

## National child project under the GEF Africa Mini-grids Program Djibouti

**Review CEO Endorsement and Make a recommendation** 

### **Basic project information**

#### **GEF ID**

10471 Countries

#### Djibouti Project Name

National child project under the GEF Africa Mini-grids Program Djibouti Agencies

UNDP Date received by PM

6/19/2021 Review completed by PM

11/3/2021 Program Manager

Satoshi Yoshida Focal Area

Climate Change **Project Type** 

## PIF CEO Endorsement

**Part I ? Project Information** 

Focal area elements

1. Does the project remain aligned with the relevant GEF focal area elements as presented in PIF (as indicated in table A)?

Secretariat Comment at CEO Endorsement Request Yes.

Agency Response Project description summary

2. Is the project structure/design appropriate to achieve the expected outcomes and outputs as in Table B and described in the project document?

Secretariat Comment at CEO Endorsement Request Nov 3, 2021: Comments cleared.

Oct 13, 2021:

1. Thank you for the explanation. As the support to the construction of the ice production facility does not contribute to mitigating GHG emissions, however, please remove the relevant descriptions from the documents. Once the facility is built, GEF investment may support a part of equipment cost of the minigrid-connection, which will reduce the GHG emissions from diesel-based power to the facility. (Co-financing can fund any costs, and the same applies to the below).

2. Thank you for the additional explanation. However, the stand-alone lighting system is not relevant to the project objectives and does not contribute to the GHG emission reduction according to the GHG calculation sheet. Please remove the relevant description from the documents.

3. Comment cleared.

July 2, 2021: The changes on outcomes and outputs and justifications are provided under Part II of the CER document. However, please address the below points.

It is indicated that ?USD 314,000 (25%) for establishing one ice production facility to promote and demonstrate productive use? while details are not clear. Ice production facility is a user of renewable energy, but it does not reduce GHG emissions. The CER document indicates it is under construction and how and why this amount of GEF investment is needed with breakdown is not provided. Please provide detailed explanation and other options for further reviews or remove this investment.
 Similarly, ?USD 125,656 (10%) for purchasing standalone solar street lighting units is not adequately described in terms of its relevance to mini-grids and the overall project objectives as well as contribution to core indicators or remove this investment.
 On PMC provided by co-financing on Table B, the proportionality is not met with GEF?s financing portion on PMC. Please address.

Agency Response ST\_Oct 8th 2021

At CEO ER stage, the project team had an investment budget from the cancelled EE activities to reallocate for other usage (a component on EE was approved for this project at PIF stage). As a result of dialogues with national partners, the two proposals around ice production and street-lighting were identified as opportunities to be further explored in implementation.

#### 1. Ice production facility.

The proposal to use part of the funding for completing the construction and purchasing the equipment for an ice production facility serves three purposes:

- a) It complements the business model proposed for mini-grid development in Djibouti (EPC+ESCO) by integrating a commercial tariff to the ESCO contract, as opposed to full reliance on the social tariff for residential users which is capped by the government at the rate of grid-connected tariffs (very low in Djibouti).
- b) It builds upon the baseline assessment of the site and the consultations with stakeholders, where fishing is one of the main income-generating activities by villagers and the presence of an ice production facility could enhance the value chain and support the elevation of poverty for residents.
- c) The assessment of the mini-grid sector in Djibouti indicates that the introduction of productive use will need time. Hence, the integration of a productive use in the AMP is perceived as a real-time testing of how such model could operate and a door opener for the government to consider productive use as a business model for mini-grid market development on future projects.

During CEO ER development, it was not possible to prepare a detailed procurement plan and cost breakdown for the pilot projects. As a rough estimate, 25% of the GEF INV allocated budget for mini-grid pilots (output 2.1) has been allocated to this productive use application. The crucial step of confirming the inventory for each pilot and the final cost split is included as an activity under Output 2.1, where the project implementation team is required to conduct more comprehensive site assessments and develop a detailed plan for the pilot projects and revisit the assumptions in relation to costs.

The reference to the distribution of investment funds over the mini-grids, ice production facility and solar street lighting has been updated in the CEO ER (Part II, Section 1a-6) to emphasize that the exact pilots and fund split will be validated using the findings of additional assessments during implementation.

2. **Standalone street lighting.** This activity is contextualized around the project?s socioeconomic benefits and general efficiency of the use of donor funding, where it prioritizes context-specific solutions as opposed to a one size fits all approach which could offer direct contribution to core indicators at the expense of making best use of resources to meet the needs of people.

The relevance to mini-grids comes from the need for enhancing public safety in the pilot locations. This will serve the residents and will also enable higher security measures for the mini-grid pilot systems. Given the lack of proper lighting, a sound integration in the project activities could have been to add a budget for increasing the capacity of the mini-grid system and extending cables from the pilot mini-grids to lighting poles. This could be well fitting under the AMP interventions targeting productive use. However, consultations with government parties indicated that this model would be complicated in its design (too much involvement in infrastructure development for a project tackling off-grid electricity development). Its operation will also be challenging given the different authorities in charge of public services. Hence, the more economic and less complicated solution was to separate the mini-grid pilots from the street lighting needs, and instead to have stand-alone solar street lighting (not connected to the minigrids), but to attempt to provide them under the same contract (i.e. the ESCO contract would include O&M service for the mini-grids and the standalone lighting systems), yet purchase them independently. Without the need for distribution lines from the mini-grid to each street lamp pole. Similar to the ice production facility, the budget is only tentative, to be validated at project start.

Overall, once again, it is important to note that both the ice-production facility and street-lighting have been included on an exploratory basis, subject to more detailed studies during implementation, which will be assessed in the project?s Minigrid Pilot Plan (Activities 2.1.1.1 to 2.1.1.4).

At this design stage, if either the ice-production facility, and/or street-lighting is removed from the project design, the corresponding funding can be reallocated to the overall GEF INV budget for mini-grid pilots.

3. **PMC.** The project received co-finance from the UNDP and the WB. The budget table in the CEO ER have been revisited such that the PMC percentage of co-finance is equivalent to the PMC % from GEF funds:

Revised PMC from total co-finance = \$760,000 / \$15,840,000 = 4.8%

Reference:

CEO ER Part II, Section 1a-6

And budget tables

#### ST 2/11/2021

#### Response:

1. and 2. Following GEF Secretariat review and comments, the UNDP discussed with the Government. References to both ice production and street lighting are removed from the project. Instead, the project will focus on mini-grids, with productive use equipments (PUE).

3. If this is a non-grant instrument, has a reflow calendar been presented in Annex D?

Secretariat Comment at CEO Endorsement Request

Agency Response Co-financing

4. Are the confirmed expected amounts, sources and types of co-financing adequately documented, with supporting evidence and a description on how the breakdown of co-financing was identified and meets the definition of investment mobilized, and a description of any major changes from PIF, consistent with the requirements of the Co-Financing Policy and Guidelines?

Secretariat Comment at CEO Endorsement Request Oct 13, 2021: Comment cleared.

July 2, 2021: While the PFD indicated \$40 million co-financing from WB, it is expected that over \$15 million will be provided throughout the project timeframe. Please explain the reason of the decrease and its impact to achieve the project objectives including GHG emission reductions. Also, please clarify if the amount of co-financing is entirely relevant to this project. Please see the comments in the box 5 under Part II.

Agency Response ST\_Oct 7th 2021

Reason for decrease: At PIF stage, \$40 million WB cofinancing was identified. This was in 2019 and indeed the WB is financing the Djibouti Sustainable Electrification Project (SEP) between 2017 to 2023. In 2021, the amount yet to be disbursed is 15.79 million USD in the form of a loan to the Government of Djibouti. Hence, the AMP in Djibouti included only this remaining amount as co-finance.

It is also confirmed that the amount of co-financing is entirely relevant to this project, where the co-finance letter explicitly makes reference to the SEP contribution to increasing access to electricity in Djibouti. Furthermore, the objective indicators for the SEP includes: People provided with access to electricity under the project by household connections (grid or off-grid), People provided with access to electricity through Community electricity connections under the project, and People benefiting from public street lighting under the project. These indicators show the complementarity between the SEP and the AMP in Djibouti and the aspired goal of ensuring that the AMP builds upon existing development as opposed to working in isolation. For more details on the SEP project, please visit the project page on the WB website: https://projects.worldbank.org/en/projects-operations/project-detail/P158505

**GEF Resource Availability** 

5. Is the financing presented in Table D adequate and does the project demonstrate a costeffective approach to meet the project objectives?

Secretariat Comment at CEO Endorsement Request Yes.

Agency Response Project Preparation Grant

6. Is the status and utilization of the PPG reported in Annex C in the document?

Secretariat Comment at CEO Endorsement Request Nov 10, 2021: Comment cleared.

Nov 8, 2021: There is no information about the preparation activities that were covered with the PPG ? please add the requested information.

Agency Response ST NOV 10. 2021

The table in Annex C of the CEO ER is revised to include information abut the preparation activities of the PPG.

**Core indicators** 

## 7. Are there changes/adjustments made in the core indicator targets indicated in Table E? Do they remain realistic?

Secretariat Comment at CEO Endorsement Request Nov 3, 2021: Comment cleared.

Oct 13, 2021: Comments cleared. Please clarify if changing the investment scope (see the box 2 above) will affect the GEBs.

July 2, 2021: The indicator targets are generally increased. However, please address the below points.

 The direct GHG emissions reduction estimation (36717 tCO2eq) on indicator is different from what is described in CER document and Annex 12 (39,717 tCO2eq).
 The indicator 11 has been decreased while the explanation has not been provided.
 Please see comments on GEBs section below and reflect the updated numbers in

3. Please see comments on GEBs section below and reflect the updated numbers in indicators

Agency Response ST\_Oct 7th 2021

1. **Direct GHG emissions.** This figure has been corrected in the GEF Portal. The estimated indirect GHG emissions reductions estimated for Djibouti are 39,717 tCO2eq as described in the CEO Endorsement Request and the UNDP Project Document and its Annex 12.

#### 2. Decrease in Indicator 11.

At the PPG stage, the methodology and technical/financial modeling for calculating GEBs has been significantly improved since the concept stage. This improved PPG-stage methodology has been used across all AMP national child projects. Annex 12 details the methodology, its assumptions and findings for this project.

The reason for the decrease in indicator 11 (number of direct beneficiaries) is that at CEO ER stage, the number of connections per kW of installed Solar PV capacity has been revised downwards. At PIF stage, it was assumed that a 30 kWp Solar PV minigrid could serve 6,000 people (1,200 household connections); that is, an average of 200 people (40 residential connections) per kW of installed Solar PV capacity. At CEO ER stage, a system configuration has been estimated to serve an indicative market that includes residential, social, and commercial/PUE users. Based on the system sizing formulas used, instead of 200 people (40 connections), 23 people (4.6 connections) can be served per kW of installed Solar PV capacity. An explanation of the system sizing formulas used has been added to Annex 13 and the excel spreadsheet with the calculations has been uploaded to the portal.

3. Please see responses to comments below which provide further clarification, as well as the updated Annex 12

Reference:

CEO ER, Part II

ProDoc, Annex 12

#### ST 2/11/2021

#### Response:

No, the project?s current GHGs are calculated based on a budget of \$1,265,312 which the financial model uses to provide 44% capex for a greenfield minigrid pilot. PUE is included to the extent that there are 66 PUE connections included in the pilot. Removal of the ice production and street lighting does not affect the GHG calculations.

#### **Part II ? Project Justification**

**1.** Is there a sufficient elaboration on how the global environmental/adaptation problems, including the root causes and barriers, are going to be addressed?

Secretariat Comment at CEO Endorsement Request Oct 13, 2021: Comment cleared.

July 2, 2021: Please add global environmental problems, including carbon emissions from the energy sector in the country, before describing challenges of mini-grids and how the project addresses such challenges.

#### Agency Response ST\_Oct 7th 2021

#### Section 1a-1 in the CEO ER has been updated to include the following information:

The most recent document available on GHG emissions is the ?3rd National Communication on Climate Change?. For the electricity sector, the report assesses the emissions of three scenarios from 2010 as the base year until 2030. In the first scenario, which is the status quo scenario, the report indicates that by 2030 the electric mix will be made up of thermal turbines, combining the existing HFO and diesel turbines with new capacities of 170 MW Natural Gas / HFO upgraded turbines installed in stages over the next decade. In this scenario, the unmet demand for electricity is estimated at 245 GWh and the combined GHG emissions over the period are estimated at 11,848 Million Mt. Two other scenarios were also developed in the document. A ?transition? scenario in which the mix of electricity production infrastructure incorporates a fraction of renewable capacities and a ?mitigation? scenario in which renewable resources are fully exploited and constitute the only source of electricity supply to meet the country's electricity needs. The ?Mitigation? scenario is drawn up on the basis of the latest electricity sector deployment plan and published by the government in late 2019. The total installed capacity in this scenario exceeds 600 MW with additional capacities coming from tidal energy, biomass, geothermal energy, solar, wind, hydrointerconnection as well as existing thermal power plants. The electricity distributed under the mitigation scenario comes exclusively from renewable resources and it is planned to keep existing thermal power plants as backup power sources to fill the intermittent nature of renewable electricity. The GHG emissions of the ?Mitigation? scenario is estimated at 1,849 Million Mt for the entire reporting period (zero from 2022 to 2030, due to the commissioning of renewable plants that will meet the country's electricity needs). Compared to the baseline scenario in which the trend is business as usual, the mitigation scenario will reduce the country's GHG emissions by 84%.

The mini-grid sector in Djibouti is characterized by a low penetration rate of energy services with coverage of less than 10% of the total rural population that has access to electricity services. Access to energy services covers two types of areas for the country according to the understanding of the government. The ?domestic fuel? sector from the resource (in particular wood, which leads us to fight against wild deforestation) to end use (improvement of the yields of cooking stoves); and electricity access projects, both on-grid and off-grid. The electrification of rural populations by modern energies offers many advantages, in particular an improvement in economic productivity, literacy and a multifaceted contribution to the development of the most disadvantaged sections of rural populations; but also in terms of lives saved thanks to the electrification of dispensaries and health centers (improvement of patient care thanks in particular to the availability of drugs and vaccines in these centers, but also an improvement in the conditions of childbirth and care for mothers). The AMP project contributes to achieve the country's

objectives of producing 100% of its electricity needs with renewable energies and improving the condition of the rural population.

Reference:

CEO ER, Section 1a-1

2. Is there an elaboration on how the baseline scenario or any associated baseline projects were derived?

Secretariat Comment at CEO Endorsement Request Oct 19, 2021: Comment cleared.

July 2, 2021: It is not sufficient. Please include more detailed baseline energy and climate policies, data, and projects including the GEF-6 project in Djibouti and regional projects.

Agency Response ST\_Oct 7th 2021

#### Section 1a-2 in the CEO ER has been updated to include the following information:

In Djibouti, the baseline in the energy sector is that the Government owns and operates all power plants, including the only four solar PV mini-grid systems in the country. Those are:

- CERD 300 kWp solar power plant
- As Eyla 150 kWp solar power plant
- Adaylou 100 kWp solar power plant
- Ali Adde 62 kWp solar power plant (in extension)
- Moumina 1 solar power plant (tender in progress under GEF6 project)

Electricity tariffs in Djibouti range from a social price of US\$0.153/kWh (life-line tariff) to US\$0.426/kWh and are considered to be among the highest in the world. The installation and commissioning of generation plants and mini-grid systems follow an Engineering, Procurement and Construction (EPC) model. In an attempt to delegate the responsibilities of operation to private sector companies, the Government of Djibouti recently published a tender seeking to hire local operators for the Operation and Maintenance (O&M) of existing mini-grids. However, no tenders were received from bidders. The lack of interest is linked to the low capacity of the mini-grid systems, their remote locations, scattered users, and the lack of experience on operating solar mini-grid systems. There were also concerns over the commercial viability since the Government

has been putting effort to maintain universal tariffs for grid-connected and off-grid users.

Key aspects of the mini-grid delivery models are still undefined and assumptions need to be validated. The following table provides a summary of the current status of key aspects of mini grid delivery models in Djibouti:

Aspect Current Status Ownership and Operation The Government of Djibouti presently owns and operates all power plants in Djibouti. They indicated interest in adopting a mini-grid delivery model where they continue to build the system through EPC contracts, then award O&M contracts to private operators under ESCO tenders. An ESCO tender for national companies was published to this effect for an existing minigrid systems, but no proposals were received. Lack of interest was linked to the system?s low capacity, its remote location and scattered users, and the lack of experience on operating solar mini-grid systems among national companies. Tariff mechanisms Tariffs are presently set for mini-grid electricity in a range equivalent to social users of grid electricity. The previous tender for O&M services left the tariff open for competition, i.e. followed a cost of service model. However, additional consultations are required to gain insight on what operators would consider to be a suitable tariff level since there is no records of bids received on baseline tenders. The ongoing GEF6 project for mini-grid development has a component for developing tariff structure for minigrids, i.e. a study to establish a clear price for rural electricity. During PPG development for the AMP, the consultant to conduct this study was yet to be hired. Subsidy mechanisms Per PPG consultations, the Government of Djibouti intends to finance the CAPEX for mini?grid projects and would like to delegate the OPEX to private operators. It was noted that the present model of financing CAPEX and OPEX is not economically feasible for the Government and is the reason behind the desire to tender for the O&M scope. In this context, the Government would be open to subsidizing the tariffs for social end-users. However, there is no clear tariff cap in the regulations, and no reference to such subsidy was included in the previous tender. Based on the budget set for rural electrification, the subsidy level is expected to have a cap of 20% of the tariffs proposed by private operators in their ESCO bids. Nevertheless, the Government noted that they would like to adopt a model that in time reduces the Government spending on mini-grid OPEX, with no plans for delegating the CAPEX component to the private sector in the near future. This can be considered a political decision rather than an economic decision since there is no studies detailing the exact cost of rural electrification. Regulations The Energy Policy, launched in 2015, states that ?rural electrification must rely on the renewable energies available in these localities. In addition, it is necessary to favor the cheapest energy resources in order to ease investment costs of potential projects and consequently the energy bills of the villager consumers.? On tariff collection regulations, the Government noted that one of the models previously used was "Standard Collectivity", where people in the same community all pay a standard cost for electricity services. It worked in some cases but additional assessments are required to validate the model suitability in the proposed pilot locations. The Government expressed interest in considering business models which

combine commercial use of energy with rural electrification as a way to drive down tariffs for social users.

Aspect	Current Status		
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Tariff mechanisms	Tariffs are presently set for mini-grid electricity in a range equivalent to social users of grid electricity. The previous tender for O&M services left the tariff open for competition, i.e. followed a cost of service model. However, additional consultations are required to gain insight on what operators would consider to be a suitable tariff level since there is no records of bids received on baseline tenders. The ongoing GEF6 project for mini-grid development has a component for developing tariff structure for mini-grids, i.e. a study to establish a clear price for rural electricity. During PPG development for the AMP, the consultant to conduct this study was yet to be hired.		
Subsidy mechanisms	Per PPG consultations, the Government of Djibouti intends to finance the CAPEX for mini?grid projects and would like to delegate the OPEX to private operators. It was noted that the present model of financing CAPEX and OPEX is not economically feasible for the Government and is the reason behind the desire to tender for the O&M scope. In this context, the Government would be open to subsidizing the tariffs for social end-users. However, there is no clear tariff cap in the regulations, and no reference to such subsidy was included in the previous tender. Based on the budget set for rural electrification, the subsidy level is expected to have a cap of 20% of the tariffs proposed by private operators in their ESCO bids. Nevertheless, the Government noted that they would like to adopt a model that in time reduces the Government spending on mini-grid OPEX, with no plans for delegating the CAPEX component to the private sector in the near future. This can be considered a political decision rather than an economic decision since there is no studies detailing the exact cost of rural electrification.		

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	On tariff collection regulations, the Government noted that one of the models previously used was "Standard Collectivity", where people in the same community all pay a standard cost for electricity services. It worked in some cases but additional assessments are required to validate the model suitability in the proposed pilot locations. The Government expressed interest in considering business models which combine commercial use of energy with rural electrification as a way to drive down tariffs for social users.

3. Is the proposed alternative scenario as described in PIF/PFD sound and adequate? Is there sufficient clarity on the expected outcomes and components of the project and a description on the project is aiming to achieve them?

## Secretariat Comment at PIF/Work Program Inclusion Oct 19, 2021: Comments cleared.

#### July 2, 2021:

1. Component 1: It does not seem to address policy and regulatory changes adequately that promote deployment of mini-grids. Please provide detailed plans on these elements to ensure scaling-up and sustainability of the mini-grids.

2. Component 2: Please provide a mechanism to ensure the deployed mini-grids will be used for lifetime (20 years) including governance structure as well as a table that explains ownership and operation of the mini-grids. Please elaborate how the project will ensure replacing batteries and converters as well as O&M of the whole system during the lifetime. Please also provide detailed plan to ensure environmentally sound management of such equipment after their usage.

3. Component 3: Please describe how the project will ensure these studies incorporated in actual policy or financial mechanisms. Please also include detailed plan to mobilize the public and private financial institutions.

Agency Response ST\_Oct 7th 2021

# Additional text and text-boxes have been added to the description of components in the CEO ER (Part II, Section 1a-3) to emphasize the design considerations below and what each component aims to achieve:

1. **Component 1.** The electricity sector in Djibouti is fully owned and operated by the government. The development on IPP laws and decrees has not yet materialized into private developers owning and operating their projects. In addition, on the scale on mini-grids, there are no laws to support Build-Own-Operate or similar mini-grid

delivery models. The authorities have been trying to encourage private sector participation in mini-grid development, and ongoing projects, such as the GEF6 minigrid development project, are tackling several aspects of policy development and tariff structure for off-grid energy development. Taking into consideration the obstacles these projects are facing, the AMP engages with the existing state-led mini-grid delivery model, presenting digital transformation as a non-disruptive intervention that brings together public and private actors and enable their collaboration through project-specific tenders and contracts. In parallel, it promotes the facilitation of a national dialogue on mini-grid delivery models and off-grid electrification to bring the parties to a common discussion and combine the efforts by different parties on the institutional and system levels. Once the mini-grid delivery model becomes familiar and the pilots showcase successful partnerships, the project will support suitable policies and regulations to scale investment around these delivery models.

2. **Component 2.** The baseline in Djibouti is government ownership, with an EPC delivery model for mini-grid development, where the Ministry of Energy and Natural Resources (MERN) hires an EPC company to design, supply and install mini-grids, then takes over the O&M and becomes responsible for distribution and tariff collection. However, the cost of financing, building and operating grid connected and off-grid systems is becoming too high to sustain and is limiting the Government?s ability to expand the investment in new power generation plants and infrastructure projects. This leads to the Government?s desire to create a delivery model that encourages private sector participation in the mini-grid sector.

The implementation of the AMP pilot projects using the proposed model includes tendering procedure to ensure the technical and financial capacity of the contracted ESCO, having contractual obligations with financial penalties for poor performance, complemented by the digital systems to support government oversight and monitoring. These measures will include maintenance schedules involving the liability on equipment replacement for the full lifetime of the pilot systems. The contract may also include provisions for environmentally sound waste management, as will be advised in the project's SESP and ESMF. A table has been added to the description of this Component in the CEO ER showing the role of each party in relation to the pilot systems.

**Component 3.** The sustainability of the proposed delivery model depends on its commercial viability, but also on the funding opportunities available to the private sector players wishing to engage in the mini-grid sector in Djibouti. The AMP?s strategy towards the mobilization of public and private financial institutions sits on the assumption that building an enabling environment for mini-grid development with higher incentives and reduced risks on ESCOs and financiers. The plan for mobilizing resources from public and private financial institutions that the in presence of an institutional setup that is easy to understand, a well-defined focal point on the government side, a recognized body to represent the interests of private parties, and clear operational guidance for financiers and investors, will enable the coordination on mini-grid projects and facilitate sectoral development towards more adaptive decisions

to the views of different parties. Furthermore, the digital transformation will also facilitate the engagement of communities and end-users and provide them with proper tools for knowledge sharing to be able to drive demand and hold ESCOs accountable. This will lead to more transparency for domestic financial institutions and small investors, leading to higher potential for their engagement in financing mini-grid projects.

Reference:

CEO ER, Part II, Section 1a-3

4. Is there further elaboration on how the project is aligned with focal area/impact program strategies?

Secretariat Comment at CEO Endorsement Request Yes.

Agency Response 5. Is the incremental reasoning, contribution from the baseline, and co-financing clearly elaborated?

Secretariat Comment at CEO Endorsement Request Nov 3, 2021: Comment cleared.

Oct 19, 2021: We note the contribution from co-financing. Please provide brief incremental cost reasoning in this section.

July 2, 2021: Contributions from co-financing to achieve the project objectives including the GEBs are not clear. Please provide the details of the co-financing of the WB loan for each component and clarify how it contributes to project?s GEBs include indirect emissions reduction, in particular on component 2 with more than \$11 million.

Agency Response ST \_ Oct 7th 2021

The GHG emissions reductions estimates are based on the total renewable power generation of the minigrid pilots receiving project support. Project funding (GEF INV) will be used to provide a CAPEX subsidy to cover part (not all) of the capital

expenditures required to deploy the minigrid investments. That means that the pilot will require additional contributions to cover the remaining portion of CAPEX costs not covered by project funds, reach financial close and deliver the intended results in terms of GHG emission reductions.

GEF INV budget allocated to the Djibouti minigrid pilot (USD 1,265,312) will be used to provide a portion of the pilot?s CAPEX needs. The actual level of CAPEX subsidy will be defined during project implementation by the respective Executing Agency, and as part of competitive selection processes with minigrid developers. Nevertheless, and for the purpose of calculating GHG emission reductions from the pilot, a CAPEX subsidy contribution of 44% has been estimated for Djibouti to allow the Solar PV minigrid to reach LCOE parity with a diesel-only baseline minigrid.

Pilots receiving GEF INV must comply with the Program?s Environmental Safeguards Management Framework (ESMF)for the responsible handling of waste with recycling of batteries and other recyclable equipment ? including via clear documentation, budgeting and monitoring in compliance with national and UNDP safeguards requirements.

#### Reference:

Prodoc, Section IV (Results and Partnerships)

#### ST 2/11/2021

#### Response:

OK, the below text has been added has been added to the section.

The main objective of the AMP in Djibouti is to ?support access to clean energy by increasing the financial viability, and promoting scaled-up commercial investment, in low-carbon mini-grids in Djibouti, with a focus on cost reduction levers and innovative business models?. The development challenge which the project aims to address is the need to increase the profitability of the solar based mini-grid systems to encourage private sector engagement, while maintaining the end-user tariff in a range that is presently paid by communities residing in social housing complexes and peri-urban areas for grid-connected electricity. The business-as-usual scenario is the continuity of the utility?s monopoly of the off-grid energy market, slowing down the Government?s ability to achieve its renewable energy development and energy access goals and maintaining high levels of GHG emissions due to continuing use of diesel generators by off-grid users.

The project follows the theory of change developed in the AMP PFD. More specifically for Djibouti, the project aims to support the Government to create an enabling environment for innovative business models centered on cost reduction and demand simulation. The **incremental reasoning underlying** the project is that the implementation of de risking (policy and financial) instruments will reduce, eliminate or transfer the risks faced by private investors in mini-grids in Djibouti, hence, reduce the costs of capital. This will reduce overall project costs and allow for profitable operation at a reduced tariff. In parallel, the project will also use levers to support the private sector to self-organize and become an active partner in the development of the mini-grid sector in the coming years, and promote regional collaboration through continuous interaction with the AMP Regional Project.

## 6. Is there further and better elaboration on the project?s expected contribution to global environmental benefits or adaptation benefits?

Secretariat Comment at CEO Endorsement Request Oct 19, 2021: Comments cleared.

July 2, 2021: Please address the below points.

1. Direct emissions reduction in Annex 12:

Please provide detailed explanation on how power generation per year per unit (368.2 MWh) is derived with the exact formula. Also, please include the loss of electricity due to the use of battery, considering factors of a similar battery with expected load/frequency in lifetime of the battery, in such calculation. Please clarify how co-financing is relevant to this indicator.

2. Indirect emissions reduction in Annex 12:

It is not clear how the number is calculated. Please provide the exact formula. Please also clarify how co-financing is relevant to indirect emissions reduction.

#### Agency Response

ST Oct 7th 2021

1.- Direct emissions reduction. Further details on GHG emissions reductions have been added to Annex 12 in the Project Document. Annex 12 has been updated to provide detailed explanation on how power generation per year is derived with the exact formula, and on how the loss of electricity due to the use of battery is considered in the estimations. Also, an excel spreadsheet with the summary of GHG emission reduction calculations is provided along with the resubmission package.

GHG estimates and co-financing. The GHG emissions reductions estimates are based on the total renewable power generation of the minigrid pilots receiving project support. Project funding (GEF INV) will be used to provide a CAPEX subsidy to cover part (not all) of the capital expenditures required to deploy the minigrid investments. That means that the pilot will require additional contributions to cover the remaining portion of CAPEX costs not covered by project funds, reach financial close and deliver the intended results in terms of GHG emission reductions.

2. Indirect emissions reduction. An excel spreadsheet with the summary of GHG emission reductions calculations is provided along with the resubmission package. This includes both direct and indirect emissions reductions, as well as other CORE indicators. Indirect emissions reductions are expected due to investments in minigrids which will be deployed during the 10-year influence period following project completion. No assumptions or considerations regarding co-financing have been made in relation to indirect emissions reductions arising from post-project investments. The excel spreadsheet shows for each country, the CAPEX investments expected but no direct link is made to project co-financing sources.

ProDoc, Annex 12

7. Is there further and better elaboration to show that the project is innovative and sustainable including the potential for scaling up?

Secretariat Comment at CEO Endorsement Request Oct 19, 2021: Comments cleared.

July 2, 2021:

1. Innovativeness: Please provide technological innovation if any in addition to business model innovativeness.

2. Sustainability: Please provide how the project ensure O&M during the lifetime of the infrastructure, including how to manage replacing a battery, converters and other equipment. Please also clarify how the government or other entities monitor the minigrids for the lifetime.

3. Scaling-up: Please elaborate how the project will achieve indirect emissions reduction target.

Agency Response ST\_Oct 7th 2021

#### Section 1a-7 of the CEO ER has been updated to include the following information:

1. **Innovativeness.** In terms of technological innovation, and in addition to the digital transformation described above, the AMP pilot systems will promote hybridization technologies following best practice specifications for

hardware/software and data sharing. Indicative specifications, to be further developed during implementation, may include inverter monitoring, distribution monitoring and smart meters.

2. **Sustainability.** On the piloting scale, sustainability is more about ensuring steady operation of the system for the full duration of its lifetime, including sound operation and maintenance of system component. This is guarded through three aspects of pilots' development: (1) the proposed model, where the operator will enter into an ESCO contract with the government and will be legally bond to conform with the O&M procedure required for best performance, (2) enhancing the institutional capacity of government staff to be able to monitor the performance of the pilot systems, and (3) empowering communities to oversee the operation of the mini-grid systems in their villages and report on any misconduct by the ESCOs. These aspects will be complemented by government oversight on system operation and performance through the digital transformation activities under Component 1 of the AMP in Djibouti.

Scaling-up. Enhancing the potential for scaling up is the primary goal of Component 3, under which the project works with domestic financial institutions and small investors, paving the way for mobilizing additional financial resources to replications of the AMP pilot(s) beyond the project lifetime. These activities aim to ensure that the development path for the mini-grid sector in Djibouti does not stop at donor funded projects. At project end, the business model will be in the hands of the Government of Djibouti, managed by a national focal point in the energy sector that can work on resource mobilization strategies with the domestic financial sector to attract national and international private sector EPCs and ESCOs. In addition, the project design aims to ensure that the proposed model can be replicated and that the parties are able to undertake similar activities when developing future projects. This is achieved by conducting detailed studies, analyses and assessments that aims to propose tailored practices and develop fit-for-purpose regulatory, organizational, and operational solutions, including the DREI techno-economic analyses. The adoption of a business model suitable for replication is key to achieving the indirect emissions reduction targets of the AMP in Djibouti, especially since the government has tried tendering one of the existing mini-grid systems for private O&M services but the was no interest in the market due to the system's small size and remote location. Recognizing that the AMP's ability to create a positive showcasing of a pilot project and an enabling environment for private sector participation are key to scaling up impacts and achieve higher indirect GHG reductions, the outputs and activities have been revisited to ensure their contextualization and complementarity, while the pilot project design was modified to cover a broader range of services to community members and enable ESCO to charge tariffs higher than the social tariff for low tier residential users.

Reference: CEO ER, Section 1a-7

**Project Map and Coordinates** 

Is there an accurate and confirmed geo-referenced information where the project intervention will take place?

Secretariat Comment at CEO Endorsement Request Yes.

Agency Response Child Project

If this is a child project, is there an adequate reflection of how it contributes to the overall program impact?

Secretariat Comment at CEO Endorsement Request Yes.

Agency Response Stakeholders

Does the project include detailed report on stakeholders engaged during the design phase? Is there an adequate stakeholder engagement plan or equivalent documentation for the implementation phase, with information on Stakeholders who will be engaged, the means of engagement, and dissemination of information?

Secretariat Comment at CEO Endorsement Request Oct 19, 2021: Comment cleared.

July 2, 2021: Stakeholder engagement plan seems lacking the exact role of each stakeholder. Please address and provide in a table format in the portal as well.

Agency Response ST\_Oct 7th 2021

Section 2 of the CEO ER has been updated to include a table showing the role and means of engagement for the different groups of stakeholders. The table is also shown in Annex 9 of the Project Document.

Reference: CEO ER, Section 2

**Gender Equality and Women?s Empowerment** 

Has the gender analysis been completed? Did the gender analysis identify any gender differences, gaps or opportunities linked to project/program objectives and activities? If so, does the project/program include gender-responsive activities, gender-sensitive indicators and expected results?

Secretariat Comment at CEO Endorsement Request Yes.

Agency Response Private Sector Engagement

If there is a private sector engagement, is there an elaboration of its role as a financier and/or as a stakeholder?

Secretariat Comment at CEO Endorsement Request Yes.

Agency Response Risks to Achieving Project Objectives

Has the project elaborated on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved? Were there proposed measures that address these risks at the time of project implementation?

Secretariat Comment at CEO Endorsement Request Oct 19, 2021: Comments cleared.

July 2, 2021:

1. Please provide more detailed risks and opportunities of the impacts of the COVID-19 pandemic.

2. Please elaborate risks that the deployed mini-grids will be discontinued before its lifetime (20 years) as well as that the batteries and other equipment will not be properly replaced during the lifetime.

3. Please elaborate environmental risks of disposal of used batteries, solar panels, power converters, and other grid equipment.

Agency Response ST\_Oct 7th 2021

## The risks table in Section 5 of the CEO ER and Annex 7 of the ProDoc has been updated to include the following information:

1. **Risk 4 ? COVID-19.** As in other countries, the Covid-19 pandemic has placed the key and fragile sectors of the Djiboutian economy under severe stress conditions over the past year. Key sectors such as the productive industry, the service industry, transport (ports and free zones), etc., experienced a total or partial shutdown amid restrictions imposed by the government to limit the spread of the pandemic across the country. Hospitals, health centers and dispensaries have been inundated.

The COVID-19 pandemic has also severely influenced local SMEs. The socioeconomic impacts assessments and preliminary analyses show that 80% of formal businesses were negatively affected by the pandemic, 39% of businesses saw a decrease of 75% in their turnover between March and July 2020 vis-?-vis the same period last year, and 50% of business owners laid off 75% of their employees. This reality implies that the large enterprises lost their skilled and productive employees, which will result in a prolonged economic downfall for themselves and Djibouti at large. The severe economic impact trickles down from the major enterprises to local MSMEs, and most unregistered informal businesses who are more susceptive to this socioeconomic crisis. These MSMEs and informal businesses are the entities that will be targeted under this activity.

Furthermore, the pandemic, and the consecutive lockdown, abruptly deprived public income and increased public expenses to provide care to the population. It is estimated that more than 10,000 jobs have been lost: including both in the formal and informal sectors, thus impacting at least 170 thousand members of household are affected. As long as it continues, COVID-19 will be posing a challenge on communication and service delivery due to restrictions on in-country gatherings and international travel.

With mitigation measures in place, the project will be able to operate and deliver on schedule. Moreover, by increasing the commercial viability of low carbon minigrids and thus encouraging access to long term, affordable and clean energy, AMP projects are well aligned with government efforts to respond to the pandemic and national priorities for long-term green and equitable recovery.

2. **Risk 6 ? Lack of private sector cooperation.** In the baseline, private sector is not a key player in the delivery of energy services to end-users. However, the need for mini-grid systems for off-grid locations in Djibouti presents an opportunity for private developers, if the engagement is introduced using a commercially viable model, with elements of technical and financial support. Lack of cooperation could potentially be manifested in the form of refusal to participate in EPC or

ESCO tenders. It may also come out in the form of a one-sided decision to discontinue the pilot systems before their lifetime (20 years) or intentional negligence in following the recommended O&M procedure, e.g. system cleaning, replacing equipment, etc.

To mitigate this risk, several outputs were dedicated to working with private actors. In addition, part of the GEF funds is allocated to the development of a pilot project to showcase the proposed model and encourage other developers to replicate the model on future projects.

3. **Risk 9 ? Project environmental impacts.** The During Project preparation similar Project activities have been visited and/or consulted by the team of experts to evaluate the risks.

Principal environmental risks have been framed at this stage (Project Preparation Grant, PPG) and they will continue to be assessed along the entire project cycle for each chosen site. Based on that, a pertinent due diligence project development process, monitoring of operations, and active intervention are foreseen according to such environmental safeguards established in this project through the ESMF to ensure operation within the established parameters and in compliance with the applicable regulations. This includes the environmental risks associated with the disposal of used batteries, solar panels, power converters, and other grid equipment during maintenance rounds and at the end of the project?s lifetime.

Therefore, this risk is assumed to the LOW under the assurance that this project will prepare the pertinent environmental studies as required in the ESMF.

Reference:

CEO ER, Section 5

ProDoc, Annex 7

#### Coordination

Is the institutional arrangement for project implementation fully described? Is there an elaboration on possible coordination with relevant GEF-financed projects and other bilateral/multilateral initiatives in the project area?

Secretariat Comment at CEO Endorsement Request Nov 10, 2021: Support letter signed by OFP submitted. Comment cleared. Nov 8, 2021: Previous comments cleared. In terms of the support letter from the OFP, please use the template (https://www.thegef.org/documents/templates) and submit accordingly.

Oct 19, 2021: We note the updates as well as clarification. However, why each support is needed given the capacity of the county is still unclear. The executing support is subject to further review (please address other comments in this review sheet in the meantime).

July 2, 2021:

As for UNDP?s role on executing support, please address the below.

1. The budget table in ProDoc indicates all components are handled by UNDP instead of IP. Please address.

2. On UNDP?s support service, as there was not an upstream consultation, it is not clear why each support service was selected given the recommendations including procurement under the checklist. Please provide detailed and precise justifications for each service or remove such services from the list of support provision under PMC. Please also explain if the similar risk categorized (moderate) countries also asked UNDP service support.

3. Please provide explanation on government agencies or third parties which UNDP explored to identify an executing entity during the PPG phase.

4. Please clarify the nature of the audit cost of UNDP under PMC (\$20,000) and its relationship with the support service or the Agency fees if any.

Please add elaboration on coordination with other GEF-funded projects and other initiatives.

Agency Response ST\_Oct 7th 2021

1. **Budget Table.** The column for Atlas Implementing Agent in the budget table (in Excel and in Section IX of the ProDoc) has been updated to list MUET instead of UNDP.

#### 2. UNDP Support Services

There has been some initial upstream consultation with GEFSec on UNDP support services, although this was at the AMP program level, not specific to any Child project.

For Djibouti, project modality is support to National Implementation (NIM). The responsibility for implementation of the project activities remains with the Ministry of Environment (IP). The Government is aware of its limited capacity in term of project implementation (also highlighted by HACT micro assessment), therefore the

government (through GEF OFP) has requested UNDP support for project implementation by signing a Letter of Agreement (LoA). The LoA particularly highlights: that:

- At the request of the IP, UNDP CO will provide execution support for high value procurement (above USD 30,000). The IP will continue to process low value procurements.

- No cash advance policy: The IP will send payment request by using FACE form, requesting UNDP to make payment directly to the vendor on their behalf.3. **Identifying the Executing Entity** 

UNDP explored 2 options for a third party and discussed them with the Government.

#### 1. Contracting a UN agency:

Djibouti is a small country and does not have enough UN agencies present on the ground. Most of the agencies rely on UNDP country office. In addition, it turned out that if this option is possible, the UN agency will charge an additional 8% GMS, which will severally impact the overall project budget.

#### 2. Contracting a private implementation agent:

Similar to UN agencies, it is also very difficult to find up to the level private agencies or international NGOs in Djibouti. In theory, a private agency might charge a minimum of 5% for its service.

Anyway, the PPG phase was the occasion to review the potential 3rd parties as they were consulted and actively engaged in the consultation processes. After a thorough analysis of the situation during the PPG phase, there is no identified 3rd party that could provide execution support to the Ministry of Environment and Sustainable Development in implementation of full-size GEF financed projects.

- A full Note, justifying the need for execution support, is provided as an Annex to this review sheet. Please refer to this Annex for more details.

4. Audit cost by UNDP under PMC. Per the guidance in the GEF template for fullsized projects and the UNDP Project Document, projects should allocate between 5,000 to 10,000 Us dollars a year as estimated audit costs. For this project, the UNDP CO in Djibouti offered to provide USD 50,000 in co-finance, including USD 20,000 to comply with this recommendation.

#### 5. Section 6 of the CEO ER has been updated to include the following information:

The PMU will also be responsible for staying up to date with progress on ongoing project that are related to the mini-grid market development in Djibouti and liaising with focal points to ensure proper collaboration and complementarity. This includes close follow up of the progress on the GEF6 project and other GEF-funded projects in Djibouti. The PMU will also strive to make information on their progress available for others to build upon when embarking on the design of new projects.

Reference:

ProDoc, Section IX and budget table in Excel

CEO ER, Section 6

#### ST 2/11/2021

#### Response:

Following the discussions with GEF Secretariat, the below justifications are provided.

Executing arrangements for other GEF projects in Djibouti	Although the majority of the projects under implementation in Djibouti are implemented by UNDP, there are a few enabling activities (EA) projects implemented by UNEP. UNEP uses full NIM modality because it is a non-resident agency (e.g, no office in the country), and its projects have very small budgets. EAs typically have very small budgets (around or less than \$500,000).	
How UNDP sought a third party for execution and who were identified (or no institution was identified) and why UNDP takes the roles rather than those institutions	To date, after a thorough review of the situation in the country and considering the challenging development context, there is no identified 3rd party that could provide execution support. The engagement of other UN entities has been challenging, even during the PPG phase consultations. Beside MDBs (African Development Bank and World Bank,) none of UN entities is engaged with the Government on such renewable energy projects. Furthermore, none of them have the local presence, the thematic focus and the execution support capacity as compared to UNDP country office.	
	The PPG phase was the occasion to review potential 3rd parties, as they were consulted and actively engaged in the consultation processes. Ongoing and past GEF and UNDP projects? institutional arrangements were reviewed as well. No 3rd party candidate emerged as a potential entity to provide the limited execution support proposed for this project (described below).	

Detailed scope for UNDP support	The project is proposing the following arrangements:			
services	<ul> <li>A direct payment modality for all projects expenses with no cash advance for the Government (Make direct payments to vendors, Establish checks, Create vendor profiles, Expenditure verification, Preparation of budget revisions)</li> <li>Limited and targeted UNDP execution support for procurement services for items above \$30,000 (high-value procurement).</li> </ul>			
Rationale/justification	The Direction of Environment and Sustainable Development (Ministry			
for UNDP support	of Environment and Sustainable Development), which is the			
services	government body that will be executing this project as Executing Agency, was subject of a HACT micro-assessment in February 2021, which has identified several weaknesses related to procurement and financial management. In addition, the 2020 audit of the expenses of a closed GEF project (GEF project ID 5332) resulted in a ?reserve? conclusion. Therefore, it was agreed with the Government to opt for the direct payment modality. In addition, this project is expected to procure two solar mini-grids. In 2020, the Government faced significant challenges in selecting an international company to set up a solar mini-grid for a GEF-6 project (GEF project ID 10051). The Government followed its own			
	procedures and the tender process was managed by the National Procurement Commission. However, it resulted in significant delays, re-advertisements and a lack of international visibility. Based on this experience, the Government wishes to benefit from UNDP?s capacity and the Long-Term Agreements (LTA) for specialized companies for the tendering of the two pilot mini grids. Therefore, the Government would like UNDP to manage high-value procurement (mainly for the construction of the mini-grids).			
Cost of UNDP support services and % covered by GEF funding	The estimated DPC cost for the services is \$90,631. Taking into account the GEF budget of \$3,071,347, it equals a ratio of <b>2.95%</b> .			

**Consistency with National Priorities** 

Has the project described the alignment of the project with identified national strategies and plans or reports and assessments under the relevant conventions?

Secretariat Comment at CEO Endorsement Request Oct 13, 2021: Comment cleared.

July 2, 2021: Please fill out this section including the contribution to the country?s NDC.

Agency Response

ST Oct 7th 2021 Section 7 of the CEO ER has been updated to include the following information: The following present a list of policy instruments and national plans that are relevant to the mini-grid sector: - Vision 2035 (launched in 2014): Requires a transition to 100% renewable energy within a decade. The 2020 target has not been met. Several development banks offered willingness to support solar and wind projects, but private investors are not yet to come forward. - Electricity production strategy: Existing document elaborated in 2016, never validated as government's strategy. - Energy Policy (launched in 2015): States that ?rural electrification must rely on the renewable energies available in these localities. In addition, it is necessary to favor the cheapest energy resources in order to ease investment costs of potential projects and consequently the energy bills of the villager consumers.? - Electricity transmission master plan by 2033: Focusing on utility scale. - Independent Power Producers (IPP) law (loi n?88/AN/15/7?me L) (launched 2015), and Complementary Decree to IPP law (issued in 2018): o In March 2015, the Government passed the IPP law (loi n?88/AN/15/7?me L) enabling private sector to enter the market of electricity production in Djibouti. The transmission and distribution of electricity remains under the monopoly of the EdD (EdD is the power utility, responsible for generation, transmission, and distribution, but it operates only in urban cities). o In Nov 2018, a new decree for IPPs in rural areas was adopted, allowing private operators to build, run and sell its electricity at the village level. However, the electricity tariffs are unilaterally fixed by the Ministry of Energy which gives the license. o Since the notion of IPP participation under a PPA with EdD was introduced, no direct investment has been recorded because the price offered by EdD, aligned to the 0,07\$ of the Ethiopian hydroelectricity grid, is far too low to justify the risks. Laws encouraging development of renewable energy sector are disseminated in several laws, In the IPP law (88) for example, the monopoly of the national utility is broken and even large self producer are authorized (where in the past only the utility were allowed to produce, transport, distribute and commercialize the electricity) as well as small to domestic self-production which are all encouraged. The impact of the global health tragedy expressed the weakness of the electricity sector which depends on imports of petroleum products and electricity to meet the country's electricity needs. Officially, the national power generation based on thermal power generation covers around 40% of the country's demand and the remaining 60% is imported from Ethiopia. It is predicted that more than 500 MW of new electrical capacity will be needed to meet growing demand over the next decade. Over the past decade, the Djiboutian government has developed various documentations (laws, decrees, strategies and roadmaps) as well as the organization of think tanks and numerous workshops on the best way to meet the challenges of electricity infrastructure in drawing on private sector funds. One of the valuable results expressed in the country's vision is the country's goal of obtaining 100% of its electricity needs from renewable sources by 2030. In rural areas, multidimensional poverty strongly handicaps the anchoring of populations in the national economy. The development of rural electrification aims to provide Djibouti with modern, affordable and sustainable energy services in the optics of SCAPE and Vision 2035 likely to bring the rural economy to acceptable levels of development and eradicate or alleviate the effects of the persistent poverty of rural populations. It should also stimulate the creation of decent jobs, participate in gender emancipation and help curb the rural exodus. The rural electrification strategy resulting from the government's collaboration with the EU through the AMCC (Global action against climate change) program, is fully inspired and formulated from the two concepts listed above, based on the liberalization of the electricity sector and the ambition to harness electricity needs from renewable sources. During the Covid-19 restrictions, the effectiveness of these two actions was confirmed by the high resilience of power plants based on renewable energies installed in rural areas which demonstrated the exceptional quality and service reliability of hybrid power plants (solar PV + battery + generator) as in As-Eyla. Other power plants in villages that use diesel generators for power generation were experiencing sporadic quality service due to the disruption of the diesel fuel supply chain to these villages, resulting in a severe shortage of electricity supply. Finally, the project is also in line with the Nationally Determined Contribution (2015) and Second National communications (2013) to UNFCCC. Both aims for sustainable and low carbon emission development, especially through the deployment of Solar PV equipments.

ST\_Oct 7th 2021

#### Section 7 of the CEO ER has been updated to include the following information:

The following present a list of policy instruments and national plans that are relevant to the mini-grid sector:

- Vision 2035 (launched in 2014): Requires a transition to 100% renewable energy within a decade. The 2020 target has not been met. Several development banks offered willingness to support solar and wind projects, but private investors are not yet to come forward.

- Electricity production strategy: Existing document elaborated in 2016, never validated as government's strategy.

- Energy Policy (launched in 2015): States that ?rural electrification must rely on the renewable energies available in these localities. In addition, it is necessary to favor the cheapest energy resources in order to ease investment costs of potential projects and consequently the energy bills of the villager consumers.?

- Electricity transmission master plan by 2033: Focusing on utility scale.

- Independent Power Producers (IPP) law (loi n?88/AN/15/7?me L) (launched 2015), and Complementary Decree to IPP law (issued in 2018):

o In March 2015, the Government passed the IPP law (loi n?88/AN/15/7?me L) enabling private sector to enter the market of electricity production in Djibouti. The transmission and distribution of electricity remains under the monopoly of the EdD (EdD is the power utility, responsible for generation, transmission, and distribution, but it operates only in urban cities).

o In Nov 2018, a new decree for IPPs in rural areas was adopted, allowing private operators to build, run and sell its electricity at the village level. However, the electricity tariffs are unilaterally fixed by the Ministry of Energy which gives the license.

o Since the notion of IPP participation under a PPA with EdD was introduced, no direct investment has been recorded because the price offered by EdD, aligned to the 0,07\$ of the Ethiopian hydroelectricity grid, is far too low to justify the risks.

Laws encouraging development of renewable energy sector are disseminated in several laws, In the IPP law (88) for example, the monopoly of the national utility is broken and even large self producer are authorized (where in the past only the utility were allowed to produce, transport, distribute and commercialize the electricity) as well as small to domestic self-production which are all encouraged.

The impact of the global health tragedy expressed the weakness of the electricity sector which depends on imports of petroleum products and electricity to meet the country's electricity needs. Officially, the national power generation based on thermal power generation covers around 40% of the country's demand and the remaining 60% is imported from Ethiopia. It is predicted that more than 500 MW of new electrical capacity will be needed to meet growing demand over the next decade. Over the past decade, the Djiboutian government has developed various documentations (laws,

decrees, strategies and roadmaps) as well as the organization of think tanks and numerous workshops on the best way to meet the challenges of electricity infrastructure in drawing on private sector funds. One of the valuable results expressed in the country's vision is the country's goal of obtaining 100% of its electricity needs from renewable sources by 2030.

In rural areas, multidimensional poverty strongly handicaps the anchoring of populations in the national economy. The development of rural electrification aims to provide Djibouti with modern, affordable and sustainable energy services in the optics of SCAPE and Vision 2035 likely to bring the rural economy to acceptable levels of development and eradicate or alleviate the effects of the persistent poverty of rural populations. It should also stimulate the creation of decent jobs, participate in gender emancipation and help curb the rural exodus. The rural electrification strategy resulting from the government's collaboration with the EU through the AMCC (Global action against climate change) program, is fully inspired and formulated from the two concepts listed above, based on the liberalization of the electricity sector and the ambition to harness electricity needs from renewable sources. During the Covid-19 restrictions, the effectiveness of these two actions was confirmed by the high resilience of power plants based on renewable energies installed in rural areas which demonstrated the exceptional quality and service reliability of hybrid power plants (solar PV + battery + generator) as in As-Eyla. Other power plants in villages that use diesel generators for power generation were experiencing sporadic quality service due to the disruption of the diesel fuel supply chain to these villages, resulting in a severe shortage of electricity supply.

Finally, the project is also in line with the Nationally Determined Contribution (2015) and Second National communications (2013) to UNFCCC. Both aims for sustainable and low carbon emission development, especially through the deployment of Solar PV equipments.

#### **Knowledge Management**

### Is the proposed ?Knowledge Management Approach? for the project adequately elaborated with a timeline and a set of deliverables?

Secretariat Comment at CEO Endorsement Request

Oct 19, 2021: Comments cleared.

July 2, 2021: Please describe how the project will learn from national and regional projects including the GEF-6 project on mini-grid as well as AMP?s coordination. Please also clarify knowledge products and budget.

Agency Response ST\_Oct 7th 2021

#### Section 8 of the CEO ER has been updated to include the following information:

As such, part of the linkage of the AMP in Djibouti to the AMP Regional Project will fall under the implementation of activities under Component 4. Notwithstanding, the project will receive support and guidance from, as well as participate in activities led by the AMP Regional Project in the following key areas of interface between the AMP regional project and the AMP national projects:

- ? Digital.
- a. Knowledge building/sharing. The regional project will build and share knowledge with the project on the potential for use of digital tools and solutions, including leveraging minigrid projects? data to improve the commercial viability of renewable energy minigrids.
- b. Data aggregation platform. The AMP Regional Project will make a data management platform available to aggregate data from all national project pilots based on a common M&E framework to track Results Framework indicators as well as program objectives, SDG impacts and GHG emission reductions for all child projects.
- ? Knowledge Management.
  - a. Information sharing. The AMP regional project will support and facilitate knowledge management and information sharing between the regional child project and national child projects, among national child projects, and between the program and the larger minigrid community.
  - b. Insight Briefs. National projects will gather data and audio-visual content (video footage, photos, etc.) highlighting national project activities which will be the subject of an ?insight brief? to be developed by the AMP Regional Project. The ?insight brief? will be disseminated by the regional project to regional stakeholders and published on the AMP website.
  - c. Communities of Practice. One of the primary ways national project staff will interface with the regional project is via the ?Communities of Practice? (CoPs) and associated activities/platforms. While it is expected that many of the activities will be undertaken virtually (via internet-based platforms, webinars or digital platforms) it is also expected that the CoPs will include actual in-person workshops, meetings or training events that project staff will participate on. Knowledge tools and good practices around minigrid cost-reduction in a variety of regulatory environments, and research and development tools, such as policy packages, template tender documents, and guidelines on productive use program designs will be made available to national projects.

- ? Monitoring and Evaluation (M&E).
  - a. Common M&E Framework. The AMP Regional Project will develop, with inputs from national projects, a common M&E framework with SMART indicators to ensure that the program is able to track progress toward its overarching objective. This common M&E framework will include both the Results Framework indicators as well as additional Key Performance Indicators (KPIs) which will be adopted by the national projects to track progress toward project and program objectives (i.e. minigrid cost-reduction). The project will thereafter provide on an annual basis (and to the extent feasible if requested on an ad-hoc basis) the following M&E information to the AMP regional project staff: (a) Standard reporting on all indicators in the results framework; and (b) Reporting on all additional Key Performance Indicators (KPIs) adopted by the project under the common M&E framework.
  - b. Operational support for national project M&E activities. The AMP Regional Project will provide support to the project, through its PMU staff or by hiring or recommending subject matter experts, for the project to execute M&E activities such as the inception workshop, ongoing monitoring, and project evaluations. Further details provided in Section VI. MONITORING AND EVALUATION (M&E) PLAN.

Under Component 4, the AMP will also develop A ?Mini-grids Digital Platform? implemented to run tenders and manage data from pilot(s), and to support mini grids scale-up and cost-reduction. The project digital platform will provide key functionality for the project in terms of acting as the (i) national digital convening platform for key stakeholders (public/private), (ii) providing ongoing data gathering and M&E on minigrids, including linking to the AMP regional project and (iii) acting as the mechanism for tenders for minigrid developers/sites. The indicative specifications for the Project's Digital Platform are presented in the following table.

Functionality	Details
	? Set up of a country-specific, web-based platform to manage all technical and financial data related to minigrid sites at the site and portfolio level
National digital convening	? Single site register of minigrid sites, with geospatial views and technical/financial benchmarks for site assessment
platform for key stakeholders	? Set of best-in-industry tools for analyzing minigrids, including demand forecasting, minigrid system design and optimization, and financial modeling
	? Capacity-building and in-depth training of key government and other stakeholders to use analytical tools and data management technologies

Functionality	Details		
National monitoring and evaluation platform (remote monitoring & analytics)	? Direct integration with smart meters and remote monitoring systems for live data feeds and monitoring (with options to address lack of remote monitoring systems or other restrictions)		
	? Big data analytics and customized reporting to calculate and report on standardized metrics for pilot performance, based on project QAMF		
	? Quality assurance of data quality, accuracy, relevance, consistency		
	? Interactive tools to analyze data, filter, and view at varying levels of granularity		
	? All pilot-specific data can be rolled up into national view, and all country-specific data can be rolled-up into regional view		
Financing platform for running tenders to select minigrid pilot beneficiaries	? Complete end-to-end management of e-tenders for mini-grids customized to specific project/pilot needs (e.g. customized technology solutions, customized workflow, customized KPIs for pilot monitoring)		
	? Automated proposal analysis for quantitative proposal components		
	? Remote verification of connections through smart meter integrations		
	? Automated M&E analytics for all RBF program indicators (connections deployed, amounts paid, gender/environmental impact metrics, etc.)		

Once the digital platform is up and running, it will be announced as a government platform which can be used to run ESCO tenders seeking O&M services for existing mini-grid systems, including the system developed under the GEF6 project fund.

Reference:

CEO ER, Section 8

#### **Monitoring and Evaluation**

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

Secretariat Comment at CEO Endorsement Request Oct 19, 2021: Comments cleared.

July 2, 2021: Please clarify whether all activities are handled by the executing entity. MTR and TE are at higher end. Please provide justifications or decrease the amount.

Agency Response ST\_Oct 7th 2021

#### Section 9 of the CEO ER has been updated to include the following information:

The AMP in Djibouti will follow the National Implementation Modality (NIM), where Ministry of Urban Planning, Environment and Tourism (MUET) will be the Implementing Partner, responsible for the UNDP-GEF project execution and accountable for the disbursement of funds and the achievement of the project goals, according to the approved results framework and work plan presented in this Project Document. The UNDP will provide execution support to the IP (MUET) during implementation per the LoA letter from GEF OFP (see Annex 2 of the ProDoc).

Ensuring that the M&E plan is implemented will be the responsibility of the M&E Officer (member of the Project Management Unit), reporting to the Project Manager. For quality assurance, M&E missions will be conducted at MTR and TE by independent (third-party) consultants, however, the PMU will be responsible for the issuance of regular progress reports to the UNDP CO. Furthermore, the UNDP-GEF Regional Technical Advisor (RTA) will provide an additional layer of project oversight and will participate in regular project team calls to monitor progress and advise on project implementation.

Furthermore, M&E is a key area of interface between the AMP national projects and the AMP regional Project. The latter can support the PMU to undertake planning, coordination, management, monitoring, evaluation and reporting. Details on these linkages are provided below:

The project will share M&E information with the AMP Regional Project as follows:

? The project will provide on an annual basis (and to the extent feasible if requested on an ad-hoc basis) the following M&E information to the AMP regional project staff: (a) Standard reporting on all indicators in the results framework for aggregation and reporting to GEF (by the regional project) on the impacts of all participating national projects for the program as a whole; and (b) Reporting on any and all additional Key Performance Indicators (KPIs) adopted by the project under the common M&E framework.

The project will <u>receive support and guidance from the AMP Regional Project for</u> <u>conducting M&E activities as follows:</u>

? Inception workshop. The AMP Regional Project PMU will:

a. Provide support to the project PMU to develop content and materials to facilitate project planning activities to be completed during and after the Inception Workshop. This includes but is not limited to support for the PMU to prepare and/or update ?key project planning instruments? such as the Total Budget and Work Plan, multi-year work plan, Annual Work Plan (AWP), Monitoring Plan, Risks Matrix, and Procurement Plan, among others.

b. Participate either remotely or in-person in the Inception Workshop.

c. Review and provide inputs to the Inception Report prior to submitting to UNDP.

? Ongoing project monitoring. The AMP Regional Project PMU will:

a. Develop a ?common monitoring and evaluation (M&E) framework? against which GHG emission reductions and broader SDG impacts and program objectives can be measured, and work closely with national child projects to ensure operationalization and harmonization.

b. Provide support to the project PMU for updating ?key project planning instruments? at least on an annual basis as required to comply with UNDP project monitoring, quality assurance, and risk management requirements, and ensure adequate project planning and adaptive management. This may entail developing common templates for ?key project planning instruments?.

c. Review and provide feedback on reports submitted by the project PMU seeking to continuously improve the quality and ease of reporting by national projects.

d. Aggregate M&E data from all national projects, including Results Framework and all additional Key Performance Indicators (KPIs) adopted by the project under the common M&E framework, and report back to GEF at the program level.

? Evaluations (MTR and TE). The AMP Regional Project PMU will:

a. Make available to national projects standardized terms of reference for MTR and TE as well as a roster of vetted evaluation consultants.

b. Review and provide feedback on terms of reference and draft evaluation reports shared by the project PMU to ensure project-level evaluation will be undertaken in compliance with UNDP requirements.

c. Make themselves available for interviews and consultation in the context of national project mid-term and terminal evaluations.

For MTR and TE costs, the USD 66,000 presents USD 50,000 for international consultant and USD 16,000 for local consultant per assignment. The amounts proposed

are within (and below) the recommended budget for MTRs and TEs by the UNDP for full-sized GEF-financed projects (i.e. USD 50,000 for independent lead consultant to undertake the MTR and USD 50,000 ? 75,000 for independent lead consultant to undertake the TE + sufficient allocation (e.g. USD 20,000 - 30,000) for independent national consultants to undertake the MTR and TE assignments).

Furthermore, during the CEO ER phase, the team took in consideration the potential COVID restrictions that could lead to the need to spend extended time on-site and have several meetings with smaller groups than large workshops as commonly done in MTR and TE missions. Conducting the missions could also require additional costs for PCR tests and quarantine time, etc. Therefore, the proposed amounts are found to be adequate and in line with common practices for MTR and TE. Nevertheless, should the situation change and a cost saving occur, the additional amounts will be directed to enhancing the M&E procedure taking place on a regular basis during project implementation.

#### Reference::

CEO ER, Section 9

Benefits

Are the socioeconomic benefits at the national and local levels sufficiently described resulting from the project? Is there an elaboration on how these benefits translate in supporting the achievement of GEBs or adaptation benefits?

Secretariat Comment at CEO Endorsement Request Oct 19, 2021: Comment cleared.

July 2, 2021: Socioeconomic benefits including social impact and improved livelihood should be elaborated. The picture in this section does not seem relevant.

Agency Response ST\_Oct 7th 2021

## Section 10 of the CEO ER has been updated to include the following information, and the diagram was moved to a more relevant section:

The project has numerous socioeconomic benefits, at the national, local and individual household levels, as listed specifically below.

At the national level the project:

- Helps increase access to off-grid electricity, thus relieving the burden on the national grid while allowing the government to meet the increasing demand sooner without large investments in infrastructure.
- Reducing the amount of fuel needed for power generation from diesel-powered minigrids.
- Increased vocational training for renewable energy practitioners from the public sector as well as staff members and potential candidates for the EPCs and ESCOs who will engage in the work.
- Reduction of CO<sub>2</sub> emissions as a direct result of reduced reliance on fossil fuel for energy.

At the local level:

- Reduced fuel combustion in diesel generators will result in reduced air pollution and reduced particulate matter, resulting in better health for the local population.
- Reduced need for fuel transport to support mini-grids also means reduced congestion, fire and explosion hazards, and further reduced pollutants.

At the individual house-hold level:

- Improved stable access to clean energy is the starting point for households to become more comfortable and enables better adoption of modern technology for different purposes. This is becoming more crucial in light of the COVID-19 pandemic and the necessity for family members to work from home or attend online classes.

#### Reference:

CEO ER, Section 10

Annexes

Are all the required annexes attached and adequately responded to?

Secretariat Comment at CEO Endorsement Request Nov 10, 2021: Comments cleared.

Nov 8, 2021: On budget, please address the below points.

1. The budget line for \$90,631: Please change the ?Executing Entity receiving funds?, which should be UNDP instead of MUET.

2. The budget contains a line for \$67,000 namely ?Fees for consultancy to develop the Procurement Plan for the project.? However, this budget was prepared when UNDP was already willing to carry out some executing activities including ?procurement services?.

Please clarify how these two are different so it is clear that there is no double payment for this activity.

Not all documents are attached. Also, see comments on budget in above boxes.

Agency Response ST 10 November 2021

#### Response:

The table in Annex C of the CEO ER is revised to include information about the preparation activities of the PPG.

The Djibouti GEF OFP signed a new support letter today, using the GEF template. The letter is attached.

#### Budgets

- ? GEF budget template (Annex 1 of the Prodoc) is revised to indicate UNDP as Executing Entity receiving funds.
- ? The Consultancy is not an execution support service, but an activity within the PMU (project management unit) to improve the quality of the tenders. It is not purely an administrative task, but rather, includes providing details on all procurement activities and defining the specifications for goods and materials. The services include conduction needs assessment and community surveys at the 2 project sites (Yoboki and Khor-Angar) to determine the capacity for the mini-grid pilot project.

The Prodoc is revised accordingly

#### **Project Results Framework**

Secretariat Comment at CEO Endorsement Request Nov 10, 2021: Comment cleared.

Nov 8, 2021: Indicator 6 (GHG emissions) has target of 36,717 in Core Indicator Table but 39,717 in Annex A ?Project Results Framework.? Please revise.

Agency Response

ST 10 November 2021

#### Response:

Indicator 6 and Annex A Project result framework have the same right figure, which is 39,717.

#### **GEF** Secretariat comments

Secretariat Comment at CEO Endorsement Request Comment cleared.

July 2, 2021: Please include responses to comments to PFD as relevant.

Agency Response Responses to comments on the PFD is provided in Annex B of the CEO ER.

Reference: CEO ER, Annex B

#### **Council comments**

Secretariat Comment at CEO Endorsement Request Comment cleared.

July 2, 2021: Please include responses to comments to PFD as relevant.

#### Agency Response Responses to comments on the PFD is provided in Annex B of the CEO ER.

CEO ER, Annex B

#### **STAP comments**

Secretariat Comment at CEO Endorsement Request Comment cleared.

July 2, 2021: Please include responses to comments to PFD as relevant.

Agency Response Responses to comments on the PFD is provided in Annex B of the CEO ER.

CEO ER, Annex B

#### **Convention Secretariat comments**

Secretariat Comment at CEO Endorsement Request

Agency Response Other Agencies comments

Secretariat Comment at CEO Endorsement Request

Agency Response CSOs comments

Secretariat Comment at CEO Endorsement Request

Agency Response Status of PPG utilization

Secretariat Comment at CEO Endorsement Request Yes.

Agency Response Project maps and coordinates

Secretariat Comment at CEO Endorsement Request Yes.

Agency Response

Does the termsheet in Annex F provide finalized financial terms and conditions? Does the termsheet and financial structure address concerns raised at PIF stage and that were pending to be resolved ahead of CEO endorsement? (For NGI Only)

Secretariat Comment at CEO Endorsement Request Agency Response

Do the Reflow Table Annex G and the Trustee Excel Sheet for reflows provide accurate reflow expectations of the project submitted? Assumptions for Reflows can be submitted to explain expected reflows. (For NGI Only)

Secretariat Comment at CEO Endorsement Request

Agency Response

Did the agency Annex H provided with information to assess the Agency Capacity to generate and manage reflows? (For NGI Only)

Secretariat Comment at CEO Endorsement Request

Agency Response

**GEFSEC DECISION** 

RECOMMENDATION

#### Is CEO endorsement recommended? (applies only to projects and child projects)

Secretariat Comment at CEO Endorsement Request Nov 10, 2021: All remaining comments addressed.

Nov 8, 2021: Please address comments on the support letter, budget, PPG and project framework above. Please also revise the relevant sections of ProDoc.

Oct 19, 2021: Please address the remaining comments.

July 2, 2021: Not at this stage. Please address the comments above.

#### **Review Dates**

	Secretariat Comment at CEO Endorsement	Response to Secretariat comments
First Review	7/2/2021	
Additional Review (as necessary)	10/19/2021	
Additional Review (as necessary)	11/3/2021	
Additional Review (as necessary)	11/10/2021	
Additional Review (as necessary)		

**CEO Recommendation** 

Brief reasoning for CEO Recommendations