

## **UN Foundation – Sustainable Electrification of Health Facilities**

ToR – Technical Assistance  
(Technical Verification of Solar PV Design & Installation)

---

### **Project Background**

The UN Foundation is supporting a four-year project that seeks to electrify 36 government-managed primary healthcare facilities in Uganda. The goal of the project is to enable improved delivery of health services – particularly but not limited to maternal and child health – in un-electrified or under-electrified healthcare facilities, through improved access to modern, affordable and sustainable electricity services. The project is being commissioned by the UN Foundation with funding support from the UK Department for International Development (DFID).

Through a competitive process, UN Foundation has selected the Solar Electric Light Fund (SELF) to lead the project's in-country activities. SELF has partnered up with All in Trade Ltd in Uganda. SELF's scope of work includes developing a relevant and appropriate system design and completing a limited number of pilot installations prior to rolling-out the remaining systems. Systems will consist of facility-wide solar PV (plus battery) packages, ranging in size from 2 kWp to 6 kWp, providing electricity to all medical buildings, including the staff quarters. This project builds on a detailed needs assessment of 250 primary health facilities across Ghana, Uganda and Malawi, commissioned by the UN Foundation in 2014/2015 and executed by African Solar Design.

### **Position Overview**

The Consultant will provide technical back-stopping to the UN Foundation before and during the pilot installations in Uganda, to ensure SELF and its national partners adhere to national and international minimum quality standards, industry best practices, and other relevant codes and standards. The Consultant will report to UN Foundation's Energy & Climate Department based in Washington D.C.

### **Scope of Work**

- A. Technical Verification of Installation Blueprint:
  - Review the proposed installation blueprint against applicable international and national standards (including minimum quality standards, building standards and codes, etc);
  - Hold interviews with key project stakeholders including the UN Foundation's implementation partners, national bureau of standards, renewable energy agencies, and other relevant stakeholders, where applicable, to inform the above-mentioned review.
  
- B. Technical Assessment of Pilot Installations:

- Evaluate the pilot installations carried out in three (3) selected sites, on the following criteria: adherence to blueprint design, quality of installation, installer friendliness, user friendliness, safety, security, and barriers to long-term technical performance;
- Review and evaluate the training material provided at each pilot installation site.

### Key Deliverables

- The Consultant will deliver a report on the review and verification of SELF’s system design and installation blueprint against international and national standards, prior to the start of the pilot installations (est. early July 2017).
- The Consultant will deliver a report on the assessment of the pilot installations, with clear recommendations if/where appropriate and necessary, within 5 working days following the last site visit.

### Expected Timing / LoE

Deliverable	Level of Effort (est.)	Est. Timing
A. Interviews with key stakeholders, and Report on Installation Blueprint Review	4 working days	Last week of June 2017
B. Site visits and Pilot Installations Assessment Report	10 working days <i>(2 days / site visit + 4 days for report)</i>	Site visits: last week of July 2017; Report due 2 <sup>nd</sup> week of August 2017 <i>(subject to change)</i>

### Requirements

- An advanced degree in engineering, renewable energy applications or similar;
- At least 5 years professional experience evaluating renewable and decentralized energy solutions, in particular solar PV systems;
- Demonstrated experience working with international institutions and national ministries and agencies;
- Demonstrated independence from political entities;
- Strong written and oral communications skills; proficiency in written and oral English required;
- Highly organized, ability to prioritize tasks and handle multiple tasks simultaneously;
- Willingness to communicate with international partners during late afternoon and early evening hours;
- Experience working and/or living in Uganda. Preference will be given to those currently working and living in Uganda. The Consultant will have the legal authorization to carry out the scope of work. Ugandan nationals are encouraged to apply.

## Application

Please send your CV along with a cover letter and budget to Luc Severi, Manager, Energy Access at UN Foundation ([lseveri@unfoundation.org](mailto:lseveri@unfoundation.org)), by putting “Technical Assistance – Uganda” in the subject line.

The budget needs to cover all expenses related to the scope of work, and should be itemized according to the following categories:

- Consultant rate and proposed # of days per activity
- Logistics and travel expenses
- Other

The deadline to submit applications is May 19, 2017 at midnight EDT. Applications received after the deadline will not be considered. Any potential conflict of interest should be mentioned as part of the cover letter.

## Annex

- Project Information Sheet (attached)
- Selected sites:

District	Facility Name	System Size
Kyegegwa	Karwenyi	2 kWp
Kyegegwa	Bugogo	3 kWp
Kyegegwa	Kazinga	5 kWp

###