GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

Realising Energy Savings and Climate Benefits of Implementing Mandatory Energy Auditing in the Republic of Mauritius

Edit and Submit CEO Endorsement

Basic project information

GEF ID

9612

Countries

Mauritius

Project Name

Realising Energy Savings and Climate Benefits of Implementing Mandatory Energy Auditing in the Republic of Mauritius

Agencies

UNDP

Date received by PM

11/20/2018

Review completed by PM

Program Manager

Ming Yang

Focal Area

Climate Change

Project Type

FSP

PIF □
CEO Endorsement □

Project Design and Financing

1. If there are any changes from that presented in the PIF, have justifications been provided?

Secretariat Comment at CEO Endorsement

1/11/2019 MY:

The PM dose not agree the following statement on page 9: "All current project outcomes remain unchanged". Rather, the PM believes that there is a significant change from the PIF to the CEO RE stage. Not enough justifications have been provided. Please:

1. On page 8, develop a table of summary which shows the changes of project and justifying the changes, These changes include (1) project components, (2) project outputs, and (3) project outcomes. Please focus on (1) the change of capital investment for the project. In the PIF, $14.65 million co-financing was budgeted to provide financial credit line for EE projects. In the CEO RE stage, the budget was gone. Also, Component 3 in the CEO RE stage, which is a TA, is budgeted a total of $19.7 million including $1.32 million GEF grant. Does the TA need so much fund? The INV component in Component 2 is not a real capital investment; it is a TA as well. (2) MRV frameworks for the country (not for the project) , study of electricity tariffs, and developing MEPS, and building ESCOs, which are necessary for EE auditing and implementation, are missing in the CEO RE stage. Why are they removed from the PIF stage to the CEO RE stage?

4/29//2019 MY:

Not at this time.

On pages 9-13, Please use the following format of Table to show and explain the changes from the PIF to the CEO ER.

Outputs with budgets at PIF	Outputs with budgets at CEO ER	Changes	Explanations
...	...	...	...
...	...	...	...

The PM will provide more comments once the Agency submits the table.

Response to Secretariat comments

The requested summary table of changes has been added to Section II, Sub-section A.3 of the CEO ER (pg. 9).

Please note the following in this regard:

- Overall, having reviewed the PIF and the CEO Endorsement, we observe that the outcomes have remained the same, with changes relating to formatting, structuring in relation to Outcome for component 4 which is now consolidated as outcome for component 2.

- The aforementioned $14.65 million in co-financing was budgeted in the PIF under Component 3. This budget is not gone from the CEO ER. In fact, the co-financing sum for Component 3 has been increased to about $18.4 million, of which $18 million is from the same AFD/SUNREF credit line as noted at the PIF stage.

- Component 3 is presented as TA in both the PIF and the CEO ER. We clarify that the classification of Component 3 as TA in both documents should be considered as applying to the GEF financing only. We apologize if the PIF somehow implied that GEF funds would directly capitalize a credit line (UNDP policies do not allow for UNDP to provide credit except in certain cases such as small-scale revolving funds). Moreover, most of the afore mentioned $19.7 million in co-finance (specifically, in the CEO ER, the $18 million committed as co-financing by AFD) for the Component is for capital investment to be delivered through the SUNREF credit facility.

  The need for TA in this component (and the broader project) remains as indicated in the PIF; however, the types of firms that are most in need of the TA are SMEs. The original focus on supporting eligible large energy consumers is no longer as relevant That component has been revised to reflect a more targeted approach and the overall budget of the TA has been reduced compared to the PIF.

- The INV component in Component 2 (including the revised GEF budget of $1.102 million, as well as co-financing) is indeed allocated for capital investment by the GEF insofar as it is used for the purchase and installation of equipment. This has been clarified in the CEO ER (Section B, Component 2). Whereas the original CEO ER had misleading formatting, making it difficult to see the separate INV portion of Component 2 and the associated GEF and co-financing amounts, now the INV portion of that Component has a clearly defined separate row, highlighted in yellow for reference. The relevant output (Output 2.3) has also been reworded to make its INV character completely unambiguous.

- The national MRV framework is now clearly identified as a key part of the project in Component 1. In the initially-submitted version of the CEO ER, the MRV output had been shifted to the M&E component of the project because of close overlap between evaluation of project impacts, and monitoring and evaluation of national energy savings and avoided emissions. UNDP takes note of GEFSec's assessment that this shift created an insufficiently distinct MRV framework **for the country**. Therefore the MRV activity has been restored to Component 1, where it originally was in the PIF, with no change in the originally-intended content (alignment with national roadmap, specification of data requirements and reporting frequency, compilation and dissemination of results, etc.). Project-specific M&V will be done in the M&E component.

- The MEPS output has not been removed, but rather shifted to Output 1.2 as a result of streamlining and reorganization of components, outputs, and outcomes. There is no reduction or change in the substance of proposed project activities on MEPS. Please see the requested summary table of changes.

- Likewise, ESCO support has not been removed, but rather shifted to Output 2.2 as a result of streamlining and reorganization of components, outputs, and outcomes. There is no reduction or change in the substance of proposed project activities on ESCO support.

- Project activity on the study of electricity tariffs has been revised but not removed. As explained in the CEO ER, new baseline activity has already been initiated by the Central Electricity Board (CEB) on a tariff study, in coordination with the Utility Regulatory Authority (URA) and the Ministry of Energy and Public Utilities (MEPU), making project activity on the study itself redundant. Both URA and MEPU, which are the responsible authorities in Mauritius, as well as the Project Board, have requested removal of the undertaking of the tariff study from the project in this light. However, the project will take the recommendations of the CEB/MEPU study to develop incentives and programs accordingly; to encourage businesses to anticipate revised tariffs; and to make investments in energy efficiency accordingly, thereby maximizing potential financial benefits. This activity is contained in Output 1.6.

12/2/2019

The requested summary table of changes has been added to Section II, Sub-section A.3 of the CEO ER (pg. 10). This table includes changes in components, outcomes and outputs as specified, as well as other broad changes.

We clarify again that the co-financing claimed in Component 3 ($14.65 million at PIF, $18.6 million at the time of this CEO Endorsement reflects direct investment in the form of SUNREF loans for energy efficiency projects. The GEF-funded UNDP project will leverage these funds to support additional viable energy efficiency projects via incremental TA to help borrowers to identify projects and generate robust technical and financial justification for follow-on investment. The project will also elaborate a new partial credit guarantee system (INV) under Component 3 in conjunction with national commercial banks and coordinated with SUNREF, focusing on micro, small, and medium enterprises (MSMEs).

[Recent changes and clarifications in these areas supersede part of our response in May 2019, which is marked below with strike-through font.]

As previously noted, MRV frameworks for the country, MEPS, and support for energy service companies are prominently included in the project. The study of electricity tariffs has been revised to reflect that such a study has already been carried out separately by the Ministry of Energy and Public Utilities and the Central Electricity Board. The project will provide additionality by elaborating incentives and penalties for energy performance based on tariffs as they evolve based on this completed study. Under the revised project framework, the total amount is USD 1.7 million out of USD 4.53 million. This is broken down into investment in the Mauritian Standards Bureau for USD 700,000 and the setting up of the partial credit guarantee scheme for USD 1 million.

2. Is the project structure/ design appropriate to achieve the expected outcomes and outputs?

Secretariat Comment at CEO Endorsement

1/16/2019 MY:

Not at this time.

The revised project design does not have necessary elements such as tangible asset investments, MRV framework development, and incentive mechanisms for EE. Please see the comments in Box 1 above.

4/29//2019 MY:

Not at this time.

The current project design does not show any tangible investments by this GEF project. It is difficult to convene the GEF Council and STAP that the project will have any tangible investment (hardware facility or equipment installation) on grand with GEF $4.5 million and co-financing $19 million. Output 2.3 does not show any tangible investment facilities. Component 3 which is a TA is budgeted at $19 million. The PM cannot see cost-effectiveness of the TA component in the Project. There is no guarantee that the GEF's TA results will be used by SUNREF. It seems that the GEF project and the SUNREF financing are parallel. They are not integrated. In other words, the $18,432,100 financing will or will not take place without GEF's intervention.

4/30/2019 MY:

Not at this time. Output 2.3 is not clear. Where are the primer/ replicable projects? What are the capacities? Which technologies will be used? The current project design does not show the GEF's fund used in any tangible investment on ground. It seems that the equipment or capital investments done and to be done by SUNSET and/or the AFD are not linked to the GEF project. "Why GEF grant resources, in addition to AFD's loan contribution, are needed for Component 3"? This question asked by the Canadian Council is not well or satisfactorily answered yet.

Response to Secretariat comments

The project will support numerous "tangible asset investments" via both direct GEF INV (Component 2) and indirectly via GEF TA leveraging co-finance investments (Components 2 and 3). Please see the response to Comment 11 from the GEFSec below.

MRV is retained in Component 1 as already noted. Incentive mechanisms for EE will be developed in Output 1.6 as noted, and will also be supported in Component 3 as described in Box 11 below.

12/2/19

Output 2.3 has been revised to reflect the proposed creation of a GEF-funded partial credit guarantee scheme to specifically facilitate increased lending to investments currently under-represented under past and current SUNREF credit lines, namely energy efficiency upgrades among MSMEs. Primer projects have been removed from the project as part of an effort to facilitate increased private sector investment and commercial financing (INV) rather than provision of technical assistance (TA).

Regarding the question of why GEF grant resources are needed in addition to AFD's SUNREF loans in Component 3:

During the first two phases, SUNREF has supported 474 projects, only 48 of which involved energy efficiency. The proportion of EE projects in SUNREF declined between Phase 1 and Phase 2, with only 5 percent of SUNREF projects involving EE in the latter phase. *Therefore, it is clear that despite the existence and operation of the credit line, there remains a need for support to increase uptake of this financing for energy efficiency. In the absence of further specific action, the financing for energy efficiency would not take place on its own.*

The project has determined that the issue is not the *availability* of credit, but rather the technical capacity to identify and justify projects that would qualify for SUNREF financing. Herein lies the incrementality of TA under Component 3. Technical assistance from the project to Mauritian companies will increase the number of applications and strengthen their technical and financial viability.

The project identified notable gaps in baseline activity, even given the operation of SUNREF, in terms of access to energy-efficiency financing particularly among MSMEs. Therefore, the project will develop and operationalize a GEF-funded partial credit guarantee mechanism to strengthen opportunities and lower risks of such

financing for MSMEs, beyond the existing offerings of SUNREF. The treatment and return of any unused funds from the guarantee scheme (post-project) will be discussed and agreed to by the GEF SEC and the Government of Mauritius prior to the establishment of the scheme.

Thus, TA in Component 3 provides an important incremental means for existing financing to actually be implemented in support of energy efficiency in Mauritius. All the same, recognizing that the originally-budgeted $1.4 million in TA was difficult to justify (see comment 11 below), the budget for TA for Component 3 has been reduced to below $0.5 million.

3. Is the financing adequate and does the project demonstrate a cost-effective approach to meet the project objective?

Secretariat Comment at CEO Endorsement

1/16/2019 MY:

Not at this time. The objective of the project is to operationalize the new national energy audit scheme of Mauritius by addressing and removing technical, institutional, and financial barriers to the adoption of energy efficiency measures and exploit synergies to reduce ODs emissions and promote HFC avoidance in the RAC sector. From the PIF stage to the CEO ER stage, many necessary project elements (see Boxes 1 and 2) to achieve the project objective have been removed, the project budget ($4.5 million GEF grant) is unchanged. As such, the project is not cost-effective.

4/30/2019 MY:

Not at this time.

The PM thinks the project has been considerably revised. Please provide a table to clearly show details. A table structure is suggested in Box 1. More comments will be made after reviewing the to-be-submitted Table.

Response to Secretariat comments

As clarified in previous responses, no material project elements have been removed; the only major project element that has been significantly revised compared to the PIF pertains to the tariff study. All other core activities enumerated in the PIF remain present in the CEO ER; in some cases activities have been revised to be more targeted or better respond to local conditions and a shifting baseline.

This is the case as regards the revision of Component 3 to focus GEF TA more on the uptake of EE investments from SMEs versus large energy consumers. During the first two phases, SUNREF has supported 474 projects, only 48 of which involved energy efficiency. The project preparation team, in consultation with AFD, the Mauritius Bankers Association, and Business Mauritius, has determined that the more salient financial barrier to energy efficiency is not simply the availability of credit to firms, but rather insufficient awareness and capacity among small and medium-sized enterprises (SMEs) to pursue SUNREF financing for EE. Most SUNREF borrowers to date have been small enterprises and individuals, but the large majority of these borrowers have pursued the loans in order to install photovoltaic systems under the national Small-Scale Distributed Generation program. There remains significant untapped technical opportunity for SMEs to pursue

EE upgrades, but these enterprises are insufficiently aware of why and how to pursue EE and associated SUNREF financing. This is the reason for the targeted focus on SMEs in Component 3.

The budget remains commensurate with the proposed volume of activity and expected impact.

12/2/19

The requested table has been provided (page 10 of the CEO ER). We hope that the comments and issues have now been adequately addressed. The guidance of GEFSEC and Council Members have been appropriately integrated with higher levels of tangible investments for a more substantive impact on the local market.

4. Does the project take into account potential major risks, including the consequences of climate change, and describes sufficient risk response measures? (e.g., measures to enhance climate resilience)

Secretariat Comment at CEO Endorsement

1/16/2019 MY:

Yes. They are indicated on pages 17-21.

Response to Secretariat comments

5. Is co-financing confirmed and evidence provided?

Secretariat Comment at CEO Endorsement

1/16/2019 MY:

Not completed at this time. The co-financing letter from the AFD shows that the AFD will contribute $15.75 million PARALLEL co-financing for the project. Please let the AFD know the new policy on co-financing (see GEF document Policy: FI/PL/01 that was approved on June 26, 2018 by the GEF Council). The GEF SEC appreciates it if the AFD can issue a new co-financing letter showing the $15.75 million co-financing is available for the GEF project as loan and grant during the implementation of the GEF project.

4/30/2019 MY:

Not at this time.

The new co-financing letter from the AFD is not acceptable. In the letter, the AFD should clearly indicate that the AFD will provide $17,142,875 as a loan and $875,143 as grants. In this way, the numbers in the co-financing letter and the number in Table C on page 5 in the CEO ER will be consistent.

Response to Secretariat comments

Under this component as currently envisioned, SUNREF will provide loans to qualifying firms for the purchase and installation of equipment. The co-financing mentioned in the AFD letter reflects SUNREF loan and grant funds to be released to firms implementing EE measures and affirming savings. An additional letter of support from AFD is forthcoming, which will confirm their support for the approach taken by the project, supporting the NEEP and the need for additional TA for facilitate financing of energy efficiency projects. Furthermore, we understand that the new co-financing policy approved on 26 June 2018, applies to project submitted or approved after 1 July 2018. As the current PIF was approved in April 2017 and therefore “submitted before 1 July 2018”, we understand that the new co-financing policy is not applicable. Notwithstanding this fact, AFD has agreed to provide an additional letter of support to emphasize that it fully endorses the approach used in this project and enhance the synergy between the PNEE and the GEF project.

Please see the response in Box 11 for a full discussion of the scoping of Component 3, alignment with SUNREF, and maximization of incrementality in expanding EE investment and specifically, uptake of SUNREF financing for EE.

6. Are relevant tracking tools completed?

Secretariat Comment at CEO Endorsement

1/16/2019 MY:

Yes.

Response to Secretariat comments

7. Only for Non-Grant Instrument: Has a reflow calendar been presented?

Secretariat Comment at CEO Endorsement

1/16/2019 MY:

N/A.

Response to Secretariat comments

8. Is the project coordinated with other related initiatives and national/regional plans in the country or in the region?

Secretariat Comment at CEO Endorsement

1/16/2019 MY:

Yes, it is described on page 23.

Response to Secretariat comments

9. Does the project include a budgeted M&E Plan that monitors and measures results with indicators and targets?

Secretariat Comment at CEO Endorsement

1/16/2019 MY:

Yes, it is described on pages 23-25. But the M&E plan may need revising after the project design is further revised (see comments in Boxes 1 and 2)

Response to Secretariat comments

The M&E plan for the project remains as presented in the original CEO ER. This plan covers all elements of the project design, including those that have been revised in light of the GEFSec's initial review. As noted above, development and implementation of a separate national MRV system has been restored to Component 1.

10. Does the project have descriptions of a knowledge management plan?

Secretariat Comment at CEO Endorsement

1/16/2019 MY:

Yes, on pages 22-23.

Response to Secretariat comments

Agency Responses

11. Has the Agency adequately responded to comments at the PIF stage from:

GEFSEC

Secretariat Comment at CEO Endorsement

1/16/2019 MY:

N/A

Response to Secretariat comments

STAP

Secretariat Comment at CEO Endorsement

1/16/2019 MY:

Yes.

Response to Secretariat comments

GEF Council

Secretariat Comment at CEO Endorsement

1/16/2019 MY:

Not at this time.

The French Council members requested the following in their comments:

"We would like to find more details in the project detailed document on the following issues: 1. Dimensioning of UNDP-AFD collaboration in the context of this initiative: Financial articulation: how the $1.4 million grant will interact with SUNREF III Credit Line. Technical articulation: Project criteria."

The Agency's responses to the comments are not relevant nor acceptable. The project, after revision, will no longer have a component to work with SUNREF to set up a credit line. The GEF project grant ($4.532 million) is budgeted for TAs, not really for tangible investments. There is not direct significant financial collaboration between the GEF-UNDP and SUNREF. Per the co-financing letter of the AFD, the SUNREF will get benefit from the GEF-UNDP project with a report with information regarding the number of projects that will have received grants from the GEF project and that will apply for a loan to be financed under SUNREF. The responses of the UNDP to the French comments read: " UNDP will deliver technical assistance only under Component 3, not grants or loans. Therefore, financial articulation between the GEF funded project and SUNREF will be quite simple. all of the financial eligibility criteria and processes for SUNREF loans and grants will remain unchanged, with no additional subsidies of interest reductions. The project will maim to increase the volume and reduce the technical risk of loan/grant applications, but not change the nature of the SUNREF loans and grants in themselves." As such, the project, after revision, becomes a TA for SUNREF for possible future financing. The project per se does not have any tangible financing elements. It is not appropriate to use $4.5 million GEF grant for a TA.

Again, in responding to Comment No. 2 of the US Council members, the UNDP highlighted again the following: " .. the UNDP supported project will contribute additional technical recommendations specific to energy efficiency (cold storage insulation management and overall housekeeping practices for reduction of end-use losses, energy consumption monitoring and performance optimization, energy management protocol and training". All these mentioned activities are TAs. Although they are GEFable, they do not need a total of $4.5 million grants.

In Comment No. 4, the US Council made the following comments: "It appears as though Component 2 and 3 are supporting, at least in part, the same type of activities as the MLF funded HPMP. Since the beneficiaries will be receiving energy/monetary paybacks after implementing the energy audit recommendations, we believe that a loan system in Component 3 is more conducive and sustainable to achieve the project goals. Since this proposal does not articulate a clear justification for the RAC primer projects and due to the funding concerns outlined above, we would recommend removing any RAC primer projects from this component (except the boiler projects)." In responding the US Council's comments, the UNDP indicates " .. two major commercial banks of Mauritius, has already established a loan program called SUNREF. SUNREF has completed its first two phases, involving credit lines of €40 million and €60 million respectively. A third phase, involving a credit line of €75 million, is being launched in 2018. To date, the banks have issued about 250 SUNREF loans, about 30-

40 percent of which involve energy efficiency. SUNREF loans for energy efficiency also include a grant equal to five percent of the loan amount, for projects that verify energy savings of 20 percent or more beyond the baseline" and "... Research and stakeholder outreach during the PPG period indicates that RAC replicable projects should not be excluded, and indeed should remain a key focus of Component 2". The GEF SEC, agreeing with the comments of the US Council members. In addition, it is unnecessary to use GEF grants to finance the RAC primer projects in a market that the local commercial banks have issued 250 loans to address the issue.

In its Comment No. 7, the US made the following point: "This proposal does not articulate how specific energy efficiency technologies will be chosen. The proposal lists a goal to promote “energy efficient low-GWP technology”; however it remains unclear how UNDP plans to identify specific projects that will meet this goal. Will the promoted technologies include examples of all possible energy efficient and low-GWP alternatives, or will UNDP only showcase some potential applications? Furthermore, what will be used as criteria to determine if a technology meets the goals of “energy efficient”? The responses of the UNDP read: " ... In its selection of technologies for replicable projects as well as scale-up efforts with non-GEF partners, and indeed in its general technical assistance as well, the UNDP-supported project will seek to analyze a range of available technology options in terms of their cost, financial returns, and potential for energy savings and GHG emissions reductions at the level of equipment, systems, and entire facilities. The description of Output 2.3 in Section IV of the Project Document elaborates a full set of criteria to be applied in selection of projects receiving support." The responses are not acceptable, because a GEF project at the CEO ER stage should have technologies and project sites well identified. Otherwise, the project cannot be correctly budged and GHG emission reduction amounts cannot be calculated.

In its Comment No. 7, the German Council members made the following point:" Although HFOs have a high mitigation potential, HFOs do not represent a sustainable long-term solution because of their short life span, unknown long-term impacts to the environment as well as dependencies on imports and high costs of refrigerants. Given these facts, Germany kindly asks for the drafting of the final project proposal statements and clarification why the GEF project is considering HFOs, and presentation of possible alternatives". The UNDP responded as follows ".... all technologies will be assessed in terms of their energy efficiency, cost-effectiveness, other technical operating parameters, attractiveness to end-users, and market replicability. " At the CEO ER stage, this response is not acceptable. All these analyses should have been done in the PPG stage.

In its Comment No. 3, the Canadian government put the following comments: "We request clarification of why GEF grant resources, in addition to AFD’s loan contribution, are needed for Component 3 – establishing a line of credit for energy efficiency. Further, if additional capital is needed to supplement AFD’s funds, was the provision of a non-grant instrument considered?".

The UNDP responded as follows: "In the time that has passed from the time when the PIF scope was discussed with the Government of Mauritius and AFD and the start of the PPG, AFD has successfully established the SUNREF credit line, which includes both loan and grant elements, without GEF and UNDP involvement, at a scale far exceeding the GEF budget for Component 3. GEF funds will therefore not be used to establish a redundant credit line (nor associated

grants or non-grant instruments), but rather to support expanded participation in SUNREF through limited investment subsidies, to provide technical de-risking of investments for borrowers and banks, and to support post-project transition. Please see the Project Document for full details.

Note that the GEF-approved PIF specifies the Component 3 budget as technical assistance (TA), rather than investment (INV). The project's approach is consistent with this specification, with no delivery of GEF funds under this component directly to beneficiaries for the acquisition of equipment, but rather the delivery of technical support for assessment of options, justification, and de-risking. Appropriate detailed description of the activities to reflect these aspects have been added to the project documentation."
On the basis of the revised document and the responses, the GEF SEC does not think the UNDP satisfactory address the issue. The Agency needs to justify why it is necessary for the GEF to use $4.5 million for TAs in a market where commercial banks are in operation to finance projects in the market.

4/30/2019 MY:

Not at this time.

In responding to Comment 3 of the French Council, the Agency used data of information dated 2012. Please use updated data or information to respond the comments and to design the project. For example, the Mauritius Prime Minister's Office published a document entitled: "Energy efficiency programmes for SMEs to enable benefits beyond energy savings, says Acting Prime Minister" (Email: gis@govmu.org Website: http://gis.govmu.org). The document highlighted a number of areas for Mauritius to improve energy efficiency. The Agency should consider targeting broader scopes rather than <boilers and RAC systems> for this project, to effectively and satisfactorily address the comments of Council members of France (bullet number 4) and the US (bullets 1 to 8).

In responding the comments of the Council, please first briefly indicate which question to respond, then respond it concisely. The responses in the last box on page 42 are not acceptable. The French questions, such as "How the $1.4 million GEF grant will interact with SUNREF III Credit Line, were not answered.

To comply with the comments from the US government, the PM suggests that the GEF intervention on the RAC system be removed from the project. There are a lot of scopes where the GEF and the UNDP can help the country to improve energy efficiency. For example, the UNDP may use part of the GEF fund to build national labs (which can be claimed as tangible capital investments) to testing energy efficiency for equipment and products. This kind of capital investment will support institutional development and capacity building of the country in energy efficiency standards and codes.It will have long term impact more cost-effective in delivering global environment benefits.

The Agency's responses to the third comment of the Canadian Council are not satisfactory. Please justify why the GEF needs to spend $1.4 million in Component 3 in addition to AFD's loan. It is difficult to justify the use of GEF $1.4 million for a TA component.

Response to Secretariat comments

A. Response to France

It is correct that the project no longer intends to help "set up" a line of credit. This is because the SUNREF line of credit is already established and funded (two program cycles completed with tranches to fund credit lines of of €40 million and €60 million respectively, and a third tranche of €75 million currently being applied as of the summer of 2018). It would be redundant to set up a line of credit when one already exists.

There does remain a clear need, however, for TA to fulfill still-untapped opportunities for SUNREF financing for EE projects. **During the first two phases, SUNREF has supported 474 projects, only 48 of which involved energy efficiency. The proportion of EE projects in SUNREF declined between Phase 1 and Phase 2, with only 5 percent of SUNREF projects involving EE in the latter phase.** *Therefore, it is clear that despite the existence and operation of the credit line, there remains a need for support to increase uptake of this financing for energy efficiency.*

The project preparation team, in close consultation with AFD, the Mauritius Bankers Association, and Business Mauritius, has determined that among the more salient financial barrier to energy efficiency uptake is not simply the *availability* of credit to firms, but rather the following factors:

* *Insufficient awareness and capacity among small and medium-sized enterprises (SMEs) to pursue SUNREF financing for EE*. Most SUNREF borrowers to date have been small enterprises and individuals, but the large majority of these borrowers have pursued the loans in order to install photovoltaic systems under the national Small-Scale Distributed Generation program. There remains significant untapped technical opportunity for SMEs to pursue EE upgrades, but these enterprises are insufficiently aware of why and how to pursue EE and associated SUNREF financing.

* *Insufficient technical and financial justification for certain EE investments*. SUNREF and its participating banks have compiled a list of eligible EE and renewable-energy measures for projects whose overall loan amount is €250,000 or less. This list helps to streamline the application and approval process. For more complex, expensive, or unfamiliar measures, there remains a need for detailed financial and technical justification on a case-by-case basis.

This need is especially notable with regard to complex integrated energy management systems in connection with new large-scale RAC systems that would be introduced in compliance with the Kigali Amendment. As a result, as rare as EE projects are in general under SUNREF, EE projects involving RAC have been even rarer. Barriers of time availability and expertise prevent the needed assessments and associated documentation. In turn, in the absence of this documentation, bankable projects remain neglected or suffer under a continued perception of prohibitive technical and financial risk.

Therefore Component 3 has been recast so as to better address these specific barriers and increase the uptake of SUNREF financing for EE projects, especially for SMEs and for technologies and solutions (including energy management for large Kigali-compliant RAC) that are new to SUNREF and to the country. Please see

pages 11-13 of the revised CEO ER for full details of planned activity. See also the recasting of the wording of Component 3 outputs in the table in Section B of the CEO ER.

With regards to comments that "there is not direct significant financial collaboration," the GEF-funded UNDP-supported project and SUNREF will indeed collaborate closely on ensuring maximal effectiveness and volume of mobilized SUNREF loans in support of energy efficiency investments. UNDP and AFD staff consulted closely on the development of this project submission and will continue to do during project implementation. Please see attached letter of support from AFD.

As noted in the CEO ER, Component 2 involves use of GEF funds for both TA and INV support for specific energy-efficiency projects (Output 2.3). The project calls for the use of $964,000 in GEF funds for INV for the purchase and installation of energy-saving measures in facilities. Note that the INV amount for the GEF budget in the CEO ER is modestly higher than the corresponding INV portion proposed in the approved PIF ($781,533). The table of components and outputs in Section B of the revised CEO ER has been reformatted to make the distinction between TA and INV clearer for Component 2.

B. Response to the USA (Comments 2 and 4)

We wish to clarify that the entire $4.5 million GEF grant will not be used for TA. As noted in the CEO ER and the response above, Component 2 involves use of $1,102,000 in GEF funds allocated for INV for purchase and installation of energy-saving measures in facilities. This INV amount has increased relative to the INV amount approved in the PIF. UNDP estimates that at least $500,000 will be used to support at least 10-15 integrated energy management systems for monitoring, optimization, and servicing of energy consumption in large RAC systems and possibly other installations.

The actual volume of TA in the project is therefore $3.214 million, which covers activities in policy development, MEPS, and MRV under Component 1; training for both energy auditors and energy managers in Component 2 (including training on energy management in Kigali-compliant RAC and other EE solutions that are completely new in Mauritius); market development for ESCOs in Component 2; support for SMEs and other firms in identifying EE opportunities and applying for SUNREF funding in Component 3; associated training for banks in Component 3; informational outreach in Component 4; and M&E. The proposed level of the TA budget is commensurate with the expected efforts and impacts of the TA work itself.

Comments 2 and 4 from the United States pertained to concerns about how project activities involving replicable projects on refrigeration and air conditioning (RAC) might overlap with the mandate and work of the Multilateral Fund (MLF). UNDP did revise and clarify the project plans in direct light of these concerns, in the following ways:

- The project will not claim any co-financing from the MLF or the National Ozone Unit.

- Any project activity involving RAC systems would focus specifically on energy efficiency, involving energy management and optimization and minimization of end-use losses – but, as noted above, not the selection or replacement of cooling equipment or refrigerant chemicals.

- The title of Component 2 has been revised to reflect that the project will have no role in promoting refrigerant choice or transition.

(The portion of UNDP's response about SUNREF was intended simply to affirm a separate portion of the USA's Comment 4, in which it was noted that a loan system in Component 3 would be conducive and sustainable to achieve the project goals.)

C. Response to USA (Comment 7)

UNDP's project preparation team did endeavour to identify specific technology options and specific sites for investment projects, leading to the development of five replicable project ideas yielding concrete estimates of energy savings, avoided emissions, and costs.

As noted, UNDP does anticipate delivering support for at least 10-15 energy management systems for Kigali-compliant RAC and possibly other installations, encompassing commercial and industrial equipment of various types and scales. However, in line with procurement rules of UNDP, the donor's funds have to be used in a transparent way which requires the announcement of a competitive call for applications, and careful section of candidate projects (as well as a prohibition on providing direct cash grants to private sector firms i.e. the INV will be provided through competitively selected contractors). Such selection must be done during implementation according to UNDP procurement rules and cannot be processed during project preparation.

Furthermore, it has proven infeasible to include specific sites and partners in the project plan because of mismatched timeframes. Companies identified as ready partners during the PPG period cannot afford to wait for months while the UNDP-GEF project is developed, assessed, approved, and launched. On the other hand, partners that will be ready during the UNDP project implementation period cannot be identified so far in advance during the preparatory period.

Therefore, in order to respond to the USA's question about articulation of how projects will be selected, while also allowing for correct matching of timetables, UNDP and its partners developed a bidding process and criteria for projects. The GEF SEC's concerns about budgeting and GHG emission projections are well noted, and will be addressed via strict criteria about cost-effectiveness; the level of appropriate subsidization from GEF assistance (as regards the overall investment needs); and total GHG reduction volume.

D. Response to Germany

In preparing the response to Germany's comments in Annex B of the CEO ER, UNDP was mindful of the divergent positions of Germany and the United States with regard to HFOs. As is evident here, Germany had major misgivings about the possibility of project support for HFO-based systems. The United States, on the other hand, called for the project to be "technology neutral" with regard to refrigerants.

Under these conditions, it would have been impossible to reject HFOs *a priori* without risking the USA's disapproval. Therefore, UNDP sought to clarify that indeed the project would be technology neutral with regard to types of low-GWP refrigerant systems.

At the same time, the rest of UNDP's response to Germany does reflect the fulfillment of the stipulated analysis:

Such assessment has already begun during the PPG phase. It has confirmed that natural refrigerant based technology has found an initial entry point on Mauritius's market, though it is still not well established. Also, based on interviews with related national counterparts, the project preparation team has determined that at present, HFOs are not competitive with natural refrigerants or other technologies such as HCFC and HFCs in Mauritius, because of import dependence and high costs, precisely as noted in the question. During the implementation period, the project will continue to assess the market, including technology availability, cost, and risks, and will allocate its support accordingly.

E. Response to Canada and associated GEFSec comments

See the response to France's comments above. As noted there, UNDP will not actually create a new credit line, as this would be redundant with SUNREF's present offerings, but will instead provide incremental TA support to increase uptake of SUNREF financing for EE (with a particular focus on SMEs), which has constituted only 10 percent of SUNREF projects to date (only 5 percent in SUNREF Phase 2).

As also noted above (see response B to USA Comments 2 and 4), the project doies not involve $4.5 million in TA. It includes $1.1 million in INV, which is in excess of the INV amount in the approved PIF. The remaining $3.2 million in TA will be used for a wide array of project activity on policy development, MEPS, MRV, training, market development, promotion of EE projects among SMEs, and so on, which collectively make up a volume of work and anticipated incremental impact commensurate with the budget.

Convention Secretariat

Secretariat Comment at CEO Endorsement

1/16/2019 MY:

N/A

Response to Secretariat comments

Recommendation

12. Is CEO endorsement recommended?

Secretariat Comment at CEO Endorsement

1/16/2019 MY:

Not at this time.

The project failed to address the comments of the GEF Council; it is not cost-effective in term of delivering GEBs. There is little addtionality for the GEF to finance EE projects in a market where the private/commercial banks are releasing loans to the enterprises. As such, the PM cannot recommend it.

5/2/2019 MY:

Not at this time. Please address the comments in Boxes: 1, 2, 3, 5, and 11. These comments are related to two major issues: (1) the challenges from the US government; and (2) the AFD co-financing letter.

1/15/2020 MY:

Not at this time. The submission is not completed.

Since May 2019, a lot of activities and meetings have happened on this project, including meetings of GEF Council members: Ms. Rachna Ramsurn (Mauritius), Elizabeth Lien (US), and Leo Theobaldt (Germany). Also, the project has been significantly revised per the meetings. Please write a narrative on these meetings and changes, make a table to show the details of these changes, and justify these changes. Please submit the narrative and the table in a separate document through the GEF Portal. Also, the revised CEO ER document needs to be submitted to the Portal. Relevant meeting minutes are welcome to be submitted to the GEF Portal as attached documents.

Response to Secretariat comments

Review Dates

	Secretariat Comment at CEO Endorsement	Response to Secretariat comments
First Review		
Additional Review (as necessary)		
Additional Review (as necessary)		
Additional Review (as necessary)		

	Secretariat Comment at CEO Endorsement	Response to Secretariat comments
Additional Review (as necessary)		