 - education and communication strategy <i>Consumer awareness of appliance resource efficiency issues and the environmental and financial benefits of resource efficient appliances</i>	SEECs Action Plan developed, adopted and funded (not just by GEF funds) by the end of year 1 Consumer awareness, in a statistically significant sample of the general population, of 50% for energy labels and 25% for project financial support mechanisms (loans and VAT exemption) by the end of the project	Project implementation reports Dedicated consumer survey in the final year of the project
6 - promotion of absorption technology <i>None</i>	No target	---
7 - training of retailers and customs about MEPS and labels <i>Importers, retailers and customs officials knowledgeable of appliance resource efficiency requirements</i>	All 8 major retailers and importers of appliances are demonstrating knowledge of resource efficiency requirements All customs officers clearing appliance imports demonstrating knowledge of resource efficiency requirements	Training workshop reports Market monitoring report
8 - vocational training for installers <i>Water heater installers installing and maintaining solar water heaters</i>	Number of technicians trained and working in solar water heater installation and maintenance	Number of certificates issued Survey of work force to establish number of technicians regularly installing / maintaining solar water heaters
9 - safe disposal of old appliances <i>None</i>	No target	---
10 - financial support mechanisms <i>Financial mechanisms in place to support the uptake of more resource efficient appliances</i>	VAT exemptions in place by the end of year 2, based on established energy labels, supporting appliances meeting future MEPS levels	Project implementation reports Reports generated by the monitoring system for financial incentives
Other outputs (not linked to a specific reconstructed outcome) <i>None</i>	No target	---

Indicators or targets linked to NEPTUNE project	No target	---
<i>None</i>		
Overall objective	By end of project, average efficiency of newly bought appliances has increased by 15% compared to the situation before the start of the project Cumulative energy savings of the project amount to 207 GWh and 142 kton CO ₂ .	Market monitoring reports by year 1 and by end of project Survey of appliance ownership and purchases

The following input data are used for this calculation of targets:

1. Length of analysis period: 15 years (5 years for project period, plus 10 years post-project impact period)
2. Useful technology lifespan: 10 years, except for old incandescent bulbs (2 years)
3. Fuel type and emission factors: electricity, 0.688 kg CO₂/kWh
4. Target technology: imported new household appliances (air conditioners, refrigerators, washing machines, water heaters and light bulbs) with improved energy performance (at the end of the project) of 15% over baseline levels, except for lamps (target level 8 kWh/yr, assuming mandatory switch over to LED). NB it has been assumed that the improvement for water heaters comes from a mix of technology improvements in standard technology and the introduction of solar water heaters.
5. Displaced technology: imported household appliances with before-project energy performance (unknown, since the baseline report did not establish useful baseline values. In the absence of further data, it is assumed that the pre-project market in the Seychelles had similar efficiencies as the one in Kenya before the start of their project, corrected with a 13.5% improvement rate for the 10 year time difference (Kenya data collection 2005; Seychelles project start 2014). Assumed energy demands are air conditioners (86.5% x 6280 kWh/yr=) 5400 kWh/yr; refrigerators (86.5% x 640 kWh/yr=) 550 kWh/yr; washing machines (no Kenyan data, based on India data, an average consumption of 0.9kWh/cycle, 200 cycles per year is assumed=) 180 kWh/yr; water heaters (no Kenya data, project document assumption used) 970 kWh/yr; light bulbs 40 kWh/yr (per light bulb, mix of CFL and incandescent). NB all numbers are rounded.
6. Stock of appliances in use: 3,500 air conditioners; 23,000 refrigerators; 17,000 washing machines; 7,000 water heaters; 480,000 light bulbs (24,000 households using light bulbs, approx. 20 light bulbs per household). Numbers are derived from a baseline study reported in the project document (rounded).
7. Stock growth rate: approx. 2% per year (the project document does not discuss stock growth; based on trends observed in the country over the years leading up to the project, it is reasonable to assume that appliance ownership is growing).
8. Annual sales of technology in base year: 12% of stock per year (10% replacement rate, plus 2% growth rate)
9. Annual reduction in energy consumption for the displaced technology: approx. 1.5% p.a.* (same as for the target technology. In addition, it is reasonable to assume that the efficiency of imported used products would increase by a similar rate as average efficiencies in the exporting countries were following (or determining) this global trend).
10. Year the standard is put in place: year 5 of the project
11. Percent compliance with new standard: 80%* (the project document does not specify an expected compliance rate; 80% compliance is assumed based on experience in the EU and North African countries (assumed to be around 90%), moderated to 80% to account for the more challenging market structure in the Seychelles).

The resulting market shares and annual energy consumption data are set out in a separate spreadsheet, for scenarios without and with the project, and for the project's base and target years. Note that, in this scenario, the vast majority of savings are due to mandatory standards for lights requiring LED lamps (or high efficiency CFLs).

The resulting energy demand and CO₂ emission figures are as follows:

	Without project		With project	
	Base year	Target year	Base year	Target year
Total annual energy demand, excluding lighting (GWh/yr)	41.4	46.1	41.4	44.8
Total annual energy demand, including lighting (GWh/yr)	60.6	70.4	60.6	49.4
Cumulative electricity savings (GWh)	0	0	0	207
Total CO ₂ emissions (kton)	0	727	0	585

Note: A simple stock model was created to calculate these impacts. It has been shared with the former project team for review.

4. Findings

4.1. *Project Design & Formulation*

From a strategic point of view, this was a useful project, focusing on a topic of great importance for the Seychelles. Appliances, and in particular the ones targeted in this project, contribute greatly to the overall energy demand of the Seychelles and improvements in energy efficiency offer the opportunity to reduce that energy demand in a cost-effective manner. Being virtually totally dependent on imported fuel for its electricity generation, end-use electricity savings also generate important reductions in greenhouse gas emissions as well as in the cost of fuel imports. All stakeholders point out that more attention for energy efficiency was much needed and is beneficial for the country.

The project correctly identifies appliance standards (MEPS) as a key instrument for improving appliance energy efficiency, successfully applied globally, often through UNDP-initiated projects. The project design, which follows similar designs in other countries, is built around the adoption of MEPS (and no labels) in the first year, which then form the foundation for most other project activities. The project design emphasises the importance of MEPS as a key tool for energy efficiency improvement, with many activities arranged around those to secure their success.

Unfortunately, the project design did not recognise the complexity of MEPS and labels or how these build on a government infrastructure of regulating product qualifications, which is a challenge for many governments, and certainly for small island states with limited government capacity (simply due to their size). The project design also failed to recognise that this was the first energy efficiency project ever implemented, by government, in the Seychelles and that understanding of energy efficiency principles (such as cost-effective investments) were largely unknown to the general public or in the market. The project's design, finally, failed to recognise that a large share of the Seychelles' households benefits from relatively low, subsidised electricity rates, which diminish or erase the cost-effectiveness of investments in more energy efficient products – a core justification for their use in many countries. Many stakeholders have pointed to these strategic barriers for improved energy efficiency through the use of (primarily) MEPS and labels. It should be noted that, at the time of the project's design, the Government had started a Tariff rebalancing programme, of which first steps (between 2012 and 2014) were implemented and which has since been delayed (no further steps have been taken so far)“..

The project design includes, in reality, 10 different outcomes (1 - baseline studies; 2 - EE & RE unit; 3 - MEPS regulations; 4 - national energy label – separate from MEPS; 5 - education and communication strategy; 6 - promotion of absorption technology (not a household technology); 7 - training of retailers and customs about MEPS and labels; 8 - vocational training for installers; 9 - safe disposal of old appliances; 10 - financial support mechanisms). These outcomes are not identified appropriately in the project's design and do not have outcome indicators (only output-indicators). Outcomes are, apparently somewhat randomly, combined into four components (also without high-level objectives). A design with 10 identifiable outcomes, each aiming to achieve a lasting impact in the country, is typically too challenging for a full-sized project and it certainly is for a medium-sized project.

The project has set its overall goal by calculating the expected impact of one of its financial support mechanisms (loans), as well as from a related water savings project which was actually not part of the design of this project. Neither constitutes good practice: GHG and energy targets should have been calculated using the GEF's guidance for calculating impacts of policy-driven projects (standards and labels module), and water savings (and related GHG savings) should only have been included if actual coordinated implementation of a water-savings project with the energy efficiency project was planned: it was not. Main indicators of the project vary from the number of certificates issued for vocational training (target 20 certificates) to an approved policy and action plan in place for the safe disposal and recycling of appliances, neither of which is sufficiently focused on outcome-level changes. The project's strategic framework also shows virtually no outcome-level targets or indicators and provides little to no guidance for the assessment of the results of the project.

The project's design is based on a series of assumptions about prices and performances of appliances in the Seychelles. These assumptions are so flawed that, essentially, the project started without any idea about the cost effectiveness of investments in resource efficient technology for a typical Seychelles consumer. An (incomplete) list of flaws in the assumptions and calculations includes: (1) no recognition of the fact that most consumers change their appliances when these fail, not because a UNDP-GEF project tells them to; (2) no assessment of product lifetimes and changeover rates; (3) no assessment of the range of efficiencies found in the market in the Seychelles nor of the range of efficiencies found in international markets; (4) no assessment of price differences between appliances with a high and a poor resource efficiency; (5) using an average electricity rate which far exceeds the rate the vast majority of households pay; (6) assessing payback periods using the total cost of a new appliance, not the difference between one with high and low resource efficiency; (7) assessing payback periods using the assumed consumption of an old appliance and the average consumption and price of a new appliance, not of one meeting MEPS requirements; (8) ignoring interest rates (relatively high in the Seychelles) when assessing the payback period of appliances bought with loans. In addition, calculations assume that 8,500 out of 26,500 households in the Seychelles would take out loans to invest in new appliances, which is much higher than the take-up rate of loans in other countries.

At the time of designing this project, a largely similar UNDP - GEF project was underway in Kenya (it was closed and evaluated in 2015; many issues were already visible at the time of the Mid-Term Review, which was conducted before this project was designed). The Kenya project demonstrates the need for sufficient government capacity, the need to better plan the timing of activities and the resulting failures if government has insufficient capacity for the implementation of MEPS and labels or if the activities are poorly timed. These lessons could have, but were not, used for the design of this project. There does not seem to have been any coordination between this project and the one in Kenya (or a similar one in South Africa, which was implemented almost in parallel with the project in the Seychelles), also providing many valuable lessons.

The project's design failed to recognise the difficult international market situation facing appliance resource efficiency policy in the Seychelles. Appliance energy and resource efficiency policy is increasingly developed by a few leading global markets (USA, EU, China) with virtually every other country in the world basing its approach on close alignment with the policy framework in one of those markets. Such alignment does not necessarily constitute the copying of EU or Chinese MEPS and labels (USA MEPS and labels are rarely copied in other markets), however, it always includes aligning the underlying technical framework (including product definitions, test methods, energy efficiency metrics and efficiency ranking scales). Note that the use of international test methods (ISO or IEC norms) covers only a small part of the technical underpinning of MEPS and labels. Even leading global markets aim to align those elements of their MEPS and labels, for example through various initiatives under the International Energy Agency and Clean Energy Ministerial platforms. Most countries are "naturally" aligned with a leading global market, either through geography, culture or both, and the basis for their national appliance resource efficiency policy is easy to choose. The Seychelles imports products, in small amounts, from many corners of the world and cannot easily select a leading global market to align with. In addition, there are substantial differences in the way energy performance is established between some of its trading partners (see for example "Improving Global Comparability of Appliance Energy Efficiency Standards and Labels", CLASP/The Policy Partners, September 2014 for more information). It is inconceivable that a market as small as the Seychelles' could introduce its own technical requirements and force global manufacturers to adjust their products to the specifications of the Seychelles, or even to perform energy performance measurements according to its set of rules, as testing costs far exceed the profit margin on an imported batch of products (in the volume in which these are imported in the Seychelles). The difficulty of finding a way to establish energy performance requirements in such a setting would have required a more extensive discussion in the project's design, as well as dedicated attention during the project. Such a discussion would probably have benefitted from the involvement of global experts, e.g., from CLASP, a global appliance standards and labels NGO. None of this seems to have happened during project design, leading to a design that in reality could only fail.

It is unclear, at this stage, why the project was designed with the level of complexity and the high number of outcomes as described above, and what stakeholder views were at the time. The Mid-Term Review remarks that the project was very complex and demanding, and also noted that the project was struggling to implement many of its outcomes. It also notes that the Seychelles, being a small island state with a small retail market, faces specific challenges which may

make the introduction of MEPS difficult to successfully complete. Unfortunately, it failed to notice the strategic shortcomings in the project's design (e.g., the timing of MEPS versus labels, and awareness raising only after the introduction of mandatory requirements) or the lack of useful outcome-based targets, and despite the apparent struggles in implementation only recommended that the project moves faster rather than a strategic review of the project. As a result, the Mid-Term Review probably did a great disservice to the project, pushing it further down a road leading to difficulties.

Even now, towards the end of the project, stakeholders struggle to see the vastness and complexity of the project they were trying to implement, and even project staff show little understanding of how appliance resource efficiency projects have been implemented in other countries. Without such basic knowledge, it is no surprise that the project struggled to find implementation mechanisms that could deliver all its targets. The experience of, for example, smaller countries on the edge of the EU, who base their policy approach on the EU's framework but lack the resources to fully adopt all aspects of that policy framework themselves (and have, for example, implemented energy labels but not MEPS, and have set up consumer education activities) could have provided useful guidance for the design of the Seychelles project. Communication and education activities, for example, are easily scalable and easier to implement, and an information label (e.g., about VAT exemptions) is easier to introduce and implement than a MEPS while offering opportunities for communication and the development of a government infrastructure for compliance checking.

Despite all this, the project's design includes many elements that have proven to be successful in other countries and many of which can be implemented with relative ease. Consumer education is in many countries a necessary first step before regulatory instruments can be introduced, and the project (rightly) included a component to introduce and implement such a strategy. Financial instruments (e.g., VAT exemptions) are a useful tool to lead a market to more energy efficient products while being less intrusive, and easier to verify, than MEPS. Those elements of the project design seem to be well-placed and appropriately targeted in the project's design.

In the following paragraphs, specific aspects of the project's design and formulation phase are discussed.

4.1.1. Analysis of LFA/Results Framework (Project logic /strategy; Indicators)

The Project results framework / Logical framework includes many standard elements, which are grouped in an unusual and somewhat inconsistent way. Although outputs are generally recognisable from standard approaches for improving appliance resource efficiency, items are not combined logically into coherent outcomes with a good timing of activities. In addition, the number of outcomes and outputs far exceeds what can be successfully implemented in a Medium-Sized project.

Many of the indicators for the project are activity-based, and not reflective of measurable changes in the market the project wishes to change. Examples include the collection of baseline data; realisation of demo sites; and an assessment of the potential savings from absorption technology. Several of the indicators that are based on changes in the market have targets that only track the completion of activities, not their impact in the market. Examples of this include the indicator "SEC efficiency and renewable energy unit operationalised with clear mandate / work plan and trained staff", which the target reduces to "EE / RE unit fully operational by end of year 1"; indicator "system for measuring energy and water savings from EE residential appliances operational", reduced via the baseline status to "no system in place for monitoring SEEREP by PUC" (which is a small sub-set of all energy and water savings); and "No. of private sector importers, dealers and retailers of household electrical appliances with access to market information (on product sourcing, pricing, quality, etc.) and maintenance of RSE technologies" which is reduced via the target to "At least 20 private sector partners have received training and support by end of project". The project lacks indicators for results at outcome-level (also because the logical framework lacks properly defined outcomes), and its overall goal is based on the impact of a single output.

4.1.2. *Assumptions and Risks*

The project document includes a long and detailed risk assessment, however, some of the risks listed are not project-specific. An example for this is the first risk listed, about The Seychelles being vulnerable to climate risks. While this is probably true (this TE did not specifically assess climate risks for the Seychelles, and neither did the project), it is also largely irrelevant for the implementation of the project. Besides, there is no project-specific management response formulated, making the risk assessment useless for the project.

Many other risks describe possible failures in project implementation, which have no place in a risk assessment. Examples include the risk of insufficiently training staff (while the project is responsible for that training); adopting inappropriate standards and / or labels (where the project is responsible for developing those standards = MEPS - and labels); that the sequencing of events does not happen as planned (planning is part of the project design and can be changed by project management); that end users might not be able to determine how to best invest in energy efficient technology (the project is responsible for developing the communication and education activities needed to ensure that consumers have this knowledge); a risk that the government cuts short funding for the project's financial scheme (the government signed the project document and committed co-financing specifically for that scheme).

The risk assessment discusses that the small market size of the Seychelles may keep prices high and thus keep payback periods low. The small market size is, rather unfortunately, not discussed in other parts of the project's design, making it strange to include it in a risk assessment. In addition, in a small market with high mark-ups, price differences between high and low efficiency appliances are usually larger than in more competitive markets, and the effect is likely to be the opposite of the described risk.

Finally, the risk assessment incorrectly states that the risk of delays in the adoption of standards (MEPS) and labels would not affect other parts of the project, whereas the project strategic framework clearly builds other activities on the adoption of those standards (MEPS) and labels. It also incorrectly states that the risk of people continuing to use an old appliance after a new one is mitigated by the inclusion of an obligation to dispose of the old appliance under its financial mechanism (SEEREP): SEEREP is only one of the many instruments the project intended to apply, and none of the other instruments include such a disposal obligation, thus not properly addressing the risk.

Overall, the vast majority of the risks identified are either not relevant, discuss what would happen if the project was poorly implemented or include incoherent management responses and the risk assessment, despite its length, is largely irrelevant.

4.1.3. *Lessons from other relevant projects (e.g., same focal area) incorporated into project design*

There is no record of the project using results of other projects for the formulation of its strategy and the project document makes no reference at all to other countries having implemented similar approaches and their experience. This is even more surprising given that, at the time this project was being developed, UNDP was also implementing appliance standards and labels projects in Ghana, Nigeria, South Africa and Kenya, as well as having implemented similar projects in the past in dozens of other countries.

Given how much the project's design could have benefitted from such experiences this lack of exchanging experiences has seriously hindered the project's success.

4.1.4. *Planned stakeholder participation*

The project document lists roles for the various stakeholders and ways of engaging with them. Stakeholders had roles in project design and implementation which were appropriate for each position and competency and were, as far as can be established now, supportive of the project.

Stakeholder participation was planned during the project, however, was not well planned in the project's strategy. Stakeholder roles in the implementation of project components were largely limited to receiving information, and not so much in how civil society and commercial stakeholders could have a voice in the direction of the project and the alignment of project activities with the activities of other (non-government) parties. This does not imply that there was no appropriate stakeholder engagement during implementation of the project, only that it was not explicitly designed into the project's implementation approach.

4.1.5. Replication approach

This project had not been designed for replication. No effort was made to set up activities in a structured way to let other countries benefit from what was (supposed to be) happening in the Seychelles. This needs to be seen against the backdrop of the Seychelles being a very small country, however, and a follower of policy developments rather than an initiator. It would have made perfect sense for the Seychelles to look carefully at the approaches taken by other countries, select the most suitable ones and align its policy with those, rather than design a project for replication elsewhere. Unfortunately, as discussed in section 4.1.3, that has not happened.

4.1.6. UNDP comparative advantage

In theory, UNDP would be perfectly placed to design and implement a policy-focused project like this one in the Seychelles. It has the experience of similar projects in other countries as well as experience with project implementation in the Seychelles. Further, this project is a typical policy and institutional development project, at the heart of UNDP's competence.

UNDP was thus in an excellent position to develop and execute this project and link it to other international initiatives and expertise. Unfortunately, none of that has happened, neither during project design nor during its implementation, and the project has suffered from that lack of international exchange. As a result, UNDP's competitive advantage in designing and implementing this project is questionable and, in this specific case, it is possible that other parties, e.g., NGOs used to working in a variety of countries within their specific area of expertise would have done a better job.

4.1.7. Linkages between project and other interventions within the sector

The project document mentions coordination only with a water savings project, NEPTUNE, implemented by the Public Utilities Commission, and a VAT exemption for renewable energy technologies (to be extended during the project to resource efficient appliances).

Coordination with the NEPTUNE project is not specified in the project document, despite this project having a very similar mandate and being implemented by a sister organisation of the project's executing partner. Logic requires that, in such cases, the project's design assesses carefully which activities the NEPTUNE project intends to undertake and how the resource efficiency project could benefit from this. This did not happen. Instead, the project design claims the expected impacts of the NEPTUNE project as its own, without actual coordination. This is not only a poor project design practice, it is also in direct conflict with GEF guidelines.

The project rightly discusses how the existing VAT exemption mechanism could be extended to resource efficient appliances. It does not detail how this exemption could take place and how it could affect the overall market transformation the project aimed to achieve, which is understandable given the project's design was – erroneously – focused on quickly implementing MEPS and using a financing mechanism as the main mechanism for delivering impacts. Undervaluing the linkage with the VAT exemption initiative is thus more a result of poor design choices elsewhere than a new mistake.

4.1.8. *Management arrangements*

Neither the project's PIF nor its CEO Endorsement request describe the institutional or management arrangements for the project, even though these are required items in the CEO Endorsement request. Both UNDP and the GEF should have noticed this discrepancy in their reviews of the project documents and requested inclusion of this important information. The UNDP project document, however, does include a description of management arrangements.

The ProDoc describes that the project would be executed by the Department of Environment, whereas the CER lists the Seychelles Energy Commission as the executing partner. Even though the SEC resides under the Ministry, and it is listed as responsible for day-to-day oversight of the project, there still is a significant discrepancy between being the executing partner responsible for the project (as per CER) and being responsible for day-to-day oversight only under the management of the Ministry (ProDoc).

Management arrangement in the ProDoc describe that a project manager would be hired as part of the Project Coordination Office which was set up by UNDP and the Government of the Seychelles to manage GEF projects. The project manager would then report to UNDP, the Seychelles Energy Commission and the Project Steering Committee. While there are no doubt good reasons for this, it does not reflect the intentions of national execution of projects, and in particular for a policy-focused project, where close integration of project activities with those of the executing agency are critical. Reporting of the project manager directly to UNDP and the steering committee, rather than to the executing agency, further reduces the mandate of the executing agency to direct the project in the way it sees as most suitable.

The ProDoc failed to mention that the National Project Director (residing at the Ministry, not at the Seychelles Energy Commission) is also the country's GEF operational focal point. Such a mix of roles is no doubt beneficial for an efficient communication with the GEF OFP, however, it also makes the GEF OFP's oversight role of the GEF portfolio impossible, since one cannot oversee projects for which one has a direct responsibility.

The ProDoc's management arrangements further specify a project assurance role by the UNDP Seychelles environment team leader. The country office, being a small office for a small country, does not have a dedicated environment team leader.

Overall, the project design and formulation for this project was unsatisfactory. The failure to properly take into account the situation in the Seychelles and lessons from other economies, the inclusion of too many components for a Medium-Sized Project and the lack of outcome-oriented indicators or targets leave no other option than this lowest possible rating. The poor quality of the project design, and in particular the lack of SMART targets, also presents problems for the rest of the evaluation, which must compare results with targets. This terminal evaluation therefore first assesses which SMART targets and indicators could have been set for the various components of the project, had the design been based on a full assessment of the situation in the Seychelles in its international context, with an appropriate number of outcomes for a Medium-Sized project (in a small island setting) and aiming to maximise impacts in a country that had not yet implemented its first resource efficiency project.

Such a reconstruction of targets and indicators implicitly carries risks, since it is done retroactively with hindsight. It also does not benefit from the full review of a project document by the Government, stakeholders and UNDP and the GEF secretariat. Nevertheless, it is the only option for a meaningful discussion of project results in the rest of this terminal evaluation report. For each originally envisioned outcome of the project, the originally defined target (reconstructed from output targets) is defined, followed by a discussion of the outcome in the context of the project's setting and a target to be used for this terminal evaluation's review of project results.

Reconstruction of SMART indicators and targets for project outcomes

The project design includes, in reality, 10 different outcomes (not appropriately identified in the project's strategic results framework): 1 - baseline studies; 2 - EE & RE unit; 3 - MEPS regulations; 4 - national energy label – separate

from MEPS; 5 - education and communication strategy; 6 - promotion of absorption technology (not a household technology); 7 - training of retailers and customs about MEPS and labels; 8 - vocational training for installers; 9 - safe disposal of old appliances; 10 - financial support mechanisms.

The table below presents, for each of these outcomes, the originally defined components of the project with reconstructed indicators (including a regrouping of some indicators; reconstructed indicators *in italics*), originally defined targets (reconstructed from output targets), followed by a discussion of outcomes in the context of the project's setting and targets to be used for this terminal evaluation's review of project results as well as means of verification.

Components and reconstructed indicators	Originally defined targets (output-based)	Discussion	Reconstructed targets	Reconstructed means of verification
1 - baseline studies <i>Market monitoring and monitoring of financial incentives established for resource efficient appliances</i>	Baseline report completed by end of year 1 Computer-based MRV system in place by end of year 1 at PUC	A baseline report should, ideally, be ready before the start of a project and, if not, be prepared immediately and inform an inception workshop. Market monitoring should include the whole market (which was also the objective of the project), not just the results of a project activity.	Ongoing monitoring of energy efficiency developments in the market for household appliances set up by the end of year 1, with regular updates during project implementation, and a monitoring system for financial incentives operational by the end of year 2	Market monitoring reports by year 1 and by end of project Monitoring system for financial incentives operational
2 - EE & RE unit <i>EE & RE unit established for the implementation of appliance resource efficiency policies</i>	EE / RE unit fully operational by end of year 1	The target should also specify the mandate and level of training needed for the new unit.	EE / RE unit mandated to develop MEPS and label regulations and staffed with at least 3 trained engineers by the end of year 1	SEC mandate from Ministry Staff level and qualifications Staff training plan
3 - MEPS regulations <i>MEPS and Label regulations implemented and operational for five major household appliances</i>	Government-approved minimum energy performance standards (MEPS) approved by end of year 1	One year, in particular a start-up year, is vastly insufficient to develop a completely new regulatory regime in a country without experience with product regulations. MEPS regulations include not only technical specifications but also administrative procedures for product registration, compliance checking and enforcement, arrangements for products tested for different markets	MEPS and labels approach developed by the end of year 1 Technical specifications and administrative procedures developed by the end of year 2 Energy labels introduced in year 3	Project implementation reports Reports on technical and administrative procedures

		and market communication. An early announcement of requirements followed by a longer transition period would have been the best achievable result, based on international experience (e.g., India, which had a 5+ years transition period between the announcement of its refrigerator MEPS and the date it came into force).	MEPS adopted by the end of the project	
4 - national energy label – separate from MEPS <i>See no 3</i>	Labels approved for at least 5 types of household appliances and 2 water saving devices by end of year 1	Energy labels are typically developed together with MEPS, since the two policy instruments share the same technical and administrative foundations. Labels can typically be introduced much faster than MEPS and often serve as a stepping stone for a new market – and government - to build experience with product resource efficiency regulations.		
5 - education and communication strategy <i>Consumer awareness of appliance resource efficiency issues and the environmental and financial benefits of resource efficient appliances</i>	SEECs Action Plan, including component on residential water use reductions, approved and under implementation by end of year 1 At least 50% of target audience contacted (within the sample group) are aware of appliance energy efficiency standards and practices 5 sites (2 households and 3 public facilities) established and open to public by	Action Plans need development as well as regular updating; going from development to adoption and implementation within the first year of implementation is overly ambitious. Apart from adoption of a plan, funding for it is equally important as no sustainable implementation is possible without a sustainable source of funding – beyond a GEF budget. Consumer awareness of resource efficiency standards is probably not needed, since standards apply to importing and/or retail products, not to buying them. Awareness of energy labels is important, however.	SEECs Action Plan developed, adopted and funded (not just by GEF funds) by the end of year 1 Consumer awareness, in a statistically significant sample of the general population, of 50% for energy labels and 25% for project financial support mechanisms (loans and VAT exemption) by the end of the project	Project implementation reports Dedicated consumer survey in the final year of the project

	<p>end of year 3 of the project</p> <p>At least 80% of consumers / SMEs contacted (within the sample group) are aware of the different financing schemes or technology transfer platform offered for RSE technologies</p>	<p>A target of 80% awareness of financing options for resource efficient products is incompatible with a 50% target for awareness of resource efficiency standards and practices (since financing builds on MEPS and labels).</p>		
<p>6 - promotion of absorption technology</p> <p><i>None</i></p>	<p>Assessment report on Absorption Cooling Technologies completed and disseminated to all relevant stakeholders by year 2 with targets specified for uptake potential</p>	<p>Absorption technology is not a direct replacement for household appliances, and an assessment report on its own generates no savings. This activity does not contribute to the goals of the project and should not have been included.</p>	<p>No target</p>	<p>---</p>
<p>7 - training of retailers and customs about MEPS and labels</p> <p><i>Importers, retailers and customs officials knowledgeable of appliance resource efficiency requirements</i></p>	<p>At least 20 private sector partners have received training and support by end of project</p> <p>At least 10 trained officers by end of year 2 of the project</p>	<p>The goal is knowledgeable staff at retailers, importers and customs, not participation in training, even though the latter is a good way of establishing knowledge.</p> <p>Participation rates are ideally based on a share of the total number of people involved (which is not mentioned in the project document), and should be quite high to ensure that both market and government are capable of compliance with requirements.</p>	<p>All 8 major retailers and importers of appliances are demonstrating knowledge of resource efficiency requirements</p> <p>All customs officers clearing appliance imports demonstrating knowledge of resource efficiency requirements</p>	<p>Training workshop reports</p> <p>Market monitoring report</p>
<p>8 - vocational training for installers</p> <p><i>Water heater installers installing and maintaining solar water heaters</i></p>	<p>By end of project Seychelles Institute of Technology (SIT) operating a certificate course for technicians in installation, operation and maintenance of</p>	<p>Vocational training is only relevant for solar water heaters (replacement technology for conventional water heaters); other resource efficient appliances are similar in installation and maintenance as regular appliances.</p>	<p>Number of technicians trained and working in solar water heater installation and maintenance</p>	<p>Number of certificates issued</p> <p>Survey of work force to establish number of technicians regularly installing /</p>

	resource efficient technologies (no. of technicians to be enrolled in course TBD during year 1)	Establishment of a training course, or even the number of certificates issued, is not a relevant outcome indicator.		maintaining solar water heaters
9 - safe disposal of old appliances <i>None</i>	Mandatory policy framework in place (to be implemented under the umbrella of the new Solid Waste Management Policy) which specifically includes guidelines and responsibilities for disposal of electronic waste and electrical equipment	A waste disposal strategy, although relevant and useful, is not directly linked to the import of more resource efficient appliances (which, in themselves, do not change the waste stream in the country). Given the resource constraints of an MSP, it would have been prudent to leave out these activities.	No target	---
10 - financial support mechanisms <i>Financial mechanisms in place to support the uptake of more resource efficient appliances</i>	Customs Act regulations amended to remove duties on EE equipment by middle of year 2 By end of project at least 8,500 households or SMEs have purchased or received one or more of the covered RSE technologies from at least one of the platforms mentioned. At least 8,500 households participating in SEEREP by end of project, disaggregated by socioeconomic status. At least 3 banks by end of project [providing loans]	Financial support is most useful when linked to a specific market transformation goal, e.g., promotion of a minimum performance level that will become mandatory in a few years, or promotion of a performance level above a minimum or market-average level. Subsidised loans might be used to support the purchase of resource efficient appliances by poorer households after the introduction of MEPS, to help overcome the high discount rate these households experience. For that to work, government loan guarantees are typically needed as well as a delivery mechanism which reaches poorer households. Before the introduction of MEPS, and given the subsidised electricity rates many (in particular poorer) households pay, it is unlikely that loans will encourage	VAT exemptions in place by the end of year 2, based on established energy labels, supporting appliances meeting future MEPS levels	Project implementation reports Reports generated by the monitoring system for financial incentives

		poorer households to invest in resource efficient appliances.		
Various (not linked to a specific outcome) <i>None</i>	Energy Efficiency Strategy (EES) and Implementation Plan (EPIP) approved by end of year 1 and published by end of year 2	This plan primarily supports the national Energy Act, covering all sectors. Parts of the Energy Act relevant for appliance resource efficiency are already covered elsewhere in the project strategy and there is no added value for this project in supporting this strategy and implementation plan for other sectors (for which there also is funding elsewhere).	No target	---
Indicators or targets linked to NEPTUNE project <i>None</i>	8,500 households (as per Neptune targets), receive water savings devices	There is no integration of the Neptune project with this project, thus also no reason to count impacts.	No target	---
Overall objective	<p>Average electricity use per household (kwh/year) participating in SEEREP or other RSE financing platform decreasing from 4,395.7 kwh/year (average) to 1,512.8 kwh/year (average) by end of project</p> <p>Cumulative total electricity saved 12,296 MWh per year (or 184,447 MWh for appliance lifetimes)</p> <p>Cumulative total water saved 446,250 m3 per year (or 6,693,750 m3 for device lifetime)</p>	<p>The reduction in average electricity use per household is based on the assumption that a household would change all old existing appliances with newly bought resource efficient appliances, and that all these savings are attributable to the project. This ignores that households typically change appliances when old ones fail, and that newly bought appliances are generally of much better quality than old ones (due to technical progress on global markets). Regardless, the project's strategy is not focused on changing all products at once and the indicated average number is not a relevant indicator for project results.</p> <p>A useful indicator for a project aiming to change the efficiency of all products on the market are improvements in average</p>	<p>By end of project, average efficiency of newly bought appliances has increased by 15% compared to the situation before the start of the project</p> <p>Cumulative energy savings of the project amount to 207 GWh and 140 kton CO2.</p>	<p>Market monitoring reports by year 1 and by end of project</p> <p>Survey of appliance ownership and purchases</p>

	Direct emissions reductions 139,590 tons CO ₂ eq	<p>energy demand or efficiency of all new products sold, as this provides a good tracking point for the success of a project. A baseline assumption (globally) is that efficiency improves by around 1% per year in the absence of a specific national policy; with policy, improvement rates across all appliances of 1.5-2% per year have been observed, and of 3-4% per year for products targeted by policy.</p> <p>Overall energy and emissions savings should be based on the full market transformation impact of the project, thus the combination of all activities (including MEPS, labels, communication, VAT exemptions etc), not on a specific activity.</p>		
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4.2. *Project Implementation*

Implementation of this project was characterised by an understaffed project team and substantial delays in the implementation of key regulations, against the background of a too complex and overly ambitious project design. As a result, the project team focused on a subset of planned activities, however, without much formal planning about which parts of the project to prioritise. As a result, at the end of the project, there are many activities that have been started but not fully finished, demonstrated, for example, by the large number of reports and other deliverables still in draft or near-final stage.

The project was designed around a core of regulations (minimum energy performance standards – MEPS - in particular) with other activities building on this (e.g., communication and training about those MEPS). The development of regulations for those MEPS, originally scheduled for the first year of the project, stalled after the first year, and has only been restarted 2 months before the planned closure of the project (with little chance of this being completed during the project). While this planning of activities was a project design failure, the project also did not complete its development of draft technical regulations (and, for example, discuss those with stakeholders) and continued other parts of the project with a different set of requirements that were designed as an interim measure to allow for VAT exemptions on resource efficient products. This could be interpreted as good adaptive management, however, in reality this is more reflective of an ad-hoc approach without much strategic thinking about what the project needed and what was realistically possible to succeed in the long term, and more focused on achieving short-term results.

Having said that, there are areas in which the project managed to find its way and deliver a coherent set of results. This includes primarily its communication strategy and its work around VAT exemptions for appliances. The project seems to have developed, a little later than planned, however, still early on in the project, a comprehensive education and communication strategy. The strategy discussed reduced appliance energy and water consumption, as well as wider resource issues such as renewable energy technology and resource efficiency in agriculture, industry and the construction sector – which are beyond the remit of the project. The strategy identifies responsible parties for each aspect of the strategy and the project has largely focused its activities on those parts of the strategy that are within its remit.

The second main achievement focuses around VAT exemptions for resource efficient products. This was intended to follow-on from MEPS, however, has been implemented independently. The project developed an interim set of criteria for VAT exemption of appliances, based on energy labels in use in other countries and an energy efficiency ratio for air conditioners, and the government provided VAT exemptions for those products. In the absence of MEPS, this has been the strongest driver of improved energy efficiency in new appliances, and the VAT exemption scheme has been used as the carrier for training and communication as well. Even though there are areas of the implementation of the VAT exemption that could have been implemented better (e.g., it could have been built on the same or similar technical criteria as MEPS, and it could have been an easy carrier for the introduction of an energy label), it still constitutes an important success and a good example of changing course where it was needed.

Given the shortcomings in the project's design (described earlier), a reconstructed set of indicators and targets was developed to assess the results of the project. Since the project itself has used the original project design (at least in theory; in reality implementation appears to have happened much more randomly), some measurements that would be needed to establish outcome results are not available; many other aspects can be assessed, however, with measurements that would be needed also in the original project design. Secondly, since the original project design had a challenging and unrealistic timing of events, links between project activities that should have been made, could not always materialise because the planned time for early activities (such as the development of MEPS) was insufficient to generate the building block that would be needed for the next step. These shortcomings should have been noted earlier on during project implementation and parties overseeing the project (primarily, the project steering committee and UNDP) should have initiated a strategic review of the project to address the many delays and inconsistencies the project experienced, however, that did not happen. The Mid-Term Review similarly found many delays, inconsistencies and overambitious targets for the project, and recommended – quite insufficiently – that it

would carry on with its existing strategy and try to make up for lost time. All this certainly has not helped the project team in its implementation of the project and the reader is requested to keep in mind that implementation of the project happened in a difficult set of circumstances.

Financial management of the project focused on managing the GEF and UNDP components, virtually ignoring the co-financed parts of the project: When it became obvious that some co-financing (e.g., government contributions to SEC REEM unit) fell short of its target, no action was taken. Similarly, when the government failed to fulfil its commitment to pay for the cost of the project manager, UNDP decided to take over these payments from the GEF budget – thus undermining a core principle of the GEF, that governments contribute substantially to the project management cost. It should be noted, however, that the government delivered substantial amount of co-financing that was neither planned nor tracked, in the form of a VAT-exemption. This has been assessed and the amount taken into account for the terminal evaluation.

Project implementation, overall, was unsatisfactory. Rated elements include:

- Overall quality of Monitoring and evaluation: unsatisfactory (U)
 - M&E design at project start-up: unsatisfactory (U)
 - M&E plan implementation: unsatisfactory (U)
- Overall quality of project Implementing and Executing agency implementation and execution: Unsatisfactory (U)
 - Implementing agency execution: Unsatisfactory (U)
 - Executing agency execution: No rating provided
 - National Project Director: Unsatisfactory (U)

Detailed observations related to the Project implementation stage

This section first presents findings relevant to the Project implementation stage of the project, followed by a discussion and assessment of various specific criteria, with a rating where required.

The project focused on reduced energy demand in the country, primarily through the use of standards (MEPS) and labels. Of this, only MEPS development has started, however, not completed, and label development has never been taken up. During the terminal evaluation, the project had restarted discussions about the development of MEPS and was awaiting a formal mandate to develop technical requirements as well as propose draft legislation. It is unclear whether these drafts could be finished before the project ends; it was obvious that the legal adoption of MEPS would not happen before the end of the project.

Despite a focus on transforming the market, there has been little monitoring of appliance sales and their efficiencies and little identifiable discussion with retailers about preparing for MEPS and labels. Instead, the project has worked primarily with VAT exemptions, based on a different set of criteria than those considered for MEPS. The technical requirements the project developed, at some (undated) stage of the project, have been assessed for this terminal evaluation. This showed that the requirements seem to be poorly aligned with the challenges of the Seychelles market. Technical requirements, for example, seem to be Seychelles-specific. To better accommodate for the Seychelles market, with imports coming from a variety of manufacturing economies, it would have made more sense to select a technical standard based on that of a major economy, and indicate which MEPS or label values from other major economies would be considered to comply with those standards. E.g., if the refrigerator requirement is set at the EU A+ level, it would make sense which Kenyan, Thai or Chinese EEI values or label classes are considered to be in compliance. This would save importers the cost of having to obtain a specific measurement report (which is not generated for sales in the EU, and thus not available to importers) for importing into the Seychelles. Related to this, it also is surprising that the technical requirements for the Seychelles, which are largely based on EU technical MEPS, require that a test by an accredited laboratory is submitted. The EU does not require this, some other economies do – but for tests according to their specifications, not to EU specifications, and the combination of basing technical requirements on EU ones, and choosing a different test regime is surprising, and probably ineffective.

Requirements for some specific products were also reviewed (refrigerators, air conditioners and light bulbs; no technical specifications were developed for washing machines; specifications for solar water heaters were not reviewed). This review shows that, while draft technical specifications largely follow EU requirements, these deviate in their threshold values, suggesting a MEPS threshold that is not used anywhere in the world. All evidence in other countries suggest that manufacturers optimise their products for specific threshold values in major economies, and it is inconceivable that a threshold value that is not used anywhere else would benefit the Seychelles. In addition, the draft technical regulations suggest a staged introduction, with threshold values which are 5% apart, well within the 15% test tolerance of the EU system and thus impossible to differentiate in practice.

Draft technical specifications for air conditioners are largely based on the EU SEER approach, which probably has little value for the region and is quite different from approaches used in Asian countries (where most manufacturers exporting to the Indian Ocean and Africa are based). EU SEER is based on a mix of load profiles typical for the EU, which has a significantly different climate than the Seychelles. The draft technical specification further extends the product size covered by the regulation from 12 kW / 41,000 BTU (maximum of the EU requirements) to 65,000 BTU, and it seems unlikely that there are any products in the range between 41,000 and 65,000 BTU that have been tested for the EU market – making this also a rather unusual choice as it would mean that anyone wanting to import an air conditioner in this size class into the Seychelles has to perform an expensive test that is required literally nowhere else in the world. Despite the draft specifications being based on a SEER value, the draft requirement then suggests that importers perform an energy savings calculation based on an EER value – a related but different value, and one that does not recognise the benefits of using variable speed (inverter) technology. Finally, also for air conditioners, proposed threshold values do not align with EU limits – for MEPS or label classes, and it seems unlikely that there are products available anywhere in the world that are a good match for these proposed specifications (certainly in the size range 41,000 – 65,000 BTU).

Requirements for lamps, finally, are based on an outdated (and since revised) set of recommendations that were developed by a working group of the International Energy Agency to guide major economies in how to steer their national requirements towards a more comprehensive and internationally aligned approach, not on any existing set of requirements. Those recommendations suggest a variety of test procedures (global, USA-specific, EU-specific, etc) to meet the needs of various of those global economies and are not reflective of actual MEPS in use in any major economy. While useful guidance for those advancing MEPS in an established programme in a major economy, these are not suitable for copy-pasting into a new standard in the Seychelles or any other small country, even if for no other reason that the draft regulation as written allows for testing a requirement from one region with a test procedure from another, which would create many technical difficulties and inconsistencies.

Overall, the draft technical specifications give the impression of having been developed without much understanding of MEPS practices and it seems unlikely that their introduction would benefit the country. It is probably best to start over with a clean slate and start with developing an overall approach for MEPS and labels in the Seychelles that recognises the challenges many smaller countries face in regulating appliance resource efficiency and the specific challenges of a small island state.

Such an approach has been used, to an extent, for the development of requirements for VAT exemption of appliances. VAT exemptions are awarded if a product meets certain energy performance requirements (energy label classes) of another country. Requirements for VAT exemptions are differentiated by the number of label classes on the energy label the appliance comes with, which recognises that products arriving in the Seychelles were originally designed for another, larger country and that it would not be useful to require a new technical assessment of its energy performance. The Seychelles could indeed make good use of the fact that most larger countries have already implemented comprehensive energy labels and that selecting the “good” ones for the Seychelles would greatly benefit the country. Unfortunately, Seychelles requirements are differentiated only by the number of label classes, which can be confusing as, for example, Kenya, Australia and Chinese all use 5 label classes, however, with (sometimes substantially) different requirements, and the EU and Tunisia both use a 7 class label, however, with a shift in requirements per class. The approach would increase in robustness if it recognised the label classes of major trading partners and allowed label classes specific for a certain national energy label - not generically for the number of label

classes. It is unclear why requirements were set as they are and which savings are expected from this scheme. A further discussion is also needed to determine if the approach chosen for the VAT scheme can also serve as the basis for MEPS and energy labels. Nevertheless, the approach chosen for the VAT scheme has been applied, seems to be applicable for retailers and to be delivering actual results for the country. There is also a registration and compliance checking mechanism in place around this scheme, which takes time to set up and test in practice.

The project developed, in its first years, an Energy education and communication strategy, together with various other government organisations and agencies. This strategy is comprehensive and covers aspects of energy efficiency in many sectors of the economy, although it is most elaborated for households. Key elements included were:

- Website with updated info (for everyone)
- Produce and air TV and radio adverts with energy saving tips
- Outreach displays at public events
- Install bus stickers
- Calendar with energy saving tips
- Develop, print and disseminate poster on energy saving tips
- Print comic book for children
- Develop teachers guide for primary schools
- Develop teachers guide for secondary schools
- Conduct workshops for teachers
- Award special prizes for innovative energy work by schools / students
- Outreach talks for schools, businesses and other groups
- Workshop on energy for journalists
- Energy Challenge for government offices
- Information / policy briefs for government and business leaders

The project has been actively pursuing the communications strategy and implemented the various elements of it. Extensive press coverage of many public awareness events, often including leading government representatives (Minister or Principal Secretary level) to raise the profile of events. In addition, a series of workshops was organised to brief and train professionals (retailers, installers, etc) about energy efficiency issues, and the response to those workshops seems to have been good. In addition to public awareness activities with a national focus (through press coverage), several community-focused events were organised, mainly around schools. This can be an excellent way to create deeper engagement of communities around energy issues, even if continuity can be a challenge (generally, feedback about these community-focused events was good, though there were some concerns about their continuation if local organisers would leave; the latter is a generic concern for any community-based approach and, although important to be aware of, not of specific concern for this project).

The project has also worked on creating education materials about energy and resource efficiency to be used in schools. This fits into a wider trend in the Seychelles to educate the population, and students in particular, about environmental issues and encourage them to respect and protect the environment with practical measures. Materials have been prepared and tested and the Ministry of Education is in the process of including these in the school curriculum, meeting with school teachers and making books widely available to schools (this had not yet been done during the time of the TE, and may not be finished before the planned closure of the project).

The project had planned to build five demonstration sites where the public could see energy efficient products in action. Two of these sites were supposed to be in houses, three in public. Demo sites in houses were abandoned at the recommendation of the Mid-Term Review, which pointed out that houses (in use by a regular household) are generally not accessible for the public, however, these sites were not replaced by public demo sites but simply abandoned. In the end, only two demo sites were created, one school (showcasing for example lighting and air conditioning solutions) and one airport (showcasing outdoor lighting solutions). The latter in particular can be useful for awareness raising, however, not for demonstrating residential technologies.

The project also initiated, together with the Public Utilities Commission (PUC) and MEECC, a light bulb exchange campaign. Households could exchange two old (incandescent) light bulbs for new LED bulbs, for free, if they could show a recent electricity bill. The project and PUC organised a series of exchange events, over the course of more than a year, often attended by a leading government representative and generally well publicised, in places where a large audience would be present, such as supermarkets. This has generated a lot of attention and wide participation of the general public. Estimates are that around one quarter of all households has participated in the light bulb exchange programme, which is quite high in comparison to similar public events in other countries. Unfortunately, detailed data for the number of households participating are not available, and neither is the amount of (PUC) budget going into the light bulb exchanges tracked – it constitutes important co-financing for the project's objective but cannot be included in the absence of data. It is also noteworthy that this activity was not part of the project's design and has not been added to the project's strategic results framework at a later date.

The project had planned to measure changes in consumer or household awareness of energy and resource efficiency issues through surveys. This, unfortunately, has not happened. Stakeholders report a strong increase in awareness about energy efficiency issues among the general public and this matches observations from shop visits, where energy efficiency information was generally on display, however, in the absence of these surveys this increase in awareness can not be quantified. This is an important missing piece of information, in particular since the education and communication work seems to have had such a positive impact on the country.

Baseline data collection was an objective of the project. Ideally, baseline data is collected before a project starts (e.g., during a PPG stage), however, this is not always possible and the collection of baseline data at the start of project implementation can be a reasonable alternative. This is also what the project did, and a market study was conducted, consisting primarily of shop visits and the inspection of appliances on sale, through which data was collected about the characteristics of typical appliances sold in the Seychelles. In the absence of a formal market research infrastructure (which is typically not present in countries new to energy efficiency), this is a good and reasonably reliable way of gathering baseline data. All data was reported in a spreadsheet, for further analysis. Raw data included a detailed overview of products characteristics, including country of origin, reported energy performance levels and product prices, which would have allowed a detailed assessment of the range of energy efficiencies on the market, as well as a cost versus efficiency comparison – which is a crucial element of a market transformation strategy and essential for informing the government, as well as consumers, about the payback from investments in better appliances. Unfortunately, the analysis did not make use of these parts of the collected data and did not report on product cost and cost efficiency aspects. This is an important missed opportunity, which should not have happened.

As part of the project, the Government of the Seychelles was to create and staff a Renewable energy and energy management unit (REEM unit) at the Seychelles Energy Commission. This unit was created, however, the number of staff was one person, with one additional person provided, on a rotating basis, through France Volontaires. This stands in stark contrast to the budget pledged in the project document, in which the Government promised to make available \$750,000 for staffing the REEM unit, which should have allowed for a multiple of that staffing level. With insufficient capacity, the REEM unit focused on a limited set of tasks focused on the VAT exemption mechanism and has yet to build expertise with developing and implementing regulations. Although the work done by the unit is useful and a good contribution to an important part of the project, it falls far short of the intended implementation in which a complete unit would be created which would, through involvement in a large number of project activities, build the necessary expertise to initiate, develop, implement and communicate about regulations and be able to independently take energy efficiency forward in the Seychelles. Given the low number of staff and their lack of involvement in important parts of the project, it is doubtful that the Seychelles Energy Commission has yet built the capacity to continue and build on the work initiated by the project.

The project initiated training of Solar Water Heater installers, working with the Seychelles Institute of Technology. A solar water heater was donated by a commercial stakeholder to this school for use in training, and the school itself has sent three of its teachers to be trained in solar water heater technology (the first one on initiative of the project; two later ones at the school's own initiative), so that these teachers could instruct their students. Many students have since

been trained (exact numbers have not been tracked), thus creating a work force in the Seychelles capable of installing and maintaining solar water heaters.

The project further organised retailer training workshops. These were intended to inform these market parties about MEPS product requirements, however, with MEPS severely delayed, training was redirected towards the VAT exemption scheme that was also part of the project. Retailers were instructed in appliance energy efficiency topics in general, as well as specifically in the requirements of the VAT exemption scheme and how to apply. Retailer participation in these sessions was good; most retailers in the Seychelles have had staff present at one or more sessions. Retailers have also been applying their knowledge, by using (foreign) energy labels in their shops and applying for VAT exemption based on the energy efficiency of the appliances they import. The project had set out to also train customs officers in compliance checking for MEPS, which has not happened, nor was it replaced by a training session in the VAT exemption scheme (as for retailers).

An important support mechanism in the project was the SEEREP loan mechanism, in which households could obtain preferential loans for the purchase of efficient appliances. This loan mechanism was intended to support the project's goal of enabling underserved (lower-income) households to invest in energy efficient appliances. SEEREP required that households obtained a quote from a retailer, presented this to a participating bank and discussed a loan. The government would then subsidise the interest rate for the loan and secure half of the principal. Banks were not allowed to request additional collateral for these loans and still carried the risk for half of the principal as well as any outstanding interest payments, and thus were only willing to offer these loans to reliable customers with a good track record. Typically, such customers can afford appliances without a dedicated loan, and/or can obtain other means of financing appliances. This, combined with the high administrative cost for banks of these relatively small loans, resulted in the loan programme being hardly used; over the course of the project, only 87 loans have been approved, virtually all of them as an add-on to housing loans. The project realised, at some point, that the loan scheme was not working as planned and drafted a report to refocus the loan programme. This refocusing has, unfortunately, not yet happened.

Regardless, it remains doubtful that a loan programme, on somewhat commercial terms, could deliver the intended goal of allowing lower-income households to invest in energy efficient products. Experiences in other countries are generally not positive about such loan programmes, unless they are structured as preferential loans dedicated to a specific target group and combined with other incentives (such as direct subsidies). In the case of the Seychelles, an additional complicating factor is that many lower income households benefit from subsidised electricity rates and thus have less incentive to invest in the higher cost of energy efficient appliances. In such circumstances, other approaches may be needed to reach those lower-income households, possibly as part of a government overhaul of electricity rates (e.g., exchanging rate subsidies for appliance subsidies). This would require a further, much wider assessment, however, which is beyond the remit of this evaluation.

The project further included some smaller elements: a study on absorption cooling and other alternative cooling systems, which was completed, and is taken up by the Public Utilities Commission; and preparations for a policy framework for the replacement and recycling of old appliances. Preparatory work was done for that strategy. The project team mentioned a follow-up to this work, however, did not make this available for review. Both elements were, as discussed in section 4.1, beyond the scope of the project and should probably not have been included. The project did not have the capacity to spend the substantial resources needed to follow through on alternative cooling technologies and it is no surprise that this activity did not come to fruition.

4.2.1. Adaptive management (changes to the project design and project outputs during implementation)

The project worked with a project design that was not suitable for the situation in which the objectives had to be achieved, with a set of outcomes that was too large for the project, targets that were overly ambitious and planning of activities that did not match the time needed to properly develop elements of the approach. This creates a difficult setting, in which project management has no choice but to fall behind on a substantial part of the project.

Under these circumstances, it is hard to decide when a project is so far behind its original plan that a re-strategising is needed and the original design needs to be abandoned. Around the time of the Mid-Term Review, it was evident that the project was far behind on most of its outcomes and that it was unrealistic to expect that it would achieve its targets by the end of the project. The MTR recommended an extension of the duration of the project, however, incomprehensibly, no rethinking about the project's goals or timing. Given that an MTR is the preferred moment to re-assess a project's strategy, and this MTR recommended that the project struggles on, project management is hardly to blame for continuing with a flawed project design.

In reality, project management did make changes to the project's strategy, prioritising elements on which it could move ahead, in particular its VAT exemption mechanism and the education and communication strategy, and letting go of other parts, such as MEPS and labels. While understandable, it is still not a good course of action to make these changes without a careful rethinking of the consequences of such choices. Not pursuing MEPS and labels, for example, leaves the country at the end of the project without an infrastructure on which to continue and extend energy efficiency regulations in future, and communication, while leading to a very useful awareness raising, cannot be used to prepare the ground for regulations in this setting. Good adaptive management would have required that the project, under initiative and guidance of its overseers (the project steering committee and UNDP) would do a strategic rethinking of its approach, adapt its planning to the realities of the situation and work from a realistic plan in which elements of the project are aligned towards the overall goal of the project and working towards an end-point that allows for a sustainable continuation of efforts after the project.

The project, in conclusion, has been adapting its approach to a challenging situation and, understandably, focusing on fewer elements of the project than designed. It failed to think through the linkages between elements and re-set its targets once it was clear that the original design was not achievable. Instead, implementation comes across as an almost ad-hoc process, in which the project acted when an opportunity presented itself which was in the wider remit of the project, without much focus on an integrated strategy and what would have been needed to reach a sustainable end point. While the flexibility of the project team is commendable, the lack of planning and management is not. Overall, implementation of adaptive management was weak and this harmed the project.

4.2.2. Partnership arrangements (with relevant stakeholders involved in the country/region)

The project did not establish formal partnership agreements with important stakeholders, such as importers and retailers of appliances. Informal collaboration with stakeholders seems to have been effective, however, in particular with retailers, a key stakeholder in any market transformation strategy. There appears to have been some informal consultations with stakeholders as well as through the project steering committee, in which stakeholders were involved. This is a good and effective alternative to a more formalised collaboration, possibly even more effective as commercial and government parties do not always speak the same language and do not always operate at the same pace.

Collaboration within government appears to have been less successful, however, with the Ministry and the Energy Commission not working together to build the planned REEM unit to size and capacity, with mandates for the Energy Commission unclear or delayed far beyond acceptable levels and with the Ministry not following through on its commitments towards the project (such as facilitating the development of regulations). This lack of collaboration has done great harm to the project.

The project, finally, had claimed a partnership with the Neptune-project implemented by the Public Utilities Commission. No evidence of any real collaboration was found, however, and it appears as if the partnership existed primarily on paper to support a funding application.

4.2.3. Feedback from M&E activities used for adaptive management

The project document included a very standard M&E plan, focused more on delivering formally required documents than on tailored activities to establish what the impacts of the project were. As seems to have been the habit of UNDP

at the time (seen in various projects from the era), any impact monitoring has been left as to be defined during implementation, also without an assigned budget. That approach seems not to have worked (not unique to this project, it also has not worked in other projects), as no impact monitoring was taken up during implementation and no budget assigned to it. Formally required documents were delivered, although the project did not finish its inception workshop with a finalised inception report, leaving it in draft state.

Overall, there has been no discernible monitoring of project activities or results, other than through the annual PIR cycle. Even at the end of the project, the project team struggled to report on direct achievements of its activities and could only deliver an overview of, for example, use of its VAT exemption mechanism after repeated requests as part of the terminal evaluation process.

It should also be noted that Project Implementation Reports include an estimation of the transformation of the market achieved by the project. PIRs present this as an information-based estimate, and this likely led reviewers to conclude that the project was on track to delivering its results. The PIRs correctly state that numbers presented are estimates in the absence of actual market monitoring, however, the presentation of numbers still suggest a level of accuracy that did not exist. This comes across as misleading and is not a good way to report about project impacts.

The project's M&E plan included a Mid-Term Review, which was not mandatory for Medium-Sized Projects, and this MTR was delivered. The Mid-Term Review provided the following recommendations for the project:

1. Facilitate development and adoption of resource efficient legislation and regulations and implementation of minimum energy / water performance standards and labels.

End of project status: Development of regulations has only started progressing at the very end of the project and will not be completed before project closure. The Seychelles Energy Commission has started drafting overarching legislation that would strengthen its mandate to introduce appliance regulation; at the time of the TE, this was under discussion. As discussed in the review of the project's design, the scheduling of this activity was too ambitious. However, drafting and discussing of legislation should have commenced much earlier and a clear implementation path (e.g., outlining which legislation was needed when) could and should have been developed much earlier in the project. The MTR recommendation to speed up the development of regulations does not seem to have resulted in substantially more activity in the project team or within government.

2. Fully integrate water savings technologies into all project activities (in addition to energy savings appliances), including regulations, standards and labels, practical information dissemination and trainings for end-users and retailers, preferential financing schemes. Extend the project implementation team to include authority empowered to regulate water appliances (minimum standards for water efficiency).

End of project status: No water saving technology activities have been developed. This was probably for the best, since the recommendation would have burdened an already overstretched project with an additional portfolio of activities for which there was no budget. The management response to the MTR indicates that a parallel water savings project, implemented by the Public Utilities Commission, was already completed by March 2018. It thus seems prudent that the project did not initiate further action on this recommendation.

3. Facilitate with the MEECC and LWMA development of a solid waste management policy implementation plan specifically for recycling and safe disposal of e-waste and appliances, including the collection system, and costs estimate

End of project status: The project developed a starting paper for a solid waste policy, which was presented to the Ministry, however, no further follow-up has happened. Given that a solid waste policy has a much wider scope than resource efficient appliances, and that a solid waste policy, useful as it can be in itself, was not essential for achieving the objective of this project, it seems prudent that the project did not commit further resources to this recommendation.

4. Request no-cost project extension for additional 0.5 to 1 year

End of project status: A no-cost extension of one year was requested and granted.

5. Develop a simple savings monitoring scheme for practical utilization

End of project status: This recommendation included two parts: to complete and populate the monitoring system for appliances receiving support through the project (via its VAT scheme), and to monitor the market for efficient appliances. The monitoring scheme was still delayed at the time of the TE, and a partial population of the monitoring system was done for this TE, to be able to monitor impacts from the VAT scheme. Market monitoring has consisted of a second market survey, which fell short of requirements (e.g., no assessment of product prices and sales volumes, and no comparison with an earlier report). The project should have moved faster in populating its monitoring tool for its key financial scheme and have devoted more attention to market monitoring.

6. Address opportunities in new governmental building development (housing program and public buildings)

End of project status: The project has initiated some activities towards energy efficiency in buildings (beyond appliances), following the MTR recommendation. These activities have not led to a full building energy efficiency initiative, which seems prudent given that the recommendation seems severely misdirected, in suggesting that an already overstretched project spends resources on activities that are not part of its objectives. The project would have done better to ignore this recommendation.

7. Utilize and strengthen local capacities – internally and externally (such as training of trainers)

End of project status: The project was recommended to utilise the local champions of Renewable energy and energy management already present in the Seychelles. The project undertook an assessment of national capacity, however, does not seem to have found those local champions. That's also not surprising, given that most aspects of the project were entirely new to the Seychelles and there was no experience with any kind of energy efficiency regulation prior to this project. It is unclear on what basis the MTR has made this suggestion, and it is only logical that the project was unable to act on this. The recommendation further included the need to increase funding for the RE/EE unit at the SEC, as was included in the project document, to increase capacity. This capacity was only increased in the final year of the project, which was too late to make up for lost time earlier on in the project. The biggest hindrance seems to have been that government refused to deliver on its commitment to fund a larger RE/EE unit, which is considered a serious breach of its commitment to the project and its promise to UNDP and the GEF. It would be prudent to insist that the Government of Seychelles formally explains why it has not delivered its committed funding for the staffing of a government agency unit that would have been instrumental to the success of the project.

8. Analyze opportunities and barriers for development of store financing/leasing and its costs for financing resource efficient appliances

End of project status: The Government of the Seychelles has reviewed options for in-store financing. Since this requires a new legal framework, it is not surprising that no action could be taken on this recommendation within the context of the project.

9. Explore opportunities to utilize international registries of energy efficiency appliances

End of project status: The project was recommended to utilise registries of other countries for its verification of the energy performance of imported products. The project responded to this by exploring more how the certification process for its VAT scheme worked and what could be learned from this. While this response of the project fell short of the recommendation (and it would have made sense to also review and discuss how the project could benefit from international certification for its – delayed, and yet to be developed – MEPS), it is also worth noting that the recommendation is based on an incorrect understanding of international S&L practices. There are no relevant global or international S&L registries open to authorities in the Seychelles, and the recommendation was not

implementable. The recommendation further included the suggestion that the Seychelles would develop an international register if none existed, which the project – luckily – ignored, as such an action would have far exceeded the resources available to a Medium-sized project in a small island country.

10. Revise project logframe
 - a. Do not limit the target group to some sectors, nor to specific source of financing only
 - b. Pilot sites to be available to public, not necessarily households only
 - c. Remove the second target “Policy and institutional mandate (MoU signed by LWMA) in place by end of year 1” of Outcome 4.1 “Recycling of non-EE residential appliances mandated in policy and institutional responsibilities”
 - d. Remove the last logframe indicator – “average electricity use per household (kwh/year) participating in SEEREP or other RSE financing platform”
 - e. Rephrase the 5th indicator and target of output/outcome 1.1 to include labeling (in addition to MEPS), and water appliances (in addition to electricity appliances)

End of project status: The project has revised its logframe according to the recommendations. The MTR recommended extending the scope of financing also to large-scale tourist industry, probably not recognising that large-scale hotels and resorts typically use different types of cooling, refrigeration and water heating systems which bear little resemblance to residential appliances and which are typically regulated in different ways. The project was therefore wise not to follow this recommendation.

11. Secure funding for new / additional activities related to the project implementation for SEC, SRC, SIT, and SBS from the state budget

End of project status: The project recommended that the project raises additional funding from the Government of the Seychelles for the continuation of project activities after project closure. No action was taken on this recommendation, and rightly so as it is beyond the remit of a project to arrange implementation after its closure (and beyond the remit of an MTR to suggest this).

12. Continue the discussion with policy makers on full pricing of electricity and water to reflect actual costs, combined with introduction of addressed social support to low-income households

End of project status: The MTR recommended continuation of an ongoing discussion of electricity pricing within government, to address the low cost of electricity which was hindering implementation of the project. Since such a discussion was ongoing at high levels of government, the project concluded that no further action was needed. This appears to have been the right course of action. A more useful approach would have been to review how the project strategy would need to be adapted to enable implementation even under these more challenging circumstances. That, however, was not recommended and thus no action was taken.

The project responded appropriately to most of the MTR recommendations, however, did not follow up on the recommendation to speed up work on regulations (even if the original planning was too ambitious, preparatory work could and should have progressed more rapidly, in particular after a recommendation to do so) and on the monitoring of impacts (severely delayed, and the timing of this was entirely in the hands of the project). Several MTR recommendations would have been difficult to implement, had the project fully followed the recommendations, and the effect on final results would probably have been limited or could even have been detrimental to progress towards the project’s objective (as the recommendation to also set up activities around water savings), and the project was probably wise not to fully follow MTR recommendations.

Missing, however, was a discussion on MTR recommendations in the project’s management response. Management responses offer an opportunity to reflect on recommendations and decide which ones to implement and which ones not (while explaining why not). Such a discussion is largely missing, although for some recommendations “no action”, with a justification, is listed as the response. It would have been clearer to add a separate discussion of

recommendations to the management response and have a clearly stated decision about the implementation of recommendations before actions are formulated.

Taking into account that the M&E framework of the project was weak in its elaboration of impact monitoring, and that the MTR for the project left out many key elements required in an MTR, and offered several recommendations which seem questionable, the project had little M&E information to work with for information-based adaptive management. The section on adaptive management already discusses that management seems to have been more ad-hoc than adaptive, and the use of M&E information would confirm that view. Even with a weak M&E framework, and a weak MTR, the project could have done more to critically assess progress information and adapt its work plan based on that in a more structured, integrated way.

4.2.4. Project Finance

Financial management of the project was fine as far as it concerns adequately recording spending of GEF- and UNDP-provided funds, however, tracking of co-financing did not happen. . There is also no evidence of tracking project spending per component and making sure that spending remains within agreed deviations of the GEF funding application. It has been clear for some time that the Government of the Seychelles has underdelivered on some of its co-financing commitments, in particular for project staff (project manager cost, and staff cost for the REEM unit), without a response by the project or UNDP. In fact, UNDP decided to cover the cost of the project manager from the GEF budget when the Government of the Seychelles declined to deliver on its commitment for this cost. This is not good practice for an implementing agency as it encourages the government to underdeliver on its commitments and may also lead to spending a higher share of the GEF budget on project management cost than was planned or is allowed under GEF rules. In the absence of detailed tracking of cost per category, however, the latter cannot be established with certainty. The project budget, as submitted to the GEF, included \$210,000 in co-financing of project management cost; it is unclear how this budget was composed, other than a specified (and apparently not delivered) \$80,000 contribution of the Ministry of Environment & Energy for project management.

Financial status of the project

The project budget as set out in the GEF CEO endorsement request and UNDP project document only specifies GEF spending, not planned spending on UNDP co-financing or other co-financing. There has also been no tracking of spending on co-financing and financial reports (Combined Delivery Reports) do not specify UNDP co-financing.

The budget overview below lists spending of GEF budget per outcome, based on data provided by UNDP in the project's annual work plans (Combined Delivery Reports have not been made available for years 2014 to 2018), spending listed in the MTR report and the 2019 Combined Delivery Report. Co-financing is discussed separately, below.

Project budget – planned and delivered GEF budget (up to 6 May 2019)

Component		Planned	Delivered	Difference
1	Improved policy, institutional, legal/regulatory and financial framework for RE technologies	\$ 416,000	\$372,827	- \$43,173
2	Awareness-raising and educational campaign on RE technologies	\$ 561,000	\$484,841	- \$76,159
3	Training schemes to support market for RE technologies	\$ 321,000	\$359,019	+ \$38,019
4	Financing Mechanisms to support adoption of RE technologies	\$ 373,500	\$286,547	- \$86,953
9	Project Management	\$ 98,500	\$118,523	+ \$20,023
	Not assigned			
	TOTAL	\$1,770,000	\$1,621,757	- \$148,243

Project spending overall seems to be broadly on track with the overall progress of the project, although there seems to be, at the time of the TE, a slight overspending on the GEF budget (presumably covered by UNDP). The reader should be aware that, for years 2018 and 2019, this is based on planned budgets per year, which may differ from actually delivered spending.

Spending per year has broadly kept track with the project, with low spending in its first (start-up) year, when there has been little activity, and increasing spending in years after. The planned budget dropped significantly in 2018, which is remarkable as there seemed to be a large unused amount of GEF funds available and more than enough to do in the project. At the time of the TE, there appears to be almost \$150,000 unassigned budget left in the project, part of which may have been allocated to ongoing activities. Even accounting for ongoing activities, it is remarkable that there would be unused budget at this stage of the project, given that there are less than two months left between the time of the financial overview and planned operational closure of the project.

At the time of the TE, project management also indicated that it was planning to continue with six activities beyond operational closure of the project (excluding the TE), which is highly unusual. These activities include projects assigned to five consultancies and a training activity for staff of the SEC. The SEC would provide oversight of those activities, as the project would be without a manager at that stage. This, of course, is not how UNDP-GEF projects are supposed to be managed.

In the absence of a clear allocation of co-financing and tracking of their delivery, it is virtually impossible to provide a complete overview of all co-financing pledged and delivered to the project. At the time of the funding request, the following amounts of co-financing were planned:

	Budgeted in Project Document
GEF financing:	1,770,000 USD
Other: (all cash, except where indicated)	10,255,203 USD
- SEC	750,000 USD
- MEECC	80,000 USD
- PUC	1,500,000 USD
- Ministry of Finance, Trade and Industry	6,898,503 USD
- DBS	500,000 USD
- AFD	TBD
- SIT (in-kind + cash)	100,000 USD
- S4S	46,700 USD
- Clinton Climate Initiative	300,000 USD
- UNDP	80,000 USD
Total project costs (incl. GEF)	12,025,203 USD

Of these, the following can be observed:

- SEC (\$750,000, cash, for the establishment of the RE&EE-unit): No amounts have been tracked, however, taking into account that the SEC has so far only one officer on its payroll working on the project, and that this person has been in her position only since 2018, it seems highly unlikely that more than a minimal share of the pledged amount was delivered.
- MEECC (\$80,000, cash, for project management cost): No amounts have been tracked, however, it became clear that MEECC declined to fund the project manager position and that these costs have been covered by UNDP from the GEF-budget. It is therefore considered that this amount of co-financing has not been delivered.

- PUC (\$1,500,000, cash, for the Neptune project): Given that the Neptune project did not coordinate with this project, this co-financing should not have been counted towards this project (and it is doubtful whether it should have been included in the funding request, since no co-operation mechanism was in place). PUC did, however, provide 10,499 LED lamps for a lamp exchange plan, as an unscheduled activity of the project (which has contributed directly to its goals), with costs shared between PUC (25%), MEECC (25%) and the project (50%). At a cost per bulb of around \$5, this might contribute to a contribution of around \$13,000 for PUC (and a similar amount for MEECC).
- MFTBE (\$6,898,503, cash, for the SEEREP financial mechanism): This co-financing consisted of a planned interest rate subsidy of \$968,643, a loan guarantee of \$5,429,860 and cost for fund management of \$500,000. A loan guarantee can be included as co-financing, however, it needs to be labelled as guarantee; it was labelled as investment, which it clearly is not. The SEEREP mechanism underdelivered: in the end, only 87 loans of a total value of SR 3,935,000 (approx. \$300,000) have been provided, over the duration of the project, and the amount of interest rate subsidised amounts to a maximum of 5 years x 5% per year = 25% of this amount (approx. \$75,000), although the actual amount is probably substantially lower as not all loans have a tenure of 5 years and repayments lower the amount of interest due. The total amount of loan guarantee provided amounts to 50% of the total loan volume, or approx. \$150,000.
- Development Bank of Seychelles (\$500,000, cash, for a financing scheme for SMEs): There is no evidence of this financing scheme having been operational. Instead, SMEs have been able to use the SEEREP mechanism.
- Agence Francaise de Developpement (TBD, green loan facility): The green loan facility indicated, though not included, in the project document has not materialised. AFD has provided in-kind support in the form of volunteers who have worked on the project.
- Seychelles Institute of Technology (\$100,000, in-kind and cash, activities not specified): SIT has supported the project through the creation of a training facility for solar water heater technology, training of its teachers and the training of future installers. The value of this contribution has not been established.
- Sustainability for Seychelles (\$46,700, cash, contribution not specified): The project documents only specify an amount, not what the co-financing constitutes. The NGO Sustainability for Seychelles has contributed to the project, partly on contract, and may also have provided support financed independently. In the absence of information, the amount of this contribution could not be established. It is unlikely that the contribution constitutes a cash contribution, however.
- Clinton Climate Initiative (\$300,000, cash, for various – unspecified – activities related to climate policy): There is no evidence of this support having materialised.
- UNDP (\$80,000, cash, unspecified): UNDP pledged co-financing to support the project's activities. This co-financing has been tracked and amounts to a little over \$100,000, at the time of the TE.

Not specified as co-financing, although listed as an activity in the project document, is the VAT exemption the Government of Seychelles intended to provide to help transform the market for household appliances. This support has been delivered and, although monitoring of the contribution is only partially developed at the time of the TE, a reliable overview of the amounts of VAT exemption has been created by the project team. Recording of VAT exemption data was still not finished at the time of the TE, and an ad-hoc overview of VAT exemption prepared for this TE includes obvious mistakes with significant impacts on totals (e.g., one entry of 55 household refrigerators with an average cost of \$64,000, which equals almost 1/3 of the overall reported amount of VAT exemption provided). It can only be concluded, therefore, that over the duration of the project, the Government of Seychelles (via the Ministry of Finance) has contributed an unknown amount in VAT exemption to the project.

UNDP has had annual audits prepared for the project, which state that funds were used in accordance with their planned purpose and UNDP-GEF rules. These audits, however, only cover direct UNDP disbursements (including GEF funds) for the project, do not link payments to project activities, do not compare spending to the originally agreed project budget, do not track cash co-financing, do not track whether activities delivered the (in the project document) intended outputs and seem generally more concerned with tracking project assets of small value (largely whether all the tables and chairs purchased for the project are accounted for) than with providing a review of the finances of the project. While it may be common practice for UNDP country offices to only track spending of GEF funds and UNDP co-financing, it does not constitute good management practice to do so.

Overall, co-financing of the project fell substantially short of pledged amounts. Government co-financing for financial instruments has broadly been delivered as planned, although through a different mechanism. Government co-financing for other parts of the project, and in particular for staffing of the executing agency, has fallen far short of expectations. Co-financing by others has also, overall, fallen far short of planned contributions and it appears that, with the exception of VAT exemption funds, the GEF budget has been by far the largest funder for this project. Even factoring in the VAT budget, the ratio of GEF to Government funding seems to be close to 1:1 – and not the 1:6 ratio promised in the project documents.

4.2.5. *Monitoring and evaluation: design at entry and implementation (*)*

The project's M&E plan was seriously lacking in contents, at design. The plan included all the usual formal progress review documents, as well as the usual reference to PIRs which report on progress towards targets, however, all measurements of means of verification were left to be developed and specified by the project team during implementation. In the absence of a clear idea of what to monitor and without clear oversight, this was a rather minimal solution. As a result, the M&E framework was, in essence, designed to underperform.

The project reported on its progress in the required documents (primarily quarterly and annual progress reports and annual project implementation reviews). Unfortunately, no targets had been defined for the actual market transformation the project aimed to set in motion and, although market data could have been collected through the project's VAT exemption scheme, shop visits and discussions with retailers (with whom the project had a good working relationship), no actual market monitoring happened – understandably, since this was not defined as a target. Repeating a comment made during the discussion of the project document, this underscores the importance of defining (and reporting on) meaningful targets for projects.

The project did gather information about its communication activities, in particular media exposure generated, which is useful at activity level. No efforts were made, however, to monitor consumer understanding of energy efficiency beyond the anecdotal level, even though this was a defined target of the project. Similarly, there has been no monitoring of the project's financial instruments (SEEREP loan scheme and VAT exemption mechanism) until the project was expressly requested to do so for this TE. Even then, only partial records could be produced for the VAT exemption scheme since the database that was supposed to register all VAT exempted appliances was still not in use.

It is a shame that M&E was weak at design, and that no further attempts were made to measure project impacts during implementation. It is particularly worrisome that the project did not track the results achieved by some of its key (financial) mechanisms during implementation – and that the project steering committee and the Government of Seychelles were apparently fine with this. Resulting ratings are:

- Overall quality of Monitoring and evaluation: unsatisfactory (U)
 - M&E design at project start-up: unsatisfactory (U)
 - M&E plan implementation: unsatisfactory (U)

4.2.6. *UNDP and Implementing Partner implementation / execution (*) coordination, and operational issues*

The overview of the implementation of the project presented in this section points to several issues with the management of and reporting about the project, and several cases of the project not following the project document. Even where there are good reasons to deviate from the original project design, such as the overly complex and ambitious design for this project, good project management requires that decisions to not implement parts of the project are justified and documented, and that the consequences of these changes for other parts of the project are taken into account. Similarly, when Government co-financing for the project team (SEC RE&EE unit and project manager) were not delivered at the expected level, actions should have been taken to hold the Government to account and if needed halt or slow down the project until the Government would make available the necessary staff to implement the project. The goal of a project is, after all, not to spend its GEF budget but to achieve a transition in a country – and that is rather difficult when Government staff supposed to implement a project is not made available.

Implementation of the project happened through an unusual arrangement, in which UNDP and the Government had set up a project coordination unit to manage all UNDP and GEF-funded projects and which was co-hosted with UNDP (at government facilities). Implementation of the project was managed by the National Project Director, also GEF Operational Focal point, who was actually not working for the Executing partner (the Seychelles Energy Commission). Such a set-up, while no doubt efficient in some ways, also undermines a key aspect on development projects: to build independent capacity for policy development and implementation at the relevant government agencies (which includes also managing a policy development project). During implementation, UNDP has maintained a good working relationship with the executing agency, however, with the project manager reporting directly to the coordination unit, and not to the executing agency, responsibilities are mixed up and project impacts suffer as a result. Budgets are often an important tool to help move policies forward in a country and taking budget authority away from the executing agency left it with no means to push forward the key regulations it was supposed to develop. Even though there is no evidence for a direct link between the way the project was organised and the lack of progress on regulation, there is at least a suspicion that the set-up as chosen in the Seychelles has been harmful to the objectives of the project.

It is not clear why UNDP opted to co-create this project coordination office rather than use the usual set-up of nationally executed projects. Nor is it clear why the double role of national project director (not residing at the executing agency) and GEF operational focal point was chosen or allowed. It is possible that UNDP and the Government of the Seychelles considered that Government agencies were not ready to handle responsibility for a policy project and a GEF-budget. If that is the case, the project should simply not have been implemented (given the large policy and regulatory component included). Otherwise, it might be wise to revise the arrangement, also to make sure not all power over GEF-funded projects is consolidated in a single office within Government.

UNDP, in its implementing agency role, was also tasked with providing direction to the project. This could – and should – have included linking the project with similar projects in nearby countries such as Kenya and South Africa and sharing information such as project implementation and evaluation reports from those projects. There is no evidence of this happening.

The executing agency, the Seychelles Energy Commission, had in the end a fairly small role in the project. It has taken responsibility of one financial instrument (VAT exemption mechanism) and has been involved in (but not leading) the development of regulation. Its lack of an appropriate staffing level also did not allow it a much larger role. It seems that the SEC lacked the authority to insist on a better mandate for regulation and to push for better staffing levels; and the Ministry it reported to (which doubles as national project director, and GEF operational focal point) has given it insufficient support. One can only speculate how this would have ended if the executing agency had been properly empowered for its role; now that its legs were cut off by the loss of both project management and national project directorship, it had no chance of developing into the champion the project had needed.

The national project director was tasked with steering the project at strategic levels. For this, he was further supported by a permanent assistant who was hosted at the project coordination unit. Despite the multiple roles the national project director combined, there is little evidence that he used his positions to pressure other parts of government to help the project achieve its objectives – which is the key task of a national project director. In fact, when the project asked for help in moving forward its regulatory component, there appears to have been no follow-up apart from a single notice within his Ministry. Overall, this constitutes a gross neglect of responsibilities. Given that the role of the national project director was separate from the implementing and executing agencies in this project, a separate rating of the role of national project director has been added to this TE. Resulting ratings are:

- Overall quality of project Implementing and Executing agency implementation and execution: Unsatisfactory (U)
 - Implementing agency execution: Unsatisfactory (U)
 - Executing agency execution: Unable to Assess
 - National Project Director: Unsatisfactory (U)

4.3. Project Results

The project has contributed to increased resource efficiency of household appliances in the Seychelles. There are no indications that it focused specifically on underserved communities in the residential sector, instead having extended its focus during implementation to also include SMEs. Efficiency improvements have been achieved primarily through one-off measures (VAT exemptions and light bulb exchanges) and these may reverse once VAT incentives are removed and light bulb exchanges end (as, inevitably, all incentive programmes do one day). Regulatory and market transformation actions that were intended to create a sustained transformation in the appliance market have not been achieved. Through a successful package of communications activities, the project seems to have managed to change public perceptions about resource efficiency and stakeholders report an increased interest in efficient appliances. In the absence of surveys or other information, there is no good indication of the size of the shift in public awareness, its robustness or its effect on purchases or intentions for efficient appliances.

The project has still not, at the time of the TE, completed its registration of VAT exempted appliances or the amounts provided. For the TE, the project team compiled an ad-hoc overview of VAT exemptions, however, with significant mistakes and some unexplained anomalies (e.g. household appliances with extremely high costs per product, average cost per product more than doubling from year to year, thousands of air conditioners listed in the overview, however, without value or VAT exemption amounts indicated) and those records have to be considered unreliable. As a result, there is not a single bit of evidence suggesting that the project has had an effect on the average energy efficiency of appliances in the Seychelles, other than from the light bulbs replaced (also not tracked).

The project has also not delivered on some of its key instruments that could have provided a long-term impact: regulations that should have been finished by the end of the project had not even been drafted at the time of the TE, there was never any activity for the development of an energy label, the Renewable Energy & Energy Efficiency unit at the Seychelles Energy Commission had only seen a small increase in staff level in 2018 (to one full time staff member working on appliances since 2018, complemented by a volunteer from France Volontaires).

The project has generated a lot of media attention with its communication activities, however, it is unclear to what extent that has led to a shift in consumer behaviour (e.g. buying more efficient appliances) or consumer perceptions (e.g., the intention to buy a more efficient appliance next time). The only project activity that has had a notable effect on the use of more efficient appliances in the Seychelles has been a light bulb exchange programme, with an estimated (but not verifiable) number of 10,000 – 15,000 old light bulbs having been replaced by LEDs. These will continue to contribute to energy savings for some years to come, however, since this was a free exchange programme, it says little about a market transformation or the willingness of the general public to invest in more efficient appliances.

The project's overall demonstratable environmental impact adds up to approximately 3 – 5 kton CO₂ equivalent direct and indirect impact, falling far short of the project's (reconstructed) target and far too limited for a project of this size and direction. In addition, important regulatory steps have not been taken and other impacts, such as increased awareness, have not been established.

The overall appreciation of project results is Unsatisfactory (U). This rating is based on an average low level of achievements on project results per outcome or component and a low level of progress towards the project's goal.

Individually rated criteria for project results are:

- Overall quality of project outcomes: Moderately Unsatisfactory (MU)
 - Relevance: Relevant (R)
 - Effectiveness: Unsatisfactory (U)
 - Efficiency: Moderately unsatisfactory (MU)
- Overall likelihood of risks to Sustainability: Moderately Unlikely (MU)
 - Financial resources: Moderately Likely (ML)
 - Socio-economic: Moderately Unlikely (MU)

- Institutional framework and governance: Unlikely (U)
- Environmental: Likely (L)
- Environmental Status Improvement: Minimal (M)
- Environmental Stress Reduction: Minimal (M)
- Progress towards stress / status change: Negligible (N)

These ratings reflect that the project started a wide range of activities, however, finished only a few of those, is still far behind on the development of key regulatory instruments at the end of the project, has implemented some good activities, however, did not link these together into an overall strategy, and has achieved little sustainable progress towards its overall goal.

4.3.1. Overall results (attainment of objectives) (*)

The project's main objective was to significantly reduce the rate of electricity consumption and water usage in Seychelles among underserved communities in the residential sector. This would be achieved through a transformation of the market using regulatory instruments (MEPS and labels); awareness raising and education; training of professionals; and financial instruments.

As discussed in section 4.1, this evaluation, which must assess achievement of expected results, cannot do so based on the strategic results framework developed for this project, since many baseline values were unrealistic, the GEF GHG methodology was not followed, several indicators were expressed at the output-level rather than the outcome-level, and the projected energy savings and carbon benefits only factored in the purchase of efficient appliances with financial support from SEEREP and did not take into account the potential impact of implementing MEPS, energy labels and VAT incentives.

Reconstructed indicators and targets were created for this project, based on the overarching market transformation goal, and these form the basis for the discussion of attainment of objectives. All outcomes have been rated on a 6 point scale, with 1 point representing no or severely lacking achievement of the outcome, 5 points representing achievement of the outcome as planned and 6 points representing better achievement than planned. On this scale the project overall scores 20 points, or 2.8 points per outcome on average.

Reconstructed indicator	Reconstructed target	Results achieved
1 - baseline studies <i>Market monitoring and monitoring of financial incentives established for resource efficient appliances</i>	Ongoing monitoring of energy efficiency developments in the market for household appliances set up by the end of year 1, with regular updates during project implementation, and a monitoring system for financial incentives operational by the end of year 2.	Baseline studies have been conducted in 2014 and 2018, however, analysis of the data was incomplete. A market monitoring system for financial mechanisms of the project was designed but has not yet been implemented. (3 points)
2 - EE & RE unit <i>EE & RE unit established for the implementation of appliance resource efficiency policies</i>	EE / RE unit mandated to develop MEPS and label regulations and staffed with at least 3 trained engineers by the end of year 1.	The SEC has not yet been mandated by the Ministry to develop and introduce MEPS and label regulations. SEC staff is not yet trained in the development of regulations (some training is foreseen to take place after closure of the project, however, not for the development of regulations). (2 points)
3 - MEPS regulations	MEPS and labels approach developed by the end of year 1.	No dedicated MEPS and label approach has been developed, setting out how these

<p><i>MEPS and Label regulations implemented and operational for five major household appliances</i></p> <p>4 - national energy label – separate from MEPS</p> <p><i>See no 3</i></p>	<p>Technical specifications and administrative procedures developed by the end of year 2.</p> <p>Energy labels introduced in year 3.</p> <p>MEPS adopted by the end of the project.</p>	<p>instruments could be applied to the complex situation of the Seychelles.</p> <p>Technical specifications for MEPS were developed, however, have not moved since year 2 of the project, have not been subject to stakeholder consultation and show significant technical defects.</p> <p>There has been no progress on energy labels.</p> <p>MEPS have not been adopted and there is no solid implementation trajectory available. (1 point)</p>
<p>5 - education and communication strategy</p> <p><i>Consumer awareness of appliance resource efficiency issues and the environmental and financial benefits of resource efficient appliances</i></p>	<p>SEECs Action Plan developed, adopted and funded (not just by GEF funds) by the end of year 1.</p> <p>Consumer awareness, in a statistically significant sample of the general population, of 50% for energy labels and 25% for project financial support mechanisms (loans and VAT exemption) by the end of the project.</p>	<p>A Communications strategy and action plan (SEECs) was developed, agreed and implemented; it is unclear whether other than GEF funds have been allocated to this.</p> <p>Consumer awareness of energy efficiency seems to have improved, however, there are no surveys or other measurements indicating the level of awareness. (4 points)</p>
<p>6 - promotion of absorption technology</p> <p><i>None</i></p>	<p>No target.</p>	<p>A technical report was produced, without follow-up. However, since this indicator was removed in the reconstruction of indicators, no rating is given.</p>
<p>7 - training of retailers and customs about MEPS and labels</p> <p><i>Importers, retailers and customs officials knowledgeable of appliance resource efficiency requirements</i></p>	<p>All 8 major retailers and importers of appliances are demonstrating knowledge of resource efficiency requirements.</p> <p>All customs officers clearing appliance imports demonstrating knowledge of resource efficiency requirements.</p>	<p>Retailers and importers participated in training workshops. There has been no assessment of their level of knowledge after participation, however, shop visits and feedback from stakeholders indicate that the level of knowledge has increased substantially and that major retailers have sufficient knowledge of energy efficiency.</p> <p>Customs officers have not been trained or informed about MEPS regulations under development; since that development stalled, such training would have been difficult also. (3 points)</p>
<p>8 - vocational training for installers</p> <p><i>Water heater installers installing and maintaining solar water heaters</i></p>	<p>Number of technicians trained and working in solar water heater installation and maintenance.</p>	<p>By June 2017, 17 technicians had been trained in SWH technology. There has been no further monitoring of this training since.</p> <p>There is no indication whether trained technicians are actually installing SWHs. (3 points)</p>
<p>9 - safe disposal of old appliances</p>	<p>No target.</p>	<p>The project developed a proposal for a solid waste policy which was apparently adopted.</p>

None		However, since this indicator was removed in the reconstruction of indicators, no rating is given.
10 - financial support mechanisms <i>Financial mechanisms in place to support the uptake of more resource efficient appliances</i>	VAT exemptions in place by the end of year 2, based on established energy labels, supporting appliances meeting future MEPS levels.	VAT exemptions have been in place since 2016, about 2 years after the start of the project. The VAT scheme was based on a separate set of requirements and not linked to ongoing work on MEPS, nor to an energy label. (4 points)

The evaluation rating for the overall quality of project outcomes is moderately unsatisfactory.

4.3.2. Relevance (*)

The project focused on improving resource efficiency, and primarily energy efficiency, in household appliances in the Seychelles. Given the country's context of high GHG electricity production, and high costs of importing fuel oil, this was a relevant trajectory. To achieve results towards improved resource efficiency, the project focused, in reality, largely on awareness raising and promoting energy efficient appliances through a VAT exemption mechanism. Such measures, and in particular awareness raising, are excellent first steps for a country starting an energy or resource efficiency strategy. Specifically in the context of the Seychelles, however, where a majority of customers, and in particular virtually all low-income households, benefit from subsidised electricity rates which undermine the cost-effectiveness of investments in energy efficiency, an awareness and market-based approach is probably not the most useful, if not accompanied by a strategy to specifically address those low-income households. Such a strategy was missing.

The project also worked on regulatory measures (minimum energy performance standards) which aim to ban the least-energy efficient appliances from the market. This is a complex policy instrument, and one that is not particularly suited for a market with, for many households, subsidised electricity rates and for high-consuming households and businesses quite high electricity rates. For standards to be effective, they would probably have to be set at a level that would require low-income households more in better appliances than they might gain back through lower electricity bills, whereas that level might still not be sufficient to capture available cost-effective improvements for higher-income, high electricity consuming households. Specific measures would have been needed to address this issue. In addition, specific attention would have been needed for the position of the Seychelles as a small island country trading with many parts of the world, however, not aligned with any part in particular. That setting makes it difficult to find a standards mechanism that is practically implementable without disrupting many existing trade relationships.

Given the project's focus on a relevant topic for the country, however, working with a strategy that did not sufficiently address the needs and circumstances of the country, relevance of the project can only be mixed at best. This is perhaps best demonstrated by perhaps the project's biggest success: its incandescent lamp for LED exchange programme. This programme, not part of the project's design, not added to the project's strategy later and not monitored for results, was probably one of the most effective ways of bringing energy efficiency into people's homes. Giving away LED lamps is probably not a sustainable strategy (although, it could be cost-effective from a national perspective, for low income households, who thus reduce their electricity demand and the amount of subsidy the government has to put in to maintain those subsidies), and it is a typical first step in an energy efficiency strategy, together with awareness raising, and well before regulatory and financing instruments can usefully be added to the mix. The project, although relevant, was not focused on creating those first steps towards energy efficiency and building a foundation for later successful national strategies and was thus less relevant than it should have been.

The evaluation rating for the project's relevance is Relevant.

4.3.3. *Effectiveness & Efficiency (*)*

The project has been largely ineffective in reaching its objectives. There is no indication that the market for household appliances has substantially changed, even if shop visits indicate that there is some use of an eclectic mix of energy labels. The VAT exemption scheme has promoted the sales of more efficient appliances, however, its effects are not measured. The project generated a lot of media attention for energy efficiency, however, has not demonstrated that consumer attitudes have changed. Regulatory instruments prepared by the project are incomplete, poorly prepared and not tailored to the country's situation. In addition, many activities were started and not finished. These circumstances allow only for a low effectiveness rating.

The project's efficiency is more difficult to assess, in the absence of a clear overview on which budgets were spent for what. The project spent almost a quarter of its GEF budget (\$370,000) on the preparation of policies and regulations, without any finished result. It also spent almost a quarter of its GEF budget (\$360,000) on training of retailers and installers, which is quite a substantial sum taking into account that the market in the Seychelles consists of 8 larger retailers and that training of installers consisted of one solar water heater training station at the local technical college. Both activities were useful, however, the cost seems excessive under the circumstances. The project seems to have spent less than planned on communication, which seems surprising given the emphasis given to communication during implementation. It would have been useful if some budget had been directed to surveys or other means to quantify consumer awareness levels and consumer responses.

Based on this, the evaluation rating for the project's effectiveness is Unsatisfactory (U) and for its efficiency Moderately unsatisfactory (MU).

4.3.4. *Country ownership*

The project has been hindered by non-delivery of government support for the project, in particular a clear mandate for the executing agency to further regulations, adequate staffing levels for the RE&EE unit as committed to in the project document and what can only be interpreted as an unwillingness to move forward on regulatory instruments.

The retail sector appears to be satisfied with the project and seems ready to move forward, although it remains to be seen whether that readiness extends to actual regulatory instruments since the project has not sought stakeholder feedback on its MEPS proposal or its (non-developed) plans with energy labelling. Upmarket retailers report substantially more interest in renewable energy and energy efficient technologies, however, it is unclear whether that interest extends to all customers. Consumers seem happy enough with free lamp for LED exchanges and understand energy efficiency better; their willingness to translate this awareness into buying more efficient products has yet to be tested.

Overall, country ownership is thus weak, even if some parts of the market (however, notably, not government) show a higher interest in energy efficiency.

4.3.5. *Mainstreaming*

The project contributed to first steps towards mainstreaming appliance energy efficiency in the Seychelles. Awareness raising, and also its VAT exemption scheme, have helped bring energy efficiency to the forefront and take it into people's homes. To what extent this also translates into a willingness to move further on energy efficiency and make energy efficiency an integral part of the appliance market remains to be seen. Key instruments for that, such as standards and labels, have not been delivered and implementation of the VAT scheme, while visible in shops and recognisable for the public, has not yet arrived at a clear and easy to understand scheme that can guide the market.

The project has not helped mainstream appliance energy efficiency legislation within Government. Despite various requests by the project team, the Government has still not acted on its commitment to enable regulation for minimum energy performance standards and energy labels. Government also failed to staff the Renewable energy and energy

management unit it had created, thus undermining a key component of mainstreaming energy efficiency in national policies. Overall, the project seems to have contributed small steps to further mainstreaming appliance energy efficiency in the Seychelles, however, much less than should have been achievable.

4.3.6. *Sustainability (*)*

Sustainability of the project's results would need to come from a transformed market, in which new appliances brought into the country are more efficient, more resource efficient appliances are bought by consumers understanding their benefits and regulatory instruments safeguard and continue this transformation in future years. None of that has been achieved.

The project has, however, created more awareness for energy and resource efficiency among the general public and in the retail sector. These are important achievements. It also has established a VAT exemption scheme for resource efficient appliances which, while not sustainable in the traditional sense of the word (since this tax measure, like all tax measures, is up for regular revision within government) still seems to be well-embedded in the Seychelles and intended to continue for some time.

More worrisome is that, at the end of the project, there is no budget assigned to continue awareness raising efforts and that the unit at the Seychelles Energy Commission which is supposed to continue all work related to appliance resource efficiency is still understaffed, still misses a clear mandate, has not yet built experience with regulations or market monitoring (for regulatory instruments) and is still in the process of being trained. In those circumstances, there is a severe risk that awareness for resource efficiency will slowly erode and that policy and regulatory initiatives, much needed to secure a better foundation for resource efficiency, will stall. These circumstances lead to the following ratings for the project:

- Overall likelihood of risks to Sustainability: Moderately Unlikely (MU), primarily as a result of significant financial risks (lack of funds for continuation of critical activities).
 - Financial resources: Moderately likely (ML). This is primarily because funding for the VAT exemption mechanism, while uncertain like any tax measure, appears to be secure. The biggest risk facing this mechanism might be that the technical criteria for the scheme are complex and not easily justified, and that there does not seem to be a visible end-point for the VAT scheme (with standards and labels not yet developed, and also not related to the technical criteria for VAT exemption).
 - Socio-economic: Moderately Unlikely (MU). The electricity tariff structure is a severe hindrance to appliance policies based on cost-effective investments. In addition, the market structure of the Seychelles makes an effective regulatory policy more difficult and probably too complicated for a small government.
 - Institutional framework and governance: Unlikely (U). Government infrastructure is unprepared to continue working on the objectives of the project. There is a lack of commitment, a lack of resources committed to activities, a lack of experience in working with regulatory instruments and a lack of concrete policy objectives. In view of this, regulatory instruments seem to be out of range for the Government of the Seychelles.
 - Environmental: Likely (L). There are no foreseeable environmental risks that could harm the project's results.

4.3.7. *Impact*

The overall objective of the project was to significantly reduce the rate of electricity consumption and water usage in Seychelles among underserved communities in the residential sector. This was translated into the (reconstructed) target that, by end of project, average efficiency of newly bought appliances would have increased by 15% compared to the situation before the start of the project. This would have resulted in cumulative energy savings of the project amount to 207 GWh and 142 kton CO₂ (over the project impact period).

In the absence of introduced regulations, only three mechanisms are in place that could have created a change in the resource efficiency of newly bought household appliances:

- The SEEREP loan mechanism, which funded 87 loans, partially to SMEs, for the purchase of efficient appliances. Details of the appliances bought are not available and, with only 87 loans provided (out of approximately 25,000 households), results can only be negligible on a national scale.
- The VAT exemption mechanism, which supported the purchase of possibly more than ten thousand more efficient appliances. Unfortunately, data collection for this mechanism has not finished and an available initial overview is too error-prone to be used to determine impacts.
- A light bulb for LED exchange programme. Results of this activity have not been monitored, however, it is estimated that 10,000 – 15,000 old light bulbs have been replaced by LEDs. This, with an estimated electricity demand reduction of 50 kWh/yr per lamp, and an expected LED lifetime of 10 years, results in an estimated electricity demand reduction of 5 – 7.5 GWh (cumulatively) and a CO₂ emission reduction of 3 – 5 kton CO₂.

There is no indication of a change of average energy efficiency of new appliances in the market.

While relevant, these impacts fall far short of planned impacts of the project and are far below what might have reasonably been expected of a medium-sized project focusing on regulatory and other policies to reduce energy demand.

Other impacts, such as a better awareness of Seychelles households of resource efficiency issues have not been measured; only media attention for project activities has been recorded. Thus, no impact can be established for this “soft target” either.

Based on these observations, the project’s impact is rated as follows:

- Environmental Status Improvement: Minimal (M)
- Environmental Stress Reduction: Minimal (M)
- Progress towards stress / status change: Negligible (N)

5. Conclusions, Recommendations & Lessons learnt

This project struggled from the beginning, in its design, in implementation and it struggled to produce results. Part of that is due to an overambitious project design, which tried to do too much with a too small budget and with a government without much experience in regulations. This also raises the question to what extent the Government of the Seychelles was ready for a complex regulatory project at the time of the project's design, and how ready it would be now. The project has given the Seychelles some useful and important steps forward, such as more attention for resource efficiency in the media, a retail sector more used to factoring in product efficiency and a government more used to supporting resource efficiency in its policies. On some core regulatory aspects, however, many gaps that were present before the project remain: a strategy to address product regulations in the Seychelles market, the capacity to independently design and develop a regulatory framework and technical requirements and the capacity to implement and enforce regulations. It is not yet clear if and when the Seychelles would be ready to handle such regulatory challenges.

One core barrier outside the project, however, directly affecting it, is the electricity tariff structure in the Seychelles. Tariffs are subsidised for a large part of the population, which makes investing in resource efficiency (the core principle around which the project was built) less attractive and sometimes not cost-effective at all. At the time, the Government had started a strategy of tariff revisions (which was not discussed in the project document, nor reported during project implementation), which was abandoned after 2 years (in 2014), just when the project was starting. This, of course, was beyond the project's area of influence. Responding to this development, however, could have been done so that further activities would be aligned with the reality that, for many households, the principal approach of the project might not work.

The project's strategic results framework was poorly developed, with a too large number of components, indicators that did not match outcome objectives, poor timing of activities and insufficient attention for the need to assess and find solutions fitting the Seychelles market before commencing on the implementation of regulation. Since the resulting set of indicators and targets for the project did not match objectives, and the overall goal had been calculated with an outdated method (not following GEF guidance for policy-focused projects), this TE reconstructed indicators and targets to create a set of SMART indicators against which to assess the project. Such an approach carries risks, however, was the only route that made sense under the circumstances.

The project also struggled keeping focus during implementation. Many activities have been started, triggered by a wide-ranging project design, however, not that many have been brought to their final objective:

- Technical regulations have been drafted and framework legislation is still being drafted; their adoption has yet to start though;
- Training of stakeholders has been conducted, however, not about regulations (due to their delay);
- Awareness raising has been conducted and a lot of media attention has been generated, however, changes in consumer behavior have not been measured or otherwise demonstrated;
- The project's core financial mechanism had been in place during the project, delivering negligible results, however, it was not revised. A VAT mechanism was introduced as an interim, alternative scheme, however, this was not linked to regulatory instruments and will need to be revised at some point to contribute to the market transformation strategy of the project;
- Some other activities, more loosely linked to the project, such as the development of alternative cooling strategies and a national energy policy, have been started, however, not completed.

The lack of focus during implementation was probably also due to understaffing of the project team: The Government had committed to staffing a Renewable Energy & Energy Efficiency unit, to implement the project, however, banned the hiring or transfer of staff to this unit until the last years of it, and even then at a limited staff level. This was linked to an overall Government freeze on hiring, however, there is no point accepting a GEF budget if the staff necessary to use it is not being made available.

A particularly unfortunately result of delays in the implementation of regulations, the understaffing of the project unit and unfinished activities is that the project was supposed to create a situation in which the country could continue benefiting from the build-up of capacity for the development and implementation of regulations, the training of stakeholders in working with those regulations and the use of financial instruments to make the market introduction of regulations easier. That opportunity is now lost, and it may not come back.

The results of the project are, not surprisingly, given the difficulties in design and implementation, quite limited. Only a small amount of GHG emission reductions could be recorded, and only from a temporary measure (exchanging of light bulbs), and there are no visible changes in the appliance market. All this has led to a weak and unsatisfactory project.

5.1. *Corrective actions for the design, implementation, monitoring and evaluation of the project*

- 1) Project strategies and documents need careful reviews, including checks on internal consistency and whether baseline information is complete and has been adequately addressed in the project's strategy. In addition, a careful assessment is needed whether a country's government is ready to initiate more complex policies, and if there is, for example, sufficient regulatory and technical capacity in country to independently develop and implement technical regulations.
- 2) If that is not the case, a project design should start with a careful assessment of the overall policy and regulatory strategy, possibly involving international expertise, before defining actions. An organisation such as CLASP, a global MEPS and labels NGO, could be a useful source of expertise for such a strategy assessment.
- 3) Part of such an approach might be to seek a collaboration with an energy or government agency that has an established MEPS and labels programme, to allow the Seychelles to benefit from ongoing technical work elsewhere and gain insights into global markets that are difficult to obtain when working in and from a small island state. Such a collaboration might be crucial for a sustainable appliance MEPS and labels approach for the Seychelles, as it is hard to see how it could develop and implement an independent programme, given the size of its market, the challenges of defining and verifying technical criteria of products and the need to work with products available on the global market. UNDP could be instrumental in helping the Seychelles Energy Commission find such a partner.
- 4) Before completion of the project, efforts should be made to assess the results achieved with various project components. This applies primarily to the project's awareness raising, through communication and education, for which there are indications of good media coverage and increased understanding of efficiency issues in the country, however, this needs to be measured and also whether attention has resulted in a willingness to invest in resource efficient appliances. It further applies to the project's VAT mechanism, which could be a rich source of market data as well as impact data. The database developed for the mechanism needs to be completed urgently, including a cross-check on data entered (for example, against customs records) to remove the mistakes that are in the current reporting.
- 5) Finally, staff levels of the Renewable energy and energy management unit need to be brought up to sufficient levels, to give the Seychelles Energy Commission some capacity to continue the development and implementation of regulation. Additional funds might be needed to train the unit and to provide experienced longer-term technical support, since the Commission still needs to build its expertise with product regulations and it has to work in a complicated market.

5.2. *Actions to follow up or reinforce initial benefits from the project*

- 6) The Government of the Seychelles is recommended to continue, with appropriate urgency, the development of framework legislation for energy efficiency and, once a strategy has been agreed and – hopefully – a collaboration with an experienced partner established, move speedily to develop and implement appliance

MEPS and labels. The VAT exemption mechanism, now used independently, can then be used to smoothen the introduction of MEPS.

- 7) There may also be scope to continue and extend the lamps for LED bulbs exchange campaign. A campaign like this essentially shifts the investment from the household to the utility, which would normally not be advisable, however, makes sense if households receive a subsidised energy tariff. A utility then has the choice to reduce electricity demand, and thus the amount of subsidy it needs to provide, for an investment – in this case LED light bulbs. A dedicated calculation is needed whether this approach might make economic sense, at the national level, for extension of the programme (to more light bulbs) and /or to other appliances (which could be exchanged for free or for a reduced price). Reducing household electricity consumption, and thus bills, might also be beneficial for a tariff revision, and reduced cost-efficient appliances could be made part of a larger tariff revision programme.

5.3. *Proposals for future directions underlining main objectives*

- 8) At this point in time, no proposals for future directions are suggested. The Government of the Seychelles will need its full attention for bringing what was started with this project to completion, a process that may easily take years and may provide challenges not yet foreseen. New policy- or regulatory-based initiatives around resource efficiency would be ill-advised until the ones started 5 years ago are completed and lessons from that trajectory can be learned. More efforts on communicating the benefits of resource efficiency might benefit the country, however, it is needed to first establish the impact of the communication activities of this project and, given experience so far, it is something the Government should be able to do on its own.

5.4. *Best and worst practices in addressing issues relating to relevance, performance and success*

Given that project outcomes have largely not yet been achieved and that more work is needed to bring core parts of the project to completion, no practices relating to relevance, performance and success can be discussed at this point.

6. Annexes

6.1. Strategic Results Framework (Project logical framework) – Revised following MTR recommendations

The strategic results framework presented here has been revised by the project following MTR recommendations. In this revision, the following changes were made:

- Under Outcome 1.1, the target for indicator “Restrictions (ban or limits) on imports of non-energy efficient appliances” was changed from “Government-approved minimum energy performance standards (MEPS) approved by end of year 1” to “Government-approved minimum energy standards and labeling scheme by end of 2017”.
- Under outcome 4.1, the target “Policy and institutional mandate (MoU signed by LWMA) in place by end of year 1” was removed.
- Under outcome 4.1, the indicator “Average electricity use per household (kwh/year) participating in SEEREP or other RSE financing platform” with its baseline and target values were removed.

Strategy	Indicator	Baseline	Targets	Source of Verification	Assumptions
Project Objective: To significantly reduce the rate of electricity consumption and water usage in Seychelles among underserved communities in the residential sector	Amount of reduced CO ₂ emissions from the power sector (compared to the project baseline)				
	Direct emissions reductions	0	139,590 tons CO _{2eq}	Project’s annual reports, GHG monitoring and verification reports	Continued commitment of project partners, including Government agencies and investors / developers
	Cumulative total electricity saved (MWh)	0	12,296 MWh per year (or 184,447 MWh for appliance lifetimes)	PUC data, MRV system, Project final evaluation	
	Cumulative total water saved (m3)	0	446,250 m3 per year (or 6,693,750 m3 for device lifetime) - 20,060 tons of CO _{2eq} over their lifetime.	PUC data, project M&E reports	
Component 1: Improved policy, institutional, legal / regulatory and financial framework for resource efficient technologies					
Outcome 1.1 - Comprehensive and strengthened policy and legal frameworks adopted to promote residential resource efficient	Key baseline data collected and analyzed (e.g. # of appliances and consumption patterns in households; consumer willingness or ability to pay; % of household spending that goes to electricity; etc.)	No detailed information on residential or SME energy use	Baseline report completed by end of year 1	Baseline study, Project reporting	Government provides funding for EE / RE unit
	SEC Efficiency and Renewable Energy Unit operationalized with clear mandate /work plan and	EE / RE unit proposed but not yet fully	EE / RE unit fully operational by end of year 1	SEC Annual Reports	Government decision-makers continue to support legal / regulatory

Strategy	Indicator	Baseline	Targets	Source of Verification	Assumptions
appliances	trained staff	staffed or operationalized			changes in favour of EE appliances
	Government-approved Energy Efficiency Strategy (EES) and Implementation Plan (EEIP)	None (only energy bill in place)	EES and EEIP approved by end of year 1 and published by end of year 2	Approved and published EES and EEIP document/SEC Annual Reports	Government decision-makers support EE appliance standards
	Fiscal / tax incentives in place for imports and purchases of energy efficient equipment (except solar water heaters and energy saving lighting)	EE equipment (except solar water heaters and energy saving lighting) currently subject to Value Added Tax (VAT)	Customs Act regulations amended to remove duties on EE equipment by middle of year 2	Published (revised) regulations and amendments	Enforcement structures in place
	Restrictions (ban or limits) on imports of non-resource efficient appliances	No restrictions in place for imports of non-EE appliances /no MEPS	Government-approved minimum energy standards and labeling scheme by end of 2017	Published standards	Key stakeholders involved in the process
	System for measuring energy and water savings from EE residential appliances operational	No system in place for monitoring SEEREP by PUC	Computer-based MRV system in place by end of year 1 at PUC	PUC data, and reports generated by MRV system (hosted by PUC.	Necessary legislation is drafted and enacted
Component 2: Awareness-raising and educational campaign on resource efficient appliances					
Outcome 2.1 - Enhanced national awareness of the benefits of resource efficient appliances and verified behaviour change across target groups regarding reduced energy and water use	Full implementation of the Seychelles Energy Education and Communication Strategy (SEECs) for residential sector	SEECs approved, but no large-scale actions implemented to date for residential sector	SEECs Action Plan, including component on residential water use reductions, approved and under implementation by end of year 1	Final approved SEECs Action Plan – verified reports on activities undertaken in MTR and TE	Commitment of key stakeholders, including MEE and PUC
	% of consumers and retailers aware of appliance energy efficiency standards and technologies via sampling and surveys	TBD by baseline study conducted in year 1	At least 50% of target audience contacted (within the sample group) are aware of	Project reporting and consumer surveys showing verified	Consumer NGOs, retailers and stakeholders involved in and consulted on the system
					Retail staff understand

Strategy	Indicator	Baseline	Targets	Source of Verification	Assumptions
	<p>No. of sites in Seychelles where consumers, retailers and other stakeholders can learn about and see demonstrations of functioning energy efficient appliances</p> <p># of energy efficient household appliances and water savings devices for which Labelling scheme (linked to MEPS) in place</p> <p>Quantitative assessment and feasibility study of potential energy savings (kWh) of absorption cooling technologies in the Seychelles, and recommendations for strategies for increasing their uptake in the country</p>	<p>0 sites with RSE appliances open to public</p> <p>0 labels exist in Seychelles linked to MEPS</p> <p>Absorption cooling technologies very infrequently used in the country – exact # TBC by baseline study</p>	<p>appliance energy efficiency standards and practices</p> <p>5 sites (2 households and 3 public facilities) established and open to public by end of year 3 of the project</p> <p>Labels approved for at least 5 types of household appliances and 2 water saving devices by end of year 1</p> <p>Assessment report on Absorption Cooling Technologies completed and disseminated to all relevant stakeholders by year 2 with targets specified for uptake potential</p>	<p>behaviour changes and/or awareness</p> <p>Project reporting</p> <p>Officially approved and gazetted S&L by SBS and government</p> <p>Report approved by Seychelles Energy Commission with response tabled on follow-up measures to be pursued</p>	<p>label & can explain it to consumer</p>
Outcome 2.2 – Consumers of RSE appliances aware of goals and conditions of the financing schemes for RSE technologies and of purchase and financing options available through these programs	% of residential households and/or SMEs aware of goals, conditions and products offered by the financing schemes for RE technologies	TBD by baseline study conducted in year 1	At least 80% of consumers/SMEs contacted (within the sample group) are aware of the different financing schemes or technology transfer platform offered for RSE technologies	<p>SEEREP and DBS reporting documents</p> <p>Consumers survey results</p> <p>Project reporting</p>	<p>Platforms identified in Component #4 are operational</p> <p>Consumers interested in purchasing EE appliances</p>
Component 3: Training schemes to support market development and maintenance of resource efficient technologies					
Outcome 3.1 – Platforms established for training of technicians in the installation,	No. of private sector importers, dealers and retailers of household electrical appliances with access to market information (on product sourcing, pricing, quality, etc.) and maintenance of RSE	Relevant private sector stakeholders have little to no knowledge of RSE	At least 20 private sector partners have received training and support by end of project	Project reporting	Interest from private sector actors to participate in project activities and

Strategy	Indicator	Baseline	Targets	Source of Verification	Assumptions
operation and maintenance of residential resource efficient technologies	technologies Training platform established to train technicians on installation and maintenance of RSE technologies	appliances No vocational training platform in place	By end of project Seychelles Institute of Technology (SIT) operating a certificate course for technicians in installation, operation and maintenance of resource efficient technologies (no. of technicians to be enrolled in course TBD during year 1)	SIT annual report and budget allocated for new course Enrolment statistics for courses	trainings Continued commitment from SIT
Outcome 3.2 - Capacity of key stakeholders improved to monitor and enforce the Minimum Energy Performance Standards (MEPS) and new energy labelling scheme	No. of officers responsible for inspections of imported goods capacitated to evaluate compliance with relevant MEPS and related national labelling scheme	0 trained officers	At least 10 trained officers by end of year 2 of the project	Project reporting Reports from Customs Division and Seychelles Revenue Commission	Approval of MEPS and labelling scheme Continued commitment from Customs Division and Seychelles Revenue Commission
Component 4: Financing mechanisms to support adoption of resource efficient technologies in the Seychelles					
Outcome 4.1 - Regulations in place (linked to financing schemes) for safe disposal on non-EE residential appliances	Recycling of non-EE residential appliances mandated in policy and institutional responsibilities	No specific policy exists for recycling of EE appliances; only a call for action under the new Solid Waste Management Policy (2014-2018) Voluntary code of practice for ODS use and disposal in the refrigeration/air-conditioning sector in place	Mandatory policy framework in place (to be implemented under the umbrella of the new Solid Waste Management Policy) which specifically includes guidelines and responsibilities for disposal of electronic waste and electrical equipment	Approved policy framework LMWA MoU with SEEREP and delineation of responsibilities under new policy Project reporting	Participation and support of Landscape & Waste Management Agency
Outcome 4.2 -	# of households receiving	0	By end of	Reporting by	Assumes

Strategy	Indicator	Baseline	Targets	Source of Verification	Assumptions
Underserved consumers accessing specially designated financial products for purchase of RSE appliances	assistance from one of the identified financing/technology transfer platforms		project at least 8,500 households or SMEs have purchased or received one or more of the covered RSE technologies from at least one of the platforms mentioned. At least 8,500 households participating in SEEREP by end of project, disaggregated by socioeconomic status.	MoFTI and/or Central Bank of Seychelles Loan program documents PUC data	operationalization of the following platforms: - Seychelles Energy Efficiency and Renewable Energy Program (SEEREP) - Development Bank of Seychelles (DBS) loan facility for EE appliances in the SME Sector - Neptune Program to promote adoption of water saving devices in the residential sector
	No. of local banks that are providing loans to borrowers for purchase of resource efficient technologies	0 banks providing loans	At least 3 banks by end of project	SEEREP reporting, loan portfolio reporting from participating banks, project reports, PUC data, DBS data and reports	Assumes on-going commitment from participating commercial banks
	# of households to receive water saving devices	0	8,500 households	MRV system, PUC & project reporting	SMEs respond to scheme and cost of financing and payback times are attractive Households successfully use water saving devices The platforms developed will provide sufficient incentives for households to invest in RSE technologies

6.2. *List of persons interviewed*

- Mr. Roland Alcindor, UNDP country office
- Ms. Preethi Sushil, NDP country office
- Ms. Elke Talma, UNDP-GOS Project Coordination Unit
- Ms. Elaine Ernesta, Project manager, UNDP-GOS Project Coordination Unit
- Mr. Tiago Queiroz Santos, RE Project International Technical Expert
- Mr. Wills Agricole, Principle Secretary, Department of Energy and Climate Change, Ministry of Environment, Energy and Climate Change (MEECC)
- Mr. Theo Marguerite, Department of Energy and Climate Change, Ministry of Environment, Energy and Climate Change (MEECC)
- Mr. Tony Imaduwa, CEO, Seychelles Energy Commission
- Ms. Cynthia Alexander, Head of Renewable Energy and Energy Management Unit, Seychelles Energy Commission
- Mr. Guilly Moustache, Seychelles Energy Commission
- Mr. Laurent Sam, Energy Engineer, Public Utilities Commission
- Mr. Andy Ally, Chief Executive Officer, Seychelles Bureau of Standards
- Ms. Genila Valentin, Custom Manager, Seychelles Revenue Commission
- Ms. Lyndinna Christine Essack, Ministry of Education
- Mr. Darell Boniface, Seychelles Civil Aviation Authority (SCAA)
- Mr. Rama Isperance, Policy analyst, Ministry of Finance
- Ms. Seylina Verghese, Policy analyst, Ministry of Finance
- State Secretary Patrick Payet, Ministry of Finance
- Mrs. Purvis, Executive Director, Sustainability for Seychelles (S4S)
- Ms. Dolly Tirant, Head of Corporate and SME, Mauritius Commercial Bank (MCB)
- Mr. Hubert Barbé, Director, Seychelles Institute of Technology (SIT)
- Mr. R. Ramani, Samsung
- Mr. Richard Hoareau, Energy Solutions Seychelles
- Ms. Michele P. Martin, Former Executive Director, Sustainability for Seychelles (S4S) (via phone)
- Mr. My Ton, technical expert (involved in lighting work on the project (via phone)

6.3. *Summary of shop visits*

During the mission, at various moments, about 10 household appliance shops were visited to observe the use of energy labels and promotion of the SEEREP scheme, as well as improve understanding of the types of appliances on offer in the Seychelles. All shops were located in Victoria (capital), except one shop on Eden island, where most retail activity in the Seychelles is concentrated.

A wide variety of household appliances can be observed in retail shops in the Seychelles, with product designs matching various international markets (e.g., US-style top load washing machines next to European-style front loading machines) as well as a wide variety of brands. Approximately half of the household appliances targeted through the project were displaying energy labels. Noteworthy is that energy labels come from a wide variety of countries: labels observed include:

- EU-style labels (old and new design)
- Kenya energy labels
- Chinese energy labels
- Singapore energy labels

- UAE energy labels
- Possibly other energy labels of unknown source.

Labels were observed on refrigerators / freezers and washing machines; no labels were encountered on light bulbs or air conditioners (solar water heaters were not on sale at the stores visited).

6.4. *List of documents reviewed*

- Project Identification Form (PIF)
- UNDP Project Document (ProDoc)
- CEO Endorsement Request (CER)
- Strategic Results Framework / Project Logframe Analysis (LFA)
- Project Tracking Tool (only baseline filled in, the mid-term point sheet has been left empty)
- Project Implementation Reports (PIRs) for 2015, 2016, 2017 and 2018 (note that the latest report covers implementation up to June 2018)
- Project Mid-term Review Report
- Project MTR Management Response
- Project Inception Report
- Minutes of Steering Committee Meetings
- Audit Reports for all completed years of the project
- Annual Work Plans for the first 4 years of the project and a Combined Delivery Report for the final year
- Quarterly progress reports and work plans of the various implementation task teams
- Various project outputs (including technical reports, training materials and education and communication materials)
- Technical regulations for VAT exemptions for energy efficient appliances
- Draft versions of technical regulations for appliance standards

6.5. *Audit trail*

Comment by	Referring to report section	Comment	TE response
CO	1.1	My general comment here Is why are these unknown? Elaine as the Pm needs to be able tp provide figures together with SEC. we cannot have unknown either there Is an amount or It Is zero.	Some co-financing figures have been provided by the project team during the review of the draft report. Where these appear to be realistic, numbers have now been included. An overall amount, or totals for the listed sub-categories, could not be established since there are no reliable data for a major share of co-financing (VAT exemptions).
CO	1.3	[related to rating for overall project results]: Is that the overall rating? what was rating at MTR? would be Interesting to also compare some of the MTR findings	<p>The rating is for overall results (achievements towards targets); no single overall rating of a project is requested in the UNDP-GEF evaluation guidance.</p> <p>The MTR didn't provide an overall rating. In fact, it provided "NA" ratings for most items under progress towards results. In detail: Project strategy: NA; EOP target: NA, high risk that EOP target will not be achieved; outcome 1.1: MU; outcome 2.1: MS; outcome 2.2: NA; outcome 3.1: NA; outcome 3.2 MS; outcome 4.1: NA; outcome 4.2/no of banks: HS; outcome 4.2/no of loans disbursed: NA, target at high risk; These ratings point to a project that is seriously underperforming at mid-term already. This is in line with findings of the TE, taking into account that the project has not made much progress on many of its key regulatory activities (highlighted during the MTR) during the 2nd part of the project..</p>
CO	1.4	[3 rd paragraph, discussing staffing at SEC]: More appropriate to refer to the Department of Public Administration that blocked the staffing requirement of the SEC	Reference changed from "government of the Seychelles" to "the Government's Department of Public Administration"
CO	3.1	[page 8, 2 nd para, discussing inception workshop]: Elaine/Elke, you need to look for the Inception Report. This was finalized as far as I recall. Check aso with Adey as this should have been uploaded on PIMs	The final inception report has now been provided; it shows small edits, however, no major changes compared to the draft report that was available during the TE process. The text of the report has been updated to reflect this.
CO	3.1	[page 8, 3 rd para, discussing inception workshop]: Project Manager was already on board and facilitated the workshop. This was not presented by UNDP. Please amend this phrase.	Phrase amended to remove UNDP
CO	3.1	[page 11, final sentence]: good to Indicate when they expect to be completed? Dec 2019?	That information has now been provided and the text updated to reflect this additional information.
CO	3.2	[page 11, 2 nd para, discussing PIF, 10 house pilot]: was this not supposed to be 50 houses?	This was during PIF development. I have no may of knowing whether it should have been 50; all I can see is that the PIF states that 10 houses were assessed.
CO	4	[overall comment]: While I am fine with your findings and not disputing any of them, I would	Findings are discussed throught chapter 4 and cover a large number of topics, organised in 3

Comment by	Referring to report section	Comment	TE response
		like them to be numbered Finding No.1 - then have a heading and then the text. this will allow us to prepare a more structured Management response. At the moment It Is all mixed up In the text and It Is difficult to focus on each specific findings.	major sections and 21 sub-sections, including many overviews and summations. It would not only be impractical to number these, it would also organise findings differently than requested by the UNDP-GEF TE format. Therefore, findings have not been numbered. Conclusions have not been numbered as these merely provide a highly summarised version of findings; recommendations, however, have been numbered, in the main text and in the summary (a few paragraphs in the main text have been split to create separately numbered items).
CO	5	[overall comment]: Again same as for findings. If you could In fact link recommendations for each of the findings that would be useful	See above
ITA	1.2	[regarding the overall project objective]: It was referred within the project team that the objective also makes the target more difficult to reach since the project aims to address principally underserved communities In the residential sector. It was considered that the objective should be cross-cutting to all the residential sector.	This section uses the project objective as stated in the project document and CER, as it should. The comment provides useful background, however, no change in the text is needed.
PMU	1.4	[regarding the Renewable Energy and Energy Efficiency unit at the SEC]: For Clarification: The name of the unit Is Renewable Energy and Energy Management Unit.	The unit is addressed differently in different documents. For clarity, the unit's name has been changed to Renewable Energy and Energy Management Unit" or "REEM unit" throughout the document.
PMU	1.4	[regarding the project's overall environmental impact]: "approximately 3 – 5 kton CO ₂ equivalent direct impact" is highlighted	No comment provided
PMU	1.4	[regarding recommendation "It might be useful to explore whether the Seychelles can develop a collaboration with an established standards and labels programme in a country it has trade relations with"]: This approach will be against free trade zone policy	It is hard to see how exploring this option would be in breach of free trade zone policy. In addition, a collaboration as discussed here is already in use in many countries (e.g., many non-EU countries aligning with the EU standards and labels programme, or Canada collaborating with the USA) and there is no indication that such collaborations breach for example WTO rules. No change made to text.
PMU	4.1	[page 19, 1 st page, 3 rd para, regarding subsidised electricity rates]: It is not low, but it is subsidies.	The rate is low compared to other rates in the Seychelles, even if it is not lower than in other countries.. To avoid confusion, the text has been changed to "relatively low, subsidised rates"
PMU	4.1	[page 19, 3 rd para, regarding the tariff rebalancing programme]: Not abandoned but delayed for various reason; it is still in the plan for re-balancing.	Text changed to "and which has since been delayed (no further steps have been taken so far)".
ITA	4.1	[page 19, 5 th para, regarding the calculation of the expected impact of the project]: Agree that the Implementing agency has Its focus on energy and not on water. However, since PUC (partner of the project) also deals with water, roject design might have thought that It would be possible for Implementing agency to also Interact with PUC	The rationale provided in the comment seems reasonable, however, does not take away that, for water savings to be included, an active collaboration with the PUC's water savings project would have needed to be part of the project's design. Since that was not the case, the

Comment by	Referring to report section	Comment	TE response
		for the water aspects. It Is a fact that there was a Project running about water , which Included aspects of water savings (the Neptune Project. The synergies between both projects were not used effectively, even if there were good reasons for It to happen (I.e., the recognition of the water-energy nexus).	calculation should have left out those savings. Therefore, there is no need to change the text.
ITA	4.1	[page 20, 1 st para, regarding flaws in assumptions and calculations, no 3, “no assessment of the distribution of resource efficiencies available in the Seychelles and internationally”]: This one Is not clear. think It needs to be rephrased.	Rephrased to: “no assessment of the range of efficiencies found in the market in the Seychelles nor of the range of efficiencies found in international markets”
ITA	4.1	[page 20, 1 st para, regarding flaws in assumptions and calculations, no 4]: Agree, the project team tried to do It In the beginning with a market survey. The water baseline study had a component about this (please verify If respective reports have or not done It. To me It Is ok to have this assessment within the project design . In the end It Is a technical matter that costs money. Without th technical and financial assistance of a donor funded project, the country would not have the possibility to have that baseline information. Unless If we think that the project design could have been tailored to prepare the conditions to a future S&L dedicated project.	The comment agrees with the finding and provides further background info. That info is useful, however, does not require a change in text.
ITA	4.1	[page 20, para 3, regarding introducing technical requirements]: Please see previous comment : The approach of Seychelles is not well understood. While most countries have adopted Internationally approved systems and /or came with their own standards, Seychelles could not move to that level because of products being Imported from everywhere and most Importantly not having any means of Compliance verification. The only available options we were left with Is to 1. Accept manufacturer's claim or a testing facility's claim used by the manufacturer 2. to establish our own means of testing the energy performance of the product needing so 3. to send the products for testing to third party 4. to Ignore energy performance. So we have started to go with point 1 and working in parallel to Introduce testing facility for air con and lights using IOC Energies program. Points 2 and 3 are inclusive od cost whilst point 4 means doing nothing. Point 1 Is the best suited option as we make sure compliance to standards are met and so the MEPS at no cost for performing tests. The labels from the country of origin is to be made available	This issue has been discussed at some length during the TE. In addition, the rationale for the statement in the text is provided in the paragraph of which it is part (which was not disputed). The observation in summary: The comment relates to the Seychelles' plan to set minimum performance levels at a level not present in other countries. For those levels to make sense, suppliers will need to supply products at that required level, which, in this case, requires redesigning products to meet the Seychelles-specific level or supplying products at an internationally recognised, better performance level and accepting that they are not rewarded for the cost involved in meeting that above-required level. Neither makes much sense and increases cost for suppliers and traders (and thus also consumers) and could be avoided by simply aligning required performance levels with trading partners. The other part of the comment addresses testing issues. The comment does not address the issue raised (of too high testing cost for the chosen solution) and doesn't recognise the finding that using a different test method often requires a re-test. Therefore, no change of text is needed regarding this point.

Comment by	Referring to report section	Comment	TE response
		- Additional - It Is not to force global market ; we just want to ensure appliances meeting MEP's are allowed in the market	Even though the original finding is correct, the text has been changed to avoid confusion, to: "It is inconceivable that a market as small as the Seychelles' could introduce its own technical requirements and force global manufacturers <u>to provide products aligned specifically</u> to the specifications of the Seychelles, or even to perform energy performance measurements according to its set of rules, as testing costs far exceed the profit margin on an imported batch of products"
ITA	4.1	[page 20, para 3, closing sentence, section "leading to a design that in reality could only fail"]: Perhaps If the design would have Integrated more S&L expertise we would have a different project to Implement. From a second reading, It seems to me that the TE does not address (or does not emphasizes sufficiently) all the possible causes for unsuccess.	The first part of the comment seems to agree with the finding. Regarding the second part: it would be impossible to list all possible causes for a lack of success; the TE has focused on describing the main actual causes. Since this is not disputed, no change of the text is needed.
ITA	4.1	[page 21, 1 st para, regarding strategic shortcomings in the project's design]: The project team was advised, not by the MTR, to Implement communication and awareness raising from the beginning and have these campaigns adapted to the specific stages of Implementation of S&L.	The comment is unclear, as this doesn't seem to relate to the project as designed.
ITA	4.1	[page 21, 2 nd para, regarding project staff understanding of S&L in other countries]: The project team was advised, during first two years, to use project's funds to go and visit Mauritius and to participate on International conferences related to the topic.	The finding relates to established levels of understanding, not to efforts made. Therefore, no change of text is needed.
ITA	4.1	[page 21, 3 rd para, regarding financial instruments]: The way SEC Is doing makes It equally easy /difficult to verify.	The observation is not about the way the SEC implemented its scheme; it is about financial mechanisms being easier to verify in general (than MEPS). The comment does not address this, therefore, no change of text is needed.
ITA	4.2	[page 31, 1 st para, regarding deliverables in unfinished state]: This should be concretized with a list of deliverables the project delivered and list of deliverables reviewed by TE. It Is true the project did not adopt a formal procedure to approve deliverables.	For the TE, all reports provided by the project have been reviewed. In various cases, the project team was requested to provide final versions of reports where only draft versions had been received; in only a few cases have such final versions been received. Many of these are still in draft state. It is not for the TE to map out every document the project has produced over its lifetime and search for final versions; that is for the project team to keep track of and provide during a TE. Given this, the finding is sufficiently supported.
ITA	4.2	[page 31, 2 nd para, regarding adaptive project management]: Agree that the timing to have the legislation and regulations In place Is lamentable and Incomprehensible. However, the strategic thinking was there. The project team agreed that the Interim process used on the VAT exemption	The finding constitutes an interpretation of findings listed in the same paragraph, which are not disputed, or even discussed in this comment. Since the comment doesn't address the findings listed, there is no reason to change the text of the report.

Comment by	Referring to report section	Comment	TE response
		Incentive was a way to put the Implicated Institutions speaking the same language and was a way also for SEC to have a perception of the work load that would come with this market regulation process. Hence deciding on whether to add labels to the MEPS and deciding about the number of types of appliances to Include as priority In the S&L. Suggest this Is rephrased.	
ITA	4.2	[page 31, 3 rd para, regarding VAT exemptions for appliances]: SWH systems are part of the residential set of equipment that could help reaching the targets of the project. There has been an effort from the project team to put In place a framework that can (and will be) used for regulating the market of these resource efficiency products. Nowhere In the TE report the SWH Endorsement Initiative Is referred.	Agree that SWH systems are part of appliances; the project has consistently included SWH systems under its category “appliances”, and so has this TE. Thus, SWH systems are already covered by the word “appliances” and no change of text is needed.
ITA	4.2	[page 31, 4 th para, regarding criteria for energy labels]: Energy performance parameters (when possible) and on energy labels. For example for AC there was a parameter being considered, for which an assessment of what was In the market and what other economies have applied was done. This aspect should be added on this TE report.	The finding is based on what was communicated (the final criteria), not on what may or may not have been considered. The comment correctly mentions that, for air conditioners, an energy efficiency rating was used as the criterion. The text is updated to reflect this.
ITA	4.2	[page 32, detailed observations, 2 nd para, regarding discussions with retailers about preparing for MEPS and labels]: The number of proposed workshops with Importers and retailers might have been around two times of what In fact happened. But given the size of the country the majority of Importers and retailers have been captured. PM has a list of them that might have been shared with the TE evaluator.	The comment is noted, however, the observation addressed specifically discussions with retailers about MEPS and Labels preparation. Project records don’t indicate such discussions and neither where these mentioned in project team or stakeholder discussions. Since there is nothing contradiction the observation, the text is not changed.
ITA	4.2	[page 32, detailed observations, 2 nd para, regarding discussions with retailers about the selection of technical standards for MEPS and labels]: If half of products arrive In seychelles with EU label than what would we do to the other half of the products. The test method adopted Is Internationally recognized . the value of the MEPS Is not seychelles specific. It has a ponderation of the average efficiency of what Is In the market, It has also a ponderation of an assessment done to other large and relevant economies (EU and Asian ones). The TE probably didn’t saw the document attached. which Is dated from June 2015. The uptake of It was done following an Impression that there was In there nothing that was not acceptable. (a draft document about technical validation was added to the comment; this document sets out some practical pointers for the Seychelles Energy Commission for the validation of the SEEREP	The rationale for the observation is listed below the sentence that was commented on. The comment doesn’t address that rationale and seems to boil down to a disagreement with the observation, although not its rationale. The commenter is entitled to his views, however, no change is made in the text.

Comment by	Referring to report section	Comment	TE response
		scheme and VAT exemptions. This document, however, has not been brought up during earlier discussions and is still a draft document; in addition, it doesn't address MEPS or Labels – the topic of the observation that was commented on).	
ITA	4.2	[page 33, detailed observations, 1 st para, regarding the review of draft technical standards, "specification for solar water heaters were not reviewed"]: Why?	Because a TE has limited resources which need to be used wisely. Other specification consisted of one document, the SWH one of three; thus, a selection was made to cover as many documents within the time available.
ITA	4.2	[page 33, detailed observations, 1 st para, regarding the review of draft technical standards, regarding MEPS thresholds that are not in use anywhere in the world]: But Is It appropriate for Seychelles considering the affordability aspects and a reasonable ambition In terms of efficiency improvement?	The rationale for this observation is presented in sentences below the comment; the comment doesn't address this rationale. This rationale leads clearly to the observation that proposed levels are not appropriate.
ITA	4.2	[page 33, detailed observations, 1 st para, regarding the review of draft technical standards, regarding the technical basis for draft proposed air conditioner MEPS levels]: This Is the second version of It. The first one was done based on the EER and It did not Integrate the concerns about ODS. The attached Is the first version and the document that served as argument for adoption of V2. The feedback on both has been scarce. (this comment was accompanied by two documents, of unknown status, about a revision of draft technical requirements for air conditioners)	The TE process included a lengthy discussion about draft MEPS requirements, during which the project team (including PMU and ITA) had several opportunities to present evidence and discuss draft TE observations. All comments by the project team were addressed during this process and the project team was invited to provide additional evidence; none was received. Since a TE is not a discussion forum, and to avoid an endless iteration of opinions, this conversation is now considered closed.
ITA	4.2	[page 33, 1 st para, regarding the review of draft technical standards, regarding the technical basis for draft proposed lamp MEPS levels]: Not sure why this comes equal to what was commented before. Ask the same question: should the project team complain or ask an explanation to the consultants that had proposed this ? On the other hand everyone understands that receiving a formal test report stating that the lumens , the watts or the lumens/ watt of said product would be sufficient to infer about if the product meets or not the stipulated MEP requirement. Perhaps this TE could also guide SEC on how to make use of what was done Instead of simply saying that it was not done the right way. I have commented on this before and, not sure why It has not been considered.	See above
PMU	4.2	[page 33, 1 st para, regarding the review of draft technical standards, regarding the technical basis for the VAT exemption threshold]: As explained earlier, there Is no compliance verification for Seychelles and would not be able to restrict Importation from one particular region. The	See above

Comment by	Referring to report section	Comment	TE response
		communication/Information was done based on total number of classes available on any label. (3, 4 or above 8).	
PMU	4.2	[page 35, 1 st para, regarding detailed data about lamp exchanges through the light bulb exchange programme]: N° of lamps purchased for this initiative 12000; Unitary power of LED lamps [W] 9; Annual energy savings for replacing 1 incandescent lamp by 1 LED lamp [kWh/year] 51; Potential energy savings of the initiative [kWh/year] 612; Potential annual avoided carbon emissions [kg CO2/year] 428.4	This data was not provided during the TE process nor is it part of project reporting. Further, the number of lamps listed here doesn't match information provided separately by the PUC, as part of their review of the draft TE report. The numbers provided here are assumed to be an estimate, equally reliable as the estimate already included in the draft TE report. Thus, there is no need to update that estimation. The estimate will be updated, however, with the exact number of lamps exchanged provided by the PUC.
PMU	4.2	[page 35, 4 th para, regarding the creation of the Renewable energy and energy efficiency unit]: The number of person Is still one with support from France Volontaire working at SEC. Not clear what Is referred as Increased to two? The REEM unit was supported by the France volontaire -The organisation provides Engineers on rotation every 3 years - & the project made good use of them for the technicalities aspect. In the first few years we had Mr Denis Morel & now we have Mr Jimmy Lenclume.	It was – incorrectly – assumed that the France Volontaire person joined the unit later, increasing its capacity. The text has been updated to correct this mistake.
PMU	4.2	[page 35, 4 th para, regarding the capacity of the Renewable energy and energy efficiency unit]: Needs clarification here This observation is made on what? SEC is an integrated partner in the project- no activities or plan is made without SEC prior consultation & approval. Kindly please explain " Important part of the project "	The review of the project clearly shows that most project activities were undertaken by the project manager (not based at the SEC) or the international technical adviser (not a staff member). In fact, several members of the project team have commented that the SEC has really only been implementing the VAT exemption scheme. There is no evidence of the SEC having initiated communication activities, retailer training, MEPS or Label preparation or the drafting of regulations. There may have been involvement in other activities, however, this does not constitute an independent capacity to implement.
PMU	4.2	[page 35, 4 th para, regarding training of SWH installers]: Developd a Solar Water heater endorsement Initiative and one of it's activities was the 1st training; includeing training of the lecturer.	The project implementation report only lists training courses (as well as inclusion of SWHs in SEEREP and VAT exemption; discussed elsewhere). No wider initiative was mentioned during the TE process either. In the absence of further evidence, the text remains as is.
PMU	4.2	[page 36, 1 st para, regarding delays in MEPS preparation]: MEPS have been on discussion since the beginning of 2016 and we set them during the year and have been having the Interim procedure since then. IT Is the same time we started engaging with the market actors. The procedure we followed is explained above. The development of product registry was initiated	The TE clearly established that no MEPS have been agreed; the comment is further ignored. See also next comment.

Comment by	Referring to report section	Comment	TE response
		since 2018 and only thing missing is populating the registry.	
PMU	4.2	[page 36, 1 st para, regarding delays in MEPS preparation]: Standards to be adopted in the future with the legislation.	Indeed – confirming the observation.
PMU	4.2	[page 36, 1 st para, regarding training of customs in MEPS]: They were always invited & present, but no specific was done targeting only Customs. we did it for all Including clearing agents.	The project had an outcome dedicated to training customs. The observation is that this has not been done – the comment confirms this, therefore, no change in text is needed.
PMU	4.2	[page 36, 4 th para, regarding the preparation of a solid waste policy strategy]: what strategy? the solid waste policy is an indicator It has been completed & adopted by cabinet	During the TE process, only a draft preparatory document was presented. As a result, no discussion about this work could take place. The final policy is therefore not taken into account in this report. To avoid confusion, references to the policy being completed or not are removed from the discussion in the report.
PMU	4.2.4	[page 42, regarding co-financing]: MEECC accounts for 11204.08 USD out of 80,000US\$. and for the rent of the office space and utilities additional of US\$ 124,406. over projects lifespan.	The project team failed to mentioned co-financing when being asked repeatedly during the TE process. It is not possible now to verify the amounts mentioned here. Given that the office space used by the project constitutes a single desk, and indicated amount of \$124,406 (or over \$2,000 /month) seems excessive. Regardless, the provision of space in a government facility does not constitute a cash co-financing under GEF rules. Therefore, the TE remains with the observation that the amount of co-financing has not been delivered.
PMU	4.2.4	[page 42, regarding co-financing]: 10,449 LED bulbs have been exchanged so far. This is about 5,000 houses, taking into account that some were donated to elderly homes and not houses. At the end of 2018, there were 32,000 domestic customers. We could estimate that as the number of homes served by PUC. So 16% of houses have exchanged their bulbs under the LED bulbs exchange program. By the end of the program, it is correct to say that about 6,000 households will have benefitted. The bulbs were purchased by MEECC, Project & PUC - PUC & MEECC each bought 3000 units & project bought 6000 unit. Had these information been asked, it would have been shared.	Information that PUC paid for only ¼ of bulbs, with the project and the Ministry providing the rest of funding, was not made available earlier in the project. The text has been updated to reflect this new information.
PMU	4.2.4	[page 42, regarding co-financing]: S4S has contributed us\$60,000- in terms of SEEREP	This amount was not presented during the TE process. It also seems highly unlikely that an NGO would pay interest rate subsidies to commercial banks when the Ministry of Finance is doing so already, or that this would amount to \$60,000 when the total amount of funding provided for SEEREP is likely much lower than \$75,000. Given that the information provided as this late stage cannot be verified, and is highly questionable, the TE remains that the amount provided by S4S could not be established.

Comment by	Referring to report section	Comment	TE response
PMU	4.3.1	[page 47, regarding baseline studies]: Analyse on data has been conclusive and information used in many campaigns for communication. This baseline was adopted by SEC. The household Energy Monitoring finalising since November 2018 is near validation. The household survey reports for 50 houses is finished & validated.	Data analysis left out many aspects, as discussed in section 4.2, page 35 (however, not commented on there). Since the results statement is an accurate summary of the longer observation presented earlier, no change is made.
PMU	4.3.1	[page 47, regarding SEC staff lacking training in the development of regulations]: SEC staff has received comprehensive training for EE and project manager. Cynthia is a Certified Energy Auditor & SWH Installer, training plan exists, and workplan as well; SEC had a previous legal officer who resigned and Is now replaced with a new legal officer since January 2019.	Being a certified energy auditor and SWH installer does not constitute training in the development of regulations. No training plan was shown during the TE process, however, it can't be ruled out that one exists. Training scheduled for after project closure does not specifically include the drafting of regulations. The text is updated to remove the reference to the lack of a training plan.
PMU	4.3.1	[page 48, regarding technical specifications for MEPS not moving since year 2]: The project had a late start - & a changed in management- so the first year 2014 - October 2015 there was little work done.	The comment doesn't address the lack of progress since year 2, nor the issues raised (lack of stakeholder consultation and technical defects). Therefore, no change in text is needed.
PMU	4.3.1	[page 48, regarding the promotion of absorption cooling]: This should not be removed as an indicator as Work is done on this absorption & and the PUC is using for pilot study.	This indicator was removed as part of an overall review of targets and indicators. Rationale for that overall review has been provided in the relevant sections (however, not commented on); it would not make sense to address one single indicator in isolation here. Therefore, the comment is not disregarded.
PMU	4.3.1	[page 48, regarding training of customs officers in MEPS regulations under development]: Information has been shared with customs through workshop participation & they have very low capacity one of the reason why they were not ready for the specific needed.	There is no indication that the information shared included draft MEPS regulations; instead, it seems that customs was informed about the VAT scheme (using different technical criteria) like other workshop participants. Thus, the comment seems to confirm the finding.
PMU	4.3.1	[page 48, regarding a solid waste policy]: Solid waste policy finalised and we have a new policy from 2018 to 2023	As discussed before, only a draft preparatory document was presented during the TE process, no final policy. However, in the interest of accuracy, the text has been updated.
PMU	4.3.1	[page 49, regarding VAT exemptions]: The VAT was used as the instrument to implement the MEPS. the legal framework for MEPS was not in existent, and rather than wait for government to be ready for the review we made used of the tool to introduce the MEPS & Implement It on a voluntary basis.	The VAT scheme used completely different criteria than those considered for MEPS. This has also been discussed at length with the project team, who were invited to provide evidence demonstrating this exact statement. However, no such evidence was received. The comment here is therefore ignored.
PMU	4.3.2	[page 49, regarding a strategy to address the unusual and complex market situation in the Seychelles and the impact thereof for MEPS development]: had the terminal been done after the closure; the strategy is near finalisation.	This comment is probably false. No such strategy was under development at the time of the TE. Under development were an energy policy act and an overall energy policy strategy, however, neither was intended to discuss the topic raised in the TE report. Given this, the text remains as is.
PMU	4.3.4	[page 50, regarding stakeholder interaction about draft regulations]: Again- the project has a very	The comment doesn't address the issue raised.

Comment by	Referring to report section	Comment	TE response
		good relationship with stakeholders and approach taken is through substantial meetings & working groups with private & govt bodies	
PMU	5	[page 53, regarding awareness raising and changes in consumer behaviour]: this cannot be demonstrated in four years- yes sample surveys should have been conducted but the effect would not be felt. The effect needs to be measured after giving time for people to adopt the behavior.	Changes in awareness should be quite visible after 4 (or 5) years of project implementation, as would changes in consumer behaviour. In fact, most consumer behaviour change programmes in other countries have shorter durations. Regardless, the comment addressed measurements of changes, and the PMU agrees that no such measurement has taken place (even though it should have). The comment is thus disregarded.
PMU	5	[page 53, regarding other activities including the development of a waste policy strategy]: again erroneous observation	The reference to a waste policy strategy is removed. The observations stands for other parts (such as for alternative cooling methods and a national energy policy)
RTA	overall	Several text edits	Edits accepted
RTA	1	[Summary]: Can you add SMART to the list of acronyms above?	SMART added to list of acronyms
RTA	1.1	[Summary table]: Agree with Roland. We should provide an estimate of co-financing at completion, if available.	Estimates of co-financing can, unfortunately, not be created due to lack of information as well as available information being unreliable. A sentence has been added to the co-financing overview in the main text to explain this.
RTA	3.1	[date of ProDoc]: According to our project database, the prodoc was resubmitted to the GEFSec on 21 April 2014.	Only a draft version of the ProDoc was made available for the TE. The date has been added to the TE report
RTA	4.1.8	[Management arrangements, page 24, regarding the lack of a management arrangement section in the PIF]: At the time that the PIF was approved, the PIF template did not require a description of institutional arrangements. There was only a section on coordination, in which the proponent was expected to outline the coordination with other relevant GEF financed and other initiatives.	Text corrected to reflect that a management arrangement section was only needed at CER stage (and missing at that stage).
RTA	4.1	[page 25, reconstruction of SMART indicators and targets for project outcomes]: The heading of this column appears to be mislabelled.	Headers corrected, and extra text added to the introductory paragraph before to explain the table.
RTA	4.2.4	[tracking of co-financing, page 41]: On p. 37 of this report, it states that "Co-financing was tracked, however, when delivery of co-financing (as tracked) fell short of its target, no action was taken."	(the comment referred to was on page 32): The original text of the report was imprecise. It was obvious to the team implementing the project that some co-financing was not being delivered, however, there was no structural tracking of co-financing. The comment on page 32 has been revised to: When it became obvious that some co-financing (e.g., government contributions to SEC REEM unit) fell short of its target, no action was taken.

CO: UNDP Country Office Seychelles

PMU: project management unit (project manager and project team members at the SEC). For the review of the draft report, a representative of the Public Utilities Commission joined this team.

ITA: international technical adviser of the RE project

RTA: UNDP regional technical adviser

6.6. Evaluation Consultant Agreement Form

Evaluation Consultant Code of Conduct and Agreement Form

Evaluators:

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

Evaluation Consultant Agreement Form

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

Name of Consultant: Frank Klinckenberg

Name of Consultancy Organization (where relevant): Klinckenberg Consultants BV

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

Signed at *Meerssen, The Netherlands* on *19 April 2019*

6.7. *Terms of Reference*

Included on the next pages (separate document; included only in the PDF version of the document).

Terms of Reference for Independent Consultant to conduct the Terminal Evaluation of the UNDP-GEF funded Resource Efficiency Project in Seychelles

Standard Template 1: Formatted for attachment to [UNDP Procurement Website](#)

Location :	Mahe, Seychelles, and home-based
Application Deadline :	10 th March 2019
Type of Contract :	Individual Contract
Post Level :	International Consultant
Languages Required :	English
Starting Date : (date when the selected candidate is expected to start)	18 th March 2019
Expected Duration of Assignment :	20 working days (over 12 weeks), including 1 mission to Seychelles (10 working days)

1. INTRODUCTION

This is the Terms of Reference (ToR) for the UNDP-GEF Terminal Evaluation (TE) of the *medium-sized* project titled **Promotion and upscaling of climate-resilient, resource efficient technologies in a tropical island context** (PIMS 4913) implemented through the Ministry of Environment, Energy and Climate Change, GOS-UNDP-GEF Programme Coordination Unit, which is to be undertaken in *March 2018*. The project started on the 13th June 2014 and at the time of the TE will be in its fifth year of implementation. This ToR sets out the expectations for this TE. The TE process must follow the guidance outlined in the document *Guidance For Conducting Terminal Evaluation of UNDP-Supported, GEF-Financed Projects* (<http://web.undp.org/evaluation/documents/guidance/GEF/UNDP-GEF-TE-Guide.pdf>).

PROJECT SUMMARY TABLE

Project Title:	Promotion and upscaling of climate-resilient, resource efficient technologies in a tropical island context			
GEF Project ID:	4913 (GEF PMIS #)		<i>at endorsement (Million US\$)</i>	<i>As at 02.2018 (Million US\$)</i>
UNDP Project ID:	4913 (UNDP PIMS#) 74539 (UNDP Atlas #)	GEF financing:	1,770,000	768,411 USD
Country:	Seychelles	IA/EA own:	Same as Government	
Region:	Africa	Government:	9,728,503	2,367,758.
Focal Area:	Climate Change	Other:	4,902,441	2,737,073
Executing Agency:	Ministry of Environment, Energy and Climate Change	Total co-financing:	10,175,203	2,496,649
Other Partners involved:	Seychelles Energy Commission	Total Project Cost:	12,025,203	8,369,891
		Pro Doc Signature (date project began):		13 th June 2014
		(Operational) Closing Date:	Proposed: 31 st June 2018	Actual: 31 st June 2019

2. PROJECT BACKGROUND INFORMATION

The project was designed to address, in part, Seychelles dependency on imported oil to meet its energy needs (90% of the primary energy supply comes from imported fuel, with imports of fuel for electricity generation alone accounting for 12% of the total government budget). This heavy reliance on imported fossil fuels places heavy pressure on the country's foreign exchange reserves, exacerbates state budget deficits, and poses major energy security concerns, both in terms of access to supplies and pricing. A market for energy efficient appliances is developing in the Seychelles. However, this market has been constrained in many ways, including: a lack of consumer awareness about EE appliances, extremely limited purchase options for EE appliances (apart from energy saving lights), the inability of consumers to get bank loans or store financing for the purchase of high-value EE appliances (such as air conditioning units, refrigerators/freezers, and washing machines), and the absence of any standards or labelling schemes or requirements for EE appliances in the country.

For this reason, the GEF project is providing technical assistance for regulatory, standards setting, educational, data collection and training needs to help set the stage for the growth of the

energy efficient appliances market in the country. In addition, the project provides critical catalytic support to programs designed to provide concessionary financing for energy efficient appliances and water saving devices, specifically the Seychelles Energy Efficiency and Renewable Energy Program (SEEREP), a financing scheme for the residential sector to purchase EE appliances, and a credit facility of the Development Bank of Seychelles (DBS) to provide concessionary finance for the adoption of EE technologies in Small and Medium Enterprises (SME loans scheme).

The project plays a critical facilitating role for these financing programs, through development of the necessary policy frameworks, providing capacity building for financial institutions, banks and other participants to enable their participation in the programs, and increasing public awareness about the programs and the opportunities and options for end users to purchase resource efficient technologies with concessionary financing.

The project is categorized under four components.

Component 1 of the project addresses policy, institutional, legal/regulatory and financial frameworks and covers Energy Efficiency technologies (EE's) in general. The project has undertaken targeted activities to revise the legal and policy frameworks to Energy efficiency technologies in the country and to prioritize the development of MEP's for those appliances, and to establish regulations and clarify other institutional responsibilities for oversight and technical support of EE's.

Component 2 addresses enhancing national awareness of the benefits of resource efficient appliances and verified behaviour change across targets groups regarding reduced energy and water use; Demonstration Projects and Trade Fair for residential energy efficient appliances and water saving devices.

Component 3 addresses platforms established for training of technicians in the installation, operation and maintenance of residential resource efficient technologies as well as making provisions for capacity of key stakeholders to improve, monitor and enforce the Minimum Energy Performance Standards (MEPS) and new energy labelling scheme.

Component 4 addresses the regulations in place (linked to financing schemes) for safe disposal on non-EE residential appliances as well as the development, communication and enforcement of financing incentive for underserved consumers accessing specially designated financial products for purchase of RSE appliances.

The project is for four years (2014-2018) and was granted a no cost one-year extension. It has a budget of US\$ 12,025,203 with a GEF grant of US\$ 1,770,000 and planned co-financing of US\$ 10,285,203. The project is managed by the GOS-UNDP-GEF Programme Coordination Unit (PCU) of the Ministry of Environment, Energy and Climate Change (MEECC), and implemented in association with the Seychelles Energy Commission (SEC) and other stakeholders.

3. OBJECTIVES OF THE TE

The TE will assess progress towards the achievement of the project objectives and outcomes as specified in the Project Document. The TE would also assess the project's strategy and its risks to sustainability.

4. EVALUATION APPROACH & METHODOLOGY

The TE must provide evidence-based information that is credible, reliable and useful. The TE Consultant will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Environmental & Social Safeguard Policy, the Project Document, project reports including Annual Project Review/PIRs, project budget revisions, lesson learned reports, national strategic and legal documents, and any other materials that the MTR Consultant considers useful for this evidence-based review). The TE Consultant will review the baseline GEF focal area Tracking Tool submitted to the GEF at CEO endorsement, and the midterm GEF focal area Tracking Tool that must be completed before the TE field mission begins. The TE Consultant is expected to follow a collaborative and participatory approach¹ ensuring close engagement with the Project Consultant, government counterparts (the GEF Operational Focal Point), the UNDP Country Office(s), UNDP-GEF Regional Technical Advisers, and other key stakeholders.

An overall approach and method for conducting project terminal evaluations of UNDP supported GEF financed projects has developed over time. The evaluation should include a mixed methodology of document review, interviews, and observations from project site visits, at minimum, and the evaluators should make an effort to triangulate information. The evaluator is expected to frame the evaluation effort using the criteria of relevance, effectiveness, efficiency, sustainability, and impact, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects. A set of questions covering each of these criteria have been drafted and are included with this TOR (Annex C). The evaluator is expected to amend, complete and submit this matrix as part of an evaluation inception report, and shall include it as an annex to the final report.

Engagement of stakeholders is vital to a successful TE. Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to: MEECC (executing agency), PCU (ceded the role of executing the project by the MEECC), SEC (implementing agency), Project Board, key project stakeholders (Public Utilities Corporation, Ministry of Finance Trade and Blue Economy, Development Bank of Seychelles, Seychelles Bureau of Standards, Land and Waste Management Agency, Seychelles Institute of Technology, Sustainability for Seychelles, Private Importers/ companies), residential and business end users, etc.

The final TE report should describe the full TE approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the review.

¹ For ideas on innovative and participatory Monitoring and Evaluation strategies and techniques, see [UNDP Discussion Paper: Innovations in Monitoring & Evaluating Results](#), 05 Nov 2013.

5. EVALUATION CRITERIA AND RATINGS

An assessment of project performance will be carried out, based against expectations set out in the Project Logical Framework/Results Framework ([Annex A](#)), which provides performance and impact indicators for project implementation along with their corresponding means of verification. The evaluation will at a minimum cover the criteria of: **relevance, effectiveness, efficiency, sustainability and impact**. Ratings must be provided on the following performance criteria. The completed table must be included in the evaluation executive summary. The obligatory rating scales are included in [Annex D](#).

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

6. PROJECT FINANCE /COFINANCE

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

Co-financing (type/source)	UNDP own financing (mill. US\$)		Government (mill. US\$)		Partner Agency (mill. US\$)		Total (mill. US\$)	
	Planned	Actual (2016)	Planned	Actual (2016)	Planned	Actual (2016)	Planned	Actual (2016)
Grants	80,000	0	9,728,503	1,064,484	146,700	0	9,955,203	
Loans/Concessions	0	0	0	11,7758.08	0	0	0	
• In-kind support	0	0	0	250,000	0	128891	0	
• Other	0	48,000		0	0	0	0	
Totals	80,000	48,000	9,728,503	1,432,242	146,700	128891	9,955,203	1,609,133

7. MAINSTREAMING

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

8. IMPACT

The evaluators will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated: a) verifiable improvements in the enabling environment for CCM, b) verifiable reductions in carbon emissions, and/or c) demonstrated progress towards these impact achievements.²

9. CONCLUSIONS, RECOMMENDATIONS & LESSONS

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

10. IMPLEMENTATIONS ARRANGEMENTS

The principal responsibility for managing this evaluation resides with the UNDP CO in **Seychelles**. The UNDP CO will contract the evaluator and ensure the timely provision of per diems and travel arrangements within the country for the evaluator. The Project Team will be responsible for liaising with the evaluator to set up stakeholder interviews, arrange field visits, coordinate with the Government, etc.

11. EVALUATION TIMEFRAME

The total duration of the evaluation will be **20 working** days over a period of 12 weeks according to the following plan:

Activity	Timing	Completion Date
Preparation/Inception Report	2 days	March 20th 2019
Evaluation Mission	10 days in country	March 25th 2019-4th April 2019
Draft Evaluation Report	5 days	25TH April 2019
Final Report	3 days	15th May 2019

EVALUATION DELIVERABLES

² A useful tool for gauging progress to impact is the Review of Outcomes to Impacts (ROtI) method developed by the GEF Evaluation Office: [ROTI Handbook 2009](#)

The evaluation team is expected to deliver the following:

Deliverable	Content	Timing	Responsibilities
Inception Report	Evaluator provides clarifications on timing and method	March 20 th 2019	Evaluator submits to UNDP CO
Presentation	Initial Findings	3 rd April 2019	To project management, UNDP CO, Project Steering Committee, key stakeholders
Draft Final Report	Full report, (per annexed template) with annexes	Within 3 weeks of the evaluation mission (By the 25 th of April 2019)	Sent to CO, reviewed by RTA, PCU, GEF OFPs
Final Report*	Revised report	Within 1 week of receiving UNDP/PSC comments on draft (By May 15 th 2019)	Sent to CO for uploading to UNDP ERC.

12. TEAM COMPOSITION

The terminal evaluation will be conducted by an independent international evaluator. The consultant shall have prior experience in evaluating similar projects. Experience with GEF financed projects is an advantage. The evaluator selected should not have participated in the project preparation and/or implementation and should not have conflict of interest with project related activities. The international evaluator will be responsible for the final deliverable of the TE inception report, draft report, and final report.

The evaluator must present the following qualifications:

Education:

- An advanced degree (Masters level or higher) in climate change mitigation, renewable energy, or a related subject

Experience:

- Minimum 10 years of relevant professional experience in climate change mitigation and energy
- Knowledge of and/or experience with UNDP and/or GEF
- Previous experience with results-based monitoring and evaluation methodologies;
- Technical knowledge in the targeted focal area (Climate Change Mitigation CCM)
- Competence in adaptive management, as applied to renewable energy and CCM projects
- Experience working in Small Island Developing States
- Demonstrated understanding of issues related to gender and renewable energy; experience in gender sensitive evaluation and analysis
- Excellent communication skills; demonstrable analytical skills
- Fluency in English

13. EVALUATOR ETHICS

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

14. PAYMENT MODALITIES AND SPECIFICATIONS

%	Milestone
10%	Following submission and approval of TE Inception Report
20%	Following the presentation of initial findings at end of in country Mission
30%	Following submission and approval of the 1st draft terminal evaluation report
40%	Following submission and approval (UNDP-CO and UNDP RTA) of the final terminal evaluation report

15. APPLICATION PROCESS

- Applicants are requested to apply online <http://jobs.undp.org> by **10th March 2019**. Individual consultants are invited to submit applications together with their CV. The application should contain a current and complete C.V. in English with indication of the e-mail and phone contact.
- UNDP applies a fair and transparent selection process that will take into account the competencies/skills of the applicants as well as their financial proposals. Qualified women and members of social minorities are encouraged to apply.
- using the [template](#)³ provided by UNDP;
- **CV** and a **Personal History Form (P11 form)**⁴;
- **Brief description of approach to work/technical proposal** of why the individual considers him/herself as the most suitable for the assignment, and a proposed methodology on how they will approach and complete the assignment (max 1 page);
- **Financial Proposal** that indicates the all-inclusive fixed total contract price and all other travel related costs (such as flight ticket, per diem, etc.), supported by a breakdown of costs, as per template attached to the [Letter of Confirmation of Interest template](#). If an applicant is employed by an organization/company/institution, and he/she expects his/her employer to charge a management fee in the process of releasing him/her to UNDP under Reimbursable Loan Agreement (RLA), the applicant must indicate at this point, and ensure that all such costs are duly incorporated in the financial proposal submitted to UNDP.

All application materials should be submitted using the UNPD Jobs site (<https://jobs.undp.org>) by **20.00 hrs GMT 10th March 2019**. Incomplete applications will be excluded from further consideration.

Criteria for Evaluation of Proposal: Only those applications which are responsive and compliant will be evaluated. Offers will be evaluated according to the Combined Scoring method – where the

³

<https://intranet.undp.org/unit/bom/pso/Support%20documents%20on%20IC%20Guidelines/Template%20for%20Confirmation%20of%20Interest%20and%20Submission%20of%20Financial%20Proposal.docx>

⁴ http://www.undp.org/content/dam/undp/library/corporate/Careers/P11_Personal_history_form.doc

educational background and experience on similar assignments will be weighted at 70% as described below and the price proposal will weigh as 30% of the total scoring. The applicant receiving the Highest Combined Score that has also accepted UNDP's General Terms and Conditions will be awarded the contract.

Education	Technical Experience	Evaluation Experience	UNDP-GEF Experience	Stakeholder Engagement	Language and Communication
MA in Climate Change Mitigation/Adaptation, Renewable Energy or Related fields	Minimum 10 years of relevant professional experience in climate change mitigation and energy or related fields	At least 5 years of evaluation experience with result-based management evaluation methodologies, including use of SMART tools. Competence in adaptive management and record of Gender analysis in evaluations would be an advantage	Must have conducted at least 3 UNDP-GEF evaluations. Must have Knowledge of UNDP-GEF processes. Experience in similar projects in SIDS is an advantage.	Demonstrated ability to work in a diverse environment.	Excellent report writing skills and fluency in English is compulsory. Knowledge of French or Creole would be advantageous
15	20	25	20	10	10

ANNEX A: PROJECT LOGICAL FRAMEWORK

The below logframe is the revised one from MTR report; Please see original logical framework in project document.

Strategy	Indicator	Baseline	Targets	Source of Verification	Assumptions
Project Objective: To significantly reduce the rate of electricity consumption and water usage in Seychelles among underserved communities in the residential sector	<ul style="list-style-type: none"> Amount of reduced CO₂ emissions from the power sector (compared to the project baseline) <ul style="list-style-type: none"> Direct emissions reductions Cumulative total electricity saved (MWh) Cumulative total water saved (m3) 	<ul style="list-style-type: none"> 0 0 0 	<ul style="list-style-type: none"> 139,590 tons CO₂_{eq} 12,296 MWh per year (or 184,447 MWh for appliance lifetimes) 446,250 m3 per year (or 6,693,750 m3 for device lifetime) - 20,060 tons of CO₂_{eq} over their lifetime. 	<ul style="list-style-type: none"> Project's annual reports, GHG monitoring and verification reports PUC data, MRV system, Project final evaluation PUC data, project M&E reports 	Continued commitment of project partners, including Government agencies and investors / developers
Component 1: Improved policy, institutional, legal / regulatory and financial framework for resource efficient technologies					
Outcome 1.1 - Comprehensive and strengthened policy and legal frameworks adopted to promote residential resource efficient appliances	<ul style="list-style-type: none"> Key baseline data collected and analyzed (e.g. # of appliances and consumption patterns in households; consumer willingness or ability to pay; % of household spending that goes to electricity; etc.) SEC Efficiency and Renewable Energy Unit operationalized with clear mandate /work plan and trained staff Government-approved Energy Efficiency 	<ul style="list-style-type: none"> No detailed information on residential or SME energy use EE / RE unit proposed but not yet fully staffed or operationalized None (only energy bill 	<ul style="list-style-type: none"> Baseline report completed by end of year 1 EE / RE unit fully operational by end of year 1 EES and EEIP approved by end of year 1 and 	<ul style="list-style-type: none"> Baseline study, Project reporting SEC Annual Reports Approved and 	<ul style="list-style-type: none"> Government provides funding for EE / RE unit Government decision-makers continue to support legal / regulatory changes in favour of EE appliances Government decision-makers support EE appliance standards

	<p>Strategy (EES) and Implementation Plan (EEIP)</p> <ul style="list-style-type: none"> Fiscal / tax incentives in place for imports and purchases of energy efficient equipment (except solar water heaters and energy saving lighting) Restrictions (ban or limits) on imports of non-resource efficient appliances, i.e. electricity and water appliances, and labeling scheme System for measuring energy and water savings from EE residential appliances operational 	<p>in place)</p> <p>EE equipment (except solar water heaters and energy saving lighting) currently subject to Value Added Tax (VAT)</p> <p>No restrictions in place for imports of non-EE appliances /no MEPS</p> <p>No system in place for monitoring SEEREP by PUC</p>	<p>published by end of year 2</p> <p>Customs Act regulations amended to remove duties on EE equipment by middle of year 2</p> <p>Government-approved minimum energy and water performance standards and labeling scheme by end of 2017</p> <p>Computer-based MRV system in place by end of year 1 at PUC</p>	<p>published EES and EEIP document/SEC Annual Reports</p> <p>Published (revised) regulations and amendments</p> <p>Published standards</p> <p>PUC data, and reports generated by MRV system (hosted by PUC.</p>	<p>Enforcement structures in place</p> <p>Key stakeholders involved in the process</p> <p>Necessary legislation is drafted and enacted</p> <p>In case these assumptions do not hold appropriate adaptive management approaches will be used to modify project activities as needed</p> <p>Cooperation from PUC in monitoring electricity use</p>
Component 2: Awareness-raising and educational campaign on resource efficient appliances					
<p>Outcome 2.1 - Enhanced national awareness of the benefits of resource efficient appliances and verified behaviour change across targets groups regarding reduced energy and water use</p>	<ul style="list-style-type: none"> Full implementation of the Seychelles Energy Education and Communication Strategy (SEECs) for residential sector % of consumers and retailers aware of appliance energy efficiency standards and technologies via sampling and surveys No. of sites in Seychelles where consumers, retailers and other stakeholders can learn about 	<p>SEECs approved, but no large-scale actions implemented to date for residential sector</p> <p>TBD by baseline study conducted in year 1</p> <p>0 sites with RSE appliances open to public</p>	<p>SEECs Action Plan, including component on residential water use reductions, approved and under implementation by end of year 1</p> <p>At least 50% of target audience contacted (within the sample group) are aware of appliance energy efficiency standards and practices</p> <p>5 sites (2 households and 3 public facilities) established and open to public by end of year 3 of</p>	<p>Final approved SEECs Action Plan – verified reports on activities undertaken in MTR and TE</p> <p>Project reporting and consumer surveys showing verified behaviour changes and/or awareness</p> <p>Project reporting</p>	<p>Commitment of key stakeholders, including MEE and PUC</p> <p>Consumer NGOs, retailers and stakeholders involved in and consulted on the system</p> <p>Retail staff understand label & can explain it to consumer</p>

	<p>and see demonstrations of functioning energy efficient appliances</p> <ul style="list-style-type: none"> • # of energy efficient household appliances and water savings devices for which Labelling scheme (linked to MEPS) in place • Quantitative assessment and feasibility study of potential energy savings (kWh) of absorption cooling technologies in the Seychelles, and recommendations for strategies for increasing their uptake in the country 	<p>0 labels exist in Seychelles linked to MEPS</p> <p>Absorption cooling technologies very infrequently used in the country – exact # TBC by baseline study</p>	<p>the project</p> <p>Labels approved for at least 5 types of household appliances and 2 water saving devices by end of year 1</p> <p>Assessment report on Absorption Cooling Technologies completed and disseminated to all relevant stakeholders by year 2 with targets specified for uptake potential</p>	<p>Officially approved and gazetted S&L by SBS and government</p> <p>Report approved by Seychelles Energy Commission with response tabled on follow-up measures to be pursued</p>	
<p>Outcome 2.2 – Consumers of RSE appliances aware of goals and conditions of the financing schemes for RSE technologies and of purchase and financing options available through these programs</p>	<ul style="list-style-type: none"> • % of residential households and/or SMEs aware of goals, conditions and products offered by the financing schemes for RE technologies 	<p>TBD by baseline study conducted in year 1</p>	<p>At least 80% of consumers/SMEs contacted (within the sample group) are aware of the different financing schemes or technology transfer platform offered for RSE technologies</p>	<p>SEEREP and DBS reporting documents</p> <p>Consumers survey results</p> <p>Project reporting</p>	<p>Platforms identified in Component #4 are operational</p> <p>Consumers interested in purchasing EE appliances</p>
<p>Component 3: Training schemes to support market development and maintenance of resource efficient technologies</p>					
<p>Outcome 3.1 – Platforms established for training of technicians in the installation, operation and maintenance of residential resource efficient technologies</p>	<ul style="list-style-type: none"> • No. of private sector importers, dealers and retailers of household electrical appliances with access to market information (on product sourcing, pricing, quality, etc.) and maintenance of RSE technologies • Training platform established to train technicians on installation and maintenance of RSE technologies 	<p>Relevant private sector stakeholders have little to no knowledge of RSE appliances</p> <p>No vocational training platform in place</p>	<p>At least 20 private sector partners have received training and support by end of project</p> <p>By end of project Seychelles Institute of Technology (SIT) operating a certificate</p>	<p>Project reporting</p> <p>SIT annual report and budget allocated for new course</p>	<p>Interest from private sector actors to participate in project activities and trainings</p> <p>Continued commitment from SIT</p>

			course for technicians in installation, operation and maintenance of resource efficient technologies (no. of technicians to be enrolled in course TBD during year 1)	Enrolment statistics for courses	
Outcome 3.2 - Capacity of key stakeholders improved to monitor and enforce the Minimum Energy Performance Standards (MEPS) and new energy labelling scheme	<ul style="list-style-type: none"> No. of officers responsible for inspections of imported goods capacitated to evaluate compliance with relevant MEPS and related national labelling scheme 	0 trained officers	At least 10 trained officers by end of year 2 of the project	Project reporting Reports from Customs Division and Seychelles Revenue Commission	Approval of MEPS and labelling scheme Continued commitment from Customs Division and Seychelles Revenue Commission
Component 4: Financing mechanisms to support adoption of resource efficient technologies in the Seychelles					
Outcome 4.1 - Regulations in place (linked to financing schemes) for safe disposal on non-EE residential appliances	<ul style="list-style-type: none"> Recycling of non-EE residential appliances mandated in policy and institutional responsibilities 	No specific policy exists for recycling of EE appliances; only a call for action under the new Solid Waste Management Policy (2014-2018) Voluntary code of practice for ODS use and disposal in the refrigeration/air-conditioning sector in place	Mandatory policy framework in place (to be implemented under the umbrella of the new Solid Waste Management Policy) which specifically includes guidelines and responsibilities for disposal of electronic waste and electrical equipment Policy and institutional mandate (MoU signed by LWMA) in place by end of year 1	Approved policy framework LMWA MoU with SEEREP and delineation of responsibilities under new policy Project reporting	Participation and support of Landscape & Waste Management Agency
Outcome 4.2 - Underserved consumers accessing specially	<ul style="list-style-type: none"> # of households receiving assistance from one of the identified financing/technology transfer platforms 	0	By end of project at least 8,500 households or SMEs have purchased or	Reporting by MoFTI and/or Central Bank of Seychelles	Assumes operationalization of the following platforms:

designated financial products for purchase of RSE appliances	<ul style="list-style-type: none"> No. of local banks that are providing loans to borrowers for purchase of resource efficient technologies # of households to receive water saving devices 	<p>0 banks providing loans</p> <p>0</p>	<p>received one or more of the covered RSE technologies from at least one of the platforms mentioned. At least 8,500 households participating in SEEREP by end of project, disaggregated by socioeconomic status.</p> <p>At least 3 banks by end of project</p> <p>8,500 households</p>	<p>Loan program documents PUC data</p> <p>SEEREP reporting, loan portfolio reporting from participating banks, project reports, PUC data, DBS data and reports</p> <p>MRV system, PUC & project reporting</p>	<ul style="list-style-type: none"> - Seychelles Energy Efficiency and Renewable Energy Program (SEEREP) - Development Bank of Seychelles (DBS) loan facility for EE appliances in the SME Sector - Neptune Program to promote adoption of water saving devices in the residential sector <p>Assumes on-going commitment from participating commercial banks SMEs respond to scheme and cost of financing and payback times are attractive</p> <p>Households successfully use water saving devices</p> <p>The platforms developed will provide sufficient incentives for households to invest in RSE technologies</p>
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REVISION OF THE PROJECT LOGFRAME

ANNEX B: List of Documents to be reviewed by the TE Consultant

- GEF Project Information Form (PIF)
- UNDP Project Document
- Project Logframe Analysis (LFA)
- Project Implementation Plan
- Implementing/ Executing partner arrangements
- List and contact details for project staff, key project stakeholders, including Project Board, and other partners to be consulted
- UNDP Environmental and Social Screening results
- Project Inception Report
- All Project Implementation Reports (PIR's)
- Project MTR Report
- Project MTR Management Response
- Quarterly progress reports and work plans of the various implementation task teams
- Project budgets and financial data
- Audit reports
- Oversight mission reports
- All monitoring reports prepared by the project
- Financial and Administration guidelines used by Project Team
- Project Board Meeting minutes
- Project Tracking Tool, at baseline, at mid-term, and at terminal points
- UNDP Development Assistance Framework (UNDAF)
- UNDP Country Programme Document (CPD)
- UNDP Country Programme Action Plan (CPAP)
- GEF focal area strategic program objectives

The following documents will also be available:

- Project operational guidelines, manuals and systems
- UNDP country/countries programme document(s)
- Minutes of the PV project Board Meetings and other meetings (i.e. Project Appraisal Committee meetings)
- Guidance for conducting terminal evaluations of UNDP-supported, GEF-financed projects

Annex C: Evaluation Matrix.

Evaluative Criteria Questions	Indicators	Sources	Methodology
Relevance: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?			
<ul style="list-style-type: none">How well does the project align with evolving GEF focal area priorities through GEF 4 5 and 6?	<ul style="list-style-type: none">Extent to which UNFCCC and related GEF priorities and areas of work incorporated	<ul style="list-style-type: none">Project documentsNational policies and strategies to implement the UNFCCC, or related to energy more generally.Project partnersProject beneficiaries	<ul style="list-style-type: none">
<ul style="list-style-type: none">How well does the project support the National Climate Change Strategy? Are there linkages with other strategic documents, such as National Development Strategy, INDCs?	<ul style="list-style-type: none">Degree to which the project supports national environmental objectives		
<ul style="list-style-type: none">Is the project aligned with other donor and Government programmes and projects? Is the project country driven?	<ul style="list-style-type: none">Degree of coherence between the project and national priorities, policies and strategies		
<ul style="list-style-type: none">Does the project adequately take into account the national realities, both in terms of institutional and policy frameworks in its design and implementation?	<ul style="list-style-type: none">Adequacy of project design and implementation to national realities and existing capacities		
<ul style="list-style-type: none">Have implementation strategies been appropriate (is the logframe logical and complete)?	<ul style="list-style-type: none">Degree to which the project supports objectives of Government energy strategies		
<ul style="list-style-type: none">Was the project responsive to threats and opportunities that emerged during the course of the project?	<ul style="list-style-type: none">Level of adaptive management related to emerging trends		
<ul style="list-style-type: none">Did the project address the needs of target beneficiaries and other stakeholders? Was it inclusive? Were beneficiaries and other stakeholders effectively engaged in implementation?	<ul style="list-style-type: none">Degree to which the project supports local aspirationsDegree to which the project meets stakeholder expectations		
<ul style="list-style-type: none">Has the experience of the project provided relevant lessons for other future projects targeted at similar objectives?	<ul style="list-style-type: none">Extent to which of lessons learned relating to all facets of the project are documented		
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
<ul style="list-style-type: none">How well has the project performed against its indicators and targets?	<ul style="list-style-type: none">Extent to which milestones and targets are achieved as laid out in the logframe and	<ul style="list-style-type: none">Project reports	<ul style="list-style-type: none">

	monitoring plan	<ul style="list-style-type: none"> Minutes of Project and ITCP Steering Committee Meetings Minutes of District Technical Planning Committee meetings Local partners and beneficiaries Project risks log 	
<ul style="list-style-type: none"> Which have been the key factors leading to project achievements? 	<ul style="list-style-type: none"> Achievement of milestones and targets as laid out in the logframe and monitoring plan 		
<ul style="list-style-type: none"> To what extent can observed results be attributed to the project or not (enabling environment for PV, level of uptake of PV, etc.)? In this respect have there been notable changes in the enabling environment for the project? 	<ul style="list-style-type: none"> Extent of change to the enabling environment 		
<ul style="list-style-type: none"> Has the project failed in any respect? What changes could have been made (if any) to the design or implementation of the project in order to improve the achievement of the expected results? 	<ul style="list-style-type: none"> Evidence of adaptive management and/or early application of lessons learned 		
<ul style="list-style-type: none"> How has the project contributed to raising capacity of local stakeholders to address aims of the project or of Government? 	<ul style="list-style-type: none"> Extent of support from local stakeholders 		
<ul style="list-style-type: none"> What are the views of stakeholders on the implementation and activities of the project? Are there activities missing from the implementation? 	<ul style="list-style-type: none"> Extent to which stakeholders are actively participating in the project or Extent to which beneficiaries were engaged in implementation and monitoring of the project 		
<ul style="list-style-type: none"> How well were risks, assumptions and impact drivers managed? What was the quality of risk mitigation strategies developed? Were these sufficient? Are there clear strategies for risk mitigation related to long-term sustainability of the project? 	<ul style="list-style-type: none"> Extent to which project has responded to identified and emerging risks (particularly risks of low participation due to perceived needs for immediate action rather than planning) Level of attention paid to up-dating risks log 		
Efficiency: Was the project implemented efficiently, in-line with international and national norms and standards?			
<ul style="list-style-type: none"> Financial efficiency: <ul style="list-style-type: none"> Were the accounting and financial systems in place adequate for project management and producing accurate and timely financial information? Have funds been available and transferred efficiently (from donor to project to contractors) to address the project purpose, outputs and planned activities? Were funds used correctly – explain any over- or under-expenditures? 	<ul style="list-style-type: none"> Extent to which funds have been converted into outcomes as per the expectations of the ProDoc Level of transparency in the use of funds Level of satisfaction of partners and beneficiaries in the use of funds Timely delivery of funds, mitigation of bottlenecks. 	<ul style="list-style-type: none"> Project financial records Project audit reports Project work plans and reports 	<ul style="list-style-type: none">

<ul style="list-style-type: none"> • Were financial resources utilized efficiently (converted into outcomes)? Could financial resources have been used more efficiently? • Were issues raised in audit reports and how efficiently were they addressed? • Was project implementation as cost effective as originally proposed (planned vs. actual) • Did the leveraging of funds (co-financing) happen as planned? 	<ul style="list-style-type: none"> • Coordination and synergies of project funds and co-financing 		
<ul style="list-style-type: none"> • Implementation efficiency (including monitoring): <ul style="list-style-type: none"> • Was the project implemented as planned, including the proportion of activities in work plans implemented? • Has monitoring data been collected as planned, analyzed and used to inform project planning? • Has project implementation been responsive to issues arising (e.g. from monitoring or from interactions with stakeholders)? • What learning processes have been put in place and who has benefitted (e.g. training, exchanges with related projects, overseas study visits) and how has this influenced project outcomes? • Were progress reports produced accurately and timely, and did they respond to reporting requirements including adaptive management changes? • Did the project experience any capacity gaps (e.g. staffing gaps)? • Has internal and external communication been effective and efficient? • How efficiently have resources and back-up been provided by donors, including quality assurance by UNDP? 	<ul style="list-style-type: none"> • Extent to which project activities were conducted on time • Extent to which project delivery matched the expectation of the ProDoc and the expectations of partners • Level of satisfaction expressed by partners in the responsiveness (adaptive management) of the project • Level of satisfaction expressed by MEECC and PCU in regard to UNDP back-stopping 	<ul style="list-style-type: none"> • Project work plans and reports • Local partners 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • Efficiency of partnership arrangements for the project <ul style="list-style-type: none"> • To what extent were partnerships/linkages between institutions/organizations/private sector encouraged and supported? • Which partnerships/linkages were facilitated? Which ones can be considered sustainable? • What was the level of efficiency of cooperation and collaboration arrangements? • Which methods were successful or not and why? 	<ul style="list-style-type: none"> • Extent to which project partners committed time and resources to the project • Extent of commitment of partners to take over project activities 	<ul style="list-style-type: none"> • Project work plans and reports • Local partners 	<ul style="list-style-type: none"> •
Sustainability: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?			
<ul style="list-style-type: none"> • Is the social, legal and political environment conducive to sustainability? 	<ul style="list-style-type: none"> • Extent of supportive policies 	<ul style="list-style-type: none"> • Steering Committee 	<ul style="list-style-type: none"> •

<ul style="list-style-type: none">• Are there early signs of activities being taken up by project partners, and plans being developed to sustain them?	<ul style="list-style-type: none">• Extent to which partners are considering post-project actions	<ul style="list-style-type: none">• minutes• Local partners and beneficiaries	
<ul style="list-style-type: none">• Have partners and stakeholders successfully enhanced their capacities and do they have the required resources to make use of these capacities?	<ul style="list-style-type: none">• Extent to which partners and stakeholders are applying new ideas outside of the immediate project context		
<ul style="list-style-type: none">• Does the project have a clear exit strategy or transformational strategy?	<ul style="list-style-type: none">• Intent to follow-up on the project (on the part of Government and stakeholders)• To what extent has the exit strategy been implemented		
Impact: Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status?			
<ul style="list-style-type: none">• What impact has the project had on policy, legal and institutional frameworks relating to uptake of renewable energy?	<ul style="list-style-type: none">• Evidence of uptake of new technologies• Extent to which national strategic planning supports project interventions	<ul style="list-style-type: none">• Project reports• Minutes of Steering Committee meetings• Local partners and beneficiaries	<ul style="list-style-type: none">•
<ul style="list-style-type: none">• What impacts has the project had or is it likely to have on people in the project area in terms of cost-savings, income generating opportunities, etc.?	<ul style="list-style-type: none">• Level of satisfaction of project interventions expressed by beneficiaries		
<ul style="list-style-type: none">• Has the project had any impact on gender equality and economic empowerment for women and other marginalized groups? Was it intended to?	<ul style="list-style-type: none">• Evidence of gender equity in project interventions such as trainings, installed PV systems and rebates.		
<ul style="list-style-type: none">• What lessons can be learnt from the project regarding efficiency? Could the project have more efficiently carried out implementation (in terms of management structures and procedures, partnerships arrangements etc.)?	<ul style="list-style-type: none">• Level of satisfaction in project implementation arrangements• Suggestions put forward by partners for possible improvement		

Annex D: Ratings

<i>Ratings for Effectiveness, Efficiency, Overall Project Outcome Rating, M&E, IA & EA Execution</i>	<i>Sustainability ratings:</i>	<i>Relevance ratings</i>
6: Highly Satisfactory (HS): no shortcomings 5: Satisfactory (S): minor shortcomings 4: Moderately Satisfactory (MS): moderate shortcomings 3: Moderately Unsatisfactory (MU): significant shortcomings 2: Unsatisfactory (U): major problems 1: Highly Unsatisfactory (HU): severe problems	4. Likely (L): negligible risks to sustainability 3. Moderately Likely (ML): moderate risks 2. Moderately Unlikely (MU): significant risks 1. Unlikely (U): severe risks	2. Relevant (R) 1.. Not relevant (NR)
<i>Additional ratings where relevant:</i> Not Applicable (N/A) Unable to Assess (U/A)		

Annex E: Evaluation consultant Code of Conduct Agreement form

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

negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.

6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form⁵

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

Name of Consultant: _____

Name of Consultancy Organization (where relevant): _____

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

Signed at *place* on *date*

Signature: _____

⁵www.unevaluation.org/unegcodeofconduct

ANNEX F: EVALUATION REPORT OUTLINE⁶

- i. Opening page:
 - Title of UNDP supported GEF financed project
 - UNDP and GEF project ID#s.
 - Evaluation time frame and date of evaluation report
 - Region and countries included in the project
 - GEF Operational Program/Strategic Program
 - Implementing Partner and other project partners
 - Evaluation team members
 - Acknowledgements
- ii. Executive Summary
 - Project Summary Table
 - Project Description (brief)
 - Evaluation Rating Table
 - Summary of conclusions, recommendations and lessons
- iii. Acronyms and Abbreviations
(See: UNDP Editorial Manual⁷)
1. Introduction
 - Purpose of the evaluation
 - Scope & Methodology
 - Structure of the evaluation report
2. Project description and development context
 - Project start and duration
 - Problems that the project sought to address
 - Immediate and development objectives of the project
 - Baseline Indicators established
 - Main stakeholders
 - Expected Results
3. Findings
(In addition to a descriptive assessment, all criteria marked with (*) must be rated⁸)
- 3.1 Project Design / Formulation
 - Analysis of LFA/Results Framework (Project logic /strategy; Indicators)
 - Assumptions and Risks
 - Lessons from other relevant projects (e.g., same focal area) incorporated into project design
 - Planned stakeholder participation
 - Replication approach
 - UNDP comparative advantage
 - Linkages between project and other interventions within the sector
 - Management arrangements
- 3.2 Project Implementation
 - Adaptive management (changes to the project design and project outputs during implementation)
 - Partnership arrangements (with relevant stakeholders involved in the country/region)
 - Feedback from M&E activities used for adaptive management

⁶The Report length should not exceed 40 pages in total (not including annexes).

⁷ UNDP Style Manual, Office of Communications, Partnerships Bureau, updated November 2008

⁸ See ToR Annex D for rating scales. See TE Guidance section 3.5, page 37 for ratings explanations.

- Project Finance:
 - Monitoring and evaluation: design at entry (*), implementation (*), and overall assessment (*)
 - Implementing Agency (UNDP) execution (*) and Executing Agency execution (*), overall project implementation/ execution (*), coordination, and operational issues
- 3.3 Project Results
- Overall results (attainment of objectives) (*)
 - Relevance (*)
 - Effectiveness (*)
 - Efficiency (*)
 - Country ownership
 - Mainstreaming
 - Sustainability: financial resources (*), socio-economic (*), institutional framework and governance (*), environmental (*), and overall likelihood (*)
 - Impact
4. Conclusions, Recommendations & Lessons
- Corrective actions for the design, implementation, monitoring and evaluation of the project
 - Actions to follow up or reinforce initial benefits from the project
 - Proposals for future directions underlining main objectives
 - Best and worst practices in addressing issues relating to relevance, performance and success
5. Annexes
- ToR
 - Itinerary
 - List of persons interviewed
 - Summary of field visits
 - List of documents reviewed
 - Evaluation Question Matrix
 - Questionnaire used and summary of results
 - Evaluation Consultant Agreement Form
 - Annexed in a separate document: Audit trail
 - Annexed in a separate document: GEF Focal Area terminal Tracking Tool

ANNEX G: EVALUATION REPORT CLEARANCE FORM

(to be completed by CO and UNDP GEF Technical Adviser based in the region and included in the final document)

Evaluation Report Reviewed and Cleared by	
UNDP Country Office	
Name: _____	
Signature: _____	Date: _____
UNDP GEF RTA	
Name: _____	
Signature: _____	Date: _____

ANNEX H: TE REPORT AUDIT TRAIL

The following is a template for the evaluator to show how the received comments on the draft TE report have (or have not) been incorporated into the final TE report. This audit trail should be included as an annex in the final TE report.

To the comments received on **(date)** from the Terminal Evaluation of **(project name)** (UNDP **PIMS #**)

The following comments were provided to the draft Terminal Evaluation report during (time period); they are referenced by institution ("Author" column) and comment number ("#" column):

Author	#	Para No./ comment location	Comment/Feedback on the draft TE report	TE team response and actions taken