United Nations Development Programme

Project Document template for projects financed by the various GEF Trust Funds

Project title: National child project under the GEF Africa Mini-grids Program		
Country(ies): Djibouti	**Implementing Partner (GEF Executing Entity):** Ministry of the Environment and Sustainable Development (MEDD)	**Execution Modality:** Support to National Implementation Modality
Contributing Outcome (UNDAF/CPD, RPD, GPD): *UNDAF Outcome 6 - Good governance:* National and local institutions and actors ensure the effective, efficient and transparent management of public resources for inclusive and equitable development. *UNDAF Outcome 7 – Community resilience:* Livelihoods of poor rural and peri-urban communities are improved to enhance their resilience to climate risks, shocks and food insecurity. *UNDAF Outcome 8 – Equitable development of the regions:* The living conditions of the poorest populations are improved for better management and protection of natural resources and ecosystems strengthening resilience and promoting equitable regional development. *SNCC – National Strategy for Climate Change:* Issued in 2018 to focus on climate change in Djibouti.		
UNDP Social and Environmental Screening Category: Substantial	**UNDP Gender Marker:** GEN 2	
Atlas Award ID: 00106652	**Atlas Project/Output ID:** 00107281	
UNDP-GEF PIMS ID number: 6327	**GEF Project ID number:** 10471	
LPAC meeting date: 21/02/2022		
Last possible date to submit to GEF: 19/06/2021		
Latest possible CEO endorsement date: 19/12/2021		
Project duration in months: 48 months		
Planned start date: 23/11/2022	**Planned end date:** 1/11/2026	
Expected date of Mid-Term Review: 1/11/2024	**Expected date of Terminal evaluation:** 1/08/2026	
Brief project description: As part of the UNDP-supported, GEF-financed Africa Mini-grids Program (AMP), 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 solar based mini-grid systems to encourage scaled-up private sector engagement, while maintaining affordable end-user tariffs. The incremental reasoning underlying the project is that the implementation of de-risking (policy and financial) instruments will reduce or transfer the risks faced by private investors in mini-grids in Djibouti, hence, reduce the running costs and improve the commercial viability of mini-grids. In parallel, the project will also use levers to support the private sector to identify innovative business models and cost-reduction levers, and with the aim to become an active partner in the development of the mini-		

grid sector in the coming years. The project will also promote regional collaboration through continuous interaction with the AMP Regional Project.

These goals are achieved through supporting the Government with: (1) Advancing policies and regulations, including identifying minigrid delivery model(s) involving the private sector, with a range of complementary support on techno-economic analyses, institutional capacity building of the public sector, technical capacity of engineers and technicians, and quality assurance capacity of public organizations responsible for quality standards; (2) implementing pilot solar PV-batteries mini-grid projects to showcase the proposed model, as well as establishing and capacitating mini-grid industry associations to strengthen private operators and developers and encourage their participation in the mini-grid market and national dialogues; (3) designing appropriate financing mechanisms and building the capacity of small investors and domestic financial institutions to participate in the mini-grid market; and (4) running an effective digitalization strategy, M&E, QA and KM systems to oversee and guide project implementation.

FINANCING PLAN	
GEF Trust Fund grant	USD 3,071,347
UNDP TRAC resources	USD 50,000
(1) Total Budget administered by UNDP	**USD 3,121,347**
CO-FINANCIERS THAT WILL DELIVER PROJECT RESULTS INCLUDED IN THE PROJECT RESULTS FRAMEWORK (FUNDS NOT ADMINISTERED THROUGH UNDP ACCOUNTS)	
(2) Total confirmed co-financing to this project not administered by UNDP	**USD 15,790,000**
(3) Grand-Total Project Financing (1)+(2)	**USD 18,911,347**

SIGNATURES:

Signature on behalf of the Government of Djibouti	**Signature on behalf of UNDP**
H.E.M. Mohamed Abdoulkader Moussa Helem	Mrs. Emma Ngouan Anoh
Minister of the Environment and Sustainable Development	**UNDP Resident Representative**
Date/Month/Year: 23/11/2022	**Date/Month/Year:** 23/11/2022

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List of Acronyms and Abbreviations

ADDS	Djibouti Social Development Agency (Agence Djiboutienne de Developpement Sociale)
ADN	l'Agence Djiboutienne de Normalisation
AMDA	African Mini-grid Developers Association
BPPS NCE-VF	Bureau for Policy and Programme Support, Nature, Climate and Energy, Vertical Fund team
CCM	Climate Change Mitigation
CoP	Communities of Practice
DREI	De-risking Renewable Energy Investment
EE	Energy Efficiency
EPC	Engineering, Procurement and Construction
ESCO	Energy Service Company
ESMF	Environmental and Social Management Framework
GEF	Global Environment Facility
GEFSEC	Global Environment Facility Secretariat
GF	Guarantee Fund in Djibouti
GHG	Greenhouse Gases
GRM	Grievance Redress Mechanism
IDB	Islamic Development Bank
IP	Implementing Partner
KM	Knowledge Management
M&E	Monitoring and Evaluation

MERN	Ministry of Energy and Natural Resources
MFF	Mini-grid Funding Facility in Djibouti
MG	Mini-grid
MTR	Mid-term Review
MUET	Ministry of Urban Planning, Environment and Tourism
NDF	National Development Fund in Djibouti
O&M	Operation and Maintenance
PFD	Program Framework Document
PIR	GEF Project Implementation Report
PMU	Project Management Unit
POPP	Programme and Operations Policies and Procedures
PPG	Project Preparation Grant
QA	Quality Assurance
QAMF	Quality Assurance and Monitoring Framework
SDGs	Sustainable Development Goals
SEP	Stakeholder Engagement Plan
SESP	Social and Environmental Screening Procedure
TE	Terminal Evaluation
ToC	Theory of Change
ToT	Training of Trainers
UNDP	United Nations Development Programme

II. DEVELOPMENT CHALLENGE

i. Baseline description of the energy sector in Djibouti

It is the ultimate goal of all governments to provide universal access to modern energy services as a basis for development. In Djibouti, the baseline in the energy sector is that the Government owns and operates all power plants, including the only five solar PV mini-grid systems in Djibouti. 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[4]. 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.

From a climate risk perspective, climate change almost universally drives an increased demand for power, whether for cooling, increased pumping of water, other aspects, however, the increased demand of energy generated from non-renewable resources make climate change worse. As the goal of the AMP is to provide affordable clean power to remote areas, the demand for the project outcomes and outputs can only be seen to increase in the face of climate change. With many government resources stretched to cope with other possible impacts of climate change, sustainable mini-grids provide a means for, sustainable power to reach communities which otherwise may be have been without power or would have relied on fossil fuel power the with attendant challenges and adverse effects.

ii. Findings of the field trip to proposed pilot locations: Yobpki and Khor-Angar

During the PPG consultation process, MERN indicated that the pilot location proposed in the Concept Note, i.e. the southern part of Balbala, may not be the most suitable for the AMP demonstration pilots since it already has grid connection. Two alternative locations were proposed, those are: Yoboki and Khor-Angar. The PPG national team conducted field trips and gathered geographic, socio-economic and environmental data to provide initial insights on the proposed AMP pilots and their suitability for the proposed locations.

A. **Yoboki:** The village is located in the South-Western part of Djibouti, about 50 km from the town of Dikhil. With a population of about 2,000 persons, residing in about 250 households.
   - The village has a distribution system that covers most of the households and is reported to be in excellent condition. The main source of electricity is a community diesel-powered generation plant with a total capacity of 100 kVA, as well as a small solar PV plant (1.4-1.6 kW) for a small dispensary.
   - A management committee is responsible for O&M and for tariff collection at a monthly flat rate of DJF 2,500 (i.e. USD 14) per household for the supply of intermittent power for 6 hours/day (traditionally from 6 pm to midnight, used for lighting and ventilation). These households are equipped with breakers. The money is used to purchase fuel for the generator.
   - The capacity of the existing generator is reported to be insufficient for the village demand. Households are facing severe voltage drops which leads to breakdowns in the equipment installed in the dwellings (such as refrigerators). In addition, there are many traditional huts (toukouls) scattered in the vicinity of the village with no connection to the local grid.

[4] Interviews and discussions with stakeholders during PPG Phase

- The village has a total of 50 solar street lighting units, with some installed at community centers and playgrounds. Although the number could be said to be appropriate, but the lack of regular maintenance puts the need for additional units to enhance the illumination into question.
- The village has schools, shops, a water pumping station, community center and a dispensary, with some of these using stand-alone solar systems or diesel generators. There is also some income-generating activities in the village and the surrounding areas, e.g. small agriculture work, crafts, etc. Overall, the economic benefits for the village are noted to be extremely limited. A telecom installation exists but the mobile network is reported to be unstable.

B. **Khor-Angar:** Located in the north of the country (about 320 km from Obock), the village of Khor-Angar is a fishing village much smaller in size than the village of Yoboki. The village is inhabited by nearly 50 households for about 250 people.

- Existing infrastructure is limited to a containerized seawater desalination unit, financed by the Islamic Development Bank (IDB). The unit supplies water to the village, but also to a military base and a national coast-guard base located near the village. However, the equipment is reported to be in poor condition, with the technician operating the unit for only one hour per day.
- The village has no connection to grid-electricity. The villagers have no access to electricity with the exception of a few generators – some of which are not working for lack of maintenance, and a small solar system which some households installed for their use.
- The Government recently initiated the "Dry Land Project" which aims to build upon the villagers' experience and fishing and help them secure sustainable revenue streams.
- In December 2020, the Djibouti Agency for Social Development (ADDS) installed about 15 solar street lighting units, but the number is reported to be insufficient to properly illuminate the village.

iii. Barriers to the commercialization of mini-grid development in Djibouti

Previous and ongoing interventions by the authorities and development partners encountered common barriers which ought to be taken in consideration during the design of new interventions. The following barriers limit the government's ability to utilize solar and hybrid mini-grid development as an approach towards achieving universal electricity access:

- Limited data on potential opportunities for mini-grid development and a model for tariff calculations that is commercially viable for private sector companies,
- Lack of a clear institutional setup and a national focal point for mini-grid development,
- Lack of quality standards for system components and technical education on low-carbon mini-grids,
- Limited capacity of local EPCs and ESCOs to undertake tender preparation and O&M services,
- Limited representation of private sector in rural electrification planning,
- Limited access of ESPs to financial schemes & incentives, and
- Lack of platforms dedicated to knowledge sharing and dissemination.

In conclusion, there are many challenges facing private sector engagement in the development of the mini-grid sector in Djibouti, and consequently limiting the government capacity to undertake rural electrification plans and achieve universal energy access. By participating in the Africa Mini-grid Programme (AMP), the Government aims to overcome these challenges. Thus, the AMP in Djibouti project is designed to support the authorities and work on enhancing the capacity of the public sector, but also to work with private sector players, e.g. EPCs, ESCOs, as well as local investors, to enhance their capacities and processes to become more efficient in preparing winning tenders and managing O&M processes that generate profit, yet achieve the highest possible social returns for the electricity users in off-grid areas.

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. The COVID-19 crisis has highlighted the importance of reliable and affordable access to electricity for enabling essential health service delivery[5], and

[5] Access to modern and reliable energy is essential for lighting of health facilities, to enable night-time service provision, power

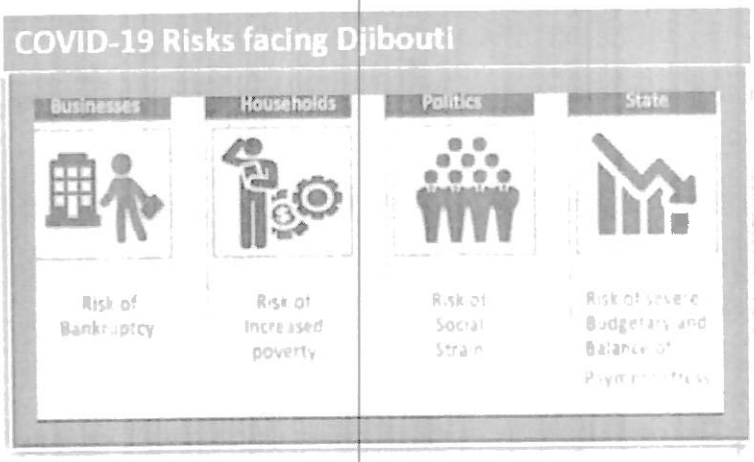
underpinning the ability of communities to abide by social-distancing measures and overcome the disruption to economic activity[6]. Also, over the medium to long term, access to reliable, affordable, clean energy will be crucial to support economic recovery. Not only are investments in off-grid renewable energy important levers to create jobs and generate financial savings but increasing energy access for the most vulnerable population creates opportunities for local economic development that enhance resilience to shocks and crises. Over the long term, access to reliable, clean energy reduces pressure on ecosystems and may contribute to reducing the likelihood and spread of zoonotic diseases[7].

iv. Health and socio-economic impacts of the ongoing COVID-19 pandemic on Djibouti

Djibouti is facing an unprecedented economic crisis due to COVID-19 threatening hard-won development gains of 20 years. Djibouti struggled to grow its economy due to a largely unskilled labor force, limited resources and harsh climate conditions. Informal and small businesses, representing more than70% of all jobs, are heavily impacted. This economic tsunami is likely to send back to poverty the most vulnerable and disrupt the social cohesion.

Djibouti has enjoyed its rapid and steadfast economic growth with per capita GDP growing at an average rate of 7% on an annual basis in recent years, thanks to the massive public debt-financed investments in infrastructure, mainly in trading and port administration. Rapid economic growth in the recent past (from 6.7% GDP growth in 2017 to 8.4% in 2018) was aligned with ambitious goal of "Djibouti Vision 2035" which aimed at tripling the per capita income and creating more than 200,000 jobs by 2035. Projection of attaining 9.7% GDP growth in 2021 is considerably affected by the global pandemic.

The pandemic of COVID-19 jeopardizes this positive trend and may scale back hard-won achievements. 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.



The realization of the fact that Djibouti is highly food-insecure and is highly vulnerable to such external shocks was made even more evident during the lockdown. Djibouti imports 90% of its food and is one of the highly food insecure countries in the region. Pre-existing conditions of food insecurity and strained food self-sufficiency, primary health care system, education, access to electricity and water supply have already been far from satisfactory. 20.3% of the population are under the extreme poverty line whereas 35.3% are under widespread poverty[8]. Agricultural production is almost non-existent, partly because of drought and partly because of poor soil quality. Only about 10% of the total land area of Djibouti is arable and fit for agriculture, and this limited arable land is under the threat of climate risks.

Unemployment rate in Djibouti is at 39% and 72% of youth; however, a considerable number of the "unemployed" population is engaged in one or the form of micro/small or medium scale informal businesses. The participation of

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medical devices (e.g. ventilators, which are critical to tackling COVID-19), provide clean water (e.g. pumping and filter), enable remote health applications, facilitate public health education and the dissemination of information, enable cold chains to make vaccines and other medications available, and with refrigeration, allow for blood-banking. It can also be a factor in attracting and retaining skilled health workers and providing faster life-saving emergency response.

[6] Access to modern and reliable energy increases household-level resilience and capacity to overcome shocks and crises (e.g. savings to wait out temporary unemployment or loss of market access) and improves the capacity of remote communities to attend to their core needs, even in the face of movement restrictions, by guaranteeing a reliable source of energy independent of vulnerable supply chains.

[7] Off-grid energy reduces pressure on ecosystems by providing an alternative to fuel wood (electric cooking), by avoiding the need for transmission infrastructure, and by improving food security through cold chains and refrigeration. This can lower the risk of emerging infectious diseases through minimizing wildlife-to-human transmission.

8 UN and Partners COVID-19 Response Plan, Djibouti. August 2020

women in the labor market is still limited Women represent 25% of the 12,400 civil servants in public administration, compared to 75% men. The staff gap between women and men is more accentuated in technical ministries[9].

The pandemic is hitting young people and they are facing multiple shocks, including disruptions to education, training and on-the-job learning and greater difficulties in finding good quality jobs. Young women are facing an increasing double burden to manage both paid work and providing unpaid care at home due to widespread school closures. Other vulnerable youth, including young persons with disabilities and refugees in encountering additional hardships on top of the barriers that they face to accessing decent work opportunities. This challenging job market contributes to the rapid shift of young people's mindset from employability to entrepreneurship. Despite their ambition, the administrative process of the business registration remains undeveloped which discourages entrepreneurs from officially registering as government accredited businesses. The high registration fee and other relevant taxes are also heavy burdens that young people can hardly overcome.

Aside from youth, the COVID-19 pandemic has also severely influenced local SMEs. The socio-economic 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-à-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.

Informal MSMEs accounting for nearly 70% of the job market have also been severely affected by the pandemic and numerous informal businesses such as street vendors, taxi drivers and food service providers have lost their income sources. They are mainly unregistered small-scale units, often employing five or fewer undeclared low-skilled workers, including unpaid family members, mainly women, who labor in precarious conditions without social protection or health and safety measures at the workplace. They have low productivity, low rates of savings and investments, and negligible capital accumulation which make them extremely vulnerable to economic shocks and are often excluded from COVID-19 crisis related short-term financial assistance programmes for businesses. This activity will fill that gap.

For Businesses and the self-employed, unfortunately, Covid-19 is adding to the multiple vulnerabilities and challenges to the country's economic resilience. In addition to the environmental and external shocks such as drought, floods and infectious diseases, the lack of basic information on the procedures for registration, tax filling, microfinancing requirements, bank account opening requirements along with the support services to open and run the businesses are very preliminary thereby posing hindrances to enterprise development and job creation opportunities. Most of the services and information available in this regard is concentrated in the city of Djibouti and almost non-existent in rural areas. On the other hand, the microfinance landscape in Djibouti is still at a low stage of development, having started to be structured and institutionalized in 2007, with the entry into force of the first law regulating this sector and the adoption of a national microfinance development strategy. Getting access to financing options including loans is a big hurdle for the MSMEs and hence the growth of MSMEs is hampered and not meeting expectations.

Now, more than ever, it is crucial to invest in youth and business owners, especially SMEs and entrepreneurs through multiples practical and scalable measures to address short- and long-term socioeconomic impacts caused by the COVID-19 crisis on an emergency basis but also with a deliberateness to impact sustainability, allowing these entities to recover immediately and helping to ensure their survival from further health and economic disaster.

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. The COVID-19 crisis has highlighted the importance of reliable and affordable access to electricity for enabling essential health service delivery, i.e. access to modern and reliable energy is essential for lighting of health facilities, to enable night-time service provision, power medical devices (e.g. ventilators, which are critical to tackling COVID-19), provide clean water (e.g. pumping and filter), enable remote health applications, facilitate public health education and the dissemination of information, enable cold chains to make vaccines and other medications available, and with refrigeration, allow for blood-banking. It can also be a factor in attracting and retaining skilled health workers and providing faster life-

[9] PNG 2011-2021, statistics 2010. Accessed on 5.05.2019.

saving emergency response. It also underpin the ability of communities to abide by social-distancing measures and overcome the disruption to economic activity, i.e. access to modern and reliable energy increases household-level resilience and capacity to overcome shocks and crises (e.g. savings to wait out temporary unemployment or loss of market access) and improves the capacity of remote communities to attend to their core needs, even in the face of movement restrictions, by guaranteeing a reliable source of energy independent of vulnerable supply chains.

Also, over the medium to long term, access to reliable, affordable, clean energy will be crucial to support economic recovery. Not only are investments in off-grid renewable energy important levers to create jobs and generate financial savings but increasing energy access for the most vulnerable population creates opportunities for local economic development that enhance resilience to shocks and crises.

Over the long term, access to reliable, clean energy reduces pressure on ecosystems and may contribute to reducing the likelihood and spread of zoonotic diseases, where off-grid energy reduces pressure on ecosystems by providing an alternative to fuel wood (electric cooking), by avoiding the need for transmission infrastructure, and by improving food security through cold chains and refrigeration. This can lower the risk of emerging infectious diseases through minimizing wildlife-to-human transmission.

III. STRATEGY

In the previous section, we presented the baseline opportunities and challenges. In this section, we focus on the proposed project design for the AMP in Djibouti, discussing the embedded assumptions it entails, the linkages between the AMP in Djibouti and the Regional AMP project, and the measures proposed to establish an enabling environment for mini-grid development with private sector support and engagement.

i. Theory of change and linkage to the Regional AMP Project

The AMP in Djibouti follows the AMP's overall ToC, developed in the PFD, which acknowledges that the initial capital investment required to develop solar PV-battery mini-grids is currently not competitive with fossil-fuel based alternatives. The AMP envisions that once the right frameworks to secure long-term investment in renewable-based mini-grids is provided, solar-based mini-grids will be competitive, and private capital will flow resulting in various program benefits, inter-alia: investment at scale, GHG emission reductions, higher electrification rates and lower tariffs for end-users. As such, the ToC of the AMP involves a number of logical steps: (1) organize interventions into three key areas (components): policies and regulations; business model innovation and private sector; and innovative finance; (2) create program specific outputs under each of these three areas that are designed to systematically target the underlying investment risks at the national level for renewable energy mini-grids; and (3) mitigating the underlying investment risks will in turn inverses the earlier relationships, resulting in three key beneficial drivers for the competitiveness and financial viability of renewable energy mini-grids: reduced hardware and soft costs, and increased revenues and economies of scale. Collectively these three beneficial drivers result in a virtuous cycle of lower generation costs. The figure below presents the ToC diagram for the AMP.

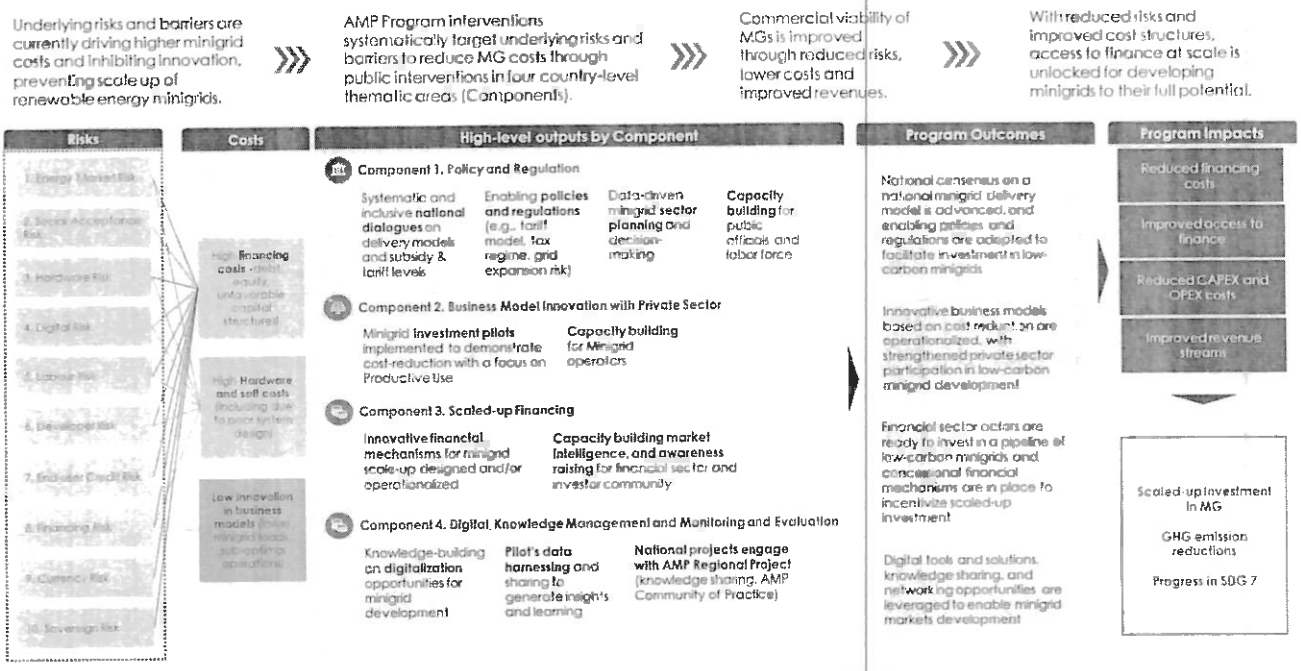


Figure 1: Theory of Change (toC) diagram of the AMP

The objective of the AMP in Djibouti is 'Supporting 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.' More specifically, the project aims to increase the market competitiveness of solar PV-battery mini-grid systems, hence, support the expansion in energy access through the use of renewable resources. Importantly, in terms of government coordination, the project will establish of a national focal point to oversee all matters related to mini-grid development and coordinating the effort of the different parties to ensure efficient intragovernmental collaboration and facilitated financial support to the mini-grid sector.

These central ideas have influenced the contextualization of the components, outcomes and outputs introduced by the AMP in the Program Framework Document (PFD), such that the AMP in Djibouti continues to be aligned with the Regional AMP Project design, yet responsive and adaptive to the national context and needs in Djibouti.

The following figure captures the four elements shaping the proposed strategy for the AMP in Djibouti, and the overarching Knowledge Management (KM) and digitalization targets on the national and regional levels.

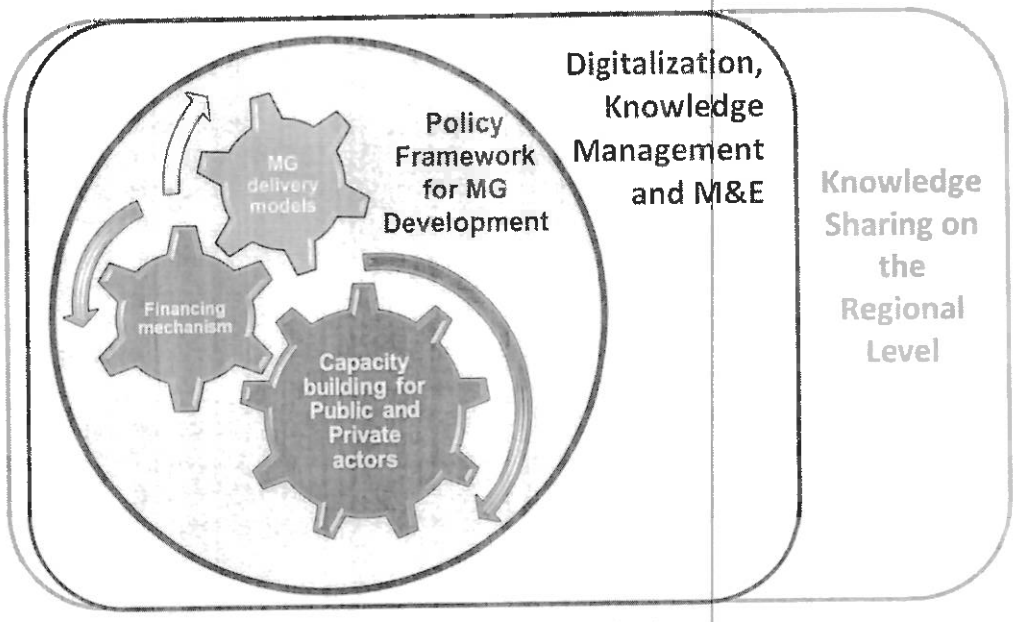


Figure 2: Overview of the proposed design for the AMP in Djibouti

In this context, financial de-risking and private sector participation was one of the key themes guiding the strategy of the AMP in Djibouti as demonstrated in focus on increasing the funds dedicated to establishing a national focal point and industry association for mini-grids in Djibouti. The technical capacity building on solar mini-grids to encourage local knowledge production is supplemented by capacity building on financing mechanisms and instruments. In addition, all projects under the AMP has an output dedicated to conducting a DREI (De-risking Renewable Energy Investment) analyses, where DREI ia a quantitative framework developed by the UNDP to assist policymakers in developing countries to cost-effectively promote and scale-up private sector investment in renewable energy, and the needs assessments for specific locations.

Furthermore, the AMP in Djibouti will align with the AMP Regional Project to foster knowledge sharing, learning, and synthesis of experiences in a multi-directional manner– i.e. flowing from the AMP Regional Project to the Djibouti project, and vice versa, and between the Djibouti project and other national projects within the Program. The AMP Regional Project will connect countries to knowledge, resources and networks of best practice and will support the rapid deployment of expertise, solutions and tools to support on-the-ground implementation. The main role of the AMP Regional Project is to make best practices in regulations and policies, innovative and inclusive business models, digitalization and financing available to all AMP beneficiary countries.

ii. Proposed mini-grid delivery model: From EPC Contracts to IPPs and ESCOs

The concept of a minigrid 'delivery model' is a key concept for this project. Text box 1 and 2 below seek to set out a common understanding of the concept, its importance to the project, and the current status of the minigrid delivery model in Djibouti.

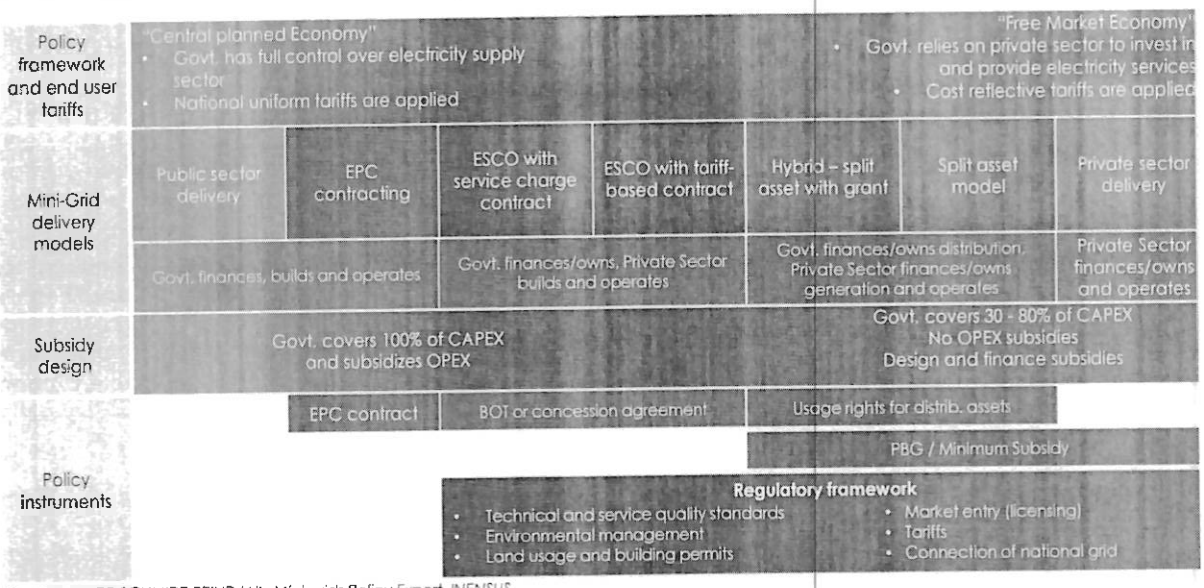
In Djibouti, as set out in box 2, the Government has been adopting an EPC delivery model for mini-grid development, where the Ministry of Energy and Natural Resources (MERN) hires an EPC company to design, supply and install mini-grids, then takes over the O&M and becomes responsible for distribution 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.

Box 1 The Concept of a Minigrid Delivery Model

Definition: *A minigrid delivery model, determined by the national government, is the cornerstone of a country's over-arching minigrid regulatory framework. It defines who finances, builds, owns and who operates and maintains the mini-grids. Where applicable, it seeks to engage the private sector. A minigrid delivery model is closely associated to other key components of a minigrid framework, including tariff structures/mechanisms and subsidy levels/mechanisms.*

In each country, identifying one (or more) delivery models will provide a framework for all sector stakeholders to plan for the longer term, particularly with regard to mobilizing private investment as one of the main objectives of the project. The Figure below describes the spectrum of design options for delivery models, across a number of different elements (ownership, policies, finance etc.)

Figure 3: Conceptual outline of minigrid delivery models



Source: JAKOB SCHMIDT-REINDAHL, Mini-grids Policy Expert, INENSUS

This decision-making process around identifying a delivery model is complex and should ideally be done in the form of a national dialogue involving all relevant stakeholders to varying degrees (different ministries such as energy, finance, health and environment, local authorities, the public, the media, the beneficiary communities, utilities, the private sector, and other key stakeholders) in order to build a national consensus on the basis of which large-scale deployment of mini-grids can be accelerated and have a sustainable impact.

Pilot projects planned under this project will also seek to fit into this framework. The more clarity there is on the part of the government regarding the choice of delivery model, the easier it is to develop or plan business models which can reduce minigrid costs. A clearly identified delivery model minimizes the risk of investments being made based on assumptions that are not in line with government expectations and may lead to conflicts and economic losses down the line. It also helps the government to answer the important questions related to the rural electrification sector to provide clarity for private investors and operators and build confidence

Looking ahead, during PPG consultations, a proposed model involving the private sector was referred to as the "EPC+ESCO" delivery model. This model envisages continuing with the business-as-usual for installation and commissioning, i.e. the government financing the CAPEX and entering into EPC contracts, yet delegating the O&M

responsibilities to the private sector by entering into a second contract, awarded to an Energy Services Company (ESCO) to be responsible for O&M. Under this model, tenders will follow a cost-of-service pricing model, where ESCOs submit their most competitive end-user tariff in the financial offer; however, the model shall rely on the pricing strategy for rural electrification and tariff calculation structures presently under development by the UNDP-GEF project titled "Promoting a better access to modern energy services through sustainable mini-grids and hybrid technologies in Djibouti" – closing in 2022.

Box 2 Current Status of Mini-grid Delivery Models in Djibouti

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 mini-grid 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 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.
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.

The possible options for each aspect need to be thoroughly understood by stakeholders and substantiated with real examples. The decisions for/against certain options must be openly discussed and weighed up in terms of the interplay between the aspects and the resulting consequences for the sector. These decisions are often influenced by the historical and cultural background on the one hand, and by the current political and economic situation of a country on the other.

To this end, one of the first activities envisaged in the project is to get all relevant stakeholders on board and initiate a process of national dialogue to weigh up all aspects of mini-grid delivery models (See Output 1.1 in the next section), with the aim of defining one or several sector-wide delivery models. The project's pilot(s) will also explore delivery models by testing market reception of the proposed models, tender documents and financing mechanism. This can further contribute to the development of the regulatory framework, complementing ongoing work in this area by the Government of Djibouti.

iii. Pilot projects: Capacity and GHG mitigation

The GEF investment funds allocated for implementing pilot mini-grid projects for delivery model demonstration under the AMP in Djibouti is USD 1,265,312.

The implementing of mini-grid pilots aims to showcase the EPC+ESCO delivery model for mini-grid development. A detailed Procurement Plan for the AMP in Djibouti will be developed during Year 1 of implementation when further studies are conducted and the exact location and systems' capacity are identified.

Based on the findings of the field visits conducted during PPG development to Yoboki and Khor-Angar, it is assumed that the pilot in Yoboki will constitute adding solar PV-battery systems to an existing diesel-generated mini-grid, while Khor-Angar can be considered a greenfield. However, the final locations and types of the pilots will be decided at project start. Similarly, the exact financing mechanism to be used for the release of GEF funds will be decided during implementation, noting that it shall put in place protections for the efficient and appropriate use of donor funding, such as additionality and minimal concessionality considerations, third-party ownership, etc., based on which the level of GEF financial support for pilots will be determined. Such methodological assessments will be part of an overall package of financial due diligence/assessments that will be performed during the tender process to select pilot sites/developers.

Using the GEF investment, the project is expected to implement pilot project(s) with a total solar PV capacity of 0.84 MW, resulting in direct GHG emissions mitigation of about 39,717 tCO_2eq. During the 20 years following project closure, the project is expected to result in 36,000 tCO_2eq of indirect GHG emissions mitigation. [10] The detailed calculation is presented in Annex 12.

iv. Digitalization of the mini-grid sector

An emerging theme from lessons across minigrid systems is the importance of digital tools and solutions as a key driver for minigrids and minigrid cost-reduction as described below in Box 3. Digitalization of mini-grid development provides an opportunity for cost reduction. A key mechanism for realizing this opportunity is the development of a digital platform for tendering and monitoring of AMP minigrid pilots. This digital platform will provide key functionality in terms of acting as the (i) national digital convening platform for key minigrid 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.

[10] In line with the protocol established in the AMP Program PFD, 10% of the indirect GHG impacts calculated for this project are allocated to the regional child project core results indicator, in line with the apportioning of the overall program budget. This reflects the benefits of this and all other national child projects accessing the regional child project's support.

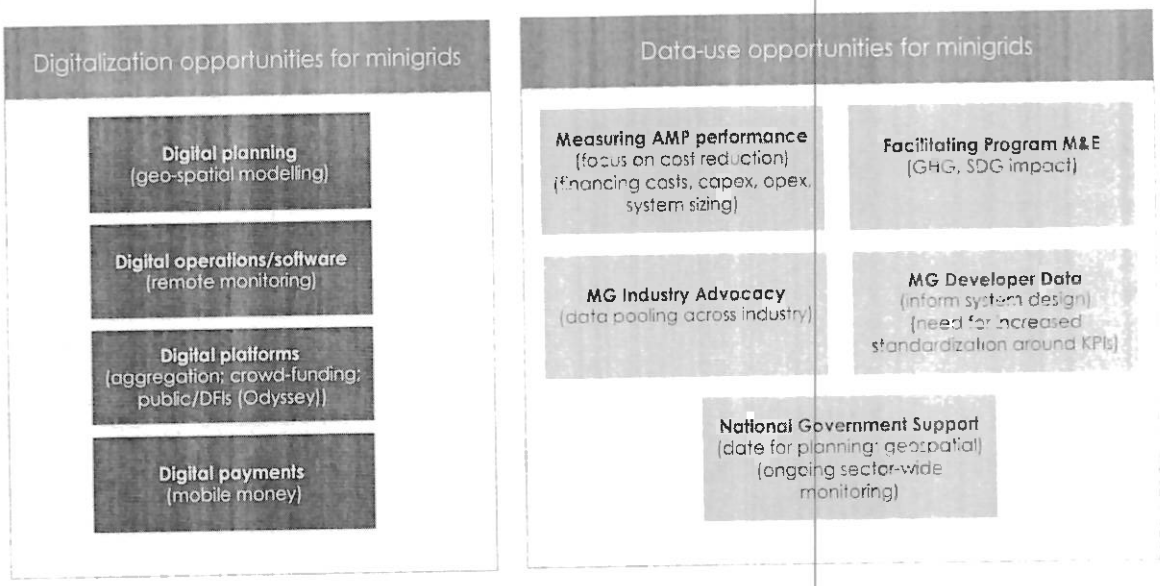
Box 3 Digitalization Mini-grids

Digital technologies and solutions are fundamental to enabling off-grid electrification. In fact, the emergence of minigrids as a viable solution to electrify remote and isolated communities relies strongly on certain digital technologies such as *remote monitoring* of minigrid operations and the use of *digital money* to collect customers' payments. The Figure below represents an initial categorization of the digital and data opportunities for minigrids under the AMP.

Digital opportunity for minigrids. It's increasingly clear that digital is a key entry point across minigrid market development. The Figure below shows different categories of digital solutions in the minigrid sector: (i) digital planning, (ii) digital operations, (iii) digital aggregation platforms, and (iv) digital payments. In common to all these is the potential of digital technologies – whether used by policy makers, financiers or minigrid developers - to lower minigrid costs, reduce risks, and address barriers to scale.

Data use opportunity for minigrids. Many opportunities around digitalization are related to leveraging the large amount of data generated by minigrid projects to surface actionable insights, learning and optimization to consolidate business models and technical solutions for scaling-up minigrids. For instance, the use of operational performance information from existing systems to forecast demand and design future minigrid can help avoid a very common pitfall of many minigrid systems which are significantly oversized and hence not financially viable.

Figure 4: Digital and data opportunities for minigrids in the AMP



The potential for using data and digital tools and solutions to add value at various stages of the minigrids value chain remains largely untapped. With enhanced capacity, **minigrid developers** could streamline their operations though smart metering and remote control of their assets and potentially reduce operations and maintenance costs by about 15% to 30%(*) through reduced site visits, labor and component replacement costs. **Government stakeholders** could leverage digital solutions for energy sector planning, to streamline licensing, monitor quality of service and broadly improve sector oversight. However, data of sufficient quality is not always available for these purposes, and government stakeholders often lack the necessary technical capacity. And while data could be a tremendously valuable asset in the minigrid sector, this potential that remains largely underutilized due to the lack of standardization and common data reporting protocols and the fact that this sector is still very nascent and remains relatively fragmented.

Opportunities across the Program, and with the AMP regional project. The AMP provides a unique opportunity to develop a single set of metrics and guidelines for data collection, and use them to collect data from minigrid investment pilots across different national projects which the AMP Regional Project can then aggregate, derive insights from, and systematically disseminate knowledge with participating AMP countries and with the broader minigrids sector in Africa. At the same time, the link between the regional project and the total of eighteen (18) national child projects provides a unique 'distribution channel' opportunity across Africa for AMP to mainstream the use of digital tools and solutions for minigrids cost-reduction and scale-up.

(*) AMMP Technologies. "Reducing the cost of operations and maintenance for remote off-grid energy systems." September 2018.

For the reasons above, the AMP in Djibouti includes an output for implementing a digital platform for tendering and data management of mini-grid systems (See Output 4.2 in the section below). The platform operation will be linked to the work of the focal point for mini-grids in Djibouti (to be established under Output 1.3) and other existing tendering procedures at the Ministry of Energy and Natural Resources (MERN) as the ministry in charge of energy projects. Component 4, on digital, develops these concepts further.

IV. RESULTS AND PARTNERSHIPS

i. *Expected Results*

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. These goals are achieved through supporting the Government with: (1) Advancing policies and regulations, including identifying minigrid delivery model(s) involving the private sector, with a range of complementary support on techno-economic analyses, institutional capacity building, the technical capacity of engineers and technicians, and the quality assurance capacity of public organizations responsible for quality standards; (2) implementing pilot solar PV-battery mini-grid projects to showcase the proposed model, as well as establishing and capacitating mini-grid industry associations to strengthen private operators and developers and encourage their participation in the mini-grid market and national dialogues; (3) supporting the design of appropriate financing mechanisms and building the capacity of small investors and domestic financial institutions to participate in the mini-grid market; and (4) running an effective digitalization strategy, Monitoring and Evaluation (M&E), Quality Assurance (QA) and Knowledge Management (KM) systems to oversee and guide project implementation.

Linkages to the AMP Regional Project: there are strong linkages with the AMP Regional Child Project across all project components, in particular with the Regional Project Component 2 which will provide access to (if requested) a variety of dedicated technical and operational support as described in the following box:

Box 4 Linkages to the AMP Regional Project –Access to technical and operational support

As part of the AMP network, the project will have access to (if requested) a variety of dedicated technical and operational support from the AMP regional project as follows:

1) **Access to specialized expert international consultants in selected areas** (DREI, data, GIS modeling, mini-grid business models, etc.) hired, retained, contracted and paid for by the AMP regional project and made available to all participating national project staff and selected beneficiaries on as needed basis. The areas of support, listing of available firms/individual consultants under contract by the regional project and protocol for how the project can request and/or access such expertise (if needed/requested) will be elaborated in the first year of regional project implementation and disseminated to this project and the staff of all other participating AMP national projects. This support may range from virtual assistance to in-country missions. All requests for such assistance must be approved by the project manager of the AMP regional project management unit.
2) **Provision of a database of qualified international consultants and firms** disaggregated by their expertise in the four main components of this national project and other key operational areas (procurement, M&E, communications, etc.). These individuals will not be retained or contracted under the regional project but rather provided to the project for informational purposes only in an effort to assist in identifying high-quality experts and firms who may be available for contracting by national governments under their own procurement rules and modalities.
3) **Provision of generic terms of reference (ToR) for various standard activities** (mentioned above) under the four main components of the national project.
4) **Advisory support by the AMP regional project management unit** to staff of the project on trouble shooting (operational support, ToR reviews and problem solving) on an ad-hoc and as-needed basis. These services will be paid for the regional project and available on a first-come/first-serve bases under a protocol to be established by the regional project.
5) **Specialized advisory support for implementing UNDP's minigrid DREI analyses.** During project implementation, the UNDP DREI Core team, working with the regional project, will make available to national teams and consultants the resources and tools to conduct full quantitative DREI applications, and will provide ongoing support and quality assurance.

A full detailed elaboration of these offerings and the protocols attached to each service will be communicated to the project at the inception workshop of the regional project and at the inception workshop of each national project.

This section presents the components, outcomes and outputs comprising the project's strategy and expected results. It also includes proposed activities to help guide the project team during implementation. These activities are subject to change based on future developments on the national or sectoral levels, noting that all consultation meetings, capacity building workshops and public campaigns shall be used as opportunities to promote diversity and gender balance, notwithstanding balanced representation of relevant stakeholders. Similarly, all surveys, market research activities, gap analyses, technical studies and SES assessments shall use gender-disaggregated data gathering methodologies and present their findings disaggregated by age and gender.

Component 1. Policy and Regulation

This component aims to build upon the GEF6 mini-grid development project by conducting more in-depth analysis of the commercial viability of the proposed regulatory framework and tariff structure. In addition, it tackles a few ingredients which are crucial for the longevity of any proposed delivery model, such as establishing a focal point to oversee all matters related to mini-grid sector development. During the implementation of the AMP in Djibouti, the focal point will be collaborating with the project team on the tasks related to improving the institutional setup of the mini-grid sector and enhancing the public sector capacity for engaging with private sector EPCs and ESCOs. As such, the capacity building activities directed towards capacitating staff members at the focal point will be conducted in the form of on-job training. The role of the proposed focal point extends beyond the lifetime of the AMP in Djibouti project. At project end, the AMP team will hand over any ongoing responsibilities to the staff at the focal point, such that they can serve as the main point of contact on future mini-grid projects, and ensure that each intervention in the mini-grid sector builds upon previous work. This component also involves the development of technical standards for low carbon mini-grid system components, and embedding mini-grid education in university certificates and vocational training programmes in Djibouti.

Outcome 1: Stakeholder ownership in a national mini-grid delivery model is advanced, and appropriate policies and regulations are adopted to facilitate investment in low-carbon mini-grids

Output 1.1. An inclusive national dialogue to identify mini-grid delivery models is facilitated, clarifying priority interventions for an integrated approach to off-grid electrification.

Activity 1.1.1. Support the establishment of a working group or a similar platform that includes all relevant stakeholders from Government, local authorities, civil society, local media, private sector, rural populations, and others, and initiate a national dialogue to identify the optimal mini-grid delivery model based on the key questions "government control over mini-grid assets and operation", "the required (and available) levels of public funding", "the resulting electricity retail tariffs" and "the required regulatory framework".

Activity 1.1.2. Provide input to the discussion in the form of gap analysis, best practice reports, and suggestions for delivery models and make sure that the probable consequences of any decision taken for the overarching framework are evaluated and well understood.

Activity 1.1.3. Align the ongoing dialogue with activities implemented in parallel under the other outputs and loop respective (pre-)results back into the discussion.

Output 1.2. Mini-grid DREI techno-economic analyses carried out to propose most cost-effective basket of policy and financial de-risking instruments and contribute to AMP Flagship Report on cost reduction.

Activity 1.2.1. *Initial, full quantitative national DREI analysis (Year 1).* A full quantitative DREI application will be conducted in the first year of project implementation. The PMU will assemble a task team to perform the national DREI analysis including consultants (international, national), government stakeholders, and members of PMU. Deliverables will include interviews, completed financial models, and national reports/knowledge products. Initial TORs for these consultants are annexed to the project document (ProDoc). This national analysis will be funded by the national project. The AMP Regional Project can in turn provide various support on DREI to the national project: including finalizing TORs for the country-level, recommendations (in the form of a vetted roster of consultants) on international consultants that are trained on DREI already, as well as resources and tools (Excel models etc.) to conduct the DREI analysis. Results from the full quantitative national DREI analysis will be shared with the regional project to feed into a regional flagship AMP knowledge product, across all AMP countries, on DREI and lowering mini-grid costs. This regional AMP knowledge product will be funded by the regional project.

Activity 1.2.2. *Dissemination of DREI analyses and adaptive management (Year 2).* In the first half of Year 2, the project will disseminate the national DREI analysis and, in the second half of Year 2, the flagship DREI regional knowledge product (south-south learning) through dissemination activities at the national level. Together, these dissemination activities will encompass 3 or 4 round-table workshops with government, private sector and other key stakeholders, over a 12-month period. Along-side these dissemination activities, the PMU will utilize the findings of the national DREI analysis to inform any adaptive management of the national project's outputs/activities, to address identified needs for public measures arising from the national DREI analysis. These activities will be funded by the national project.

Activity 1.2.3. *Coordination with regional project on national DREI analysis update (Year 4).* In the final year, or year 4, of the national project's implementation period, whichever happens first, the original national-level DREI analyses will be refreshed to track evolutions in financing costs as well as in hardware and soft costs. For administrative efficiency, the regional project will fund and execute this update (a 'light quantitative DREI analysis'), on behalf of the national project. The deliverable will be a brief note of 2-5 pages on the DREI national update. The data from the national refreshed DREI analysis will be fed into an update note to the year 2 flagship regional DREI knowledge product, which will provide an end-of-program overview of the evolution in mini-grid costs across AMP countries. The national project's contribution to this activity will be: facilitating the DREI national update (to be executed by the regional project); disseminating the findings of the national DREI update note, and the update to the regional flagship DREI product.

Output 1.3. Institutional set-up for rural electrification assessed to support the establishment of a focal point for mini-grid development, and institutional capacity building provided on technical, managerial, and regulatory issues.

Activity 1.3.1. Analyze the existing institutional setup for rural electrification, including performing needs and capacity assessment to the key public parties involved in the energy sector. Present the summary of findings in an inception report for government's review and comments.

Activity 1.3.2. Nominate an entity or a department within the government, such as the Rural Electrification Department under the Energy Directorate or a regulatory body within the energy sector, to host a national focal point for mini-grid development in Djibouti and obtain consensus on the nomination from the nominated entity, Implementing Partner and national stakeholders involved in the implementation of the AMP project.

Activity 1.3.3. Conduct workshops and in-house consultations with ministries and authorities on the benefits and limitations of the existing institutional setups, discussing their proposals for improving the intra-government collaboration and work flow and obtaining feedback on the proposed structure and mandate for the focal point.

Activity 1.3.4. Establish the focal point for mini-grid development, including the legal documentation, organizational structure, statement of purpose and annual budget. The work will be carried out in collaboration with the CoPs (which will be set-up and managed by the AMP Regional Project).

Activity 1.3.5. Develop process flow charts and data flow diagrams linking the focal point to existing players in the energy arena. Present a final report summarizing the outcomes of the workshops and in-house consultation, and the recommendations for improving the institutional setup in Djibouti.

Activity 1.3.6. Review, select and adopt relevant online tools and/or register at one of the internationally recognized digitalized data platforms, such as Odyssey, to provide the Government in Djibouti with visibility on their mini-grid sectors, i.e. location of mini-grid systems, their type, capacity, ESCO contracts, and the tariffs charged by the operators (whether government or ESCO).

Activity 1.3.7. Support the ministries and authorities with the implementation of the recommendations and conduct capacity building activities for the staff of the newly established focal point based on the results of the needs assessment conducted under Activity 1.2.1.

Output 1.4. Public programmes (apprenticeships, certificates, university programs) to develop competitive, skilled labor market in the design, operation and maintenance of solar and hybrid mini-grids.

Activity 1.4.1. Analyze existing programs at universities, higher learning institutions, and vocational training centers to perform gap analyses and identify courses of relevance to mini-grids. Introduce the findings to these establishments, as well as to the authorities in charge of providing them with budgets, as an opportunity for learning scope expansion.

Activity 1.4.2. Support the development of partnerships between local institutions and international partners for the integration of courses on solar and hybrid mini-grid design, operation and maintenance, into existing engineering curricula and vocational training programmes. The work on the selection of courses and development of on-line and in-person courses will be conducted in close collaboration with the CoPs, led by the AMP Regional Project, to make best use of the capacity building material provided by the AMP Regional Project and the experience in other countries.

Activity 1.4.3. Organize Training-of-Trainers (ToT) workshops to train course providers from the selected local institutions on delivering the newly integrated courses, using course material from partner institutions. Translation of course material may also be required.

Output 1.5. Domestication of quality standards for solar mini-grid components, and institutional capacity of national authorities in-charge, i.e. standards organizations/bureau, strengthened.

Activity 1.5.1. Review existing domestic standards and identify the gaps requiring the introduction of new codes and standards for solar mini-grid system components, and the baseline of testing capabilities on the national level. Prepare a report and present the results to the in-charge authorities that are involved in standardization, market inspection and products' quality.

Activity 1.5.2. Develop new standards to fill the gaps based on existing international standards in coordination with development partners and regular consultations with public authorities and private sector on aspects of domestication.

Activity 1.5.3. Integrate the data collection processes required for quality control and assurance in the data flow diagrams developed as part of improving the institutional setup under Output 1.3.

Activity 1.5.4. Develop user manuals and guidance notes for the purchase of equipment in English, French and Arabic, and assist the authorities with the design of checklists and inspection plans, including field audits, market surveys, third party verification processes and reporting procedure.

Activity 1.5.5. Conduct capacity building activities to introduce the new standards, the corresponding audit and testing procedure, to capacitate relevant staff members at the authorities in-charge of standardization, importation and market inspections, and quality control and assurance, on the use of the new equipment and performing market audits.

Component 2. Business Model Innovation with Private Sector

This component focuses on the promotion of innovative ways to increase private section engagement in mini-grid sector development, which links to adopting a delivery model that makes economic operation possible.

As stated above, the EPC+ESCO delivery model appears promising in terms of private sector engagement. Based on an initial analysis during PPG development, the team identified two viable options on the related issues of tariffs for this model: (a) charging cost-reflective tariffs, i.e. set tariffs at levels that are high enough for private operator to generate sufficient profit; or (b) charging tariffs that do not reflect the real costs with the Government subsidizing the operation to guarantee profitability to the contracted ESCOs. The result of the studies presently conducted under GEF6 project, the proposed tariff structure, and how both are transformed into regulation, will form the basis for the decision on the delivery model to adopt for the AMP pilots.

The goal of the activities under this component is to provide concrete applications of the selected delivery model, and to promote complementary private sector business model innovation. Therefore, pilot projects will be implemented, consisting of solar PV-battery mini-grid systems, using the EPC+ESCO delivery model (or another - as may be recommended during implementation). During PPG development, MERN proposed to implement the pilot projects in Yoboki and Khor-Angar. During Year 1 of the AMP project implementation, additional studies and site assessments will be conducted to confirm the suitability of the proposed sites.

With regards to the technical assistance dimension of this component, it entails capacity building for private sector companies, with focus on potential bidders for low-carbon mini-grid EPC and ESCO tenders. To ensure the sustainability of the capacity building effort and the continuous improvement in private sector engagement and involvement in the mini-grid sector, the AMP will support the establishment of an industry association to become the hub for mini-grid knowledge sharing among companies and potentially responsible for carrying out post-project capacity building activities and ongoing communication with the focal point established under Output 1.3.

Outcome 2: Innovative business models based on cost reduction operationalized, with strengthened private sector participation in low-carbon mini-grid development

Output 2.1. Pilots for low-carbon mini-grids are developed, to demonstrate business models for off-grid electricity including productive use/innovative appliances, leading to cost-reduction in mini-grids.

Activity 2.1.1. Review the outcome of the GEF6 project to ensure that the proposed delivery model and tariff structure are aligned with the objectives of the Government of Djibouti in terms of creating a business enabling environment for the solar and hybrid mini-grid market. The tariff structure should then be used to advise the business model adopted by the AMP pilots and the preparation of tender documents for ESCOs.

Activity 2.1.2. Review the capacity and performance of existing mini-grids in Djibouti and conduct a technical study to assess the potential for using a standardizing design to promote the use of solar PV-battery mini-grid systems in Djibouti.

Activity 2.1.3. Conduct detailed site assessments for the proposed locations for the pilot projects, i.e. Yoboki and Khor-Angar, including needs assessment, demand sizing, and the applicable SES assessments in accordance with the project's ESMF, to confirm the capacity and type of the mini-grid systems to be installed in each location.

Activity 2.1.4. Develop a detailed project plan (the project's 'Minigrid Pilot Plan') for advancing the project's minigrid pilot(s)

The PMU will lead and develop, in close collaboration with other stakeholders and support from the AMP Regional Project, a detailed project plan (the project's 'Minigrid Pilot Plan') for advancing the pilot(s). Once prepared, the project's Minigrid Pilot Plan will first be reviewed for clearance by UNDP (CO and BPPS NCE), and then shared with the Board. This activity should be completed by the end of year 1.

Building on the initial design information in this project document and its annexes, the project's Minigrid Plan Pilot Plan will determine, among other aspects, the following:

- Clear objective for the pilot(s)
- The minigrid delivery model(s) which will be demonstrated in the pilot(s)
- The proposed type of pilot(s), here including: (i) greenfield pilots, including productive use and (ii) productive use overlays, on existing pilots. In both cases, proposed areas of productive use can be advanced
- The estimated target number of pilot(s), based on ex-ante estimates of available GEF INV
- Inputs, as necessary, on site selection, including based on geo-spatial mapping, for the pilot(s)
- Site-specific assessments and other requirements (e.g., demand sizing, social and environmental safeguards (SES) assessments, gender assessments, e-waste disposal). Some assessments may be needed to be performed by the project ex-ante, to inform follow-up competitive tenders
- The use of the digital platform for
    - Competitive tendering, as necessary.
    - Ongoing data collection from mini-grid pilot(s), including data-sharing requirements from mini-grid pilot(s), as well as digital hardware requirements (see two textboxes below)
- The project's approach to ensure minimal concessionality for the level of GEF INV support to the pilot(s) (when there are private sector beneficiaries)
- Review of the IP's modalities for transfer of GEF INV support to the pilot(s), ensuring they are aligned with UNDP's policies and financial rules.
- If a pilot includes GEF INV support for productive use, ensuring the pilot takes a third party ownership model to productive use equipment
- Coordination and rationale on any associated project technical assistance activities which may benefit the minigrid pilot(s)
- Brief summary updates, at the time of drafting the plan, on the status in Djibouti of
    - (i) any other solar-battery minigrid pilots (specifications, any results/findings to date), and
    - (ii) examples of minigrid productive use applications (specifications, any results/findings to date)

Box 5 Initial Indicative Specifications for Minigrid Digital Hardware and Software

Offering	Details
Hardware requirements per 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 • Various data cables and installation material • Optional: 24V backup battery • Optional: Cabinet for the complete monitoring system • Industrial internet router • Industrial or high quality Ethernet Switches
Hardware requirements per connection	• Smart meter

Box 6 Data sharing requirements for mini-grids

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.

Box 6b: Pilots and the Project's Environmental Safeguards Management Framework (ESMF)

Pilot minigrids funded by GEF INV are required to comply with all the relevant national standards of the country as well as UNDP standards on social and environmental safeguards, gender equity and stakeholder consultation. In support of this, an Environmental Safeguards Management Framework (ESMF), developed for the program, a gender action plan and stakeholder engagement plan accompany this ProDoc. The ESMF is structured as a program-wide framework that provides guidance that is both generically applicable to all AMP country projects as well as country specific. This guidance will have to be incorporated and considered in developing the environmental and social impact assessments and management plans for pilot minigrids.

A critical consideration under this ESMF is the need to ensure environmentally sound management of replaced equipment, including batteries, inverters and solar panels, after their usage. The responsible handling of waste with recycling of batteries and other recyclable equipment, should be clearly documented, budgeted and monitored in compliance with national and UNDP safeguards requirements.

Activity 2.1.4 *Design of tender process for pilot(s) using a digital platform*

The project's pilot(s) may involve private sector engagement in various forms, including models involving private sector minigrid ownership, private sector EPC, and private sector O&M services. Where there is private sector engagement in the pilot(s), a competitive tender process will be executed using the digital tendering feature of the digital platform procured under Component 4.

The digital platform will have, at a minimum, the following features:

- Complete end-to-end management of e-tenders for mini-grids customized to specific project needs
- Complete data management for financial schemes, including customized technology solutions for claims submissions and independent verification
- Remote verification of connections through smart meter integrations
- Automated M&E analytics for all project/program indicators (connections deployed, amounts paid, gender/environmental impact metrics, etc.

Under this activity, the PMU, working with the digital platform vendor, specialist engineering, financial, procurement, and legal expertise, and the AMP regional project, will translate the approach set out in the project's Minigrid Pilot Plan into the design of a customized tendering process on the digital platform, including requirements, specifications and evaluation criteria. At the end of this activity, the tendering process on the digital platform will be ready to launch. The tender process itself should be launched before the end of Year 2.

This activity may also include capacity building for government personnel with the digital platform, as well as planning for capacity building to be available to private sector developers who will participate in the tender.

Activity 2.1.5 *Execution of tender, contracting and payments to the selected pilot beneficiaries*

In year 2, the tender will be launched and executed according to the design finalized in activity 2.1.2, resulting in pilot beneficiaries being selected. Submissions to the tender will be competitively assessed against evaluation criteria (engineering, financial), with the PMU supported by appropriate expertise.

Following selection of beneficiaries, the PMU/IP will enter into legal contracts with the selected minigrids, again supported by appropriate expertise, and make payments on pre-defined milestones, including on commissioning of minigrid plants. The digital platform will validate payment milestones.

This activity may also include capacity building for government personnel with the digital platform, as well as capacity building to private sector actors to engage with the competitive tender.

Activity 2.1.6 *Monitor pilot(s), collect and aggregate data shared by pilot(s)*
Data generated by the pilot(s) will be collected using the digital platform, connecting directly to remote monitoring and smart metering equipment. Data that are not amenable to be collected by remote sensing will be collected either by the mini-grid operator or some alternative way to be defined by the PMU.

Data collected from the pilot(s) will be used at the project level to, among other purposes: (i) track the performance of the mini-grid systems in real-time; (ii) validate the underlying pilot(s) assumptions and business case; (iii) track performance enhancement in mini-grid capacity utilization; and (iv) generate insights and lessons learned to share with the AMP Regional Project. Also, data collected from pilot(s) will be shared with the AMP Regional Project for aggregating and analyzing data across all AMP national child projects. The regional project will use these data to: (i) generate insights and lessons learned; and (ii) inform the development of knowledge products, both to be disseminated across AMP participating countries and the broad mini-grid sector.

Activity 2.1.8. Develop project-specific publications to showcase the implemented pilot and encourage replication in other locations in need of off-grid electricity.

Output 2.2. Capacity of potential tender bidders (private sector developers) strengthened to consider innovative business models and cost-reduction levers.

Activity 2.2.1. Prepare an inventory of the national companies versed in the field of installation and/or operation of solar and hybrid mini-grid systems according to well defined criteria in order to identify the capacity building needs of companies/private sector required to engage in this type of infrastructure.

Activity 2.2.2. Carry out training workshops for local private operators and developers on proposal writing and efficient preparation of a tender package. This includes providing participants with an overview of the mini-grid business models under consideration by the Government, i.e. EPC+ESCO model, most common tender specifications for EPCs and ESCOs, best-practice examples for mini-grid designs, technical and financial proposal preparation, and post-awarding financial management.

Activity 2.2.3. Develop a procedure for distributing information on the available funding opportunities (national and international), cost reduction methodologies and freely available tools for technical assistance, which potential bidders can use to develop their skills at implementing mini-grids projects. An example of these resources is the "Green Mini-Grid Helpdesk" of the African Development Bank (AfDB).[11]

Activity 2.2.4. Create a catalogue providing guidance and best practice examples for delivering cost effective mini-grid services. The guidance will cover the common methodologies for reducing the costs associated with providing mini-grid services, suggestions for stimulating demand, alternatives for productive use development, and other levers which contribute to increasing energy utility.

Output 2.3. Support provided to establish and grow a national industry association of private sector mini-grid developers.

Activity 2.3.1. Conduct a study for private sector mapping during Year 1 to research and collate all of the relevant in-country private players in the mini-grid sector and assess their technical capacity to participate in EPC and ESCO tenders and their interest in becoming association members, including a needs assessment for existing associations, e.g. Chamber of Commerce.

Activity 2.3.2. Establish linkages between the AMP in Djibouti project and international/regional organizations such as the African Mini-grid Developers Association (AMDA)[12], GOGLA[13], the Alliance for Rural

[11] Green Mini-grid Helpdesk, African Development Bank - https://greenmini-grid.afdb.org/
[12] Africa Mini-grid Developers Association (AMDA) - https://africamda.org/
[13] GOGLA, the global association for the off-grid solar energy industry - https://www.gogla.org/

Electrification (ARE)[14] or others - as relevant, to discuss existing guidance and explore the potential for setting up a local industry association for solar mini-grids in Djibouti.

Activity 2.3.3. Identify the champions in the public sector, who can support the association and provide a direct liaison to the government and key ministries, to ensure the required support is forthcoming. For example, the departments and units within the ministries that are concerned with enhancing the environment for private sector investment and have existing working relations with the Chamber of Commerce on ongoing initiatives.

Activity 2.3.4. Draft the governance structure of the association and hold consultation meetings with interested parties to put in place the operational guidelines, i.e. membership fee to incentivize commitment, voting rights and membership eligibility.

Activity 2.3.5. In parallel to the steps towards formal establishment, publish information and newsletters on the aspired association using national and social media to ensure wide coverage of information pertaining to the establishment of the proposed association and that the private actors and general public are aware of the opportunities which the association can provide for its members, in close collaboration with the CoPs, led by the AMP Regional Project.

Component 3. Scaled-up Financing

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 establishment of an innovative financing mechanism and instruments requires undertaking a holistic analysis of the mini-grid sector, how it operates, existing financing mechanisms and gaps, the stakeholders involved, as well as existing and expected challenges potentially affecting the scaling up of investment in the mini-grid sector. The following are some of the aspects the study would investigate:

- An analysis of existing national rural development strategy;
- Appetite for engagement with donor programs, private sector lending institutions and national commercial operators;
- Capacity of national bodies to manage a funding program;
- Extent and favorability of any national mini-grid related policy and regulation;
- Potential for lobbying and policy guidance;
- A general assessment of the extent to which the political ecosystem is supportive of the mini-grid sector;
- An assessment of the transparency and corruption of relevant agencies;
- An analysis of any legal implications of various funding models; and
- Examples of any previous successful funding programs managed by the relevant agencies.

Hence, the activities under this component involve conducting this study to support the design of a financing model suitable for the mini-grid market in Djibouti. Following which, capacity building support is provided to introduce the model to members of the domestic financial sector and local mini-grid operators.

Outcome 3: Financial sector actors are ready to invest in a pipeline of low-carbon mini-grids and concessional financial mechanisms are in place to incentivize scaled-up investment

Output 3.1. Design support, including development of operational guidance, provided for Mini-grid Funding Facility (MFF) or equivalent financial mechanism, under rural electrification agencies/funds, such as the National Development Fund (NDF) or the Guarantee Fund (GF).

Activity 3.1.1. Building upon the outputs from GEF6, undertake a mapping exercise to identify and characterize all existing and planned national mini-grid funding programmes, subsidy structures and incentive mechanisms, including an assessment of their effectiveness and limitations.

Activity 3.1.2. Conduct a market analysis which looks at rural electrification plans, opportunities for resource mobilization, national capacity for managing funding programs, the political ecosystem, dynamics and considerations, etc. The resulting report will include a holistic analysis of the mini-grid sector and its operation and will be complementary to the findings and recommendations of the DREI analyses conducted under Output 1.2.

[14] Alliance for Rural Electrification (ARE) - https://www.ruralelec.org/

Activity 3.1.3. Identify the champions in relevant institutions, who can act as key contacts for the development of centrally administered funding program, to ensure the required support is forthcoming. For example, the departments and units within the ministries that are concerned with resource mobilization and managing the relations with national and international funding institutions.

Activity 3.1.4. Develop operational guidance for selected financing schemes. Publish information on the funding opportunities available for solar mini-grid development, in collaboration with the team working on relevant publications under Output 2.3.

Output 3.2. Domestic financial sector capacity building on business and financing models for mini-grids.

Activity 3.2.1. Identify leading national financial institutions and lenders to engage them in the design process under Output 3.1 and assess their capacity and appetite for lending into the mini-grid sector.

Activity 3.2.2. Conduct workshops with representatives from the institutions identified to create awareness of the opportunities that exist with lending to the mini-grid industry. Present examples of best practice business models and financing mechanism that are relevant to the market in Djibouti, using the resources to be provided by the CoPs, led by the AMP Regional Project.

Activity 3.2.3. Carry out training workshops for financial institutions including an introduction to the design process of mini-grid financial schemes, and in-depth training on the operationalization of the funding mechanism designed under Output 3.1.

Activity 3.2.4. Create linkages between financial institutions, national government agencies and international donors, ensuring balanced representation of women in each group. The purpose of this will be to explore hybrid and innovative schemes focused on unlocking finance and reducing the costs of capital and risks, such as donor programs creating first loss pools or currency hedging facilities.

Output 3.3. Capacity building provided to local mini-grid developers and investors on measuring and reporting on impact indicators, building credibility in impact investment as an asset class.

Activity 3.3.1. Carry out training workshops and webinars to raise awareness among local mini-grid investors on the availability of remote monitoring hardware, smart meters and software packages that unlock access to near real-time data and allow sites to report accurately on impact indicators. Among the available tools are Ferntech's Universal Monitoring and Control technology[15], New Sun Road's data-driven technology solutions[16] and AMMP's digital solutions for energy service companies in emerging markets.[17]

Activity 3.3.2. Conduct an assessment of existing mini-grid specific monitoring and reporting frameworks (e.g. AMDA Data Benchmarking Report), in an effort to determine the most suitable framework and associating impact indicators for the mini-grid sector in Djibouti. An example is the NREL inspired Quality Assurance Framework developed for the Sustainable Energy Fund for Africa (SEFA) and the African Development Bank (AfDB).[18]

Activity 3.3.3. Develop a comprehensive framework for measuring the SDGs impacts of investing in the mini-grid sector in Djibouti. This resulting framework will be made available to the relevant investor community and the mini-grid developers, in collaboration with the platforms and publications developed under Outputs 2.3 and the CoPs managed by the AMP Regional Project.

Component 4. Digital, Knowledge Management (KM) and Monitoring and Evaluation (M&E)

This component aims to ensure that the AMP in Djibouti can (1) link-up to KM activities undertaken at the AMP Regional Project level, and (2) comply with UNDP/GEF M&E requirements. In terms of KM, the results of Component 4 activities will feed data and lessons learned to the AMP Regional Project for onward sharing with other participating countries and the mini-grids ecosystem as a whole. There will also be opportunities for these results to be shared directly with other countries through corresponding KM activities built into each national project looking to promote interaction between other AMP national child projects. Hence, the AMP in Djibouti will participate in AMP Communities of Practice (CoPs) which will be set-up and managed by the AMP Regional Project. Participation on the part of national child projects will include attending actual in-person workshops, meetings or training events.

[15] Ferntech technology for Monitoring and Control of Off-grid Power Systems - https://ferntech.io/

[16] New Sun Road - https://www.newsunroad.com/

[17] AMMP - https://www.ammp.io/

[18] Quality Assurance Framework for Mini-grids in Nigeria - https://www.tfe.energy/project/Quality-Assurance-for-Mini-Grids/

In addition, Component 4 explicitly includes the activities required to comply with M&E requirements from both UNDP and GEF.

Outcome 4: Digital and data are mainstreamed, across stakeholders, into local mini-grid market development. Increased knowledge, awareness and network opportunities in the mini-grid market and among stakeholders, including benefitting from linkages to international good practice

Output 4.1. A Project Digital Strategy is developed and implemented, including linkages to and following guidance from, the AMP Regional Project.

Activity 4.1.1. *Develop and implement a Project Digital Strategy.* All national child projects will develop a Digital Strategy for the project in year 1 which will be implemented thereafter. The Project Digital Strategy will updated on an annual basis to reflect learnings from project implementation, guidance received from the AMP Regional Project on digital tools and solutions, and insights gained from minigrid pilot(s) data.

Activity 4.1.2 *Develop recommendations for a national-level digital strategy for minigrid development*. Upon implementation of the Project Digital Strategy and based on lessons learned around opportunities to leverage digital tools and solutions for minigrid sector development, the project will develop a set of evidence-based recommendations for rolling out digital solutions for minigrids at the national level. These recommendations will be shared with key national stakeholders and provide the basis for developing a digital strategy for minigrid development post-project.

Output 4.2. Mini-grids digital platform implemented to run tenders and manage data from pilots, and to support mini-grids scale-up and cost-reduction.

Activity 4.2.1. *Develop Terms of Reference (TORs) for procuring Minigrids data management platform.* The project will use standardized TOR provided by the AMP Regional Project and tailor them to the specific country/project needs. Box 7~~Box 7~~ provides indicative specifications for the Digital Platform which the AMP regional project will develop further into standardized TOR and the project PMU will tailor to the specific country/project needs.

Activity 4.2.2. *Procure Minigrids data management platform.* The project will procure a country-level mini-grids digital platform and set it up to enable (i) convening and capacity building for key stakeholders (public/private), (ii) collecting and managing technical and financial data related to minigrid pilot(s) based on the project's Quality Assurance and Monitoring Framework (QAMF), including linking to the AMP Regional Project, and (iii) acting as the mechanism for running digital tenders for minigrid developers/sites.

Box 7 Indicative Specifications for the Project's Digital Platform

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.

Functionality	Details
National digital convening platform for key stakeholders	• 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 • Single site register of minigrid sites, with geospatial views and technical/financial benchmarks for site assessment • 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
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.)

Output 4.3. A Quality Assurance and Monitoring Framework (QAMF)[19] for measuring, reporting and verification of the sustainable development impacts of all mini grid pilots supported, including GHG emission reductions, is adopted and operationalized based on standardized guidance from the AMP Regional Project.[20]

Activity 4.3.1. *Provide inputs and feedback to the regional project on the development of a standardized Quality Assurance and Monitoring Framework (QAMF).* The specifications around the data generation by the demonstration pilots supported by the project will consult and follow the guidance/standards provided by the regional child project. A standardized Quality Assurance and Monitoring Framework (QAMF) for application in all minigrid pilots supported under AMP national projects will be developed in year 1 of the regional project and disseminated to all national project staff. It is expected that national project staff will provide both inputs and feedback on the development of this framework as well as on how best to operationalize the commitment to its adoption by the minigrid operators receiving support from the national project.

Activity 4.3.2. *Adopt and utilize the standardized Quality Assurance and Monitoring Framework (QAMF).* The adoption and utilization of this framework and associated data reporting protocols will be a

[19] Building on the minigrid Quality Assurance Framework (QAF), a set of technical and financial performance monitoring indicators, developed by NREL, SEFA and others, as well as the considerable data gathering, pooling and analysis work ongoing by partners such as RMI, SE4All and AMDA.

[20] The national project will not need to 'develop' their own QAMF; it will be developed by the AMP Regional Project and 'adopted' and used by national projects. They will simply need to adopt it and ensure that it is adopted and utilized by all mini-grid operators receiving support.

mandatory requirement for all minigrid pilots supported under AMP (e.g. applicable to all national projects) and each minigrid operator/sponsor who is the beneficiary of investment subsidies and technical support by the project will be required to formally commit to using the QAMF as a condition of assistance. The adoption of the QAMF by all minigrid operators/sponsors supported under AMP national projects will ensure that the regional project can aggregate common data metrics and track a standardized set of key performance indicators across all minigrid pilots supported by AMP across all partner countries and report this data to the donor on a programmatic level.

Output 4.4. M&E and Reporting, including (i) Conducting inception workshop and preparing report, (ii) Ongoing M&E, (iii) Mid-term Review (MTR), and (iv) Terminal Evaluation (TE).

Activity 4.4.1. *Conducting inception workshop and preparing report.* A project inception workshop held to officially launch the project and, among other aims, familiarize key stakeholders with the detailed project strategy, roles and responsibilities of the project team. The national inception workshop will be carried at the beginning of project implementation (within 60 days of CEO endorsement of this project). The workshop will be organized by the PMU with support from the project's IP. An Inception workshop report will be prepared by the PMU and submitted to UNDP within 90 days of CEO endorsement of this project.

Activity 4.4.2. *Ongoing project monitoring.* Data on Results Framework Indicators systematically collected and analyzed to provide decision-makers, managers, and Stakeholders with information on progress in the achievement of agreed objectives and the use of allocated resources, as set out in the Monitoring and Evaluation Plan.

Monitoring provides management and the main stakeholders of an ongoing intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds. It provides regular feedback on performance of projects and programs taking into account the external environment. Information from systematic monitoring serves as a critical input to ongoing management decisions (adaptive management), evaluation, and learning. The GEF Core indicators included in the UNDP Project Document (Annex 15) will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to MTR and TE. Also, the indicators found in the Results Framework will be monitored as per the Monitoring Plan in Annex 5 and the M&E Plan and Budget in Section VI of this project document. The UNDP-GEF project is accompanied by various plans including Stakeholder Engagement Plan (Annex 9), mitigation plan for project risks (Risk Register in Annex 7), and Gender Action Plan (Annex 11). These plans will be reviewed according to the monitoring and evaluation requirements. According to the project's social and environmental risk rating, there is a need to carry out continuous monitoring of the social and environmental safeguards as proposed in the Environmental Social Management Framework (ESMF) and other SES frameworks/plans (Annex 10). The ESMP that will emanate from the ESMF will also be monitored under this activity.

Data collected by monitoring GEF Core indicators, Results Framework indicators, project plans and social and environmental safeguards will be used to prepare the PIR to report to the GEF.

Activity 4.4.3. *Mid-term Review (MTR).* An independent mid-term review (MTR) will take place at the half-way mark of project implementation and will be conducted according to guidance, rules and procedures for such evaluations established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects. The MTR will be make widely available to all project stakeholders in the relevant language.

Activity 4.4.4. *Terminal Evaluation (TE).* An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The project's terminal GEF PIR along with the TE report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lessons learned and opportunities for scaling up.

Output 4.5. Engage with the AMP Regional Project, including, but not limited to, via (i) Participating in Communities of Practice (CoPs), and (ii) Capturing and sharing lessons learnt.

Activity 4.5.1. *Participate in AMP 'Communities of Practice' (CoP).* One of the primary ways national 'child' 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 under the Regional Project Component #3 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.

Activity 4.5.2. *Sharing of research and lessons learned with the regional child project*. Research and lessons learned will be systematically shared with the regional project based on guidelines that will be defined by the regional project and shared at the project's Inception Workshop. Capacity building will be provided to the Project Management Unit to compile lessons learned and share knowledge effectively.

Activity 4.5.3. *Collaborate with the regional project on an 'Insight Brief'*. Every national 'child' project is expected (in the course of the four years' implementation cycle) to collaborate with regional project staff on the development of at last 1 'insight brief' capturing (in an accessible format) selected key highlights from a successful national project activity. The 'insight brief' can cover any activity of the project and take the form of a written brief or video brief. The regional project has budgeted resources for the production of 'insight briefs' under Component #1 Knowledge Tools, but the success of regional staff in producing insight briefs highlighting national project activities will be dependent on content and data provided by the national project team and stakeholders. In order to facilitate such collaboration each national project is required to hire a consultant or local firm to gather data and audio-visual content (video footage, photos, etc.) on the subject for the 'insight brief'. The information and data collected at the national level will be provided to the regional project staff who will utilize this content and produce an 'insight brief' according to a standardized communications format for all AMP knowledge products for external audiences. The 'insight brief' will be produced in both the local/national language of the relevant national project as well as English for dissemination by the regional project to regional stakeholders and publishing on the AMP website.

Activities that precede are tightly linked to the Regional Project. The following box provides an overview of these linkages in the context of this specific component:

Box 8 Linkages to the AMP Regional Project – Component 4 – Digital, KM and M&E

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 aggregate data from all national project pilots based on a common M&E framework/QAMF to track Results Framework indicators as well as other key performance metrics.
- **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.
- **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.

It is important to note that some of the abovementioned project results will be realized by co-financing activities with resources that do not flow through UNDP accounts. In particular, the mini-grid pilots to be built in the projects (Output 2.1) will be funded through a CAPEX (partial) subsidy from the project budget (GEF funds and UNDP TRAC), and the remaining of the CAPEX will be funded by third parties (who will likely be private sector developers and communities but those are not precisely defined yet). While the funds from third parties will not flow through UNDP accounts, they will directly contribute to the same mini-grid pilots the GEF and UNDP funds are contributing to and will be essential to realizing the project objectives. For this AMP child project, these are "co-financing activities included as project results". The precise sources and amounts of these co-financing activities will only be known at implementation stage. UNDP is accountable to monitor all project results, including results to be delivered by these co-financing activities, to ensure consistency with UNDP and GEF policies and procedures, including social and environmental safeguards policies and requirements (SES). This is further detailed in the ESMF.

For these co-financed activities included as project results with resources that do not flow through UNDP accounts, the following procedures will need to be applied before co-financing activities start:

The co-financing partner's capacities will need to be assessed through the Partner Capacity Assessment Tool (PCAT) and the co-financing partner will need to develop a risk management strategy if gaps are identified, for UNDP's approval and subsequent oversight/assurance.

The co-financing partner will need to sign a legal agreement with UNDP or the Implementing Partner to confirm accountabilities, mentioning in particular the following sentence: "*The co-financed activities will be undertaken in full compliance with [co-financing partner's] policies and procedures. However, because the activities are included in the results of the project the [co-financing partner] commits to monitor these activities consistent with the UNDP Project Document. The Project Board and UNDP will also assume an oversight and assurance role to further ensure the project, including the co-financed activities covered by this letter, remains consistent with UNDP policies and procedures. These arrangements will be confirmed through [signature of Project Document OR signature of Responsible Party Agreement with reference to the Project Document].*".

Risks stemming from and/or to co-financed activities – as with risks from/to all other project activities – will be included in the project risk register and monitored accordingly. The risk description will clarify relation to the specific co-financing.

Social and environmental risks associated with the co-financed activities will be identified during project design and included in the SESP and relevant safeguard management plans. Relevant safeguards instruments prepared by the co-financing partner will be reviewed by UNDP for consistency with UNDP's SES, during project development and implementation; any gaps will be resolved in discussion with the co-financier.

Once the co-financing activities will have started, risks will need to be monitored (as per item 3 above) and results achieved through co-financed activities will be monitored and reported in the annual GEF PIR, the independent mid-term review and the independent terminal evaluation.

ii. Partnerships

Successful implementation of the project strategy to achieved the expected results requires close, continuous and reciprocal communication between the Implementing Partner (MUET) and the UNDP CO. In addition to the several groups of stakeholders, the following list presents some of the key partners in project implementation:

- Ministry of Urban Planning, Environment and Tourism (MUET);
- Ministry of Energy and Natural Resources (MERN);
- Djibouti Social Development Agency (ADDS);
- National Development Fund in Djibouti (NDF);
- Mini-grid Funding Facility in Djibouti (MFF); and
- Chamber of Commerce.

Given the project's focus on commercial viability and the promotion of the EPC+ESCO delivery model for low-carbon mini-grid development, the collaboration between public and private parties will be key to successful implementation of the project activities. Hence, the AMP dedicates part of the GEF funds to activities with representatives in each sector as direct beneficiaries and ensures both sectors are part of the implementation of activities under each component. For example, the AMP dedicates resources for establishing a focal point to be hosted by a national party, but also dedicated resources to the establishment of an industry association for private sector companies. Capacity buildings activities target staff members in the public sector, but also local practitioners and labor, as well as potential bidders for EPC and/or ESCO tenders. Similarly, financial capacity building is planned to engage with national financial institutions, but also small investors. Etc. The collaboration with the Regional AMP Project, through the CoPs, sharing reports or attending meetings, enhances the potential for regional partnerships and continent-level knowledge sharing and dissemination.

With respect to partnering with international organizations, the last decade witnessed several interventions by development partners financing projects in the energy sector in Djibouti and attempting to expand the role of private sector companies in grid-connected and off-grid power generation. The interventions took the form of grants and loans for pilot projects, as well as technical assistance to support the development of regulations and building national capacities in the public and private sectors. This includes an ongoing project financed by GEF during the

previous round. The GEF6 project is dedicated to the development of solar mini-grid policies and regulations, as well as the design of tariff structures for off-grid systems. The strategy developed for the AMP in Djibouti emphasized the necessity to work hand-in-hand with the GEF6 project team and other development partners to ensure complementarity and avoid duplication.

A number of the abovementioned partners have provided letters of co-financing for this project. As further described in the table below, most of these co-financed activities correspond to funds not flowing through UNDP accounts and whose results are not included in the project results framework. In this case, UNDP is accountable to monitor the risk to realization of co-financing amounts and realization amounts annually in the GEF PIR, at mid-term and at terminal evaluation. Specifically, potential risks associated with co-financing that may affect the Project, including safeguards related risks that fall within the project context or area of influence, will be considered in safeguards due diligence and the project risk register and monitored accordingly. Risk management measures identified will be only those within the control of the UNDP project (e.g. managing reputational risk). See the ESMF for more details on the management of risks related to the different types of co-financed activities in this project.

List of co-financed activities not included as project results

Co-financing source	Co-financing type	Co-financing amount (USD)	Included in project results?	If yes, list the relevant outputs
World Bank	Loan	15,790,000	No	N/A
UNDP	Grant	50,000	No	N/A
TOTAL		**15,840,000**		

iii. Risks

Like any project, the implementation of the proposed strategy for the AMP in Djibouti faces risks which threatens the achievement of the aspired results, and consequently, poses risks on the successful achievement of the project's objective. When identifying potential risks affecting project implementation, the risk level is also assessed to identify whether the risk is high, substantial, moderate, or low, which entails assessment of likelihood and impact of each identified risk. The project strategy has taken the identified strategic, political, health, organizational, operational and financial risks in consideration, offering embedded mitigation measures in the design of outcomes and outputs. More details on the type of risks potentially facing project implementation and the proposed mitigation measures are presented in UNDP Risk Register (Annex 7).

In terms of climate risks, the PPG discussions and analysis indicated that the greatest risk posed by climate change to the project involve either risks to the structure, due to forces of nature in the pilot areas (primarily higher wind speeds) or the remote chance of migration of some villages due to drought, flooding, or the disruption of revenue-generating activities. In the former case, resilience to potential climate change impacts is relatively easily achieved through reinforced structures which do not present any significant impediment to the project. Solar modules and standard solar mountings are already designed for very high wind speeds unlikely to be observed in the project country, even with climate change. For sustainable adaptation to climate risks, the project also includes an output focusing on the selection and domestication of quality standards for solar components to ensure the durability and resilience of future solar and hybrid mini-grid systems.

By design, mini-grid systems are significantly more mobile than other infrastructure such as dwellings and grid transmission lines. Communities moving as a result of climate risks materializing at the pilot locations is a relatively remote risk. Nevertheless, the manual for solar mini-grid installation shall include instructions for disassembly and dismantling enabling the re-allocation of the mini-grid infrastructure to new places, as may be necessary.

With respect to other SES-related risks, preliminary analysis and screening was conducted during PPG development through updating the UNDP's Social and Environmental Screening Procedure (SESP) and the preparation of an Environmental and Social Management Framework (ESMF). The results are presented in Annexes 6 and 10,

respectively. The legal framework for environmental assessment in Djibouti, including Environmental Code and the Ministerial Decree on Environmental Impact Studies will also be taken into account.

In addition to the above plans, the project will establish a Grievance Redress Mechanism (GRM) to ensure effective implementation of the proposed mitigation measure and enhance the responsiveness to new risks or concerns which may be identified by the project team or reported by stakeholder during implementation. The outline of the proposed GRM is presented in the project's Stakeholder Engagement Plan (Annex 9). More details of the proposed GRM shall be agreed upon during the Inception Phase. Further information on GRM can be found in the UNDP Guidance Note on Social and Environmental Standards, Stakeholder Engagement and the Supplemental Guidance on Grievance Redress Mechanisms.

iv. Stakeholder engagement and south-south cooperation

The PPG development process involved conducting several consultation meetings and workshops with public authorities and private sector parties in Djibouti, during which stakeholders were invited to share their views on the obstacles facing low-carbon development in the mini-grid sector and their suggestions for the best way forward. The feedback and comments by stakeholders were taken in consideration when developing the project strategy presented in this document. The consensus on the strategy and expected results is aspired to lead to successful project implementation. Furthermore, the project management arrangement embraced the need for MUET, as the implementing partner, to work closely with all national stakeholders as a necessary ingredient for project success. Additional details on the project's approach towards stakeholders' engagement can be found in the Stakeholder Engagement Plan (SEP) presented in Annex 9.

In addition, to bring the voice of national parties in Djibouti to global and regional fora, the project will explore opportunities for meaningful participation in specific events where UNDP could support engagement with the global development discourse on low-carbon mini-grid development. The project will furthermore provide opportunities for regional cooperation with countries that are implementing initiatives on low-carbon mini-grid development in geopolitical, social, and environmental contexts relevant to the AMP in Djibouti.

Furthermore, the proposed strategy for the AMP in Djibouti intends to capitalize on the project being part of the AMP Regional Project and use all possible opportunity for South-South and Triangular cooperation. Hence, the AMP in Djibouti will have access to (if requested) a variety of dedicated technical and operational support from the AMP Regional Project as follows:

1) **Access to specialized expert international consultants in selected areas** (DREI, data, GIS modeling, mini-grid business models, etc.) hired, retained, contracted and paid for by the AMP regional project and made available to all participating national 'child' project staff and selected beneficiaries on as needed basis. The areas of support, listing of available firms/ICs under contract by the regional project and protocol for how the project can request and/or access such expertise (if needed/requested) will be elaborated in the first year of regional project implementation and disseminated to this project and the staff of all other participating AMP national 'child' projects. This support may range from virtual assistance to in-country missions. All requests for such assistance must be approved by the project manager of the AMP regional project management unit.
2) **Provision of a database of qualified international consultants and firms** disaggregated by their expertise in the four main components of the national project and other key operational areas (procurement, M&E, communications, etc.). These individuals will not be retained or contracted under the regional project but rather provided to the project for informational purposes only in an effort to assist in identifying high-quality experts and firms who may be available for contracting by national governments under their own procurement rules and modalities.
3) **Provision of generic ToRs for various standard activities** (mentioned above) under the four main components of the national project.
4) **Advisory support by the AMP regional project management unit** to staff of the project on trouble shooting (operational support, ToR reviews and problem solving) on an ad-hoc and as-needed basis. These services will be paid for the regional project and available on a first-come/first-serve bases under a protocol to be established by the regional project.

A full detailed elaboration of these offerings and the protocols attached to each service will be communicated to the project at the inception workshop of the AMP Regional Project and at the inception workshop of each national child project.

v. *Gender equality and Women's Empowerment*

In Djibouti, the situation of women has changed, but there are still disparities between men and women, particularly in rural areas. Disparities exist in the labour market, education and decision-making spheres, whether at the level of public administration, at the community level and within households. These disparities can be explained in part by the Arab-Muslim tradition prevailing in Djibouti, even though the population comes from various millennia-old cultures that relate to its main community components, namely Afars, Arabs and Somalis. This Arab-Muslim tradition is patriarchal and patrilineal. It places, socially, the woman under the authority of the man.

At the political level, Djibouti's constitution guarantees equality before the law regardless of language, origin, race or religion regardless of gender and prohibits discrimination on the basis of sex. Djibouti ratified the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1998. Unlike other members of the Arab League, Djibouti has ratified CEDAW without reservation. Moreover, Djibouti has a national strategy for gender equality 2011-2021 that succeeded the National Strategy for the Integration of Women in Development (2000-2010). The current National Gender Equality Strategy focuses on promoting equal access to social services, including education and health, and prioritizes programmes to improve women's literacy.

Looking at the links between gender, access and control of natural resources, particularly in the energy sector, we find that there are a number of disparities in the world and in Djibouti:

1) **The unequal access to and control of natural resources:** Women continue to be hampered by structural constraints and gender norms related to access and control of land, water and other productive goods and biological resources. Even when the law guarantees women equal rights to men, many women have less control over natural resources. Research shows that if women had the same access to resources as men, agricultural productivity in developing countries could increase by 20-30%, reducing poverty and improving women's ability to support their families, and sustainable management and use of natural resources.
2) **Unbalanced participation and decision-making in environmental planning and governance at all** levels: gender standards, greater time constraints for women and other structural constraints continue to prevent women from having the same opportunities as men to make decisions in the management and sustainable use of natural resources. Bridging gender gaps in participation and leadership in decision-making, from local to national, can help make institutions and policies more representative, and help women better participate in decisions that shape environmental planning, policy development, and sustainable solutions and practices.
3) **The unequal ability to benefit and services socio-economic:** In rural areas in particular, women do not have the same opportunity to access income generation opportunities, credit and technology as men. In addition, women often face more barriers than men to accessing funding, training and information. Expanding women's socio-economic benefits can make a significant contribution to improving the environment in areas such as natural resource management, land degradation reduction, renewable energy, sustainable fishing, etc.

Added to this are the negative effects of the accumulation of unreliable energy on the health and well-being of the population, and in particular of women and girls who are primarily responsible for the collection of biomass fuels such as charcoal, wood and agricultural waste. They are at risk of sexual violence when they search for firewood for long hours, travelling several kilometers. The risk of indoor air pollution from the fumes of traditional stoves also exists. Finally, the lack of reliable energy services seriously affects women's activities in the micro-enterprise. The Africa 2018 Sustainable Development Report indicates that the time lost by women and girls to the stress of poverty is compounded by their disproportionate lack of access to affordable and sustainable energy sources.

Given these barriers, this project will be a transformative potential that will bridge these gender gaps and access to reliable energy by (i) more effectively mobilizing women to participate in the design and implementation of the project and environmental efforts, taking into account (ii) women's skills, knowledge and experiences, training (iii) women in the solar mini-network implementation chain in Djibouti and the project area, as well as women's access to reliable information. Also, increased supports will be offered specifically to women to strengthen its role as applicants and primary users of reliable energy and support and support activities to strengthen women's empowerment so that they can benefit full of the project will also be designed and developed.

Additional details on the project's approach towards gender mainstreaming and women empowerment can be found in the Gender Analysis and Gender Action Plan presented in Annex 11.

vi. *Innovativeness, Sustainability and Potential for Scaling Up*

Innovativeness

In a market where all power generation projects are presently owned and operated by the public sector, innovation plays a key role in understanding previous trials that have been implemented to encourage private sector participation in mini-grid projects and filling the gaps limiting the financial feasibility of renewable energy adoption in the mini-grid sector. Therefore, the AMP in Djibouti starts the work on each output by investigating the developments accomplished by previous and ongoing projects, and analyzing their outcomes to find the most suitable way for enhancing the competitiveness of low-carbon mini-grids. Building on the assessments and discussions during PPG development, innovative ways have been proposed to create an enabling environment. This includes the proposal to establish a national focal point for mini-grids as a way of ensuring that the knowledge base is concentrated and can be analyzed and disseminated through a single point to all other actors in the sector.

The project also presents a mini-grid delivery model that is innovative to the Djibouti market, yet contextualized to the specific needs expressed by the Government during PPG development. The proposed EPC+ESCO builds upon the public sector experience with EPC tenders and contracts, introducing ESCOs as a complementary service provider for the model to be complete. The proposed pilots aim to demonstrate this model and showcase the impact of balancing government ownership with profitable operation by a private sector company. Recognizing that this is a nuanced model for the market in Djibouti, the project focuses heavily on capacity building for public and private actors to ensure smooth transition into the newly proposed model.

Sustainability

From an operational sustainability perspective, the additional outputs tackling the establishment of a national focal point and industry association for mini-grid development, are not only aiming to facilitate project implementation, but also increase the medium and long-term sustainability of all project outcomes. Hence, sustainability will be one of the main priorities in undertaking the work towards supporting the institutional setup for the mini-grid public sector, capacity building of public and private parties, as well as dedicating resources to institutionalizing the knowledge production through creating university and vocational training programmes for mini-grid education.

Furthermore, Component 4 dedicates resources to knowledge management on the national and regional levels. These aspects are stronger in this project than other mini-grid projects and initiatives in the country since the AMP in Djibouti is part of a regional programme, giving it access to a regional hub for mini-grid technical support, a wealth of experience sharing between the participating countries, and an opportunity to become part of the Communities of Practice (CoP) to be established by the Regional AMP Project.

From a climate change perspective, increasing the commercial viability of low-carbon mini-grids will have long-term positive environmental and economic impacts. The proposed project activities contribute significantly towards helping protect off-grid communities from some of the risks of climate change. With the potential for increased adverse weather events, the delivery of diesel to support conventional mini-grids may be interrupted for significant periods. The use of solar-powered mini-grids significantly reduces or eliminates the needs for diesel delivery therefore enhancing the sustainability of communities and their resilience to climate change. Moreover, promoting low-carbon development is also in line with the recommended global response to COVID-19 crisis and helps to reduce the risk of emerging infectious diseases in the future, while increasing the resilience of the ecologic and socio-economy systems to emergency situations.

Potential for 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 delivery 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.

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 Djibouti 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 delivery model and giving confidence to the private sector for engaging with it using innovative business models.

Furthermore, the multi-dimensional COVID-19 crisis creates opportunities for the AMP to mitigate country- and project-level impacts, to contribute toward green recovery and building back better, and also to leverage global responses to COVID-19 to deliver global environmental benefits and/or climate adaptation and resilience benefits. The following opportunities are identified as relevant for the AMP in Djibouti:

- **Leveraging economic recovery and stimulus plans.** Governments across the continent have been structuring and implementing stimulus and economic recovery plans, social programs and even policy reforms during the crisis. These offer a good opportunity to accelerate the energy transition and step-up climate ambition. Putting people back to work will be an important part of stimulus plans and clean energy is an important source for new job creation and has great potential to spur local economic activity. This creates opportunities for AMP as increased funding availability and public support for renewable energy projects could be leveraged to augment AMP's results. Also, increased support to energy consumers could address widening affordability gaps which pose risks for project implementation.
- **Minigrid site selection with COVID-19 considerations.** AMP projects could also seek to help policymakers and regulators integrate elements from government strategies to respond and recover from the pandemic into energy sector planning. For instance, rural electrification strategies and plans could prioritize areas based on the presence of essential health facilities, key economic activities, particularly vulnerable populations, or other factors to concentrate efforts where COVID-19 impacts are highest. AMP national child projects can help enhance coordination between the energy and health sectors to ensure national electrification plans and minigrid sector planning consider the energy needs of the health sector.
- **Health facilities as beneficiaries of specific minigrid investment pilots.** AMP projects provide support to a number of specific minigrid investment pilots across AMP countries. Projects could use digital mapping tools to proactively identify minigrid sites that can benefit health facilities in addition to households, commercial, and productive users.
- **Improved business case for minigrids providing energy for health facilities.** With its focus on minigrid cost-reduction, AMP could potentially add value in reducing the cost and increasing the commercial viability of minigrids providing energy for healthcare facilities in several ways including supporting governments: (i) to improve data collection on energy access in the health sector and conducting comprehensive community energy needs assessments of health facilities that consider both electricity and thermal energy needs; and (ii) to utilize specialized digital tools to assist minigrid operators in targeting health care providers and designing appropriate minigrid systems for rural health clinics.
- **Communities of Practice focused on COVID-19 impacts.** If there was enough interest among several countries AMP could create a specific Community of Practice (CoP) to focus on impacts, risks and opportunities around minigrids and the global pandemic. This would allow AMP countries to document and exchange experiences and knowledge on how off-grid lighting and electrification can alleviate some of the disadvantages and challenges experienced by households, productive users, health facilities and communities without access to electricity in facing the different stages of the COVID-19 pandemic and bolster recovery efforts.

V. PROJECT RESULTS FRAMEWORK

This project will contribute to the following Sustainable Development Goal(s):
SDG 7: Ensure access to affordable, reliable, sustainable, and modern energy for all.
SDG 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services; and
SDG 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.
SDG 13: Take urgent action to combat climate change and its impacts.
SDG 5: Achieve gender equality and empower all women and girls.

This project will contribute to the following country outcome (UNDAF/CPD, RPD, GPD):
UNDAF Outcomes 6 – Good governance: National and local institutions and actors ensure the effective, efficient and transparent management of public resources for inclusive and equitable development.
UNDAF Outcome 7 – Community resilience: Livelihoods of poor rural and peri-urban communities are improved to enhance their resilience to climate risks, shocks and food insecurity.
UNDAF Outcome 8 – Equitable development of the regions: The living conditions of the poorest populations are improved for better management and protection of natural resources and ecosystems strengthening resilience and promoting equitable regional development
SNCC – National Strategy for Climate Change: Issued in 2018 to focus on climate change in Djibouti.

	Objective and Outcome Indicators (no more than a total of 20 indicators)	**Baseline**	**Mid-term Target**	**End of Project Target**
Project Objective: Supporting 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.	*Indicator 1: GEF Core indicator 6* Greenhouse gas emissions mitigated (metric tons of carbon dioxide equivalent; tCO_2e)	Zero, since the project has not yet started	Zero, since the pilot project is not yet commissioned	Direct: 39,717 tCO_2e Indirect: 36,000 tCO_2e (90% of the total estimation for this project)
	Indicator 2: GEF Core indicator 6.4 Increase in installed solar PV capacity (MW) and battery storage (MWh)	Zero, since the project has not yet started	Zero, since the pilot project is not yet commissioned.	0.84 MW (Solar PV capacity) 2.042 MWh (Battery storage)
	Indicator 3: GEF Core indicator 11 Number of direct beneficiaries disaggregated by gender (and customer segment) as co-benefit of GEF investment Units of measure: number of people; number of connections disaggregated by customer segment	Zero, since the project has not yet started	Zero, since the pilot project(s) is not yet commissioned	8,999 people (Female) 10,147 people (Male) 19,146 people (Total) 18,500 people (residential) 448 people (social) 198 people (commercial/PUE) 3,700 connections (residential) 112 connections (social) 66 connections (commercial/PUE) 3,878 connections (total

	Indicator 4: Number of local residents trained in different aspects of mini-grid development and operation (e.g. sales, distribution, operations, management) disaggregated by gender (number of people)	Zero, since the project has not yet started	5 people (Female) 5 people (Male) 10 people (Total)	10 people (Female) 10 people (Male) 20 people (Total)
Project component 1	**Policy and Regulation**			
Outcome 1 Stakeholder ownership in a national mini-grid delivery model is advanced, and appropriate policies and regulations are adopted to facilitate investment in low-carbon mini-grids.	*Indicator 5:* A minigrid delivery model to enable minigrid development is endorsed/adopted by the national government through a consultative process involving key stakeholders (e.g. relevant ministries, local authorities, rural populations, private sector, media, etc.)	No explicit delivery identified. Default model is government ownership. Lack of multi-stakeholder dialogue	Multi-stakeholder, national dialogue platform on minigrid delivery models established and active.	At least one minigrid delivery model is identified and endorsed by the government through the work of the multi-stakeholder platform and dialogue.
	Indicator 6: Number of policy derisking instruments[21] for minigrid investments - whose development has been supported by the project - are endorsed/adopted by the national government (number of policy derisking instruments)	Zero, since the project has not yet started	At least one policy derisking instrument.	At least two policy derisking instruments.
	Indicator 7: A focal point is established to oversee the operationalization of the proposed institutional setup for rural electrification, the establishment of university and vocational training programmes for mini-grid design and O&M, and the adoption of domesticated quality standards for low-carbon mini-grid system components (*binary; 1/0*)	No focal point exists to oversee all aspects of mini-grid sector development	A draft for the proposed institutional setup for rural electrification is presented to stakeholders, and consensus is achieved among stakeholders on the entity to host the focal point for mini-grid sector development.	The focal point is operational, with finalized institutional setup for rural electrification, domesticated quality standards for system components, and agreements with universities and vocational training institutes on mini-grid education programmes.
Outputs to achieve Outcome 1	1.1. An inclusive national dialogue to identify mini-grid delivery models is facilitated, clarifying priority interventions for an integrated approach to off-grid electrification. 1.2. Mini-grid DREI techno-economic analyses carried out to propose most cost-effective basket of policy and financial de-risking instruments and contribute to AMP Flagship Report on cost reduction. 1.3. Institutional set-up for rural electrification assessed to support the establishment of a focal point for mini-grid development, and institutional capacity building provided on technical, managerial, and regulatory issues. 1.4. Public programmes (apprenticeships, certificates, university programs) to develop competitive, skilled labor market in the design, operation and maintenance of solar and hybrid mini-grids. 1.5. Domestication of quality standards for solar mini-grid components, and institutional capacity of national authorities in-charge, i.e. standards organizations/bureau, strengthened.			

[21] A list of policy derisking instruments can be found in the Derisking Table found in the "DREI: Off-Grid Electrification" (UNDP, 2018) report. As an illustration, example policy derisking instruments can include: off-grid planning/site mapping, mini-grid policies/regulations/tenders; grid service and technical standards; awareness campaigns; technical skill building programs.

Project component 2	Business Model Innovation with Private Sector			
Outcome 2 Innovative business models based on cost reduction operationalized, with strengthened private sector participation in low-carbon mini-grid development.	*Indicator 8:* Mini-grid pilots implemented (e.g. facilities and systems installed and commissioned) to demonstrate a delivery model, cost-reduction measure(s) and/or productive use of electricity (*binary; 1/0)*	Zero, since the project has not yet started	The project's detailed design plan (the 'Minigrid Pilot Plan') for advancing the minigrid pilots is developed, and cleared by UNDP. (1) Any project tendering process, as applicable, for minigrid pilots is launched. (1)	100% of the planned minigrid pilots, as identified in the project's Minigrid Pilot Plan, are commissioned. (1) 100% of social users and PUE facilities associated to the mini-grid pilots are installed and commissioned, and using electricity from the mini-grid pilots. (1)
	Indicator 9: Capacity of private sector mini-grid developers and/or operators is enhanced to participate in sector-wide tendering processes to develop and/or operate mini-grids under EPC and ESCO contracts (*binary; 1/0)*	Private sector companies are involved in mini-grid development as EPCs, but no companies are engaged in ESCO contracts	Templates for tender documents developed, and at least 10 private sector companies receive training on preparing tenders for EPC and ESCO tenders to develop, operate and maintain low-carbon mini-grid systems. (1) Planned capacity building activities for year 1 and 2 are implemented. (1) The capacity of targeted recipients is assessed by survey towards the end of year 2. On a scale of 1 to 5, an average score of at least 2 is achieved. - 1 represents a low level of capacity - 5 represents a strong capacity to understand relevant issues and apply knowledge and skills to find effective solutions. (1)	A national industry association is capacitated to deliver trainings to private sector EPCs and ESCOs, and have continuous open communication with public parties on issues related to rural electrification and mini-grid sector development. (1) Planned capacity building activities for year 3 and 4 are implemented. (1) The capacity of targeted recipients is assessed by survey towards the end of the project. On a scale of 1 to 5, an average score of at least 4 is achieved. - 1 represents a low level of capacity - 5 represents a strong capacity to understand relevant issues and apply knowledge and skills to find effective solutions. (1)
Outputs to achieve Outcome 2	2.1. Pilots for low-carbon mini-grids are developed, to demonstrate business models for off-grid electricity including productive use/innovative appliances, leading to cost-reduction in mini-grids. 2.2. Capacity of potential tender bidders (private sector developers) strengthened to consider innovative business models and cost-reduction levers. 2.3. Support provided to establish and grow a national industry association of private sector mini-grid developers.			

Project component 3	**Scaled-up Financing**			
Outcome 3 Financial sector actors are ready to invest in a pipeline of low-carbon mini-grids and concessional financial mechanisms are in place to incentivize scaled-up investment.	*Indicator 10:* Capacity of financial institutions is enhanced through training, knowledge sharing, and/or awareness raising events aimed at increasing the financial sector's capacity to evaluate investments in mini-grids (*binary; 1/0)*	Domestic financial institutions are not involved in mini-grid funding	Planned capacity building activities for year 1 and 2 are implemented. (1) The capacity of targeted recipients is assessed by survey towards the end of year 2. On a scale of 1 to 5, an average score of at least 2 is achieved. - 1 represents a low level of capacity - 5 represents a strong capacity to understand relevant issues and apply knowledge and skills to find effective solutions. (1)	Planned capacity building activities for year 3 and 4 are implemented. (1) The capacity of targeted recipients is assessed by survey towards the end of the project. On a scale of 1 to 5, an average score of at least 4 is achieved. - 1 represents a low level of capacity - 5 represents a strong capacity to understand relevant issues and apply knowledge and skills to find effective solutions. (1)
	Indicator 11: Number of government or impact investor-supported financing mechanisms offering concessional finance for low-carbon mini-grids	Zero, since the project has not yet started	At least one complementary funding instrument is designed and operational. (1)	At least one low-carbon mini-grid project has managed to obtain concessional finance (i.e. sign the relevant agreements) through the designed complementary funding instrument.
Outputs to achieve Outcome 3	3.1. Design support, including development of operational guidance, provided for Mini-grid Funding Facility (MFF) or equivalent financial mechanism, under rural electrification agencies/funds, such as the National Development Fund (NDF) or the Guarantee Fund (GF). 3.2. Domestic financial sector capacity building on business and financing models for mini-grids. 3.3. Capacity building provided to local mini-grid developers and investors on measuring and reporting on impact indicators, building credibility in impact investment as an asset class.			
Project component 4	**Digital, Knowledge Management (KM) and Monitoring and Evaluation (M&E)**			
Outcome 4 Digital and data are mainstreamed, across stakeholders, into local mini-grid market development. Increased knowledge, awareness and network opportunities in the mini-grid market and among stakeholders,	*Indicator 12:* A project digital strategy is prepared and implemented by the PMU to contribute to project implementation and local mini-grid market development (*binary; 1/0)*	No progress, since the project has not yet started	The Project Digital strategy is developed (in consultation with public and private parties, and in close collaboration with the PMU of the AMP Regional Project and the CoPs led by the AMP Regional Project) and being implemented. (1)	The Project Digital Strategy is implemented. (1) Public officials, including women, are capacitated to utilize the associated digital tools and data reporting protocols. (1) Recommendations for rolling out digital solutions for minigrids at national level have been shared with key national stakeholders. (1)

including benefitting from linkages to international good practice.	*Indicator 13:* Mini-grid pilots are sharing data on mini-grid performance with the regional project and other stakeholders following best practices and guidance provided by the AMP Regional Project (*binary; 1/0)*	Zero, since the project has not yet started	The project's 'digital & data management platform' is procured and operational, ready for data collection from the project's mini-grid pilot(s), and for data sharing with the AMP regional project's digital platform. (1)	100% of the planned minigrid pilots, as identified in the project's Minigrid Pilot Plan, are collecting and sharing data with the AMP Regional Project (at least on a quarterly basis) using the project's 'digital & data management platform'. (1)
Outputs to achieve Outcome 4	4.1. A Project Digital Strategy is developed and implemented, including linkages to and following guidance from, the AMP Regional Project. 4.2. Mini-grids digital platform implemented to run tenders and manage data from pilots, and to support mini-grids scale-up and cost-reduction. 4.3. A Quality Assurance and Monitoring Framework (QAMF) for measuring, reporting and verification of the sustainable development impacts of all mini-grid pilots supported, including GHG emission reductions, is adopted and operationalized based on standardized guidance from the AMP Regional Project. 4.4. M&E and Reporting, including (i) Conducting inception workshop and preparing report, (ii) Ongoing M&E, (iii) Mid-term Review (MTR), and (iv) Terminal Evaluation (TE). 4.5. Engage with the AMP Regional Project, including, but not limited to, via (i) Participating in Communities of Practice (CoPs), and (ii) Capturing and sharing lessons learnt.			

VI. MONITORING AND EVALUATION (M&E) PLAN

The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored annually and evaluated periodically during project implementation. If baseline data for some of the results indicators is not yet available, it will be collected during the first year of project implementation. The Monitoring Plan included in Annex details the roles, responsibilities, and frequency of monitoring project results.

Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP (including guidance on GEF project revisions) and UNDP Evaluation Policy **The UNDP Country Office is responsible for ensuring full compliance with all UNDP project M&E requirements including project monitoring, UNDP quality assurance requirements, quarterly risk management, and evaluation requirements.**

Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the GEF Monitoring Policy and the GEF Evaluation Policy and other relevant GEF policies[22]. The M&E plan and budget included below will guide the GEF-specific M&E activities to be undertaken by this project.

In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed – including during the Project Inception Workshop - and will be detailed in the Inception Report.

Minimum project monitoring and reporting requirements as required by the GEF:

Inception Workshop and Report: A project inception workshop will be held within 2 months from the First disbursement date, with the aim to:

a. Familiarize key stakeholders with the detailed project strategy and discuss any changes that may have taken place in the overall context since the project idea was initially conceptualized that may influence its strategy and implementation.
b. Discuss the roles and responsibilities of the project team, including reporting lines, stakeholder engagement strategies and conflict resolution mechanisms.
c. Review the results framework and monitoring plan.
d. Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP and other stakeholders in project-level M&E.
e. Update and review responsibilities for monitoring project strategies, including the risk log; SESP report, Social and Environmental Management Framework (where relevant) and other safeguard requirements; project grievance mechanisms; gender strategy; knowledge management strategy, and other relevant management strategies.
f. Review financial reporting procedures and budget monitoring and other mandatory requirements and agree on the arrangements for the annual audit.
g. Plan and schedule Project Board meetings and finalize the first-year annual work plan. Finalize the TOR of the Project Board.
h. Formally launch the Project.

GEF Project Implementation Report (PIR):
The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. UNDP will undertake quality assurance of the PIR before submission to the GEF. The PIR submitted to the GEF will be shared with the Project Board. UNDP will conduct a quality review of the PIR, and this quality review and feedback will be used to inform the preparation of the subsequent annual PIR.

GEF Core Indicators:

[22] See https://www.thegef.org/gef/policies_guidelines

The GEF Core indicators included as Annex will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to MTR and TE. Note that the project team is responsible for updating the indicator status. The updated monitoring data should be shared with MTR/TE consultants prior to required evaluation missions, so these can be used for subsequent ground truthing. The methodologies to be used in data collection have been defined by the GEF and are available on the GEF website.

Independent Mid-term Review (MTR):

The terms of reference, the review process and the final MTR report will follow the standard UNDP templates and UNDP guidance for GEF-financed projects available on the UNDP Evaluation Resource Center (ERC).

The evaluation will be 'independent, impartial and rigorous'. The evaluators that UNDP will hire to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project under review.

The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the evaluation process. Additional quality assurance support is available from the BPPS/NCE-VF Directorate.

The final MTR report and MTR TOR will be publicly available in English and will be posted on the UNDP ERC by **November 1, 2024**. A management response to MTR recommendations will be posted in the ERC within six weeks of the MTR report's completion.

Terminal Evaluation (TE):
An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance for GEF-financed projects available on the UNDP Evaluation Resource Center. TE should be completed 3 months before the estimated operational closure date, set from the signature of the ProDoc and according to the duration of the project. Provisions should be taken to complete the TE in due time to avoid delay in project closure. Therefore, TE must start no later than 6 months to the expected date of completion of the TE (or 9 months prior to the estimated operational closure date).

The evaluation will be 'independent, impartial and rigorous'. The evaluators that UNDP will hire to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.

The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the BPPS/NCE-VF Directorate.

The final TE report and TE TOR will be publicly available in English and posted on the UNDP ERC by **August 1, 2026**. A management response to the TE recommendations will be posted to the ERC within six weeks of the TE report's completion.

Final Report:
The project's terminal GEF PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information:
To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper

acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy[23] and the GEF policy on public involvement[24].

Interaction between the AMP in Djibouti and the AMP Regional Project:

M&E is a key area of interface between the national project 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 in Box 1~~Box 1~~ below.

Box 1: Linkages to the AMP Regional Project - M&E

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 receive support and guidance from the AMP Regional Project for conducting M&E activities as follows:

- **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.

[23] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/
[24] See https://www.thegef.org/gef/policies_guidelines

Monitoring and Evaluation Plan and Budget:

This M&E budget provides a breakdown of costs for M&E activities to be led by the Project Management Unit during project implementation. These costs are equivalent to those of the M&E Component of the Results Framework and TBWP. Other project M&E activities can be added to this budget if they are included under the M&E component of the results framework. The oversight and participation of the UNDP Country Office/Regional technical advisors/HQ Units in these M&E activities and in performing standard UNDP M&E requirements are not included as these are covered by the GEF Fee.

GEF M&E requirements	Indicative costs (US$)	Time frame
Inception Workshop and Report	5,000	Inception Workshop within 2 months of the First Disbursement
M&E of GEF core indicators and project results framework	4,800 (1,200 per year)	Annually and at mid-point and closure.
GEF Project Implementation Report (PIR)	4,800 (1,200 per year)	Annually typically between June-August
Monitoring of environmental and social risks, and corresponding management plans as relevant (i.e. M&E Officer, including SES and Gender aspects)	4,800 (1,200 per year)	On-going.
Implementing the GRM and addressing environmental and social grievances	1,600	On-going
Supervision missions	None	Annually
Independent Mid-term Review (MTR)	66,000	1/11/2024
Independent Terminal Evaluation (TE)	66,000	1/08/2026
TOTAL indicative COST	**USD 153,000**	*4.98% of the total GEF funds*

VII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

Roles and responsibilities of the project's governance mechanism:

Implementing Partner: The Implementing Partner for this project is the ***Ministry of Urban Planning, Environment and Tourism (MUET)***.

The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.

The Implementing Partner is responsible for executing this project. Specific tasks include:

- Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
- Risk management as outlined in this Project Document;
- Procurement of goods and services, including human resources;
- Financial management, including overseeing financial expenditures against project budgets;
- Approving and signing the multiyear workplan;
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.

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.

Execution Support: The UNDP will provide country support to the IP (MUET) during implementation per the LoA letter from GEF OFP (see Annex 2).

Project Management Unit (PMU): MUET will also be responsible for the creation of a PMU (based at MUET), where a minimum of two full-time staff members will be hired to fill the positions of Project Manager and Administrative/Financial Assistant. 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.

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.

Project stakeholders and target groups:

To ensure sound management of project implementation and continuous engagement of stakeholders in all project activities, MUET will establish the following committees at project start:

- ***Steering Committee/Project Board:*** Consisting of representatives from MUET, MERN, UNDP CO, as well as representatives from the Department of Social Affairs, Chamber of Commerce, the Ministry of Higher Education, the Ministry of National Education, the Secretariat of State in charge of decentralization, the Directorate of Fisheries, the Ministry of Women and the Family, civil society, regional authorities, etc. The

role of the Board is to oversee project development, support sound governance, ensure M&E procedure is followed and support continuous collaboration with the Regional AMP. Board meetings will be held every six months. Additional meetings may be scheduled if required by the PMU during implementation. At the end of the first year of implementation, the entity selected to host the focal point for mini-grid development should be identified. The PMU should ensure this entity is represented on the Project Board.

- ***Technical Committee:*** This will be a sub-committee of the project's Steering Committee in which technical institutions related to the energy sector will be represented with the necessary expertise, i.e. representatives of ministries, the Rural Electrification Department under the Energy Directorate, private sector, academia, and NGOs. This committee is expected to meet more frequently than the Project Board, e.g. quarterly, and will be responsible for reviewing the studies and assessments which the project will generate, and advising the PMU on strategic issues and technical aspects affecting project implementation.
- ***Consultancy Task Force:*** Consisting of international & national experts taking the lead on specific technical assignments and collaborating to ensure the homogeneity of the overall output. The Project Coordinator, supported by the consultants to be in responsible for KM activities, will be responsible for bringing the consultants together and ensuring that their work is complementary.

It should be noted that members of the Steering and Technical committees representing public entities will not be paid from the project funds. The cost of their engagement will represent Government contribution to support project implementation.

The target groups under this project can be divided into four categories:

1) State and local government authorities, i.e. public sector entities;
2) Private sector associations and companies;
3) Development partners financing mini-gird, energy access and renewable energy projects in Djibouti; and
4) Local communities.

Further details on the project's strategy for engaging stakeholders and target groups in decision making processes are provided in the project's Stakeholder Engagement Plan (SEP), presented in Section IV and Annex 9.

UNDP: UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project. **The UNDP GEF Executive Coordinator, in consultation with UNDP Bureaus and the Implementing Partner, retains the right to revoke the project DOA, suspend or cancel this GEF project.** UNDP is responsible for the Project Assurance function in the project governance structure and presents to the Project Board and attends Project Board meetings as a non-voting member.

Project organisation structure:

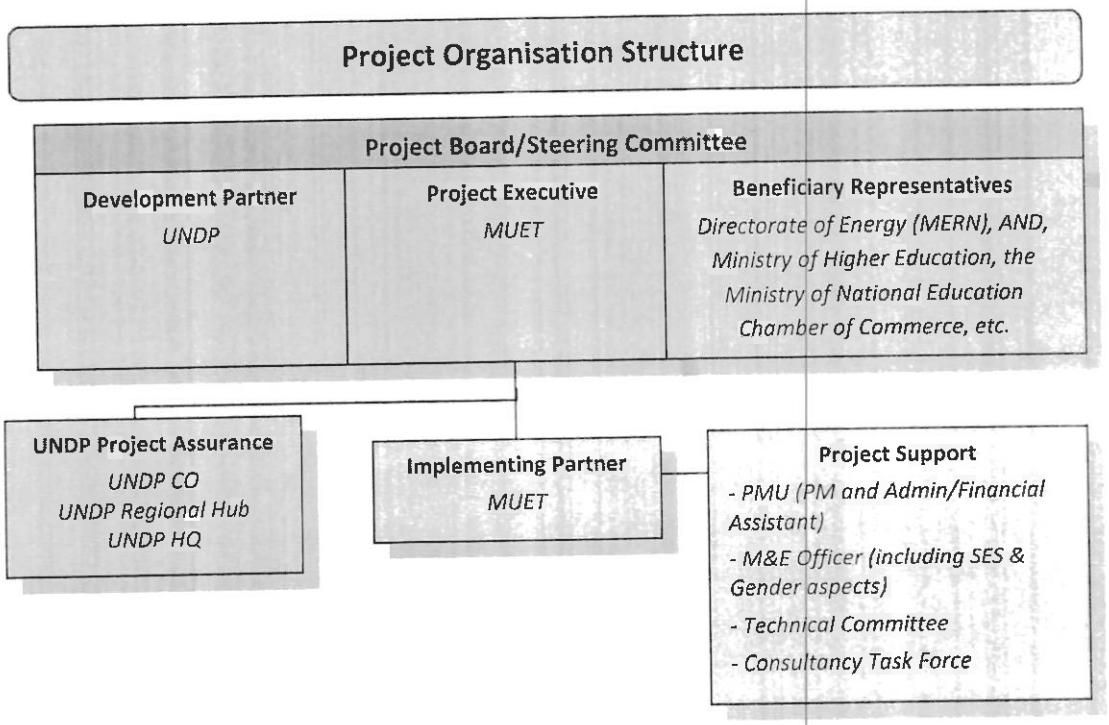


Figure 5: Project organizational structure for the AMP in Djibouti UNDP-GEF project

The UNDP Resident Representative assumes full responsibility and accountability for oversight and quality assurance of this Project and ensures its timely implementation in compliance with the GEF-specific requirements and UNDP's Programme and Operations Policies and Procedures (POPP), its Financial Regulations and Rules and Internal Control Framework. A representative of the UNDP Country Office will assume the assurance role and will present assurance findings to the Project Board, and therefore attends Project Board meetings as a non-voting member.

UNDP project support: The Implementing Partner and GEF OFP have requested UNDP to provide support services in the amount of USD$ 90,631.26 for the full duration of the project, and the GEF has agreed for UNDP to provide such execution support services and for the cost of these services to be charged to the project budget. The execution support services – whether financed from the project budget or other sources - have been set out in detail and agreed between UNDP Country Office and the Implementing Partner in a Letter of Agreement (LOA). This LOA is attached to this Project Document.

To ensure the strict independence required by the GEF and in accordance with the UNDP Internal Control Framework, these execution services will be delivered independent from the GEF-specific oversight and quality assurance services.

The Project Board (also called Project Steering Committee) is responsible for taking corrective action as needed to ensure the project achieves the desired results. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition.

In case consensus cannot be reached within the Board, the UNDP Resident Representative (or their designate) will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.

Specific responsibilities of the Project Board include:

- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;

- Address project issues as raised by the project manager;
- Provide guidance on new project risks, and agree on possible mitigation and management actions to address specific risks;
- Agree on project manager's tolerances as required, within the parameters set by UNDP-GEF, and provide direction and advice for exceptional situations when the project manager's tolerances are exceeded;
- Advise on major and minor amendments to the project within the parameters set by UNDP-GEF;
- Ensure coordination between various donor and government-funded projects and programmes;
- Ensure coordination with various government agencies and their participation in project activities;
- Track and monitor co-financing for this project;
- Review the project progress, assess performance, and appraise the Annual Work Plan for the following year;
- Appraise the annual project implementation report, including the quality assessment rating report;
- Ensure commitment of human resources to support project implementation, arbitrating any issues within the project;
- Review combined delivery reports prior to certification by the implementing partner;
- Provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
- Address project-level grievances;
- Approve the project Inception Report, Mid-term Review and Terminal Evaluation reports and corresponding management responses;
- Review the final project report package during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.
- Ensure highest levels of transparency and take all measures to avoid any real or perceived conflicts of interest.
- Designate the 'beneficiary representative' of the project on the AMP Regional Project's Steering Committee/Project Board

The composition of the Project Board must include the following roles:

a. Project Executive: Is an individual who represents ownership of the project and chairs the Project Board. The Executive is normally the national counterpart for nationally implemented projects.
The Project Executive is: *Mr. Dini Abdallah Omar, Secretary General, Ministry of Urban Planning, Environment and Tourism (MUET).*

b. Beneficiary Representative(s): Individuals or groups representing the interests of those who will ultimately benefit from the project. Their primary function within the board is to ensure the realization of project results from the perspective of project beneficiaries. Often civil society representative(s) can fulfil this role.
- The Beneficiary representative (s) is/are:
Mr. Mahad Abdourahman Omar (president), Association Green Generation
Tél: 77815880/77862760. Mail: agg.environment@gmail.com
Mr. Idriss Ahmed, Association pour le Développement Social & Enviornement Gobaad
Tél : 77.83.91.01. Mail : dadal.arho2@gmail.com

c. Development Partner(s): Individuals or groups representing the interests of the parties concerned that provide funding and/or technical expertise to the project.
The Development Partner(s) is/are: Mrs. Fatima Elsheikh, UNDP RR.

d. Project Assurance: UNDP performs the quality assurance and supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed, and conflict of interest issues are monitored and addressed. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. UNDP provides a three – tier oversight services involving the UNDP Country Offices and UNDP at regional and headquarters levels. Project assurance is totally independent of project execution.

Representation on the AMP Regional Project's board: A representative of the project will sit on the project board/steering committee of the AMP Regional Project in a role as 'beneficiary representative.' It is expected that all AMP Regional Project board meetings will be held virtually (i.e. not in-person) and that beneficiary representatives will participate in project board meetings via video-conference. The representative of the project on the AMP Regional Project board will be the *Implementing Partner (MUET)*. It is expected that the AMP Regional project board will meet a maximum of twice per year.

Project extensions: The UNDP Resident Representative and the UNDP-GEF Executive Coordinator must approve all project extension requests. Note that all extensions incur costs and the GEF project budget cannot be increased. A single extension may be granted on an exceptional basis and only if the following conditions are met: one extension only for a project for a maximum of six months; the project management costs during the extension period must remain within the originally approved amount, and any increase in PMC costs will be covered by non-GEF resources; the UNDP Country Office oversight costs in excess of the CO's Agency fee specified in the DOA during the extension period must be covered by non-GEF resources.

VIII. FINANCIAL PLANNING AND MANAGEMENT

The total cost of the project is ***USD 18,911,347***. This is financed through a **GEF grant of *USD 3,071,347*** administered by UNDP, ***USD 50,000*** in cash co-financing to be administered by UNDP and additional support of ***USD 15,790,000***. The UNDP, as the GEF Implementing Agency, is responsible for the oversight of the GEF resources and the cash co-financing transferred to UNDP bank account only.

Co-financing: The actual realization of project co-financing amounts will be monitored by the UNDP Country Office and the PMU on an annual basis in the GEF PIF and will be reported to the GEF during the mid-term review and terminal evaluation process as follows:

Co-financing source	Co-financing type	Co-financing amount	Planned Co-financing Activities/Outputs	Risks	Risk Mitigation Measures
World Bank (IDA Credit)	Loan (Investment Mobilized)	USD 15,790,000	IDA is financing the Djibouti Sustainable Electrification Project (SEP), with implementation period from July 2017 to December 2023. The Project Objective is to increase access to electricity in Djibouti. It aims to connect about 11% of the country's population to the national grid. The amount yet to be disbursed (US$ 15.79 million) is considered as co-finance contribution to the AMP in Djibouti.	There is a risk (low) that the donor engagement in the project will not be as significant as expected, due to the competing demands of stakeholder,	A Co-financing monitoring framework will be developed at the propjet inception phase ad implemented to coordinate effectively the level of progress on the implementation of the committed the government co-financing Also, if the need be, the Risk will be escalated to the Projet Board on a biannual basis for discussions and way forward actions

Implementing Partner (IP) requests for UNDP to provide country support services: The Implementing Partner and GEF OFP have requested UNDP to provide support services in the amount of USD$ 90,631.26 for the full duration of the project, and the GEF has been informed. The GEF execution support letter (signed by the GEF OFP) detailing these support services is included in Annex. To ensure the strict independence required by the GEF and in accordance with the UNDP Internal Control Framework, these execution services will be delivered independent from the GEF-specific oversight and quality assurance services (i.e. not done by same person to avoid conflict of interest). See latest guidance available from BPPS NCE-VF team.

Budget Revision and Tolerance: As per UNDP POPP, the project board may agree with the project manager on a tolerance level for each detailed plan under the overall multi-year workplan. The agreed tolerance should be written in the project document or approved project board meeting minutes. It should normally not exceed 10 percent of the agreed annual budget at the activity level, but within the overall approved multi-year workplan at the activity

level. Within the agreed tolerances, the project manager can operate without intervention from the project board. Restrictions apply as follows:

Should the following deviations occur, the Project Manager/IP through UNDP Country Office will seek the approval of the BPPS/NCE-VF team to ensure accurate reporting to the GEF. It is **strongly encouraged** to maintain the expenditures within the approved budget at the budgetary account and at the component level:

a) Budget reallocations must prove that the suggested changes in the budget will not lead to material changes in the results to be achieved by the project. A strong justification is required and will be approved on an exceptional basis. Budget re-allocations among the components (including PMC) of the approved Total Budget and Work Plans (TBWP) that represent a value greater than 10% of the total GEF grant.
b) Introduction of new outputs/activities (i.e. budget items) that were not part of the agreed project document and TBWP that represent a value greater than 5% of the total GEF grant. The new budget items must be eligible as per the GEF and UNDP policies.
c) Project management cost (PMC): budget under PMC component is capped and cannot be increased.

Any over expenditure incurred beyond the available GEF grant amount must be absorbed by non-GEF resources (e.g. UNDP TRAC or cash co-financing).

Project extensions: The UNDP Resident Representative and the UNDP-GEF Executive Coordinator must approve all project extension requests. Note that all extensions incur costs and the GEF project budget cannot be increased. A single extension may be granted on an exceptional basis and subject to the conditions and maximum durations set out in the UNDP POPP; the project management costs during the extension period must remain within the originally approved amount, and any increase in PMC costs will be covered by non-GEF resources; the additional UNDP oversight costs during the extension period must be covered by non-GEF resources, in accordance with UNDP's guidance set out in UNDP POPP.

Audit: The project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies. Audit cycle and process must be discussed during the Inception workshop. If the Implementing Partner is an UN Agency, the project will be audited according to that Agencies applicable audit policies.

Project Closure: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP. All costs incurred to close the project must be included in the project closure budget and reported as final project commitments presented to the Project Board during the final project review. The only costs a project may incur following the final project review are those included in the project closure budget.

Operational completion: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. **Operational closure must happen at the end date calculated by the approved duration after the Project Document signature or at the revised operational closure date as approved in the project extension. Any expected activity after the operational date requires project extension approval.** The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. At this time, the project should have completed the transfer or disposal of any equipment that is still the property of UNDP.

Transfer or disposal of assets: In consultation with the Implementing Partner and other parties of the project, UNDP is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project (it is strongly encouraged to be done before the operational closure date). In all cases of transfer, a transfer document

must be prepared and kept on file[25]. The transfer should be done before Project Management Unit complete their assignments.

Financial completion (closure): The project will be financially closed when the following conditions have been met: a) the project is operationally completed or has been cancelled; b) the Implementing Partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

The project will be financially completed **within 6 months of operational closure or after the date of cancellation**. If Operational Closure is delayed for any justified and approved reason, the Country Office should do all efforts to Financially Close the project within 9 months after TE is completed. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the BPPS/NCE-VF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

Refund to GEF: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the BPPS/NCE-VF Directorate in New York. No action is required by the UNDP Country Office on the actual refund from UNDP project to the GEF Trustee.

[25] See https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PPM_Project%20Management_Closing.docx&action=default.

IX. TOTAL BUDGET AND WORK PLAN

Total Budget and Work Plan			
Atlas Award ID	00106652	Atlas Output Project ID:	00107281
Atlas Proposal or Award Title	AMP Child Djibouti		
Atlas Business Unit	DJI10		
Atlas Primary Output Project Title	Djibouti Minigrids		
UNDP-GEF PIMS No.	6327		
Implementing Partner	Ministry of Urban Planning, Environment and Tourism (MUET)		

Atlas Activity (GEF Component)	Atlas Implementing Agent (Responsible Party[2] , IP or UNDP)	Atlas Fund ID	Donor Name	Atlas Budgetary Account Code[3]	ATLAS Budget Account Description[3]	Amount Year 1 2021/2022 (USD)	Amount Year 2 2022/2023 (USD)	Amount Year 3 2023/2024 (USD)	Amount Year 4 2024/2025 (USD)	Total (USD)	*See Budget Note:*
COMPONENT 1: Policy and Regulation	MUET	62000	GEF	71200	International Consultants	50,000	46,000	45,400	45,000	186,400	*1*
				71300	Local Consultants	31,000	31,000	31,000	30,000	123,000	*2*
				71400	Contractual services - Individuals	50,000	-	-	-	50,000	*3*
				72100	Contractual services - Companies	50,000	40,000	35,000	35,000	160,000	*4*
				~~75700~~	~~Training, workshop, conference~~	~~25,000~~	~~25,000~~	~~25,000~~	~~25,000~~	~~100,000~~	~~5~~
				71600	Travel	15,000	10,000	10,000	10,336	45,336	*6*
					sub-total GEF	**221,000**	**152,000**	**146,400**	**145,336**	**664,736**	
		4000	UNDP	75700	Training, workshop, conference	2,500	2,500	2,500	2,500	10,000	*7*
					sub-total UNDP	**2,500**	**2,500**	**2,500**	**2,500**	**10,000**	
					Total Component 1	**223,500**	**154,500**	**148,900**	**147,836**	**674,736**	
COMPONENT 2: Business Model Innovation	MUET	62000	GEF	71200	International Consultants	30,000	30,000	20,000	20,000	100,000	*8*
				71300	Local Consultants	15,000	15,000	15,000	15,000	60,000	*9*
				71400	Contractual services - Individuals	40,000	10,000	10,000	7,000	67,000	*10*

with Private Sector				72100	Contractual services - Companies	-	40,000	40,000	40,000	120,000	11
				72300	Material & Goods	-	1,000,000	265,321	-	1,265,321	12
				75700	Training, workshop, conference	10,000	10,000	15,000	15,000	50,000	13
				71600	Travel	5,000	5,000	5,000	4,893	19,893	14
					sub-total GEF	**100,000**	**1,110,000**	**370,321**	**101,893**	**1,682,214**	
		4000	**UNDP**	72100	Contractual services - Companies	-	5,000	2,500	2,500	10,000	15
					sub-total UNDP	**-**	**5,000**	**2,500**	**2,500**	**10,000**	
					Total Component 2	**100,000**	**1,115,000**	**372,821**	**104,393**	**1,692,214**	
COMPONENT 3: Scaled-up Financing	MUET	**62000**	**GEF**	71200	International Consultants	30,000	30,000	25,000	25,000	110,000	16
				71300	Local Consultants	15,000	15,000	15,000	15,000	60,000	17
				72100	Contractual services - Companies	36,000	20,000	20,000	20,000	96,000	18
				75700	Training, workshop, conference	10,000	10,000	20,000	20,000	60,000	19
				71600	Travel	5,000	5,000	5,000	4,899	19,899	20
					sub-total GEF	**96,000**	**80,000**	**85,000**	**84,899**	**345,899**	
					Total Component 3	**96,000**	**80,000**	**85,000**	**84,899**	**345,899**	
				71400	Contractual services - Individuals	8,000	4,000	4,000	4,000	20,000	21
				72100	Contractual services - Companies	-	1,500	1,500	7,000	10,000	22
COMPONENT 4: Digital, Knowledge Management (KM) and Monitoring & Evaluation (M&E)		**62000**	**GEF**	75700	Training, workshop, conference	6,000	8,000	8,000	7,243	29,243	23
				71600	Travel	2,500	7,500	2,500	7,500	20,000	24
					sub-total KM	**16,500**	**21,000**	**16,000**	**25,743**	**79,243**	
				71200	International Consultants	-	50,000	-	50,000	100,000	a
				71300	Local Consultants	1,200	17,200	1,200	17,200	36,800	b
				72100	Contractual services - Companies	7,800	2,800	2,800	2,800	16,200	22
					sub-total M&E	**9,000**	**70,000**	**4,000**	**70,000**	**153,000**	

					sub-total GEF	**25,500**	**91,000**	**20,000**	**95,743**	**232,243**	
		4000	**UNDP**	74500	Miscellaneous	2,500	2,500	2,500	2,500	10,000	*25*
					sub-total UNDP	**2,500**	**2,500**	**2,500**	**2,500**	**10,000**	
					Total Component 4	**28,000**	**93,500**	**22,500**	**98,243**	**242,243**	*c*
Project Management Costs (PMC)	**MUET**	**62000**	**GEF**	71400	Contractual services - Individuals	12,862	12,862	12,862	12,863	51,449	*26*
				74596	Services to Projects (Direct Project Cost)	22,658	22,658	22,658	22,657	90,631	*27*
				72800	IT Equipment	1,175	1,000	1,000	1,000	4,175	*28*
					sub-total GEF	**36,695**	**36,520**	**36,520**	**36,520**	**146,255**	
		4000	**UNDP**	74100	Professional services	5,000	5,000	5,000	5,000	20,000	*d*
					sub-total UNDP	**5,000**	**5,000**	**5,000**	**5,000**	**20,000**	
					Total Project Management	**41,695**	**41,520**	**41,520**	**41,520**	**166,255**	
SUB-TOTAL GEF						**479,195**	**1,469,520**	**658,241**	**464,391**	**3,071,347**	
SUB-TOTAL UNDP						**10,000**	**15,000**	**12,500**	**12,500**	**50,000**	
PROJECT TOTAL						**489,195**	**1,484,520**	**670,741**	**476,891**	**3,121,347**	

Summary of Funds:

	Amount Year 1 2021/2022	Amount Year 2 2022/2023	Amount Year 3 2023/2024	Amount Year 4 2024/2025	Total (USD)
GEF grant administered by UNDP	$ 479,195	$ 1,469,520	$ 658,241	$ 464,391	$ 3,071,347
Grant co-finance by GEF Agency: UNDP	$ 10,000	$ 15,000	$ 12,500	$ 12,500	$ 50,000
Loan co-finance by Donor Agency: World Bank	-	$ 15,790,000	-	-	$ 15,790,000
TOTAL	**$ 489,195**	**$ 17,274,520**	**$ 670,741**	**$ 476,891**	**$ 18,911,347**

Budget note number	Comments: Budget note should be output based rather than input based. Even for individual consultants' outputs of the consultants must be clear. Include cost breakdown and calculation basis (e.g. daily fee and number of days/weeks, unit cost and number), as well as a total amount for the budget line.
a	Since this is a full-size project, USD 50,000 has been allocated for independent lead consultant to undertake the mid-term review and USD 50,000 for independent lead consultant to undertake the terminal evaluation.
b	Fees for Local Consultants involved in M&E procedure. This includes: - MTR and TE visits: Since this is a full-size project, USD 16,000 has been allocated for independent national consultant to undertake the mid-term review and USD 16,000 for independent national consultant to undertake terminal evaluation. - SES and Gender Officer, responsible for developing the project's ESAP, in line with the project's ESMF, and conducting quarterly monitoring visits to project sites to ensure compliance with SES requirements. ($300/week for 4 weeks/year over 4 years, costing about USD 4,800).
c	The total amount for Component 4 includes the M&E budget (USD 153,000) detailed in Section VI of this document, i.e. the USD 232,243 includes USD 100,000 for international MTR and TE Consultancies, USD 32,000 for local MTR and TE Consultancies, and USD 21,000 for the work performed to comply with the GEF M&E requirements, as described in budget notes a, b and 23, respectively.
d	An estimated audit cost of USD 5,000 a year has been allocated by the UNDP CO – as recommended in the latest template for UNDP Project Documents.
1	Fees for International Consultants involved in the work under Component 1. This includes: - Mini-grid Policy and Regulations Expert ($600/week for 26 weeks/year over 4 years, costing about USD 62,400), - Organizational Development and Institutional Capacity Building Expert ($500/week for 26 weeks/year over 4 years, costing about USD 52,000), - Mini-grid Education and Vocational Training Expert ($500/week for 26 weeks/year over 4 years, costing about USD 52,000), and - Technical Standards and Quality Control Expert ($500/week for 20 weeks/year over 2 years, costing about USD 20,000).
2	Fees for Local Consultants involved in supporting the project team and facilitating the implementation of all activities under Component 1. This includes: - Mini-grid Policy and Regulations Specialist ($300/week for 38 weeks/year over 4 years, costing about USD 45,600), - Communication Specialists with experience in the Energy Sector ($300/week for 36 weeks/year over 4 years, costing about USD 43,200), and - Training Facilitators and Capacity Building Specialists with background in Energy Policy ($225/week for 38 weeks/year over 4 years, costing about USD 34,200).
3	Fees for contracting national and international consultants to conduct the initial full quantitative national DREI analyses.
4	Fees for consultancy (contractual services – companies) to support the project team with conducting market research and associating studies. The services include capacity assessment for the public sector to advise on the most suitable institutional setup, private sector mapping on the national level to define the technical gaps limiting their ability to participate in tenders and advise suitable capacity building activities, and market research to assess the commercial gaps prohibiting the expansion of ESCOs in Djibouti.
5	Expenditures for organizing consultation meetings, stakeholders' engagement conferences, capacity building workshops and round table discussions, to support the implementation of activities under Component 1. The amount includes budget allocation for DREI dissemination activities (e.g. workshops, round tables, etc.) towards the end of Year 1 and in Year 2.
6	Travel expenses for missions conducted by international consultants contracted to perform activities under Component 1. This includes $7,500 as travel budget for international DREI consultant to go on mission twice during Year 1.
7	Expenditures for organizing consultation meetings, stakeholders' engagement conferences, capacity building workshops and round table discussions, to support the implementation of activities under Component 1.
8	Fees for International Consultants involved in the work under Component 2. This includes: - Mini-grid Design Experts ($875/week for 20 weeks/year over 4 years, costing about USD 70,000), and - Tendering and Commercialization Experts ($500/week for 15 weeks/year over 4 years, costing about USD 30,000).

Budget note number	Comments: Budget note should be output based rather than input based. Even for individual consultants' outputs of the consultants must be clear. Include cost breakdown and calculation basis (e.g. daily fee and number of days/weeks, unit cost and number), as well as a total amount for the budget line.
9	Fees for Local Consultants involved in supporting the project team and facilitating the implementation of all activities under Component 2. This includes: - Mini-grids Local Engineers ($375/week for 28 weeks/year over 4 years, costing about USD 42,000), and - Training Facilitators and Capacity Building Specialists with Engineering background ($750/week for 24 weeks/year over 4 years, costing about USD 18,000).
10	Fees for consultancy (contractual services – individuals) to develop the Procurement Plan for the project. This includes providing details on all procurement activities, including defining the specifications for goods and material – in collaboration with other project consultants, developing the tender documents and the procedure for the selection of the contractor to undertake the retrofitting activities, and supporting the PMU on the evaluation of offers and other procurement logistics. The services include conduction needs assessment and community surveys at Yoboki and Khor-Angar to determine the capacity for the mini-grid pilot project(s).
11	Fees for national contractor (Contractual Services – Company) to undertake the site work required to install and commission the pilot projects, in accordance with the Procurement Plan to be developed during Year 1 of project implementation.
12	Investment budget for the purchase of system components, i.e. goods and material, for the mini-grid pilot project(s). The Procurement Plan will be developed during Year 1 of implementation when further studies are conducted and the exact location and systems' capacity are identified.
13	Expenditures for organizing consultation meetings, stakeholders' engagement conferences, capacity building workshops and round table discussions, to support the implementation of activities under Component 2.
14	Travel expenses for missions conducted by international consultants contracted to perform activities under Component 2.
15	Fees for the contractor (Contractual Services – Company) to undertake the site work required to install and commission the pilot projects, in accordance with the Procurement Plan to be developed during Year 1 of project implementation.
16	Fees for International Consultants involved in the work under Component 3. This includes: - Financial Market Analysis and Financing Mechanisms Development Experts ($500/week for 38 weeks/year over 4 years, costing about USD 76,000), and - Investor Relations and Capacity Building Expert ($500/week for 34 weeks/year over 2 years, costing about USD 34,000).
17	Fees for Local Consultants involved in supporting the project team and facilitating the implementation of all activities under Component 3. This includes: - Energy Finance Specialist ($300/week for 23 weeks/year over 4 years, costing about USD 27,600), - Communication Specialists with experience in the Finance Sector ($300/week for 20 weeks/year over 3 years, costing about USD 18,000), and - Training Facilitators and Capacity Building Specialists with background in Finance ($225/week for 32 weeks/year over 2 years, costing about USD 14,400).
18	Fees for national consultancy (contractual services – companies) to perform market analyses to identify and promote financing mechanisms, schemes and incentives, that can help domestic financial institutions and local mini-grid investors engage in the development and operation of low-carbon mini-grids. The responsibilities under this contract also include the preparation of operational guidance and training manuals for the integration of solar PV-batteries mini-grid systems in existing funding instruments and financing mechanisms.
19	Expenditures for organizing consultation meetings, stakeholders' engagement conferences, capacity building workshops and round table discussions, to support the implementation of activities under Component 3.
20	Travel expenses for missions conducted by international consultants contracted to perform activities under Component 3.
21	Fees for consultancy (contractual services – individuals) to support the project team with the design and implementation of effective KM, M&E and QA systems and procedures, including the design of national digital convening platform for key stakeholders. This includes the development of templates for the team to use in reporting, as well as the design of suitable surveys in English, French and Arabic, as appropriate. This budget also includes carrying out specific national-level activities which can contribute to the AMP program and link up with the AMP Regional Project's activities, noting that this will not involve any transfer to the regional child project, but will simply cover national child project costs.

Budget note number	Comments: Budget note should be output based rather than input based. Even for individual consultants' outputs of the consultants must be clear. Include cost breakdown and calculation basis (e.g. daily fee and number of days/weeks, unit cost and number), as well as a total amount for the budget line.
22	Fees for hiring of a local firm for data collection and development of communications content (including photos and/or video footage) for the preparation of an 'insight brief' capturing (in an accessible format) selected key highlights from a successful national project activity. This insight brief will be developed in a standard format provided by the AMP Regional Project. The AMP Regional Project will also support the dissemination of the Insight Briefs developed by the national AMP projects. The costs include USD 5,000 for translation from French to English and costs related to the activities performed under GEF M&E requirements, i.e. inception workshop, inception report, M&E of GEF core indicators and issuance of PIRs, as well as the fees proposed to implement the project's GRM and address SES-related grievances. The summation of this item and the fees for international and local consultants (contracted to perform MTR and TE), and the fees for the Local SES and Gender Officer, presents the total M&E budget detailed in Section VI.
23	Expenditures for organizing consultation meetings, stakeholders' engagement conferences, capacity building workshops and round table discussions, to support the implementation of activities under Component 4.
24	- Travel expenses for missions conducted by international consultants contracted to perform activities under Component 4. - The amount also includes USD 2,500 per year for travel expenses related to the projects participation in the meetings organized by the Communities of Practice (CoP) to be led by the AMP Regional Project. The location of these events will be confirmed by the AMP Regional Project during implementation, but the budget is expected to cover the expenses required for at least one member of the PMU to attend in-person at least one CoP meeting per year.
25	Expenditures for organizing consultation meetings, stakeholders' engagement conferences, capacity building workshops and round table discussions, to support the implementation of activities under Component 4.
26	Budget for hiring local staff for the PMU. This includes: - Project Manager (PM) (Full-time employment at a rate of $1,072/month for 4 years, costing about 51,449 USD)
27	Fees for UNDP to provide execution support services (Direct Project Cost)
28	Software, computers, and IT tools for the project team.

X. LEGAL CONTEXT

Option a. Where the country has signed the Standard Basic Assistance Agreement (SBAA)

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the **Government of Djibouti** and UNDP, signed on **(October 5th, 1979)**. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

This project will be implemented by the **Ministry of Urban Planning, Environment and Tourism (MUET)** ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

XI. RISK MANAGEMENT

Option a. Implementing Partner is a Government Entity (NIM)

1. Consistent with the Article III of the SBAA *[or the Supplemental Provisions to the Project Document]*, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
   a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
   b) assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan.

2. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document.

3. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/ag_sanctions_list.shtml.

4. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.

(a) In the implementation of the activities under this Project Document, the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").

(b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment.

5. a) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities), and shall require from its sub-parties referred to in paragraph 4 (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, the Implementing Partner will and will require that such sub-parties will take all appropriate measures to:

   i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;

ii. Offer employees and associated personnel training on prevention and response to SH and SEA, where the Implementing Partner and its sub-parties referred to in paragraph 4 have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and its sub-parties may use the training material available at UNDP;

iii. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties referred to in paragraph 4 have been informed or have otherwise become aware, and status thereof;

iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and

v. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in paragraph 4 with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.

b) The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties referred to in paragraph 4, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.

6. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).

7. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

8. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

9. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

10. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

11. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes in accordance with UNDP's regulations, rules, policies and

procedures. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.

12. The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

    Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

13. UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail the Implementing Partner's obligations under this Project Document.

    Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

    Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

14. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.

15. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

16. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this Project Document.

XII. MANDATORY ANNEXES

1. GEF Budget Template
2. GEF Execution Support Letter
3. Project Map and geospatial coordinates of the project area
4. Multiyear Workplan
5. Monitoring Plan
7. UNDP Atlas Risk Register
8. Overview of technical consultancies/subcontracts
14. GEF Core indicators
15. GEF 7 Taxonomy

Separate Annexes – included as part of the Project Document and submission package to the GEF:

6. Social and Environmental Screening Procedure (SESP)
9. Stakeholder Engagement Plan (SEP)
10. Environmental and Social Management Framework (ESMF)
11. Gender Analysis and Gender Action Plan (GAP)
12. GHG emissions reduction calculation
13. Additional agreements:

    Annex 13-1: Letter of co-finance by the UNDP

    Annex 13-2: Letters of co-finance by the World Bank (WB)

Annex 1: GEF Budget Template

Expenditure Category	Detailed Description	Component (USDeq.)							Total (USDeq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)[1]
		Component 1	*Component 2*	*Component 3*	*Component 4*	*Sub-Total*	*M&E*	*PMC*		
		Sub-component 1.1	*Sub-component 2.1*	*Sub-component 3.1*	*Sub-component 4.1*					
Equipment	Investment budget for the purchase of system components, i.e. goods and material, for the mini-grid pilot project(s). The Procurement Plan will be developed during Year 1 of implementation when further studies are conducted and the exact location and systems' capacity are identified.		1,265,321			1,265,321			1,265,321	MUET
Equipment	Software, computers, and IT tools for the project team					-		4,175	4,175	MUET
Sub-contract to executing partner	Fees for UNDP to provide execution support services (Direct Project Cost)					-		90,631	90,631	UNDP
Contractual Services – Individual	Fees for contracting national and international consultants to conduct the initial full quantitative national DREI analyses.	50,000				50,000			50,000	MUET
Contractual Services – Individual	Fees for consultancy (contractual services – individuals) to develop the Procurement Plan for the project. This includes providing details on all procurement activities, including defining the specifications for goods and material – in collaboration with other project consultants, developing the tender documents and the procedure for the selection of the contractor to undertake the retrofitting activities, and supporting the PMU on the evaluation of offers and other procurement logistics. The services include conduction needs assessment and community surveys at Yoboki and Khor-Angar to determine the capacity for the mini grid pilot project(s).		67,000			67,000			67,000	MUET

Contractual Services – Individual	Fees for consultancy (contractual services – individuals) to support the project team with the design and implementation of effective KM, M&E and QA systems and procedures, including the design of national digital convening platform for key stakeholders. This includes the development of templates for the team to use in reporting, as well as the design of suitable surveys in English, French and Arabic, as appropriate. This budget also includes carrying out specific national-level activities which can contribute to the AMP program and link up with the AMP Regional Project's activities, noting that this will not involve any transfer to the regional child project, but will simply cover national child project costs.				20,000	20,000			20,000	MUET
Contractual Services – Individual	Budget for hiring local staff for the PMU. This includes: - Project Manager (PM) (Full-time employment at a rate of $1,072/month for 4 years, costing about 51,449 USD)					-		51,449	51,449	MUET
Contractual Services – Individual						-			-	MUET
Contractual Services – Company	Fees for consultancy (contractual services – companies) to support the project team with conducting market research and associating studies. The services include capacity assessment for the public sector to advise on the most suitable institutional setup, private sector mapping on the national level to define the technical gaps limiting their ability to participate in tenders and advise suitable capacity building activities, and market research to assess the commercial gaps prohibiting the expansion of ESCOs in Djibouti.	160,000				160,000			160,000	MUET
Contractual Services – Company	Fees for national contractor (Contractual Services – Company) to undertake the site work required to install and commission the pilot projects, in accordance with the Procurement Plan to be developed during Year 1 of project implementation.		120,000			120,000			120,000	MUET

Contractual Services – Company	Fees for national consultancy (contractual services – companies) to perform market analyses to identify and promote financing mechanisms, schemes and incentives, that can help domestic financial institutions and local mini-grid investors engage in the development and operation of low-carbon mini-grids. The responsibilities under this contract also include the preparation of operational guidance and training manuals for the integration of solar PV-batteries mini-grid systems in existing funding instruments and financing mechanisms.			96,000		96,000			96,000	MUET
Contractual Services – Company	Fees for hiring of a local firm for data collection and development of communications content (including photos and/or video footage) for the preparation of an 'insight brief' capturing (in an accessible format) selected key highlights from a successful national project activity. This insight brief will be developed in a standard format provided by the AMP Regional Project. The AMP Regional Project will also support the dissemination of the Insight Briefs developed by the national AMP projects. The costs include USD 5,000 for translation from French to English and costs related to the activities performed under GEF M&E requirements, i.e. inception workshop, inception report, M&E of GEF core indicators and issuance of PIRs, as well as the fees proposed to implement the project's GRM and address SES-related grievances. The summation of this item and the fees for international and local consultants (contracted to perform MTR and TE), and the fees for the Local SES and Gender Officer, presents the total M&E budget detailed in Section VI.				10,000	10,000			10,000	MUET

Contractual Services – Company	Fees for hiring of a local firm for data collection and development of communications content (including photos and/or video footage) for the preparation of an 'insight brief' capturing (in an accessible format) selected key highlights from a successful national project activity. This insight brief will be developed in a standard format provided by the AMP Regional Project. The AMP Regional Project will also support the dissemination of the Insight Briefs developed by the national AMP projects. The costs include USD 5,000 for translation from French to English and costs related to the activities performed under GEF M&E requirements, i.e. inception workshop, inception report, M&E of GEF core indicators and issuance of PIRs, as well as the fees proposed to implement the project's GRM and address SES-related grievances. The summation of this item and the fees for international and local consultants (contracted to perform MTR and TE), and the fees for the Local SES and Gender Officer, presents the total M&E budget detailed in Section VI.						16,200		16,200	MUET
International Consultants	Fees for International Consultants involved in the work under Component 1. This includes: - Mini-grid Policy and Regulations Expert ($600/week for 26 weeks/year over 4 years, costing about USD 62,400), - Organizational Development and Institutional Capacity Building Expert ($500/week for 26 weeks/year over 4 years, costing about USD 52,000), - Mini-grid Education and Vocational Training Expert ($500/week for 26 weeks/year over 4 years, costing about USD 52,000), and - Technical Standards and Quality Control Expert ($500/week for 20 weeks/year over 2 years, costing about USD 20,000).	186,400				186,400			186,400	MUET
International Consultants	Fees for International Consultants involved in the work under Component 2. This includes: - Mini-grid Design Experts ($875/week for 20 weeks/year over 4 years, costing about USD 70,000), and - Tendering and Commercialization Experts ($500/week for 15 weeks/year over 4 years, costing about USD 30,000).		100,000			100,000			100,000	MUET

International Consultants	Fees for International Consultants involved in the work under Component 3. This includes: - Financial Market Analysis and Financing Mechanisms Development Experts ($500/week for 38 weeks/year over 4 years, costing about USD 76,000), and - Investor Relations and Capacity Building Expert ($500/week for 34 weeks/year over 2 years, costing about USD 34,000).			110,000		110,000			110,000	MUET
International Consultants	Since this is a full-size project, USD 50,000 has been allocated for independent lead consultant to undertake the mid-term review and USD 50,000 for independent lead consultant to undertake the terminal evaluation.						100,000		100,000	MUET
Local Consultants	Fees for Local Consultants involved in supporting the project team and facilitating the implementation of all activities under Component 1. This includes: - Mini-grid Policy and Regulations Specialist ($300/week for 38 weeks/year over 4 years, costing about USD 45,600), - Communication Specialists with experience in the Energy Sector ($300/week for 36 weeks/year over 4 years, costing about USD 43,200), and - Training Facilitators and Capacity Building Specialists with background in Energy Policy ($225/week for 38 weeks/year over 4 years, costing about USD 34,200).	123,000				123,000			123,000	MUET
	Fees for Local Consultants involved in supporting the project team and facilitating the implementation of all activities under Component 2. This includes:									
Local Consultants	- Mini-grids Local Engineers ($375/week for 28 weeks/year over 4 years, costing about USD 42,000), and - Training Facilitators and Capacity Building Specialists with Engineering background ($750/week for 24 weeks/year over 4 years, costing about USD 18,000).		60,000			60,000			60,000	MUET

Local Consultants	Fees for Local Consultants involved in supporting the project team and facilitating the implementation of all activities under Component 3. This includes: - Energy Finance Specialist ($300/week for 23 weeks/year over 4 years, costing about USD 27,600), - Communication Specialists with experience in the Finance Sector ($300/week for 20 weeks/year over 3 years, costing about USD 18,000), and - Training Facilitators and Capacity Building Specialists with background in Finance ($225/week for 32 weeks/year over 2 years, costing about USD 14,400).			60,000		60,000			60,000	MUET
Local Consultants	Fees for Local Consultants involved in M&E procedure. This includes: - MTR and TE visits: Since this is a full-size project, USD 16,000 has been allocated for independent national consultant to undertake the mid-term review and USD 16,000 for independent national consultant to undertake terminal evaluation. - SES and Gender Officer, responsible for developing the project's ESAP, in line with the project's ESMF, and conducting quarterly monitoring visits to project sites to ensure compliance with SES requirements. ($300/week for 4 weeks/year over 4 years, costing about USD 4,800).					-	36,800		36,800	MUET
Trainings, Workshops, Meetings	Expenditures for organizing consultation meetings, stakeholders' engagement conferences, capacity building workshops and round table discussions, to support the implementation of activities under Component 1. The amount includes budget allocation for DREI dissemination activities (e.g. workshops, round tables, etc.) towards the end of Year 1 and in Year 2.	100,000				100,000			100,000	MUET
Trainings, Workshops, Meetings	Expenditures for organizing consultation meetings, stakeholders' engagement conferences, capacity building workshops and round table discussions, to support the implementation of activities under Component 2.		50,000			50,000			50,000	MUET

Trainings, Workshops, Meetings	Expenditures for organizing consultation meetings, stakeholders' engagement conferences, capacity building workshops and round table discussions, to support the implementation of activities under Component 3.			60,000		60,000			60,000	MUET
Trainings, Workshops, Meetings	Expenditures for organizing consultation meetings, stakeholders' engagement conferences, capacity building workshops and round table discussions, to support the implementation of activities under Component 4.				29,243	29,243			29,243	MUET
Travel	Travel expenses for missions conducted by international consultants contracted to perform activities under Component 1. This includes $7,500 as travel budget for international DREI consultant to go on mission twice during Year 1.	45,336				45,336			45,336	MUET
Travel	Travel expenses for missions conducted by international consultants contracted to perform activities under Component 2.		19,893			19,893			19,893	MUET
Travel	Travel expenses for missions conducted by international consultants contracted to perform activities under Component 3.			19,899		19,899			19,899	MUET
Travel	Travel expenses for missions conducted by international consultants contracted to perform activities under Component 4. - The amount also includes USD 2,500 per year for travel expenses related to the projects participation in the meetings organized by the Communities of Practice (CoP) to be led by the AMP Regional Project. The location of these events will be confirmed by the AMP Regional Project during implementation, but the budget is expected to cover the expenses required for at least one member of the PMU to attend in-person at least one CoP meeting per year.				20,000	20,000			20,000	MUET
Grand Total		664,736	1,682,214	345,899	79,243	2,772,092	153,000	146,255	3,071,347	

Annex 2: GEF Execution Support Letter

Programme des Nations Unies pour le développement

Au service
des peuples
et des nations

LETTER OF AGREEMENT BETWEEN UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP) AND THE MINISTRY OF URBANISM, ENVIRONMENT AND TOURISM (MED) FOR THE PROVISION OF SUPPORT SERVICES

UNDER PROJECT "National child project under the GEF Africa Mini-grids Program".

Excellency,

1. Reference is made to consultations between officials of the Ministry of Environment and Sustainable Development of Djibouti and officials of UNDP with respect to the provision of support services by the UNDP country office for nationally managed programmes and projects. UNDP and the MEDD hereby agree that the UNDP country office may provide such support services at the request of the Government through its institution designated in the relevant programme support document or project document, as described below.

2. The UNDP country office may provide support services for assistance with reporting requirements, procurement and direct payment. In providing such support services, the UNDP country office shall ensure that the capacity of the Government-designated institution is strengthened to enable it to carry out such activities directly. The costs incurred by the UNDP country office in providing such support services.

3. The UNDP country office will provide, at the request of the designated institution, financial, procurement (above DJF 5 Million) and administrative support services as described in Annex 2.

4. The procurement of goods and services and the recruitment of project and programme personnel by the UNDP country office shall be in accordance with the UNDP regulations, rules, policies and procedures. Support services described in paragraph 3 above shall be detailed in an annex to the programme support document or project document, in the form provided in the Attachment hereto. If the requirements for support services by the country office change during the life of a programme or project, the annex to the programme support document or project document is revised with the mutual agreement of the UNDP resident representative and the designated institution.

5. The relevant provisions of the UNDP standard basic assistance agreement with the MEDD (the "SBAA"), including the provisions on liability and privileges and immunities, shall apply to the provision of such support services. The MEDD shall retain overall responsibility for the nationally managed programme or project through its designated institution. The responsibility of the UNDP country office for the provision of the support services described herein shall be limited to the provision of such support services detailed in the annex to the programme support document or project document.

6. Any claim or dispute arising under or in connection with the provision of support services by the UNDP country office in accordance with this letter shall be handled pursuant to the relevant provisions of the SBAA.

Téléphone : (253) 21 35 33 71 – (253) 21 35 33 72 – (253) 21 35 43 54 / Facsimile : (253) 21 35 05 87
E-mail : registry.dj@undp.org / B.P. 2001 Djibouti

7. The manner and method of cost-recovery by the UNDP country office in providing the support services described in paragraph 3 above shall be specified in Annex 2.

8. The UNDP country office shall submit progress reports on the support services provided and shall report on the costs reimbursed in providing such services, as may be required.

9. Any modification of the present arrangements shall be effected by mutual written agreement of the parties hereto.

10. If you are in agreement with the provisions set forth above, please sign and return to this office two signed copies of this letter. Upon your signature, this letter shall constitute an agreement between your Government and UNDP on the terms and conditions for the provision of support services by the UNDP country office for nationally managed programmes and projects.

Yours sincerely,

For the National Implementation Agency
Dini Abdallah Omar
MEDD Secretary General

Signed on behalf of UNDP
Gael Ollivier
UNDP Resident Representative a.i.

16/06/21

Téléphone : (253) 21 35 33 71 – (253) 21 35 33 72 – (253) 21 35 43 54 / Facsimile : (253) 21 35 05 87
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Annex 2
DESCRIPTION OF UNDP COUNTRY OFFICE SUPPORT SERVICES

1. Reference is made to consultations between Ministry of Environment and Sustainable Development the institution designated by the Government and officials of UNDP with respect to the provision of support services by the UNDP country office for the nationally managed programme or project **"00106652 AMP Child project Djibouti".**

2. In accordance with the provisions of the letter of agreement signed on 17/06/2021 and the project document, the UNDP country office shall provide support services for the Project as described below.

Support services	**Cost to UNDP of providing such support services**	**Schedule for the provision of the support services**	**Amount and method of reimbursement of UNDP**
• Payment Process • Issue check only (Atlas Agencies) • Vendor profile only (Atlas Agencies only) • Consultant recruitment • Travel Authorization • F10 settlement • Procurement process involving local CAP (and/or ITB, RFP requirements • Procurement not involving local CAP (Low Value Procurement) • Disposal of equipment.	• US$ 40 010,05 • US$ 3 310,20 • US$ 1 459,80 • US$ 5 151,00 • US$ 6 861,60 • US$ 1 389,92 • US$ 9 891,92 • US$ 14 830,26 • US$ 7 725,93	**As defined on the Annual Work Plan or request ad-hoc.**	**UNDP will directly charge the project upon receip of request of services from the implementation Partner (IP).**
Total DPC value	**90 631,26** US$		

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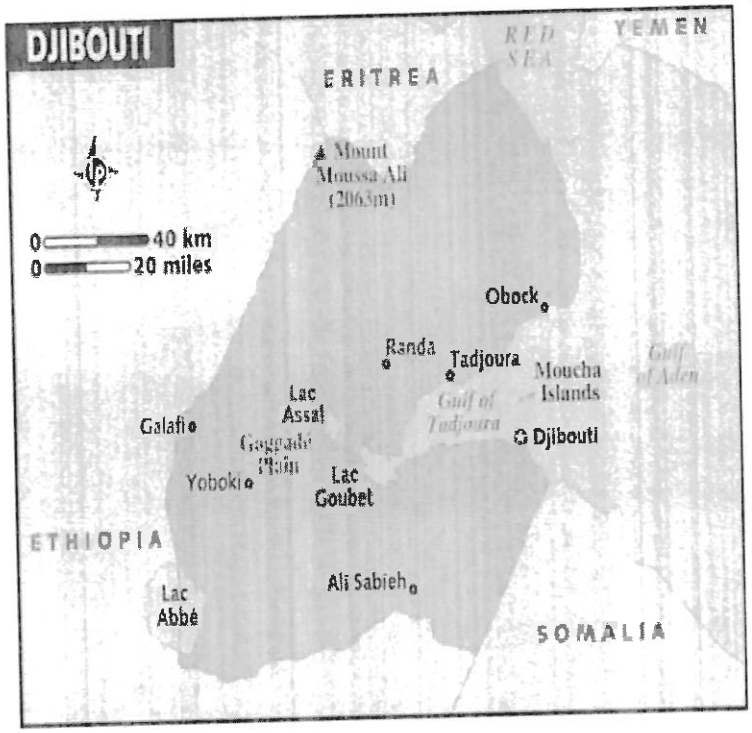
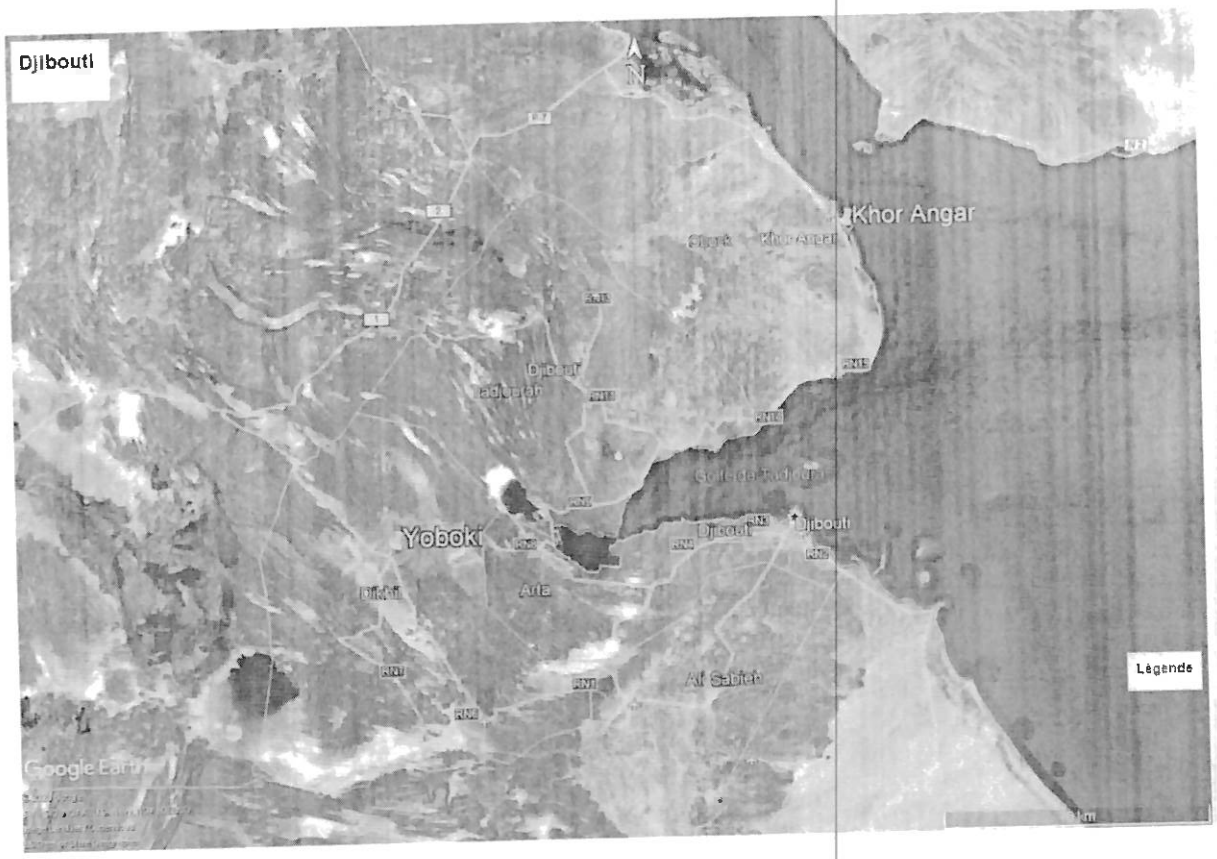
Annex 3: Project map and Geospatial Coordinates of project sites



The locations proposed for the AMP pilot projects during PPG development are: Yoboki in Dikhil Prefecture, and Khor-Angar in Obock Prefecture.



Annex 4: Multi Year Work Plan

Financial mechanism, de-risking instruments

Delivery model, technical standards and pilot projects

Institutional and individual capacity building

M&E, QA and KM Systems

Components	Outcomes	Outputs	Year 1 (2021/2022)				Year 2 (2022/2023)				Year 3 (2023/2024)				Year 4 (2024/2025)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Component 1: Policy and Regulation	Outcome 1: Stakeholder ownership in a national mini-grid delivery model is advanced, and appropriate policies and regulations are adopted to facilitate investment in low-carbon mini-grids.	1.1. An inclusive national dialogue to identify mini-grid delivery models is facilitated, clarifying priority interventions for an integrated approach to off-grid electrification.																
		1.2. Mini-grid DREI techno-economic analyses carried out to propose most cost-effective basket of policy and financial de-risking instruments and contribute to AMP Flagship Report on cost reduction.																
		1.3. Institutional set-up for rural electrification assessed to support the establishment of a focal point for mini-grid development, and institutional capacity building provided on technical, managerial, and regulatory issues.																
		1.4. Public programmes (apprenticeships, certificates, university programs) to develop competitive, skilled labor market in the design, operation and maintenance of solar and hybrid mini-grids.																
		1.5. Domestication of quality standards for solar mini-grid components, and institutional capacity of national authorities in-charge, i.e. standards organizations/bureau, strengthened.																
Component 2: Business Model Innovation with Private Sector	Outcome 2: Innovative business models based on cost reduction operationalized, with strengthened private sector participation in low-carbon mini-grid development.	2.1. Pilots for low-carbon mini-grids are developed, to demonstrate business models for off-grid electricity including productive use/innovative appliances, leading to cost-reduction in mini-grids.																
		2.2. Capacity of potential tender bidders (private sector developers) strengthened to consider innovative business models and cost-reduction levers.																

Components	Outcomes	Outputs	Year 1 (2021/2022)				Year 2 (2022/2023)				Year 3 (2023/2024)				Year 4 (2024/2025)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		2.3. Support provided to establish and grow a national industry association of private sector mini-grid developers.																
Component 3: Scaled-up Financing	Outcome 3: Financial sector actors are ready to invest in a pipeline of low-carbon mini-grids and concessional financial mechanisms are in place to incentivize scaled-up investment.	3.1. Design support, including development of operational guidance, provided for Mini-grid Funding Facility (MFF) or equivalent financial mechanism, under rural electrification agencies/funds, such as the National Development Fund (NDF) or the Guarantee Fund (GF).																
		3.2. Domestic financial sector capacity building on business and financing models for mini-grids																
		3.3. Capacity building provided to local mini-grid developers and investors on measuring and reporting on impact indicators, building credibility in impact investment as an asset class.																
Component 4: Digital, Knowledge Management (KM) and Monitoring and Evaluation (M&E)	Outcome 4: Digitalization and data are mainstreamed, across stakeholders, into local mini-grid market development. Increased knowledge, awareness and network opportunities in the mini-grid market and among stakeholders, including benefitting from linkages to international good practice.	4.1. A Project Digital Strategy is developed and implemented, including linkages to and following guidance from, the AMP Regional Project.																
		4.2. Mini-grids digital platform implemented to run tenders and manage data from pilots, and to support mini-grids scale-up and cost-reduction.																
		4.3. A Quality Assurance and Monitoring Framework (QAMF) for measuring, reporting and verification of the sustainable development impacts of all mini-grid pilots supported, including GHG emission reductions, is adopted and operationalized based on standardized guidance from the AMP Regional Project.																
		4.4. M&E and Reporting, including (i) Conducting inception workshop and preparing report, (ii) Ongoing M&E, (iii) Mid-term Review (MTR), and (iv) Terminal Evaluation (TE).																
		4.5. Engage with the AMP Regional Project, including, but not limited to, via (i) Participating in Communities of Practice (CoPs), and (ii) Capturing and sharing lessons learnt.																

Annex 5: Monitoring Plan

This Monitoring Plan and the M&E Plan and Budget in Section VI of this project document will both guide monitoring and evaluation at the project level for the duration of project implementation.

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/ Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
Project Objective: Supporting 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.	*Indicator 1: GEF Core indicator 6* GHG emissions mitigated (metric tons of carbon dioxide equivalent; tCO_2e)	**Mid-term Target:** Zero, since the pilot project is not yet commissioned. **End of Project Target:** Direct emissions mitigated: 39,717 tCO2e Indirect: 36,000 tCO2e	GHG emissions mitigation will be achieved by the installation of solar PV mini-grids.	Consumption data from the monitoring systems installed to the project pilots.	Annually	Project M&E Officer from MUET, supported by QA focal points from UNDP CO.	- Installation and commissioning reports for pilot projects, especially in relation to installed capacity and generated power. - M&E systems developed under Outcome 4. - QA Reports.	The main risk facing these indicators is that the baseline data and assumptions used to estimate existing capacity and GHG emissions maybe inaccurate or incomplete. The project aims to mitigate this by: (1) conducting further assessments during Year 1; and (2) establish a focal point as an entity able to track such data on regular basis.
	Indicator 2: GEF Sub-Indicator 6.4 Increase in installed solar PV capacity (MW) and battery storage (MWh)	**Mid-term Target:** Zero, since the pilot project is not yet commissioned. **End of Project Target:** Installed capacity of solar PV: 0.84 MW Installed capacity of battery storage: 2.042 MWh	The pilot projects involve the installation of solar PV and hybrid mini-grids.	Data on installed capacity from progress reports, QA audits and third-party evaluation.	Annually	Project M&E Officer from MUET, supported by QA focal points from UNDP CO.		
	Indicator 3: GEF Core indicator 11 Number of direct beneficiaries disaggregated by gender (and customer segment) as co-benefit of GEF investment Units of measure: number of people; number of connections disaggregated by customer segment	**Mid-term Target:** Zero, since the pilot project(s) is not yet commissioned. **End of Project Target:** 8,999 people (Female) 10,147 people (Male) 19,146 people (Total) 18,500 people (residential) 448 people (social) 198 people (commercial/PUE)	The targets reflect the direct beneficiaries targeted by outcomes involving the project pilots, as well as other workshops and events. Indirect beneficiaries include the population benefiting from increasing the financial viability and commercial investments in the mini-grid sector.	Overall reporting by consultants in charge of different outcomes, especially those involving pilot implementation, training, surveys, or direct participation by individuals.	Annually	Project M&E Officer from MUET, supported by QA focal points from UNDP CO.	- Installation and commissioning reports for pilot projects. - Survey forms, attendance sheets for training workshops, and certifications issued to participants. - QA Reports.	The main risk facing effective reach out to direct beneficiaries is that several of these outcomes rely on additional assessments and studies to be conducted during Year 1 of project implementation. The project can mitigate this risk by following the project timeline as closely as possible.

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/ Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
		3,700 connections (residential) 112 connections (social) 66 connections (commercial/PUE) 3,878 connections (total						
	Indicator 4: Number of local residents trained in different aspects of mini-grid development and operation (e.g. sales, distribution, operations, management) disaggregated by gender (number of people)	**Mid-term Target:** Female: 5 Male: 5 Total: 10 persons **End of Project Target:** Female: 10 Male: 10 Total: 20 persons	In addition to the supply of electricity through the pilot projects, the project aims to enhance the capacity of local residents to engage in the mini-grid sector. Every training workshop will have a survey form to assess the effectiveness of the activities performed, such that the quality of training can also be assessed.	- Reports submitted by the Consultants engaged in capacity building activities. - Records of training attendance.	Annually	Project M&E Officer from MUET, supported by QA focal points from UNDP CO.	- Surveys filled by participants and trainees. - Handbooks developed for training workshops. - SEP and Gender-related reports. - QA Report.	It is assumed that every year, at least one training workshop for local residents in the pilot locations will be conducted. In case of COVID restrictions, training sessions will be conducted online. This poses a risk on inclusivity, which will be mitigated by conducting additional in-person training for small groups as needed.
Outcome 1: Stakeholder ownership in a national mini-grid delivery model is advanced, and appropriate policies and regulations are adopted to facilitate investment in low-carbon mini-grids.	*Indicator 5:* A minigrid delivery model to enable minigrid development is endorsed/adopted by the national government through a consultative process involving key stakeholders (e.g. relevant ministries, local authorities, rural populations, private sector, media, etc.)	**Mid-term Target:** Multi-stakeholder, national dialogue platform on minigrid delivery models established and active. **End of Project Target:** At least one minigrid delivery model is identified and endorsed by the government through the work of the multi-stakeholder platform and dialogue.	Project team is expected to start the basis of a National Dialogue on minigrids. Forum established and activities structured to collaborate, digest knowledge material (existing and developed by the project) and actively interface with regional project to formulate a vision and roadmap incorporating a	- National Dialogue minutes of meeting. - Nominations for regional Community of Practice implemented and active interface established. - Roadmap and vision commissioned and developed.	Annually	PMU and Implementing Partner as host / sponsor of the National Dialogue	- Surveys filled by participants and trainees. - SEP and Gender-related reports. - QA Report.	National Dialogue not engaged in the topic as anticipated and therefore unable to utilize the wealth of resources available through AMP to effectively shape the direction of mini-grids in Djibouti. Stakeholder participation not adequately representative to maximize the

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/ Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
			selected business model(s) for the country.	- Chosen business model(s) identified.				contribution of mini-grids in the country. Outputs produced as tick boxes rather than as meaningful planning resources. Vision and roadmap not adequately cognizant of the country context.
	Indicator 6: Number of policy derisking instruments[26] for minigrid investments - whose development has been supported by the project - identified and endorsed by the national government (number of policy derisking instruments)	**Mid-term Target:** At least one policy derisking instrument. **End of Project Target:** At least two policy derisking instruments.	The targets present the three main stages of performing the DREI analyses, i.e. conducting the analyses, engaging with stakeholders, and updating the report during Year 4 to obtain government endorsement.	- Reports submitted by the Consultants engaged in conducting the analyses. - Records of consultation workshops.	Annually	Project M&E Officer from MUET, supported by QA focal points from UNDP CO.	- Mission reports. - QA Report.	From an operational perspective, it is envisioned that these national light quantitative DREI analyses will be centralized, and administered and performed by the AMP Regional Project.
	Indicator 7: A focal point is established to oversee the operationalization of the proposed institutional setup for rural electrification, the establishment of university and vocational training programmes for mini-grid design and O&M, and the adoption	**Mid-term Target:** A draft for the proposed institutional setup for rural electrification is presented to stakeholders, and consensus is achieved among stakeholders on the entity to host the focal point for mini-grid sector development. **End of Project Target:** The focal point is operational, with finalized	The establishment of a focal point and its success at becoming operational is a main component of the sustainability of project activities. The targets reflect the legal and physical establishment, i.e. paperwork and organizational structure.	- Agreements legalizing the focal point establishment. - Organizational structure and job descriptions for staff.	Annually	Project M&E Officer from MUET, supported by QA focal points from UNDP CO.	- Site visit to focal point offices. - Interviewing focal point staff. - QA Report.	The main risk facing the achievement of this outcome is that the legal arrangement for establishing of a focal point is obstructed by governmental limitations prohibiting its ability to operate as a cross-functional, independent regulator.

[26] A list of policy derisking instruments can be found in the Derisking Table found in the "DREI: Off-Grid Electrification" (UNDP, 2018) report. As an illustration, example policy derisking instruments can include: off-grid planning/site mapping; mini-grid policies/regulations/tenders; grid service and technical standards; awareness campaigns; technical skill building programs.

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/ Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	of domesticated quality standards for low carbon mini-grid system components (binary; 1/0)	institutional setup for rural electrification, domesticated quality standards for system components, and agreements with universities and vocational training institutes on mini-grid education programmes.						
Outcome 2: Innovative business models based on cost reduction operationalized, with strengthened private sector participation in low-carbon mini-grid development.	*Indicator 8:* Mini-grid pilots implemented (e.g. facilities and systems installed and commissioned) to demonstrate a delivery model, cost-reduction measure(s) and/or productive use of electricity (binary; 1/0)	**Mid-term Target:** The project's detailed design plan (the 'Minigrid Pilot Plan') for advancing the minigrid pilots is developed, and cleared by UNDP. (1) Any project tendering process, as applicable, for minigrid pilots is launched. (1) **End of Project Target:** 100% of the planned minigrid pilots, as identified in the project's Minigrid Pilot Plan, are commissioned. (1) 100% of social users and PUE facilities associated to the mini-grid pilots are installed and commissioned, and using electricity from the mini-grid pilots. (1)	The demonstration pilots are developed to showcase the proposed delivery model and promote private sector engagement in its roll-out. Targets represent the pilot preparations (through the development of the procurement plan), followed by installation and commissioning before project end.	- Procurement Plan developed during Year 1 of AMP project implementation. - Reports submitted by the Consultants engaged in pilot planning and implementation. - User manuals for purchased equipment. - First Inspection Report issued by the focal point established under Outcome 1.	Annually	Project M&E Officer from MUET, supported by QA focal points from UNDP CO.	- The pilot projects exist, with documents showing evidence of equipment purchase and ownership. - Interviewing beneficiaries of the generated electricity. - Reports of site visits to pilot locations. - QA Report.	The pilot locations have been selected by the Government of Djibouti during PPG development, with no country-level mapping to indicate whether the locations are the most in need for mini-grid systems. The project will mitigate this risk by conducting more detailed site assessments, including needs assessment, for the proposed locations prior to pilot implementation.
	Indicator 9: Capacity of private sector mini-grid developers and/or operators is enhanced to participate in sector-wide tendering processes to develop and/or operate mini-grids under EPC	**Mid-term Target:** Templates for tender documents developed, and at least 10 private sector companies receive training on preparing tenders for EPC and ESCO tenders to develop, operate and	The goal is to develop the templates, then support private companies learn how to use them. Every training workshop will have a survey form to assess the effectiveness of the	- Reports submitted by the Consultants engaged in capacity building activities. - Records of training attendance.	Annually	Project M&E Officer from MUET, supported by QA focal points from UNDP CO.	- Surveys filled by participants and trainees. - Handbooks developed for training workshops.	It is assumed that every year, at least one awareness raising event, one technical training workshop, and one ToT will be conducted. In case of COVID restrictions, training sessions will

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/ Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	and ESCO contracts (binary; 1/0)	maintain low-carbon mini-grid systems. (1) Planned capacity building activities for year 1 and 2 are implemented. (1) The capacity of targeted recipients is assessed by survey towards the end of year 2. On a scale of 1 to 5, an average score of at least 2 is achieved. - 1 represents a low level of capacity - 5 represents a strong capacity to understand relevant issues and apply knowledge and skills to find effective solutions. (1) **End of Project Target:** A national industry association is capacitated to deliver trainings to private sector EPCs and ESCOs, and have continuous open communication with public parties on issues related to rural electrification and mini-grid sector development. (1) Planned capacity building activities for year 3 and 4 are implemented. (1) The capacity of targeted recipients is assessed by survey towards the end of the project. On a scale of 1 to 5, an average score of at least 4 is achieved.	activities performed, such that the quality of training can also be assessed.				- SEP and Gender-related reports. - QA Report.	be conducted online. This poses a risk on inclusivity, which will be mitigated by conducting additional in-person training for small groups on the community level as needed.

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/ Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
		- 1 represents a low level of capacity - 5 represents a strong capacity to understand relevant issues and apply knowledge and skills to find effective solutions. (1)						
Outcome 3: Financial sector actors are ready to invest in a pipeline of low-carbon mini-grids and concessional financial mechanisms are in place to incentivize scaled-up investment.	*Indicator 10:* Capacity of financial institutions is enhanced through training, knowledge sharing, and/or awareness raising events aimed at increasing the financial sector's capacity to evaluate investments in mini-grids (binary; 1/0)	**Mid-term Target:** Planned capacity building activities for year 1 and 2 are implemented. (1) The capacity of targeted recipients is assessed by survey towards the end of year 2. On a scale of 1 to 5, an average score of at least 2 is achieved. - 1 represents a low level of capacity - 5 represents a strong capacity to understand relevant issues and apply knowledge and skills to find effective solutions. (1)**End of**	Training under Outcome 3 focuses on financial institutions to enable resource mobilization for pilot replication beyond the project lifetime. Every training workshop will have a survey form to assess the effectiveness of the activities performed, such that the quality of training can also be assessed.	- Reports submitted by the Consultants engaged in capacity building activities. - Records of training attendance.	Annually	Project M&E Officer from MUET, supported by QA focal points from UNDP CO.	- Surveys filled by participants and trainees. - Handbooks developed for training workshops. - SEP and Gender-related reports. - QA Report.	It is assumed that every year, at least one training workshop will be conducted. In case of COVID restrictions, training sessions will be conducted online. This poses a risk on inclusivity, which will be mitigated by conducting additional in-person training for small groups on the community level as needed.
		Project Target: Planned capacity building activities for year 3 and 4 are implemented. (1) The capacity of targeted recipients is assessed by survey towards the end of the project. On a scale of 1 to 5, an average score of at least 4 is achieved. - 1 represents a low level of capacity						

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/ Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
		- 5 represents a strong capacity to understand relevant issues and apply knowledge and skills to find effective solutions. (1)						
	Indicator 11: Number of government or impact investor-supported financing mechanisms offering concessional finance for low-carbon mini-grids	**Mid-term Target:** At least one complementary funding instrument is designed and operational. (1)**End of Project Target:** At least one low-carbon mini-grid project has managed to obtain concessional finance (i.e. sign the relevant agreements) through the designed complementary funding instrument.	This indicator focuses on the project's ability to engage financial institutions in funding future solar and hybrid min-grid projects. The targets reflect the design of a financing mechanism and its adoption by financial institutions.	- Reports submitted by the Consultants engaged in the design of the financing mechanism. - Relevant agreements for new projects.	Annually	Project M&E Officer from MUET, supported by QA focal points from UNDP CO.	- Handbook developed to introduce the financing mechanism to financial institutions and private companies. - QA Report.	It is assumed that the designed mechanism will be in line with national regulations governing the receipt of loans in Djibouti, and that financial institutions gain interest in the mini-grid market.
Outcome 4: Digital and data are mainstreamed, across stakeholders, into local mini-grid market development. Increased knowledge, awareness and network opportunities in the mini-grid market and among stakeholders, including	*Indicator 12:* A project digital strategy is prepared and implemented by the PMU to contribute to project implementation and local mini-grid market development (binary; 1/0)	**Mid-term Target:** Digital strategy is developed (in consultation with public and private parties, and close collaboration with the PMU of the AMP Regional Project and the CoPs led by the AMP Regional Project) and being implemented. (1) **End of Project Target:** The Project Digital Strategy is implemented. (1) Public officials, including women, are capacitated to utilize the associated digital tools and data reporting protocols. (1) Recommendations for rolling out digital solutions for minigrids at national	A digital strategy for the project will be developed, implemented and updated regularly, following guidance from the AMP regional project. Once implemented, recommendations will be prepared and disseminated to inform the a national digital strategy for minigrid development post-project.	PMU will share Project Digital Strategy with the AMP regional Project	Annually	Project M&E Officer from MUET, supported by QA focal points from UNDP CO.	PMU progress report.	

Monitoring	Indicators	Targets	Description of indicators and targets	Data source/ Collection Methods	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
benefitting from linkages to international good practice.		level have been shared with key national stakeholders. (1)						
	Indicator 13: Mini-grid pilots sharing data on mini-grid performance with the regional project and other stakeholders following best practices and guidance provided by the AMP Regional Project (binary; 1/0)	**Mid-term Target:** The project's 'digital & data management platform' is procured and operational, ready for data collection from the project's mini-grid pilot(s), and for data sharing with the AMP regional project's digital platform. (1)**End of Project Target:** 100% of the planned minigrid pilots, as identified in the project's Minigrid Pilot Plan, are collecting and sharing data with the AMP Regional Project (at least on a quarterly basis) using the project's 'digital & data management platform'. (1)	This indicator measures project readiness to share minigrid pilots data with the regional project. Midterm goal evaluates readiness based on the degree to which digital platform is operational to collect and share pilots data. EOP target measures actual data sharing by pilots, calculated as the percentage of total minigrid pilots (defined in the Project Minigrid Pilot Plan) which are effectively sharing data with the AMP Regional Project.	AMP Regional Project Data Aggregation Platform	Annually	Project M&E Officer from MUET, supported by QA focal points from UNDP CO.	AMP Regional Project Data Aggregation Platform reports.	

Annex 7: UNDP Risk Register

#	Description	Risk Category	Likelihood (L) & Impact (I)	Risk Treatment / Management Measures	Risk Owner
1	The project is partially reliant on progress to be made by the GEF6 mini-grid project.	Strategic	In the lack of a regulatory framework and tariff structure, private sector participation in the mini-grid market will be limited. *Level: High* *Likelihood = 4* *Impact = 5*	The operationalization of any delivery model for mini-grid development requires an enabling environment and a clear regulatory framework within which private sector actors can operate. To avoid duplication in the allocation of funds, the AMP does not engage directly with activities planned under GEF6 mini-grid project, such as: - Output 1.1: Comprehensive but simplified regulatory framework to unlock the off-grid market - Output 1.2: Tariff setting, and design of financial support To mitigate the impacts of GEF6 progress on the AMP, the Project Document proposed the promoting of a specific delivery model, i.e. EPC+ESCO. The recommendation was developed in consultation with national stakeholders and shall be revisited at project start based on the latest progress on GEF6 implementation. Furthermore, several studies will be conducted at project start, which will rely on outcomes from GEF6, if available. This approach aims to ensure complementarity, while avoiding the risks of direct sequencing.	MUET, in their capacity as the project's IP (and the IP for the GEF6 mini-grid project)
2	Inability to maintain the political will and commitment to engaging private sector actors in the electricity sector and mini-grid service delivery.	Political	Without political will, market openness will not be achieved regardless of the progress achieved on other project activities, which jeopardizes the progress on the overall objective. *Level: Substantial* *Likelihood = 2* *Impact = 5*	The PPG consultations involved extensive discussions with government parties to ensure that the AMP is designed to address the country's need and develop a strategy that is in line with national plans for the off-grid sector. During implementation, and in addition to overall stakeholder engagement, a clear output to work on the institutional arrangement and the establishment of a focal point for mini-grid development has been added to the project strategy and another output for establishing an industry association for mini-grid EPC contractors and ESCOs. The mitigation of this risk, in case of occurrence, will be to redirect funds from short-term activities towards these two medium and long-term outputs as a way of enhancing the readiness of the market for actual projects once the Government regains the commitment to promoting solar mini-grids.	MUET, in their capacity as the project's IP

#	Description	Risk Category	Likelihood (L) & Impact (I)	Risk Treatment / Management Measures	Risk Owner
3	Lack of interest by financial institutions and investors to participate in financing the mini-grid development.	Financial	Without funding opportunities, the competitiveness of solar PV-batteries mini-grid systems will continue to be low. *Level: Substantial* *Likelihood = 3* *Impact = 4*	The AMP has a dedicated component for studying the financing mechanisms available and contributing to: (1) enhancing the clarity of the process of obtaining finance from existing sources, and (2) expanding the ability of financial institutions to mobilize resources from international developers and small investors. In case financial institutions could not be properly engaged in capacity building activities during the AMP lifetime, the activities will be replaced with ToT to the focal point staff and industry association members, such that they assume the responsibility of course delivery when the enabling environment is strengthened.	MUET, in their capacity as the project's IP
4	Persistence of COVID-19 until project start and/or throughout project implementation, and/or spread of similarly communicable diseases among the population.	Health	The implementation of the project during a pandemic can potentially lead to: - Change in national priorities and context, - Procurement delays due to restrictions on imports, affecting the pilot projects, - Hindered communication due to COVID-19, and - Exposure risks for the project team, consultants, partners, and communities during implementation. *Level: Moderate* *Likelihood = 4* *Impact = 3*	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 socio-economic 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-à-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.	MUET, in their capacity as the project's IP

#	Description	Risk Category	Likelihood (L) & Impact (I)	Risk Treatment / Management Measures	Risk Owner
				The following mitigation measures were integrated in the project strategy to overcome and mitigate the influence of the above challenges on project operation: - Supporting the government with energy access goals readily supports COVID-19 responses by facilitating the stay-home conditions for people, and ensures more reliable energy access for health facilities. - Establishing a national focal point in the public sector and an industry association for private sector actors aims to set the basis for internally-based support system that can operate using remote guidance from external experts and regional networks. - In the work plan, procurement of material and goods for the pilot project will start in Year 1 of project implementation. The activities involving procurement may be shifted further, as necessary, taking into consideration the 4 years' implementation period. In addition, the project will focus on virtual activities whenever possible, including online consultation meetings and capacity building workshops. The project budget also allocates fees for national consultants to support international consultants on all components. This strategy aims to engage national experts in project implementation to ensure its sustainability, but also to ensure continuity and enhance the ability of the project team to maintain the workflow whether the international consultants were able to conduct field missions, or carried home-based assignments to comply with travel restrictions in their home countries and/or in Djibouti.	
				Furthermore, the project team will follow UN and host country regulations in terms of social distancing and travel restrictions, abiding by WHO guidelines for preventive measures.[27] 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.	

[27] WHO (2020). Considerations for public health and social measures in the workplace in the context of COVID-19 (https://apps.who.int/iris/rest/bitstreams/1277575/retrieve)

#	Description	Risk Category	Likelihood (L) & Impact (I)	Risk Treatment / Management Measures	Risk Owner
5	Lack of coordination amongst various stakeholders and partners involved in the mini-grid sector	Organizational	Without intra-government collaboration and consensus among stakeholders, all project activities will be more challenging and less impactful. *Level: Moderate* *Likelihood = 3* *Impact = 3*	The AMP is designed to promote an inclusive strategy for developing the mini-grid sectors. Three outputs are dedicated to capacitating the public sector, private sector and financial sectors and supporting them with self-organization, i.e. national focal point, industry association, and capacity building for domestic financial institutions. In addition, the AMP in Djibouti will work in close collaboration with the Regional AMP on establishing knowledge networks and CoPs. These activities will help mitigate the impacts of general lack of coordination and pave the way for long-term sound governance and development in the mini-grid sector.	MUET, in their capacity as the project's IP
6	Lack of private sector cooperation on project activities	Operational	Without private sector cooperation, energy access will continue to rely on the Government's ability to extend the national grid or build and operate off-grid systems. *Level: Moderate* *Likelihood = 2* *Impact = 4*	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.	MUET, in their capacity as the project's IP
7	Educational and training institutions are unable to integrate mini-grid-related courses in their curricula.	Operational	Without institutionalized technical capacity building, ESCOs will not be able to operate and maintain the developed systems. *Level: Moderate* *Likelihood = 2* *Impact = 3*	The technical capacity of local companies and their knowledge of solar systems was identified as one of the major gaps preventing private sector engagement in the mini-grid sector. Integrating mini-grid courses in existing engineering schools and vocational training programmes aims to build upon existing knowledge-base and ensure sustainability in course delivery. In case agreements with these institutions could not be made, either the focal point or industry association shall assume the responsibility of course delivery in the form of an independent mini-grid training programme until mainstreaming in existing curricula can be achieved.	MUET, in their capacity as the project's IP

#	Description	Risk Category	Likelihood (L) & Impact (I)	Risk Treatment / Management Measures	Risk Owner
8	Climate risk: External environmental factors, like for example the effects of climate change (such as the volume and quality of rainfall, rising temperatures, floods, droughts, violent winds, earthquakes, landslides, severe winds, storm surges, tsunamis, volcanic eruptions...) could lead to delay or abandonment of the project.	Environmental	*Level:* Moderate Likelihood = 3 Impact = 3	This is an external risk to the project that will be mitigated in the context of a variety of other third-party activities form the Government. Furthermore, external environmental factors likely to be a risk will be considered within this project as part of the feasibility/assessment studies established in the ESMF for each site, which will use conservative assumptions to successfully operate. Therefore, this risk is assumed to be LOW under the assurance that this project will prepare the pertinent environmental studies as required in the ESMF.	MUET, in their capacity as the project's IP
9	Potential negative environmental impacts resulting from the project, either routine or non-routine based, could lead to adverse local, regional, and/or transboundary impacts causing a delay or abandonment of it.	Environmental	*Level:* Substantial Likelihood = 4 Impact = 4	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 sites. 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.	MUET, in their capacity as the project's IP

#	Description	Risk Category	Likelihood (L) & Impact (I)	Risk Treatment / Management Measures	Risk Owner
10	External social factors, like for example political unrest, COVID persistence and other issues, could lead to delay, abandonment of the project or decrease the ability of people to pay for the services.	Social	*Level:* Substantial Likelihood = 4 Impact = 4	This is an external risk to the project that will be mitigated in the context of a variety of other third-party activities from the Government. Furthermore, external social factors likely to be a risk will be considered within this project as part of the feasibility/assessment studies established in the ESMF for each site, which will use conservative assumptions to successfully operate. Therefore, this risk is assumed to be LOW under the assurance that this project will prepare the pertinent environmental studies as required in the ESMF.	MUET, in their capacity as the project's IP
11	Potential negative social impacts resulting from the project, either routine or non-routine based, could lead to adverse local, regional, and/or transboundary impacts causing a delay or abandonment of the project.	Social	*Level:* Moderate Likelihood = 3 Impact = 3	During Project preparation similar Project activities have been visited and/or consulted by the team of experts to evaluate the risks. Principal social 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 sites. Based on that, a pertinent due diligence project development process, monitoring of operations, and active intervention are foreseen according to such social safeguards established in this project through the ESMF to ensure operation within the established parameters and in compliance with the applicable regulations. Therefore, this risk is assumed to be LOW under the assurance that this project will prepare the pertinent environmental studies as required in the ESMF.	MUET, in their capacity as the project's IP

Annex 8: Overview of Project Staff and Technical Consultancies

Consultant	Time Input	Tasks, Inputs and Outputs
		For Project Management
Local / National contracting		
Project Manager (PM) *Rate: $2,260/month*	Full-time for 4 years *Total value of about $108,480*	The PM, together with the Lead Technical Advisor will be responsible for the overall management of the project, including the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors. Duties and Responsibilities • Manage the overall conduct of the project. • Plan the activities of the project and monitor progress against the approved work plan. • Execute activities by managing personnel, goods and services, training and low-value grants, including drafting terms of reference and work specifications, and overseeing all contractors' work. • Monitor events as determined in the project monitoring plan, and update the plan as required. • Provide support for completion of assessments required by UNDP, spot checks and audits. • Manage requests for the provision of UNDP financial resources through funding advances, direct payments or reimbursement using the FACE form. • Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports. • Monitor progress, watch for plan deviations and make course corrections when needed within project board-agreed tolerances to achieve results. • Ensure that changes are controlled and problems addressed. • Perform regular progress reporting to the project board as agreed with the board, including measures to address challenges and opportunities.
		• Prepare and submit financial reports to UNDP on a quarterly basis. • Manage and monitor the project risks – including social and environmental risks - initially identified and submit new risks to the Project Board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log; • Capture lessons learned during project implementation. • Prepare revisions to the multi-year work plan, as needed, as well as annual and quarterly plans if required. • Prepare the inception report no later than one month after the inception workshop. • Ensure that the indicators included in the project results framework are monitored annually in advance of the GEF PIR submission deadline so that progress can be reported in the GEF PIR. • Prepare the GEF PIR; • Assess major and minor amendments to the project within the parameters set by UNDP-GEF;

Consultant	Time Input	Tasks, Inputs and Outputs
		• Monitor implementation plans including the gender action plan, the ESMF and the SEP; • Monitor and track progress against the GEF Core indicators. • Support the Mid-term review and Terminal Evaluation process. • Ensure all technical reports, equipment, deliverables and any other products or specific terms of references that are produced or purchased by the project are at highest appropriate quality; and • Facilitate access of UNDP technical teams as per their oversight role to any technical products and deliverables of key activities both in terms of ad hoc requests and standard procedures. • Add technical tasks as necessary • Liaise with the AMP Regional Project PMU Staff to request and receive operational and technical support as needed, to participate in activities led by the AMP Regional Project, and share data and information with the AMP regional Project as required. The Terms of Reference (ToR) for this position should include a clear statement indicating that a minimum of 10% of the person's time will be allocated to AMP Regional Project activities. If the PM is also delegated as the 'beneficiary(ies) representative' on the AMP Regional Project board, this should also be included in their ToR.

Consultant	Time Input	Tasks, Inputs and Outputs
Administrative/Financial Assistant *Rate: $700/month*	Full-time for 4 years *Total value of about $33,600*	Administrative Duties and Responsibilities Under the guidance and supervision of the PM, the Project Assistant will carry out the following tasks: • Assist the Project Manager in day-to-day management and oversight of project activities; • Assist the M&E officer in matters related to M&E and knowledge resources management; • Assist in the preparation of progress reports; • Ensure all project documentation (progress reports, consulting and other technical reports, minutes of meetings, etc.) are properly maintained in hard and electronic copies in an efficient and readily accessible filing system, for when required by PB, TAC, UNDP, project consultants and other PMU staff; • Provide PMU-related administrative and logistical assistance. Financial Duties and Responsibilities • Keep records of project funds and expenditures, and ensure all project-related financial documentation are well maintained and readily available when required by the Project Manager; • Review project expenditures and ensure that project funds are used in compliance with the Project Document and GoI financial rules and procedures; • Validate and certify FACE forms before submission to UNDP; • Provide necessary financial information as and when required for project management decisions; • Provide necessary financial information during project audit(s); • Review annual budgets and project expenditure reports, and notify the Project Manager if there are any discrepancies or issues; • Consolidate financial progress reports submitted by the responsible parties for implementation of project activities; • Liaise and follow up with the responsible parties for implementation of project activities in matters related to project funds and financial progress reports.
For Technical Assistance		
Component 1: Policy and Regulation		
Local / National contracting		
Mini-grid Policy and Regulations Specialist *Rate: $300/week*	38 weeks/year, over 4 years *Total value of about $45,600*	The purpose of this consultancy is to support the work of the international team in relation to performing the activities under Component 1, especially those related to data collection, providing insights during the policy analysis, and supporting the institutional setup development to fit with the mini-grid market in Djibouti. The consultant(s) will also play a vital role in conducting surveys and field missions with or on behalf of the international consultants.

Consultant	Time Input	Tasks, Inputs and Outputs
Communication Specialists with experience in the Energy Sector *Rate: $300/week*	36 weeks/year, over 4 years *Total value of about $43,200*	The purpose of this consultancy is to support the project team with planning and conducting the necessary stakeholder consultation and engagement meetings and activities, as well as develop promotional and awareness raising material in relation to the implementation of the activities under Component 1 and in accordance with the overall guidance detailed in the project's Stakeholder Engagement Plan (SEP). The consultant(s) will also act as the point of contact for this component, facilitating the work between the consulting team and national stakeholders.
Training Facilitators and Capacity Building Specialists with background in Energy Policy *Rate: $225/week*	38 weeks/year, over 4 years *Total value of about $34,200*	The purpose of this consultancy is to support the project team with conducting the necessary training workshops, and other individual and institutional capacity building activities involved in successful achievement of Component 1. In the preparation of training material and operation manuals, the consultant(s) will collaborate the AMP Regional Project and follow the guidance issued by the Communities of Practice (CoPs) to ensure harmonization and knowledge sharing on the activities under Component 1.
Contractual services - Companies	*Contract value: $160,000*	This service provider will be responsible for supporting the project team with conducting market research and associating studies. The services include capacity assessment for the public sector to advise on the most suitable institutional setup, private sector mapping on the national level to define the technical gaps limiting their ability to participate in tenders and advise suitable capacity building activities, and market research to assess the commercial gaps prohibiting the expansion of ESCOs in Djibouti. It is recommended that the contract for these services is awarded to a consortium consisting of national and international experts, to ensure quality, contextualization, and knowledge production and transfer.
International / Regional and global contracting		
Mini-grid Policy and Regulations Expert *Rate: $600/week*	26 weeks/year, over 4 years *Total value of about $62,400*	The purpose of this consultancy is to analyze exiting regulations and policies of relevance to mini-grid development, proposed tariff structures, to advise the enabling environment required to operationalize the proposed EPC+ESCO delivery model for mini-grid development. The work will be conducted in accordance with the results of the DREI analyses and similar studies conducted by the GEF6 project or other development partners.
Organizational Development and Institutional Capacity Building Expert *Rate: $500/week*	26 weeks/year, over 4 years *Total value of about $52,000*	The purpose of this consultancy is to assess the resources and capacities available in public sector entities, and conduct a needs assessment to identify the additional skills and resources required to operationalize existing regulations and create a national focal point to be in charge of mini-grid development. This includes the development of a data flow diagram to promote intra-government collaboration and facilitate the data flow in relation to mini-grid programmes and initiatives.
Mini-grid Education and Vocational Training Expert *Rate: $500/week*	*26 weeks/year, over 2 years* *Total value of about $52,000*	The purpose of this consultancy is to work with universities and vocational training centers on the development of the certification programmes for mini-grid education. This includes performing baseline assessment for existing training programmes, researching relevant programmes worldwide and establishing contacts with reputable institutions for potential partnership with national parties, as well as working with both teams on the formulation of curricula, preparing course material and organizing/conducting ToT for local staff at national institutions.
Technical Standards and Quality Control Expert *Rate: $500/week*	*20 weeks/year, over 2 years* *Total value of about $20,000*	The purpose of this consultancy is to study existing quality standards for mini-grid systems and system components to create a comparative analysis of their suitability for adoption in Djibouti, followed by the domestication of the selected standards and the development of the relevant manuals and importation requirements.

Consultant	Time Input	Tasks, Inputs and Outputs
Contractual services - Individuals	*Contract value: $50,000*	The purpose of this contracting is to hire national and international consultants to conduct the initial full quantitative national DREI analysis during Year 1 of project implementation.
Component 2: Business Model Innovation with Private Sector		
Local / National contracting		
Mini-grids Local Engineers *Rate: $375/week*	28 weeks/year, over 4 years *Total value of about $42,000*	The purpose of this consultancy is to support the design and implementation of the pilot project(s) by carrying the work on the ground at the project sites, whether related to data collection, surveys, or overseeing the installation, commissioning and operation of the installed systems. The work constitutes developing a procurement plan for the pilot projects, including system components and measurement sensors, as well as managing the tendering processes and supporting the UNDP CO with managing the shipping, customs clearance and other logistics. The procurement plan will be reviewed and approved by the international consultant(s) contracted as Hybrid Mini-Grid Design Experts prior to the actual purchase of goods. The tasks also include regular reporting on technical performance of the systems to the project team.
Training Facilitators and Capacity Building Specialists with Engineering background *Rate: $225/week*	20 weeks/year, over 4 years *Total value of about $18,000*	The purpose of this consultancy is to support the project team with conducting the necessary training workshops, and other individual and institutional capacity building activities involved in successful achievement of Component 2. In the preparation of training material and operation manuals, the consultant(s) will collaborate the AMP Regional Project and follow the guidance issued by the Communities of Practice (CoPs) to ensure harmonization and knowledge sharing on the activities under Component 2.
Contractual services – Companies	*Contract value: $120,000*	This service provider will be responsible for undertaking the site work required to install and commission the pilot projects, in accordance with the Procurement Plan to be developed during Year 1 of project implementation. It is recommended that the contracts for these services are awarded to consortiums involving national and international companies and individuals, to ensure quality, contextualization, and knowledge production and transfer.
Contractual services - Individuals	*Contract value: $67,000*	This service provider will be responsible for developing the Procurement Plan for the project. This includes providing details on all procurement activities, including defining the specifications for goods and material – in collaboration with other project consultants, developing the tender documents and the procedure for the selection of the contractor to undertake the retrofitting activities, and supporting the PMU on the evaluation of offers and other procurement logistics. The services include conduction needs assessment and community surveys at Yoboki and Khor Agar to determine the capacities for the mini-grid pilot project(s). It is recommended that the contracts for these services are awarded to consortiums involving national and international companies and individuals, to ensure quality, contextualization, and knowledge production and transfer.
International / Regional and global contracting		
Mini-grid Design Experts *Rate: $875/week*	20 weeks, over 4 years *Total value of about $70,000*	The purpose of this consultancy is to design of suitable pilot projects, including the identification of all technical specifications and confirmation on the suitability of the proposed sizing for the selected sites. The design will take in consideration the SES aspects, as detailed in the ESMF plan. The services will also take in consideration the existing generation capacities at the pilot sites and the proposed tendering procedure under Component 1.

Consultant	Time Input	Tasks, Inputs and Outputs
Tendering and Commercialization Experts *Rate: $500/week*	15 weeks/year, over 4 years *Total value of about $30,000*	The purpose of this consultancy is to develop suitable templates for tenders and contracts in accordance with the proposed EPC+ESCO delivery model for mini-grid development. The tasks undertaken will involve consultation with public and private parties to arrive at a procedure that is acceptable and comprehensible by both parties.
Component 3: Scaled-up Financing		
Local / National contracting		
Energy Finance Specialist *Rate: $300/week*	23 weeks/year, over 4 years *Total value of about $27,600*	The purpose of this consultancy is to support the work of the international team in relation to performing the activities under Component 3, especially those related to data collection, providing insights during the analysis, and supporting the contextualization of the proposed financing mechanisms and incentive schemes to fit with the mini-grid market in Djibouti. The consultant(s) will also play a vital role in conducting surveys and field missions with or on behalf of the international consultants.
Communication Specialists with experience in the Finance Sector *Rate: $300/week*	20 weeks/year, over 3 years *Total value of about $18,000*	The purpose of this consultancy is to support the project team with planning and conducting the necessary stakeholder consultation and engagement meetings and activities, as well as develop promotional and awareness raising material in relation to the implementation of the activities under Component 3 and in accordance with the overall guidance detailed in the project's Stakeholder Engagement Plan (SEP). The consultant(s) will also act as the point of contact for this component, facilitating the work between the consulting team and national stakeholders.
Training Facilitators and Capacity Building Specialists with background in Finance *Rate: $225/week*	32 weeks/year, over 2 years *Total value of about $14,400*	The purpose of this consultancy is to support the project team with conducting the necessary training workshops, and other individual and institutional capacity building activities involved in successful achievement of Component 3. In the preparation of training material and operation manuals, the consultant(s) will collaborate the AMP Regional Project and follow the guidance issued by the Communities of Practice (CoPs) to ensure harmonization and knowledge sharing on the activities under Component 3.
Contractual services – Companies	*Contract value: $96,000*	This service provider will be responsible for performing market analyses to identify and promote financing mechanisms, schemes and incentives, that can help domestic financial institutions and local mini-grid investors engage in the development and operation of low-carbon mini-grids. The responsibilities under this contract also include the preparation of operational guidance and training manuals for the integration of solar PV-batteries mini-grid systems in existing funding instruments and financing mechanisms. It is recommended that the contracts for these services are awarded to consortiums involving national and international companies and individuals, to ensure quality, contextualization, and knowledge production and transfer.
International / Regional and global contracting		

Consultant	Time Input	Tasks, Inputs and Outputs
Financial Market Analysis and Financing Mechanisms Development Experts *Rate: $500/week*	38 weeks/year, over 4 years *Total value of about $76,000*	The purpose of this consultancy is to undertake a mapping exercise for previous and ongoing financing schemes within the mini-grid sector in Djibouti and perform a holistic analysis of investment opportunities and cost-reduction levers. This includes developing a survey to study how the sector operates, identify the stakeholders involved, and study present and expected challenges potentially affecting the scaling up of investment in low-carbon mini-grid systems. The result of the study should include a recommendation for suitable financing mechanisms and incentive schemes for mini-grid development.
Investor Relations and Capacity Building Expert *Rate: $500/week*	34 weeks/year, over 2 years *Total value of about $34,000*	The purpose of this consultancy is to build a network of previous and potential investors in the mini-grid sector in Djibouti, developing the necessary manuals and guidance notes with summary of applicable regulations and de-risking measures, in accordance with the results of the DREI analysis and similar studies conducted by the GEF6 project and other development partners. The tasks also include preparing material for capacity building activities dedicated to the domestic financial sector and conducting ToT sessions to ensure longevity of the knowledge production and sharing efforts.
Component 4: Digital, Knowledge Management (KM) and Monitoring and Evaluation (M&E)		
Local / National contracting		
M&E Officer, including SES and Gender aspects *Rate: $300/week*	4 weeks/year, over 4 years *Total value of about $4,800*	Duties and Responsibilities for general M&E functions: • Monitor project progress and participate in the production of progress reports ensuring that they meet the necessary reporting requirements and standards; • Ensure project's M&E meets the requirements of the Government, the UNDP Country Office, and UNDP-GEF; develop project-specific M&E tools as necessary; • Oversee and ensure the implementation of the project's M&E plan, including periodic appraisal of the Project's Theory of Change and Results Framework with reference to actual and potential project progress and results; • Oversee/develop/coordinate the implementation of the stakeholder engagement plan; • Oversee and guide the design of surveys/ assessments commissioned for monitoring and evaluating project results; • Facilitate mid-term and terminal evaluations of the project; including management responses; • Facilitate annual reviews of the project and produce analytical reports from these annual reviews, including learning and other knowledge management products; • Support project site M&E and learning missions; • Visit project sites as and when required to appraise project progress on the ground and validate written progress reports. • Liaise with the AMP Regional Project PMU Staff to request and receive operational and technical support as needed, to participate in activities led by the AMP Regional Project, and share data and information with the AMP regional Project as required.

Consultant	Time Input	Tasks, Inputs and Outputs
		The tasks of the M&E officer also include providing guidance and community engagement support to the PMU during the development of the pilot projects, conducting needs and impact assessments, and the implementation of the project's grievance mechanism with specific consideration of inclusivity of gender, youth and other vulnerable groups. Based on the results of these assessments and the grievances received, the project may consider hiring a part-time Community Liaison Officer at the pilots' location to support the work of the PMU and undertake additional consultation activities during and after the implementation of the pilots, such as surveys, focus groups, etc. The Terms of Reference (ToR) for this position should clearly indicate commitment not only to the national project but also to the Regional Project's M&E protocols as regards provision of timely reporting data to the regional project staff. The ToR should also include a clear statement indicating that a minimum of 10% of the person's time will be allocated to regional project activities. <u>Duties and Responsibilities for the Safeguards role:</u> The expert will be nationally recruited by the UNDP and she/he will be responsible for undertaking social and environmental studies related to the activities of the project. • Monitor progress in development/implementation of the project ESMF ensuring that UNDPs SES policy is fully met and the reporting requirements are fulfilled; • Oversee/develop/coordinate implementation of all safeguard related plans; • Ensure social and environmental grievances are managed effectively and transparently; • Review the SESP annually, and update and revise corresponding risk log; mitigation/management plans as necessary; • Ensure full disclosure with concerned stakeholders; • Ensure environmental and social risks are identified, avoided, mitigated and managed throughout project implementation; • Work with the M&E officer to ensure reporting, monitoring and evaluation fully address the safeguard issues of the project; • Assist the finance and administration staff by providing technical inputs during the preparation and revision of the Management Plan, Annual Work Plans, periodic reports such as the Combined Project Implementation Review/Annual Project Report (PIR/APR), inception report, technical reports, quarterly reports for submission to UNDP, the GEF, other donors and Government Departments, as required; • Ensure quality control of interventions/outcomes/deliverables; • Document lessons learned from project implementation and make recommendations to the Steering Committee for more effective implementation and coordination of project activities. <u>Duties and Responsibilities for the Gender role:</u> • Monitor progress in implementation of the project Gender Action Plan ensuring that targets are fully met and the reporting requirements are fulfilled;

Consultant	Time Input	Tasks, Inputs and Outputs
		• Oversee/develop/coordinate implementation of all gender-related work; • Review the Gender Action Plan annually, and update and revise corresponding management plans as necessary; • Work with the M&E officer and Safeguards Officer to ensure reporting, monitoring and evaluation fully address the gender issues of the project.
Local M&E Consultant to support the Mid-term Review (MTR)	Year 2 (Q4) *Total value of about $16,000*	Contracted to support the international M&E Consultant on performing the MTR for the project.
Local M&E Consultant to support the Terminal Evaluation (TE)	Year 4 (Q3) *Total value of about $16,000*	Contracted to support the international M&E Consultant on performing the TE for the project.
Contractual services - Companies	*Contract value: $10,000*	This local contractor will be responsible for data collection and development of communications content (including photos and/or video footage) for the preparation of an 'insight brief' capturing (in an accessible format) selected key highlights from a successful national project activity. This insight brief will be developed in a standard format provided by the AMP Regional Project – noting that the fees include translation of the final output from French to English. The AMP Regional Project will also support the dissemination of the Insight Briefs developed by the national AMP projects.
International / Regional and global contracting		
International M&E Consultant	Year 2 (Q4) *Total value of about $50,000*	Contracted to conduct the MTR for the project, including review of available document, field mission, interviews with stakeholders, providing recommendations, and issuance of the MTR report.
International M&E Consultant	Year 4 (Q3) *Total value of about $50,000*	Contracted to conduct the TE for the project, including review of available document, field mission, interviews with stakeholders, assessment of lessons learned, and issuance of the TE report.
Contractual services - Individuals	*Contract value: $20,000*	This service provider will be responsible for supporting the project team with the design and implementation of effective KM, M&E and QA systems and procedures. This includes the development of templates for the team to use in reporting, as well as the design of suitable surveys in English and French, as appropriate.

Annex 14: GEF Core indicators

Core Indicator 6	**Greenhouse gas emission mitigated**				***(Metric tons of CO_2e)***
		Expected metric tons of CO_2e (6.1+6.2)			
		PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)	*16,800*	*39,717*		
	Expected CO2e (indirect)	*36,266*	*36,000*		
Indicator 6.2	Emissions avoided Outside AFOLU				
		Expected metric tons of CO_2e			
		Expected		Achieved	
		PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)	*16,800*	*39,717*		
	Expected CO2e (indirect)	*36,266*	*36,000*		
	Anticipated start year of accounting	*2021*	*2024*		
	Duration of accounting	*20*	*20*		
Indicator 6.4	Increase in installed renewable energy capacity per technology				
	Technology	Capacity (MW)			
		Expected		Achieved	
		PIF stage	Endorsement	MTR	TE
	Solar Photovoltaic	*0.33*	*0.840*		
	Energy Storage	*0*	*2.042*		
Core Indicator 11	**Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment**				***(Number)***
		Number			
		Expected		Achieved	
		PIF stage	Endorsement	MTR	TE
	Female	*31,937*	*8,999*		
	Male	*36,013*	*10,147*		
	Total	*67,950*	*19,146*		

Annex 15: GEF 7 Taxonomy

Level 1	Level 2	Level 3	Level 4
☒ Influencing models			
	☒ Transform policy and regulatory environments		
	☒ Strengthen institutional capacity and decision-making		
	☒ Convene multi-stakeholder alliances		
	☒ Demonstrate innovative approaches		
	☒ Deploy innovative financial instruments		
☒ Stakeholders			
	☐ Indigenous Peoples		
	☒ Private Sector		
		☒ Capital providers	
		☒ Financial intermediaries and market facilitators	
		☒ Large corporations	
		☒ SMEs	
		☒ Individuals/Entrepreneurs	
		☐ Non-Grant Pilot	
		☐ Project Reflow	
	☒ Beneficiaries		
	☒ Local Communities		
	☒ Civil Society		
		☒ Community Based Organization	
		☐ Non-Governmental Organization	
		☐ Academia	
		☐ Trade Unions and Workers Unions	
	☒ Type of Engagement		
		☒ Information Dissemination	
		☒ Partnership	
		☒ Consultation	
		☒ Participation	
	☒ Communications		
		☒ Awareness Raising	
		☒ Education	
		☒ Public Campaigns	
		☒ Behavior Change	
☒ Capacity, Knowledge and Research			
	☒ Enabling Activities		
	☒ Capacity Development		
	☒ Knowledge Generation and Exchange		
	☐ Targeted Research		
	☒ Learning		
		☒ Theory of Change	
		☒ Adaptive Management	
		☒ Indicators to Measure Change	
	☒ Innovation		
	☒ Knowledge and Learning		
		☒ Knowledge Management	

		☒Innovation
		☒Capacity Development
		☒Learning
	☒ Stakeholder Engagement Plan	
☒Gender Equality		
	☒Gender Mainstreaming	
		☒Beneficiaries
		☒Women groups
		☒Sex-disaggregated indicators
		☒Gender-sensitive indicators
	☒Gender results areas	
		☐ Access and control over natural resources
		☒Participation and leadership
		☒ Access to benefits and services
		☒Capacity development
		☒Awareness raising
		☒Knowledge generation
☒Focal Areas/Theme		
	☒Climate Change	
		☒Climate Change Mitigation
		☐Agriculture, Forestry, and other Land Use
		☒Energy Efficiency
		☐ Sustainable Urban Systems and Transport
		☒Technology Transfer
		☒Renewable Energy
		☒Financing
		☒Enabling Activities
		☒United Nations Framework on Climate Change
		☒Nationally Determined Contribution
	☒ Rio Markers	
		☒Paris Agreement
		☒Sustainable Development Goals
		☐Climate Change Mitigation 0
		☐Climate Change Mitigation 1
		☒Climate Change Mitigation 2
		☐Climate Change Adaptation 0
		☐Climate Change Adaptation 1
		☐Climate Change Adaptation 2