

Promoting Sustainable Energy Access for Rural Communities in South-Eastern Angola

Review CEO Endorsement and Make a recommendation

Basic project information

GEF ID

9810

Countries

Angola

Project Name

Promoting Sustainable Energy Access for Rural Communities in South-Eastern Angola

Agencies

UNDP

Date received by PM

5/28/2019

Review completed by PM

9/10/2020

Program Manager

Satoshi Yoshida

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 Request
AT, 07/25/19:

Yes. Several changes have been brought to the project design based on the baseline assessment.

1) Improved cook stove have been left out of the off-grid technology mix.

*Time spent for cooking is relatively small as women spend on average only 1h/day for cooking, consequently average time spent for collecting firewood is only 15 mnutes/day, therefore households willingness to pay for improved firewood cook stoves is too low to make upfront investment. Besides dissemination of improved charcoal cook stoves is already being carried out under the other GEF-UNDP project.

2) Output 1.3: "Micro finance institutions provide micro-credit to rural communities for the purpose of advanced cook stoves solar systems and solar lanterns" has been changed to "Access to finance to rural communities for the purchases of solar systems and lanterns."

*BOP rural households are too vulnerable economically and hence too risky a market segment for microcredit. No examples of micro finance to rural households could be observed, not least for the purchase of off-grid solar solutions for household applications. As a precursor to micro finance, this project will support the financial literacy of rural households and increase capacity to pay and credit worthiness through formation of women-led solidarity savings and credit associations (SACs).

3) Output 1.4: "Mobile payment system expanded to Moxico Province and mobile-based PAYG models established in South-Eastern Angola" has been changed to "Innovative payment systems established to improve customer for recovery"

* The bank-led model of mobile money is very limited in scope and scale in Angola. Lack of an effective fee recovery mechanism is a barrier that prevents the private sector participation in the off-grid technology supply chain. Given the fact that there are alternative payment systems that can be easier to implement than the existing mobile money system, this project output has been broadened in scope without leaving out the mobile payment as an option.

4) Output 2.1: The scope has been enlarged beyond 'access to finance' to also cover 'locally appropriate payment systems'.

* Payment for purchased products is not limited only by access to finance it has been found that locally-appropriate payment systems must also be established to support payments.

5) Added new Output 3.4: Communication and sensitization of project at national and provincial scale.

Response to Secretariat comments

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

Secretariat comment at CEO Endorsement Request

AT, 07/25/19: Yes.

This project is designed to achieve 2.7 million t CO₂-eq of the 10-year cumulative emission reduction by promoting a flagship project for setting up a market-based approach for rural energy access using decentralized solar technologies (lanterns and different size solar home system). The Project Outcomes and Outputs are as follows;

Outcome 1 (TA) : Enabling environment created for private sector investment in decentralized renewable energy;

Output 1.1: Assessment of successful RET diffusion in the region;

Output 1.2: Business case for clean energy supply chain developed;

Output 1.3: Access to finance to rural communities for the purchase of solar home systems and lanterns;

Output 1.4: Innovative payment systems established to improve customer fee recovery;

Outcome 2: (TA/INV) Successful establishment of a household-level energy service delivery model, which may include community-based systems, e.g. in communal jangos, for replication nationally. Around 81,000 beneficiaries have access to sustainable lighting technologies;

Output 2.1: Local private companies along the value chain supported, including business development, connection to suppliers and access to finance and locally appropriate payment systems;

Output 2.2: Six solar-powered kiosks produced, providing clean energy products to communities in Moxico Province;

Output 2.3: Technology transfer of decentralized renewable energy systems facilitated;

Output 2.4: Training provided to technicians on installation and maintenance of solar home systems;

Output 2.5: Training and technical support provided to communities on how to choose, use and maintain the clean energy products, including home- and community-based systems;

Outcome 3 (TA): Lessons learned and experience from project interventions support replication and scaling-up of project results;

Output 3.1: Lessons learned report produces on project experience;

Output 3.2: Cooperate with technical institutes and universities established;

Output 3.3: Project results incorporated into vocational schools curriculum;

Output 3.4: Communication and sensitization of project at national and provincial scale.

Response to Secretariat comments

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

Secretariat comment at CEO Endorsement Request AT, 07/25/19; Yes. The CO2 abatement cost of the project is estimated to be 1.53 \$/t CO2-eq.

Response to Secretariat comments

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 Request
AT, 07/23/19: Yes.

This project contains a significant financial risk that customers may not have the willingness or ability to pay for the producers or have access to an appropriate method of payment.

To respond to the risks, the project has gathered market intelligence on willingness and ability to pay. The data has been used to develop financial models to investigate payment modalities for each RET based on avoided energy costs. The results show that a combination of access to micro-finance and financing through solidarity groups should make RETs affordable. All RETs have payback periods much less than capital outlay, with net savings accruing to households. In the second half of the project period, the solar-powered kiosks will serve as payment points, allowing customers to pay ?off-line,? while the money can then be sent to the private companies via e-Kwanza from the kiosks.

Response to Secretariat comments

5. Is co-financing confirmed and evidence provided?

Secretariat comment at CEO Endorsement Request
AT, 07/25/19: Not yet.

Letters for confirmation of co-finance from the (1) Ministry of Energy and Water (Grant : \$20,000,000) and (2) Ministry of Environment (In-kind: \$500,000) re not attached. Please submit the letters.

AT, 08/26/19: The Co-financing letters have been submitted to the Portal. Comment cleared.

Response to Secretariat comments

FK, 13 August 2019: The co-financing commitment letters from the Ministry of Energy and Water and the Ministry of Environment have now been uploaded in the portal.

6. Are relevant tracking tools completed?

Secretariat comment at CEO Endorsement Request

AT, 07/25/19: Not yet.

Please complete the Tracking Tool at CEO Endorsement and submit it. (see "[Guidelines on the Project and Program Cycle Policy](#)", GEF/C.52/Inf.06/Rev.01, Annex 9 Para 10, page 46).

AT, 08/26/19: The agency's response is noted. Comment cleared.

Response to Secretariat comments

FK, 13 August 2019: Please note that tracking tools are no longer required for GEF-6 or GEF-7 projects, as the GEF has transitioned to the core indicators. The core indicators for the project were uploaded in the portal along with the original submission.

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

Secretariat comment at CEO Endorsement Request 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 Request

AT, 07/25/19: Yes.

Angola formulated the "Renewable Energy Strategy" which has specific goals including ""establishment of 500 solar villages", "private domestic market of 1MW/year in individual solar systems" and "distribution of 500,000 solar lanterns in remote areas"

It also formulated the "Energy Action Plan 2018-2022" which has specific goals including "increase rate of electrification from 35% to 50% with a minimum of 20% in each province" and "100,000 solar home system imported, distributed and sold".

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 Request

AT, 07/25/19: Yes.

OFP sent a letter to the Agency (UNDP) requesting the support of UNDP in the implementation of this project, specifically through a number of administrative services that are necessary for the implementation of project activities as laid out in the ProDoc.

AT, 08/27/19: Please see additional comments in Box 12 below.

April 24, 2020 , SY: Please revise the budgeted M&E and budget the table addressing the below points.

1. MTR and TE budget are significantly increased with the same outputs and seem not reasonable without justification of such increase.
2. NIM Audit as per UNDP audit policies by UNDP country office is still in the M&E plan, while supervision under the project cycle management should be covered by Agency fee. (also, regular financial auditing for the project by the executing agency is covered by PMCs)
3. The budget of "Lessons learned and knowledge generation" by the project manager, \$75,291, seems large and its allocated budget in the budget table is not clear. Please clarify the scope of this part in detail and adjust as appropriate.

Sep 7, 2020, SY: Thank you for revising the M&E budget table and the entire budget table and providing rationale. Comments cleared.

Response to Secretariat comments

FK, August 31, 2020:

1. In response to the earlier GEF comments recommending the removal of the execution support services from the project document, we subsequently reviewed the total budget and work plan with our County Office. Based on the latest UNDP guidance for conducting evaluations of GEF-financed projects, the comparatively high travel costs to Angola, and the remote location of the project sites in Moxico Province, we increased the budget allocated for the mid-term review and terminal evaluation. The revised budget of \$46,500 for the mid-term review and \$64,960 for the terminal evaluation includes the cost of both the lead international consultant and the national consultant for both evaluations and is consistent with the latest guidance.
2. As suggested, we have removed the financial audit from the M&E plan and budget. In addition, in the project budget, we have shifted the financial audit from Outcome 3 to the Project Management Cost.

3. The lessons learned under activity 3.1.2 is for a national consultant that is spread over the five-year implementation period rather than at two points in time. Given that this is a first-of-its-kind project in Angola, capturing lessons and codifying knowledge on a regular basis will be important, both to support adaptive management as well as replication and scaling up of project results. Lessons learned and knowledge generation activities are placed under component 3 in the budget table. We have adjusted the M&E plan and budget accordingly.

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

Secretariat comment at CEO Endorsement Request
AT, 07/25/19: Yes.

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 Request

Response to Secretariat comments

STAP

Secretariat comment at CEO Endorsement Request AT, 07/25/19: Yes.

Response to Secretariat comments

GEF Council

Secretariat comment at CEO Endorsement Request

AT, 07/25/19: Not yet.

Canada and Germany made comments on the Work Program for the 53rd GEF Council including those on this project.

However Agency's response to the comments are not attached. Please address.

AT, 08/27/19: Comment cleared.

Response to Secretariat comments

FK, 13 August 2019: UNDP would like to thank the Program Manager for pointing this out. We have now responded to the Canada and Germany Council member comments in Annex B of the CEO endorsement request.

Convention Secretariat

Secretariat comment at CEO Endorsement Request

Response to Secretariat comments

Recommendation

12. Is CEO endorsement recommended?

Secretariat comment at CEO Endorsement Request

The CEO ER refers to a set of Annex documents (Annex SA1, SA2, SA3, SA4, SA5, SA6, SA7....) which include important information for technical review. However they are not attached. Please submit these documents.

Part I: Project Information/ Rio marker on climate change mitigation should be '2'.
Please revise.

The PM will make additional comments after receiving the necessary documents stated above.

AT, 07/25/19: Not at this time. Please address all comments stated above (Box 5, 6, 11).

AT, 08/27/19: Thank you for the responses. Rio marker on climate change mitigation has been revised. Comments provided on 07/25/19 cleared.

However, for the clearance of the project, please address the following comments on the Agency's execution functions.

The PM reviewed the proposed role for the implementing Agency and the Execution partners based on the GEF's Guidelines on the Project and Program Cycle Policy (Annex 8, para. 7-9). This section was created with the intent of allowing **-on an exceptional basis only-** avenue for GEF Agencies to overcome situations of extreme low capacity challenges in certain countries.

Having checked the OFP letter to request support of administrative services, the CEO Endorsement Request and the Project Document of this project, as well as the proposed execution function of another recent project in Angola submitted by another Agency, it is found that this project is not regarded as an exceptional case mentioned above.

In this regard, please delete any description on the executing functions of the Agency from the CEO Endorsement Request and the Project Document. (Such descriptions are found in the sections such as "CEO ER: A6. Institutional Arrangement and Coordination including Figure 2 (for example, para 64 and 65)", "Project Document: VIII. Governance and Management Arrangement including Figure 4.", "IX. Financial Planning and management (for example, para 72: UNDP Direct Project Services as requested by Government)" and "Project Document: X. Total Budget and Work Plan" and others. In terms of the budget plan, the budget (\$51,000) for direct project cost mentioned in the OFP letter should be used by the Government to carry out these activities. So please revise the budget plan accordingly.

April 24, 2020, SY: Thank you for deleting the executing functions by UNDP and revising the CEOER (Assistant PM is still in the figure 2) and Prodoc. The revised budget table now has, for example, increased budget for ?Audio Visual&Print Prod Costs? and ?Workshops and Meetings? as well as some M&E activities as described above. Please clarify why revising executing functions would affect these budget distributions and adjust as appropriate (see the box 9 as well). Please consult with the PM before re-submission.

Also, please consider the expected date for the implementation as the Prodoc has not changed planned start date, taking into account the latest situation of the COVID-19 as appropriate.

Sep 21, 2020, SY: Thank you for providing explanation. However, please further address/clarify the below points.

1. The Gender Action Plan in the M&E budget must be monitoring the Gender Action Plan only or it may be covered by relevant components if it is rather implementing the plan. Please clarify.

2. Although UNDP's executing functions have been removed, 'Governance and Management arrangements' of the ProDoc defines "Development Partners" including UNDP who must have the authority to commit or acquire supplier resources required, which indicates some linkages to executing functions. Please clarify if this is not related to executing functions or adjust as appropriate.

3. Budget:

(i) In Component 1, there is an activity namely 'Low value grants' that 'to operational guidelines that will be developed under Output 1.3'. A similar descriptions in Component 2 ('financial derisking instrument which may take the form of credit guarantees for micro-credit institutions to provide micro-credit to riskier BOP market segments' ? 'UNDP will work with UNCDF or a competent national institution to set up and manage this financial instrument.?). In order for these items to be approved, it is required a detailed explanation of the mechanism through which the Executing Entity will select the successful savings associations (SAC) and the micro-credit institutions, and how they will disburse the funds.

(ii) In Component 1, there are two budget lines of 'International Consultants,' and one of which appears to be financially linked by UNDP as it says 'the consultation fee for the Technical Officer (10%)' will be managed by UNDP for total amount of US\$ 42,000. It is unclear what a consultation fee means. As UNDP is not authorized to play any executing function, please remove this budget line or adjust as appropriate.

(iii) The ProDoc says that there will be a project vehicle 'operated by project staff,' in the budget there is a provision for \$60,000 (\$12,000 per year) to 'cover the entire salary of the project driver.' Please clarify these descriptions. The vehicle in the former seems to be the mobile kiosk as one of solar kiosks the project will establish, rather than a vehicle for project management purpose, and the vehicle in the latter is also under the main component.

June 15, 2021: The previous comments have been clarified and addressed. The checklist was also attached.

Response to Secretariat comments

FK May 28, 2021,

1. The referenced activity in the M&E budget is intended to finance the monitoring aspects of the gender action plan. We have amended the text in the M&E budget to ?Monitoring activities related to the Gender Action Plan.?

2. As per the latest UNDP guidance, ?the Development Partner(s) are individuals or groups representing the interests of the parties concerned that provide funding and/or technical expertise to the project.? We have removed the following text: ?*must have the authority to commit or acquire supplier resources required,*? as that was an oversight.

3. Budget

(i) The GEF-funded project will support the formation of women-led savings and credit associations (SACs) in Moxico Province under Output 1.3 in partnership/collaboration with the Lutheran World Federation (LWF). This will build on LWF's earlier successful experience in pioneering women-led SACs for community development in Camanongue. Therefore, the GEF project will replicate and scale up best practices. Guidelines for the setting up, operation, monitoring and evaluation of SACs will be developed under the partnership with LWF-Angola. The government implementing partner, the Ministry of Culture, Tourism and Environment, will enter into an MOU with the Lutheran World Federation. The disbursement of the low-value grants will follow the protocol already developed and used by LWF in the northern parts of Moxico Province for about a decade. The low-value grants will be provided to the SACs that the project will support to establish.

Under Output 2.1, a partial credit risk guarantee was initially proposed. However, while UNDP's guarantee policy has been approved by the Organizational Performance Group (OPG), the guarantee policy has not yet been formally approved by the Executive Group. Therefore, Activity 2.1.1 on setting up incentive mechanisms for private sector participation in the technology value chain has been reoriented. Setting up and maintaining distribution channels and infrastructure is both costly and risky as businesses are exposed to uncertain demand from customers often unable or unwilling to pay for products they are not familiar with. In order to de-risk such investments and incentivize private sector actors to establish last-mile distribution channels and infrastructure in Angola, the Ministry of Culture, Tourism and Environment will undertake a competitive procurement process to identify local or international providers with a track record in the last-mile distribution of solar home systems in the region or elsewhere in Sub-Saharan Africa, especially those selling such products on a pay-as-you-go basis. The Ministry will provide funding for the establishment of such distribution channels in conjunction with the solar jangos. This will ensure a supply of quality products for the solar jangos, which will also benefit from the providers' know-how and expertise. Furthermore, by focusing on providers of PAYG solutions, there is an opportunity to address the affordability barrier for BOP customers. We have amended the relevant budget note accordingly.

(ii) Following earlier GEF Secretariat guidance, the project will be implemented under full National Implementation Modality (NIM), which means that UNDP will have no role in execution. Therefore, the government implementing partner will manage all consultant contracts. The consultation fee refers to the professional daily fee of the international consultant. We have amended the text in the budget note accordingly to reflect these two points. In addition, we have merged the two international consultant budget lines into one budget line.

(iii) The vehicle mentioned under Activity 2.2.3 refers to the mobile solar kiosk, which will help bridge the gap in the off-grid technology supply chain. The mobile kiosk will be able to reach dispersed communities at the base of the income pyramid in Moxico Province, generating awareness of household-level solar energy products. The vehicle will not be used for project management purposes. The driver of the mobile kiosk will be carrying out essential field activities and will not be supporting the project management unit. We have edited the text to accurately reflect the role of the mobile solar kiosk and the driver.

Please note that in 2020, the Ministry of Environment (MINAMB), Ministry of Culture and Ministry of Tourism merged to form a super ministry with three portfolios, the Ministry of Culture, Tourism and Environment. This ministry will serve as the national implementing partner for the project. We have updated all references to the Ministry throughout the project document and CEO Endorsement Request. Finally, in line with GEF policy, we have incorporated COVID-19 risks and opportunities in the Development Challenge and Strategy sections of the project document respectively and added a COVID-19 related risk in the risk table. We have also applied these changes to the CEO endorsement request.

FK, August 31, 2020

After consulting with our Country Office regarding the budget reallocation, we increased the audiovisual and print production costs given the fact that printing costs in Angola are very high. Angolan print products are often printed in Portugal or Namibia for this reason, but the cost of shipping is prohibitive. Design and layout of publications, which is also reflected in the audiovisual and print production costs budget line, is also very expensive in Angola. Under Outcome 2, the audiovisual costs are \$10,729 over five years, which we would consider to be in a reasonable range given the cost of doing business in Angola.

In consultation with our Country Office, we increased the budget for workshops and meetings as training workshops will be required for technicians on the installation and maintenance of solar home systems and extensive outreach activities will be required to sensitize rural households on the benefits of renewable energy and how to use the household energy technologies. As per the Multi-year Work Plan in Annex A, these

workshops will be held regularly throughout the project duration. At the same time, three technical working groups (TWGs) will be established for each component of the project. Technical working sessions will be organized to provide technical advice and guidance on specific issues around policy derisking, market development and dissemination of results.

As suggested, we have revised the planned start date to 1 October 2020 and revised the planned end date to 31 September 2025. The revised start date will not have any impact on the committed co-financing for the project.

Finally, with regard to the impacts of COVID-19 on the ongoing vertical funds portfolio, we are in regular contact with our counterparts in Angola. Our Country Office colleagues have informed us that many project activities have been put on hold for the time being due to travel restrictions between provinces. It is expected that the pace of delivery will pick up as restrictions on movement are gradually eased. In the meantime, the ongoing GEF-funded sustainable charcoal project (GEF ID 5719) has implemented the following adaptive measures:

- ? The local NGO, ADPP, has incorporated COVID content into its community trainings and outreach, such as handwashing with soap and physical distancing.
- ? Some NGO staff have relocated to the communities so that they are not affected by travel restrictions.

The charcoal project and other GEF-funded initiatives will support the longer-term recovery in the country. Community strengthening and awareness-raising will become even more relevant post-COVID

FK, 20 April 2020: Following consultations with our Country Office and government partners, we have removed the direct project costs in the amount of \$51,000 from the PMC budget and reallocated it for the mid-term review and terminal evaluation. As requested, all references to executing functions or execution support services have been removed from the project documentation. As per GEF policy, the Project Manager's and Admin Assistant's salaries are now covered by the project management cost. In consultation with country partners, the Assistant Project Manager position has been removed from the budget. All changes to the Total Budget and Work Plan are highlighted in green. The subtotal for each component remains the same. All technical comments have now been addressed. We look forward to receiving the CEO endorsement.

FK, 13 August 2019: All of the supplementary annexes have now been posted in the portal. As suggested, we have revised the Rio marker for climate change mitigation to 22. We have also addressed all comments in Boxes 5, 6 and 11. We look forward to receiving the CEO endorsement.

Review Dates

**Secretariat comment at CEO
Endorsement Request**

**Response to
Secretariat
comments**

First Review	7/25/2019
Additional Review (as necessary)	8/27/2019
Additional Review (as necessary)	4/24/2020
Additional Review (as necessary)	9/21/2020
Additional Review (as necessary)	6/15/2021

CEO Recommendation

Brief Reasoning for CEO Recommendations

The project aims to catalyze investments in decentralized renewable energy systems to expand energy access for base-of-the-pyramid consumers and to reduce GHG emissions in Angola. It will mobilize \$21 million of co-financing in total including \$20 million of grant by the government of Angola.

[Background]

In Angola, more than 8 out of 10 households in rural areas live in energy poverty without access to modern energy services. Grid extension will not happen in most areas of South-Eastern Angola for the medium to long-term. An alternative mechanism to provide modern energy access to rural households is needed.

Angola is endowed with substantial renewable energy resource potential with solar energy constituting the largest and most uniformly distributed renewable resource of the country. While renewable energy can play an important role in rural energy access and in providing basic services, there are several barriers, which will be addressed by this project: barriers of entry for private sector participation, inadequate institutional framework for rural energy access, last mile distribution challenge, limited awareness of clean lighting alternatives, and limited human resource capacity in the sector.

[Project interventions]

The project will create conducive conditions for private sector participation and engagement in the small-scale renewables sector by derisking the investment environment. With GEF's investment, the project will support the preparation of

business plans by private companies interested in the commercialization of renewable energy technologies and the provision of technical support for the clean energy supply chain while facilitating technology transfer and dissemination of decentralized renewable energy systems to rural households. Six solar-powered kiosks (jangos) will be established where solar home systems (SHS) and solar lanterns are sold, which will bridge a vital gap in the technology supply chain. The total expected installed capacity of solar system is 0.43MW. Finally, lessons learned and experience from the project interventions support replication and scaling-up of project results.

[Expected achievements]

The project will deliver greenhouse gas (GHG) emission reductions through the deployment of 13,800 units of SHS. Total cumulative emission reductions during project lifetime are estimated at 100,000 tCO₂ eq. Consequential GHG benefits during the 10-year influence period following project implementation will be 2,217,000 tCO₂ eq. The unit abatement cost is estimated at about \$1.53/tCO₂ eq.

[COVID-19 responses]

In Angola, many project activities currently have been put on hold for the time being due to travel restrictions between provinces due to the COVID-19 pandemic. It is expected that the pace of delivery will recover as restrictions on movement are gradually eased. The project start date has been adjusted accordingly. The project will build on lessons learned and activities of another GEF project on COVID-19 responses. The project is in line with green recovery from COVID-19 by building decentralized renewable energy systems in Angola.