

SEforALL – Supporting Documentation

Project Management Services to Support the Electrification of 5 Hospitals in Sierra Leone with Renewable Energy Solutions

11 | 11 | 2022

Supporting Information for all vendors

1. Examples of early impact indicators (qualitative and quantitative) which the consultant is expected to report on at the end of month 10 of the proposed project?
 - a. Early Impact indicators will be jointly developed with SEforALL's MEL team, under the Log Frame. There will be limitations due to time constraints post-implementation to look at longer-term health service delivery impacts, but some health indicators such as pre/post staff and patient satisfaction numbers (e.g., health-seeking behaviour), or technical indicators such as average power downtime before/after installation can be considered. Depending on the time available, the consultant may also be expected to investigate additional appliances being deployed, or existing appliances being used more because power will be more available than before.
2. The Scope of Work for the consultant includes a critical activity under 'Strategy' ("develop an overview of different long-term sustainability opportunities...") and therefore added as a deliverable:
 - a. The strategy overview of sustainability opportunities is a required deliverable, and these options are expected to be developed and presented before the installation starts, and the indicative timeframe for completing this deliverable is Mid- March
3. Project Manager's expenses incurred during the delivery of the project (travel, accommodation, etc)
 - a. Such expenses are expected to be part of the bid and will be part of the fixed price of the contract.
4. Terms of Payment, further clarification:
 - a. SEforALL follows a deliverable based payment system, breakdown of which will be discussed with the selected consultant
5. EPC Tender
 - a. Attached as Annex I
6. Support EPC will require for obtaining a tax/duty exemption for imports
 - a. The consultant is expected to assist/advice as they are meant to know the terrain and understand how things work locally.
7. Type of Contract
 - a. A fixed-price service agreement will be issued for the final contractor; draft contract attached as Annex II
8. Evaluation Weightage
 - a. The evaluation will be split between 70-30 for technical and financial proposal. Within technical, 40 points will be allotted for operational capacity and 30 points for design and approach

ANNEX I – EPC TENDER



TERMS OF REFERENCE

Issued on: 27 September 2022
for

**Design, Supply, Installation of Sustainable Solar Solutions for 5 Health Facilities in
various locations in Sierra Leone**

Deadline: 23:59 PM CEST time, 5 October 2022.



PART 1- Bidding Procedures

Section I. Instructions to Bidders

General

Scope of Bid

1.1 Sustainable Energy for All (SEforALL) issues these Bidding Documents for the supply of goods and related services as specified in Part 2 – Supply Requirements. The Scope of Work is described further in Part 2 – Supply Requirements.

1.2 SEforALL invites bidders to submit bids for all specified lots.

Eligible Bidders

1.3 In order to be eligible for this project, the bidder must:

- Be a legal entity, eligible to work in Sierra Leone and operating in full compliance and duly incorporated under the laws of Sierra Leone under the Companies Act 2014;
- Have a valid tax clearance certificate;
- Have a valid NASSIT clearance certificate;
- Be directly responsible for the preparation and management of all proposed project activities with any co-bidder(s); not acting as an intermediary;
- Demonstrate familiarity with all with utility regulations in Sierra Leone as specified by the Sierra Leone Electricity Water Regulatory Commission Act 2011;
- Demonstrate familiarity with all with Mini Grid regulations in Sierra Leone as specified by the Sierra Leone Electricity Water Regulatory Commission Act 2019;
- Have prior experience in designing, installing, deploying, and commissioning a solar PV solution at a hospital (50kWp or higher); and
- Have prior experience deploying Li-Ion systems as part of a large solar PV solution (e.g., 30 kWp installed capacity or higher)

1.4 The bidder may be a single organization or work in partnership with other organizations (herein referred to as “co-bidders”). In the case of a partnership, co-bidders can satisfy the eligibility criteria.

1.5 The bidder should indicate whether sub-contracting is envisaged, to whom, and, indicatively, to what extent as a proportion of the total costs of the project. If sub-contracting is foreseen, the bidder should show that the part of the project that will not be subcontracted will still bring substantial added value to the project.

1.6 The bidder shall disclose in its bid whether it has any conflict of interest, actual or perceived, in connection with the work contemplated in the Scope of Work. Any bidder determined by SEforALL to have a conflict of interest may be disqualified.

1.7 Bidders shall provide such evidence of their continued eligibility satisfactory to SEforALL, as SEforALL shall reasonably request.

Contents of Bidding Documents

Sections of Bidding Documents

1.9 The Bidding Documents consist of Parts 1 and 2, which include all of their associated Sections and Annexes,

1.10 SEforALL is not responsible for the completeness of the Bidding Documents and any addenda if they were not obtained directly from SEforALL.

1.11 The bidder is expected to examine all instructions, terms, and specifications in the Bidding Documents. Failure to furnish all information or documentation required by the Bidding Documents may result in the rejection of the bid.

Amendment of Bidding Documents

1.12 At any time prior to the deadline for submission of bids, SEforALL may amend the Bidding Documents by issuing an addendum.

1.13 Any addendum issued shall be part of the Bidding Documents and shall be communicated in writing on SEforALL procurement's webpage.

1.14 To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, SEforALL may, at its sole discretion, extend the deadline for the submission of bids.

Preparation of Bids

Cost of Bidding

1.15 The bidder shall bear all costs associated with the preparation and submission of its bid, and SEforALL shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

Language of Bid

1.16 The bid, as well as all correspondence and documents relating to the bid exchanged by the bidder and SEforALL, shall be written in English.

Contents of Bid

1.17 The bid should include, at a minimum, responses, and information relevant to those topics referenced in Section III.

Currencies of Bid

1.18 The bidder shall quote all prices in U.S. Dollars.

Bid Prices

1.19 Bids shall present prices (i.e., budget) for individual Lots.

Submission of Bids

Submission of Bids

1.20 Bids should be submitted to SEforALL in electronic format (PDF file) via e-mail to procurement@seforall.org. Hand-written submissions are not eligible.

Deadline for Submission of Bids

1.21 The deadline for submissions of bids is 23:59 PM CEST time, 5 October 2022.

1.22 SEforALL may, at its sole discretion, extend the deadline for the submission of bids, in which case all rights and obligations of SEforALL and bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

1.23 Any bid submitted after the deadline will automatically be rejected unless otherwise noted by SEforALL.

Evaluation and Comparison of Bids

Confidentiality

1.24 Any effort by a bidder to influence SEforALL in the examination, evaluation and comparison of the bids or contract award decisions may result in the rejection of its bid.

Clarification of Bids

1.25 To assist in the examination, evaluation, and comparison of the bids, SEforALL may, at its discretion, ask any bidder for a clarification of their bid.

Preliminary Examination of Bids

1.26 SEforALL may examine the bids to confirm that all documents and technical documentation requested have been provided, and to determine the completeness of each document submitted. If any of the requested documents or information is missing, SEforALL may reject the bid.

Evaluation and Comparison of Bids

1.27 SEforALL shall evaluate each bid that has been determined, up to this stage of the evaluation, to be complete.

1.28 To evaluate a bid, SEforALL will follow the guidelines and criteria set forth in Section II.

1.29 SEforALL reserves the right to evaluate bids with the possible assistance of external assessors.

SEforALL's Right to Accept Any Bid, and to Reject Any or All Bids

1.30 SEforALL reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to bidders.

Award of Contract

Award Criteria

1.31 SEforALL shall award a contract to the bidder whose offer has been determined to have the highest score as outlined in Section II, provided further that the bidder passes SEforALL Due Diligence Evaluation (see clause 1.33 and 1.34 for more information). SEforALL will award one contract – comprising all lots – to a single bidder.

SEforALL's Right to Vary Quantities at Time of Award

1.32 At the time the contract is awarded, SEforALL reserves the right to change the Scope of Work originally specified in Section V.

Due Diligence

1.33 Prior to awarding a contract, the bidder will be vetted in compliance with SEforALL's Due Diligence Evaluation. A contract will only be awarded to bidders who pass the evaluation.

1.34 The evaluation will assess the bidder against the following indicative issues:

- ✓ Governance and Internal Control
 - Governance
 - Fraud, bribery, and corruption
 - Internal controls
 - Risk management
 - Ethics
 - Safeguarding
- ✓ Ability to Deliver
 - Past performance
 - Staff capacity and capability
 - Programme management
- ✓ Financial Stability
 - Financial viability
 - Financial management
 - Strength of audit
 - Value for money
 - Policies, procedures, and systems
- ✓ Technical Expertise
- ✓ Downstream Activity
 - Due diligence
 - Management framework/contracts
 - Monitoring and management
 - Fraud, bribery and corruption

Contract

1.35 Upon passing the SEforALL Due Diligence Evaluation, SEforALL will issue the successful bidder a contract for the Scope of Work relevant to its corresponding lot(s).

1.36 The contract will be a fixed price contract denominated in U.S. Dollars.

Section II. Evaluation and Qualification Criteria

SEforALL's evaluation of a bid may take into account the following criteria and their associated weighting.

Completion of bidding documents; compliance with eligibility criteria: Pass/Fail

Operational Capacity: 40 points

- ✓ Does the bidder and, if applicable, co-bidder(s) have sufficient technical expertise?

The criterion above may be assessed based on the following indicative questions:

- How much technical expertise does the bidder/co-bidders(s) have:
 - in designing and deploying decentralized renewable energy and/or hybrid power systems in resource constrained settings (health facilities);
 - in deploying Li-Ion systems as part of larger solar PV solution;
 - in setting up and managing a remote monitoring system to manage the technical performance of renewable energy solutions;
 - in training stakeholders to use and maintain decentralized renewable energy and/or hybrid power systems;
- ✓ How much experience and presence does the bidder and, if applicable, co-bidder(s) have in Sierra Leone?
- ✓ Does the bidder and, if applicable, co-bidder(s) have sufficient project management capabilities and experience?

The criterion above may be assessed based on the following indicative questions:

- Does the bidder/co-bidder(s) have sufficient experience in project management:
 - in the energy access sector;
 - in the region/country in which the project will take place; and
 - in complex deployment of projects activities with large international and local procurement activities.
- Has the organizational structure for the bid been described and is it adequate to implement the proposed project (in terms of technical, management, financial capacity)?
- Does the bidder/co-bidder(s) have adequate staff to handle the project (number, qualifications, expertise of employees, etc.)?
- Does the bidder/co-bidder(s) have adequate quality assurance procedures?
- Does the bidder/co-bidder(s) have suitable risk mitigation mechanisms?
- Does the bidder/co-bidder(s) have the capacity to quickly procure the equipment needed to deploy systems?
- Does the bidder/co-bidder(s) have the capacity and experience to deploy the solutions within the expected project timeline adequately?
- ✓ Does the bidder have stable and sufficient sources of finance that extend beyond the funds available through this project?

Design and Approach: 20 points

- ✓ How coherent is the overall design of the bid?
- ✓ Are all system components and the installation modus operandi well defined and justified?
- ✓ Are the activities proposed appropriate, practical, and consistent with the objectives and expected results?
- ✓ Is the action plan clear and feasible? Is implementation carefully planned and is there a clear flow and sequence to activities? Are the main elements of the implementation plan included?

- ✓ Performance Criteria - How fast can the bidder complete the Scope of Work; note, **the Scope of Work should be completed by no later than June 2023.** Bidders are encouraged to present accelerated timelines.

Technical quality: 15 points

- ✓ Is the quality of the key energy system components adequate and in line with industry standards?
- ✓ Are all key components clearly identified with standards and technical specifications? (see Annex A for an overview of minimum technical standards)

Budget and Cost-effectiveness: 25 points

- ✓ Is the bid cost-effective and efficient?

Section III. Requested Information

Bids should include, at a minimum, responses, and information relevant to the below-mentioned topics. While bidders are not required to fill out any set forms, SEforALL requests that bids follow the structure/outline below, to the extent possible. Note, in this section, the term “bidder” shall mean to include all co-bidders (if applicable).

1. Background Information

1.1 Bidder Information

- Bidder's legal name
- Bidder's country of registration
- Bidder's year of registration
- Bidder's legal address in country of registration
- Bidder's contact information
- Description of bidder, including types of services offered
- Number of full-time employees
- Annual turnover for the past 3 years (expressed in U.S. Dollars)
- Describe how the bidder plans to legally operate within the host country

1.2 Partner Information

- If applicable, explain any partnerships with co-bidders or other organizations relevant to the Scope of Work. Special attention should be given to providing a clear picture of roles, responsibilities, reporting lines and accountability, and reporting any conflict of interest of the partner
- If applicable, explain whether any work would be subcontracted, to whom, how much percentage of the work, the rationale for such, and the roles of the proposed subcontractors. Special attention should be given to providing a clear picture of roles, responsibilities, reporting lines and accountability, and reporting any conflict of interest of subcontractor(s)

2. Expertise and Capacity

2.1 Organizational Capacity

- Outline the bidder's general organizational capacities which are likely to affect its performance, such as strength of project management support, project management controls, networks, and financial stability.

2.2 Project Experience

- Provide a detailed description of any specific experience the bidder has performing similar work. Project experience should include:
 - The project name
 - Year and duration of project
 - Working with national and local government
 - Project size (total cost and project capacity in kW), including a dedicated section on past experience with hospital electrification and past experience with deploying Li-Ion storage systems as part of large off-grid solar PV solutions.
 - Location
 - Name of project manager
 - Name of client contact, email address, telephone number
 - Brief description of the project, including role of bidder in project

2.3 Financial Capacity

- Provide financial statements certified by a reputable accounting firm as accurately presenting the financial position of the bidder in accordance with generally accepted accounting principles.

2.4 Resource Plan, Key Personnel

- Describe the availability of resources in terms of personnel and facilities required for the Scope of Work. Describe the structure of the proposed team/personnel, length of time with firm, key

projects, work history and the work tasks (including supervisory) which would be assigned to each. An organigram illustrating the key personnel, their office location and, reporting lines should be submitted.

- Submit CVs for key project personnel (only profiles that will be directly working on this project).
- Clearly identify the Project Manager

3. Proposed Workplan and Approach

- Explain the bidder's understanding of SEforALL's needs and objectives and expected results.
- Identify any gaps/overlaps/concerns with the Scope of Work and how the bidder proposes to address them.
- Provide a description of the bidder's approach and methodology for how the bidder would carry out the Scope of Work.
- Provide a detailed description of how the management of the requested Scope of Work would be implemented, including an:
 - Action Plan
 - Gantt Chart (Identify key project milestones for the procurement cycle and for each site)
 - Deliverables
 - Monitoring and Reporting.
- Describe any potential performance risks associated with carrying out the Scope of Work and how the bidder would mitigate them. This should include assumptions and preconditions, as well as likelihood and impact levels.
- Provide a logical framework.

4. Budget

- Provide a detailed breakdown of all projected expenses and any associated assumptions. Expenses should be broken down:
 - By the month they are expected to be incurred;
 - By the type of expense;
 - Human Resources
 - Expense (e.g., travel)
 - Equipment
 - Sub-contracting
 - By the activity/action they are associated with;
 - Into their individual components (the number of units for each component and the unit rate must be specified - \$/unit)
- Include the cost of all permits and licenses;
- Include the cost of clearing (assuming no duties and taxes will be paid); and
- Provide a value for money analysis including expense figures per project input and output (e.g. US\$/kW installed). This will allow SEforALL to evaluate the cost effectiveness of the bid.

5. Disclosures

- Bidders should disclose any potential conflicts of interest, actual or perceived, in connection with the work contemplated in the Scope of Work.
- Bidders should disclose whether any team member has been a party to any lawsuit involving the performance of any equipment it has installed. Provide a summary of the issues and lawsuit status.

SEforALL may conduct negotiations following the evaluation of Proposals and before the final contract award. Negotiations may address any aspect of the contract so long as they do not change the specified business function and performance requirements. SEforALL may negotiate first with the Bidder that has the Most Advantageous Proposal. If the negotiations are unsuccessful, SEforALL may negotiate with the Bidder that has the next best Most Advantageous Proposal, and so on down the list until a successful negotiated outcome is achieved.



PART 2 - Supply Requirements

Section IV. Project Information

1. Background and Rationale

1.1 Sustainable Energy for All

Sustainable Energy for All (SEforALL) is an International Non-Governmental Organization operating a world-wide multi-stakeholder platform focused on the delivery of Sustainable Development Goal 7 (SDG7). Launched as a UN initiative in 2011 by the Secretary-General of the United Nations, Ban Ki-Moon, SEforALL is widely acknowledged for its achievement in raising global awareness of the world's sustainable energy challenges, ensuring they were included in the UN's Sustainable Development Goals. Now an independent international organization, SEforALL is directed by its CEO as it works toward the achievement of SDG7. The organization also supports the work of the CEO in her additional roles of Special Representative of the United Nations Secretary-General for Sustainable Energy for All and as co-chair of UN-Energy. These roles include advising the UN Secretary-General and his staff on issues relating to sustainable energy and the implementation of SDG7 and supporting the coordination of sustainable energy issues in the United Nations system.

The ambitions of SDG7 on ensuring universal access to affordable, reliable, and modern energy services by 2030 are extraordinary. Aiming to achieve them in the context of the Paris agreements involves transformation at a scale never undertaken by humanity before. Swift action needs to be taken by leaders in governments, companies, institutions, financiers, development banks, unions and communities, entrepreneurs, and civil society. As a global team, SEforALL crafts interventions that support these leaders in accelerating the delivery of actions. All interventions comprise one or more of SEforALL's competencies: (i) to marshal the evidence, (ii) to benchmark progress towards SEforALL objectives, (iii) to amplify the voices of the energy poor; (iv) to tell stories of success, and (v) to connect stakeholders to each other and to solutions. All interventions systematically draw on strategic insight, build on compelling communications, and are delivered through and include action-oriented partnerships.

1.2 Powering Healthcare

As one of SEforALL's programs, Powering Healthcare (PHC) acts as an 'engine room', providing the impetus and solutions needed by governments and their partners to increase investment in and the sustainability of health facility electrification efforts. PHC does this by:

- Building an investment case for powering healthcare to ensure access to adequate and reliable power in healthcare facilities is prioritized as a necessary input to achieving public health and energy/climate goals.
- Creating the core 'building blocks' to deliver distributed clean energy solutions to healthcare facilities at scale and in a sustainable manner.

To achieve these objectives, SEforALL has developed programme of work that works to break down the sector-wide, systemic barriers that impede wide-scale deployment of quality energy solutions. Our work is organized around five tracks:

- Bridging the Data Gap: Building the evidence base for powering healthcare facilities
- Driving Innovation: Developing new ideas and solutions that address critical barriers to the wide-scale and sustainable adoption of distributed clean energy solutions in health facilities
- Mobilizing Finance: Promoting innovative financing mechanisms and tracking financing flows to health facility electrification
- Providing Country-level Technical Assistance: Assisting countries in developing and implementing health facility electrification strategies and plans
- Global Advocacy and Leadership: Raising ambition and strengthening cooperation and knowledge exchange among health and energy actors

1.3 SEforALL's Powering Healthcare Work in Sierra Leone

As part of its wider Powering Healthcare programme, SEforALL is undertaking a market assessment and developing a strategic roadmap for the electrification of social infrastructure, focusing on secondary education, rural health facilities, as well as hospitals in Sierra Leone. As part of the project, SEforALL has commissioned detailed energy needs assessments in several hospitals and health facilities in Sierra Leone, with support from UK FCDO and the Global Energy Alliance for People and Planet (GEAPP).

2. Project Description and Objectives

2.1 Objectives

Building on the results of SEforALL's Market Needs Assessment Study and with funding from UK FCDO, SEforALL is now supporting a new health electrification Project that will electrify six (6) health care facilities – and their staff quarters – in Sierra Leone over the next 9 months. The project is estimated to deploy approximately 530kWp of installed capacity of solar PV to the health sector. The goal of the project is to enable improved delivery of health services – particularly but not limited to maternal and child health services - in un-electrified or under-electrified health care facilities, through improved access to modern, affordable and sustainable electricity services. The electrification of these facilities will be using decentralized solar photovoltaic (PV) systems with batteries and should adhere to the following principles:

- ✓ Integrated and holistic: Systems should be designed using a facility-wide and needs-driven approach.
- ✓ State-of-the-art: Where appropriate, systems shall utilize state-of-the-art technologies (e.g. remote monitoring capabilities, zero-maintenance components) to improve functionality and sustainability.
- ✓ Gender sensitive: Gender considerations should be taken into account in the final system design and installation. Particular attention should be paid to maternal and child health considerations.

2.2 Project Duration

The project officially began in September 2022 and SEforALL expects that all activities included in the Scope of Work will take place between November 2022 and June 2023.

2.3 Project Area and Identification of Lots

The project is to take place in Sierra Leone, with 5 hospitals covered under the scope of work. 2 hospitals are co-located and are treated as one lot. Each lot represents a distributed renewable energy (DRE) system. The name, type and location of each facility is included in Table 1.

Section V. Scope of Work

This tender is for the design, supply, installation of solar photovoltaic (PV) systems with batteries, to specification and in proper working order. Throughout the Scope of Work, the selected bidder shall ensure its activities are closely coordinated with and, if necessary, approved by relevant government authorities.

1. Supply and Installation of Solar PV Systems

1.1 Design Systems

System Descriptions

This project shall focus on the use of solar PV “micro-grid” configurations, which will operate autonomously, and where an electrical distribution network will connect all or most buildings and loads on the health facility site, powered by a centralized solar PV energy unit. Preliminary system designs for the system configurations are provided below. These preliminary designs are based on the recommendations of the SEforALL’s Needs Assessment Study. See Annex B for a summary of the methodology used. The successful bidder will have access to the detailed energy needs assessments, and also have the opportunity to visit the locations to carry out their own due diligence.

Table 1

On the basis of recent energy audits carried out at all hospitals covered under this RFP, the following system sizes are recommended:

Lot	Facility	Location	PV size	Battery capacity	Inverter size	Additional info & requirements
Lot SL01 Lot SL02	Ola During Children's Hospital & Princess Christian Maternity Hospital	Freetown, Western Area	300 kWp	549 kWh	325 kW	On-grid (unreliable); existing gensets operational as back-up; partial rewiring required; energy efficiency measures (e.g., installing LED lights). One system expected to service both facilities. For details see Annex B
Lot SL03	Masanga Hospital	Tonkolili District, Northern Province	100 kWp	275 kWh	63 kW	Energy efficiency measures
Lot SL04	Kambia Govt Hospital	Kambia, Kambia District, Northern Province	60 kWp	179 kWh	59 kW	Complete rewiring required; energy efficiency measures
Lot SL05	Bonthe Govt Hospital	Bonthe District, Southern Province	70 kWp	204 kWh	30 kW	Complete rewiring required; energy efficiency measures

System Components

Size and technical changes (e.g., battery bank voltage or inverter capacity) can be proposed but need to be justified. Bidders are required to select Li-Ion storage systems. Energy systems are expected to be ‘grid-ready’ and compatible with occasional generator use. System component choices (e.g., light bulb type) need to be justified and explained, taking into account the environmental and physical surroundings in which they will be installed, operated, and maintained. The selected bidder is encouraged to standardize components across the different system sizes as much as possible and to ensure that maintenance requirements for the individual components and the system as a whole are kept to a minimum.

The systems shall include all major energy system components, as well as all the balance of system materials required for a high-quality, safe and secure energy system. Systems should meet specifications laid out in Annex A. Each system shall also include:

- ✓ Wiring/Cabling: While most health facilities have some form of wiring, in some cases this wiring is not sufficient or of inferior quality, and may not cover all the buildings on the site (e.g. toilet blocks, staff quarters). For the purpose of this bid, all cabling for connecting the systems to all buildings needs to be provided, as well as the wiring inside the buildings for the purpose of light and sockets. For an indicative number of buildings and layout of a health facility, please refer to Annex B.
- ✓ Light bulbs: The preliminary specifications mentioned in the tables in this section include lighting requirements for the purpose of general indoor lighting (e.g. dispensary, check-in area, staff quarters), exterior security lighting (around the facility and around the micro-grid), and high-duty task lighting (in the operating theatre or delivery room- where applicable). It is important that the bidder justifies the selection of the chosen types of light bulbs, making mention of the power consumption, expected lifetime, and the luminous flux expressed in lumens for the selected components.
- ✓ Lightning protection: Due to the size of the installation, and the climatic conditions in the country of implementation, the bidder shall put appropriate measures in place to protect the system and its components from lightning.
- ✓ Remote monitoring system: The selected bidder shall ensure that a remote monitoring system is set up to monitor the technical performance of each system. The remote monitoring equipment, which may include smart metering devices at the facility level, and/or a "dashboard" for centralized performance monitoring, is thus an important component to the overall system.
- ✓ The selected bidder will not be required to supply medical or other end-use equipment.

Spare Parts

The selected bidder is expected to include in the main procurement order a minimum quantity of spare parts, according to the following suggested minimum metrics:

- ✓ Solar PV panels: 5% of total number of PV panels selected per different type of PV panel selected.
- ✓ Batteries: 2% of total number of batteries selected per different type of battery selected.
- ✓ Charge controller: 2 charge controllers per different type of charge controller selected.
- ✓ Inverter: 2 inverters per different type of inverter selected.
- ✓ Light bulbs: 5% per different type of selected light bulb.

Installation Plan

The selected bidder shall have a modus operandi for the installations, particularly regarding the safety and security of the components in settings where there is a lot of human traffic, high humidity, rain, occurrence of thunderstorms and lightning, opportunity for theft and vandalism and other hazards which may hamper the proper functioning of the systems. As such, the selected bidder should have an installation plan that ensures the security and safety of all components (e.g., equipment enclosures and circuit breakers) and the systems as a whole (e.g. fencing and protection from natural elements).

Technical Specifications and Standards

The selected bidder shall prepare the final technical specifications and standards for the solar PV systems. The selected bidder's technical specifications should be guided by the preliminary designs recommended in SEforALL's Needs Assessment Study and as indicated in Annex A. The technical specifications and standards should include:

- ✓ System sizing;
- ✓ System technical specifications;
- ✓ Indicative number of light points per selected facility, and types of required light in and around the site;
- ✓ Code of practice for installation; and
- ✓ Component technical specifications and standards.

- ✓ Where appropriate and/or required, the selected bidder shall adhere to relevant international, regional and/or national codes and standards when designing the systems.
- ✓ Location of Sites and Overall Quantities

The selected bidder shall ensure that the disruption to existing health services is limited to a minimum during the installation process. The bidder should assume that electricity supply is not available at all times at the facilities.

The selected bidder shall be responsible for the storage and security of the material on site before and during the installation.

1.2 Procure, Store and Transport Systems

The selected bidder shall procure, store and transport all equipment necessary to install the solar PV systems.

For the purpose of this project, the FCDO will ensure that all equipment procured will be tax and duty exempt, however the bidder should assume costs associated with the clearing and the exemption process. The successful bidder will be expected to liaise closely with SEforALL or its designee and FCDO during the procurement process.

The selected bidder shall set up a procurement committee, which shall include a representative from SEforALL and FCDO, to provide a final evaluation and decision on the quality and quantity of the system components.

1.3 Install Systems

Installations

SEforALL, and/or its designees, will review the quality and functionality of components, individually and as a system, and the quality of installation against the design specifications, and will revise, as needed, based on industry standards.

Commissioning, Inspection and Acceptance

The selected bidder shall satisfy itself that all installations are completed in accordance with the technical specifications, before requesting an inspection by SEforALL and/or its designees.

System Handover

The selected bidder shall formally hand over the solar PV systems to a designated beneficiary upon acceptance of the systems by SEforALL and/or its designees.

Disposal/Re-use of Legacy Systems

Some of the target facilities currently have one or multiple non-functioning or partially functioning (solar PV) energy systems installed on or at the facility site. These systems typically only address a partial energy need, are often under-sized, and due to insufficient O&M may no longer be fully functional.

As necessary, the selected bidder shall ensure the safe removal and disposal (or re-use) of any existing, non-functional or unnecessary PV systems or components at the selected facilities that may interfere with the installation and operation of the new systems. This includes hazardous components as well as existing insufficient or inferior wiring in and around the building, if it is considered a risk to the performance of the new system. The selected bidder shall make reasonable efforts to avoid damaging the health facilities when removing the legacy systems/components.

2. Support Services

2.1 Documentation and Training

Initial User Training

Accompanying the installation of the PV solar system, the selected bidder shall provide end user-training. Identification of key personnel for training shall be done in collaboration with relevant host country government authorities. Training requirements should be directed at the users and the administrators of the health facilities. These include the following specific components:

- Basic use of solar PV systems – operating principles, basic operating modes and practices, safety issues, energy and power limitations of solar PV systems.
- The uses and limitations of the system installed.
- Basic fault diagnosis and key indicators of system or component failure.
- User-maintenance responsibilities, administration of maintenance visits and completion of user-sections of maintenance log sheets
- Safety procedures and precautions.
- Contact information for queries and break-down maintenance service.

- User training in the system operation shall be provided to the users at each system installed.
- User Manual

The selected bidder shall provide a user manual with each system to be stored at the site. The user manual shall be specific to each system type.

- The user manual documentation should be simple and easy to understand. Use of sketches or graphics should be used to make the manual easier to use. The documentation is to include the following:
 - A block diagram showing the main components, the main system, and how the different buildings are connected to the system.
 - A description of how the system works: battery charging by the array, functions, battery low voltage protection, and battery overcharge protection. The relationship between energy available on a daily basis and sunlight conditions should be clearly and simply explained.
 - Description of all interactive hardware.
 - Procedures for proper system operation, including lists of load limitation. These procedures should include suggested operation, including load conservation, during periods of inclement weather, and /or a low voltage disconnect event. The procedures for checking that the photovoltaic array is not shaded and how to prevent shading must be explained.
 - A user trouble shooting guide.
 - Emergency shut down procedures and recommendations for extended periods of system non-use.
 - Logbook for registering the technical performance of the energy system.
 - Clear contact information for maintenance and access to spare parts.

2.2 Warranties

Component Warranty

The selected bidder shall ensure that all major system components used in the energy system have the following minimum warranty periods:

- Solar PV modules: 20 years (performance not less than 80% of name plate capacity)
- Charge controller: 5 years
- Lithium-Ion Batteries: 10 years to 80% of design capacity
- Inverter: 5 years
- Light bulbs: 3 years (based on a daily usage of 8 hours per 24-hour cycle)
- Specific manufacturer warranties shall be provided signed by an authorized official of the manufacturer.
- Manufacturers' warranties must be transferable to the SEforALL or its nominees.
- The selected bidder shall be responsible for the proper disposal/recycling of all replaced components (especially batteries).

Installation Warranty

The selected bidder shall provide a minimum of a twelve (12) month warranty on the quality of work of the installation from the date of acceptance of each system. This shall cover the normal wear and tear of the materials used during the installation, as well as the installation itself (e.g. repair loose wires, or broken sockets and light switches).

Should any faults arise, this warranty will provide for the necessary maintenance or component replacement in order for full functionality within a reasonable amount of time.

The selected bidder shall be responsible for the proper disposal/recycling of all replaced components, in particular those components containing hazardous elements.

3. Monitoring and Evaluation (M&E)

3.1 Project-level Reporting

Regular Project Communications

The selected bidder shall make itself available for regular project update calls/meetings with the SEforALL and its nominees.

Bi-Weekly Reports

The selected bidder shall provide the SEforALL with bi-Weekly status reports at the activity-level, indicating specific milestones (start/end of specific activity), an M&E overview, and changes in the level of risks which may impact the delivery of the scope of activities.

The selected bidder shall keep an inventory for any physical asset procured under the Scope of Work, either by the bidder or by any subcontractor, with a value of US\$1,500 or over. This asset inventory, stating the specifications and whereabouts of the procured goods, should be added as an annex to the quarterly reports.

Monthly Reports

The selected bidder shall provide the SEforALL with monthly status update reports at the activity level, providing a detailed overview of the progress made at that point, as well as forecasting the activities for the following reporting period. Where a monthly report coincides with a bi-weekly report, the latter requirement will be waived only with regards to the narrative section. Other requirements, which include the M&E overview, the reporting of the Asset Inventory, will remain in place as part of the monthly report.

Final Report

The selected bidder shall submit a final report to the SEforALL, at the activity level. The final report shall include sections on the specific activities, the final asset inventory, and a detailed overview of the technical system performance. The final report shall also include a detailed section on the lessons learnt throughout the delivery of the Scope of Work.

3.2 System Performance Reporting

Using remote monitoring capabilities, the selected bidder shall monitor the technical performance and energy management of all systems. At a minimum, the selected bidder shall monitor indicators including daily energy use, battery state of charge at a specific point in the morning after night operating hours, number of system failures and response time to system failure. Indicators shall be monitored at the facility-level as well as aggregated per district and for all facilities.

The selected bidder shall provide SEforALL with a quarterly overview of the above-mentioned indicators until the end of the contract, starting after the completion of the first installation. Prior to or upon the completion of the contract, the management of the remote monitoring system shall be transferred to a designated beneficiary.

The selected bidder will not be responsible for monitoring health indicators. However, the selected bidder shall ensure access to the data management system as well as specific indicators tracked upon request by SEforALL, SEforALL's partners and the Ministry of Health.

Annex A - Additional Technical Specification

The Bidder must meet the following minimum criteria, herein listed for that item:

- ✓ PV Modules must meet all IEC standards for testing and ISO9001 or recent for manufacturing. All modules provided are to be of identical make and model and must be from a recognized Tier 1 module manufacturer.
- ✓ Central Inverter/String Inverter: The number and rated capacity of the inverters must be such that Total PV Array DC capacity < 1.2 x Total Inverter AC output capacity. The sizing of the inverter shall determine the operable requirement on the Power Factor as per Sierra Leone codes.
- ✓ The installation of the inverter is to be in accordance with IEC standards and IEC Power Conversion system (PCS). The PCS shall be of high-quality product, preferably produced by a manufacturer certified with ISO 9001 or equivalent.
- ✓ The PCS shall comply with IEC62109 or UL 1741: Standard for Inverters, Converters, Controllers, and Interconnection System Equipment for Use with Distributed Energy Resources.
- ✓ Battery/Energy Storage: Energy Storage System preferably produced by a manufacturer certified with ISO 9001 or equivalent with the following key indexes. Only Lithium-Ion batteries are eligible.
- ✓ Round-Trip Efficiency: Round-trip efficiency takes into consideration energy losses from power conversions and parasitic loads (e.g., electronics, heating and cooling, and pumping) associated with operating the energy storage system.
- ✓ Response Time: The need for fast response times is expected to be more important for variability-damping than for load shifting applications, and hence more relevant to utility-scale photovoltaic generation.
- ✓ Lifetime and Cycling: As is the case for efficiency, the cost-effectiveness of energy storage is directly related to its operational lifetime. The lifetime of an ESS depends on many factors, including charge and discharge cycling, depth of discharge, and environmental conditions.
- ✓ For any application, maximizing the depth of discharge minimizes the required energy storage capacity. Failure to comply with this minimum requirement will result in rejection of the bid.

Annex B - Needs assessment result – Please note that the Needs Assessment Result has not been added in this supporting document

ANNEX II – DRAFT SEFORALL CONTRACT

Sustainable Energy for All Contract for Services

23 | 11 | 2021

This Contract is made on *** between Sustainable Energy for All (hereinafter referred to as “SEforALL”), and***, a company duly constituted under the laws of *** and having its registered address at *** (hereinafter referred to as "Contractor"). In consideration of the promises contained in this Contract and subject to the SEforALL Conditions of Services hereby incorporated by reference as Annex I, the Parties agree as follows:

1. Scope

1.1 The Contractor shall perform services (hereinafter referred to as “Services”) as specified in the Terms of Reference (“TOR”) attached as Annex II, and the Proposal attached as Annex III, and hereby incorporated by reference. Unless otherwise provided for in this Contract, the Contractor shall furnish all the technical and administrative support, human resources, materials, and equipment necessary to complete the Services.

2. Period

2.1 The agreement will begin on *** and continue through the completion of services, and in any event no later than ***. If agreed in writing by the Parties, this Agreement may be modified, and/or other projects added.

3. Fixed cost

3.1 The fixed amount of \$*** USD will be paid within thirty (30) days following completion of the key deliverables, as set out in the TOR in Annex II, and based on the payment schedule below.

Deliverables	Timeline	Payment terms	
		xx%	\$
		xx%	\$
		xx%	\$
		xx%	\$
		xx%	\$

3.2 The Contractor shall not do any work, provide any equipment, materials, and supplies, or perform any other services which may result in any costs in excess of the amount mentioned above or of any of the amounts specified in the breakdown of costs for each cost category without the prior written agreement of SEforALL. The price of this contract is not subject to any adjustment or revision due to currency fluctuations, or the actual costs incurred by the Contractor throughout the completion of the contract.

4. Invoices

4.1 Invoices are to be submitted by the Contractor as deliverables are completed in accordance with table in section 3.1 above. Invoices are to be sent to the SEforALL email address procurement@seforall.org

4.2 SEforALL shall transfer payments to the bank account of the Contractor within thirty (30) days of receipt and acceptance by SEforALL of the original invoice for the appropriate amount together with whatever supporting documentation may be required.

4.3 Payments to the Contractor will be made to the bank account:

5. Performance of the services

5.1 The contractor shall perform and complete the Services described in Annex II with due diligence and efficiency and in accordance with the Contract.

5.2 The Contractor shall provide the services of the following key personnel:

Name/Consultant	Position

5.3 Any changes in the above key personnel shall require prior written approval of ****, SEforALL or equivalent.

5.4 The Contractor shall also provide all technical and administrative support needed to ensure the timely and satisfactory performance of the Services.

6. Notifications

6.1 For the purpose of notifications under the Contract, the addresses of SEforALL and the Contractor are as follows:

For SEforALL:

Zakra Chachar
Donau-City Strasse 6
Andromeda Tower 15th floor
1220, Vienna, Austria
procurement@seforall.org
+43-676-846 727243



For the Contractor:

Andromeda Tower 15th floor
Donau City Strasse 6
1220 Vienna, Austria
SEforALL.org

7. Superseding effect

7.1 This Contract supersedes all prior oral agreements or written contract, if any, between the Contractor and SEforALL, constituting the entire agreement with respect to the Service.

In witness of these terms and conditions, the Parties execute this contract.

For and on behalf of SEforALL:

For and on behalf of the Contractor:

Signature _____

Signature _____

Name Damilola Ogunbiyi

Name

Title CEO and Special Representative
of the UN Secretary-General for Sustainable
Energy for All and Co-Chair of UN-Energy

Title

Date

Date

Annex I: SEforALL conditions of services (Appendix to the Contract)

1. Contractor's status

In all matters relating to this Contract, the Contractor shall be acting as an independent contractor. Neither the Contractor nor its employees are the employees of SEforALL. The Contractor assumes all liabilities or obligations imposed by any law or regulation with respect to such employees. The Contractor shall not have the authority to create any obligation on behalf of SEforALL and shall not represent itself as an agent, employee or in any other capacity of SEforALL. The Contractor shall be responsible for the professional and technical competence of its employees, who shall be expected to respect local customs and conform to a high standard of moral and ethical conduct.

2. Damage for Persons and Property

The Contractor shall indemnify and hold harmless SEforALL, its officers, agents, employees and servants from and against all suits, claims, demands, proceedings, and liability of any nature or kind, including costs and expenses, for injuries or damages to any person or any property whatsoever which may arise out of or in consequence of acts or omissions of the Contractor or its agents, employees, servants or subcontractors in the execution of this Contract.

3. Intellectual Property Rights

All intellectual property and other proprietary rights, including but not limited to patents, copyrights and trademarks, in all countries, with regard to maps, drawings, photographs, mosaics, plans, manuscripts, records, reports, recommendations, estimates, documents and other materials, except pre-existing materials, publicly or privately owned, collected or prepared as a consequence of or in the course of the performance of this Contract, shall become the sole property of SEforAll. The Contractor shall hold harmless and fully indemnify SEforALL from and against all claims and proceedings for infringement of any patent rights, design trademark or name or other protected rights resulting from Contractor's performance.

4. Confidentiality

All maps, drawings, plans, reports, documents and all other data compiled by or received by the Contractor under the Contract shall be the property of SEforALL, shall be treated as confidential and shall be delivered only to the duly authorized representative of SEforALL upon completion of the Services.

5. Advertising

The Contractor shall not advertise or otherwise make public the fact that it is performing or has performed services for SEforALL or use the name, emblem or official seal or any abbreviation of the name of SEforALL for advertising purposes or any other purposes.

6. Modifications

Any modification or change to this Contract shall require an amendment in writing between both parties duly signed by the authorized representatives of the Contractor and SEforALL.

7. Sub-contracting and Assignment of Contract

The Contractor shall not sub-contract the Services or otherwise assign, transfer, pledge or make other disposition of this Contract or any part thereof or of any of the Contractor's rights, claims or obligations under this Contract.

8. Termination

SEforALL may terminate this Contract for cause or convenience in the interest of SEforALL upon not less than fourteen (14) days written notice to the Contractor. Upon termination of this Contract, the Contractor shall take immediate steps to terminate their performance of the Contract in a prompt and orderly manner, to reduce losses, and to keep further expenditures to a minimum. Unless such termination has been occasioned by the Contractor's breach of this Contract, the Contractor shall be entitled to be paid for the part of the Services satisfactorily completed as of the date of termination, plus substantiated costs resulting from commitments entered into prior to the date of termination, as well as any reasonable substantiated direct costs incurred by the Contractor as a result of the termination, but shall not be entitled to receive any other or further payment or damages.

9. Privileges and Immunities

Nothing in or relating to this Contract shall be deemed a waiver of any of the privileges and immunities of SEforALL is an integral part.

10. Settlement of Disputes

Any controversy or claim arising out of or in connection with provision of this contract or any breach thereof, shall, unless resolved through direct negotiation, be settled in accordance with the UNCITRAL Arbitration Rules then in force. SEforALL and the Contractor shall be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of any such controversy or claim.

11. Force Majeure

Force Majeure shall refer to an event beyond the control of both the Contractor and SEforALL, which prevents the compliance of either Party with any of its obligations under this contract. Such events can include, but are not limited to: Act of God, war, hostilities (whether war be declared or not), invasion, act of foreign enemies, mobilization, requisition, or embargo, rebellion, revolution, insurrection, or military or usurped power, or civil war; acts or threats of terrorism.

Neither Party shall be considered in breach of this Contract to the extent that performance of their respective obligations is prevented by an event of Force Majeure that arises after the Effective Date. The Affected Party that is prevented from carrying out its obligations hereunder shall give notice to the other Party of an event of Force Majeure upon it being foreseen by, or becoming known to, the Affected Party.

If and to the extent that the Contractor is prevented from executing the Services by the Event of Force Majeure, while the Contractor is so prevented, the Contractor shall be relieved of its obligations to provide the Services but shall endeavor to continue to perform its obligations under the Contract so far as reasonably practicable, and in accordance with Good Operating Practices.

If after notice of such event, the Event of Force Majeure exceeds 60 days, either party may terminate this Contract upon notice in writing to the other party. Termination hereunder shall be without liability and without payment of any amount by way of penalty, damages or other compensation.

12. Suspension

In the event of allegations of unlawful acts including, without limitation, fraud, abuse, embezzlement and/or theft against the Contractor, SEforALL may suspend payments to the Contractor in whole or in part.

13. Anti- Terrorism

You hereby confirm that the Contractor (and subcontractors) does not directly or indirectly engage in, promote or support other organizations or individuals who engage in, promote or support terrorist activity, which is defined by U.S. Treasury Department regulations as “a violent act or an act dangerous to human life, property or infrastructure that appears to be intended to intimidate or coerce a civilian population, to influence the policy of a government by intimidation or coercion, or to affect the conduct of a government by mass destruction, assassination, kidnapping or hostage-taking.” The Contractor hereby expressly binds itself to include this provision in all subcontracts and sub-grants issued under this contract.

14. Anti-Corruption

As of the date hereof, and at all times during the contract term, the Contractor agrees that no assistance, payments or anything of value (monetary or non-monetary) has been or shall be made, promised or offered by the Contractor to, or accepted from the Contractor by, any government employee or official (i) in contravention of any U.S. or other applicable law or regulation including, but not limited to, the United Nations Convention

Against Corruption and any implementing laws of Austria or any similar applicable statutes or regulations, including the United States Foreign Corrupt Practices Act and the U.K. Bribery Act 2010; (ii) without the express consent of the government for which the employee or official works; and (iii) that is not reasonable, bona fide, and directly related to the Contractor's activities. It is the Contractor's responsibility to ensure compliance with this clause, and to maintain and provide at the SEforALL's request documentation demonstrating such compliance.

The Contractor hereby agrees that no payments or other form of assistance has been or shall be made by the Contractor to or accepted from the Contractor by any government employee or official to influence any official government act or decision; to induce any government employee or official to commit or omit to commit any act in violation of his or her lawful duty; or to obtain or retain business for, or direct business to any individual or entity. Under no circumstances shall any payments or anything of value be given, made, promised, or offered to any federal, state, or local employee or official. The Contractor hereby expressly binds itself to include this provision in all subcontracts and sub-grants issued under this contract.

15. Data Security

Without limiting the foregoing, if the Contractor processes data as part of the Services and on behalf of SEforALL which relates to an identified or identifiable person ("personal data"), the Contractor shall:

- i. only process such personal data, including with respect to the Contractor's use of subcontractors or sub processors, as set forth in this Contract and the Protocols, as otherwise authorized in writing by SEforALL, or as required by applicable law,
- ii. implement appropriate technical and organizational measures to protect such personal data as set forth in the Protocols,
- iii. promptly notify SEforALL of any incident in which the confidentiality, integrity or security of the personal data has been compromised, and
- iv. collaborate with SEforALL as required by applicable law or SEforALL's request to document the personal data, data subjects and processing activities related to the Services, including as part of an applicable Proposal. In the event that SEforALL transfers personal data that is subject to the General Data Protection Regulation (2016/679) to the Contractor outside of the European Economic Area, or where otherwise agreed by the parties or required by applicable law, the parties agree that the standard contractual clauses for the transfer of personal data to processors established in third countries under Directive 95/46/EC of the European Parliament and of the Council (or any successor thereto) The Contractor will comply with SEforALL's reasonable requests to furnish information regarding the Contractor's processing activities as is reasonably necessary to enable SEforALL to verify that the Contractor is complying with its obligations under Contract, including by making its Director of IT Security or person of comparable knowledge and position available to provide information about the



Protocols and the Contractor's processing in connection with the Services, and the foregoing shall apply in full satisfaction of any SEforALL audit or inspection rights of the Contractor, but shall not limit or restrict the ability of any legal or regulatory authority to conduct such audit or inspection pursuant to applicable law.

