



**REQUEST FOR CEO ENDORSEMENT**

**PROJECT TYPE: MEDIUM-SIZED PROJECT**

**TYPE OF TRUST FUND: THE GEF TRUST FUND**

**PART I: PROJECT INFORMATION**

<b>Project Title: Small Hydropower-based Mini-grids for Rural Electrification in Congo-Brazzaville</b>			
<b>Country:</b>	Republic of Congo	<b>GEF Project ID:</b>	5424
<b>GEF Agency:</b>	UNDP	<b>GEF Agency Project ID:</b>	4685
<b>Other Executing Partner(s):</b>	National Agency for Rural Electrification (ANER)	<b>Submission Date:</b> <b>Resubmission Date:</b>	March 3, 2015 27 July 2015
<b>GEF Focal Area(s)</b>	Climate Change	<b>Project Duration (Months)</b>	48
<b>Name of Parent Program (if applicable):</b>	n/a	<b>Project Agency Fee (\$):</b>	184,692

**A. FOCAL AREA STRATEGY FRAMEWORK**

<b>Focal Area Objectives</b>	<b>Expected FA Outcomes</b>	<b>Expected FA Outputs</b>	<b>Trust Fund</b>	<b>Grant Amount (\$)</b>	<b>Cofinancing (\$)</b>
CCM-3	Promote Investment in Renewable Energy Technologies.	Renewable energy capacity developed and installed.	GEF TF	1,944,133	10,250,000
<b>Total Project Cost</b>				1,944,133	10,250,000

**B. INDICATIVE PROJECT FRAMEWORK**

<b>Project Objective: To trigger public and private investment in small and micro hydropower-based mini-grids for rural electrification in Congo-Brazzaville</b>						
<b>Project Component</b>	<b>Grant Type<sup>1</sup></b>	<b>Expected Outcomes</b>	<b>Expected Outputs</b>	<b>Trust Fund</b>	<b>Grant Amount (\$)</b>	<b>Confirmed Co-financing</b>
1. Policy and de-risking instruments for SHP and RE-based mini-grids	TA	Enabling policy and institutional framework for SHP-based mini-grids set up  Financial viability of SHP mini-grid operation ensured	1.1 Policy package to operate and develop RE based mini grids 1.2 Financial viability mechanism of SHP mini-grid operation 1.3 Tariff criteria for RE based mini grids	GEFTF	400,000	800,000
2. Technology and services supply chain	TA	Capacity to deliver turnkey solutions and quality O&M&M services for SHP developed	2.1 Registered technology and service providers 2.2 Ownership and operation models selected	GEFTF	310,000	900,000

<sup>1</sup> TA includes capacity building, and research and development.

			2.3 Capacity Development and Training of registered technology and service providers			
3. SHP-based mini-grids roll-out	INV	Improved confidence in the technical and financial viability of SHP-based rural electrification  <ul style="list-style-type: none"> <li>• Pico-hydro: 8 sites for a total of 5 kW each</li> <li>• Micro hydro: 8 sites for a total of 50 kW each</li> <li>• Mini hydro: 3 sites for a total of 500 kW each</li> <li>• Small hydro: 2 sites for a total of 1000 kW each</li> </ul>	3.1 Selected project sites 3.2 First batch of sites built and operating with short term concessions 3.3 Second batch of sites built and operating with short term concessions 3.4 Third batch of sites built and operating with long term concessions 3.5 All sites operating with long term concessions	GEFTF	910,000	8,000,000
4. Public Relations and promoting investment	TA	Increased awareness about SHP potential and investment climate	4.1 RE Mini-Grid Project Facilitation Platform (PFP) established 4.2 Promotion Campaign conducted	GEFTF	180,000	300,000
Subtotal					1,800,000	10,000,000
Project Management Cost (PMC) <sup>2</sup>				GEFTF	144,133	250,000
Total Project Cost					1,944,133	10,250,000

### C. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT BY NAME (\$)

Please include letters confirming co-financing for the project with this form.

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
National Government	Ministry of Energy	Grant	10,000,000
GEF Agency	UNDP	Grant	250,000
<b>Total Co-financing</b>			<b>10,250,000</b>

### D. Trust Fund Resources Requested by Agency, Focal Area and Country

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) <sup>2</sup>	Total c=a+b
UNDP	GEFTF	Climate Change	Congo	1,329,863	126,337	1,456,200
UNDP	GEFTF	Biodiversity	Congo	614,270	58,355	672,625
<b>Total Grant Resources</b>				1,944,133	184,692	2,128,825

### E. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? No.

<sup>2</sup> To be calculated as percent of subtotal.

## **PART II: PROJECT JUSTIFICATION:**

### **A: DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF**

1. Some components/outcomes/outputs have been slightly renamed. And some outputs have been moved from one component to another (example: capacity building outputs moved from component 1 to component 2).
2. Although the project components and outcomes are the same, the number of outputs have been reduced. It was noticed that there were too many outputs at PIF level, and some outputs were pretty much the same. Within the remaining outputs, there are several designed activities that will lead to the achievement of the dedicated outcomes.
3. The overall cofinancing amount has decreased from \$13,500,000 at PIF stage, to \$10,250,000 at CEO endorsement request stage. The main reason for this is a missing letter from a key partner, e.g. the Central African Development Bank. Although the bank is fully committed to support the project through concessional loan, slowness in procedures and loan agreement with the Government of Congo has led to important delays. Project proponents can no longer wait as the MSP project is largely overdue. Loan agreement with the Central African Development Bank is expected at early stages of project implementation. It will then be considered as leveraged financing.
4. The financial support (aid/subsidy) has been redesigned. The Output based Aid (OBA) will not be given to all SHP (Small hydropower) based mini-grid developer/manager. But instead, targeted SHP based mini-grids were differentiated depending of their capacity.
  - Pico-hydro: 8 sites for a total of 5 kW each
  - Micro hydro: 8 sites: for a total of 50 kW each
  - Mini hydro: 3 sites for a total of 500 kW each
  - Small hydro: 2 sites for a total of 1000 kW each

This adds up to about 4 MW, the differentiation capacity-wise is made since normalized investment costs are very sensitive to size, technology used, accessibility, among other variables. Then the above sites were divided into 3 batches. The first batch to be developed with small capacities (5kW to 50kW), the second batch up to 500 kW and the third batch up to 1 MW. The first two batches will benefit support at the beginning (CAPEX subsidy), while OBA will be applicable to the third batch only. This means that these “bigger” SHP will have to build the infrastructure at their own and will receive aid only when electricity has been generated and sold. The assumption here is that, by developing this bigger SHP, smart clients (telecommunication operators, small agro-factories, etc.) will likely be present at the dedicated site.

#### **A.1 NATIONAL STRATEGIES AND PLANS:**

The Republic of Congo, also known as Congo - Brazzaville, is a country located in Central Africa from both sides of the Equator and covering an area of 342,000 km<sup>2</sup> and a population of about 4 million inhabitants. The country had an electrification rate of 37.8% in 2012 according to the World Bank’s data<sup>3</sup>. Meanwhile, most of the rural population does not have access to electricity: in 2010 approximately only 9% according to the Sustainable Energy for All Tracking Report<sup>4</sup> and the World Bank<sup>5</sup> (other sources mention 16% in 2011 according to the African Development

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<sup>3</sup> Taken from the World Bank Data webpage on October 2014 at: <http://data.worldbank.org/indicator/EG.ELC.ACCS.ZS>

<sup>4</sup> Sustainable Energy for All, 2013. 2013 Global Tracking Framework Report. Available at: <http://www.se4all.org/tracking-progress/>

<sup>5</sup> According to the World Bank’s database on the Sustainable Energy for All Indicators, the rural access rate in 2010 was of 9.4%. Consulted on October 2014 and available at: <http://bit.ly/1rrCSVt>

Fund<sup>6</sup> and 5% in 2012 according to the IEA Africa Outlook Report<sup>7</sup>) has power supply, which is primarily obtained through off-grid small gasoline or diesel genset powered mini-grids. The rest of the populations rely on kerosene, disposable batteries, firewood and agricultural residues to meet basic energy needs. The use of diesel and gasoline-based electric generators in Congo is quite wide-spread; in 2005 their consumption was nearly 163,000 metric tons (t) of fossil fuels per year, meanwhile for households, they predominantly use kerosene for lighting (13,200 t/year)<sup>8</sup>.

Due to high suppressed demand, economic growth and domestic supply of cheap diesel products, the rate of diesel and kerosene use is growing exponentially: according to 2nd National Communication, use of diesel fuel has been steadily increasing between 1994 and 2010 and is projected to nearly double by 2020. The result is high GHG emissions, inefficient use of fossil fuels, and environmental degradation. With a projected steady increase in population volume (2.8% per year) and energy demand (3.4% per year) and in the absence of more climate-friendly sources of power supply, GHG emissions from rural energy use will continue to grow.

For detailed description of the National Strategies and Plans, please refer to the UNDP PRODOC, section 1 “Situation Analysis” page 6 to 15.

## **A.2 GEF FOCAL AREA AND/OR FUND(S) STRATEGIES, ELIGIBILITY CRITERIA AND PRIORITIES:**

This project is fully consistent with GEF-5, Climate Change Objective 3: "Promote Investment in Renewable Energy Technologies". Its main objective is to facilitate investment in small and micro hydropower-based mini-grid systems in Congo-Brazzaville.

For detailed description of the GEF focal area strategies, please refer to the UNDP PRODOC, section 2.4 “Project Rationale and GEF Policy Conformity” and section 2.5 “Country Ownership: Country Eligibility and Country Drivenness” page 47 to 48.

## **A.3 THE GEF AGENCY’S COMPARATIVE ADVANTAGE:**

The proposed project is clearly within the comparative advantages of UNDP as stated in the GEF Council Paper C.31.5 “Comparative Advantages of GEF Agencies”. UNDP is one of the few GEF agencies present in the country. It has the ability to mobilize and make available quality technical expertise to develop policies and strategies, particularly in climate mitigation and adaptation, social sectors, governance and environmental management and risk disasters. UNDP has also developed and implemented several projects in Congo related to Energy and Environment, among them few GEF projects dealing with climate change and biodiversity.

UNDP has implemented over 230 GEF clean energy projects in close to 100 developing countries, and has acquired a unique base of institutional knowledge on transforming renewable energy markets in developing countries. This project feeds under the UNDP-GEF EITT Signature program number 1 “SP1 – Clean Energy” Promoting access to clean and affordable energy systems.

The current proposal is also in line with the strategic priorities developed under the United Nations Development Assistance Framework of Congo-Brazzaville (UNDAF 2012 – 2017) where UNDP is a Lead Agency, specifically the following UNDAF Outcome “The Government of Congo improves the management of natural resources & associated benefits, the disaster management mechanisms & promotes green economy”.

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<sup>6</sup> According to AFD, 2012 the electrification rate in rural areas of Congo is 16%. African Development Fund, 2012. Project Appraisal Report on Rural Electrification for the Republic of Congo. ONEC Department. September 2012. Available at: <http://bit.ly/1sREFYS>

<sup>7</sup> International Energy Agency, 2014. Africa Energy Outlook : A focus on energy prospects in Sub-Saharan Africa. Full report available at: <http://bit.ly/1Cy6Xsp> and datasets at: <http://www.worldenergyoutlook.org/africa/>

<sup>8</sup> Ministère du Développement durable, de l'économie forestière et de l'environnement, 2009. Seconde Communication Nationale de la République du Congo a la Convention-cadre des Nations-Unies sur les changements climatiques (UNFCCC). Available at : <http://unfccc.int/resource/docs/natc/connc2.pdf>

#### **A.4 THE BASELINE PROJECT AND THE PROBLEM THAT IT SEEKS TO ADDRESS:**

For detailed description of the baseline project and the problem that it seeks to address, please refer to the UNDP PRODOC, sections 1.5; 1.6 and 1.7 “Baseline, barriers and current government policy to address the root causes and threats” page 16 to 26.

For detailed description of the alternative scenario and project activities, please refer to the UNDP PRODOC, section 2.1 “Project Objective, Outcomes and Outputs” page 27 to 43.

The Government of the Republic of Congo realizes that lack of energy access in rural areas is a major detrimental factor for the country’s economic development, social and environmental sustainability. To address the problem the Agence Nationale d’Electrification Rurale (ANER) has been created. ANER is the national agency responsible for rural electrification under the Ministry of Mines, Energy and Hydraulic (MMEH). ANER’s goal is to improve the electrification rate from 5 % to 50% by 2015. But it has to be acknowledged that this goal at this stage seems unfeasible.

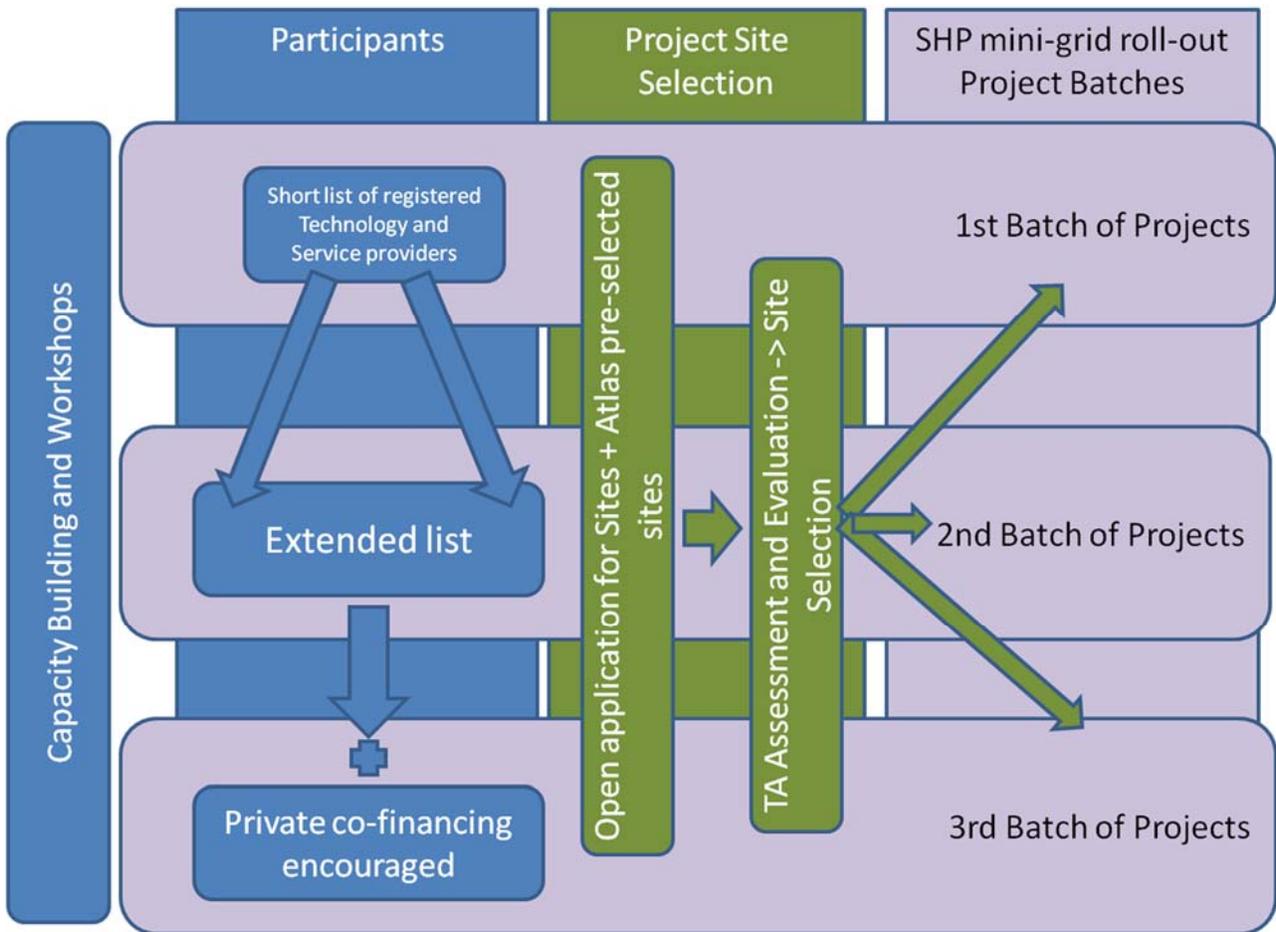
The Government has also established the Development Fund for the Electricity Sector and embarked on an ambitious program to improve the energy infrastructure in the country. This program includes major investments in power generation, transmission, and rural electrification, including the recently commissioned new 120 MW hydro power plant at Imboulou and a 74 MW hydropower facility at Moukoulou.

Further, to attract private investment in new power generation and grid expansion, a major restructuring of the electricity sector has been underway since 2003 after adoption of new Electricity Code aimed at creating the enabling regulatory and market framework for provision of electricity services by Independent Power Producers (IPPs), which would encourage private initiative and competition. The reform also created the Power Sector Regulatory Agency, the key entity in charge of tariff regulation for all power producers.

The proposed project objective is to contribute to the Congolese Government’s goal of increasing the rate of rural electrification and also to avoid emissions of greenhouse gases by improving the enabling environment of small hydro (SHP) mini-grid projects.

The project will develop a decentralized track for sustainable rural electrification based on renewable energy generation carried out through nongovernmental entities such as private entrepreneurs, cooperatives, community user groups or NGO’s.

The project proposes an alternative scenario with three-phase deployment



### A.5 INCREMENTAL/ADDITIONAL COST REASONING

For detailed description of the Incremental/Additional cost reasoning, please refer to the UNDP PRODOC, sections 2.6 to 2.9 “Cost effectiveness, Sustainability, Replicability and Innovation” page 48 to 49.

From the total requested GEF financing of 1,944,133 US\$, 1.8US\$ million have been allocated for use as technical assistance and investment type of activities in accordance with the Project Results Framework, set-up of local project office and capacity building activities. A total of US\$ 144,133 i.e. less than 8% of the total budget will be used for project management.

The combined direct and indirect global benefits of the project have been assessed at over 774 kilotons of CO<sub>2eq</sub>. With a GEF funding request of US\$ 1,944,133, this corresponds to an abatement cost of less than US\$ 3 per ton of CO<sub>2</sub> reduced. When considering direct emissions only, the ration is US\$ 7 per ton of CO<sub>2</sub> reduced.

**A.6 RISKS** (including climate change, potential social and environmental risks that might prevent the project objectives from being achieved and measures that address these risks).

For detailed description of the Risks, please refer to the UNDP PRODOC, section 2.2 “Project indicators, Risks and Assumptions” page 44 to 45.

### A.7 COORDINATION WITH OTHER RELEVANT GEF-FINANCED INITIATIVES

Apart from ensuring coordination and collaboration with relevant baseline projects, the proposed project will also forge partnership with the GEF funded climate change project on “Enabling Activity” (BUR and NC). It will also coordinate closely with the Sustainable Energy for All Initiative’s program of work at the country and global level. The proposed project is one of a series of similar UNDP-GEF initiatives aimed at promoting small and mini-hydro based mini-grids in Central Africa (DR Congo, Sao Tome and Principe, and Equatorial Guinea). These projects share the same market transformation approach and model for MHP-based rural electrification. The portfolio will be coordinated by UNDP-GEF Regional Coordination in Africa, including analysis and presentation of lessons learnt, organization of regular face-to-face and virtual networking, knowledge sharing and outreach activities and events. During implementation of the proposed project, UNDP will ensure that the various project partners periodically meet to share information on progress in project activities and to avoid any duplication. These meetings may be organised in conjunction with meetings of the Project Board.

## **B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:**

### **B.1 Describe how the stakeholders will be engaged in project implementation.**

For detailed description of the Stakeholders, please refer to the UNDP PRODOC, section 1.6 “Institutional Framework and Stakeholder Analysis” page 22 to 23.

The project will be implemented through the NEX execution modality by ANER. ANER will appoint a National Project Director who will assume overall responsibility for project implementation, ensure the delivery of project outputs and the judicious use of project resources. The National Project Director will be assisted by a Project Management Unit headed by a Project Manager (PM) to be recruited through a competitive process. The PM will be responsible for overall project coordination and implementation, consolidation of work plans and project papers, preparation of quarterly progress reports, reporting to the project supervisory bodies, and supervising the work of the project experts and other project staff. The PM will also closely coordinate project activities with relevant Government and other institutions and hold regular consultations with project stakeholders. An international part-time Chief Technical Adviser will be recruited to support the PM on technical issues, while a full-time Project Assistant (PA) will support him/her on administrative and financial matters.

National and international consultancy services will be called in for specific tasks under the various project Outcomes (components). These services, either of individual consultants or under sub-contacts with consulting companies, will be procured in accordance with applicable UNDP/GEF guidelines.

A Project Board, chaired by the Ministry of Mines, Energy and Hydraulic (MMEH) will be established to provide strategic directions and management guidance to project implementation. It will consist of representatives of the relevant ministries and Government Departments/Directorates (Ministry of Environment, ARSEL, FDSE, SNE) participating in the project, Rural Community organizations, the UNDP Country Office, the National Project Director as well as representatives of the NGO community and women’s groups. Representatives of the private sector may be invited to participate as observers.

Finally, the UNDP CO will provide specific support services for proper project implementation, as required, through its Administrative, Programme and Finance Units and through support from Addis Ababa Regional Service Centre. These services will include support for annual PIR review (project implementation review), mid-term review and terminal evaluation. Additional details on the proposed management arrangement – including an organogram representing the implementation arrangement – can be found in the “Management Arrangements” Section of the UNDP Project Document).

### **B.2 Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global benefits.**

For detailed description of the socioeconomic benefits and other benefits, please refer to the UNDP PRODOC, section 2.3 “Expected Global, National and Local Benefits” page 45 to 46.

The project will enable rural areas benefiting for access to better energy services. By end of the project, approximately 10,000 households and approximately 45,000 people in selected sites will benefit for access to better energy services.

The project will have many socio-economic benefits for local communities through the provision of electricity and thereby enabling the creation of new jobs.

On the social front, it has been amply demonstrated how important could be the provision of electricity in rural school children, improving public health and increase of income by providing income-generating activities in place of activities in the home. The overall impact of the project will be felt on many fronts by combining the advantages of substantial jobs, the production of green energy, and improvement to the environment through a local source of energy instead of imported fossil diesel.

The project will be a showcase initiative for Congo. Local individuals who will operate the facilities will be trained on the processes and technologies related to small scale hydropower. The implementation of such a project will hence have a cumulative effect on such projects in other regions. Regarding indigenous people, there are Pygmy minorities in Congo-Brazzaville, locally called “autochthon population”. There are about 12,000 Pygmies in the country, living in the high forest regions. However, this project is not likely to have an impact on them. Most of them live in very remote parts, even far from villages. However, if it occurs during project implementation that a potential site is nearby their habitats, the project will ensure that their interest and participation are fully taken into account.

On the gender related issues, the majority of the beneficiaries of mini- and micro-hydropower in rural areas are end users. 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.

### **B.3 Explain how cost-effectiveness is reflected in the project design.**

Within the requested GEF funding of USD 1,944,133; \$1.8 million have been allocated for use as technical assistance and investment type of activities in accordance with the Logical Framework. A total of \$144,133 (i.e. less than 8%) of the total budget is dedicated to project management.

The combined direct and indirect global benefits of the project have been assessed at over 774 kilotons of CO<sub>2</sub>eq. With a GEF funding request of US\$ 1,944,133, this corresponds to an abatement cost of less than US\$ 3 per ton of CO<sub>2</sub> reduced. When considering direct emissions only, the ration is US\$ 7 per ton of CO<sub>2</sub> reduced.

Congo-Brazzaville being part of the Congo basin region, hydropower is the best source of electricity generation in the country, compare to other source of renewable energies such as Solar, Wind or Biomass. A brief comparison of the various RE technologies showed an overall advantage to hydro-based power: year-round reliable availability of water for baseload generation at reasonable cost; solar resource is not adequate (high degree of cloudiness during extended periods of the year), wind resources are very inadequate and biomass power presents important technological challenges as well as feedstock supply management concerns.

## **C. DESCRIBE THE BUDGETED M & E PLAN:**

For detailed description of the M&E Plan, please refer to the UNDP PRODOC, section 6 “Monitoring and Evaluation” page 61 to 66.

A Project Board, as indicated above, will provide overall guidance to project execution. IPPs and other interested parties will be invited to participate in the meetings of the Project Board, as observers, when required.

UNDP will monitor and report on progress in project implementation in accordance with the UNDP Programme Manual and GEF Monitoring and Evaluation (M&E) guidelines. In undertaking this, it will be supported by a National Project Director, to be designated by MMEH, a Project Management Unit (PMU) that will be supported by an international part-time Chief Technical Adviser and the UNDP-GEF Regional Service Centre in Addis Ababa. The PMU will report on relevant progress to the National Project Director and UNDP on a quarterly basis. Regular monitoring of the project will take place through this reporting mechanism as well as through site visits, as required.

Progress will be measured against targets set out in the Work Plan and indicators defined in the Project Logical Framework. For each of the project components, a detailed monitoring plan will be prepared during project inception. In this connection, a Project Inception workshop will be organized at the start of project activities to review the Logical Framework; specifically detailed means of verification, assumptions, etc. will be revisited and adapted (adaptive project management) as necessary, including measures to track any major project risks and taking into consideration the situation prevailing in the country. These indicators will draw upon all sources of information, including those of other donors active in the communal services field in the country. Appropriate and specific performance benchmarks will be established prior to project implementation to effectively monitor project progress and to make crucial management decisions.

Annual Tripartite Review meetings (TPRs), with the participation of the project team and stakeholders, will be held to review progress, identify problems, and agree on solutions to maintain timely provision of inputs/achievement of results. The Project Board will review annual work plans as well as provide strategic advice on the most effective ways and means of implementation. Reporting to GEF will be accomplished through Annual Project Reviews (APRs) and Project Implementation Reviews (PIRs).

Additionally, the project will be the subject of an independent mid-term review midway through project implementation and a terminal evaluation at project completion. The independent evaluations will review the relevance, timeliness and impact of project inputs and discuss lessons learned for use in improving the quality of future development interventions with similar activities that could be undertaken in collaboration with other development partners to the project. The results of the terminal evaluation, incorporating the lessons learned, will be disseminated both within and outside the region. All reports will be posted on the project website.

The costs for Monitoring and Evaluation are estimated at \$ 75,000 (Table below). This budget allocation includes activities related to preparing quarterly progress reports, undertaking Project Implementation Reviews, Annual Project Reviews, an independent mid-term review, an independent terminal evaluation and organizing/participating in Project Board Meetings, as required.

**Table: Monitoring and Evaluation (M&E) Work Plan and Estimated Associated Budget.**

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team staff time</i>	Time frame
Inception Workshop and Report	<ul style="list-style-type: none"> <li>▪ Project Manager</li> <li>▪ UNDP CO, UNDP GEF</li> </ul>	Indicative cost: 10,000	Within first two months of project start up
Measurement of Means of Verification of project results.	<ul style="list-style-type: none"> <li>▪ UNDP GEF RTA/Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members.</li> </ul>	To be finalized in Inception Phase and Workshop.	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on <i>output and implementation</i>	<ul style="list-style-type: none"> <li>▪ Oversight by Project Manager</li> <li>▪ Project team</li> </ul>	To be determined as part of the Annual Work Plan's preparation.	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	<ul style="list-style-type: none"> <li>▪ Project manager and team</li> <li>▪ UNDP CO</li> <li>▪ UNDP RTA</li> <li>▪ UNDP EEG</li> </ul>	None	Annually
Periodic status/ progress reports	<ul style="list-style-type: none"> <li>▪ Project manager and team</li> </ul>	None	Quarterly
Mid-term Evaluation	<ul style="list-style-type: none"> <li>▪ Project manager and team</li> <li>▪ UNDP CO</li> <li>▪ UNDP RCU</li> <li>▪ External Consultants (i.e. evaluation team)</li> </ul>	Indicative cost: 20,000	At the mid-point of project implementation.

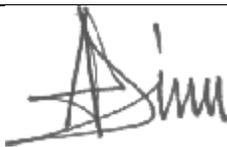
Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team staff time</i>	Time frame
Final Evaluation	<ul style="list-style-type: none"> <li>▪ Project manager and team,</li> <li>▪ UNDP CO</li> <li>▪ UNDP RCU</li> <li>▪ External Consultants (i.e. evaluation team)</li> </ul>	Indicative cost : 20,000	At least three months before the end of project implementation
Project Terminal Report	<ul style="list-style-type: none"> <li>▪ Project manager and team</li> <li>▪ UNDP CO</li> <li>▪ local consultant</li> </ul>	5,000	At least three months before the end of the project
Audit	<ul style="list-style-type: none"> <li>▪ UNDP CO</li> <li>▪ Project manager and team</li> </ul>	Indicative cost per year: 5,000	Yearly
Visits to field sites	<ul style="list-style-type: none"> <li>▪ UNDP CO</li> <li>▪ UNDP RCU (as appropriate)</li> <li>▪ Government representatives</li> </ul>	For GEF supported projects, paid from IA fees and operational budget	Yearly
<b>TOTAL indicative COST</b> Excluding project team staff time and UNDP staff and travel expenses		US\$ 75,000 (+/- 5% of total budget)	

### **PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT AND GEF AGENCY**

#### **A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT ON BEHALF OF THE GOVERNMENT**

NAME	POSITION	MINISTRY	DATE (mm/dd/yyyy)
Joel LOUMETO	GEF Operational Focal Point Director General of Environment	Ministry of Tourism and Environment	06/27/2013

#### **B. GEF AGENCY (IES) CERTIFICATION**

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for CEO Endorsement.					
Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Adriana Dinu Executive Coordinator, UNDP - GEF		July 27, 2015	<b>Saliou Touré</b> Regional Technical Advisor, EITT	+251 912 503 320	<a href="mailto:saliou.toure@undp.org">saliou.toure@undp.org</a>

## ANNEX A: PROJECT RESULTS FRAMEWORK

	Indicator	Baseline	Targets End of Project	Source of verification	Risks and Assumptions
<p><b>Project Objective</b> To trigger investment in small and micro hydropower-based mini-grids for rural electrification in Congo-Brazzaville</p>	<p>Investment in SHP mobilized in comparison to baseline year 2014</p> <p>Amount of reduced CO<sub>2</sub> emissions by the investments facilitated by the project (in rural electricity generation compared with the baseline)</p> <p>Number of MWh produced under the project</p> <p>Number of village/people in rural areas benefiting for access to better energy services</p>	<p>0 USD/year (2014)</p> <p>2014: The baseline assumes that all new demand for electricity will be met by diesel generators.</p>	<p>By end of the project – Year 4 (EOP): a total of 17,500,000 USD of investment from the private sector, government and multilateral aid organizations EOP: 275,414 tCO<sub>2</sub></p> <p>EOP: 350,400 MWh (17,520 MWh/y over 20 year lifetime)</p> <p>EOP: 21 sites, 10,000 households, 45,000 people benefiting for access to better energy services</p>	<p>Monitoring and reporting on total SHP investments triggered by the project M&amp;E Framework</p> <p>Monitoring and Reporting of yearly generation of installed Pilot SHP (kWh)</p>	<p>Private investors' interest is lower than estimated Co-financing from government and Multilateral institutions is not materialized The installed capacities are lower than estimated. Downtime of SHP projects identification and construction is lengthier than expected Climate change affectations to hydrology which lowers the expected electricity output</p>
<p><b>Outcome 1a</b> <b>Enabling policy and institutional framework for SHP-based mini-grids set up</b></p>	<p>Draft and submission of SHP-specific policies and regulation Number of new policies or regulation for rural electrification and SHP, for aspects such as:</p> <ol style="list-style-type: none"> <li>1. Rural electrification policy</li> <li>2. SHP generation concessions</li> <li>3. Exploitation of the resource (water) for electricity generation</li> <li>4. Microgrid (off-grid) operation conditions and obligations</li> <li>5. Tariff setting methodology for RE-based rural independent grids</li> <li>6. Site selection prioritization tool</li> </ol> <p>Capacity building for relevant government agencies on the established regulatory</p>	<p>0 SHP specific policy and regulation</p> <ol style="list-style-type: none"> <li>1. Absence of a rural electrification policy</li> <li>2. Absence of SHP-specific generation law</li> <li>3. Law about private/public land/water use exists</li> <li>4. Electricity Law: microgrids are contemplated</li> <li>5. There are no tariffs specific to rural microgrids</li> <li>6. There is no procedure for selecting or prioritizing</li> </ol>	<p>At least six newly drafted and submitted for approval by government of SHP specific policy and regulation such as:</p> <ol style="list-style-type: none"> <li>1. Rural electrification policy drafted and presented</li> <li>2. Law drafted governing SHP generation</li> <li>3. Reviewed Law governing use and exploitation of land/water for SHP</li> <li>4. Reviewed Law governing microgrids, operators etc.</li> <li>5. Tariffs setting methodology/process for rural microgrids, and SHP studied and approved</li> <li>6. Established procedure on site selection and prioritization</li> </ol> <p>Capacity Building Programme created and implemented to at least 30 government officials</p>	<p>MMEH publishes the Policy and regulations Development and submission to Government of the laws/ recommendations Proof of participation of staff on capacity building activities</p>	<p>Country priorities for policy and regulation on rural electrification are shifted to other issues New regulation is not adopted by government</p>

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	framework for rural electrification	communities to be electrified National agencies staff will have to be trained on the newly developed policy and regulatory framework developed	of four agencies (ANER, ARSEL, FDSEL, SNE) on the newly developed policy and regulations		
<b>Outcome 1b</b> <b>Financial viability of SHP mini-grid operation ensured</b>	Financing schemes for SHP mini-grid have been set-up Amount of money leveraged by financial schemes	No sustainable financing schemes for SHP	At least 1 sustainable financing scheme for supporting 1 million USD investment	Monitoring and reporting on cash flow of SHP set-up	Financing schemes are not properly identified
<b>Outcome 2</b> <b>Capacity to deliver turnkey solutions and quality O&amp;M&amp;M services for SHP developed</b>	Number of Official guidebook on SHP technologies  Workshops on SHP and rural microgrids, capacity building for SHP manufacturers  Number of Short-listed companies	Non-existing  Non-existing  Non-existing	1 guidebook  At least 1 workshop per pilot SHP developed and 1 workshop on operation and management models  At least 4 local companies short-listed and participating in SHP Pilot project Bids	Publication done by UNDP Workshops are organized and open to short-listed companies, other companies and academia Results of the bidding process for short-listing companies	The Local companies in the sector are not interested in capacity building activities and bidding for projects
<b>Outcome 3</b> <b>Improved confidence in the technical and financial viability of SHP-based rural electrification</b>	Number of SHP projects installed, in operation (commissioned), and with established operational model set-up according to developed framework  Total installed capacity	0 SHP projects installed	21 SHP projects (different capacities – <i>pico, micro, mini, small</i> )  6 MW installed	Proof of Commissioning to PMU	The hydro resource is not enough to power the adjacent community
<b>Outcome 4</b> <b>Increased awareness about SHP potential and investment climate</b>	Implementation of a SHP Clearinghouse (facilitation platform) mechanism Implementation of a PR and investment promotion campaign	Non existing  Non existing	1 implemented  1 implemented	Facilitation platform operating  Campaign Conducted	Campaign channels are not adequate for outreach to relevant stakeholders There is little interest on the initiative

**ANNEX B: RESPONSES TO PROJECT REVIEWS** (from GEF Secretariat and GEF Agencies, and Responses to Council from Council at work program inclusion and the Convention Secretariat and STAP at PIF)

N/A

**ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS**

**A. EXPLAIN IF THE PPG OBJECTIVE HAS BEEN ACHIEVED THROUGH THE PPG ACTIVITIES UNDERTAKEN.**

The PPG objective of formulating detailed Project Document has been achieved. The project formulation through consultations involving a range of stakeholders. Consultative activities were taken up through interviews with stakeholders and workshop (Problem/solution analysis and Log frame Workshop).

**B. DESCRIBE FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION, IF ANY:**

N/A

**C. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES AND THEIR IMPLEMENTATION STATUS TABLE BELOW:**

The activities achieved during PPG are shown in the table below:

<i>Project Preparation Activities</i>	<i>Implementation Status</i>	<i>GEF Amount (\$)</i>				<i>Co-financing (\$)</i>
		<i>Amount Approved</i>	<i>Amount Spent to date</i>	<i>Amount Committed</i>	<i>Uncommitted Amount*</i>	
Collection and analysis of baseline data including comparative review of other countries under similar conditions and circumstances	Completed	25,000	25,000			20,000
Review of experiences in Congo and other countries of the following: - Application of SHP based mini-grids in rural areas - Business model for operating these SHP - Area/community-based energy needs assessment and planning	Completed	15,000	15,000			10,000
Conduct a Logical Framework Analysis (LFA) to define project goal, objectives, outcomes, outputs and activities, including success indicators as well as delineation of responsibilities and coordination mechanisms	Completed	5,000	5,000			5,000
Stakeholder engagement, capacity needs assessment of key local implementing partners and co-financing	Completed	10,000	10,000			10,000
Detailed design of project implementation plan	Completed	10,000	10,000			5,000
Preparation and finalization of the full-sized Project Document	Completed	0	0			5,000
<b>Total</b>		<b>65,000</b>	<b>65,000</b>			<b>50,000</b>

\*Any uncommitted amounts should be returned to the GEF Trust Fund. This is not a physical transfer of money achieved through reporting and netting out from disbursement request to Trustee. Please indicate expected refund transaction to Trustee. N/A