Fact Sheet

Title of the proposed Joint Programme	Accelerating Innovative Finance for Renewable Energy in Social Sectors and UN operations in Uganda
UNCT	Uganda
Date	Tue, 03/31/2020 - 12:00
RCO focal point	Asel Abdurahmanova

Lead UN entity and contact person

UN entity	Name	Email
United Nations Development Programme (UNDP)	Onesimus Muhwezi	onesimus.muhwezi@undp.org

Participating UN entities and contact persons

UN entity	Name	Email
Office of the United Nations High Commissioner for Refugees (UNHCR)	David Githiri Njoroge	njorogda@unhcr.org
World Health Organization (WHO)	COllins Mwesigye	mwesigyec@who.int
United Nations Development Programme (UNDP)	Gloria Namande	gloria.namande@undp.org

Relevant UNDAF Outcome/s and Output/s

- Outcome 2.2. By 2025, Uganda’s natural resources and environment are sustainably managed, protected and all people especially the vulnerable and marginalized have the capacity to mitigate and adapt to climate change impacts and disaster risks. The programme contributes to “adoption of inclusive and sustainable solutions to achieve increased universal modern energy access and energy efficiency (especially off-grid sources of renewable energy)" and emission reduction targets under this outcome.

-Outcome 3.1: By 2025, people, especially the vulnerable and marginalized, have equitable access to and utilization of quality basic social and protection services.

- Uganda Refugee Response plan (2019-2020) strategic objectives which include:
Strategic objective 3: By 2020, the refugee response paradigm in Uganda has progressively shifted from care and maintenance to inclusion and self-reliance through development of individual capacities and the promotion of a conducive environment for livelihoods opportunities.

Strategic objective 5: By 2020, refugees are well on their path to access durable solutions; and priority outcome on Energy and Environment; Access to sustainable energy for sufficient and clean cooking in the refugee settlements and in Uganda at large.

Relevant objective/s from national strategic document/s

The programme will contribute to the following key strategies objectives and priorities in Uganda's Third National Development Plan (NDPIII), Uganda's green growth development strategy and Nationally Determined Contribution:

Strategies under NDPIII
Strategy 9: Increase access to stable, reliable and affordable energy
Strategy 11: Improve access and quality of social services
Strategy 15: Increase access to social protection
Strategy 20: Enhance partnerships with non-state actors for effective service delivery

In the NDPIII, Uganda also plans to take a regional and global development agenda to tackle the emerging issues which include:
- Support private sector (particularly local SMEs) to develop capacity to drive the industrialization effort, increase exports, local content and create jobs;
- Take measures to minimize and/or mitigate the risks that the country faces which include climate change and a surge in refugee numbers due to regional conflicts; and
-Improve the quality and relevance of education service delivery and the skills taught in the education institutions

Priority area five of the Uganda's Green Growth Development Strategy focuses on energy for green growth with increased emphasis on renewable energy investment through, enhancing solar power potential.

Uganda's Nationally Determined Contribution (NDC) targets a 22% emission reduction by 2030 and seeks to help the country reduce vulnerability to climate change in priority sectors of forestry and wetlands, energy, transport and agriculture.

SDG targets on which the progress will be accelerated (includes targets from a range of SDGs and development pillars)

Goal 1: End Poverty	
Goal 2: Zero Hunger	
Goal 3: Good Health and Well-Being	3.1
Goal 4: Quality Education	4.1
Goal 5: Gender Equality	
Goal 6: Clean Water and Sanitation	
Goal 7: Affordable and Clean Energy	7.1 7.b
Goal 8: Decent Work and Economic Growth	
Goal 9: Industry, Innovation and Infrastructure	
Goal 10: Reduced Inequalities	
Goal 11: Sustainable Cities and Communities	
Goal 12: Responsible Production and Consumption	
Goal 13: Climate Action	13.2 13.b
Goal 14: Life Below Water	
Goal 15: Life On Land	
Goal 16: Peace, Justice and Strong Institutions	
Goal 17: Partnerships for the Goals	

Self-Assessment

The proposal reflects the integrated nature of the SDGs

	Yes
The proposal is based on an inter-agency approach (two or more UN entities involved), with RC coordinating Joint Programme preparation and implementation	Yes
The proposed results are part of the UNDAF and aligned with national SDG priorities	Yes
The proposed Joint Programme will be led by government and include key national stakeholders	Yes
The proposal is based on country level consultations, as explained in the Concept note, and endorsed by the government (the letter of endorsement)	Yes
The proposal is based on the standard template for Concept Notes, it is complete, and it includes: • **Theory of Change demonstrating contribution to SDG acceleration and transformation to implement the 2030 Agenda and awareness of relevant financial policy efforts at regional or national level,** • **Results-oriented partnerships, including a strategy to engage and partner with IFIs/MDBs,** • **“Quick wins” and substantive outcome-level results, and** • **Initial risk assessment and mitigation measures.**	Yes
The proposal is expected to leverage resources for the SDGs at scale	Yes

Proposal for Joint Programme

1. Summary of the Joint Programme

More than 1.1 billion people in the world, including 600 million people in Sub-Saharan Africa lack access to electricity (UN, 2011). Although Uganda is making progress towards achieving Sustainable Development Goals (SDGs), more still needs to be done to increase energy access to rural populations. The overall national electrification level in Uganda is currently estimated at 26%. The rural electrification level is even lower, at about 7-8%. This impacts on the socio-economic development of the people of UgandaThe goal of Uganda’s National Development Plan and Uganda’s Vision 2040 is “to meet the energy needs of the Ugandan population for social and economic development in an environmentally sustainable manner.”
Uganda has been hosting refugees since 1959 and currently hosts more than 1.3 million refugees. Currently, 97 percent of the refugees in Uganda lack adequate access to safe, clean and sustainable energy and current delivery models are costly and carbon intensive.

UNHCR Uganda spends about US$500,000 annually on pumping water using diesel generators in the refugee settlements, this contributes about 6,776 tCO_2 per year.
Objectives:
The purpose of this JP between UNDP, UNHCR and WHO in Uganda is to accelerate progress on SDG 7 and related SDGs through an integrated suite of activities and innovative financing that leverages the UN's position as a guaranteed energy off-taker to catalyze the domestic uptake of solar leasing and or Power Purchase Agreement (PPA) arrangements with both the UN and stakeholders in the health, education, shelter of refugees and other social sectors.
The target institutions will include the following;
- 30 Refugee settlements in all parts of the Country
- 535 school's country-wide that have no access to electricity
- 40 health centres in the refugee settlements.
The JP includes three components or service lines;
1) An aggregation and coordination support platform that would provide 'one stop' visibility, services and access for entities in Uganda related to solarization via leasing or PPAs
2) A technical assistance budget that would seek to bundle together a pool of UN Solarization projects and provide a limited amount of grants to participating UN-affiliated health, education and refugee settlement facilities customized energy audits for solar PV applications
3) Establishment and capitalization of a specialized financing product that would both address financing constraints faced by the Energy Servicing Companies (ESCOs)/suppliers that are prospective bidders of the procurement packages that UNDP and UNHCR are tendering, as well as support for the

---

2. Thesis and theory of change of the Joint Programme

This innovative JP is built on a theory of change that leverages several complementary initiatives by UN agencies at both the global and country level.

Globally, UNHCR has recently launched an initiative to solarize its large field-based compounds in remote areas in Africa. UNDP is supporting market development of solar ESCOs in several countries (via several donor-funded projects) and is implementing the Climate Aggregation Platform (CAP), a global initiative to promote the scale-up of financial aggregation for small-scale, low-carbon energy assets. In parallel, the Global Plan of Action for Sustainable Energy Solutions in Situations of Displacement (GPA) is taking multiple actions, such as: developing a standard PPA / Leasing Agreement with inputs from the UN and private sector actors and exploring a Guarantee Mechanism to reduce the financial risk associated to the UN's termination clause in its long-term agreements.
Regarding availability of electricity in education, only 26.40 percent of the government secondary schools have electricity, compared with 66.10 percent of private schools. This constrains use of any electrical appliances (e.g. radio, computer), and lighting options are limited to kerosene (paraffin) lamps or candles. On the other hand, 50% of public health centers do not have access to electricity and functionality of installed solar PV systems remains at below 50% due to inadequate operation and maintenance. Installations of photovoltaic systems to provide electricity and lighting have been implemented by a couple of government or NGO initiatives but their numbers are still few largely due to financial barriers.
The thesis for this JP is that these UN activities – and the resulting partnerships they form with participating ESCOs/vendors – can be leveraged in a strategic and catalytic fashion such that this investment can accelerate the expansion of solar leasing schemes and ESCO development in Uganda.

While solarizing UN-affiliated premises is a positive start, by itself this is not likely to ‘move the dial’ at a national level nor accelerate at scale progress on SDG 7. Numerous barriers exist in Uganda that inhibit solar leasing and PPA schemes and none of these barriers are specifically addressed. Barriers are impossible for anyone UN agency to address alone and go well beyond the capacity of the GPA Inter-Agency Task Force or any specific existing project by one agency.

Without this program various UN agency initiatives in this space are likely to remain fragmented and uncoordinated; participating ESCOs/vendors may not be able to provide services at rates or terms that UN and other off-takers can afford; and the seed investment and private sector partnerships that the UN agencies are making in this space will not be leveraged in such a way as to more broadly accelerate progress on SDG 7 beyond the discrete solarization schemes of UN premises. By initially targeting three UN Agencies to tackle these challenges, this JP is premised on scalability to more UN organizations.

---

3. What are the expected results of the proposed Joint Programme?

Outcome 1: and Reduced CO2 emissions (Greening the Blue) through solarization of UNDP and UNHCR facilities in Uganda via a solar leasing scheme or PPA with a participating consortium of (or individual) ESCOs/vendors.

Output 1.1: Leveraged private capital and UN purchasing power through pilot financing products to de-risk participating ESCOs and/or their local sub-contractors to enter solar leasing/PPA schemes.

Output 1.2: National support platform/help desk launched for ‘one stop’ visibility, business facilitation services and access for public and private partners on innovative financial instruments to deepen solar power penetration in Uganda’s energy mix.

Outcome 2: Improved energy and investment planning by Government of Uganda and UN partners, and enhanced access to clean, reliable, and affordable energy services targeting health, education and refugee hosting facilities.

Output 2.1: Improved customer awareness – among UN entities, government, and commercial actors of the technical feasibility of commercial solar PV applications and financing/leasing schemes in Uganda.

Output 2.2: Customized energy audits for solar PV applications (including detailed load and energy usage analysis) and site specification options, leading to solar leasing contracts being signed or applications being purchased by ESCOs.

Output 2.3: A common UN pipeline of investable solarization projects created, capable of providing sustainable and clean energy solutions to schools, health centers, refugee hosting facilities and other community-based infrastructure to achieve SDG objectives.

Output 2.4: Solarization through a leasing scheme or PPA of the 30 refugee settlements, 530 schools, 40 health centers and 3 UN facilities.

Indicators will be developed to prioritize the number of women and children with improved access to electricity, health and education services, and livelihood opportunities.

At a higher level these results will lead to progress on the following SDG 7 indicators which will be tracked at the country level:

- Indicator 7.1.1: Percentage of population with access to electricity
- Indicator 7.1.2: Proportion of population with primary reliance on clean fuels and technology
- Indicator 7.2.1: Renewable energy share in the total final energy consumption

The Joint Programme will accelerate progress across other SDGs especially SDG 1; SDG 3; SDG 4; and SDG 13. We anticipate increased savings to both UN and non-UN premises and operations during and beyond the JP period by introducing solar PV applications, laying the groundwork for additional solar-related interventions that further accelerate public and private sector investments that can positively impact the beneficiaries of our projects and programs.

---

4. Describe the innovative nature of the Joint Programme

This approach is innovative due to the joint and concerted approach between UNDP, UNHCR and WHO in tackling the energy access challenge in the most vulnerable populations in rural Uganda and refugee settlements. The co-benefits in terms of socio-economic development, improved health, education and social wellbeing result contribute to the overall UN Cooperation framework and the country national development priorities.

The proposed facility will enable private capital to flow towards green energy solutions. Without the facility these investments would not be possible. The approach of using the UN's bankability and footprint to leverage additional resources for sustainable energy is new. The approach will also involve a new innovative financing instruments e.g. the PPAs and the leasing contracts which will be deployed in collaboration with the ESCOs and hence will increase private sector investments in the solar PV products and businesses in Uganda.

Additionally:

1) It will be the first initiative of its kind for UNDP, UNHCR and WHO specifically focused on supporting the uptake and acceleration of solar leasing schemes in Uganda. Almost all of the solar PV installations done by UN agencies to date have involved purchases. For many entities in Africa - where financing costs and interest rates can exceed 20% -- it is prohibitively expensive to purchase a solar system upfront. Solar leasing and PPAs allow entities to go solar without the upfront costs of installing a system.

2) Innovation in terms of its use within the UN system, in accordance with UN reform principles: The facility aims to enhance and extend existing collaborative efforts between UN agencies, including joint planning efforts in the areas of health, financing for energy and sustainability efforts, and other areas.

3) Innovation in working with ESCOs not just as vendors/suppliers for UN projects, but as critical development actors central to the medium- and long-term penetration of solar PV applications in the countries targeted. The approach provides targeted and catalytic support to ESCOs to achieve financial sustainability and expand their customer base for the benefit of the entire country - and the achievement of multiple SDGs - that would otherwise happen.

5. Expected added value of the UN and the Joint SDG Fund

The JP is a great example of UN agencies in Uganda 'delivering as one' to tackle the development challenges and to support government efforts regarding achievement of the Sustainable Development Goals.
A key result for underlying premise of this JP is to blend UN demand (i.e., energy that UN agencies directly pay for, including in schools, health centres and refugee settlements and our own offices/compounds) with sites that the UN does not directly pay for, since we have less off-taker risk than a typical developing country local government. The shift for both the premises and the institutions from diesel will result into a reduction of 1.5MtCO2 per year. This will contribute to the UN Uganda's efforts on greening operations and contribute to the national mitigation targets under Uganda's NDC.
The UN value add is essential to expanding/catalyzing what might otherwise be a limited amount of discrete investments by UN agencies in solar leasing schemes into a harmonized program that facilitates not only those specific transactions, but a much broader array of third party solar financing products in the country and the acceleration of a dynamic solar leasing market across the country.

The initial “seed funding” we are seeking from the SDG Fund is central to catalyzing this effort, and will provide dedicated, harmonized support that can unlock additional much-needed funds for financing the aforementioned activities at a magnitude far greater than the agencies are currently able to achieve alone.
Should this funding request not be fulfilled by the SDG Fund, we anticipate seeking funding from other external sources, although this may result in delays in our collective ability to achieve the intended goals and outcomes of this proposal which are ultimately intended to accelerate progress towards achieving the SDGs on multiple fronts as described above.

---

6. Leadership and implementation of the Joint Programme

This Joint Programme will be led by UNDP, UNHCR and WHO country offices through a joint coordination team operating in close collaboration with the UN Country Team and the RCO. The programme will be implemented in collaboration with government institutions and the private sector. A steering committee under the leadership of the Ministry of Energy and Mineral Development; and a technical working group will oversee implementation of the programme. Coordination with the private sector will be established through the Uganda National Renewable Energy Associations, specifically the Uganda Solar Energy Association (USEA) and Private Sector Foundation Uganda (PSFU).

The program will also be implemented in collaboration with other development partners and Civil society organizations such as World Bank, USAID, DFID, WWF and GIZ. Research institutions and academia will be engaged such as the Makerere University Centre for Research in Energy and Energy Conservation (CREEC).

Additional Technical capacities required:

Technical capacity development of the participating institutions including the private sector (ESCOs) and technical leaders in the institutions (schools, refugee settlements, health centres) will be done as a crucial step to the successful implementation of the programme.

Training of the ESCOs in the innovative business models and financing instruments will be done. This will improve their technical capacity to deploy innovative business models that are central to the implementation of the programme. For example, the ESCOs will be trained on the rules and modalities of the leasing contracts or the PPAs; these trainings shall be delivered through the already existing institutions such as the Uganda Solar Energy Association (USEA).

Technical capacity building will be provided to the different financing institutions that will be engaged to provide financial products to the ESCO companies from selected institutions that are providing on-lending for renewable energy businesses.

---

7. Expected period of implementation

The joint programme will be implemented over a period of 4 years as per the following;
Year one
• Completion of detailed design and joint Programme Document

• Completion of Inter-agency MOU between UNDP, UNHCR and WHO
• Creation of multi-agency work plan and governance structure
• Recruitment/procurement of external private sector partners with financial expertise to advise on structuring of the financing product
• Legal/operational development of the financing products
• Nomination of a national steering/ technical working group
• Recruitment/procurement of external private sector partners/ESCOs
• Inception meetings
• Energy audits and load assessments for UN premises and the selected institutions

Year 2

• Launch of the project
• Launch of the specialized financial product
• Structuring of long-term lease agreements and PPAs
• Market outreach to private investors, ESCOs, financial service providers and impact investors.

Year 3

• Installation of solar PV systems in the selected institutions
• Technical training of education, health and refugee facility managers on solar PV system performance, service agreements with international and national ESCOs, and referral services
• South-South Cooperation with participating institutions

Year 4

• Sharing of best practices, lessons learned and sustainability plans
• Monitoring and evaluation of the programme

---

8. Cost, co-funding, and co-financing of Joint Programme

The total implementation cost is estimated at US$5 million, with an initial budget allocation based on US$1,000,000 to UNDP, US$ 500,000 to UNHCR and $500,000 to WHO with the balance of US$3 million earmarked for capitalization of the specialized renewable energy financing product under Component 3 targeting health, education and refugee hosting facilities.

?

This initial allocation is based on the following division of responsibilities:

UNDP: Operation of technical assistance facility; hosting of JP Coordination Team; commissioning of energy audits and load assessments on behalf of UN partners; engagement and outreach with Government of Uganda, private sector, and banking/financial sector; one-stop service shop for Ugandan entities; solarization of its premises; co-management of the joint fund under Component 3; operational costs.

UNHCR: solarization of its premises and support facilities; co-management of the joint fund under Component 3; operational costs.

WHO: solarization of its premises and support facilities; co-management of the joint fund under Component 3; operational costs.

Options for hosting of the capital fund under Component 3 will be assessed during detailed JP design.

Co-financing will be provided through the existing programmes implemented by the UN agencies, for example UNDP is implementing a Paygo solar initiative aimed to increase access to modern energy services to the most vulnerable populations through deploying innovative financing instruments; and the Climate Aggregation Platform aimed at accelerating aggregative financing models for Pay go solar companies to scale.

UNHCR is supporting energy access programmes in the refugee settlements hence there shall be a combination of grants and result based financing instruments.
Co-financing will be leveraged from ongoing initiatives by other UN agencies such UNCDF, WHO UNICEF and FAO; other development partners supporting energy access programmes in schools, health facilities and refugee settlements such as World Bank, USAID, DFID, GIZ among others.

---

9. Risk assessment

The most significant risk that this Joint Programme aims to address is non-payment by users of the provided solar energy. Without the Joint Programme this risk would make the provision of solar energy too high and the schools, health centers and refugee settlements would remain using non-renewable and polluting energy sources. The effort to reduce this risk includes the use of UN operations and programmes as a reliable partner and the technical preparation work of UN technical experts in bundling the projects and the de-risking resources in the financing facility. The sustainability of the project is dependent on the quality of the analysis that goes into the packaging and structuring of the investments.

A further risk for the UN would be making a long-term commitment to a PPA when the UN presence or funding is not guaranteed for that period of time. This risk will be mitigated by the financing facility. The presence of the financing facility is the key difference between previous unsuccessful efforts and why this effort is likely to succeed.

?
The assumption that the Private Sector would be interested in investing in such a partnership has been comprehensively mitigated through discussions with key actors and a competitive RFI.

Partnership with the Private Sector always entails some risks for the UN principles, norms and standards. Critical to the SDGs is the concept of reaching the furthest behind first. If not carefully managed the private sector will lean towards energy provision in the least risky and most profitable areas. The UN is needed to ensure that private sector provision also reaches where it is most needed. This entails careful policy and structuring work. Scarce grant resources must not be used to profit the private sector, but to facilitate private sector investment. This Joint Programme will need to carefully balance that tension.

---

10. Convening the private sector and engaging IFIs/DFIs

The private sector in Uganda will be the ultimate investors in the identified initiatives. The private sector will be engaged through the Private Sector Foundation of Uganda-Uganda Solar Energy Association (USEA) whose mandate is to seek countrywide mobilization of solar providers, coordinating stakeholders, playing an advocacy role and capacity building. The solar association has 60-70 members consisting of engineers running local businesses and solar product distributors; and receives support from several development partners.

Development financing institutions (DFIs) including World Bank, East African Development Bank (EADB), Uganda Development Bank, the African Development Bank and commercial banks that are already providing financing for solar PV programmes such as Centenary Bank, Stanbic Bank will be engaged and participate on the steering and technical working group.

An assessment will be done of the key ESCOs that will be engaged in the leasing or PPA models. Some of the ESCOs would be in position to obtain additional working capital from the different financing Institutions.

UNDP, UNHCR and WHO will carefully monitor and document all activities, including partnering with the private sector. Additionally, as a joint programme the participating agencies will use existing coordination structures established by the UN Resident Coordinators office to periodically review and

11. Leverage and catalytic function

It is expected that the JP will leverage on additional financing from the different energy programmes implemented by the UN agencies. UNDP is supporting the Government of Uganda promoting access to renewable energy services, whilst expanding livelihoods and creating employment opportunities through empowerment. Through this support, UNDP is implementing the PayGo solar initiative – an initiative aimed at accelerating solar uptake through financial inclusion in line with UNDP Strategic Plan.

?

UNHCR is supporting energy access programmes in the refugee settlements hence there shall be a combination of grants and result based financing instruments will be deployed. Co-financing will be leveraged from other development partners supporting energy access programmes in the refugee settlements and other institutions for the example World Bank, USAID, DFID, GIZ among others.

The Programme would leverage existing work by WHO to solarize some its operations.

The programme will leverage on UNCDF CleanStart programme that is supporting development of business ideas related to financing distributed energy services, among energy and financial service providers to keep innovation firmly on their agenda while building out their businesses for future growth.

Private finance will be mobilized from the private sector actors and financing institutions through the solar re-financing facility implemented by UECCC. Financing institutions such as Uganda Development Bank, Centenary bank and Stanbic bank that are support investments in the energy sector will be engaged to replicate the programme have a wider reach in different parts of the Country. The lessons learnt and best practices of the programme will be replicated to other parts of the country that are not target beneficiaries under this programme.

The programme will also leverage ongoing initiatbes by development partners including the European Union and other bilateral and multilateral development partners.

12. Technical support and seed funding

Owing to the innovative nature of this proposal technical support will be required. This JP will need US$ 200,000 for project preparation and full design. This technical support will involve stakeholder consultations and data collection, energy audits, human resource for the preparation of legal documents among others.

This amount will be used to finance a technical expert on renewable energy and finance, in order to conduct relevant energy and feasibility assessments on solarization of supported facilities, review existing policy frameworks and conduct a cost-benefit analysis. The amount will also cover consultations with various stakeholders, including the technical working group, national institutions, private sector and local communities in order to ensure ownership of the program.

Signatures

Government Endorsement