



ONUDI

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION ORGANISATION DES NATIONS UNIES POUR LE DEVELOPPEMENT INDUSTRIEL

Project Implementation Report

(1 July 2021 - 30 June 2022)

Project Title:	Greening the productive sectors in Gambia: Promoting the use and integration of small to medium-scale renewable energy systems in the productive sectors.
GEF ID:	5609
UNIDO SAP ID:	130110
GEF Replenishment Cycle:	GEF-5
Country(ies)	The Gambia
Region:	AFR-Africa
GEF Focal Area:	Climate Change Mitigation (CCM)
Implementing Department/Division:	ENE/CTI
Co-Implementing Agency (if applicable):	-
Executing Agency(ies):	MOPE, NEA, ECREEE
Other Project Partners:	
Project Duration (months):	30 Months
Extension(s):	3
GEF Project Financing:	1,319,635
Agency Fee:	125,365
Co-financing Amount:	3,175,388
Date of CEO Approval:	1/22/15
UNIDO Approval Date:	12-12-14
Actual Implementation Start Date:	5/3/2015
Cumulative disbursement as of 30 June 2022:	1,301,146
Completion Date Planned:	12-31-2020
Expected Completion Date:	06-30-2022
Expected Financial Closure Date:	06-30-2023
UNIDO Project Manager ¹ :	Alois Posekufa Mhlanga

¹ Person responsible for report content

Project Objective

To promote market-based use and integration of small to medium scale renewable energy systems in the productive sectors. Main approach is to promote investments in RE technologies through developing a favourable market and investment climate for the increased deployment of RE technologies in The Gambia. Technology demonstration pilots are expected to Increase access to reliable and cost-effective energy services in the country, contributes to income generation from productive ventures by making available reliable and cost-effective energy services through the demo projects and investments that will follow.

Baseline

1. RE Law is in place but needs to be operationalized and there is need to develop appropriate regulation to promote investments in small to medium scale RE systems

2. The RE Fund is able to provide funding to women and youth led projects at scale and rate that will result in these sectors of the population adopting RE technologies in their enterprises.

Overall Ratings ²	FY22	FY21	
Global Environmental Objectives (GEOs) / Development Objectives (DOs) Rating	Satisfactory (S)	Satisfactory (S)	
Implementation Progress (IP) Rating	Satisfactory (S)	Satisfactory (S)	
Overall Risk Rating	Low Risk (L)	Low Risk (L)	

II. Targeted results and progress to-date

Please describe the progress made in achieving the outputs against key performance indicator's targets in the project's **M&E Plan/Log-Frame at the time of CEO Endorsement/Approval**. Please expand the table as needed.

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress to-date			
Component 1 – Develop strategy and regulation on the integration of small to medium-scale RE systems							
Outcome 1: conducive regulatory environment for small to medium scale renewable energy systems is established in The Gambia							

Output 1.1:	 Regulations developed and adopted for the operation of private wire networks 	1. No regulations in place	 Regulations on small to medium scale RE systems developed and adopted. Grid Code developed and adopted 	MOPE requested the project to recognize the RE policy related initiatives ongoing in the country to avoid duplication of work, including policy work conducted by EU and AfDB funded projects: 1. Private Wire Network - is being taken care of by Green Min-Grid project. According to MOPE the GMG project
Output 1.2:	 Regulations developed and adopted for the operation of SPP Grid code and performance standards developed and adopted 	 No regulations in place Absence of study on grid absorption capacity and grid code 	 Regulations developed and adopted. Grid code developed and adopted 	regulatory frame work, feasibility studies of ten sites) are validated and finalized. 2. Connecting smaller RE systems to the Grid - Feed -in Tariff Model have been developed and currently MOPE is seeking support from EU Delegation Office in The Gambia to develop Net Metering Guidelines. 3. Grid Code - ECOWAS is working on the GRID CODE. In light of the above, UNIDO and MOPE agreed to reallocate the budget for the Training of the PSC. The PSC trained on RE technologies, climate change, energy efficiency, gender, and regulation
Component 2 – De	emonstrating technic	al feasibility and p	romoting investmen	its
Outcome 2.1: Feas	ibility of small to medi	um scale RE project	s for the productive s	ector demonstrated
Output 2.1:	Total installed capacity portfolio projects	UNIDO-GEF demonstration project 2X450kVa and one 150kVa wind	1.2 MW installed by 2017	 The following demo projects all completed and certificate of work completion issued: Power Up Gambia MBOLO Association, Medical Research Council The Gambia, Gambia Chamber of Commerce and Industry, University of The Gambia, and Gambia National Petroleum Corporation.
Outcome 2.2: Wom	nen and youth invest in	small to medium-so	ale RE projects	I
Output 2.2:	1. Number of RE business established by youths and women	None	10 at least 10 businesses established with 5 of them headed by women	GEF/UNIDO and PURA signed a contract in 2017 for the implementation of an 18 month grant funded scheme to promote RE in the Gambia targeting

	 Number of young women and men employed in RE sector at least 50% are women 			youths and Women. The project has been successfully implemented
Outcome 2.3: Inves	tment in small to med	ium scale renewable	e energy systems pror	noted
Output 2.3: Inves	Truent in small to med Number of Pipeline projects in the Portfolio	None	At least 10 viable projects are identified	MOPE has worked with ECREEE and identified a pool of projects to be included in the Investment Prospectus (IP) of the country. MOPE requested UNIDO to work on the selected proposals in the Investment Prospectus in order to make them bankable. March 2020, UNIDO contracted an investment facilitation expert from the Private Financing Advisory Network to develop an investment portfolio of viable and replicable small-to-medium scale projects. In line with MOPE's request, the expert has provided services to enhance the investment readiness of the proposals
				selected in the Investment Prospectus. The PFAN expert developed a project selection criteria template followed with a business development plan template to guide the renewable energy entrepreneurs through the process and steps for crafting a business plan.
				Six projects out of fifteen were selected for support and business development plan coaching. Hence a one-on-one, 1-hour call with the project developers was arranged to gather some information on their projects and share guidance of how to draft their business. Due to the COVID-19 travel restrictions, and online workshop was organized March 29 th 2021at MOPE addressing the capacity gaps of project developers and introduced them to PFAN Network which will lead to the uptake of investments in small to medium-scale RE Project for productive uses beyond the life of

Component 3 – RE Projects Entrepreneurship skills development									
Outcome 3: Entreprint	Outcome 3: Entrepreneurship skills of the youth and women in small to medium-scale renewable energy projects increased								
Output 3.1:	1. Number of trainings conducted	None	 At least 5 train-of trainers sessions conducted and 60 trainings conducted for youths (with over 50% women) 	TOT successfully conducted November 2019.					
Output 3.2:	 Number of enrolments on RE enterprise program. Number of young men and women trained 	None	 At least 30 new enrolments. At least 15 young men and 15 women trained 	Training Modules were validated in September 2019. All comments and feedback were incorporated.					

III. Project Risk Management

1. Please indicate the <u>overall risk management</u>: (i) as identified in the CEO Endorsement document, and (ii) progress to-date. Please expand the table as needed.

	(i) Risks	(i) Risk level	(i) Mitigation measures	(ii) Progress to-date	New defined risk ³
1	Institutional Risk 1: Low government commitment to the enactment of regulations for the Operationalization of the law	Low	Through the stakeholder consultation workshop that will lead to the preparation of the regulations, the interest and needs of all the relevant stakeholders will be identified and issues will be clarified.		
2	Institutional risk 2: Lack of Adequate Human capacity in GREC	Moderate	Under the UNIDO GEF 4 project, UNIDO is working with MOE to build the capacity of MOE and GREC staff. Through this intervention it is expected the staff will have the skills and knowledge required for the work.	A training Expert will work on identifying capacity and knowledge gaps and subsequently train national key stakeholders of The Gambia, such as members of the Project Steering Committee (PSC) and National Platform for Energy Nexus Issues. The Consultant will be collecting the training needs of all members through	

³ New risk added in reporting period. Check only if applicable.

				written questionnaires. These will cover inter alia existing knowledge in terms of energy efficiency and its link and impact on other sectors. Based on the capacity building needs assessment a training programme with a work plan will be proposed. For each of the trainings, the objectives, expected learning outcomes, scope, structure, modules, number of trainers and participants as well as the required materials will be described.	
3	Institutional 3: NAWEC does not accept RE into its grids	Low	NAWEC have been fully consulted in the demo projects and will be actively involved in some of them. In addition, they are keen for additional generation capacity and keen to also offset some of their losses from fuel based generation. They have expressed interest in signing PPAs with potential generators.	Due to lack of feed in Tariffs, PPAs can't be signed with project developers however Net Metering arrangements are now possible with NAWEC The MOE is fully committed to the project and is ensuring that projects are connected to the grid. So far GNPC and UTG 456kW and 100kW respectively are now connected to the grid on a net metering arrangement with NAWEC. The Bi- Directional Meters are installed by NAWEC.	
4	Technical risk: Underperformance or RE technologies	Moderate	The activity will be executed with component 1 of the project, which will lead to the development of performance standards for RE. Moreover, with proper communication programmes that will be executed with the MOE, PURA and NAWEC, project developers will have access to information on baseline conditions for RE technologies.	The standard of equipment used are in compliance with IEC and TGSB. The Installations also comply with the International standards and best practice in terms of design and Installation . i. e. IP65/IEC Regulations.	
5	Market risk: Gambian youths do not participate in the RE training	Low	During the PPG, several academic institutions were consulted and it is clear that there is a demand for training in RE entrepreneurship development. Moreover many of these institutions have introduced courses on RE to respond to the growing demand in this field of study. The international consultant that will be employed to develop the programme on RE	Training on RE entrepreneurship has been successfully completed for Trainers and Stakeholders	

			entrepreneurship will liaise with the relevant institution to ensure that training modules are functional and tailored to the needs and interest of the youths.		
6	Economic and Financial risk: Financial and credit constraints prevent enterprises from investing in RE	Moderate	The project will link up with ECREEE initiative: ECOWAS RE Investment Forum, to promote RE portfolio projects at the regional level with the aim to attract investors into the RE market in The Gambia. Moreover, through capacity building efforts under component 2, financial institutions will be equipped with the skills to properly assess RE projects and thus, reduce the perception of them being high risk investment ventures.	A two-day National Renewable energy investment workshop was to be held with the six selected project developers from the investment prospectus. Unfortunately, due to travel restrictions under the COVID-19 Pandemic, an online training workshop was conducted March 29 th 2021.	
7	Sustainability risk	low	NEA was consulted during the PPG and throughout the process leading to the final selection of the demonstration projects. Moreover, during the implementation of the demo projects the activities will be closely monitored to ensure that national and international environmental rules and regulations are respected.	Achieved. All environmental rules were adhered to during project implementation	
8	Climate change risk	Low	The technology does not depend on solely on groundnut. There is a vast alternative of fuel source.	NA	
9	Social Risk: Women, due to socio-cultural factors, shy away from participating in technical aspects of RE capacity building	Moderate	With a combination of special awareness and sensitization activities and incentives, targeting women, the project will ensure equal participation of women and men in trainings.	There was a high number of women participation during the PURA RE FUND training and RE entrepreneurship training	

2. If the project received a <u>sub-optimal risk rating (H, S)</u> in the previous reporting period, please state the <u>actions taken</u> since then to mitigate the relevant risks.

NA

3. Please indicate any implication of the COVID-19 pandemic on the progress of the project.

As 95% of the project results were achieved before the COVID-19 related restrictions came into effect, the

overall impact to the project is minimal.

Output 2.3 (portfolio for viable small to medium scale investments projects) has been successfully implemented despite the challenges during the COVID-19 pandemic. Virtual online meetings were organized with project developers followed with an online training workshop.

IV. Environmental and Social Safeguards (ESS)

1. As part of the requirements for **projects from GEF-5 onwards**, and based on the screening as per the UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP), which category is the project?

Category A project

□ Category B project

□ Category C project

(By selecting Category C, I confirm that the E&S risks of the project have not escalated to Category A or B).

	E&S risk	Mitigation measures undertaken during the reporting period	Monitoring methods and procedures used in the reporting period
(i) Risks identified in ESMP at time of CEO Endorsement	NA	NA	NA
(ii) New risks identified during project implementation (if not applicable, please insert 'NA' in each box)	NA	NA	NA

V. Stakeholder Engagement

1. Please provide information on **progress**, **challenges and outcomes** regarding engagement of stakeholders in the projects (based on the description of the Stakeholder Engagement Plan or equivalent document submitted at CEO Endorsement/Approval).

Not being able to sign PPAs with project developers due to the lack of feed-in tariffs has been a real challenge that project developers experience.

Other stakeholders i.e. World Bank, EU, ADB, ECOWAS, ECREEE are actively involved in the RE sector development in The Gambia. Currently EU is supporting the development of the Feed in Tariff for RE systems. A training program was conducted recently in which a Feed I Tariff model was demonstrated. It was recommended The Gambia starts with Net Metering and this is currently being facilitated by Ministry of Energy. As at now, one of the GEF5 projects (GNPC) is connected to the NAWEC grid in a net metering arrangement.

2. Please provide any feedback submitted by national counterparts, GEF OFP, co-financiers, and other Partners/Stakeholders of the project (e.g. private sector, CSOs, NGOs, etc.).

Please see attachment.

3. Please provide any relevant stakeholder consultation documents.

Please see attachment.

VI. Gender Mainstreaming

1. Please provide information on progress on gender-responsive measures and gender-sensitive indicators as documented at CEO Endorsement/Approval (in the project results framework or gender action plan or equivalent).

One of the demonstrations that registered much success in gender-responsiveness, is Fandema, Mbolo Association's flagship project. The word "Fandema" translates to "help yourself" in Mandinka, the local language, which is at the heart of Fandema's philosophy: helping people to help themselves.

The project brings together young and vulnerable women from 74 rural villages, mostly in The Gambia's West Coast Region, in order to train them in the design, installation and maintenance of stand-alone renewable energy systems.

Empowering women and young people is a central tenet of Fandema's work, and with the help of two projects funded by the Global Environment Facility (GEF) and implemented by the United Nations Industrial Development Organization (UNIDO), it has mainstreamed gender into its renewable energy activities since 2014.

VII. Knowledge Management

1. Please elaborate on any **knowledge activities / products** (when applicable), as outlined in knowledge management approved at CEO Endorsement / Approval.

Under component 3: Renewable energy project entrepreneurship skills development for the youth and women--- Training modules and materials were developed and used in facilitating training, training of trainers workshops. Furthermore, PMO in collaboration with MOPE and expert panel will meet and discuss on how to get the modules accredited by the educational body in The Gambia and ensure their availability in schools.

2. Please provide any relevant knowledge management mechanisms / tools that the project has generated.

Please see attachment.

VIII. Implementation progress

1. Please provide information on progress, challenges and outcomes on project implementation activities.

Co-financing, not adhering to work plan due to changes during project implementation have been the bottleneck for some of the project developers. However, two of the three remaining projects were completed

by the project deadline of June 2022.

UTG- Installation of 100kWp Solar PV System: Faced delays in project implementation due to lack of cofinancing. However, UTG were able to complete the test and commission the Solar PV system in June 2022 and certificate of work completion issued.

GNPC- 455.6kWp Solar PV Systems: Faced challenges in the implementation of the project due to the technicalities involved in connecting each site to the national grid. A Memorandum of Understanding was signed between NAWEC and GNPC for each site to be net metered.

Unfortunately, the only GEF 5 Project that is still not completed is the Greentech 60kW Biomass Generator which is still in the testing phase.

GREENTECH- Installation of biomass gasifier and gas engine for briquettes Production in The Gambia: Faced challenges building the proper engine which caused many delays in the shipment. Technicians from South Africa could not visit the Gambia to install and commission the gasifier and the engine. Local engineers still facing challenges for the gasifier to reach the required temperature of 1000 degrees Celsius for the engine to work.

2. Please provide information related to the financial implementation of the project.

Financial implementation is on track.

Some budget revisions are foreseen in order to complete the technical evaluation of the project under component 4.

IX. Work Plan and Budget

VII.1 Please provide **an updated project work plan and budget** for the remaining duration of the project, as per last approved project extension. Please expand/modify the table as needed.

	2020		GEF	Comments				
Outputs by Project Component	Outputs by Project Component Q3 Q4 A		Budget Available (US\$)					
Component 1 – Develop strategy and regulation on the integration of small to medium-scale RE systems								
Outcome 1: conducive re established in The Gamb	Outcome 1: conducive regulatory environment for small to medium scale renewable energy systems is established in The Gambia							
Output 1.1:					490.59	Considered complete, as MOPE requested the		
Output 1.2:					242.73	project to recognize the RE policy related initiatives ongoing in the country to avoid duplication of work, including policy work conducted by EU and AfDB funded projects. Pending receipt of final documents from the partners. PSC requested for the funds to be allocated for the training of the Project Steering Committee. PMO has drafted a TORs for the hiring of an individual consultant.		
Component 2 – Demonstrating technical feasibility and promoting investments								
Outcome 2: Feasibility of	fsma	all to r	nediı	um so	ale RE pro	jects for the productive sector demonstrated		
Output 2.1:					0	All demo projects completed: PUG, MBOLO Association, MRCG, GCCI, GNPC, UTG		

Output 2.2:					4,315.69	Women and youth RE Fund completed.	
Output 2.3:			х	х		Investment portfolio completed.	
Component 3 – RE Projects Entrepreneurship skills development							
Outcome 3: Entrepreneurship skills of the youth and women in small to medium-scale renewable energy projects increased							
Output 3.1:					10,997.16	Completed	
Output 3.2:			х	х	28,493.24	Completed	
Component 4 –							
Output 4.1:			х	х	1,439.56		
			х	х	14,875.26	Technical evaluation to be conducted in Q4	

X. Synergies

Outputs 1.1 and 1.2 benefited from ongoing policy work in the Gambia as described in Section II. Output 2.3 will build on the ongoing work of MOPE and ECREEE, as described in Section II.

Stories to be shared (Optional)

Promotional video of UNIDO GEF 5 project on youtube titled: "**Renewable Energy for productive** uses in The Gambia"

EXPLANATORY NOTE

- 1. **Timing & duration:** Each report covers a twelve-month period, i.e. 1 July 2019 30 June 2020.
- 2. **Responsibility:** The responsibility for preparing the report lies with the project manager in consultation with the Division Chief and Director.
- 3. **Evaluation:** For the report to be used effectively as a tool for annual self-evaluation, project counterparts need to be fully involved. The (main) counterpart can provide any additional information considered essential, including a simple rating of project progress.
- 4. **Results-based management**: The annual project/programme progress reports are required by the RBM programme component focal points to obtain information on outcomes observed.

Global Environmental Objectives (GEOs) / Development Objectives (DOs) ratings		
Highly Satisfactory (HS)	Project is expected to achieve or exceed <u>all</u> its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as "good practice".	
Satisfactory (S)	Project is expected to <u>achieve most</u> of its <u>major</u> global environmental objectives, and yields satisfactory global environmental benefits, with only minor shortcomings.	
Moderately Satisfactory (MS)	Project is expected to <u>achieve most</u> of its major <u>relevant</u> objectives but with either significant shortcomings or modes overall relevance. Project is expected not to achieve some of its major global environmental objectives or yield some of the expected global environmental benefits.	
Moderately Unsatisfactory (MU)	Project is expected to achieve <u>some</u> of its major global environmental objectives with major shortcomings or is expected to <u>achieve only some</u> of its major global environmental objectives.	

Unsatisfactory (U)	Project is expected <u>not</u> to achieve <u>most</u> of its major global environmental objectives or to yield any satisfactory global environmental benefits.
Highly Unsatisfactory (HU)	The project has failed to achieve, and is not expected to achieve, <u>any</u> of its major global environmental objectives with no worthwhile benefits.

Implementation Progress (IP)		
Highly Satisfactory (HS)	Implementation of <u>all</u> components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be presented as "good practice".	
Satisfactory (S)	Implementation of <u>most</u> components is in substantial compliance with the original/formally revised plan except for only few that are subject to remedial action.	
Moderately Satisfactory (MS)	Implementation of <u>some</u> components is in substantial compliance with the original/formally revised plan with some components requiring remedial action.	
Moderately Unsatisfactory (MU)	Implementation of <u>some</u> components is <u>not</u> in substantial compliance with the original/formally revised plan with most components requiring remedial action.	
Unsatisfactory (U)	Implementation of <u>most</u> components in <u>not</u> in substantial compliance with the original/formally revised plan.	
Highly Unsatisfactory (HU)	Implementation of <u>none</u> of the components is in substantial compliance with the original/formally revised plan.	

Risk ratings		
Risk ratings will access the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risk of projects should be rated on the following scale:		
High Risk (H)	There is a probability of greater than 75% that assumptions may fail to hold or materialize, and/or the project may face high risks.	
Substantial Risk (S)	There is a probability of between 51% and 75% that assumptions may fail to hold or materialize, and/or the project may face substantial risks.	
Moderate Risk (M)	There is a probability of between 26% and 50% that assumptions may fail to hold or materialize, and/or the project may face only moderate risk.	
Low Risk (L)	There is a probability of up to 25% that assumptions may fail to hold or materialize, and/or the project may face only low risks.	