



SELCO Foundation – Call for Vendors

**Supply, Installation, Commissioning of Solar Energy Solutions for
The Chief Ministers Youth Centers (CMYC) across The State of
Meghalaya**

SELCO Foundation – Procurement Officer

690, 15th Cross Rd, Jeewan Griha Colony, 2nd Phase,
J P Nagar, Bengaluru, Karnataka 560078
procurement@selcofoundation.org

SELCO Foundation hereby invites bids for the Supply, Installation, Commissioning of Off-Grid Solar Energy Solutions for the Chief Ministers Youth Centers across the state of Meghalaya during the Year 2022-2023.

The Tender Estimated value is Approximately ₹80 Lakhs (Rupees Eighty Lakhs only)

<https://selcofoundation.org/tender/>

The detailed tender document which can be downloaded from 29-09-2022. Bids, as per the terms and conditions should be submitted to the undersigned, at the above-mentioned address by 5 pm on or before 10-10-2022.

Chief Executive Officer – SELCO Foundation



SELCO FOUNDATION

TENDER NOTIFICATION

FOR

**THE SUPPLY, INSTALLATION, COMMISSIONING OF OFF-GRID SOLAR
ENERGY SOLUTIONS FOR THE CHIEF MINISTERS YOUTH CENTERS (CMYC)
ACROSS THE STATE OF MEGHALAYA DURING THE YEAR 2022-2023**

TENDER DOCUMENT

Address for Communication

SELCO Foundation
#690, 15th Cross Rd, J P Nagar – 2nd Phase
Bangalore, Karnataka – 560078
Telephone: 080-26493145
e-mail: procurement@selcofoundation.org

DISCLAIMER

NIT No: 06/2022-23

This tender by SELCO Foundation is for selection of vendors for the work of Supply, Installation, Commissioning of Off-Grid Solar Energy Solutions for the Chief Minister's Youth Centers (CMYC) across the state of Meghalaya.

NOTE:

1. Though adequate care has been taken while preparing the Notice Inviting Tender (NIT) document, the Organizations shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Organizations within seven (7) days from the date of notification of Request for solution (RfS)/ Issue of the RfS documents, it shall be considered that the RfS document is complete in all respects and has been received by the Organizations.
2. SELCO Foundation has the right to award the works under this tender to single or multiple vendors and in multiple tranches based on the lowest quote ascertained through this tender.
3. The implementation of Solar Solutions at the said centers is subject to receiving the approval for installation from Nodal Officer CMYC Project
4. SELCO Foundation reserves the right to cancel/ withdraw this invitation for bids without assigning any reason and shall bear no liability whatsoever consequent upon such a decision
5. SELCO Foundation reserves the right to modify, amend or supplement this document.
6. While this RfS has been prepared in good faith, neither SELCO Foundation nor their employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of the information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RfS, even if any loss or damage is caused by any act or omission on their part..

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SELCO FOUNDATION

#690 15th Cross J P Nagar 2nd Phase

Bangalore - 560078

Telephone: 080-26493145

e-mail: procurement@selcofoundation.org

Medical Equipment Tender: 06/2022-2023

Dated: 29-09-2022

NOTICE INVITATION TENDER

Chief Executive Officer of SELCO Foundation, Karnataka State, India hereby invites bids for Supply, Installation, Commissioning of Off-Grid Solar Energy Solutions for the Chief Ministers Youth Centers Project at 10 locations across the state of Meghalaya.

1.	Tender Ref No.	06/2022-2023
2.	Last date & time for the bid submission	10-10-2022, 5 PM
3.	Opening date of first cover (technical bid) & second cover (financial bid)	11-10-2022, 4 PM
4.	Venue of acceptance and opening of tenders.	SELCO Foundation, Bangalore

Interested and eligible Organizations may furnish the Technical & Commercial Bids for supply and installation of Solar Systems to the below-mentioned address:

Procurement Officer - Tender NO 06/2022-2023

SELCO Foundation

#690 15th Cross J P Nagar 2nd Phase

Bangalore - 560078

Telephone: 080-26493145

e-mail: procurement@selcofoundation.org

Any further information or clarification may obtain either in person or through phone during office hours from the office of the SELCO Foundation Ph: 080-2649 3145 or through the email – procurement@selcofoundation.org

sd/-

**Chief Executive Officer
SELCO Foundation**

INSTRUCTION TO BIDDERS

Eligibility of bidders:

- I. Organization should be in operation for the last 3 years in the field of supply, installation and commissioning of Solar Energy Solutions.
- II. The organization should submit the following document along with the Tender.
 - a. Organization registration certificates or any other proof of incorporation to be submitted to establish the legal status.
 - b. The Organization should be able to provide excellent service. It is expected that complaints will be attended to within 72 hrs of lodging.
 - c. The Organization should have its own local office, service center and technicians in Guwahati or Meghalaya. Companies having multiple own offices and service centers in the districts will be preferred, Evidence of proof should be provided.
 - d. Solar panels used by the Organization should be of a supplier in India and should have manufacturing Organization name and the technical specifications
 - e. Up to date Professional Tax/GST/Income Tax/GST Clearance certificate to be submitted.
 - f. PAN card for the Organization and Bank details
 - g. Self-Declaration Certificate to declare that the organization is not blacklisted.
 - h. Documents to establish that the organization has implemented projects of cumulative worth Rs.1 Crore or more in the last two years. In case of organizations not meeting this requirement of cumulative worth of Rs 1 Crore, SELCO Foundation may decide to give a portion of the order to such entities subject to the fact that all other criteria are met. The decision of SELCO Foundation in this regard will be final and binding on such a bidder.

Cost of bidding:

The bidder shall bear all costs associated with the preparation and submission of Bid to the Chief Executive Officer, SELCO Foundation hereinafter referred to as “the Purchaser” will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

The Technical Bid shall contain:

- a. Particulars of the Firm as per **Annexure - 4**
- b. Checklist of Documents to be submitted in First Envelope as per **Annexure - 5**
- c. The bidder has to submit an acceptance letter of warranty for 5 years for the total performance of the Solar Energy Systems.
- d. The bidder should have a service center facility in Meghalaya or Guwahati.
- e. The bidder has to sign all the pages of the documents in annexures as a token of acceptance of all terms and conditions.

Financial bid shall contain:

The rate quoted for supply of Solar Energy Solutions in different geographies. The rate quoted should include all taxes levied by the State & Central Govt. Packing, forwarding charges including loading & unloading, installation & commissioning.

Price schedule:

The Bidder shall complete the price schedule as per Annexure 7 - PRICE SCHEDULE furnished in the Bidding Documents, indicating the total cost towards supply, installation, commissioning of solar energy solutions as per the technical specifications mentioned in the Annexure – 1 and 2. The SELCO Foundation will not pay any extra charges over and above rate quoted by the Bidder.

Fixed price:

Prices quoted by the Bidder are firm, final and binding and not subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected. The quotation will remain valid for a period of 12 months from the date of opening the second envelope (financial bid).

Period of Validity of Bids:

Bids shall remain valid for a period of 12 month from the date of opening of Second Envelope (Financial Bid). A Bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.

Format and Signing of Bid:

The Bidder shall give a set of duly signed hard copies of all the documents in the sealed cover. The Bids could be submitted by hand or post/courier to the below mentioned address

Procurement Officer (Tender No: 06/2022-2023),
SELCO Foundation,
#690, 15th Cross, 2nd Phase,
JP Nagar, Bengaluru- 560078.

Deadline for Submission of Bids:

Bids must be received by the Purchaser not later than the time and date specified in Invitation of the Bids. The Purchaser may, at his/her discretion, extend this deadline for submission of bid by amending the bid documents in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

Tender Opening and Evaluation:

The Technical & Financial bids will be opened on the same day itself or later separately. The financial bids (Second Cover), of only technically qualified bidders will be opened. The Bidders Names, Bid Modifications, or Withdrawals, bid prices, Discounts and the presence or absence of the requisite details as the Purchaser, at its discretion, may be considered appropriate will be recorded by the Procurement Committee of SELCO Foundation. No Bid shall be rejected at bid opening, except for late bids, which will be rejected.

Clarification of Bids:

During evaluation of Bids, SELCO Foundation may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in prices or substances of the Bid shall be sought, offered or permitted.

Preliminary Examination:

SELCO Foundation will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

Arithmetical errors will be rectified on the following basis. If there is a discrepancy between words and figures, the lowest of the two shall prevail and the bid shall stand corrected to that effect. SELCO Foundation may waive any minor infirmity or non-conformity or irregularity in a bid, which does not constitute a material deviation, provided such a waiver does not prejudice or affect the relative ranking of any bidder.

Acceptance or rejection of bids:

- **CEO**, SELCO Foundation reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability or any obligation to inform the affected bidder or bidders of the grounds for the said action.
- Any Bid with incomplete information is liable for rejection.

Terms and Conditions of the Contract:**1. Scope of this tender:**

The objective of the tender is to supply, installations, commissioning of Solar Photovoltaic (SPV) off-grid systems.

2. Contract Agreement:

The successful bidder will have to undertake a contract agreement with respect to the supply of products as detailed in this tender that is covered under these terms of supply, both technical, commercial specifications and governing spirit of this tender.

3. Technical specifications/Bill of materials of the Solar Energy System – Annexure 1**4. Technical specifications of components of the system – Annexure 2**

- 5. Duration:** The agreement will be valid for 5 years (60 months) from the date of completion of the installation and commissioning of the Project. The end date of this agreement will be sixty (60) months after the date mentioned in supply, installation and commissioning reports that will be subsequently annexed to this agreement and will form an integral part of this agreement.

- 6. Prices:** Prices provided by the Bidder, and accepted by the Foundation shall be considered as final and firm and will not be subject to escalation due to any variations in the prices of materials, labour and/or any other reasons which may occur while the order is being carried out (except any increase in costs due to a change in applicable taxes or other such regulations which shall be passed on to the Foundation). The Project Costs are inclusive of taxes, transport, installation and commissioning. The costs mentioned here do not include replacement of spares while servicing.

7. Payment Terms:

- a. For the supply, installation, commissioning of Solar Photovoltaic (SPV) off-grid systems payment will be released in 3 installments.
- b. The 1st installment of 30% will be paid along with the work order
- c. The 2nd installment of 40% will be paid further to the supply of the material with evidence of delivery note certified by the Chief Minister's Youth Center representative or authorized person/SELCO Foundation representative.
- d. The 3rd and final installment of 30% will be paid on receipt of Installation Reports, Inefficient Equipments Handing over report & Project completion and assets handing over reports with supporting Photographs mentioned location wise/system wise confirming commissioning letter (from Bidder) duly certified & sealed by representative of Chief ministers Youth center and Foundation representative. (Formats will be provided)
- e. Any taxes and charges such as TDS that will have to be deducted from the WO amount as per the rules in force at the time of release of payment will be done by the Foundation and the Bidder will be paid only the net amount.
- f. The Bidder should submit the progress report to the Associate Director – SELCO Foundation who will approve the invoice for payments based on the project performance and stages of completion and Associate director contact will be provided along with WO.
- g. The Bidder has to provide installation certificate for each location mentioning the date of commissioning make & serial no. of each material (Solar panels, PCU, Battery etc.), and Photographs of the system installed before disbursal of the final installment(3rd).

8. INSURANCE:

- a. Insurance shall be arranged by the Bidder till the products/components are delivered in full to the end point and installation is completed.
- b. Material safety after delivery: Arrangement of transport, warehouse for stocking and safekeeping of the material till the handover is within the Bidder's scope of work and Foundation will not be responsible for any missing item or damage that is incurred before the system is handed over to the Chief Minister's Youth Center authority.
- c. Accidental damage for supplied items or to delivery staff or installation staff is the responsibility of the Bidder and the Bidder will ensure insurance coverage and damage to service staff in case of any accidents during the course of this engagement with the Foundation

9. Inspection, Checking, Testing:

The products covered by the Work order shall be subject to inspection within a reasonable time after arrival at the place of delivery and the Bidder must facilitate this process by fixing time informing foundation in advance and making Bidder representative available at the location. Besides, the Foundation is also entitled to do a preliminary inspection at the manufacturing site of the Bidder by giving prior notice.

The Bidder shall provide free access to the Foundation during normal working hours at Bidder's or its sub-Bidder's works and place at their disposal, internal test reports, material/component test certificates, approved drawings. Even if inspections and tests are fully carried out, Bidder shall not be absolved to any degree from their responsibilities to ensure that products supplied, comply strictly with requirements of the Work order and technical specification at the time of delivery, inspection on arrival at site, installation and commissioning and warranty/guarantee period.

In any case, the products supplied must be strictly in accordance with the Work order and the technical specification specified by the tender failing which the Foundation shall have the right to reject goods and hold the Bidder liable for non-performance of contract.

10. Packing:

Bidder is fully responsible for adequately packing products/components mandated in the tender and ensuring appropriate packing suitable for inland carriage and ensuring complete safety of goods from any kind of damage during transport and subsequent storage at the Heath Centre authority.

11. Assembly, Pre-installation survey, Installation, after sales service and training:

- a. The Bidder shall be fully responsible for the assembly of the product at the destination site and completeness of the Project as per the Work order.
- b. The successful bidder/Bidder must carry out a pre installation survey at his cost so that the Bidder will have a clear idea on logistics to reach materials, estimating the ease of material movements, pre installation preparations etc.
- c. The Bidder must ensure proper insulators, appropriate height and necessary grout for lightning arresters up to grounding. Any deviation has to be brought to the notice of the foundation and written/ email acceptance must be availed before adopting the deviation.
- d. The Bidder shall be fully responsible for getting the materials for grouting/preparation for foundation wherever required, curing of the grouting before installing. Bidder cannot hand over this part of the work to an unskilled labourer or person in charge at the health center.
- e. Bidder should provide training on basic maintenance of the solar system to the designated Health center staff.
- f. **Danger Boards should be provided as and where necessary as per IE Act, posters for DOs and DON'Ts need to be provided. At array, battery bank, distribution box, Inverter/PCU etc.**

- g. The Bidder shall provide necessary "After Sales Service" at site for a period of 5 years. Bidder must keep a log book at each site /to be maintained at each system location and the Bidder representative must record the service done/complaint recorded /resolution done /instructions if any.
- h. Any Complaints on the system have to be resolved within 5 to 10 working days of lodging complaint.
- i. Complaints will be lodged using SMS/WhatsApp message/email or a phone call and the Bidder must provide the appropriate active contacts like phone number/email ID/WhatsApp number for lodging complaints.
- j. Active contact numbers will be displayed at the site prominently for registering any complaints on the performance of the product.

12. Delivery terms:

- a. Successful bidder will be provided a detailed written communication on site address, system to be installed and a brief site profile for installation and necessary contacts
- b. The delivery of the said products will be to the Chief minister's youth Center authority as per the list provided by the Foundation in writing. No variation shall be permitted, except with prior authorization in writing from the Foundation.
- c. Delivery Schedule and terms will be as per the WO. In case of a delay solely attributed to the Bidder in meeting the said deliverables, the Bidder shall be liable to pay a late fee at the rate of 2% per week beyond a period of 30 days and up to a maximum of 10% of the value of this Agreement.

13. Risk Purchase on Default: In case of default on the part of the Bidder to supply all the products or part thereof covered by the contract as per the standard/specifications within the contractual delivery period stipulated in the contract, the Foundation shall have the right to purchase such products or other of similar description at the risk and cost of the Bidder. Bidder shall be liable to pay the cost of such purchase products and also the penalty under clause 3.10 above for resultant delay.

14. Delay due to force majeure: If any time during the continuance of the Agreement the performance in whole or part by either party on any obligation under the contract shall be prevented or delayed by reason of any war, hostility, explosions, epidemics, quarantine restrictions, or other acts of God, then provided, notice of the happening of any such event is given by either party to the other within fifteen (15) days from the date of occurrence thereof, neither party shall be reason of such event be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance and delay in performance and deliveries under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist. Force Majeure conditions shall not affect the payment obligations of the Foundation which shall be made as per clause 3.5 above.

15. Rejection, Removal of Rejected Goods and Replacement: In case the testing and inspection at any stage by inspectors reveal that the product, material and workmanship do not comply with the agreed specifications and requirements, the same shall be removed by the Bidder at his/its own expenses and risk within 15 to 20 working days of information of

rejection by the Foundation. The Foundation shall be at liberty to dispose of such rejected goods in such manner as they may think appropriate, in the event the Bidder fails to remove the rejected goods within the period as aforesaid. All expenses incurred by the Foundation for such disposal shall be to the account of the Bidder. The freight paid by the Foundation, if any, on the inward journey of the rejected material shall be reimbursed by the Bidder to the Foundation before the rejected materials are removed by the Bidder. The Bidder will have to proceed with the replacement of that product or part of the product without claiming any extra payment if so, required by the Foundation, within 2 weeks of notification.

16. Warranty: The Bidder shall warrant that every material/product to be supplied shall be in accordance with the specifications in this tender. The items should be consistent with the established, recognized or stipulated standards for material of the type usually used for the purpose and in full conformity with the specifications and drawings or samples, if any, outlined by the Foundation in the tender documents and agreed upon by the Bidder by the virtue of acceptance of the WO by the Bidder. Products offered must withstand normal operating conditions. The warranty shall continue notwithstanding inspection, payment, acceptance of tendered product and shall expire except in respect of complaints notified to Bidder prior to such date within 60 months from the date of commissioning.

17. Performance Guarantee: The Bidder shall guarantee that all material and products shall be repaired or replaced, as the case may be, at his own expense in case the same have been found to be defective in respect of material, workmanship for smooth and rated operation within a period of 60 months from the date of commissioning. Acceptance by the Foundation of any product and materials or their replacement will not relieve the Bidder of his/its responsibility concerning the above guarantee.

In case of any legal case against the Foundation by any ultimate user of the product with respect to the performance of the system (during the warranty period), the Bidder should provide, and support the Foundation with required and relevant technical testing and reports supporting the performance of the product and to defend that the non-performance of the product is not because of any manufacturing defect.

The warranty replacements will have to be made within 15 to 20 working days from the date of receipt of the Complaint at the site.

18. Indemnity: The Bidder shall at all times indemnify the Foundation against all claims which may be made in respect of stores for infringement of any right protected by patent, registration of design or trademark. Provided always that in the event of any claim in respect of alleged breach of patent, registered designs or trademark being made against the Foundation, the Foundation shall notify the Bidder of the same and the Bidder shall at his own expense either settle any such dispute or conduct any litigation that may arise there from.

19. Other Clauses:

- a. The Bidder will treat all information given under this agreement as information with proprietary value and will not disclose the same to competitors or any outsiders. Bidder will not at any time, except under legal process, divulge any trade or business secret relating to the Foundation or any customer or agent of the Foundation, which may

become known by virtue of the position as Bidder, save in so far as such disclosure shall be necessary in the interest and for the benefit of the said Foundation and will be true and faithful to the Foundation in all dealings and transactions whatsoever relating to the said Project.

- b. Either party may terminate this contract forthwith in the event of any fraud or misconduct on part of the other party; the Foundation may terminate this contract in the event of delay in supply/ installation of the products by the Bidder beyond 15 days from what is stipulated in the WO or the Bidder may terminate in the event of 3 consecutive delays of 15 days from what is agreed to between the parties in making payment to the Bidder. Any notice to be given hereunder shall be sufficiently given to the other party if forwarded by registered post or by Courier Service to the registered address of the other party mentioned in this agreement or the last known postal address of the other party. Upon the termination of this contract, the Bidder shall refund the entire amount paid by the Foundation. The Bidder shall deliver all deeds, documents and paper in his possession relating to the business of the Foundation.
- c. Both the Foundation and the Bidder fully and freely intend to create an independent Bidder relationship under this Agreement. Nothing herein shall be deemed to establish a partnership, joint venture, association or employment relationship between the parties. Both parties agree that the Bidder has sole and exclusive control over the manner and means employed in performing their activities under this Agreement in matters that are not specifically discussed and agreed upon between the parties to this Agreement.
- d. The Foundation represents and warrants that (a) it has the full right and authority to enter into this Agreement, and no consent or authorization not obtained prior to the Effective Date is necessary to be obtained, (b) the Foundation is a charitable trust registered under the laws of India and is authorized to do business to the extent necessary to fulfill its obligations hereunder.
- e. Except as specifically set forth in this Agreement, neither party makes any representation or warranty of any kind, express or implied, including without limitation any warranty of merchantability, any warranty of fitness for a particular purpose or use, any warranty of non-infringement, or any other statutory warranty. Each party expressly disclaims any and all implied warranties.
- f. This agreement shall not be amended or renewed, except in writing mutually agreed by both parties. The project shall be fully completed as agreed in the above-mentioned terms and conditions.
- g. Notwithstanding anything else to the contrary: -
 - (1) Bidder's total aggregate liability under this Agreement shall not in any case exceed 100% of the value of this Agreement;

- (2) neither party shall be liable for any indirect, consequential, special, remote, exemplary, punitive or speculative losses or any losses or damages for loss of profits or business even if such party has been advised of the possibility of such costs or damages; and
 - (3) the Bidder shall have no liability for matters outside of its own scope of works.
-
- h. This Agreement along with the WO contains the entire terms of agreement between the Parties and supersedes any previous oral or written understandings, commitments or agreements pertaining to the subject matter. This Agreement may not be amended, assigned nor any obligation waived, except by in writing signed by both Parties.
 - i. In the event that any or any part of the provisions contained in this Agreement is determined to be invalid, unlawful or unenforceable to any extent, such provision shall be severed from the remaining provisions which shall continue to be valid and enforceable to the fullest extent permitted by law.
 - j. The Foundation shall not either directly or indirectly assign, transfer, charge or in any manner make, offer or purport to assign, transfer or charge this Agreement or any rights herein or any part thereof without the previous consent in writing of the Bidder.

20. Governing Law and Arbitration: The Parties agree that this Agreement shall be governed and construed in accordance with the laws of India. The Parties hereto agree that they shall use all reasonable efforts to resolve between themselves any disputes, controversy or claim arising out of or relating to this Agreement. If the Parties fail to resolve the matter within the 30 days of occurrence of any dispute, such dispute, controversy or claim shall be settled by binding arbitration under the Indian Arbitration and Conciliation Act, 1996. There shall be one arbitrator mutually appointed by the Parties. The place of arbitration shall be Bangalore and the arbitration proceedings shall be in English. The courts at Bangalore alone shall have the jurisdiction to entertain and, or try any dispute arising out of or in connection with or in relation to the terms of this Agreement.

ANNEXURE 1: TECHNICAL SPECIFICATIONS/BILL OF MATERIALS OF THE SOLAR ENERGY SYSTEMS

Selco Foundation seeks quotations from bidders towards Supply, Installation, Commissioning of Solar Energy Solutions of 10 kilo-watts capacity each at 10 separate locations. All 10 buildings have a super built-up area of less than 1200 square feet with no more than 4 individual rooms.

Bill of Materials:

Sl.No.	Products	Capacity	Quantity
1	Solar Module - 10 in series	335 Wp, 24 V	20 Nos
2	Solar Battery - 20 in series	200 Ah,12 V	20 Nos
3	Module Mounting Structure	335 Wp, 1M	20 Nos
4	Solar Inverter - Single phase grid interactive	12.5 kVA, 10 kW, 240 Vdc	1 No
5	Solar Cable red+black (M-M)	6 Sq.mm.	80 m
6	Cables (B-B)	25 Sq.mm.	10 m
7	Cables red +black (B-I)	25 Sq.mm.	20 m
7	Cables red+black (M-B)	10 Sq.mm	30 m
8	Earthing Cable	10 Sq.mm	50 m
9	Earthing Kit	Chemical earthing powder, solid copper electrode, protective construction to earthing pit (LxBxH -1 cubic feet) with metallic lid.	5 Nos (2 Nos for Lightning Arrester)
10	Grid Input Protection Box	10KW, 230Vac (With SPD & MCB)	1 No
11	Battery terminal caps, Battery rack with acid absorbent and insulation mat	200 Ah X 20 Nos (1 rack of 10 batteries)	2 Nos
12	AJB with MCB & SPD	2 IN, 1 OUT	1 No
13	Double Pole MCB (Load side) -	32 A, 230Vac	1 No

14	Lighting Protection System	Lightning arrestor kit(Copper based, Air terminal rod should be 1.5m height Lightning arrestor and base plate with ceramic insulator), down conductor cable, and anodized aluminum elevation of 3 Mtr	2 Set
15	Consumables		1Set

For heavy loads like Air Conditioners, Air coolers, OTG Oven, electric kettle, microwave oven etc, separate wiring has to be done accordingly.

*MMS need to be customized if the roof is tin sheet/ needs to be ground mounting.

Bill of Materials for Luminaries & Electrical wiring accessories :

Sl. No.	Products	Capacity	Quantity
1	LED Tube light with brackets	20W, 230V	6 Nos
2	LED Bulb with holder	9W, 230V	6 Nos
3	Wall mounted Outdoor Light with pole/arm and bracket – Automatic switch for dusk to dawn	20W	2 Nos
4	Wiring along with sockets/plug points on the inside of building	16A, 230V	Sufficient for 15 computers, 10 other charging points for light load devices
5	Wiring along with sockets/plug points on the inside of building	32A, 230V	2 Nos
6	Wiring along with sockets/plug points on the inside of building	32A, 230V	6 Nos

ANNEXURE 2- TECHNICAL SPECIFICATIONS OF COMPONENTS

The proposed project shall be commissioned as per the technical specifications given below. Any shortcomings or deviations may lead to the cancellation of the Letter of Award, and in such a case the Competent Authority's decision will be final and binding on the bidder.

1. SOLAR PV MODULE:

- a. The PV modules used must qualify to the latest edition of the IEC PV module qualification test.
- b. The total solar PV array capacity should not be less than the allocated capacity and should comprise solar crystalline modules of minimum Wp mentioned in the bill of materials. Module capacity less than minimum mentioned Wp in the BoM / Purchase Order shall not be accepted.
- c. PV modules must be tested and approved by one of the IEC authorized test centers. The module frame shall be made of corrosion-resistant materials, preferably anodized aluminum.

1.1 MODULE WARRANTY:

Module Warranty is defined as: The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than five (5) years from the date of sale to the original customer ("Customer")

- a. Defects and/or failures due to manufacturing.
- b. Defects and/or failures due to quality of materials
- c. Non-conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s), at the supplier's sole cost

1.2 Performance Warranty

The degradation of power generated by the module shall not exceed 20% of the minimum rated power over the 25-year period and not more than 10% after the first ten years period.

1.3 Preferred Make

Waaree, Adani, TATA Solar, EMMVEE, VIKRAM SOLAR, RENEWSYS, Premier Energies, JACKSON, SATVIK, GOLDI.

Bidder has to take prior approval from the Foundation with sufficient certifications if other brands than the above specified are considered by the bidder.

2. MOUNTING STRUCTURE

- a. Hot dip galvanized MS/ anodized aluminum of size not less than 50 mm x 50 mm x 6 mm size shall be used for mounting the modules/ panels/arrays. Each structure should have an angle of inclination as per the site conditions to take maximum irradiation.
- b. Any square tube thickness should be 1.6 sq.mm.
- c. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from

the SPV panels. Installation of solar structures should not damage the roof in any way. If any concrete or foundation is required, it should be precast type.

- d. Fixed tilt systems, South facing with 16-26 degree inclined towards north should be followed despite whatever roofing type is. This range is indicative and will depend on the actual location.
- e. The structure also should be able to withstand wind speed of 200 - 250 km/h.
- f. Bidder must follow any of the three types of roof mounting options and the solution is dependent on the type of roof at the location. a) Flat roof, b) standing seam c) Shingle roof. In all cases, considerations must be made for the roof's age, structural integrity, access to equipment, and necessary setbacks for fire and life safety requirements.
- g. The MMS should be mounted to the RCC roof using wedge anchor fasteners and One Cubic Feet (L x W x H = 1 x 1 x 1 Feet) of concrete blocks at each leg of the MMS

3. DC COMBINER BOX/ARRAY JUNCTION BOX:

The junction boxes are to be provided in the PV array for termination of connecting cables. The Junction Boxes (JBs) shall be made of GRP/FRP/Powder Coated Aluminum /cast aluminum alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands. Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification.

4. BATTERY:

The battery type proposed is Lead acid battery.

- a. All the batteries capacities mentioned are at a C/10 rate of discharge and the same should also be followed by the bidder. The preferred voltage of each battery is of 12 V due to better space utilisation. However, bidders quoting for battery banks with 2V cells or other capacities should add a justification note as annexure to why the particular voltage was opted for. The technical committee will consider this and take a decision on the suitability of such an option. The decision of the technical committee/technical member of the buyer on this matter will be final and binding on the bidder.
- b. Battery should conform to the latest BIS/ International standards. A copy of the relevant test certificate for the battery should be furnished.
- c. The battery should be warranted for a minimum of 5 years.
- d. The battery should be installed inside the premises of consumers on a Battery rack of acid resistant material to bear the required battery load. The non-reactive acid proof mat should be provided around the floor space of the battery bank.

4.1 Preferred Make

Exide, Luminous, HBL, Amaron, Okaya, Base, Livguard, Eastman, Vguard.

Bidder has to take prior approval from the Foundation with sufficient certifications if other brands than the above specified are considered by the bidder.

5. PCU/ SOLAR INVERTER:

The power conditioning unit should be provided to convert DC power produced by SPV modules, into AC power. The power conditioning unit/inverter should be Off-Grid type. Typical technical features of the inverter shall be as follows:

Power conditioning unit with inbuilt charge controller of capacity & ratings as specified in the below for various capacities of Solar Power Plants should convert DC power into AC power. Preference will be given to power conditioning units conforming to standards IEC 61683.

The PCU/ inverters should be tested from the MNRE approved test centers / NABL /BIS accredited testing- calibration laboratories. In the case of imported power conditioning units, these should be approved by international test houses.

5.1 The PCU will have the following features:

- a. MOSFET (till 1.4 kVA) / IGBT (any capacity more than 5 kVA) based MPPT charging
- b. Inverter efficiency should be more than 85%
- c. Output voltage 230V, +/-3% f modified/ pure sine wave for single phase.
- d. Output frequency: 50 Hz, +/- 0.5 Hz
- e. Capacity of PCU/ Inverter is specified at 0.8 lagging power factor
- f. THD: less than 3% Efficiency: >85% at full load
- g. Ambient Temp 50 degree Celsius (max.)
- h. Operating humidity 95% maximum

5.2 Protections:

- a. Over voltage (automatic shutdown)
- b. Under voltage (automatic shutdown)
- c. Overload - Short circuit (circuit breaker & electronics protection against sustained fault)
- d. Over Temperature
- e. Battery, PV reverse polarity

5.3 Indicators

- a. Array on
- b. MPPT charger on
- c. Battery connected, charging
- d. Inverter ON
- e. Load on solar/ battery
- f. Grid charger on
- g. Load on Grid
- h. Grid on
- i. Fault

5.4 Display Parameters

- a. Charging current

- b. Charging voltage
- c. Voltage of PV panels
- d. Output voltage
- e. Grid voltage
- f. Inverter loading (kW) & Energy Generation (kWh)
- g. Output frequency
- h. Fault / fault code

5.5 Cooling: cooling mechanism required - Air Cooled

5.6 Preferred Make: Luminous, Glowpower, Statcon.

Bidder has to take prior approval from the Foundation with sufficient certifications if other brands than the above specified are considered by the bidder.

6. PROTECTIONS

The system should be provided with all necessary protections like earthing, Lightning protection.

6.1 LIGHTNING PROTECTION

The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV array shall be suitably protected against Lightning by deploying the required number of Lightning Arresters.

6.2 EARTHING

Earthing is a way of transmitting any instant electricity discharge directly to the ground through low resistance wires or electrical cables. This instant electricity discharge is mostly in the form of lightning. The goal is to protect the appliances for voltage surges, but much more, the users from electrocution.

- a. Earthing type - Chemical Earthing
- b. Earth pit should be 1ft x 1 ft x 4 ft (LXBXD)
- c. Earthing should be provided for the three components i.e. Lighting protection, AJB & Grid input protection box/Inverter.
- d. Minimum of 3m distance between each pit has to be provided.
- e. Should not combine AC earthing & DC Earthing.
- f. Earthing pits should be closed.

6.3 CABLES

Cable size as mentioned in the bill of materials to be used in the Project shall have the following characteristics:

- a. Temp. Range: -10oC to +80oC.
- b. Excellent resistance to heat, cold, water, oil, abrasion, UV radiation
- c. Flexible

Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be selected to keep the voltage drop (power loss) of the entire Project to the minimum. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use.

The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e., twenty-five (25) operational years.

6.4 Preferred Make: Polycab, Finolex, Havells, RR Kabels.

7. TOOLS & TACKLES AND SPARES:

After completion of installation & commissioning of the power plant, necessary tools & tackles shall be maintained by the successful bidder for maintenance purposes at the local service center.

8. SAFETY MEASURES:

The bidder shall take entire responsibility for electrical safety of the installation(s) and follow all the safety rules & regulations applicable as per Electricity Act, 2003 and CEA guidelines etc

9. LUMINARIES and ACCESSORIES

Preferred Make:

LED Bulbs /Tubes: Havells, Phillips, Syska, Eveready, Wipro,

Fan (Ceiling & Pedestal): Usha, Havells, Atomberg, Orient, Super Fan, Arizon.

10. OPERATION and MAINTENANCE MANUAL

An Operation, Instruction and Maintenance Manual, in English and the local language, should be provided with the Solar System. The following minimum details must be provided in the Manual:

- a. Basic principles of Photovoltaics.
- b. A small write-up (with a block diagram) on Solar System - its components, PV module, battery, electronics and luminaire and expected performance.
- c. Significance of indicators.
- d. Type, Model number, voltage & capacity of the battery, used in the system.
- e. Clear instructions about mounting of PV module(s).
- f. Clear instructions on regular maintenance and troubleshooting of the Solar System.
- g. DO's and DON'Ts. A plaque with customer care number and DO's and DON'Ts should be put up at the PCU/ SOLAR INVERTER.
- h. Name and address of the contact person for repair and maintenance.

ANNEXURE 3: LIST OF CHIEF MINISTER’S YOUTH CENTERS

Indicative list of Health centers is attached. However, the sites are subject to change further to the site survey. SELCO Foundation will have the complete right on the selection of District Hospitals

Sl. No.	District Name	Block Name
1	West Garo Hills	Rongram
2	East Garo Hills	Samanda
3	East Garo Hills	Rongjeng
4	South Garo Hills	Baghmara
5	South West Garo Hills	Betasing
6	North Garo Hills	Resubelpara
7	Ri Bhoi	Umling
8	Ri Bhoi	Umling
9	West Jaintia Hills	Laskein
10	West Jaintia Hills	Laskein

ANNEXURE 4 - DETAILS OF THE ORGANIZATION

(Enclose separate sheets as necessary and in this checklist indicate yes or no)

1	Name and address of the Bidder (With pin code)	
2	Year of starting the organization	
3	Registration number (photocopy of registration certificate or any other relevant document to be enclosed)	
4	Name and Contact number of the Proprietor or Point of Contact	
5	Status of Supplier- Proprietorship / Partnership/ Pvt Ltd / Limited/others	
6	GSTIN	
7	PAN No. of Income Tax Dept. (Copies of certificates to be enclosed)	
8	Particulars of Physical Infrastructure and total strength of staff available in the organization relating to Supplier/supply/testing etc.,	
9	Evidences of existence (GST Registration) of local office in State of Meghalaya or Guwahati Preferably closer to the project districts	

Signature of the bidder and address with seal

Date:

ANNEXURE 5 – CONFIRMATION ON ENCLOSURES

Sl.No.	Description	Whether the Document is enclosed or not	Page No. From and to
1	Details of Organization as per Table –I	YES/NO	
2	Copies showing the legal status, places of registration and principal place of business of the firm	YES/NO	
3	Copies of audited financial statements for the last 2 financial years	YES/NO	
4	Copies of GST registration and GST returns filled in the last 2 financial years	YES/NO	
5	Copies of income tax returns filled in the last 2 financial years	YES/NO	
6	Acceptance to provide 5 years maintenance	YES/NO	
7	Evidences of existence (GST Registration) of local office in State of Meghalaya or Guwahati Preferably closer to the project districts	YES/NO	
8	Letter of declaration to confirm that the bidder has not been black listed by any entity or institution	YES/NO	
9	Bidders bank details	YES/NO	
10	Signed, sealed copies of Annexure 1, 2, 3, 4,5,6 and 7	YES/NO	

I abide by all the above terms & conditions.

SIGNATURE OF THE BIDDER and with office seal

PLACE:

DATE:

ANNEXURE 6- SCHEDULE OF TENDER

Regarding Supply, installation and commissioning

Sl.No.	Scheduled activity	Within days (no.of days)	Accepted Schedule by date
1.	Supply starts after WO	15 days	
2.	Supply ends	30 Days	
3	Installations begins	30 Days	
4.	Commissioning of all the system	45 days	

I abide by all the commitments accepted & conditions.

SIGNATURE OF THE BIDDER and with office seal

PLACE:

DATE:

ANNEXURE 7 - PRICE SCHEDULE

PARTICULARS TO BE SUBMITTED IN THE FINANCIAL BID (SECOND COVER).

PRICE SCHEDULE FOR THE SUPPLY, INSTALLATION, COMMISSIONING OF OFF-GRID SOLAR ENERGY SOLUTIONS FOR THE CHIEF MINISTERS YOUTH CENTERS ACROSS THE STATE OF MEGHALAYA DURING THE YEAR 2022-2023.

Rates quoted by the bidder:

- a. The rates should be mentioned item wise clearly both in words and figures Item-wise details of rates quoted.
- b. Rates should be inclusive of GST.

Sl No	Center	No. of systems	Price in Rs/unit of solar System	Total Price
1	Part A: Cost of Solar Energy Solution	10		
2	Part B: Cost of Luminaries and electrical wiring accessories	10		
Grand Total				
Grand Total in words: Rupees				

CONDITIONS:

If our tender is accepted, we hereby undertake to abide as per the stipulated Terms and Conditions to supplier and supply, installation and commissioning of solar energy-based solutions.

We agree to abide by this tender and if the work is awarded to us, in executing the above contract we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of corruption act 1988".

We understand that you are not bound to determine the price based on the lowest offer that Foundation may receive.

We accept that all disputes between parties will be adjudicated by a competent court in Bangalore, India.

I, _____ (Name of signatory) on behalf of the bidder
_____ (Name of the bidder), hereby certify that I have noted the technical

specifications of solutions mentioned in Annexure 1, and the technical specifications for components mentioned in Annexure 2 and the prices quoted above are as per the details specified and in compliance with Annexure 1 and 2.

Dated this..... day of.....2022

Signature (Name and Address of the Tender with seal) (In the capacity of.....
..... Duly authorized to sign the Tender for and on behalf of_____)