



# PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Medium-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

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## PART I: PROJECT INFORMATION

Project Title:	Greening the productive sectors in Gambia: Promoting the use and integration of small to medium scale renewable energy systems in the productive uses.		
Country(ies):	Gambia	GEF Project ID: <sup>1</sup>	5609
GEF Agency(ies):	UNIDO	GEF Agency Project ID:	130110
Other Executing Partner(s):	Ministry of Energy (GREC), National Environment Agency,	Submission Date:	3 October 2013
		Resubmission Date:	30 October 2013
GEF Focal Area (s):	Climate Change	Project Duration (Months)	30 Months
Name of parent program (if applicable):		Agency Fee (\$):	125,365
• For SFM/REDD+ <input type="checkbox"/>			

### A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK<sup>2</sup>:

Focal Area Objectives	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
CCM-3	GEFTF	1,319,635	3,000,000
Total Project Cost		1,319,635	3,000,000

### B. INDICATIVE PROJECT FRAMEWORK

Project Objective: Promoting market based use and integration of small to medium scale renewable energy systems in the productive sectors.						
Project Component	Grant Type <sup>3</sup>	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
1. Development of strategy and regulation on the integration of small-to-medium scale RE systems.	TA	Conducive regulatory environment established	1. National strategy, targets and regulation on the use and integration of renewable small to medium scale energy systems in productive sectors developed.  2. Performance standards, permitting procedures and regulation on grid-connected renewable energy systems developed	GEFTF	82,750	230,000
2. Demonstrating technical feasibility and promoting investments	TA	Feasibility of small to medium scale projects from the productive sector demonstrated	1. Demonstration projects (3) (based on solar and wind) with a total capacity of 0.4 MW installed	GEFTF	300,000	600,000
	INV	Investments in small to medium scale renewable energy	2. Portfolio of viable small to medium scale investment projects	GEF TF	600,000	1,500,000

<sup>1</sup> Project ID number will be assigned by GEFSEC.

<sup>2</sup> Refer to the reference attached on the [Focal Area Results Framework](#) when completing Table A.

<sup>3</sup> TA includes capacity building, and research and development.

		systems promoted	developed. 3. Investments projects realised with total capacity on 0.8 MW.			
3. Renewable energy projects entrepreneurship skills development	TA	Small to medium scale renewable energy projects entrepreneurship skills of youth increased	1. Renewable energy projects based entrepreneurship training modules for the youth developed and training conducted 2. Training on small to medium scale RE systems integrated into curriculum of youth organisations.	GEFTF	152,918	400,000
4. Monitoring and Evaluation	TA	Project effectively implemented	Mid-term and end of project evaluation reports		64,000	70,000
Subtotal					1,199,668	
Project Management Cost (PMC)					119,967	200,000
Total Project Cost					1,319,635	3,000,000

**C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)**

Sources of Co financing	Name of Co financier	Type of Co financing	Amount (\$)
Private Sector	Private – Services sector	Soft Loan/equity	1,500,000
National Government	Ministry of Energy	In-kind	400,000
National Government	Ministry of Energy	Cash	200,000
Local Banks	To be finalized	Soft loans	700,000
Multilateral	UNIDO	Cash	60,000
Multilateral	UNIDO	In kind	140,000
<b>Total Co-financing</b>			<b>3,000,000</b>

**D. INDICATIVE TRUST FUND RESOURCES (\$) REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY<sup>1</sup>**

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (\$) (a)	Agency Fee (\$) (b) <sup>2</sup>	Total (\$) c=a+b
UNIDO	GEFTF	Climate Change	Gambia	1,319,635	125,365	1,445,000
<b>Total Grant Resources</b>				<b>1,319,635</b>	<b>125,365</b>	<b>1,445,000</b>

**E. PROJECT PREPARATION GRANT (PPG)<sup>4</sup>**

Please check on the appropriate box for PPG as needed for the project according to the GEF Project Grant:

	<u>Amount Requested (\$)</u>	<u>Agency Fee for PPG (\$)<sup>5</sup></u>
• No PPG required.	-- 0--	--0--
• (upto) \$50k for projects up to & including \$1 million		
• (upto)\$100k for projects up to & including \$3 million	54,800	5,206
• (upto)\$150k for projects up to & including \$6 million		
• (upto)\$200k for projects up to & including \$10 million		
• (upto)\$300k for projects above \$10 million		

<sup>4</sup> On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

<sup>5</sup> PPG fee percentage follows the percentage of the GEF Project Grant amount requested.

## **PART II: PROJECT JUSTIFICATION<sup>6</sup>**

### **A. PROJECT OVERVIEW**

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

1. Commercial electricity production in Gambia is marked by a number of problems. These include under-capitalization, a rigid tariff system, escalating fuel prices, high transmission and distribution losses and non-settlement of electricity bills. Consequently, the utility i.e. National Water and Electricity Company (NAWEC) has great difficulties in meeting its operational costs, replace obsolete equipment and invest in generation capacity expansion. At the same time, electricity demand is growing at an average rate of 8% per annum, thereby creating a huge power deficit in the country. The existing power generation infrastructure, with a total installed capacity of about 50MW, is predominantly dependent on fossil fuels, is quite old and is now operating at very inefficient levels. NAWEC is, therefore, actively encouraging private sector investments in the power generation sector as part of efforts to reduce this power deficit. So far, interest in power generation has come from private sector entities that are willing to invest in large-scale fossil-fuel based systems, normally above 10MW. Given the success of the ongoing GEF 4 project being implemented by UNIDO, there has been some interest in large-scale renewable energy projects (more than 1 MW) but these are far fewer and smaller in size compared to the proposed fossil fuels based projects. The current trend will lock the country's electricity supply sector into fossil fuel based technology systems with a concomitant increase in GHG emissions.

Large-scale renewable energy projects are still at early stages of development and are not expected to come online soon. The potential role of small to medium scale renewable energy power generation systems, as part of the overall efforts to resolve the critical power shortages, has not been explored so far. Given the erratic power supplies, there is a growing trend in that productive sectors such as SMEs, fisheries, tourism, agro-processing units like beer brewing, cashew nut processing etc, and institutions, are increasingly investing in standby diesel powered generators. This is, despite Gambia having abundant renewable energy resources that could be exploited in small and medium scale operations to supply decentralised demand centers and also connect to the grid, where possible. In particular, the recent reduction in cost of renewable energy technologies like solar and wind, as well as, their increased performance and reliability makes them competitive with diesel systems in the long-term.

The use and integration of small to medium scale renewable energy systems for productive uses in the services and domestic sectors can create the critical mass required to catalyse transformational change in the power sector in Gambia. Based on literature reviews and UNIDO's experience with energy for productive uses, there is convergence on the fact that meaningful productive activities need power supply of at least 20kW. As such, this project plans to focus on renewable energy systems in the range of 20-500kW. As part of the PPG work, a detailed study will be carried out to determine the market potential of systems in this size range. A feasibility study by Gambia's Office of the President<sup>7</sup> on small-scale wind power systems concluded that the country has significant wind energy resources that could be viably exploited. The feasibility study concluded that over 11MW of small-scale wind turbines could be installed at the Tajureg Site at heights of 10-30 meters. In addition, as part of the GEF-4 project, a pilot project where 2X450kW wind turbines were installed, the capacity factor was estimated at 25% at the

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<sup>7</sup> Feasibility study available on : <http://moe.gov.gm/images/SMALLSCALEWINDPARK.pdf>

design stage but the actual capacity factor after 1 year of operation is well above 60%. Several other sites in the country were also identified as having similar potential. Reports from a stand-alone wind and solar hybrid system of 8.4 kW powering a women's vocational training centre (Fandema) under the ongoing UNIDO/GEF project shows that the 1.5kW wind turbine is producing more power than initially estimated<sup>8</sup>. Discussions are currently underway to connect this system to the local grid on a pilot basis with the utility paying for the connection costs. The Office of the President also conducted a feasibility study on the potential of solar home systems (solar PV) in 2006<sup>9</sup>. The feasibility study established that there is potential for use of solar systems in household, schools and ICT centres and other productive uses. In the households sector, the study concluded that with a national coverage of 50%, and using systems with sizes ranging from 40-150W, there is potential to install over 10,000 solar home systems. In the ICT and productive sectors, the study assessed the potential to install 18 X 2.8kW solar systems and concluded that such systems would be technically feasible. Progress in rural electrification, population growth and the reduction in cost of solar photovoltaic technology since the date of these feasibility studies warrants that a new study of this potential be carried out to ascertain the true current potential. This study will be conducted as part of the PPG phase. In addition, the study will assess the capacity of the existing grid to absorb these systems without compromising the stability of the grid.

The Public Utilities Regulatory Authority (PURA)<sup>10</sup> is cognizant of the role of a conducive regulatory environment in stimulating renewable energy investment projects. The GEF-4 project has started work on this with the development of a draft Feed-in-Tariff regulation and a draft Power Purchase Agreement. In addition, PURA and USAID have organised national forums that discussed various regulatory issues, including the issue for net-metering<sup>11</sup>, as a trigger for investments in small to medium scale renewable energy investment projects. Based on the success of one pilot net-metering project 150kVa windmill at Batokunku<sup>12</sup>, PURA is keen to apply the experiences from this pilot and to test the draft FiT regulation which includes proposals for regulations on net metering, which will stimulate investments in this sector.

The use and integration of small to medium scale renewable energy technologies for productive uses face a number of barriers that need to be systematically and simultaneously addressed so as to establish an environment conducive to a broader and accelerated market-based scaling up of these systems. The barriers include the following:

- a. Lack of appreciation of the potential role of renewable energy systems in increasing access to reliable energy services in the productive sectors. So far, renewable energy is primarily considered as an option for solar lighting without any productive uses.
- b. High cost of capital. The banking system in Gambia is generally not geared towards long-term financing that is synonymous with renewable energy project financing. Commercial banks in Gambia charge very high interest rates, as high as 20% for short-term loans and about 10% for long-term borrowing. As such, there is a need to reduce the cost of capital to increase the uptake of renewable energy systems.
- c. Strategy and regulation. Under the UNIDO/GEF project, currently under implementation, a renewable energy law was developed<sup>13</sup>. Although it is anticipated that this law will be adopted in early 2014, the main challenge is its operationalization which requires, among others, more sector specific strategies, as set out in the outline Action Plan prepared under the GEF-4 project. Accordingly, there is a recognised need to have a strategy that will guide development of small to medium scale renewable energy projects. In addition, the integration of small to medium scale renewable energy systems into the current power supply infrastructure needs to be adequately regulated to ensure sustainability. Accordingly, Public

<sup>8</sup> Video on the project is available on : <http://www.youtube.com/watch?v=5KQMKpzzKX8>

<sup>9</sup> Feasibility study available on ECREEE observatory : <http://www.ecowrex.org/document/feasibilitystudyshs-0>

<sup>10</sup> [http://www.pura.gm/index.php?option=com\\_content&view=article&id=108&Itemid=104](http://www.pura.gm/index.php?option=com_content&view=article&id=108&Itemid=104)

<sup>11</sup> <http://www.naruc.org/International/Documents/Gambia%20Article%20Erwin%20Final.pdf>

<sup>12</sup> <http://www.naruc.org/International/Documents/PETER-%20Batakunku-%20Presentation%2031.1.pdf>

<sup>13</sup> <http://observer.gm/africa/gambia/article/gambia-renewable-energy-law-electricity-strategy-validated>

<sup>14</sup> Based on GHG emission calculation from ongoing GEF 4 project entitled "Promoting Renewable Energy Based Mini Grids for Productive Uses in Rural areas" available on <http://www.thegef.org/gef/sites/thegef.org/files/documents/document/6-28-2011%20ID3922%20Gambia%20Council%20Letter%20rev.pdf>

Utilities Regulatory Authority (PURA) in Gambia is already leading national consultations on this issue and they need to be supported in developing a strategy and regulation on this sector.

d. Energy for productive uses. Since existing RE projects in The Gambia are not connected to productive uses the project owners are not maximising their income from their investments and so negatively impacting on the financial viability. So far, solar and wind energy systems have been developed with no link to productive uses. This has created a situation where beneficiaries of these technologies have not reaped much economic benefit from these projects and hence are not able to repay for these systems.

2. The baseline scenario of the project involves two aspects. At the utility level, there will be increasing use of fossil fuel based power generation to replace the current aging generators. Given the increasing power demand due to an expanding economy and the current rural electrification drive, further increases in power demand will be met by heavy fuel oil based power plants. As part of the baseline project and with the support of the ongoing GEF 4 project – “Promoting Renewable Energy Based Mini Grids for Productive Uses”, large scale renewable energy projects, exceeding 1MW in size, will also be realised, albeit to a limited extent. Under this GEF 4 project, over 1.35 MW of wind capacity has been installed, a new RE law has been developed and is awaiting parliamentary approval, draft regulations for a feed-in-tariff and draft power purchase agreements were developed as well as an outline energy strategy and action plan. In addition various training activities have been carried out. The rate of increase in large renewable energy systems would however be much smaller compared to the increase in fossil fuel based power generation systems. On the demand side, increasing power demand results in increased unreliability of grid power supply causing interruption of operations in the productive sectors. This is already causing serious production losses and reduced productivity in the local productive sectors. In response, there is increasing deployment of small to medium scale fossil fuelled standby power generation systems in SMEs and service sectors. This will result in increased use of standby fossil fuel-based power generators with concomitant increase in emissions of greenhouse gasses.

3. This project will bring about an alternative scenario that combines both pilot and investment projects that will realise over 1.2MW in additional renewable energy capacity (representing about 3% of the total installed capacity in Gambia) and interventions at strategy and regulation that will, together, result in transformational change in the electricity supply situation in the country. To begin with, the project will develop a national strategy and regulations to assist the Ministry of Energy and PURA in the implementation of the RE Law and to support the use and integration of small to medium scale renewable energy systems in the productive sectors. The strategy will guide the developments in this sector and provide the basis for sustaining the project interventions beyond the life of the project. This work will include necessary tasks identified during GEF-4 including: proposing RE targets (as required by the draft RE law as well as working with ECOWAS and ECREEE to cascade the regional RE targets set out in the ECOWAS Renewable Energy Policy, to the Gambian context); and developing credit lines for RE projects. In addition, the project will work with the regulatory authority i.e. PURA to develop a regulation and performance standards guiding the integration of small to medium scale renewable energy systems in the country, simplifying and strengthening the permitting procedures (as required by the draft RE law), as well as testing the FIT and PPA regulations drafted under GEF-4.. In order to develop confidence in the role of small to medium scale renewable energy systems in the services productive uses, the project will support the implementation of 3 demonstration projects whose sizes would be in the 20-500kW range per system for a total of 0.4MW. The demonstration projects to be implemented will be selected on the basis of objective criteria to be developed and subject to the project counterparts providing the required co-financing. In order to scale-up these demonstration projects, the project will work with financial service providers including banks and insurance companies in the country to set up a financing scheme that will buy down the cost of capital for identified investment projects. The project preparatory phase will explore this possibility in detail including identifying banks willing to provide funding to renewable energy projects and the possibility of bundling several projects to make investments economically viable. Based on the discussions at the country level so far, it is envisaged that GEF resources will be used to provide performance incentives to renewable energy projects to make them viable. One such example could be to provide a premium on the electricity

generated to assist in the viability of the projects and in early loan repayment. Another example could be where GEF effectively reduces the cost of capital, e.g. if a project developer approaches a Bank to finance renewable energy project and the Bank's interest rate would be too high (e.g. 16%) to make the project viable (cut off rate of 10%), such a developer would then access a GEF grant that would effectively reduce the cost of capital (i.e. the GEF grant would be allocated to cover the interest rate differential in this case  $16-10 = 6\%$ ). The details of this partnership will be explored in detail at the PPG phase but exploratory discussions with several banks in Gambia under the GEF 4 project indicate that there is substantial appetite for such a scheme. Subject to the uptake of the financing mechanism established, it is envisaged that Banks will increasingly provide dedicated financing mechanisms to renewable energy projects. The project will provide entrepreneurship training to selected youth organisations on a train-the trainer basis in Gambia as a way of building a critical mass of youth with skills to identify, develop and manage renewable energy based businesses involving small to medium scale renewable energy technologies based investment projects. The entrepreneurship training will primarily focus on skills needs for youth who show initiative and interest in business and technical skills for small to medium scale renewable energy systems. In addition international quality standards for technicians will be introduced which will ensure that The Gambia will have qualified RE installers and O&M technicians. These interventions will collectively bring about transformational change in how small to medium scale renewable energy projects are developed in the country. GHG emission reduction will be achieved through the replacement of the current diesel power stand-by power generation systems with renewable energy systems. In addition, more emission reductions will be realised from the avoided increase in the deployment of the diesel-based systems.

4. GEF financing will be used for incremental costs for this project by supporting catalytic activities under the three components and project management. In particular, GEF financing will support the developing of a national strategy and regulation, mainly to bring international expertise and best practices to this component and to support the implementation of the RE Law. Under component 2, GEF grant will be used to support up to 25% of the costs of the first 3 demonstration projects while the private sector will mobilise 75%. Technical assistance will be provided to assist in bankable feasibility studies. In addition, GEF resources will also be incentivise additional investment in projects by the private sector. This could be through small grants or performance incentives or a combination of all. This component will involve selected and willing local banks to ensure sustainability of intervention beyond the life of the project. Under the third component on entrepreneurship development, GEF financing will be used to leverage international best practices, quality standards and technical know-how in youth skill development in the small to medium scale solar and wind energy technologies. This component will be jointly implemented with youth organisations, local universities, i.e. University of Gambia and Gambia Technical Training Institute so as to ensure that the knowledge is retained in these institutions for further dissemination. As part of the PPG phase, a detailed baseline study will be conducted to analyse the extent of the grid coverage in Gambia as this will, to a large extent, determine the range of small to medium scale renewable energy technologies to be supported under this project. For areas where there is grid coverage, grid-connected small to medium scale renewable energy systems will be supported. In addition, the performance and stability of the current grid will have an implication on technology options for grid-connected systems and their viability. Experience from other projects shows that in cases of frequent grid outages, investors are keen to have their systems able to operate in island mode. For non grid-connected areas, the option of stand-alone systems will be supported. Settlements in rural areas in the Gambia are clustered in villages that have some common economic activities such as agro-processing like rice milling, fisheries etc. As such, the option for stand-alone systems in these areas will be tied to these productive activities.

5. Global environmental benefits will derive from the displacement of fossil fuels by the use of renewable energy systems for productive uses. Based on current estimates<sup>14</sup>, the installation of 1.2 MW will generate about 246,000tCO<sub>2</sub> over the life time of the projects. In addition, the transformational change that the project will achieve will result in more emission reduction from the use of the renewable energy systems in other sectors. Detailed calculations to determine the full extent of the global

environmental benefits of the project will be carried out at the PPG phase.

6. The main innovation under this project derives from the adoption of a business model approach to the development of medium scale grid connected renewable energy systems in a developing country context like Gambia. The private sector has always been central to any innovation and sustaining innovative ideas until such ideas become mainstream. The private sector will lead in the design and co-financing of renewable energy systems that operate in parallel to the grid, which are currently discussed mainly in developed countries. By placing the private sector at the centre of the demonstration and scaling up these projects, the project takes care of the need for benefit and needs based innovation and translating it into mainstream business. The situation of Gambia, where the country does not have one central grid but a couple of grid systems that supply different areas creates a unique opportunity for small to medium scale systems. In particular, given that tourism, agro-processing, fishing, services are the major industries in Gambia, the project will actively target these industries to provide the much needed co-finance to support the pilot and investment projects and other project activities. The design of the project is premised on ensuring the long-term scaling up and sustainability of project interventions by focusing on answering the energy challenges faced by the private sector. By developing and operationalising a strategy, the project will provide guidance in the development of small to medium scale renewable energy systems in the productive sectors as well as other sectors beyond the life of this project. Through youth entrepreneurship development, the project will tap into the resourcefulness and dynamism of the youth to develop and manage small to medium scale renewable energy projects. By adopting a train-the-trainer approach in youth training, the project will ensure that the trained youth will be able to provide further training to other youth, well after the duration of the project. This will support the long-term sustainability of the interventions under this project. The interventions in services sectors can also be replicated to other sectors thereby increasing the cost-effectiveness of this project. Ultimately, the local industries will be the end beneficiaries of this project as they will get improved and reliable energy services that will increase their productivity and competitiveness.

**A.2. Stakeholders. Identify key stakeholders (including civil society organizations, indigenous people, gender groups, and others as relevant) and describe how they will be engaged in project preparation:**

The National Environment Agency, as the focal and key institution in the execution of GEF funded projects in Gambia, will play a central role in this project. Adopting the set-up from the ongoing GEF 4 project, the GEF Focal point will chair the project steering committee. Other stakeholders in the project include the Ministry of Energy. The Ministry will play the role of contributing to the project design and will house the project management office. Ministry of Energy will also ensure the linkages and cross fertilisation of the project activities with other ongoing activities, in particular the GEF 4 project and other projects in the sector. In areas where the pilot projects will be located, the project will actively engage local and indigenous people at project conception and integrate their value-adding process into the project. As part of the process of developing the full project, effort will be made to gather sex disaggregated data for target communities and stakeholders so as to ensure that gender is mainstreamed into the project design. In particular, the project will actively identify the needs of women and indigenous groups concerned so as to integrate their needs in the project. Given the size of the project, there will be no people removed from their areas or harmed as a direct or indirect result of this project. The project will have entrepreneurship training programmes focusing on youth. Youth organisations will be identified and profiled at the beginning of the project. The project will engage with civil society organisations in all its activities to promote synergies and most importantly to ensure their continued interest in the same area beyond the life of this project. So far, it is foreseen, that some of the CSO will contribute towards the capacity building and the development of the regulation and mobilising support for these activities. Youth groups will be engaged in all components of the project, as far as is possible. In particular, Youth run enterprises will be targeted for the pilot and investment projects. In addition, Youth organisations will be engaged in the youth entrepreneurship training component so that the organisations will continue to provide the training beyond the life of the project.

**A.3 Risk. 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):**

<b>Risk</b>	<b>Rating</b>	<b>Mitigation strategy</b>
Climate change risks – some of the renewable energy systems to be installed under the project may be affected by changes in climate like floods etc	L	The design of all pilot projects will include climate risk analysis and integrate mitigation strategies. In particular, as part of the Environment Impact Assessments for the projects, the potential impacts of climate change on the project will be assessed in detail and mitigation measures will be taken.
Social and environment impacts.	L	The interventions under this project will comply with the requisite national environmental safeguards that include the EIAs etc. This will ensure that potential impacts are minimized and in cases where such occur, there are adequate remedial mechanisms in place. Given the volume and size of the project, it is however not foreseen that the project interventions will have major environmental and social impacts and will have no adverse impacts on indigenous people.
Technical risk – there is a risk that some of the technologies used may under perform	L	The project design stage will identify and focus on proven renewable energy technologies that would have functioned in environments similar to Gambia. In addition, the capacity building component of the project will systematically address this aspect by addressing the exact training needs to those charged with the operation and maintenance of these technologies.
Economic and Financial risk – there is risk that some of the private sector may not be willing to provide financial backing to project activities	L	The project development phase will actively mobilize awareness of the private sector active in the domestic and services sector with a view to create adequate appreciation of the economic benefits of investing in small to medium scale renewable energy technologies. This will be done through targeted seminars with CEOs of the different sectors that will be organised in collaboration with local chamber of commerce. If convinced, this will ensure commitment by private sector to the projects so as to realise the direct economic benefits of investing in renewable energy technologies on their operations.

**A.4. Coordination. Outline the coordination with other relevant GEF financed and other initiatives:**

The current projects build on the experiences, lessons and success of the GEF 4 project that is being implemented by UNIDO entitled, "Promoting Renewable Energy Based Mini Grids for Productive Uses in Rural Areas in The Gambia". The experience under the GEF project shows that there has been good traction and momentum on large-scale renewable energy project as seen by the pilot projects already implemented in very short period of time. A renewable energy law was developed and is awaiting approval by the national government. Capacity building activities are currently underway. Therefore, the current GEF 5 project will be building on the lessons of the GEF 4 project by focusing on promoting small to medium scale renewable energy technologies in the productive sectors. In particular, the GEF 5



project will develop sector specific strategy for renewable energy in line with the overall policy objectives to help in the implementation of the RE Law. Regulations on these systems will also be developed. Youth entrepreneurship skills development activities under this project will build on already ongoing capacity building activities under GEF 4. The GEF 4 project strengthened the Gambia Renewable Energy Centre (GREC) through targeted institutional capacity building. The GEF 5 project will operate from GREC thereby minimising the project management costs. At a regional level, the project will actively link with the activities of the ECOWAS Regional Centre for Renewable Energy and Energy Efficiency (ECREEE) in areas of capacity building, demonstration projects and strategy development. In particular, further to the recent adoption of the ECOWAS regional policies on renewable energy and energy efficiency with concrete targets, the project will focus on enabling Gambia to comply with these regional policy directives. The project will therefore tap into resources available from ECREEE to develop national level strategies and action plans.

## **B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:**

### **B.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSAs, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.:**

The project seeks to promote the use and integration of small to medium scale renewable energy systems in the productive sectors (i.e. tourism, agro-processing, services and repairs, ICTs etc). This is in direct response to the need to attend to the energy challenges that Gambia is facing, as expressed in various national policy and strategy documents. Gambia's most recent PRSP<sup>15</sup> identifies energy access and security as key areas that needs priority attention. In particular the high cost of energy is viewed as one of the factors negatively affecting investments in the country. The National Communication in particular identifies the development of renewable energy as the most effective way of addressing the management and operational efficiency challenges that NAWEC faces. The recently developed Power Sector strategy and Renewable Energy Bill<sup>16</sup>, as part of the ongoing UNIDO/GEF project, clearly advocates for the development of renewable energy especially in the productive sectors thereby enhancing productivity by increasing access to energy for remote areas and increase reliability of supply for grid-connected systems. Gambia's NAPAs<sup>17</sup>, identifies renewable energy sector as priority. It identifies several priority renewable energy projects that will be considered under this project. Gambia's NPFE shows an increasing need to finance small to medium scale renewable energy projects. In fact, the NPFE identifies a number of projects that will be considered under this project. Therefore, this project is fully consistent with these national development policies and strategies.

### **B.2. GEF focal area and/or fund(s) strategies, eligibility criteria and priorities:**

The project fits into the GEF Strategic Program 3: Promoting Investment in Renewable Energy Technologies and Strategic Programme 1 - Promote the Demonstration, deployment and transfer of innovative low-carbon technologies. In line with the objectives of these two areas, this project will result in technologies being demonstrated, new renewable energy capacity being installed, an enabling policy environment established and operationalised, capacity of actors along the technology value chain increased and GHG emissions avoided. The project will result in more GHG emissions being avoided with the replication and scale up of renewable energy systems beyond the life of the project thereby demonstrating the catalytic effect of GEF financing.

### **B.3 The GEF Agency's comparative advantage for implementing this project:**

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<sup>15</sup> PRSP Progress report - <http://www.imf.org/external/pubs/ft/sctr/2011/cr1127.pdf>

<sup>16</sup> <http://www.euei-pdf.org/country-studies/development-of-an-electricity-strategy-and-renewable-energy-law>

<sup>17</sup> <http://unfccc.int/resource/docs/napa/gmb01.pdf>


The GEF Council document GEF/C.31/rev.1 gives UNIDO comparative advantage for this Strategic Program under the intervention Type Capacity Building/Technical assistance. The project has a strong industrial focus, i.e. a strong linkage between the renewable energy systems and energy use in the productive sectors, which is UNIDO's overall mandate. UNIDO is especially well placed to implement this project because of its experience and expertise in renewable energy projects, its long history of cooperation with key stakeholders, and its high standards of fiduciary responsibility. UNIDO's current projects in Gambia focus in developing and strengthening SMEs, trade and capacity building, industrial upgrading, development of industrial policy, among others. These key activities of UNIDO in the industrial sector do directly result in this project as this project will address the central challenge to industrial development in Gambia namely, access to modern and reliable energy forms. The current ongoing GEF 4 funded project is already interacting with chambers of commerce in Gambia who have alluded to the need to bring the youth into these projects. Therefore, this project builds on the activities of the current GEF 4 project and is closely linked to local industrial activities.

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

**A. RECORD OF ENDORSEMENT 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 [OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Ndey BAKURIN	GEF Focal Point - Gambia and Executive Director of National	NATIONAL ENVIRONMENT AGENCY - THE GAMBIA	08/30/2013

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

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.					
Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Philippe Scholtès Officer-in-Charge Programme Development and Technical Cooperation Division (PTC) UNIDO GEF Focal Point		30 October 2013	Alois Posekufa Mhlanga Industrial Development Officer, UNIDO-Vienna, Austria	Tel: +43 1- 260265196	a.mhlanga@unido.org 