



Project Implementation Report

(1 July 2021 – 30 June 2022)

| | |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project Title: | Scaling up small hydro power (SHP) projects in Nigeria |
| GEF ID: | 5375 |
| UNIDO ID: | 120119 |
| GEF Replenishment Cycle: | GEF-5 |
| Country(ies): | Nigeria |
| Region: | AFR - Africa |
| GEF Focal Area: | Climate Change Mitigation (CCM) |
| Integrated Approach Pilot (IAP) Programs¹: | N/A |
| Stand-alone / Child Project: | FSP |
| Implementing Department/Division: | ENE / ETI |
| Co-Implementing Agency: | N/A |
| Executing Agency(ies): | Energy Commission of Nigeria (ECN), Federal Ministry of Power (FMP), Federal Ministry of Water Resources (FMWR), Rural Electrification Agency (REA), Federal Ministry of Environment FMEv. |
| Project Type: | Full-Sized Project (FSP) |
| Project Duration: | 48 months |
| Extension(s): | 3 |
| GEF Project Financing: | 2,689,680 USD |
| Agency Fee: | 255,520 USD |
| Co-financing Amount: | 17,200,000 USD |
| Date of CEO Endorsement/Approval: | 2/2/2015 |
| UNIDO Approval Date: | 2/18/2015 |
| Actual Implementation Start: | 3/24/2015 |
| Cumulative disbursement as of 30 June 2022: | 1,203,861 |
| Mid-term Review (MTR) Date: | 2/18/19 to 5/3/19 |
| Original Project Completion Date: | 2/2/2019 |
| Project Completion Date as reported in FY21: | 12/31/2021 |
| Current SAP Completion Date: | 6/30/2023 |
| Expected Project Completion Date: | 6/30/2023 |

¹ Only for GEF-6 projects, if applicable

| | |
|------------------------------------------------|------------|
| Expected Terminal Evaluation (TE) Date: | 3/1/2023 |
| Expected Financial Closure Date: | 12/30/2023 |
| UNIDO Project Manager²: | Liu Heng |

I. Brief description of project and status overview

| Project Objective | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| The project focuses on creating a favorable environment for small hydro power (SHP) technology in Nigeria. The main objective is to promote investments in small hydro power (SHP) technology and strengthen local manufacturing of SHP turbines in the country. | | |
| Project Core Indicators | | Expected at Endorsement/Approval stage |
| 1 | Incremental CO ² emission reduction | Cumulative capacity of 3.1MW of SHP established during the project (leading to an overall direct emission reduction of around 349,424t CO ²) |
| 2 | Number of locally fabricated micro/mini hydropower equipment and accessories | Fabricate SHP equipment and accessories with capacity of 300 kw |
| 3 | Number of private sector/financial institutions developing SHP projects | At least 2 private investors developing the 3.1 MW cumulative SHP plants. |
| 4 | Number of micro/mini/small hydropower-based power generation plants in operation | At least 2 SHP plants with cumulative capacity of 3.1 MW in operation. |

| Baseline |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The electricity supply is presently unreliable in the country with frequent shutdowns, load shedding and grid failures. The estimated electricity demand in the country is about 20,000MW; on the supply side, the total installed generating capacity is approximately 12,000MW, but only about 4,500MW is effectively operating. This has compelled many consumers (both industrial and households) to rely on inefficient diesel/petrol generators to meet their energy needs. As a result, the Nigerian economy has become fossil-fuel dependent leading to high CO² emissions from the energy sector with serious environmental consequences and increased vulnerability to climate change.</p> <p>Among various renewable energy (RE) options, small hydropower (SHP) holds great potential for Nigeria in addressing climate change and providing access to energy for the whole population. Recent government estimates suggest a potential of approximately 24,000 MW of hydropower, SHP alone is estimated to be around 3,500 MW.</p> <p>The development of the small hydro power sector is hampered by a number of barriers, such as:</p> <p>a) lack of capacity in design, fabrication, installation and operation of SHP systems; b) lack of skills and know-how in developing SHP projects (planning, development and implementation); c) lack of information on potential sites (hydrological and geological data, etc.); d) lack of awareness, incentives and coordination among various stakeholders; and e) lack of a conducive environment for private sector participation in SHP development.</p> <p>Target Results: The main outcomes and deliverables expected under the project are as follows:</p> |

² Person responsible for report content

- (i) Improve human and institutional capacity for continuous development of SHP projects;
- (ii) Upgrade the capacity for local fabrication of SHP turbines and control systems up to 300 kW;
- (iii) Establish standards and quality assurance for the fabricated equipment
- (iv) Demonstrate SHP projects on a private-public partnership (PPP) basis for a cumulative 3.1 MW installed capacity leading to an overall direct emission reduction of around 349,424 tCO₂e

| Overall Ratings ³ | FY22 | FY21 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------|
| Global Environmental Objectives (GEOs) / Development Objectives (DOs) Rating | Satisfactory (S) | Satisfactory (S) |
| <p><i>Using the progress rationale reported in section II, please briefly justify the selected FY22 GEOs/DOs ratings versus the GEOs/DOs ratings reported in FY21.</i></p> <p>Steady progress towards the realization of development objectives have been made. The project has raised awareness and strengthened the capacity among various stakeholders such as; policy makers, financial institutions, project developers and private investors to develop and implement SHP projects. Detailed feasibility studies for the development and implementation of several potential SHP sites across the country have also been carried out.</p> <p>In addition, collaboration with the Nigeria Investment Promotion Commission (NIPC) and other relevant stakeholders has been established, regarding the availability of suitable incentives to increase private sector participation in developing SHP projects.</p> | | |
| Implementation Progress (IP) Rating | Moderately Satisfactory (MS) | Moderately Satisfactory (MS) |
| <p><i>Using the progress rationale reported in section II, please briefly justify the selected FY22 IP ratings versus the IP ratings reported in FY21.</i></p> <p>Incremental progress towards attainment of expected outputs have been made, though some activities and outputs are behind schedule.</p> <p>Nigeria has been adversely impacted by the COVID-19 pandemic and has undergone several changes in terms of energy policy framework, with consequences on the policy environment, which has contributed to delays in project implementation.</p> | | |
| Overall Risk Rating | Low Risk (L) | Low Risk (L) |
| <p><i>Using the progress rationale reported in section II and III, please briefly justify the selected FY22 risk rating versus the risk ratings reported in FY21.</i></p> <p>Risks to the project have relatively remained the same (low) and have been mitigated as planned.</p> | | |

II. Targeted results and progress to-date

³ 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

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 in FY22 |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component 1 – Human and institutional capacity building | | | | |
| Outcome 1: Improved awareness, knowledge and capacity on SHP technology | | | | |
| Output 1.1: Capacity of SHP technology centre in Nigeria strengthened | Trained personnel (men and women) manning the SHP technology Centre for more effective technical support on SHP project development and implementation in Nigeria | Minimal personnel with competency in SHP technology available in Nigeria | Increase in number of competent personnel (men and women) in SHP technology at the end of the project | No new progress to date (Activity completed) |
| Output 1.2: Capacity building of at least 100 policy makers | Number of trained personnel (men and women) from relevant Government institutions responsible for policy making. | Inadequate capacity among the key policy makers | Train at least 100 policy makers (men and women) on SHP development. | No new progress to date (Activity completed) |
| Output 1.3: Capacity building of at least 50 project developers, relevant RE institutions including financial institutions | Number of personnel (men and women) trained from project development and financial sector. | Insufficient local capacity to develop and finance SHP projects | At least 50 personnel (men and women) trained. | No new progress to date (Activity completed) |
| Component 2 – Upgrading the capacity for local fabrication of SHP turbines and control systems in Nigeria | | | | |
| Outcome 2: Capabilities for locally fabricated SHP turbines and control equipment up to 300 kW capacity are available in the country | | | | |
| Output 2.1: Enhanced local fabrication capacity for micro hydro turbines and control equipment from 125 to 300 kW | Capacity of fabricated turbine increased from 125 to 300 kW. | Capacity to fabricate cross flow turbines with capacity up to 125kW | Increased capacity of the locally fabricated micro hydro turbine from 125 to 300 kW | Potential sites for the installation of locally fabricated turbines identified. The sites include: Obudu Dam (up to 200kW) in cross river state, several dams in Kano state such as Tiga, Gari and Watari Dam and Erin-Ijesha in Osun State. The generating capacity of the actual potential site selected for the training purpose would be capped at 150-300kW, based on the Project's target. Suitable technology transfer partner on equipment fabrication identified |
| Output 2.2: National standards developed for SHP electromechanical equipment in Nigeria | Standard Organization (SON) Certificate | No standards available | Standards accredited by SON for SHP equipment fabricated should be in place at the end of the project | Technical Committee on SHP development under the ISO system established, with active participation by SON. The link to the ISO is below https://www.iso.org/standard/82192.html . |
| Component 3 – Promoting investments in SHP sector | | | | |
| Outcome 3: Conducive investment environment for scaling up of SHP projects available | | | | |
| Output 3.1: Incentive systems designed for SHP projects | Increase in private investors developing SHP plants | One private sector investor developing SHP plants | Cumulative 3.1 MW SHP plants developed by private investors. | No new progress to date |
| Output 3.2: Detailed feasibility studies prepared for the replication SHP plants | Feasibility study and business plans for | 17 plants have feasibility study and business plan report | Potential sites should have business plan and feasibility report | Detailed feasibility study report with design for the implementation of the 2.5MW Obudu Mountain Resort SHP potential site in Cross |

| | | | | |
|-----------------------------------------------------------------|-------------------------------------------------------------|------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | identified potential sites developed. | available for implementation | available for implementation at the end of the project. | River State prepared and disseminated to stakeholders. Preliminary design report for the implementation of the 320kW Balanga dam SHP potential site in Gombe State prepared and disseminated to stakeholders. |
| Output 3.3: SHP plant of 3.1 MW cumulative capacity established | SHP plants with cumulative capacity of 3.1MW commissioned. | | Cumulative of 3.1 MW SHP plants to be established | Implementation of the 15kW OOPL pico-hydro project in Abeokuta ongoing. Civil works is in progress and Electro-mechanical equipment has been delivered to the project site. Implementation of the 300kW Doma Dam SHP project in Nasarawa State in progress. Civil works (powerhouse construction) ongoing. |
| Output 3.4: Promotion of replication projects | SHP plants with cumulative capacity of 2.4 MW commissioned. | | SHP plant with cumulative capacity of 2.4 MW developed during the project implementation. | Additional requests also received from River Basin Development Authorities, under the Federal Ministry of Water Resources (FMWR) to implement SHP projects within their respective catchment areas. |

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 21 | (i) Risk level FY 22 | (i) Mitigation measures | (ii) Progress to-date | New defined risk ⁴ |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------|
| 1 | There is no indigenous technology for SHP in Nigeria and the country currently depends upon the importation of components and peripherals from other countries. | Low risk (L) | Low risk (L) | UNIDO has transferred technology for fabrication of cross-flow turbines for MHP up to 125 kW. This has reduced the level of dependency on other countries to a certain extent. The training for local fabrication of SHP turbines and controls is planned as a part of the project. With UNIDO's prior experience, the technology can be transferred very effectively to the local manufacturers. Human and institutional capacity will be built effectively. Hence, the acquired knowledge and skills will be used to mitigate against the technical risks | No new progress to-date. Risk mitigated as planned. | <input type="checkbox"/> |
| 2 | No off-takers for the generated electricity. | Low risk (L) | Low risk (L) | The electricity generated will be supplied to the local communities and industries nearby the power plant. The demand and supply gap is wide and hence will not be any risk for electricity off-take. | No new progress to-date. Risk mitigated as planned. | <input type="checkbox"/> |

⁴ New risk added in reporting period. Check only if applicable.

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|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------------|
| 3 | Low market for SHP turbines and components. | Moderate risk (M) | Moderate risk (M) | The replication potential for SHP is high (82 MW). Enabling environment for investment will be created at the end of the project. Therefore, the market for SHP turbines and components will be mitigated. | No new progress to-date. Risk mitigated as planned. | <input type="checkbox"/> |
| 4 | The general perception is that investments in SHP based plants do not provide enough (high) returns and hence investors will not be willing to invest in SHP replication projects. | Moderate risk (M) | Moderate risk (M) | The project will create awareness about the benefits of SHP projects among private investors. It will also facilitate fund / financing scheme which would encourage and sustain SHP development. These activities will eliminate the perceptible risks of the project. The successful implementation of the proposed projects will enhance the stakeholders' participation, especially, the financial institutions. This will ensure successful replication of the project. | No new progress to-date. Risk mitigated as planned. | <input type="checkbox"/> |
| 5 | No specific policies on SHP to facilitate enhanced scaling up | Low risk (L) | Low risk (L) | The project proposes FiT specifically for SHP which, when in place, will significantly improve the development of SHP projects | No new progress to-date. Risk mitigated as planned. | <input type="checkbox"/> |
| 6 | Change of RE policies due to change of Government. | Moderate risk (M) | Moderate risk (M) | Electricity access is the key parameter essential for Nigerian economic growth. Even when the government changes, there is lesser possibility that the existing RE policies will be discontinued, as most of these policies were implemented by government ministries. | No new progress to-date. Risk mitigated as planned. | |
| 7 | Co-financing not being committed by co-financiers. | Moderate risk (M) | Moderate risk (M) | Consultations with the stakeholders to ensure their financing of the project. | No new progress to-date. Risk mitigated as planned. | |
| 8 | Drought | Low risk (L) | Low risk (L) | Based on the feasibility study report, the demonstration sites are not vulnerable to drought. | No new progress to date. Risk mitigated as planned. | |
| 9 | Risk of flooding | Low risk (L) | Low risk (L) | Nigeria is vulnerable to low flooding only. Proper spillways and diversion channels will be constructed to overcome this risk in flood prone sites. | No new progress to date. Risk mitigated as planned. | |

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.

N/A

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

The imposed government restrictions on movement (both local and international), and gatherings due to the pandemic has led to substantial delays in the completion of project implementation activities.

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

N/A

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

Conclusion

- There has been some progress in the implementation of the project at the time of the Mid-Term Evaluation but the progress is limited
- UNIDO GEF 5 Small hydro project in Nigeria lags behind in achievements at the time of MTR due to delays (owing to reasons explained in the report) in the project implementation
- Project implementation monitoring, particularly related to regular reporting and PSC meetings does not fully meet the expected requirements, and is moderately satisfactory
- It is unlikely that the all the activities envisaged in the ProDoc can be completed or nearly completed by June 2020.

Recommendations

- The project timeline should be extended by at least one more year to June 2021 or more in order to have a reasonable possibility of completing all the activities in the project.
- A detailed action plan covering all the remaining activities in the project, timeline and responsibilities of stakeholders should be prepared urgently and approved by UNIDO and PSC
- A list of potential beneficiaries from all components (e.g. policy makers, renewable energy agencies, potential project developers) should be prepared urgently in order to expedite the capacity building activities and identify project developers.
- Government agencies should create more supportive environment for SHP in Nigeria including support to demonstration projects undertaken by UNIDO.

Actions Taken

The project has been extended to June 2023. A detailed action plan covering remaining project activities was prepared and approved by the PSC. Training of policy makers, project developers and financial institutions has been completed. The recommendations of the MTR have also been disseminated to relevant Government agencies.

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).

Notes on new risks:

- *If new risks have been identified during implementation due to changes in, i.e. project design or context, these should also be listed in (ii) below.*
- *If these new/additional risks are related to Operational Safeguards #2, 3, 5, 6, or 8, please consult with UNIDO GEF Coordination to discuss next steps.*
- *Please refer to the UNIDO [Environmental and Social Safeguards Policies and Procedures \(ESSPP\)](#) on how to report on E&S issues.*

Please expand the table as needed.

Not applicable for a GEF-5 project.

| | 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 | | | |
| (ii) New risks identified during project implementation (if not applicable, please insert 'NA' in each box) | | | |

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).

UNIDO is the GEF Implementing Agency involved in this project and responsible for the achievement of the expected outcome.

Federal Ministry of Power (FMP), Energy Commission of Nigeria (ECN), Rural Electrification Agency (REA), Federal Ministry of Environment FMEnv) and Federal Ministry of Water Resources are the main executing agencies.

Others partners include state governments and the private sector.

Government bureaucracy is a key challenge that has affected the implementation of the project. In addition, the socio-economic challenges imposed by the COVID-19 pandemic, which the country is still recovering from have all affected the implementation of the project.

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.).

The project is well aligned to national priorities. However, due to the COVID-19 pandemic, the project has faced significant disruptions in implementation.

It is essential to realise as much as possible the project objective with the available implementation time frame, for the benefit of Nigeria

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

N/A

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),.

All required efforts are being made by the PMU to select as many qualified women as possible in its planned activities, both at the management and technical levels and encourage them to participate in all relevant project and decision-making activities.

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.

N/A

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

5375_Obudu_Mountain_Resort_Feasibility_Study_Report.pdf
5375_Balanga_Dam_Preliminary_Design_Report.pdf

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.

Government bureaucracy is a major challenge that has affected the implementation of the project. Participation by government agencies as partners of UNIDO in demonstration projects is likely to introduce delays in project implementation, due to financial issues.

Private Sector participation in the project has been limited due to perception of risk by investors in SHP projects.

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2. Please briefly elaborate on any **minor amendments**⁵ 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.

| | | |
|--------------------------|-----------------------------------------------|----|
| <input type="checkbox"/> | Results Framework | NA |
| <input type="checkbox"/> | Components and Cost | NA |
| <input type="checkbox"/> | Institutional and Implementation Arrangements | NA |
| <input type="checkbox"/> | Financial Management | NA |
| <input type="checkbox"/> | Implementation Schedule | NA |
| <input type="checkbox"/> | Executing Entity | NA |
| <input type="checkbox"/> | Executing Entity Category | NA |
| <input type="checkbox"/> | Minor Project Objective Change | NA |
| <input type="checkbox"/> | Safeguards | NA |
| <input type="checkbox"/> | Risk Analysis | NA |
| <input type="checkbox"/> | Increase of GEF Project Financing Up to 5% | NA |
| <input type="checkbox"/> | Co-Financing | NA |
| <input type="checkbox"/> | Location of Project Activities | NA |
| <input type="checkbox"/> | Others | NA |

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

5373_Financial_Report_pdf

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 | Time-Frame | | | | | | | | | | | | GEF Grant Budget Available (US\$) | |
|-------------------------------------------------------------------------|------------|----|----|----|-----------|----|----|----|-----------|----|----|----|-----------------------------------|-----------|
| | 2020/2021 | | | | 2021/2022 | | | | 2022/2023 | | | | | |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | | |
| Component 1 – Human and institutional capacity building | | | | | | | | | | | | | | 38,789.87 |
| Outcome 1: Improved awareness, knowledge and capacity on SHP technology | | | | | | | | | | | | | | |
| Output 1.1: <i>Awareness and Capacity Improved</i> | | | | | | | | | | | | | | |
| Output 1.2: | | | | | | | | | | | | | | |

⁵ 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%.

| | | | | | | | | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Component 2 – Upgrading the capacity for local fabrication of SHP turbines and control systems in Nigeria 135,904.63 | | | | | | | | | | | | |
| Outcome 2: Capabilities for locally fabricated SHP turbines and control equipment up to 300kW capacity are available in the country | | | | | | | | | | | | |
| Output 2.1: Local fabrication of MH turbines | | | | | | | | | | | | |
| Output 2.2: National Standards developed for SHP | | | | | | | | | | | | |
| Component 3 – Promoting investments in SHP sector 1,172,211.70 | | | | | | | | | | | | |
| Outcome 3: Outcome 3.1: Conducive investment environment for scaling up of SHP projects available Outcome 3.2: Technical and economic viability of SHP technology established | | | | | | | | | | | | |
| Output 3.1: Feasibility studies prepared for the replication SHP plants | | | | | | | | | | | | |
| Output 3.2: SHP Plants of 3.1 MW cumulative capacity established | | | | | | | | | | | | |
| Component 4 – Monitoring and Evaluation 40,357.64 | | | | | | | | | | | | |
| Outcome 4.1: Effectiveness of the outputs assessed, corrective action taken and experience documented. Outcome 4.2: Acceptance of technical and economic viability of SHP plants | | | | | | | | | | | | |
| Output 4.1: Evaluation and Management | | | | | | | | | | | | |

X. Synergies

1. Synergies achieved:

Good synergy exists between the Project and the Country Programme (CP) for Inclusive and Sustainable Industrial Development in Nigeria (2018 – 2022).

Component 8 of the CP specifically promotes the implementation of renewable energy based projects in Nigeria.

3. Stories to be shared (Optional)

N/A

EXPLANATORY NOTE

1. **Timing & duration:** Each report covers a twelve-month period, i.e. 1 July 2021 – 30 June 2022.
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 is <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 assess 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. |