GEF-6 PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Medium-sized Project
TYPE OF TRUST FUND:GEF Trust Fund

For more information about GEF, visit TheGEF.org

PART I: PROJECT INFORMATION

Project Title:	**Promoting a better access to modern energy services through sustainable mini-grids and hybrid technologies in Djibouti**		
Country(ies):	Djibouti	GEF Project ID:[1]	10051
GEF Agency(ies):	UNDP	GEF Agency Project ID:	6202
Other Executing Partner(s):	Ministry of Housing, Urban and Environment	Submission Date: Re-Submission Date:	13-April-2018 24 -April -2018
GEF Focal Area(s):	Climate Change	Project Duration (Months)	36
Integrated Approach Pilot	IAP-Cities ☐ IAP-Commodities ☐ IAP-Food Security ☐	Corporate Program: SGP ☐	
Name of parent program:	[if applicable]	Agency Fee ($)	82,008

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES[2]

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	**Trust Fund**	**(in $)**	
		GEF Project Financing	**Co-financing**
CCM-1: Technology Transfer, and Supportive Policies and Strategies **Program 1**: Promote timely development, demonstration and financing of low-carbon technologies and mitigation options	GEFTF	863,242	4,000,000
Total Project Cost		**863,242**	**4,000,000**

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To promote investment in sustainable mini-grids and hybrid technologies, and develop an appropriate business model for the sustainability of the system.

Project Components	**Financing Type[3]**	**Project Outcomes**	**Project Outputs**	**Trust Fund**	**(in $)**	
					GEF Project Financing	**Co-financing**
1. Policy and financial instruments and incentive scheme for sustainable mini-grids and hybrid technologies	TA	Institutional and financial viability of RE[4] mini-grids and hybrid technologies ensured	1.1 Policy package to operate RE-based mini-grids and hybrid technologies developed and adopted. 1.2 Financial viability mechanism and tariff criteria for RE mini-grid and hybrid technologies operations defined, adopted and enforced. A national policy will be developed to resolve the issue of very low Government controlled tariffs. 1.3 Financial incentives and market mechanisms developed. 1.4 The "Energy sector integrated management Board" is established and operationalized as an integrated governance platform that serves as a joint decision mechanism for the energy sector. It will serve as a platform to ensure harmonization of different management jurisdictions (e.g. Ministry of	GEFTF	400,000	1,300,000

[1] Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.
[2] When completing Table A, refer to the excerpts on GEF 6 Results Frameworks for GETF, LDCF and SCCF and CBIT guidelines.
[3] Financing type can be either investment or technical assistance.
[4] (i) Throughout the document, the term 'renewable energy-based mini-grid' means a solar PV, wind or hybrid with diesel mini-grid. The focus will be solar PV as there is no experience yet on wind energy in the country.

			Energy, EdD, ADDS and Ministry of Environment) and the different levels of administration. 1.5 Productive use promoted (rechargeable batteries, cooling for fisheries, agriculture transformation, seawater desalination) in order to overcome the capacity and willingness to pay of local population in order to ensure financial sustainability.			
2. Capacity building for RE-based mini-grid and hybrid technologies system management	TA	Capacity to deliver turn-key solutions and quality O&M&M services for mini-grids developed	2.1 Published guidebook (1,000 printed copies) on RE-based mini grids development (both solely RE and hybridized) specifically tailored for the country's context 2.2 On-the-job capacity building programme for 50 RE plant installers delivered, including on materials, plant design, combination, construction, O&M 2.3 Business and technical advisory services to the power utility and other potential mini-grid plant developers 2.4 Tailored capacity building programme delivered to relevant national agencies 2.5 National clearing-house mechanism for sustainable mini-grids developer's set-up 2.6 Public relations and investment promotion campaign conducted	GEFTF	400,000	2,500,000
				Subtotal		800,000	3,800,000
				Project Management Cost (PMC)[5]	GEFTF	63,242	200,000
				Total Project Cost		**863,242**	**4,000,000**

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: ( )

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount ($)
National Government	Ministry of Environment and Ministry of Energy	In-kind	500,000
National Government	Ministry of Environment and Ministry of Energy	Grant (Cash)	200,000
Donor Agency	World Bank (through PPIAF)	Grant / Loans	2,500,000
GEF Agency	UNDP	Grant	300,000
Private Sector	Technology suppliers/IPPs	Equity	500,000
Total Co-financing			**4,000,000**

[5] For GEF Project Financing up to $2 million, PMC could be up to10% of the subtotal; above $2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS [a)]

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	Agency Fee (b)[b)]	Total (c)=a+b
UNDP	GEFTF	Djibouti	Climate Change		863,242	82,008	945,250
Total GEF Resources					**863,242**	**82,008**	**945,250**

a) Refer to the Fee Policy for GEF Partner Agencies.

E. PROJECT PREPARATION GRANT (PPG)[6]

Is Project Preparation Grant requested? Yes ☒ No ☐ If no, skip item E.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

Project Preparation Grant amount requested: $50,000					PPG Agency Fee: 4,750		
GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in $)		
					PPG (a)	Agency Fee[7] (b)	Total c = a + b
UNDP	GEFTF	Djibouti	Climate Change		50,000	4,750	54,750
Total PPG Amount					**50,000**	**4,750**	**54,750**

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS[8]

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO_{2e} mitigated (include both direct and indirect)	*27,540 metric tons*

[6] PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to $50k for PF up to$2m (for MSP); up to $100k for PF up to $3m; $150k for PF up to $6m; $200k for PF up to $10m; and $300k for PF above $10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

[7] PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

[8] Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the *GEF-6 Programming Directions*, will be aggregated and reported during mid-term and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF, SCCF or CBIT.

PART II: PROJECT JUSTIFICATION

1. *Project Description.* Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area[9] strategies, with a brief description of expected outcomes and components of the project, 4) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and co-financing; 5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovation, sustainability and potential for scaling up.

1) The global environmental problems, root causes and barriers that need to be addressed

Djibouti is a small country located in the Horn of Africa. The total population of the country is estimated at around 900,000 inhabitants (2016), and its surface at 23,200 km^2. About two thirds of the population lives in the capital city Djibouti. Therefore, the rural population represents less than 30% of the population. According to the 2016 UNDP Human Development Report (HDR), Djibouti is ranked 172th in the Human Development Index, out of 188 assessed countries. Djibouti is classified as a Least Developed Country (LDC).

The economy of the country is characterized by an extreme dualism. The modern, commercial, export-oriented urban sector contrasts with the rural sector, which is a subsistence economy based on pastoralism, with very limited access to infrastructure, services and markets.

Status of the energy sector

The overall electrification rate in Djibouti is 47%. This is a national average, very diverse within the country. The access rate is 57% in the capital city, while about 10% only in rural areas. The country is completely dependent on petroleum products for electricity generation, despite its own high renewable energy potential, especially in terms of solar, wind and geothermal.

The national final energy consumption in the country is characterized by the predominance of traditional use of biomass, accounting for about 67%, with the remaining share from oil products. The per capita energy consumption is about 440 kg of oil equivalent. Biomass use has progressively decreased in urban areas as LPG has replaced biomass in Djiboutian homes, but it is still the basis of cooking in rural areas. Renewable energies account for negligible amounts of energy consumed across the whole country.

Since 2011, there is an interconnection between the national grids of Djibouti and Ethiopia. Ethiopia produces most of its electricity from large hydropower dams and then, is able to provide Djibouti with electricity at a very low cost. The cost of electricity at USD 0.07/kWh from Ethiopia compares favorably with USD 0.30/kWh from local diesel plants. It is estimated that Djibouti decreased its domestic power production by over 37% in 2010-2011 once the Ethiopian interconnection was commissioned.[10]

The electricity supply from Ethiopia is not provided under a guaranteed capacity agreement, so that power may not necessarily be available when Djibouti needs it most. An agreement that gives a higher degree of guarantee to Djibouti over a longer term would create better energy security conditions. It would reduce the sense of vulnerability felt by development planners in Djibouti. Because that agreement is lacking and is still unlikely, Djibouti would need to invest in its own generation capacity in order to minimize its exposure to potential future price increases or disruptions of power from Ethiopia, for whatever reason.

[9] For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which Aichi Target(s) the project will directly contribute to achieving.

[10] Source: The general description of the energy context in Djibouti is mainly sourced from the IRENA Renewables Readiness Assessment (2015)

In 2014, the Government of Djibouti launched an ambitious long-term development plan, known as Vision 2035. The planning strategy aims to place the country on a sustainable development pathway by strengthening the country's human capital, developing its private sector and reforming its systems of governance. The ambitious plan covers social and economic aspects with a focus on education, tourism, fisheries, new information and communication technologies, transport and logistics, industry, and energy. Djibouti aims to make a power sector transition, moving from 100% fossil thermal in 2010 to 100% renewable electricity sources by 2020. This would be sourced mainly from geothermal, wind and solar, as well as more importation from the Ethiopian grid, which is based on hydropower.

So far, the 100% renewable energy by 2020 target will not be met. Significant effort is required for Djibouti to become energy secure and address the energy access challenge. At present, per capita annual electricity consumption is about 330 kilowatt-hours (kWh) against an African average of over 575 kWh and a global average of over 2,770 kWh. This makes the average Djiboutian citizens among the lowest consumers of electricity in the world. Moreover, about 53% of the population does not have access to electricity (this rate is 90% in rural areas), and the level of unmet demand in the country's power sector is significant. This suggests Djibouti needs to close the gap between electricity demand and what it is able to supply to its citizens. Lack of reliable and affordable energy is thus a major obstacle the ambitious aims in Djibouti's economic development plans.

Besides, the interconnection with or the imported electricity from Ethiopia will likely continue to serve urban populations, leaving behind the rural population where there is no grid. The power utility EdD (*Electricité de Djibouti* - Djibouti Electricity Company) serves only in urban cities and does not operate in isolated areas. There is an estimated of 20% of transmission losses within the main grid of the power utility.

In urban areas where EdD operates, approximately 37% of electricity is consumed by big industry and activity related to the sea port, airport, free zone and military camps. Residential consumers, including a social consumer category, account for 38%. The remaining 25% is consumed by large retailers, public offices and government offices (World Bank, 2009).

Electricity tariffs remain in the hands of the government and are set by ministerial decree from the Ministry of Economy and Finance. They are subject to review by Ministry of Energy. Tariffs are set according to number of factors, such as electricity production cost (including operation cost), social cost and other political economy criteria. Electricity tariffs in Djibouti are high and average USD 0.32/kWh, mainly as a result of increased oil prices and technical and non-technical inefficiencies. The EdD tariffs range from a social price of USD 0.153/kWh (lifeline tariff) to USD 0.426/kWh paid by industry and construction sites. Retailers and government buildings are charged USD 0.397/kWh for their electricity. The cost of electricity in Djibouti is very high compared to USD 0.05/kWh in Ethiopia and USD 0.10/kWh in Kenya, mainly because Djibouti's primary electricity production sources depend on petroleum products. The power utility EdD seems to receive no subsidy from the Government.

Potential of Renewable Energy in the country

The country has a range of renewable energy sources, with different potential for development. Geothermal, wind and solar energy are available.

<u>Geothermal:</u>

The Republic of Djibouti is located within the Afar Depression. This is a geological triple junction structure formed by the intersection of the Red Sea, the Gulf of Aden and the East African rifts. A number of countries along this tectonically active region are exploring geothermal energy as an option to meet their energy requirements. Kenya has already an installed capacity of 500MW from geothermal, and Ethiopia has 70MW. One important advantage of developing geothermal energy is to have it as a baseload. Most renewables are variable in nature and thus need to be paired with other technologies that can provide the baseload. Geothermal, however, provides secure baseload power, and is hence better suited to replacing the existing heavy fuel oil baseload power.

In Djibouti, various exploration activities since the 1970s have demonstrated the existence of significant geothermal resources in the Assal Rift Zone. The Assal rift, which includes the exploratory drilling focus of the Geothermal Power Generation Project Djibouti has experienced stop/start geothermal exploration. Nevertheless, the work completed so far has built up enough of a picture to attract significant policy attention and exploratory activity. The overall potential of geothermal in Djibouti is estimated at 5,000 MW.

Recently, the Government of Iceland pledged support to develop Djibouti's geothermal resource in the form of a proposal by Reykjavik Energy Invest. It would take total project risk including exploration risk as an Independent Power Producer (IPP) developer and recoup investment and associated return through a 20-year electric tariff.

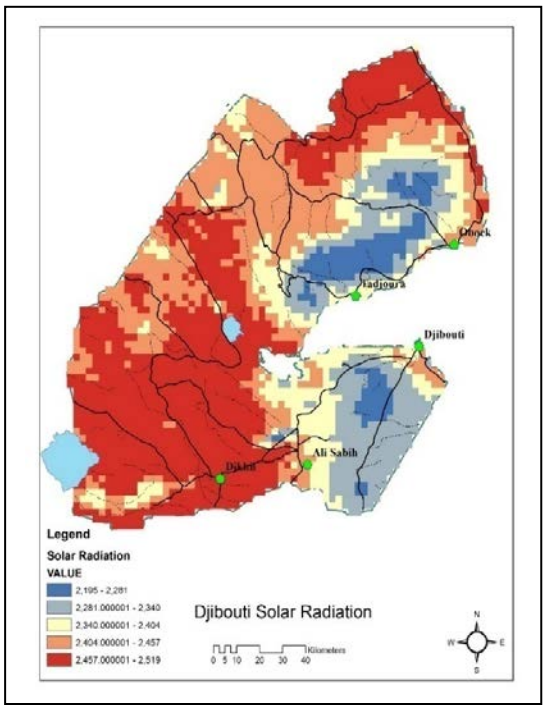
There is an ongoing (under implementation) GEF-WB project on geothermal development.

Solar:

Solar energy is very abundant in the country. The irradiation ranges from 4.5 kWh/m^2/day to 7.3 kWh/m^2/day, with a yearly average of 5.7 kWh/m^2/day.

So far, the solar resource has been used in a limited manner for electricity generation with photovoltaic (PV) systems in rural households, schools, offices, hospitals and health centers; for solar water pumping; and for solar telecommunication systems. There are some small Solar PV based power plants coupled with micro-grids in two villages in As-Eyla and Ali-Addeh. The village of As-Eyla is one of the biggest in the country and the village of Ali-Addeh shelter more than 20,000 refugees from the neighboring Somalia. But these were primarily donor-driven initiatives and lacked sustainability.

The Ministry of Energy is planning to build a 50 MW ongrid solar PV plant in Grand Bara. But there is no power purchase agreement (PPA) that enables the independent power producer (IPP) to move on with the plant construction.



Wind:

Since 2000, the Government of Djibouti has explored the potential wind energy resource in a variety of studies. Some sites in the country have stable and very high wind speeds, such as Goubet, Grand Bara, Yoboki, and Ali-Sabieh mountain areas. Average wind speeds of 9 to 10 m/s are recorded at the coastal areas around the Gulf of Goubet. The inland shows lower wind speeds during most months, averaging at 6 m/s.

However, no wind farm project, no matter how small, has yet been achieved in Djibouti, despite multiple studies demonstrating the profitability of this technology. The Goubet site in particular has received considerable attention, and the European Commission is considering a 20 MW wind farm there. There is as well some interest from private sectors (IPPs) especially for agri-business industries,

proposing to build a 30 MW wind farm. So far, the main bottleneck remains the lack of proper PPA, as it is up to the power utility EdD to set the price, and there is no third party yet that can play the regulator role.

Main barriers to accelerated development of sustainable mini-grids:

Legal, regulatory and institutional framework: The current legal framework is a barrier to the development of RE in Djibouti. Up to now, there are no proper regulations, incentives or legislative framework conditions that support the implementation of renewable energy in Djibouti. The production of electricity is liberalized, meaning Independent Power Producers (IPPs) can construct and run their own power plants. But they can only sell the produced electricity to the power utility as the distribution and commercialization has not been liberalized and is still a monopoly of EdD. The main issue regarding IPPs is the power purchase agreement. EdD only accepts to pay to IPPs a tariff of USD 0.07/kWh (same as the cost of electricity imported from Ethiopia) and of course, this is not adequate for private operators. The Government has also established regulations that allow private operators to become involved in rural electrification, thus offering opportunities for the utilization of RE. In rural areas, a private operator can construct, run and sell its electricity at the village level. However, the electricity tariffs are unilaterally fixed by the Ministry of Energy which gives the license. The tariff usually turns to be too low for a private sector to operate. There is then a lack of proper business model for rural mini-grids in Djibouti.

In addition, there is insufficient capacity of relevant stakeholders (Government, institutions, national agencies) to formulate and enforce policy and regulatory frameworks on rural electrification in an integrated manner, especially in combination with other energy usages such as water pumping (agriculture), cooling (fishery) and seawater desalination.

Technology supply chain: The technology supply chain for RE in Djibouti is at a very nascent stage. There are a few local SMEs capable of assembling simple RE installations based on imported machinery and turbines, but they lack the technical and engineering capacities to ensure optimal system design, installation and maintenance. In the rural areas, there is only very limited local technical expertise available on how to properly administer, operate and maintain RE based mini-grids. The low quality and quantity of skilled and competent workers in the power sector adds additional risks and increases the cost of mini-grid operation due to the need to rely on expensive imported services even for basic repair and maintenance.

Sustainable O&M&M model: The lack of experience with, and demonstration of, sustainable operation, maintenance and management (O&M&M) of RE-based mini-grids represents a key bottleneck and the reason for the failure of past donor-funded projects. Technical and managerial capacities are extremely low at the local level, especially in provincial and rural areas.

The key missing aspects of a sustainable O&M&M model that have to be put in place are: (i) technical oversight over plant operations and responsibility for repairing faulty equipment; (ii) an efficient and effective tariff structure which adequately covers both start-up and O&M&M costs; (iii) a robust and effective financial management, billing and payment collection system; (iv) community mobilization, customer relations and conflict resolution procedures (such as in case of illegal connections or theft), engagement of productive end-users, etc.

Access to capital: Significant upfront investment requirements remain a roadblock for implementation of many projects. RE projects are capital-intensive, with significant investment requirements that are generally beyond the capacity of local companies or communities. In addition, the local banking sector is not sufficiently capitalized to facilitate financing for RE projects with longer pay-back and substantial risks.

Investors' awareness and perception of risks: Information about the potential and the benefits of RE (especially solar PV) for rural electrification development is not developed in Djibouti. There is little data about prospective sites and their characteristics. Even when such studies exist, they often are not publicly available. Basically, there is no single information point where a potential developer can receive required guidance and data to make an informed investment decision. The Government is unable to pull such guidance/data together on its own due to limited budget

resources, staff capacities, lack of prior experience and overall vision of how to promote RE-based mini-grids and private sector investment. Whilst the national energy strategy does acknowledge the importance of RE development in tackling energy deficits in rural areas, the primary focus and efforts of the Government so far have been on addressing the energy deficit in the capital city Djibouti, and facilitating construction of a second and even a third interconnection line with Ethiopia. Promotion of solar PV and wind-based mini-grids requires a different approach, more geared towards private sector and local communities, and requiring open and transparent access to information for investors. The scarcity of successful and sustainable RE projects is limiting opportunities to raise awareness and to build up the confidence of local communities, project developers and investors, and is in itself a big deterrent to market development.

Very little private sector interest: The little private sector interest is still in urban areas for on-grid electricity generation projects. But even for those projects, nothing is materialized yet due to the lack of PPA. For rural areas, there is still no interest for the private sector to invest in mini-grids because of the very low tariffs unilaterally fixed by the Government. In the WB/IFC Doing Business 2018 data, Djibouti is 96th out of 189 economies on protecting investors and 175th on enforcing contracts.[11]

Information/cultural sensitivities: The population in rural areas are used to free electricity and free water supply services. Even if there is a form of payment, it is too low, at a symbolic value, but not a real cost that can cover the viability of the system. The capacity and willingness to pay in rural areas is a major barrier.

2) The baseline scenario or any associated baseline projects

Both the Government of the Djibouti and the international donor community acknowledge that lack of energy access in rural areas is a major detrimental factor for country's economic development, social stability and environmental sustainability. Thus, several projects are planned in the area of energy access in rural areas.

Electrification of 19 villages through Solar PV (either mini-grids or individual kits) - World Bank:

The World Bank Group, though its Public-Private Infrastructure Advisory Facility (PPIAF), has developed a rural electrification program. The initial number of targeted villages were 25, but further reduced to 19 due to technical criteria: distance of the village to the national grid, presence of public administration, presence of income generated activities, number of households, scattering or houses, etc. Mini-grids or individual kits are considered depending on the village structure. The responsible partner at national level is the Social Development Agency of Djibouti (ADDS).

The 19 villages were divided into 3 groups:

- Mini or micro-grid, for those who need a small solar power plant from 50 to 200 kW;
- Kits, for those who require individual solar kits;
- Batteries, for those who require portable/rechargeable batteries

TABLE: TECHNOLOGIES OF THE 19 VILLAGES

N°	Name	Number of households	Electrification type
1	As Eyla	1,000	Mini-grid
2	Yoboki	850	Mini-grid
3	Adailou	215	Mini-grid

[11] See http://www.doingbusiness.org/data/exploreeconomies/djibouti

4	Randa	450	Mini-grid
5	Sankal	850	Micro-grid
6	Goubetto	600	Micro-grid
7	Chebelley	150	Micro-grid
8	Assa-Geyla	450	Micro-grid
9	Assamo	390	Micro-grid
10	Dorra	350	Kits
11	Da'asbiyo	325	Kits
12	Sagalou	320	Kits
13	Assassan	300	Kits
14	Kalaf	290	Kits
15	Gourabous	180	Batteries
16	Guirori	150	Batteries
17	Khor-Angar	100	Batteries
18	Karta	100	Batteries
19	Medeho	80	Batteries

Key points from the WB proposals:

Funding:

The WB initiative is still at proposal stage, and has not yet reached neither funding/financing nor implementation on the ground.

Proposed type of model is hybrid dealer and non-concessional market model

On the basis of international review of best practices of solar rural electrification market models, the overall assessment is that Djibouti should introduce a combination of a dealer model and non-concession market model. For specific geographical areas, this model would provide subsidies on a per Wp basis to a small number of suppliers of one to three firms. Such a combination will provide an incentive for selected firms to keep the pace of technology innovation in the field of SHS/pico-systems while limiting competition in order to attract private sector participation. In the case of pico-solar products below 5 Wp, the project will pay a fixed subsidy per unit sold.

The SHS pre-selected companies will ideally supply different brands of pico-solar products. It is however recommended that all pico-solar systems be approved by Lighting Africa. Lighting Africa standards2 allow for a range of product types (ambient, work space, portable lighting etc). With a minimum of education about the products, consumers should be able to decide which product best meets their needs. Aftersales and maintenance is key for successful programme design.

Based on lessons learned from international experience, the fundamental requirement of any programme is to provide incentives for follow-on after sales support. Many programmes fail because insufficient thought was given to the need for on-going maintenance. Suppliers or other agencies must have the appropriate incentives or obligations to maintain the equipment. This can be through contractual obligations but enforcement must be possible. Alternatively, financial incentives may also be possible, or it may be possible to contract a firm or agency with responsibility for providing a roaming maintenance service (as is the case in Djibouti with solar equipment used by clinics).

Tariff settings: Break-even tariff levels are 0.45 US$/kWh with 90% investment subsidies

A simplified financial model was constructed for the mini-grid system based on the capital cost requirements, future replacement of parts (e.g. batteries and inverters), operation and maintenance costs, fuel costs and the collection of revenue. The model was used to assess the sensitivity of the project's net present value (NPV) to changes in tariff levels and their associated parameters. Two tariff scenarios were analyzed:

- 0.58 US$/kWh and a 30-40% non-payment from low income and some middle-income households.
- ADDS social tariff of 0.22 US$/kWh and non-payment rates of 10-20%.

Assuming an investment subsidy of 90%, the tariff scenario of 0.58 US$/kWh would result in a positive NPV (+45,308 US$). With the ADDS social tariff the NPV would be negative at -21,280 US$. The average tariff needed to break even is US$ 0.45/kWh.
Based on ability to pay the proposed rate should be feasible for high and medium income households but too high for low income households. The average monthly bill would however be lower than current average expenditure, suggesting that a certain level of cross subsidy should be possible.

The proposed UNDP-supported GEF-funded project will use this project as baseline and focus on the enabling environment of the energy sector (business model to have sustainable financial viability) and build the capacity of the key stakeholders.

Other initiatives:

IFAD has just started the implementation of a large programme on sustainable agriculture: Surface Water and Soil Management Programme (PROGRESS), from 2017 to 2021. Overall, the focus is on agriculture, but it is worth mentioning that several water drillings are planned under the project, all of them using solar panels as their energy source. Thus, this can be a good synergy with rural electrification.

There are few other initiatives for min-grids in rural areas. The most important ones, already under implementation, are in Hol-Hol, Ali-Addeh, Adaylou, and As-Eyla. These projects faced several difficulties and are rich in lessons learned, from the legal aspects to the business model challenges, which will inform the design of the present GEF-financed project.

3) The proposed alternative scenario, GEF focal area strategies, with a brief description of expected outcomes and components of the project

This project is consistent with the GEF-6 strategy to address climate change (*CCM-1 Technology Transfer, and Supportive Policies and Strategies*), Programme 1 (*Promote timely development, demonstration and financing of low-carbon technologies and mitigation options*) because its main objective is to facilitate investment in RE-based mini-grid systems in Djibouti.

The proposed UNDP-GEF project will address barriers that are specifically related to the investment in decentralized mini-grids. The RE source can be either Solar PV or Wind depending on the resource availability. But because there is still no experience in wind throughout the country, the focus will be on Solar.

The project consists of the following three components.

Component 1: Policy and financial instruments and incentive scheme for sustainable mini-grids and hybrid technologies

This component will develop a set of policy and financial instruments and incentive schemes. It envisages the preparation and adoption of a comprehensive policy framework for the promotion of RE-based electrification. The framework will complement existing policies on power sector development and rural electrification by putting explicit emphasis on, and providing more favorable conditions for, decentralized RE technologies. The policy framework will include specific timeframes, targets and roll-out plans for the development of mini-grids. The decentralized RE policy framework will also establish a cornerstone policy instrument (e.g. a financially viable tariff for RE-based mini-grids) and supporting policies and regulations, including, but not limited to, harmonized and simplified concession regimes and licensing rules for RE technologies, standardized PPAs, and Performances based payments (PBP). In order to support the implementation of the proposed policy framework, a capacity building programme will be provided to relevant national agencies and directorates, potential private-sector IPPs and community groups.

Setting financially viable tariffs to obtain the right energy price is one of the most important factors to ensure sustainability of RE-based mini-grids and hybrid technologies. Under Component 1, the project will assist the Ministry of Energy with developing and introducing a new regulation for decentralized RE tariffs. It is proposed that the mini-grid tariff system have a graded tariff regime, similar to the system in place for the main grid system. This will allow the tariffs to be set in better proportion to the customer's ability to pay. As most of the planned mini-grids will be fairly small in terms of the user-base, there will be natural constraints on how differentiated the tariff levels can be. Also, since most customers will be poor, it is envisaged that productive uses (businesses) will shoulder a disproportionate burden of electricity cost-recovery. A national policy will be developed to resolve the issue of very low Government controlled tariffs. For example, a policy can require the power utility company to accept electricity with high tariffs from a power generation company and provide the electricity to a commercial end-user with reasonable tariffs.

As indicated earlier, the current tariff paid by grid-connected consumers in Djibouti is on average 30 cents US$/kWh. This level of tariff, should, in principle, be sufficient to make investment in wind and solar PV commercially viable. However, the PPG phase will help to run financial models to better determine the financial viability of different tariff options. The project will conduct a comprehensive assessment that will balance the requirements for minimizing subsidies, ensuring adequate rates of return for investors and respecting the social electrification objectives set by the Government. In addition, the project will promote productive uses such as rechargeable batteries, cooling for fisheries, agriculture transformation, and seawater desalination in order to overcome the capacity and willingness to pay of local population in order to ensure financial sustainability.

The project will also establish an integrated governance platform named "Energy sector integrated management Board" that serves as a joint decision mechanism for the energy sector. It will serve as a platform to ensure harmonization of different management jurisdictions between the Ministry of Energy, EdD, ADDS and other ministries such as of Environment and Agriculture. As an exit strategy, the platform can be transformed as an independent regulator at the end of the project.

There are essentially 4 internationally-proven business models for rural/off-grid energy development[12]: a utility business model, a private sector business model, a community business model and a combined business model, meaning a combination of two of the previous listed models. The business model that is proposed under the GEF-financed project will be a combination of the community and private sector models. This will be done mainly through public-private partnerships (PPPs). For example, the community (through its local governance) could invest in the mini-grid

[12] Source: Alliance for Rural Electrification (2011), *Hybrid Mini-Grids for Rural Electrification: Lessons Learned*.

installations, while a local private company could be responsible for the overall daily management, maintenance and operations. This kind of arrangement will serve to lower O&M&M costs.

In addition, there are new promising business model trend developments, especially in East Africa, for rural electrification. The latest being PAYG models (pay-as-you-go). PAYG is a prepayment energy solar home system that allows the user to pay only for the amount of energy he consumes, thus avoiding the initial purchasing cost of the system. The purchase, installation and maintenance of PAYG systems can be made by a third parties investor (private, banks, governments…) that becomes a kind of energy distributor that sells to the users the energy produced by the solar systems. This system is particularly convenient in developing rural areas where people do not have the economic possibilities to buy equipments upfront.

The PPG phase will help to better define the proposed business model.

Component 2: Capacity building for RE-based mini-grid and hybrid technologies system management

This component will address technical barriers to the implementation of RE-based mini-grids and hybrid technologies. First, the aim is to help the power utility EdD and potential service providers upgrade their capacity for delivering turn-key solutions for RE and hybrid systems. Technical assistance will be provided to a number of competitively-selected local Small & Medium Enterprises (SMEs) through an open Call for Expression of Interest. An international technology transfer partner (an experienced solar PV manufacturer) will be sub-contracted to deliver such assistance. Second, the project will provide training courses to system designers and end-users, develop and publish guides on design, installation and maintenance of RE and hybrid technologies systems. Also, community organizations in selected sites (local NGOs and SMEs/productive users) will be provided with assistance and advice on the relevant aspects of RE operations, such as identification of potential sites, pre-feasibility assessment and business planning.

The component will also establish a national clearing-house mechanism for decentralized sustainable mini-grids and hybrid technologies developers and national entities. Assistance will be provided to collect and present all essential information for potential RE developers, such as: a) prospective sites and their characteristics; b) the required process for permitting and licensing; c) policies and regulations governing RE project development; d) information about local technology service providers; and e) potential sources of financing and incentives. The information will be presented online and published as an investor guide. Support will also be provided to an assigned national entity to ensure regular updates and wide dissemination of this information. The project will also promote investment opportunities among local and foreign partners, financial institutions, developers and social impact investors via targeted Public Relation campaigns, conferences and other marketing and communication tools.

By facilitation the establishment of a suitable enabling environment, policies and financial incentives and building capacities, the project will facilitate the roll-out (preparation and implementation) of commercial RE-based mini-grid systems for a total of up to 1 MW of RE-based capacity. The energy will be utilized mainly for lighting, cooling (fish) and seawater desalination. The project will partner with WB, EU, Arab Fund[13] and institutions that have similar rural electrification targets. Priority will be given to sites where mini-grids are already operational and running with either fossil fuel or other sources, to reduce the high upfront investment cost. An initial screening has shown villages such as Gourabous, As-Eyla, Randa, etc. The PPG phase will help to better define the site selection criteria.

4) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

Baseline practices	Alternative to be put in place by the project	Expected Global Benefits
Component 1: Policy and financial instruments and incentive scheme for sustainable mini-grids and hybrid technologies		
- Government focusing mainly in urban areas with on-grid	A comprehensive policy framework promoting renewable energy-based electrification will govern the	The electricity generated from PV facilitated by the project through

[13] AFESD (FADES in French) is the Arab Fund for Economic and Social Development, usually called the Arab Fund.

investments. - Current legal framework does not favour RE investments, especially in rural areas - Few existing mini-grids are mainly donor-driven, lacking financial business model to sustain without subsidies.	energy sector. Cornerstone policy instrument (e.g. a financially viable tariff structure for RE-based mini-grids) and supporting policies and regulations, including, but not limited to, harmonized and simplified concession regimes and licensing rules for mini-grids, standardized PPAs, Performance based payments (PBP), Build-Operate-Transfer (BOT) are established for mini-grid projects. A new and sound business model is in place, blending the community and private sector models. An integrated governance platform that serves as a joint decision mechanism for the energy sector is established. It plays the role of an independent regulator and ensures harmonization of different management jurisdictions between the Ministry of Energy, EdD, ADDS and other ministries such as of Environment and Agriculture.	policy/financial instruments and capacity building will result in a reduction of 27,540 tCO_2 over the 20-year technology lifetime. The establishment of new frameworks, instruments and incentives will apply to all long-term future investments in mini-grids and thus can be estimated to indirectly contribute to additional emission reductions post-project (this will be defined in the PPG phase).
Component 2: Capacity building for RE-based mini-grid and hybrid technologies system management		
- Institutional and human capacities at all levels (sub-regional, national and local) are insufficient (if at all existent) to support rural and provincial electrification based on decentralized mini-grid systems.	Technical assistance is provided to local manufacturers and service providers to upgrade their capacity for delivering turn-key solutions for sustainable mini-grid technologies. An international technology transfer partner (an experienced solar PV manufacturer) is delivering such assistance.	The electricity generated from PV facilitated by the project through policy/financial instruments and capacity building will result in a reduction of 27,540 tCO_2 over the 20-year technology lifetime.

5) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

A preliminary and conservative estimate indicates that the total direct project CO_2 emissions reduction from the deployment of an additional 1 MW of installed capacity from PV facilitated by this project is **27,540 tCO_2**, which translates into an abatement ratio of $30 of GEF funds per tCO_2 reduced. Please see below for further details.

Assumptions: (1) PV system capacity factor = 20%; (2) Useful life of solar power systems = 20 years; (3) Average emission factor from diesel generators = 0.786 tCO2/MWh

Calculations:
Annual power generation from PV systems = 1 x 0.2 x 8760 = 1,752 MWh
Annual CO2 emission reduction = 0.786 x 1,752 = 1,377 tons/year
Lifetime CO2 emission reduction = 1,377 x 20 = 27,540 tons

Total direct emission reductions: 27,540 tons CO2 eq.

PPG phase will help to better define the emission reductions, including the substantial indirect emission reduction benefits that are anticipated.

6) Innovation, sustainability and potential for scaling up

Innovativeness: The project has several distinctive features, which makes it highly innovative in the context of Djibouti. First, the project will pilot a combination of 2 business models (the community business model and the private sector business model), combining the advantages of both models to support decentralized mini-grids. It also explores the PAYG model (pay-as-you-go) as a prepayment tool for rural electrification. Second, it will focus on identifying and supporting private sector-led RE projects (as opposed to the traditional pubic/donor-driven approach), thus maximizing

long-term financial and operational sustainability. Finally, as opposed to traditional approach of delivering readily-available turn-key solutions for rural electrification, the project will work with the entire domestic value chain of solar PV, starting with design through construction and commissioning and up to operation, maintenance and management.

Sustainability: By addressing the underlying policy and financing barriers that impede the development of RE-based mini-grids and hybrid technologies in Djibouti, the creation of a sustainable niche for an integrated development will be realized. The financial sustainability of mini-grids and hybrid technologies will be ensured via the introduction of financially - and socially - viable tariffs. The project will also remove barriers for sustainable operating and maintenance costs, by specifically putting in place the missing elements for a sustainable O&M&M model (as described in the barrier section). Component 1 will put in place a sustainable and viable business model for the operation and maintenance of the system, Component 2 will focus on the capacity building. Given the low literacy rate and the lack of technical capacity among rural communities, maintenance issues represent a significant risk for mini-grid system operations. Minor repairs have to be done by locally-trained staff to prevent equipment from being idled for long periods. Spare parts have to be standard among sites, locally manufactured if possible, readily available for transport and installed at minimal cost.

Potential for scaling-up: Djibouti's unexploited potential for solar PV means there is a substantial scope for replication and scaling-up investment in sustainable mini-grids, especially for rural electrification where almost 90% of customers are yet to be served. There are about 83 villages in the country. Those that have received donor-funded electrification programs are very few, less than 20. That means more than 60 villages are yet to be served. This represents 200,000 people that need sustainable access to energy services. The policy, financial instruments and business model developed under the project, coupled with a sound awareness/outreach programme, will generate interest beyond the targeted sites for replication and scaling-up by connecting the various stakeholders (rural households, small farmers, the private sector, financial institutions, technical training and local organizations) to promote the establishment of distribution channels to develop sustainable renewable energy based mini-grids for the provision of electricity services. The scaling-up will benefit not only solar PV based mini-grids, but mini-grids with any type of renewable energy source, as some aspects of the business model will be applicable. The approaches piloted in this project can also be applied in many localities in the country and, indeed, the region.

2. Stakeholders. Will project design include the participation of relevant stakeholders from civil society organizations (yes ☒ /no☐) and indigenous peoples (yes ☐ /no☒)? If yes, identify key stakeholders and briefly describe how they will be engaged in project preparation.

The project is not related to indigenous people. There is no "indigenous people" in Djibouti. The beneficiaries are the local community in rural area.

Stakeholders	Expected role
Ministry Habitat, Urban and of Environment	• Leading Executing Partner for the project • Coordination of the overall project preparation and activities • Ensure consistency of the project • Co-participate in the identification of pilot sites • Environmental and social impacts assessment • Resources assessment for pilot projects • Ensure the Monitoring GHG emission reductions • Investment support and promotion, including from international climate finance • Monitoring and evaluation
Ministry of Energy and Natural Resources	• Ensure the integration of proposed mini-grid related policies in the national policy and institutional framework for power sector reform • Co-participate in the identification of pilot sites • Plan activities related to transfer and development of domestic supply chain and O&M&M models • Facilitating investment promotion, support for mini-grids, and issuance of co-financing letters
Power Utility EdD	• Ensure harmonization between isolated grids (mini-grids) and main grid extension.

Stakeholders	Expected role
	• Ensure technical aspects of electricity are harmonized. • Ensure that policies and regulatories are adequate for all parties.
Ministry of Finance	• Provide guidance on the design of appropriate financial mechanisms and to ensure the programming and the disbursement of the co-financing (cash) committed by the Government
Social Development Agency of Djibouti (ADDS)	• Conduct of required project researches on social aspects and developments • Conduct of tailor-made awareness programs on low carbon technologies • Assist the project in the creation and production of informative material about low carbon technologies
Private sector: mini-grid operators, installers of RE systems	• Provide equity investment for pilot projects • Technology needs assessment for solar PV supply chain • Design of O&M&M models
Local communities and CSOs	• Organization and conduct of awareness-raising campaigns • Ensure strong support and buy-in from direct beneficiaries of the project
International partners (WB, EU, AU, etc.)	• Provision of loan financing models for pilot projects

3. Gender Equality and Women's Empowerment. Are issues on gender equality and women's empowerment taken into account? (yes ☒ /no☐). If yes, briefly describe how it will be mainstreamed into project preparation (e.g. gender analysis), taking into account the differences, needs, roles and priorities of women and men.

The majority of the beneficiaries of better access to energy needs in rural areas are women and children. Providing energy access to these most often poor households adds value to agricultural production and to micro, small and medium enterprises. It generates high positive impacts on women as consumers of electricity. While electrification will benefit both women and men by enhancing their engagement in more productive activities, gender gains are derived mainly from reducing the workload of women and girls.

In addition, fisheries and fishing activities are predominant in most targeting sites. Women bear the brunt of household chores in fishing villages. Women are responsible for water collection and all household chores, representing a large amount of their productive time. To a certain extent, they are also mainly responsible for managing household expenses and education.

By providing access to electricity and potable water (the project will facilitate provision to potable water as well, through seawater desalination), the project will help to reduce costs borne by the households, but also free up time for women. Local access to electricity and drinking water will help to reduce the time spent on chores. Women are one of the main sources of added value in fishing villages. In most cases, they are the ones that transform the fishing product, cleaning it, drying it, transforming it into fish flour or flake and producing fish oil from the remains.

The production of ice, mainly used for fish conservation, will also help to increase revenue from fishing in the villages. All in all, between the increased revenue afforded to the households and decreased costs from the provision of local electricity, water and ice, local populations will have access to higher revenues. In turn this should allow local populations to conserve more added value from their own production and re-invest in new activities.

Some of the accompanying programmes, such as the GEF-SGP's (although not accounted for as co-finance), will assist the local women's cooperatives in transforming their produce and extracting more added value. In addition, the SGP will consider assisting local populations (once again mostly women's cooperatives) in collecting the remaining fish residues, transforming them into fertilizer and initiating a local, small agriculture project.

All of these measures should not only improve the daily life of women, but also assist them in initiating productive activities to produce more local added value. This will help empower women that are currently limited in their options to help encourage development.

At CEO endorsement, the project document will have specific gender goal indicators, which will include the collection of gender-disaggregated data and a strong monitoring and evaluation mechanism to operate and advance gender mainstreaming and social equity. During the PPG phase, surveys will be conducted and consultation workshops will be organized to specifically reflect the participation of women, youth and socially marginalized groups.

4 Risks. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable).

Risk	Level of Risk	Mitigation Action
Political risk Djibouti is in a very instable part of the world: the horn of Africa. This region faces regular political instability and influx of refugees, especially in Somalia, Eritrea and Yemen. However, Djibouti is in a better shape compared to its neighbors. The country is relatively calm and elections are held on a regular basis. One of the reasons is the strong military presence from France and USA, which have their base in Djibouti for Middle East related operations. However, if a sudden political instability occurs, it will certainly negatively impact on the overall investment climate and cause delays in project implementation.	P=2 I=4	The project will work as much as possible with decentralized authorities in provinces and rural areas. The political will to support this project in these regions is strong. The impact of political threat at national level is seen more in the capital, Djibouti. The project will also build a wide coalition of partners and stakeholders whose interest in rural development will likely sustain, even in case of regime change. They include local businesses and communities, NGOs and international development agencies.
Technology risk Insufficient quality of locally-produced equipment, leading to early break-down of PV or mini-grid systems and dwindling consumer confidence in the technology.	P=2 I=2	Given the low literacy rate and the lack of technical capacity among rural communities, maintenance issues represent a significant risk for mini-grid system operations. Minor repairs have to be done by locally-trained staff to prevent equipment from being idled for long periods. Spare parts have to be standard among sites, locally manufactured if possible, readily available for transport and installed at minimal cost. The building of technical and operational capacities among rural communities will be critical to mitigate these technical risks. This will be done by providing basic technical training jobs in rural areas and sponsoring local institutions that take on maintenance tasks.
Financial risk Widespread poverty and lack of sustainable sources of income, resulting in low ability to pay for modern energy services.	P=2 I=3	The project will conduct assessments of the capacity and willingness to pay of end-users. In addition, the combination of the community business model and private sector business model will reduce the financial risk by establishing peer-pressure at community level. The role of microfinance (especially Islamic microfinance tailored to the low-income market) can also help reduce the risk.
Market risk In Djibouti, RE systems will have to compete with locally available diesel alternatives. Without additional incentives, sustainable mini-grids plants may remain uncompetitive.	P=3 I=3	Introduction of financially- and socially-viable tariffs for RE-based mini-grids will be a cornerstone instrument of the proposed policy package, aimed specifically at addressing this market risk by leveling the playing field for RE against other available alternatives.
Climate risk Climate change is predicted to cause changes in, and increase the variability of,	P=1 I=3	Results of climate models for Djibouti will be incorporated in the design and selection of pilot sites. The existing and projected climatic data will be used to ensure that the chosen sites are not

Risk	Level of Risk	Mitigation Action
Djibouti's temperature patterns, which will pose additional challenges and risk to RE (especially PV) development.		highly affected by irregular rain trends and are least vulnerable to projected changes in temperature or wind regimes.
OVERALL	**MODERATE**	

5. Coordination. Outline the coordination with other relevant GEF-financed and other initiatives.
During the PPG phase, in-depth consultations will be undertaken to establish partnerships and practical modalities for linking and collaborating with several ongoing and planned modern energy access related projects/programmes in Djibouti. This is not only to avoid unnecessary duplication but also to ensure that GEF resources build on the progress and achievements made to date through such initiatives. A strategy and plan for collaboration with relevant ongoing and planned initiatives such as those stated below will be prepared during the preparatory phase, including defining the roles and responsibilities of critical stakeholders.

The proposed project is one of a series of similar UNDP-GEF initiatives aimed at promoting renewable energy-based mini-grids in Africa (such as small hydro-based mini-grids in Congo-Brazzaville, DR Congo, Central African Republic and Guinea Bissau; wind-based mini-grids in Mauritania, solar PV mini-grids in Mali and biomass-based mini-grids in Benin). These projects share the same market transformation approach and model for RE-based rural electrification. The portfolio will be coordinated by the same UNDP-GEF Regional Hub, including analysis and presentation of lessons learned, organization of regular face-to-face and virtual networking, knowledge-sharing and outreach activities and events.

The project will also liaise with the Small Grants Programme (SGP), which has developed a number of projects in the fields of rural energy access.

6. Consistency with National Priorities. Is the project consistent with the National strategies and plans or reports and assessements under relevant conventions? (yes ☒ /no☐). If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

- **Vision 2035 (2014):** The Government of Djibouti launched an ambitious long-term development plan, known as Vision 2035. The planning strategy aims to place the country on a sustainable development pathway by strengthening the country's human capital, developing its private sector and reforming its systems of governance. The ambitious plan covers social and economic aspects with a focus on education, tourism, fisheries, new information and communication technologies, transport and logistics, industry, and energy. Djibouti aims to make a power sector transition, moving from 100% fossil thermal in 2010 to 100% renewable electricity sources by 2020. This would be sourced mainly from geothermal, wind and solar, as well as interconnecting with the Ethiopian grid, which is based on hydropower.

- **Energy Policy (2015)**: The Government of the Djibouti realizes that lack of energy access in rural areas is a major barrier to the country's economic development, social stability and environmental sustainability. To address the problem, the Government had emphasis rural electrification as one of the pillars of its Energy Policy (2015). It is stated in the Energy Policy that "Energy has been identified in the national strategy as a tool to combat poverty. Rural electrification is the most effective way to combat poverty, social exclusion, and gender inequalities. The availability of electricity in the rural areas drives a new dynamic for socio-economic development, offers new employment opportunities, creates income-generating activities, and improves the quality of basic social services (water, health, education, etc.). The development of the income generating activities has the indirect effect of reducing rural exodus and thereby reducing poverty. The Policy concludes by stating that rural electrification must rely on the renewable energies available in these localities. In addition, it is necessary to favor the cheapest energy resource in order to ease investment costs of potential projects and consequently the energy bills of the villager consumers.

- **Second National Communication to the UNFCCC** (2013): The SNC highlights that the main sources of GHG emissions are agriculture and energy sectors. The report identifies the main mitigation measure being the increase of RE and the reduction of fossil fuel based energies. This is in accordance with this proposed project.

- The **Intended Nationally Determined Contribution** (2015) of Djibouti indicates a reduction target of 40% less GHG emissions by 2030. This will be achieved through various initiatives including: (i) an additional 50 MW from Ethiopia, (ii) installation of a 60 MW wind farm power plant, (iii) several solar PV plants reaching 250 MW, and (iv) geothermal exploitation.

7. Knowledge Management. Outline the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

Knowledge management is very important for this project, due to its innovativeness. The project will help to collect and present all essential information in project sites. The information will be presented online and published as an investor guide. Support will be provided to relevant ministries to ensure regular information updates and wide dissemination.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT[14] OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):

(Please attach the **Operational Focal Point endorsement letter**(s) with this template. For SGP, use this **SGP OFP endorsement letter**).

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
MR DINI ABDALLAH	SECRETARY GENERAL	MINISTRY OF HOUSING, URBAN AND ENVIRONMENT	5-MARCH-2018

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies[15] and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator, Agency name	Signature	Date *(MM/dd/yyyy)*	Project Contact Person	Telephone	Email
Adriana Dinu Director, Sustainable Development (Environment) a.i. Executive Coordinator, Global Environmental Finance		April 24, 2018	Saliou Toure Technical Advisor EITT	+90 850 288 2648	Saliou.toure@undp.org

[14] For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.
[15] GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT

C. ADDITIONAL GEF PROJECT AGENCY CERTIFICATION (APPLICABLE ONLY TO NEWLY ACCREDITED GEF PROJECT AGENCIES)

For newly accredited GEF Project Agencies, please download and fill up the required **GEF Project Agency Certification of Ceiling Information Template** to be attached as an annex to the PIF.