



## TOR for training module and manual writing

<b>Title</b>	<b>TOR for training module and manual writing</b>
<b>Contract Supervision</b>	Program Manager - Training and Outreach, SELCO Foundation
<b>Timeline</b>	<b>10th October 2022 - 15th December 2022</b>
<b>Expected area of expertise</b>	Content development, Content Writing, Training Module and manual development, Training
<b>Email and website</b>	<a href="mailto:procurement@selcofoundation.org">procurement@selcofoundation.org</a> , <a href="http://www.selcofoundation.org">www.selcofoundation.org</a>
<b>Last date to receive the application</b>	<b>5th October 2022</b>

### About SELO Foundation

Being registered as a non-profit trust in the year 2010, SELCO Foundation interventions are premised on an understanding that - “Uplifting millions out of poverty is possible using decentralized renewable energy (DRE) and energy efficiency as a catalyst”. This linkage between energy and several of the development indicators are now well understood and accepted under the United Nations Sustainable Development Goals (SDG).

SELCO Foundation sees the pressing need to develop a fertile environment to enhance sustainable energy access solutions for the poor. This includes an inclusive design process, an affordable end-user financing and conducive policies, as well as training and nurturing local talent as skilled workers, entrepreneurs and innovators.

### Background

Health Energy Nexus Scale program is SELCO foundation’s initiative to support the health sector in India, that provides sustainable solar energy solutions for the health sector, which has the direct impact on achieving sustainable development goals (SDG3, SDG7 and SDG 13). SELCO Foundation has solar-powered more than 1000 health centers in various geographies especially the tough and hard to reach terrains like North-East India. The organization has a larger plan of expanding the program to other parts of the country with a goal to solar power 25000 health facilities in the next 5 years.

Training is one of the major components of the program, which has wide scope at different levels/stages of program implementation. The program design has scope for interventions with various Government stakeholders at National, State level, District level, Community

level, vendors and the community leaders. Technical and non-technical orientation about the program for all stakeholders is very much essential in the program.

This TOR is to hire an individual /agency to write the training modules/manuals on (1) Health energy assessment, (2) Standard installation practice to install solar PV systems and the (3) Operation and maintenance of solar PV systems.

### **Scope of the work**

Under this work the consultant/agency is expected to develop training modules, facilitators guide and training tools (PPT, Posters, IEC) for the following.

- Background and need of DRE
- DRE and Health - health value chain
- Importance of health assessment for solar design
- Introduction to the Health Energy Assessment
- Why Health Energy Assessment ?
  - Conduct joint assessments and deploy optimised energy solutions at scale, which will help improve quantity as well as quality of health services offered.
  - Develop and promote energy efficient medical technology solutions for wider access and greater economic solutions

### **Module 1: Health - Energy assessment**

1. Eco System analysis - Need assessment
2. Site Survey - Health-Energy assessment
3. Baseline for Health Energy

#### **Section 1: Needs assessment :**

- Goal and Objective of need assessment
- Importance of need assessment

Ecosystem assessment analysis - Critical understanding on the health care access gaps and energy needs that hamper the delivery of healthcare.

#### **The Process :**

- Overview of the geography and understanding on health energy scenario
- Regional level landscape
- Energy and healthcare nexus challenges
- Mapping of existing stakeholders
- Site visit, Meeting with the health staff
- Energy need assessment at different level of health centers - CHC,PHC, SC
- Identifying the Solutions
- Indicative Costing and timeline
- Way forward- Action plan

## **Section 2: Site Survey**

Introduction to Site Survey

Prerequisite of site assessment

Introduction to assessment format

Process of health energy assessment

- Pre -assessment
  - Objectives and uses of Site survey
  - Pre- requisites of assessment
  - Introduction to the assessment format
  
- Assessment
  - Health -side: Type of health facility and services provided
  - Nexus Aspects : Location and terrain, Accessibility and adaptation to climate
  - Energy side: Equipment/load details, availability of infrastructure
  
- The Post Assessment process
  - Data entry and data cleansing

## **Section 3: Baseline - Health Energy Nexus Scale**

- Introduction to health energy baseline survey
- Need and Importance of baseline
- Understanding on the existing scenario and post installation Impact assessment
- Introduction to the format and steps

## **Module 2: Training on Standard installation practices**

The primary objective of the manual on standard installation practice is to instruct/guide the selected vendors to follow the standards across all the installations. The vendors are expected to follow the same standards in all installations as per the bill of material. The major areas to be covered in this module are mentioned below.

- a. Roles and responsibilities of vendor (work ethics)
- b. Technical specifications of Panel, Cable, Battery, PCU, Protective systems (Earthing and lightning arrester).
  - Installation methodology for Panels  
Orientation, inclination, elevation (Positioning, mounting of panels, shadow free area)
  - Cable management  
Protection from environmental factors, bending radius, prevention of series and parallel arcing, ferrule.
  - Battery Management

Proper ventilation in battery rooms, away from direct sunlight and flammable materials, proper cable management, acid absorbent mats, steel racks.

- PCU  
Cable management, maintenance, placement of PCU.
  - Protective systems  
Earthing installation standards, Material specifications for earthing, Use of earth augurs, Use of backfill compound, chambers etc  
Placement, mounting, material specifications, uses.
- c. Solar Waste disposal management - Solar panels and batteries
- d. Electric safety
- e. Maintenance - Scheduled and unscheduled maintenance.

### **Module 3: Operation and maintenance**

- a. Positive perception towards maintenance and ecosystem
- b. Understanding the components of solar PV system- Panel, Battery, PCU, Lighting arrester and earthing.
- c. Basic maintenance and management of panel, batteries, PCU  
Specifications on the capacity of systems installed for each category of health facilities (SC, PHC, CHC, DH)
- d. Troubleshooting- Customer care, vendor linkages, Follow up

### **Methodology**

The agency/consultant will undertake the following:

1. A desk review of existing program documents, reports, program-specific information and any other relevant materials.
2. The agency/consultant will meet the experts within the organization, discuss and understand the subject-specific write-up and the flow of the content.
3. Field visits for better understanding of the process.
4. Two rounds of review and feedback from the review team from SELCO Foundation.

### **Deliverables**

1. Training modules with facilitator guide / booklet - 3 + 3 no's
2. Training deck / ppt - 3 no's
3. Training handouts / posters/ video's /tools - the softer version.

### **Timeline**

<b>SL. No</b>	<b>Activity/sub-activity</b>	<b>Time</b>
1	Submit of detailed work plan	4 days after signing the contract.
2	Progress Report	15 days after signing the contract.
3	Final report + summary ppt	65 days after signing the contract.

**Expertise Required**

Individual/ Agency with an experience of at least 5-10 years, preferably in content development and assignment of writing.

Experience on compilation of qualitative information.

Excellent written and verbal communication skills.

Technical knowledge and familiarity with the solar energy/health centers is desirable.

Agency/individual with at least 5 years of demonstrated experience in writing and media production of program process and documentation.

**Selection Criteria**

The technical proposal will be evaluated based on the following general areas:

1. Agency/ individual, experienced in the field of assignment
2. Understanding of the aims and objectives
3. The qualifications and relevant experience of the personnel.
4. The financial proposal will be evaluated on the basis of expertise, cost, lead-time and proposed payment terms.

For any clarification, please write an email to [procurement@selcofoundation.org](mailto:procurement@selcofoundation.org)