UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

SUSTAINABLE DEVELOPMENT GOALS

Project Implementation Report: Burundi

(1 July 2022 – 30 June 2023)

Project Title:	**Promotion of small hydro power (SHP) for productive use and energy services in Burundi**
GEF ID:	9056
UNIDO ID:	140332
GEF Replenishment Cycle:	*GEF-6*
Country(ies):	*Burundi*
Region:	*AFR - Africa*
GEF Focal Area:	*Climate Change Mitigation (CCM)*
Integrated Approach Pilot (IAP) Programs[1]:	*N/A*
Stand-alone / Child Project:	*Stand-alone*
Implementing Department/Division:	*ENE / ETI*
Co-Implementing Agency:	*N/A*
Executing Agency(ies):	Ministry of Hydraulics, Energy and Mines
Project Type:	*Medium-Sized Project (MSP)*
Project Duration:	*48*
Extension(s):	2
GEF Project Financing:	USD 1,575,155
Agency Fee:	USD 149,640
Co-financing Amount:	USD 6,530,000
Date of CEO Endorsement/Approval:	6/5/2017
UNIDO Approval Date:	7/5/2017
Actual Implementation Start:	7/26/2017
Cumulative disbursement as of 30 June 2023:	*USD 519,329.76*

[1] Only for **GEF-6 projects**, if applicable

Mid-term Review (MTR) Date:	4/20/2021
Original Project Completion Date:	7/25/2021
Project Completion Date as reported in FY22:	12/31/2022
Current SAP Completion Date:	6/30/2025
Expected Project Completion Date:	6/30/2025
Expected Terminal Evaluation (TE) Date:	12/31/2024
Expected Financial Closure Date:	12/31/2025
UNIDO Project Manager[2]:	*Liu Heng*

I. Brief description of project and status overview

Project Objective
The project focuses on creating a favourable environment for scaling up small hydropower (SHP) technology by private sector investment. The project will contribute to the twin goal of ending extreme poverty and boosting shared prosperity. The project intends to promote SHP plants to increase energy supply, as well as productive use of energy. Also, the project will focus on decentralized electricity generation and distribution by promoting micro-mini grids whereby providing energy access to small and medium-sized industries and benefiting rural communities. More specifically, the main outcomes and deliverables expected under the project are as follows: (i) improving human and institutional capacity for continuous development of SHP projects; (ii) establishing the technical and economic viability of SHP technology; (iii) demonstrating SHP projects on a private-public partnership (PPP) basis for a cumulative 1 MW installed capacity leading to an overall direct emission reduction of around 63,072 tCO2e; and (iv) facilitating a conducive investment environment leading to replication of at least 4 MW and overall indirect savings of 126,144 tCO2e.

Baseline
Burundi is endowed with vast river resources as Malagarazi and Rusizi that stretch over a distance of 475 km and 117 km, respectively. The economically feasibility hydroelectric potential is about 300 MW and so far only 34 MW (about 11%)from it has been harvested. Small hydropower (up to 10 MW) installed capacity is 15.84 MW. Civil conflicts in the 1990s had prevented the development of the country's electricity generation infrastructure. It was planned that investments will be made in new hydropower plants every years, but no such investment was made over the last decades. The on-going conflict has affected the development of private sector and foreign investment, and the country depends on foreign aid to fund about 50%of its

[2] Person responsible for report content

national budget. Since there is no private sector participation in development projects, there is no technical capacity or skilled resources available for the energy sector in the country. All of the power generation for public utilisation is from available governmental power plants only. Thus, there is a lack of contribution from the private sector towards the development of energy sector in the country.

Apart from technical management, the complex nature of the energy sector further hinders the growth of electrification and in turn the SHP development. Overlapping responsibilities between the ministries such as the ministry of Energy and Minerals, the Ministry of Communal Development, and the Ministry of Finance (which is responsible for investment planning and coordination with foreign donors), slows down the growth process of SHP." Law of 27 April 2015, recognizing the electricity sector in Burundi" proposed that regulations would be devised in the future to promote Public-Private Partnership (PPP) in the energy sector. Accordingly, regulatory agency has been set up through law of 06 January 2016 for support of PPP in the country.

An on-going World Bank project includes pre-feasibility and feasibility studies of potential hydropower sites with capacities ranging between 1MW and 7.5 MW. It assumed that these potential sites could be realized in approximately two years, considering that major dam construction is required. SHP is the most suitable to connecting grids and providing electricity to remote areas. UNIDO, in collaboration with the Ministry of Energy and Mines (MEM) has implemented 300 KW project in Burundi. The mini-grid is still now operational.

UNIDO conducted a pre-feasibility study during PPG stage at these ten sites to verify the estimated power potential at these sites in April 2016. The study estimated that there is a good potential for small hydropower generation of 20-500 MW in these locations. During the visit, it was found out that some of the sites have been already installed with SHP plants, but were out of operation due to various reasons.

A significant difficulty faced by these sites was that, either identified small hydropower sites did not have sufficient load centres or the load centres were too far away. The table 1 shows the list of identified sites and their estimated capacitiesTable1.

Identified SHP sites for scale up.

s. N.o.	Name of the water course	Project location	Estimated power generation potential, KW	Area to be electrified
1	Waga	Bihomvora, Bisoro commune ,Mwaro Province	240	Kanka, Masango, Nyarusange
2	Gikuka	Gitaba, Vugizo Commune, Makamba Province	500	Mpinga, kavyiru, Gishiha, Vugizo and vugizo market
3	Muyovozi	Karindo, Rutana Commune, Rutana Province	180	Musongati and Kayero
4	Nyamwondo	Nyamwondo, Mwakiro Commune, Muyinga Province	100	Gisimbawaga and mwakiro
	TOTAL		1,020	

The study also identified some existing barriers for SHP technology in the country. The institutional support is nearly non-existent and the different ministries have many overlapping areas. <it is also noted here that all the grid connected power plants are public owned plants only. And such, there is no hydropower policy in the country on generation licenses, power purchase agreements (PPA), grid connection, wheeling, etc. Lack of effort is also identified at all levels for local capacity development both on site assessments and manufacture of SHP technology.

In summary, the baseline project activities show there are serious efforts going on to increase utilization of hydropower in Burundi. The proposed project could use this momentum to achieve its objectives and target effectively. Though baseline project activities are focussed on hydropower plants with 1.020 MW total capacity, the proposed project could benefit from the lessons learnt, challenges faced and gaps in technical capabilities in the implementation of hydropower projects in the country. Thus the baseline projects indicate appositive influence on the project activities

Please refer to the explanatory note at the end of the document and select corresponding ratings for the current reporting period, i.e. FY23. Please also provide a short justification for the selected ratings for FY23.

In view of the GEF Secretariat's intent to start following the ability of projects to adopt the concept of adaptive management[3], Agencies are expected to closely monitor changes that occur from year to year and demonstrate that they are not simply implementing plans but modifying them in response to developments and circumstances or understanding. In order to facilitate with this assessment, please introduce the ratings as reported in the previous reporting cycle, i.e. FY22, in the last column.

Overall Ratings[4]	**FY23**	**FY22**
Global Environmental Objectives **(GEOs)** / Development Objectives **(DOs)** Rating	*Moderately Satisfactory (MS)*	*Moderately Satisfactory (MS)*
The project is supporting the government to develop a 800 kW SHP and solar hybrid power plant at Karonke. In addition to the detailed engineering design documents for Waga and Gikuka sites that being developed.		
Implementation Progress **(IP)** Rating	*Moderately Satisfactory (MS)*	*Moderately Unsatisfactory (MU)*
. All the proposed tasks listed in the work plan for FY23 have been completed such as the following: *i. Benchmarking tour for policy and decision-makers in Burundi;* *ii. Analysis of cost-reflective tariff;* *iii. Conduct further studies such as geotechnical, topographical survey, analysis of cost-effective tariff and detailed Environmental Social Impact Assessment (ESIA); and* *iv. Extend the project by 2.5-3 years if the above milestones have been achieved*		
Overall **Risk** Rating	*Moderate Risk (M)*	*Substantial Risk (S)*
The incumbent administration is very supportive of the project and addressing most of the challenges facing the project.		

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.

[3] Adaptive management in the context of an intentional approach to decision-making and adjustments in response to new available information, evidence gathered from monitoring, evaluation or research, and experience acquired from implementation, to ensure that the goals of the activity are being reached efficiently

[4] Please refer to the explanatory note at the end of the document and assure that the indicated ratings correspond to the narrative of the report

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress in FY23
Component 1 – Component 1 – Human and institutional capacity building on SHP technology, energy policy and planning				
Outcome 1: Outcome 1.1: improved knowledge base and strengthened national policy on SHP				
Output 1.1: Output 1.1: Output 1.1.1: Key policymakers and other stakeholders (at least 30 in each group) trained	Number of trained policy makers and other stakeholders	Low number of trained people	Train at least 150 policy makers and other stakeholders	The proposed benchmarking tour to Uganda has been organized from 23-26 August 2022. Eight high-level representative from relevant government institutions and two officials from the cabinet of the Minister in charge of Energy, among them the Permanent Secretary participated in the benchmarking tour (Annex 1, Mission report)
Output 1.2: Output 1.2: Output 1.1.2: Institutional set up strengthened for suitable management of mini-grid	Capacity of ABR and REGIDESO for effective and sustainable management of mini-grids improved	No improvement actions realised	Improved capacity for ABR and REGIDESO or effective and sustainable management of mini-grids	A geospatial mapping exercise to identify potential mini-grid sites in the country and assessment of poetntial15 hydropower sites was conducted and training. In addition, forty (40) participants were trained on the use of VIDA's software (Annex 2, VIDA report)
Output 1.3: Output 1.1.3: Relevant institutions and national policy on SHP strengthened	Policy summary report including a recommendation for an improved policy and strengthening of institutions for facilitating SHP business in the country prepared Capacity of ABR and REGIDESO to develop and manage a large network of decentralized mini-grid network of SHP in the country strengthened	Few institutions with limited capacity to promote SHP technology	Prepared policy summary report including a recommendation for an improved policy and strengthening of institutions for facilitating SHP business in the country Strengthened capacity of ABR and REGIDESO to develop and manage a large network of decentralized mini-grid network of SHP in the country	Study on the existing tariff structure and legal framework for deploying off-grid public-private-partnership energy systems in Burundi was conducted and validated (Annex 3, Tariff report)
Component 2 – – Scaling up of SHP plants				
Outcome 1: Conductive environment created for scaling up SHP plants				
Output 1.1: Output 1.1: Output 2.1.1: Detailed plant designs prepared for accumulative capacity of 1 MW SHP	Technical designs and business plans prepared	No design or business plan prepared	Prepared technical designs and business plans	Further geotechnical and topographical surveys as well as the detailed engineering design document for Gikuka and Waga Hydropower sites have been initiated.
Output 1.2: Output 2.1.2: SHP plants for	SHP plants for a cumulative capacity of 1 MW	Any existing plant at the sites	Established SHP plants for a cumulative	The process for the inclusion of Karonke hybrid project in the GEF project is on-going. Virunga Power is

accumulative capacity of 1 MW established	established (Waga, GIKUKA? Muyovozi, Nyamwondo)		capacity of 1 MW (Waga, Gikuka, Muyovozi, Nyamyondo	awaiting of the authorization from the Government. The Karonke hybrid project is being developed by an independent power producer, Virunga Power, and has a hydro component of 600 kW. (Annex 4)
Output 1.2: Output 2.1.3: Centralized electronic monitoring and controlling system for decentralized SHP plants established	Automated electronic monitoring and control system installed in each of installed SHP Standardized central monitoring and control unit developed	Any installed monitoring or control system	Installed Automated electronic monitoring and control system in each of installed SHP Developed Standardized central monitoring and control unit	No new progress to date
Component 3 – Facilitation of replication projects				
Outcome 1: : Initiatives taken for the replication projects				
Output 1.1: Output 1.1: Output 3.1.1: SHP sites assessed for further replication	Assessment of other potential sites and availability of load centres done in order to identify further replication projects in the country	No assessment done	Done assessment of other potential sites and availability of load centres done in order to identify further replication projects in the country	Pre-feasibility studies on 15 potential hydropower sites and an assessment of the possibility of establishing a renewable energy and rural transformation centres around the potential SHP sites have been conducted.
Output 1.2: Output 1.2: Output 3.1.2: Detailed project report (DPR) and business plan developed for the replication projects to a cumulative capacity of 1.0 MW	Detailed project report (DPR) and business plan developed for the replication projects to a cumulative capacity of 1.0 MW prepared	No DPR	Prepared detailed project report (DPR) and business plan developed for the replication projects to a cumulative capacity of 1.0 MW	No new progress to date
Output 1.3: Experience shared and information disseminated	Project sites visit and seminars organized and project experience disseminated to various interested stakeholders	No action undertaken	Organized project sites visit and seminars organized and disseminated project experience to various interested stakeholders	No new progress to date
Component 4: -Monitoring and Evaluation				
Outcome 4.1.: Effectiveness of the outputs assessed, corrective action taken and experience documented				

Output 4.1.1. End of project monitoring and evaluation report prepared (independent evaluation)	Independent final evaluation conducted	No action undertaken	Conducted Independent final evaluation	No new progress to date

III. Project Risk Management

1. Please indicate the overall project-level risks and the related risk management measures: (i) as identified in the CEO Endorsement document, and (ii) progress to-date. Please expand the table as needed.

	(i) Risks at CEO stage	(i) Risk level FY 22	(i) Risk level FY 23	(i) Mitigation measures	(ii) Progress to-date	New defined risk[5]
1	Insufficient technical capacity for operation and maintenance	Low risk (L)	Low risk (L)	Burundi already has few SHP plants, whose experience will be incorporated in the proposed projects. Assistance will be provided through the proposed project to technical services such as feasibility studies, procurement of equipment and power plant operation training. As already mentioned in section A.1, "under innovativeness, sustainability and scaling up", UNIDO possesses remarkable experience in SHP in the region. UNIDO , has experience in the technology an implementation of SHP projects, especially , GEF funded projects and can influence various factors including managing the technical risk and can steer project to ensure its success.	A bench marking tour to sensitize the relevant stakeholders was conducted in August 2022.	☐
2	a) No off-takers for the generation of electricity	Moderate risk (M)	Moderate risk (M)	The generated electricity will be to the small industries nearby the power plant. In general, the demand and the supply gap are wide in Burundi. Hence, there will not be any risk for the electricity off-take The proposed project is implemented by MHEM with participation of private sector	The process for the inclusion of Karonke hybrid project in the GEF project is on-going. Virunga Power is awaiting the authorization from the Government. The Karonke hybrid project is being developed by an independent power producer, Virunga Power, and has a hydro component of 600 kW	☐

[5] New risk added in reporting period. Check only if applicable.

				since Karonke hybrid project is included in the GEF project. Participation. Virunga Power related risk are modest but have to be considered. However, training will be provided to national experts, renewable energy (RE)/technical institutions, banks/financial institutions, engineering companies, interested developers, NGOs/CSOs. This will boost confidence and capacity of private sector for future investment in SHP.		
3	Lack of human capacity to operate the SHP plants	Moderate risk (M)	Moderate risk (M)	All the SHP plants management and O&M staff will be trained by the respective equipment suppliers. In addition, training will be given through the proposed project to strengthen the capacity of local engineering and O&M companies	No new progress to date	☐
4	Drought, flood and silting	Moderate risk (M)	Moderate risk (M)	Feasibility study and design of the scale up projects will consider the historical rain patterns and intensity. Based on the feasibility study report, a detailed ESMP will be developed. Spillways and diversion channels will be constructed where required to mitigate the risk of flooding as well as utilization of environmental flow devices to address fish passages	The request for proposal to conduct the ESIA for both Gikuka and Waga sites has been initiated	☐
5	Lack of interest, thus underrepresentation from the specific stakeholder groups	Substantial risk (S)	Moderate risk (M)	This project will pursue thorough and gender responsive communication an ensure stakeholder involvement at all levels, with special regard to involving women and men as well as CSOs and NGOs promoting gender equity and empowerment of women (GEEW), and a gender expert. This will mitigate social and gender-related risks, promote gender equity, create a culture of mutual acceptance, and maximize the potential contribution of the project in	Stakeholder participation has increased through training activities and bench marking tour. This led to the change in risk level from substantial to moderate	☐

				improving gender equity in the energy field.		
6	Unstable political conditions	High risk (H)	Low risk (L)	UNIDO will carefully keep tracking the political conditions in the country. Agreements will be signed with the government of Burundi/MEM to ensure implementation of project activities as per plan. UNIDO's international experience in handling such projects in developing counties will help to overcome this risk	Government interest in the project has increased tremendously during the reporting period. This is confirmed by the implication of the governmental officials in the project activities and the meetings held by different UNIDO responsible on mission in the country. This changed the risk level from high to low	

2. If the project received a sub-optimal risk rating (H, S) in the previous reporting period, please state the actions taken since then to mitigate the relevant risks and improve the related risk rating. Please also elaborate on reasons that may have impeded any of the sub-optimal risk ratings from improving in the current reporting cycle; please indicate actions planned for the next reporting cycle to remediate this.

UNIDO organized a 4-day benchmarking tour to Uganda, to raise the awareness of decision-makers in Burundi on the potential of deployment of public and private partnership (PPP) SHP mini-grid systems in the country. The theme of the tour is How to Build Distributed Power Generation and Distribution across Burundi using a Public and Private Partnership (PPP) Business Model. The benchmarking tour brought together representatives from the regulatory authorities in Uganda to share their achievements, success stories, and international experts with development partners and donor agencies working on accelerating access to modern energy services for all to avail the Burundian delegates of the opportunities available to the country.

At the end of the tour, the team agreed on the following action plan to in place by the Burundian government:

- ✓ Review and revise the existing legal and regulatory framework for the energy sector;
- ✓ Reform REGIDESO;
- ✓ Reform AREEN;
- ✓ Initiate the GET FIT (Feed in Tariff) project in Burundi;
- ✓ Identify hillside villages and validate them;
- ✓ Carry out an urgent study of the electrification of hill villages throughout the country;
- ✓ Set up a technical team to strengthen the rural electrification policy;
- ✓ On the basis of the rural electrification plan, determine the necessary financing sources and opportunities to mobilize it;
- ✓ Involve the Energy Sector group in the implementation of the vision of rural electrification;
- ✓ Support ABER by granting it a substantial budget and by mobilizing financing for rural electrification;
- ✓ Accelerate studies of rural electrification in PPP form with Virunga and complete the GEAPP-supported program;
- ✓ Hold a national exchange workshop on the changes to be made in the legal framework;
- ✓ Closely monitor the implementation interventions of the rural electrification program.
- ✓ Strengthen cooperation with technical assistance institutions such as UNIDO to support and accompany the Government in mobilizing funding in the sector.

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

During the period of the PIR, there is no visible negative impact of the COVID-19 pandemic on the progress of the project.

4. Please clarify if the project is facing delays and is expected to request an **extension**.

The project has been extended for three (3) years from January 2023 to June 2025

5. Please provide the **main findings and recommendations of completed MTR**, and elaborate on any actions taken towards the recommendations included in the report.

Carry out an in-depth reflection, revisit and revise the project document to take into account the institutional framework already in place as well as extend the project implementation period to 2 years to mobilize funding while limiting ambition to fundable sites;
- The research on institutional arrangement, especially tariff and legal system have been done,
Coordinate in synergy all the revision, implementation and monitoring-evaluation activities of the project;
- The recommendation for PPP engagement has been submitted to the Ministry of Energy and Power
Co-sign the project document between the Government and UNIDO and officially launch the implementation of the revised project;
- No revised project document
Notify the co-signed project to the Ministry in charge of finance;
- No revised project document
Schedule the realization of feasibility studies on the 4 sites as quickly as possible and prioritize their sequential constructions over time given the funds progressively mobilized while finding mechanisms to avoid the constraints linked to the COVID-19 pandemic (in particular through remote collaboration from national and international consultants);
- Two site feasibility studies were completed and detailed project documents are on the way Cooperation with Private company, Virunga Power, is under negotiation for construction of SHP to meet the project targets for installation.
Consider and put in place a fundraising strategy for the revised and reoriented project, especially since the Government is committed to supporting the continuation of the project which involves UNIDO, the private sector and possibly other Technical and Financial Partners;
- Please refer to above regarding on-going negotiation for Virunga Power (Private Company) to work with UNIDO for construction of SHP projects.
Improve the quality of collaboration of stakeholders by organizing them around the reoriented project for its concerted implementation with the visible participation of beneficiaries at the local level and communities;
- Benchmarking tour was organized to Uganda in August 2022 after Covid pandamic for collaboration of stakeholders
Translate into facts, at the time of the implementation of the reoriented project, the cross-cutting themes relating to gender, the environment and monitoring-evaluation;
- Paid attention for all these aspects
Government agencies should create a more supportive environment for SHP, including support to demonstration projects on SHP.
- Received positive response from Project Coordination Committee meeting to support for more SHP project demonstration

IV. Environmental and Social Safeguards (ESS)

1. As part of the requirements for **projects from GEF-6 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).

Please expand the table as needed.

	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	The risks identified in the ESMP are related to the development of the identified sites and are listed as follows: i. Erosion of the top soil and reservoir sedimentation ii. Loss of aquatic habitat, flora and fauna iii. Fish injury due to plant design iv. Loss of productive land, historical and cultural sites v. Displacement of people vi. Change in water quantity in downstreamDeterioration vii. in water quality	The EIA has been achieved and the report exists. Mitigation measures will be taken during the realization of the project referring to the EIA report recommendations. The hydropower plant has not been implemented.	The call for ESIA on Waga and Gikuka SHP sites is publishing. All aspects in ESMP will be reflected in the relevant report. . Since the ESMP is supposed on implementation or after the completion of the identified sites, therefore, no concrete measures for the lists of E&S risks at moment, because it is only on the stage of detailed project report for two identified sites said above.
(ii) New risks identified during project implementation (if not applicable, please insert 'NA' in each box)	N/A	N/A	N/A

V. Stakeholder Engagement

1. Using the previous reporting period as a basis, please provide information on **progress, challenges and outcomes** regarding engagement of stakeholders in the project (based on the Stakeholder Engagement Plan or equivalent document submitted at CEO Endorsement/Approval).

The project coordinating and monitoring committee held one meeting. The members of PCMC are representatives of the key stakeholders from Government and private sector. The Ministry of finance funded the visits by the PCMC of the 15 selected sites. The activity was realized from 08 to 13 august, 2022, 07 to 11 September, 2022, 20 to 24 September, 2022 and 13 to 17 October, 2022.

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.).

N/A

3. Please provide any **relevant stakeholder consultation** documents.

List of documents which were developed with engagement of stakeholders in the PIR period:

- *9056_Project coordinating and monitoring Committee meeting minutes*
- *9056_Report of the benchmarking tour*
- *9056_GS study report (VIDA report)*
- *9056_Report of the study on the existing tariff structure and legal framework for deploying off-grid public-private partnership energy system in Burundi*

VI. Gender Mainstreaming

1. Using the previous reporting period as a basis, please report on the **progress** achieved **on implementing gender-responsive measures** and **using gender-sensitive indicators,** as documented at CEO Endorsement/Approval (in the project results framework, gender action plan or equivalent),.

One woman is member of the coordinating and monitoring committee. However, the project ensures that women are adequately represented where applicable at different project activities such as trainings.

VII. Knowledge Management

1. Using the previous reporting period as a basis, please elaborate on any **knowledge management activities / products**, as documented at CEO Endorsement / Approval.

In the PIR period, the GS study report (VIDA report) for identification of potential SHP sites is applicable for knowledge management in other African countries. The report was developed by VIDA, located in Germany.

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

N/A

VIII. Implementation progress

1. Using the previous reporting period as a basis, please provide information on **progress, challenges and outcomes achieved/observed** with regards to project implementation.

The main realizations are as follows:

- A benchmarking tour to Uganda has been organized from 23-26 August 2022. Participated 8 managers of governmental institutions and 2 officials from the cabinet of the Minister in charge of Energy, among them the Permanent Secretary

- GS mapping exercise to identify potential mini-grid sites in the country has been developed and training for 40 participants organized in the use of GS technic

- Study on the existing tariff structure and legal framework for deploying off-grid public-private-partnership energy systems in Burundi was conducted and validated by the beneficiaries.

- Pre-feasibility studies on 15 potential hydropower sites and assess the possibility of establishing a renewable energy and rural transformation centres around the potential SHP sites have been conducted

Visits on the 15 new sites

2. Please briefly elaborate on any **minor amendments**[6] to the approved project that may have been introduced during the implementation period or indicate as not applicable (NA).

Please tick each category for which a change has occurred and provide a description of the change in the related textbox. You may attach supporting documentation, as appropriate.

☐	Results Framework	**N/A**
☐	Components and Cost	**N/A**
☐	Institutional and Implementation Arrangements	**N/A**
☐	Financial Management	**The coordinating and monitoring committee has authorized that the GEF grant could be used up to the tune of USD 550,000 as incentive to Virunga Power for the joint realization of the 800kW hybrid Hydropower and solar project at Karonke**
☐	Implementation Schedule	**The estimated end date has been extended to 30.06.25**
☐	Executing Entity	**N/A**
☐	Executing Entity Category	**N/A**
☐	Minor Project Objective Change	**N/A**
☐	Safeguards	**N/A**
☐	Risk Analysis	**N/A**
☐	Increase of GEF Project Financing Up to 5%	**N/A**
☐	Co-Financing	*The participation of Virunga Power is estimated USD 600,000The Virunga Power co-financing is expected to be used for the civil works activities, while the project will contribute for the electromechanical equipment*
☐	Location of Project Activities	*Introduction of the new site of Karonke with collaboration of Virunga Power*
☐	Others	**N/A**

3. Please provide progress related to the **financial implementation** of the project.

[6] As described in Annex 9 of the *GEF Project and Program Cycle Policy Guidelines*, **minor amendments** are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5%.

Main expenditures:

- *Staff and international consultants*
- *Local travel*
- *Nat. consultants/staff*
- *Contractual services*
- *Train/fellowship/study*
- *Other direct costs*

IX. Work Plan and Budget

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.

Please fill in the below table or make a reference to a file, in case it is submitted as an annex to the report.

Outputs by Project Component	Year 1				Year 2				Year 3				GEF Grant Budget Available (US$)
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Component 1 –Human and institutional capacity building on SHP technology, energy policy and planning													
Outcome 1: Improved knowledge base and strengthened national policy on SHP													
Output 1.1: Key policy makers and other stakeholders (at least 30 in each group) trained													
Train at least 30 policy makers.													15 000
Output 1.2: Institutional set up strengthened for suitable management of mini-grids													
Develop a mini-grids central monitoring system plan													30 000
Strengthening the capacity of institutions for suitable management of mini-grids													15 000
Output 1.3: Relevant institutions and national policy on SHP strengthened													
Prepare a comprehensive report on the existing policy and regulatory framework review for the energy sector													20 000

Component 2 –Scaling up of SHP plants												
Outcome 2: Conductive environment created for scaling up SHP plants												
Output 2.1: Detailed plant designs prepared for a cumulative capacity of 1.0 MW SHP plants												
Complete the detailed engineering design and geotechnical survey for Waga and Gikuka sites												150 000
Conduct ESIA and develop the ESMP for Waga and Gikuka sites												90 000
Fund raising for the construction of Gikuka and Waga sites												
Output 2.2: SHP plants for a cumulative capacity of 1.0 MW established.												
Issue the Rfp and evaluate Virunga Power's proposal for the incentive grant to develop Karonke 850 KW hybrid site.												550 000
Construction of 850 KW hybrid power site at Karonke Virunga Power												
Output 2.3: Centralized electronic monitoring and controlling system for decentralized SHP plants established												
Training of relevant stakeholders on the utilization of VIDA's geospatial mini-grid mapping software												
Component 3-Facilitation of replication projects												
Outcome 3.1: Initiatives taken for the replication projects												
Output 3.1: SHP sites assessed for further replication												
Pre-feasibility studies for 15 potential sites												
Fund raising for conduct the feasibility studies for 15 potential sites												15 000

Component 4-Monitoring and evaluation (M&E)													
Outcome 4.1: Effectiveness of the outputs assessed, corrective actions taken and experience documented													
Output 4.1:End of project M&E report prepared													
Continuous monitoring of Karonke hybrid site and Waga &Gikuka sites													15 000
Conduct periodic PCC meetings													15 000
Recruit the evaluation team													25 000
Conduct the terminal evaluation													5 000
Project management cost													
a. Recruitment of the PMU staffs													100 000
management of the office space													5 000
c. Printing of achievement brochure and develop project documentary													15 000
d. Contingencies													10 000
e.Close the project													15 000
TOTAL													1 090 000

X. Synergies

1. **Synergies** achieved:

N/A. The synergies with ongoing activities with Virunga Power, a private company in Africa, is identified. With the cooperation, not only SHP, but also solar and energy storage as integrated solusion for energy access may be achieved in near future,

3. Stories to be shared (Optional)

N/A.

XI. GEO LOCATION INFORMATION

The Location Name, Latitu de and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate.

Web mapping applications such as OpenStreetMap or GeoNames use this format. Consider using a conversion tool as needed, such as: https://coordinates-converter.com

Please see the Geocoding User Guide by clicking here

Location Name	Latitude	Longitude	Geo Name ID	Location and Activity Description
Gikuka	**29.667079**	**-4.118231**	**11399821**	
Waga	**29.7888**	**-3.5894**	**424167**	

Please provide any further geo-referenced information and map where the project interventions is taking place as appropriate.

- Gikuka site is located on the Gikuka River in Makamba Province. It is located in the commune of Vugizo. The Gikuka River is a tributary of the Nyengwe River, which feeds Lake Tanganyika in the Congo River basin. The site is located in a rural area with a mountainous landscape.

- Waga site is located on the Waga River in Mwaro Province. It is located on the boundary between the commune of Bisoro (Mwaro Province) and the commune of Nyarusange (Gitega Province). The Waga River is a tributary of the Ruviyironza River in the Nile basin. The site is located in a rural area with a hilly landscape. The upstream catchment area of the potential intake site is 258.5 km2

ANNEXES

Annex 1: Mission report to UGANDA 23-26 August 2022
Annex 2: VIDA report - Geospatial mapping of mini-grid potential in Burundi and assessment of 15 hydropower sites
Annex 3: Tariff report - PROMOTION DES ÉNERGIES RENOUVELABLES DISTRIBUÉES À USAGE PRODUCTIF ET DES SERVICES ÉNERGÉTIQUES AU BURUNDI (English is also available)
Annex 4: Meeting Minutes of Project Coordination Committee on 13 March 2023 (English translation is also available)

EXPLANATORY NOTE

1. **Timing & duration:** Each report covers a twelve-month period, i.e. 1 July 2022 – 30 June 2023.

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 all 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 achieve most of its major global environmental objectives, and yields satisfactory global environmental benefits, with only minor shortcomings.
Moderately Satisfactory (MS)	Project is expected to achieve most of its major relevant 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 some of its major global environmental objectives with major shortcomings or is expected to achieve only some of its major global environmental objectives.
Unsatisfactory (U)	Project is expected not to achieve most 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, any of its major global environmental objectives with no worthwhile benefits.

Implementation Progress (IP)	
Highly Satisfactory (HS)	Implementation of all 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 most 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 some components is in substantial compliance with the original/formally revised plan with some components requiring remedial action.
Moderately Unsatisfactory (MU)	Implementation of some components is not in substantial compliance with the original/formally revised plan with most components requiring remedial action.
Unsatisfactory (U)	Implementation of most components in not in substantial compliance with the original/formally revised plan.
Highly Unsatisfactory (HU)	Implementation of none 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.