

Joint SDG Fund – Component 2 – SDG Financing

Joint Programme Final Progress Report (preparatory funding)

Purpose: to provide the UN Joint SDG Fund’s donors with evidence that preparatory funding provides good value for money - so that we can continue allocate resources to your programming.

Instructions: be succinct and to the point; emphasize only results and issues that you want to bring to the attention of the Fund; do not go over the max number of pages.

Deadline: January 31st, 2021

Cover page

Reporting period: June 30 – December 30, 2020

Country: Uganda

Joint Programme (JP) title: Accelerating Innovative Finance for Renewable Energy in Social Sectors and UN operations in Uganda

Short title: PPA guarantee to solarize UN

List of PUNOs: UNDP, UNHCR, UNCDF, WHO

RC (name): Rosa Malango

Representative of Lead PUNO (name and agency): Elsie Attafuah, UNDP

Government JP Focal Point (name and ministry/agency): Mr. John Tumuhimbise, Ministry of Energy and Mineral Development, Uganda

RCO JP Focal Point (name): Asel Abdurakhmanova E-mail: asel.abdurakhmanova@un.org

Lead Agency JP Focal Point (name): Gloria Namande E-mail: gloria.namande@undp.org

Budget (Joint SDG Fund contribution): 200,000 USD Budget Expenditures: 28,212 USD

Delivery Rate: 14% *Prep Funding Rate (%) = $\frac{\text{Expenditures PUNO}}{\text{Total transferred funds Jan 2020 to December 2020}}$;*

Short Description of the Joint Programme **(1 paragraph for each section)**

This description will be used to update your country page in our online platform (please scan the website before answering) <https://sdginvest.jointsdgfund.org/proposals>

Financial leverage (estimated target in US\$): 5,400,000

Challenge:

Explain the key challenge(s) the JP aims to tackle with reference to both development and financing challenges and how they interconnect.

Uganda, which is a host country to the 3rd largest refugee population (1.4 Million), suffers from poor access to electricity from national grid (26% nationally, 7-8% in rural areas). 97% of the refugees, 50% of public health centers and 73% of government schools in Uganda lack adequate access to clean energy and the current delivery models are expensive and carbon intensive. Sustainable energy generation projects, on the other hand, struggle to achieve financial closure since the UN Humanitarian and social sector off-takers are perceived to be risky. This high perceived "Off-taker payment risk" exists since the UN humanitarian agencies can cease operations before the term of a long-term PPA, and since they do not have long-term budgeted funding.

Innovation (financial instrument/mechanism/approach):

Summarize the financial mechanism(s) proposed and why the approach is different from conventional and/or alternative approaches and how it is fit for purpose to address the challenge described above.

The proposed "PPA Guarantee" mechanism will de-risk the investment environment for Solar IPPs and private investment funds in humanitarian and other social sector such as in health and education in Uganda. This mechanism will be implemented in the form of a PPA payment guarantee fund (PPG) that will provide payment cure to the Solar IPP and the Private investors in the case of early termination of PPA by the off-taker and a Liquidity Support Facility (LSF) that will provide payment cure to the Solar IPP in case of delayed PPA payment or short-term non-payment by the Off-taker, thus removing any and all perceived / actual off-taker risks. The proposed mechanism is a "groundbreaking" effort since the traditional methods of de-risking solar projects are not readily suited to, and do not address all the risks of, small-medium scale humanitarian projects. Existing de-risking solutions are largely aimed at covering credit risk and political risk for financiers for large-scale Solar projects with sovereign or sub sovereign Off takers only.

SDG Impact:

Please describe the development impact the JP aims to achieve. Do not list the SDGs.

- Private capital mobilized – US\$ 5.4 Million
- Leverage (Private capital attracted / Guarantee equity) – 1.9x
- Installed solar capacity created in Humanitarian and Social sector – 5.4 MW
- % savings in diesel bill over PPA tenor for UN Humanitarian agencies – 50%
- Liters of diesel consumption avoided for UN Humanitarian agencies – 9.5 Million Liters
- Tons of CO₂ emissions avoided by all JP solar projects during PPA tenor – 83,921 tons
- # of refugees trained with technical skills to conduct O&M for RE projects – 92

Partners:

Please list key partners involved in implementation as well as secured investors. Do not mention more than 4-5 partners. Do not mention generic stakeholders (e.g. Government, private sector), but only specific institutions/partners.

- Ministry of Energy and Mineral Development, Uganda
- Uganda Energy Credit Capitalization Company, Uganda
- REPP managed by Camco Clean Energy
- Social Investments Managers and Advisors (SIMA)
- PowerGen Renewable Energy

Final Progress Report (MAX 3 PAGES)

1.1. Progress achieved

Provide brief description of the project's developments, results and achievements during the preparatory phase including 1) financial vehicle design; 2) market assessment; 3) feasibility study; 4) pipeline assessment; 5) legal assessment; 6) investor mapping and matching; 7) others. Please list the names of strategic documents developed (if any).

With the support of the project preparatory funding from UN Joint SDG funding, the Joint Programme (JP) successfully achieved the following developments and results during the preparatory phase –

1. **Baseline scenario assessment.** Primary research involving structured interviews with Global Plan of Action for Sustainable Energy Solutions in Situations of Displacement ("GPA") and desk research of best practices and key lessons identified by the GPA in advancing PPA frameworks and applicability of guarantees in humanitarian sector.
2. **Policy framework assessment.** Review of relevant and applicable policy framework for private Solar PPAs in Uganda involving the needs for licensing, license exemptions, land acquisition etc.
3. **Market assessment for Solar PPAs.** Review of the baseline energy generation scenario in UN humanitarian sector in Uganda, technical review of the energy generation assets in settlement areas in Uganda and technical sizing of opportunity size for Solar PPAs.
4. **Landscape analysis for complementary interventions.** Comprehensive review of de-risking products and strategies that can be applied for humanitarian settings including avenues such as Host government support, Insurance products, Guarantee structures etc.
5. **Design of PPA Guarantee facility.** The JP with leadership from UNCDF has designed and developed the Liquidity Support Facility (LSF) and PPA Payment Guarantee (PPG) mechanism and the associated cash flows, operational procedures, terms etc.
6. **Design of Technical Assistance tracks.** The JP with leadership from UNDP, UNCDF and UNHCR has designed and developed two Technical Assistance tracks – one for building technical and financial capacities within participating solar IPPs and one for improving energy data management practices in Humanitarian sector.
7. **Financial intervention validation process.** Stakeholder consultation process to validate the financial and technical de-risking instruments that the JP has developed and to identify potential scope for improvement. The consultation process involved structured interviews and informational surveys with players such as
 - o Private sector solar companies in Uganda
 - o Regional solar IPPs and minigrid companies willing to invest in Uganda
 - o Global private investment funds with solar expertise
 - o Domestic and global banking institutions interested in project finance
 - o National energy finance entities
8. **PPA price discovery tool.** An excel based PPA price estimation tool was built to identify potential range of PPA bids from bidders with inputs for the tool generated from the stakeholder consultation process.
9. **Feasibility study for Solar IPPs.** Financial modeling to ensure viability of projects for bidders through Debt Service Coverage Ratios and IRRs at the PPA prices estimated using the PPA price discovery tool.
10. **Cost-Benefit analysis for UN agencies.** Cost-benefit analysis was conducted to estimate the savings potential for the humanitarian sector.
11. **Pipeline development.** Identified sites with solar PPA potential of Approx.3.5 MW and secured participation interests from reputed solar IPPs with execution track record of 200 MW+.
12. **Investor mapping.** Identified potential private capital investors and secured participation interests from investors with demonstrated off-grid investment expertise and an AUM of more than US\$ 500 Million.

1.2. Challenges faced

Did the UNCT face any major challenges in the preparatory phase? Briefly explain the challenges, their impacts, and how you overcame those.

No major challenges were faced by UNCT during the proposal preparatory phase. There was however difficulty in recruiting and onboarding consultants due to the limited time for procurement. In addition, the COVID 19 travel restrictions limited the physical interactions for the meetings with different partners. The recruitment challenges for the consultants were overcome by using the UNDP ExpRes Roster for consultants which reduced the time for procurement. Regular virtual meetings with the UNCT teams, project partners and the consultants were very key to ensure effective sharing of information despite the travel restrictions due to COVID19.

1.3 Partnerships leveraged

Did you leverage new partnerships during the preparatory phase (e.g. government, private investors, IFIs, bilateral/multilateral banks, etc.)?

- Yes
 No

Provide in bullet points the main highlights on strategic partnerships and with whom.

- Strategic partnership to secure Implementation support and Technical Assistance from Ministry of Energy and Mineral Development (MEMD)
- Partnership with Private Sector IPPs to conditionally participate in Solar PPA tenders, to invest private capital in long-term solar assets and to sell clean electricity through long-term PPA contracts to humanitarian and social sector off-takers in Uganda.
- Partnership with Private capital investors to conditionally invest debt capital in long-term solar projects in humanitarian and social sectors in Uganda

1.4. Co-funding mobilized

Did you secure additional funding or in kind support for the proposal during the preparatory phase?

- Yes
 No

If yes, please include amounts committed during the prep-phase.

Source of funding	Yes	No	Type? (\$ or in kind support)	Name of organization	Amount (USD)	Comments
Government	<input type="checkbox"/>	<input type="checkbox"/>				
Donors/IFIs	<input type="checkbox"/>	<input type="checkbox"/>				
Private sector	<input type="checkbox"/>	<input type="checkbox"/>				
UN/PUNOs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>In-kind support</i>	<i>UNDP</i>	<i>200,000</i>	
UN/PUNOs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>In-kind support</i>	<i>UNHCR</i>	<i>100,000</i>	
UN/PUNOs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>In-kind support</i>	<i>UNCDF</i>	<i>100,000</i>	
UN/PUNOs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>In-kind support</i>	<i>WHO</i>	<i>100,000</i>	
Other partners	<input type="checkbox"/>	<input type="checkbox"/>				

1.5. Budget changes (if relevant)

If there were changes in the actual budget from the one shared as part of the Fund Transfer Request, please briefly justify these changes. **No changes**

Please, explain briefly: