

National child project under the GEF Africa Mini-grids Program Somalia

Review CEO Endorsement and Make a recommendation

Basic project information

GEF ID

10470 Countries

Somalia Project Name

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

UNDP Date received by PM

6/19/2021 Review completed by PM

11/4/2021 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 Oct 10, 2021: We note the change of co-financing on PMCs. Please see the comment on co-financing below.

July 17, 2021: The changes on outcomes and outputs and justifications are provided under Part II of the CER document. 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_7th October 2021

The budget tables in Excel, CEO ER and ProDoc have been revisited such that the PMC percentage of co-finance does not exceed 5% of the total co-finance. In summary we have:

- PMC percentage from GEF resources: 4.76%
- PMC percentage from co-financing resources: 4.78%

In addition, partners continue to show interest in Somalia and two additional cofinancing letters have been received after first submission to the GEFSec. These are from the World Bank (\$157 million) and SIDA (\$10 million).

Reference:

Budget tables in CEO ER

ProDoc, Annex 1 Excel

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 Nov 3, 2021: Comments cleared.

Oct 10, 2021: The two additional co-financing sources lack co-financing letters. On providing such letters, please indicate which parts of components of such projects are directly relevant to achieve the project objectives. Categories of co-financing in the table

seem not right (at least World Bank is a donor). Please add how the investment mobilized on such co-financing.

Agency Response ST 2/11/2021

Response:

Table C of the CEO ER is revised to correct the categories. Both World Bank and SIDA are Donor agencies. Relevant tables are also updated in the Prodoc. Also, a footnote is added under Table C of the CEO ER to inform how the investments were mobilized.

Both World Bank and SIDA co-financing are investment mobilized through partnerships. Specifically, the WB contributions will help addressing capacity gaps and provide support for improving electricity infrastructure to promote low carbon clean energy options in Somalia. This contribution is directly contributing to Components 1 and 3 of the project. The SIDA contributions will strengthen the energy sector by fostering multilateralism to empower the private sector engagement. This contribution is contributing to both components 2 and 3 of the project.

Reference:

CEO ER, table C

Prodoc, Section 8

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 Yes.

Agency Response 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 Oct 10, 2021: Comments cleared in this section.

July 17, 2021: The indicator targets are slightly above than as expected at the PFD. However, please address the below points.

1. The indicator 6 and 11 have been decreased while the explanation has not been provided.

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

Agency Response ST 7th October 2021

1. 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.

Decrease in Indicator 11. 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 50 kWp Solar PV minigrid could serve 10,000 people (2,000 household connections); that is, an average of 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 40 connections, 6.35 connections can be served per kW of installed Solar PV capacity. An explanation of the system sizing formulas used has been added to Annex 12 and the excel spreadsheet with the calculations has been uploaded to the portal.

Decrease in Indicator 6. GHG Emissions reductions estimated at PIF stage were 45,202 tCO2e over the 20 years of the Solar assets lifetime. At CEO ER stage this estimate has been revised at 29,577 tCO2e. This is a function of a number of updated assumptions that are now used in the PPG?s more rigorous GEB methodology,

including capacity factors, system design, and minimal concessionality assumptions. This causes total estimated annual renewable generation from Minigrid pilots to be approximately 29% lower at CEO ER stage (1,996 MWh/year) than at PIF stage (2,888 MWh/year).

2. 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

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 8, 2021: Comment cleared.

July 17, 2021: Please add global environmental problems, including carbon emissions from the energy sector in the country.

Agency Response ST_7th October 2021

Due to the absence of a formal system for energy generation and distribution in Somalia, data on energy as a sector is quite limited. To elaborate on the global environmental problems in the Somali context, the following text has been added to the baseline description in the CEO ER (Part II, Section 1a-1) and ProDoc (Section II):

The environment and natural capital underpins Somalia?s sustainable development and have been the basis for livelihoods and wellbeing of the population for generations. However, the country?s natural resources are under huge pressure, degradation, and pollution due to inappropriate uses and overexploitation, conflicts, and climate change impacts such as recurrent drought, floods, and cyclones. Some of the key environmental issues include land degradation and deforestation mainly from unsustainable charcoal, pollution (water, air), unsustainable waste management and biodiversity loss.

Somalia?s current GHG emissions are relatively low, estimated at 53.70 MtCO2eq which represents less than 0.03% of the total global GHG emissions. The Agriculture, Forestry, and Land-use sectors are the major contributors to Somalia?s emissions. World Bank data for 2016 indicate that the GHG emissions from liquid fuel consumption in

Somalia is about 645 ktCO2eq. Key challenges to effective management of the natural resources include lack of and weak policy and regulatory frameworks, weak institutional arrangements, inadequate capacities, lack of public awareness and information and lack of financial resources to the management of resources. Poverty in Somalia is directly linked to the state of the environment and natural resources, with the use of extremely unsustainable land management practices, which exacerbate the ongoing adverse effects of drought on land productivity, further deepening the state of poverty.

Reference:

CEO ER, Part II, Section 1a-1

ProDoc, Section II

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

Secretariat Comment at CEO Endorsement Request Yes.

Agency Response

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 10, 2021: Comments cleared.

July 17, 2021: Please address the below points.

1. Component 1: It does not seem to address policy and regulatory changes adequately that mitigate risks of minigrids including discontinue of services due to financial or physical impacts, disposal of batteries and other wastes, and adapting to change of demand of electricity (i.e. numbers of customers or increase in demand). Please provide plans on these elements to ensure scaling-up and sustainability of deploying the minigrids.

2. Component 2: Please describe the details of pilot minigrid systems that this component will invest in with rationale. 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 a detailed plan to mobilize the public and private financial institutions.

Agency Response ST_7th October 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. At the CEO ER stage, Somalia already had in place several policies and national plans aiming to regulate the service delivery and tariff levels in the mini-grid sector. However, these policies and bills are yet to be operationalized. The AMP is well positioned to deliver the required support for the government to move ahead with its plans. Hence, Component 1 is designed to focus on facilitating a national dialogue on minigrid delivery models for the effective rollout of existing policies, a DREI analysis to systematically identify investment risks and public instruments to address this, and to support the institutional setup for their adoption. Using these approaches, and building on existing policies, the objective of AMP Somalia is to establish a comprehensive policy and regulatory regime, around a clear minigrid delivery model, which will ensure full financial and commercial sustainability for the asset?s lifetime. The DREI analysis, to be carried out during implementation, will assess the latest status of issues raised in GEF SEC comment, namely financial/physical impacts (under DREI, this is assessed under ?counterparty risk?), disposal of batteries (under DREI, this is assessed under ?hardware risk?), and demand fluctuations (under DREI, this is captured under system sizing barriers in ?developer risk). Where latest policies are assessed to be inadequate, they will be addressed. Additional details have been included in the description of Component 1 in the CEO ER.

2. **Component 2.** Additional details on the pilot systems have been included in the description of Component 2 in CEO ER. The mechanism deployed for the management and oversight of the pilot systems is embedded in the digital transformation promoted under Component 1. The exact financing mechanism and payment/contractual modality to be used by the UNDP for the release of the GEF investment fund to ESPs and suppliers will be decided at project start. The SREF?s Window-1 structure is already a good model for inspiration. More details on the environmental impacts of the project and waste management plans are provided in the project?s SESP and ESMF.

3. Component **3.** As discussed in the CEO ER, the competitiveness of solar and hybrid mini-grid development depends on the commercial viability of the system, but also on the funding opportunities available to the private sector players wishing to engage in

hybridization or complete shift to renewable sources. The AMP?s strategy towards the mobilization of public and private financial institutions sits on two main pillars: (1) capacity strengthening through design support, operational guidance and training workshops, and (2) creating an enabling environment that would reduce the risk to market entry for developers and their financiers. Component 3 focuses on the first pillar to complement the effort under the remaining Components to achieve progress on enabling environment goals. Additional details have been included in the description of Component 3 in the CEO ER.

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 10, 2021: Co-financing contributions and the table have not been updated with additional co-financing resources.

July 17, 2021: Please provide incremental cost reasoning. Contributions from cofinancing to achieve the project objectives including the GEBs are not clear. Please provide the details on how co-financing would contribute to cost-sharing on investments.

Agency Response ST_7th October 2021

With regard to general incremental cost reasoning, Section 1a-5 in the CEO ER has been updated to elaborate on the incremental cost reasoning for the AMP in Somalia.

With regard to the relationship between co-financing and GEBs, the following methodology is being used.

- Estimates for Direct GEBs for the project are calculated for the project?s proposed pilot investments in Output 2.1, for which GEF INV is being contributed.

- The pilots? actual system sizing and financial specifications will only be determined during project implementation, a result of competitive processes for selecting recipients of GEF INV. At the PPG stage, to estimate GEBs, generic systemic sizing and financial assumptions have been made.

- For each pilot, it is assumed that GEF INV is being complemented by other cofinancing. For Somalia?s GEB calculations, the methodology estimates that GEF INV will contribute 27% of the pilots? capital expenditures, and hence co-financing will contribute 73% of capital expenditures. This level of GEF INV is calculated on the basis of minimal concessionality, with GEF INV contributing the incremental cost resulting in an LCOE which is equivalent to a baseline of a diesel minigrid.

- Please see the Prodoc?s Annex 12 for detailed descriptions of this methodology.

- For clarity, these co-financiers to pilots are not included in the CEO ER list of cofinancing, because these pilot co-financiers will only be identified during the project?s implementation when competitive tender processes for the pilots will be held. To identify these co-financiers at the PPG stage would compromise the future tender processes.

- 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:

CEO ER, Section 1a-5

ST 2/11/2021

Response:

Section 5 of the CEO ER is revised to reflect all the co-financing resources.

Reference:

CEO ER, Section5

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 Nov 3, 2021: Comment cleared.

Oct 10, 2021: Thank you for clarification. Please explain how the capacity factor (21%) is derived (and if such number is within a range in this region) with oversizing factor of 50% (if the capacity of PV panels is much higher than expected KW under indicator 6, which is the capacity of the converters (power conditioners)).

July 17, 2021: On direct emissions reduction in Annex 12, please provide detailed explanation on how power generation per year per unit 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 also clarify if emissions from diesel generators are excluded from the emissions reduction estimation.

Agency Response ST 7th October 2021

Annex 12 has been updated to provide detailed explanations on how power generation per year is derived with the exact formula, on how the loss of electricity due to the use of battery is considered in the estimations, and to clarify for those pilots that are Solar PV Battery Diesel systems, that electricity generated from diesel gensets (used as backup or otherwise) is excluded from GHG emission reduction estimates. Also, an excel spreadsheet with the summary of GHG emission reduction calculations has been uploaded to the portal.

Reference:

ProDoc, Annex 12

ST 2/11/2021

Response:

Solar PV Oversizing factor. An oversizing factor of 50% for solar PV-battery-**diesel** hybrid systems, and 75% for solar PV-battery systems has been used to account for yield degradation, demand growth, and the need to charge the batteries which provide electricity for night-time consumption. This factor is used to determine the total installed Solar PV capacity based on the electricity demand that the minigrid should meet. This in turn is the value used to define the targets for Sub-indicator 6.4 Increase in installed renewable energy capacity per technology.

Inverter capacity. Solar PV systems designed include by definition other elements (Balance of Systems or BoS) such as inverter, charge controller and these have been sized and budgeted as well in each model. System inverter capacity estimated in each

minigrid model is about 120-140% of rated Solar PV capacity, (120%-140% range depends on load and battery capacity. Typically Solar PV inverters for off-grid systems are 110-115% of Solar PV capacity (ideally Solar PV capacity and inverter capacity should be the same but one should account for inverter efficiency), but it needs to be higher if sizeable batteries and/or customer loads are included.

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 10, 2021: Comments cleared.

July 17, 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 minigrid systems for the lifetime. Please

3. Scaling-up: Please elaborate the role of knowledge management if any.

Agency Response ST 7th October 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. This includes abiding by the following requirements per project site:

- Inverter monitoring (monitoring & control)
- Distribution monitoring

- Optional current transformers for energy meter if more than 10 kW (single phase) or 30 kW (three-phase)

- 24V power supply (50?)
- Various data cables and installation material

- Optional: 24V backup battery (50?)
- Optional: Cabinet for the complete monitoring system
- Industrial internet router
- Industrial or high quality Ethernet Switches
- Smart meters per connection

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) focusing on hybridization, which means the ESP already has ownership 1. of the mini-grid prior to the involvement of the AMP, (2) mandating ESPs to co-finance the pilot systems, which capitalizes on this ownership and creates mutual benefit to keep the system in operation for the longest possible period, and (3) empowering communities to oversee the operation of the mini-grid systems in their villages and report on any misconduct by ESPs. 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 Somalia.

2. **Scaling-up.** 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.

There were also measures that have been expanded into independent outputs instead of activities tackling only the pilot under the AMP. For example, the establishment of an industry association for private sector developers in the mini-grid sector may not be of direct use to the AMP pilots, but it paves the way for further public-private partnerships going forward. Similarly, the implementation team for the AMP in Somalia will ensure the use of high quality components for the pilot systems, yet the development of quality standard for system component is included in the AMP outputs to ensure high quality is maintained by future projects replicating the AMP business model.

To enhance the knowledge production and management aspects of project implementation, some of the outputs and activities under Components 2 and 4 are designed to serve not only the AMP in Somalia, but to also allow the AMP to become an enabler for further renewable mini-grid development efforts. For example, the project focuses on data sharing requirements for the pilot mini-grids where:

- Pilot beneficiaries (e.g. minigrid operators) receiving support from the project will be required to share minigrid performance data with the national project

Specific terms and conditions for data-sharing and how best to operationalize the commitment and its adoption by the beneficiaries will be defined and agreed upon with minigrid operators during project implementation, including details of what data can and cannot be used, based on consultations with industry stakeholders and with support from the AMP Regional Project.

The specifications around the data generation by the demonstration pilots supported by the project will consult and follow guidance/standards provided by the AMP Regional Project. A standardized Quality Assurance and Monitoring Framework

- (QAMF) for application in all minigrid pilots supported under the project will be developed in year 1 of the regional project and disseminated to all national projects.
- A digital platform will be procured by the project (under Component 4, Output 4.2) to serve different purposes including: (1) running digital tenders by which minigrid developers will be selected as beneficiaries to receive support under the project and (2) managing all technical and financial data related to minigrid sites.
- Through the implementation of this digital management platform, minigrid developers selected to implement minigrid pilots with support from the project will have access to a set of best-in-industry tools for analyzing minigrids (e.g. demand forecasting, system optimization, distribution network design, detailed financial modeling at the site and portfolio level). Similarly, as part of the roll-out of the data platform, minigrid developers (as well as key government and other stakeholders) will receive capacity-building and in-depth training to use analytical tools and data management technologies.

More details on the AMP's strategy on knowledge management and sharing is presented in Section 8 below.

Reference:

CEO ER, Section 1a-7

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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 Oct 10, 2021: Comments cleared.

July 17, 2021: Please add a general map that covers potential sites as exact locations will be determined at a later stage.

Agency Response ST 7th October 2021

Map has been provided and included in the CEO ER and ProDoc.

Reference:

CEO ER, Annex E

ProDoc, Annex 3

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 10, 2021: Comment cleared.

July 17, 2021: Stakeholder engagement plan in the Annex seems lacking the exact role and means of engagement of each stakeholder. Please address and provide in a table format in the portal as well.

Agency Response ST_7th October 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

ProDoc, Annex 9

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 Dec 9, 2021: Comment cleared.

Nov 9, 2021: The project has indicated that it expects to closing gender gaps in access to and control over natural resources. The review of the gender analysis and action plan including the proposed sex disaggregated indicators, however, does not substantiate this. Please revise and or provide additional information.

Agency Response ST_Dec 3rd 2021

Response:

Annex 11 of the Prodoc, Gender analysis and action plan, highlighted the gender gaps in Somalia, and provided action plans. In addition to what is already planned, the Annex 11 is revised to include the below text, to make it very clear about the actions to be undertaken. The Gender analysis and action plan is in line with the Gender Equality and Women's Empowerment strategy, as defined in the Regional project (PFD). The gender analysis has highlighted the gaps in the energy dividend between men and women, and regarding the participation of women in the minigrids value chain. It also pointed to opportunities for inclusion, increased participation by women in the minigrids value chain, including making use of renewable electricity productively. In addition to improved quality of living, this can positively impact the economic empowerment of women.

The overall AMP and the Regional Project have been designed within this context. Gender responsive measures to address gender gaps and to promote gender equality and women?s empowerment in the minigrid value chain have deliberately been incorporated into the Somalia project design. These measures aim to improve women?s participation and decision making; and generating socio-economic benefits through productive energy uses.

Opportunities identified to promote the development of gender-responsive energy policies include:

- ? Through gender responsive knowledge products, influence others, especially other programs, to take up strategies that provide both men and women with equal and fair opportunities to benefit from minigrid interventions.
- Provide technical expertise to national child projects to undertake systematic gender analysis. Country level gender analyses undertaken through the national child projects can help identify and make visible the different needs of men and women and gender gaps in the energy sector would help policymakers develop more gender-responsive energy policies and identify concrete targets and solutions to close gender gaps.
- ? Generate gender-responsive and sex-disaggregated data as part of energy policy development. Systematic collection of gender-energy disaggregated data throughout the policy process would be useful for countries in monitoring and tracking the developmental outcomes of energy services on key SDG indicators, including gender equality (SDG 5), SDG education (SDG4), potable water (SDG6), primary health services (SDG3) and improved food security (SDG2).
- ? Enhance women's participation in energy policy development and in the energy sector in general. When national energy dialogue and energy policies are being shaped related to mini?grids, attention needs to be paid to who is participating and providing input into the formulation of the energy policy or rural energy development plans. Diverse

perspectives from groups such as women?s business associations and various civil society organizations are essential to inform and shape the discussions on energy use (from household level realities to industry demands), social services, job creation and the ability and willingness of consumers to pay for electricity connections. Having targets for women?s participation in the public energy sector and creating platforms where women entrepreneurs and other relevant stakeholders can inform policymaking are other avenues for further exploration.

? Support national governments to support integration of gender-responsive solutions in energy planning, through sex-disaggregated data, gender analyses and capacity building of gender equality advocates and civil society organizations.

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 10, 2021: Comments cleared.

July 17, 2021:

1. Please provide a risk of hindered communications due to COVID-19 as well as opportunities of the impacts of the COVID-19 pandemic if any.

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_7th October 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.** The biggest risk of the COVID-19 to the AMP project has been the impact on the economy, which reduced the purchasing power of the population in general. According to the UNDP SEIA of COVID-19, it was reported early on that in general the electricity sector experienced negative outcome as consumption of electricity reduced due to failing demand, revenue collection was disrupted, suspension network expansion operations, a slowdown in daily operations and staff productivity and overall disruption in operations. This trend will have negative impact on the overall development of the sector especially in the clean energy sector as it is currently more capital intensive to invest in clean energy than diesel power.

In addition, COVID-19 poses a challenge on communication and service delivery due to restrictions on in-country gatherings and international travel. In March 2020, the Government imposed restrictions in response to the COVID-19 pandemic, and the UN reduced its physical staff presence in response.

Despite the above-mentioned challenges, COVID-19 also presented an opportunity for solar mini-grid development, where the knowledge and awareness of the opportunities in the clean energy sector has increased significantly over the past 12 months. The Federal government is currently running a successful national campaign on public awareness of the benefits of solar clean energy as part of the Somalia Energy Access Project. Furthermore, during the pandemic, a number of large mini-grid projects ranging from 1MW to 7 MW hybrid were implemented in the country both by the private sector and by NGOs. A number of international clean energy companies from countries such as Italy, South Africa and the Netherlands have also entered agreements with large ESP. Some of the Banks are managing multimillion projects on clean energy as part of the eligible productive sector financing conditions.

2. **Risk 6 ? Lack of private sector cooperation.** The private sector is *the* key player in the development of mini?grids in Somalia and is naturally inclined to reject regulations that could potentially reduce its ability to maximize profit. This could potentially be manifested in the form of refusal to participate in tenders that mandates a minimum threshold of co-finance or poses strict oversight on tariffs value and collection procedure. 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.

Enforcing laws without proper private sector engagement could lead to their withdrawal from the market. Therefore, the AMP will focus on promoting hybridization to ensure that ESPs can capitalize on their existing investments and are supported to achieve cost-reduction. Furthermore, the AMP adopts a step-wise approach towards regulations, where the introduction of new measures targeting digital transformation will start voluntarily with incentives, before they become mandatory in the long-term. In addition, emphasis is given to developing ESPs? capacities as project beneficiaries for several activities.

In addition, the project will capitalize on the experience of the ESRES project financed by FCDO and the lessons learned by the team on how to best engage ESPs and provide collaboration modalities that are realistic and binding, while empower communities to hold ESPs accountable and ensure that the pilot systems are maintained to provide the service promised.

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

Dec 9, 2021: The support letter is provided while the addressee is GEFCEO. Comment cleared.

Nov 9, 2021: The previous comment cleared. Please upload a support letter by OFP as required by the GEF guidelines.

Oct 10, 2021: While noting the additional information on the UNDP's policy/implementation modality in Somalia, it is necessary to review justifications and

supporting documents. Please provide them for the further review. PFD mentioned that "Local government agencies will be executing agencies for the national projects," while the child project concept left the executing agency box TBD for Somalia's project.

July 17, 2021: Please address the below.

 On UNDP CO's execution, ProDoc or the checklist does not provide sufficient justification on the dual role of UNDP as an implementing agency and an executing entity. Please consider finding a third party or minimize UNDP's roles on execution while noting that other projects in Somalia recently submitted to GEF did not ask such arrangements. Please also provide explanation on government agencies or third parties which UNDP explored to identify an executing entity during the PPG phase.
 Please add elaboration on coordination with other projects and initiatives if any.

Agency Response ST_7th October 2021

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

The AMP in Somalia will follow the Direct Implementation Modality (DIM), where the UNDP CO in Mogadishu will act as the Implementing Partner (IP), 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.

At the time of submission of the project document, all UNDP projects in Somalia are under Direct Implementation Modality (DIM). This is considering the limited national capacities and fragile operational context of the country. Given the operational context in Somalia, all projects in 2021-25 Country Programme cycle are required to follow DIM.

DIM does not limit the engagement of third party to undertake specific activities under contractual agreements with UNDP. Such contracts need to follow a thorough competitive process during the project implementation, where the overall accountability of delivery of results will remain with UNDP. The project will also benefit from the ground presence and on-the-ground operational capacities of UNDP Country Office required for day-to-day interaction with counterpart institutions, ability to timely address risks and operational capacities for effective implementation, help to reduce transactional cost that would have required engagement of third party for project implementation. UNDP projects and programmes in Somalia are part of four portfolios, including, 1) Resilience and Climate Change; 2) Economic Recovery and Institutional Development; 3) Rule of Law and Security; 4) Inclusive Politics. In addition, UNDP CO have dedicated units for human resources management, finance and resources management and procurements. Senior management in its oversight and compliance functions, is supported by Programme Oversight and Quality Assurance Unit. The oversight functions are independent of Project Management functions with clear delineation of rolls as per the Internal Control Framework (ICF).

Furthermore, national institutions will be engaged as Responsible Party (RP) on specific activities under Letters of Agreement arrangement for enhancing national capacities based on the capacity assessment for Harmonised Approach to Cash Transfer (HACT). The mitigation measures are adopted based on the findings of HACT assessments for risk management without compromising on the accountability of UNDP for the use of project resources.

In addition, development partners will be regularly consulted during the implementation phase to share lessons and ensure complementarity. Continuous collaboration on minigrid sector development is part of the project's SEP and has already started during project design as evidenced by the two letters of co-finance by the WB and SIDA. The project team will continue to build these healthy relationships throughout the implementation of the AMP in Somalia.

Reference:

CEO ER, Section 6

ST 2/11/2021

Response:

The below table is provided as per the discussions with GEF Secretariat.

ST_Dec 3rd 2021

Response:

A support letter signed by the OFP has been received. Besides, due to several challenges faced during the PPG phase, the GEF OFP has also requested an extension request for the second milestone, due to force majeure. Both letters are uploaded as part of this resubmission.

Comment(s)	Provide further explanation and justification for the proposed implementation arrangements.
Executing arrangements for other GEF projects in Somalia	DIM is followed for all UNDP projects/programmes in Somalia. Not only UNDP but also all <u>resident</u> UN agencies in Somalia use the DIM modality. Resident UN agencies are those that have offices on the ground in the country. Non-resident agencies are not bound by this principle.
	This is considering the limited national capacities and fragile operational context of the country. UNDP Country Programme Document (2021-2025) stipulates direct implementation for all projects and programmes. Shift towards national execution will be informed by a UN wide macro assessment of public financial management systems. However, this would not have any implications on the DIM arrangements for the projects currently going through approvals.
Detailed scope for UNDP support services	The AMP in Somalia will follow the Direct Implementation Modality (DIM). There will be distinct roles with the UNDP Country Office to ensure proper delineation of functions between the Executive Decision-Making Role, Oversight Role and Project Execution & Implementation Role.
	Further details are available in the checklist. More details can also be provided when submitting the signed LoE from the GEF OFP.
Rationale/justification for UNDP support services	As with all other projects and programmes, a DIM modality is used considering the limited national capacities and fragile operational context of the country.
	Discussions are already ongoing with the GEF OFP, who should be able to share a signed LoE by end of this week.
Cost of UNDP support services and % covered by GEF funding	There is no DPC for DIM projects.

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 10, 2021: Comment cleared.

July 17, 2021: The section is entirely missing. Please describe the alignment with the project.

Agency Response ST 7th October 2021

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

The Federal Government in Somalia and Somaliland have been developing policies and regulations which could shape their aspired intervention in energy sectoral planning, including interventions to regulate the service delivery and tariff levels in the mini-grid sector. The most relevant developments to this project are summarized below:

- National Energy Policy (2018) and the Somali Electricity Bill (2020):

o The policy was developed by the Ministry of Energy and Water Resources (MoEWR). It presents the overall plan for the energy sector.

o The Electricity Bill is more focused, containing an outline for the legal direction of the electricity and identify the relevant authorities which will govern the sector ? both have been drafted and awaiting cabinet approval.

- <u>Somaliland Energy Policy (2010) and the Somaliland Electrical Energy Act</u> (2016):

o The policy was developed by the Ministry of Energy and Minerals (MOEM), in collaboration with Adventist Development and Relief Agency (ADRA) as part of the Somaliland Energy Policy Dialogue.

o The Act was developed a few years later, emphasizing the need to establish the Energy Regulatory Commission (ERC) for Somaliland, to provide a framework for energy investment and consumer protection.

The project aligns well with the current National Development Plan (NDP 2020-2024) as well as the National Energy Policy (2018) and Power Master Plan in number of areas.

•Master Plan outlines plans to increase energy production, increase the supply of renewable energy, and for government to establish regulatory authorities and a legislative framework to improve the market efficiency.

•The National Energy Policy sets out a strategy to the development of the country?s electricity sector with a focus on clean energy, reduction of cost and coordination of the electricity general, transmission as well as distribution through policy making and the creation of an effective regulatory framework.

•In line with the above, the NDP 2020-2024 outlines clear strategy to develop the country?s electricity sector from a triangular vantage point that covers, (a) development and implementation of relevant enabling environment i.e. regulations that improve the current developments in the private led energy sector, (b) focusing on clean energy, and (c) increasing access to energy particularly.

Finally, the project is also in line with the Nationally Determined Contribution (July 2021) and First National communications (2018) to UNFCCC. Both aims for sustainable and low carbon emission development, especially through decentralized mini-grids.

<u>Reference:</u> CEO ER, Section 7

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 Nov 3, 2021: Comment cleared.

Oct 10, 2021: It is not clear if M&E in this section is related to M&E section or a part of KM. Please also clarify if "Mini-grids Digital Platform" is the only KM product in this project.

July 17, 2021: Please describe how the project will learn from national and regional projects as well as AMP?s coordination and how the KM approaches will impact the overall achievement of the project. Please also clarify knowledge products and timeline/budget.

Agency Response ST_7th October 2021

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

Part of ensuring the sustainability of project activities and prolonging its impact beyond the project duration is to maintain a system of monitoring, evaluation, knowledge sharing, and knowledge dissemination. The information contributing to knowledge production will be collected in an organized manner and constantly feeding the project operation as well as the design of new interventions. More specifically, the outcomes under Component 4 serve to ensure that knowledge management, monitoring and evaluation are accounted for as independent tasks, but also integrated in all aspect of project implementation. This includes project participation in the Communities of Practice (CoP) to be established and managed by the AMP Regional Project. As such, part of the linkage of the AMP in Somalia to the AMP Regional Project will fall under the implementation of activities under Component 4 notwithstanding that 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.
- a. 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.)

To overcome the COVID restrictions, many of the tools developed under the Knowledge Management (KM) system will take the form of online portals, reducing inperson contact and ensuring the work can proceed in case there continues to be restrictions on mobility during project implementation. More details on the deliverables, timeline and budget for the KM scope of project implementation are presented in the Results Framework and M&E plan under Component 4.

Reference:

CEO ER, Section 8

ST 2/11/2021

Response:

No, the Mini-grid Digital Platform is not the only KM product in this project. Rather, emphasis was put on digitalization as there is a strong linkage between the Parent project (the PFD) and Child projects on Digitalization. There is even a dedicated component in the PFD in this regard.

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 Yes with descriptions in ProDoc.

Agency Response 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 10, 2021: Comment cleared.

July 17, 2021: It seems socioeconomic benefits such as improved health due to less usage of diesel are missing.

Agency Response ST 7th October 2021

Section 10 of the CEO ER has been updated to include the following information:

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 government and allowing it 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 as well as installers and contractors who will do the work.
- Of course, reduction of CO2 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:

- Reduced operational cost for ESPs will enable service provision at lower costs, hence lower tariffs leaving additional income at households for other matters.

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 Dec 9, 2021: Comment cleared.

Nov 9, 2021: On budget, please remove unspecified miscellaneous expenses.

Oct 10, 2021: Numbers in the Annex E are not properly shown. Please attach a properly formatted table.

Agency Response ST 2/11/2021

Response:

Annex E is provided as a separate annex in Word format. Hope this will help to avoid formatting issue when uploading in the Portal.

ST_ Dec 3rd 2021

Response:

Budget tables are updated and all references to miscellaneous expenses removed.

Project Results Framework

Secretariat Comment at CEO Endorsement Request Yes.

Agency Response GEF Secretariat comments

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

Oct 10, 2021: Please include the information on the portal as well.

July 17, 2021: Please include responses to comments to PFD as relevant.

Agency Response ST_7th October 2021

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

Council comments

Secretariat Comment at CEO Endorsement Request Oct 10, 2021: Please include the information on the portal as well.

July 17, 2021: Please include responses to comments to PFD as relevant.

Agency Response ST_7th October 2021

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

ST 2/11/2021

Response:

Annex B of the CEO ER is posted in this section of the Portal

STAP comments

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

Oct 10, 2021: Please include the information on the portal as well.

July 17, 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

ST 2/11/2021

Response:

Annex B of the CEO ER is posted in this section of the Portal

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 Please see the above comment on geo-reference.

Agency Response ST_7th October 2021

Map provided in response to comment 8 above

Reference:

CEO ER, Annex E

ProDoc, Annex 3

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 Dec 9, 2021: The remaining comments addressed.

Nov 9, 2021: Please address comments on budget, support letter for execution, and gender.

Oct 10, 2021: Please address new and remaining comments above.

July 17, 2021: Not at this stage. Please address the comments above.

Review Dates

	Secretariat Comment at CEO Endorsement	Response to Secretariat comments
First Review	7/17/2021	
Additional Review (as necessary)	10/10/2021	

	Secretariat Comment at CEO Endorsement	Response to Secretariat comments
Additional Review (as necessary)	11/9/2021	
Additional Review (as necessary)	12/9/2021	
Additional Review (as necessary)		
CEO Recommendation		

Brief reasoning for CEO Recommendations