



## **SELCO Foundation – Call for Vendors**

**for Supply, Installation and Maintenance of Solar Direct Drive  
Vaccine Refrigerators**

**SELCO Foundation – Procurement Officer**

690, 15<sup>th</sup> Cross Rd, Jeewan Griha Colony, 2<sup>nd</sup> Phase,  
J P Nagar, Bengaluru, Karnataka 560078  
[procurement@selcofoundation.org](mailto:procurement@selcofoundation.org)

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SELCO Foundation hereby invites bids to Supply, Installation and maintenance for 5 years (including training) of a Solar Direct Drive (SDD) Vaccine Refrigerator with Deep Freezer (Combo) for 16 Health Centers across the state of Assam during the year 2023-2024.

The detailed tender document can be downloaded from 31-10-2023.

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

Bids, as per the provided terms and conditions should be submitted to the undersigned at the above-mentioned address by

5 pm on or before 09th November 2023.

**Chief Executive Officer – SELCO Foundation**

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**SELCO FOUNDATION**

**TENDER NOTIFICATION**

**FOR**

**SUPPLY, INSTALLATION AND MAINTENANCE FOR 5 YEARS (INCLUDING TRAINING)**

**OF**

**A SOLAR DIRECT DRIVE (SDD) VACCINE REFRIGERATOR WITH DEEP FREEZER (COMBO)**

**FOR 16 HEALTH CENTERS ACROSS THE STATE OF ASSAM**

**DURING THE YEAR 2023-2024**

**TENDER DOCUMENT**

Address for Communication

**SELCO Foundation**

#690, 15<sup>th</sup> Cross Rd, J P Nagar – 2<sup>nd</sup> Phase

Bangalore, Karnataka – 560078

Telephone: 080-26493145

e-mail: [procurement@selcofoundation.org](mailto:procurement@selcofoundation.org)

## DISCLAIMER

### NIT No: 08/2023-24

This tender by SELCO Foundation is for selection of vendors under the Energy for Health Program supported by H T Parekh Foundation (Mumbai) (hereinafter “**Organisations**” or “**Bidder**”) for the work of Supply, Installation and maintenance for 5 years (including training) of a Solar Direct Drive (SDD) Vaccine Refrigerator with Deep Freezer (Combo) for 16 Health Centers across the state of Assam during the year 2023-2024.

#### NOTE:

1. Though adequate care has been taken while preparing the Notice Inviting Tender (NIT) document, the Organisations shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to the Procurement Team at [procurement@selcofoundation.org](mailto:procurement@selcofoundation.org) immediately. If no intimation is received from the Organisation within Five (5) 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 Organisations.
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 and technical suitability ascertained through this tender.
3. Organisations can send the quotations Completely or Partially.
4. The installation of Solar Direct Drive (SDD) Vaccine Refrigerator with Deep Freezer (Combo) at the said Health centres is subject to receiving the approval for installation from the local health authorities.
5. 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
6. SELCO Foundation reserves the right to modify, amend or supplement this document.
7. 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](mailto:procurement@selcofoundation.org)**

Tender: 08/2023-2024

Dated: 30-10-2023

### **NOTICE INVITATION TENDER**

**Chief Executive Officer of SELCO Foundation, Karnataka State, India** hereby invites bids for Supply, Installation and maintenance for 5 years (including training) of a Solar Direct Drive (SDD) Vaccine Refrigerator with Deep Freezer (Combo) for 16 Health Centers across the state of Assam during the year 2023-2024.

1.	Tender Ref No.	08/2022-2024
2.	Last date & time for the bid submission	09-11-2023, 5 PM
3.	Opening date of first cover (technical bid)	10-11-2023, 10 AM
4.	Opening of the financial bid - second cover	10-11-2023, 11 AM
5.	Venue of acceptance and opening of tenders.	SELCO Foundation, Bangalore

Interested and eligible Organisations may furnish the Technical & Commercial Bids for supply, installation and maintenance of Energy Efficient Medical Equipment to the below-mentioned address:

**Procurement Officer - Tender NO 08/2023-2024**

**#690 15th Cross J P Nagar 2nd Phase**

**Bangalore - 560078**

**Telephone: 080-26493145**

**e-mail: [procurement@selcofoundation.org](mailto: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](mailto:procurement@selcofoundation.org)

**sd/-**

**Chief Executive Officer  
SELCO Foundation**

## **INSTRUCTION TO ORGANISATION**

### **Eligibility to Organisations:**

- I. The organization should be in operation for the last 3 years in the field of supply, installation and maintenance of Solar Direct Drive (SDD) Vaccine Refrigerator with Deep Freezer (Combo).
- II. The organisation shall submit the following document along with the Tender.
  - a. Registration Certificate issued by the competent authority.
  - b. Valid manufacturing license issued by the competent authority or authorized Dealer Certificate whichever is applicable.
  - c. List of the Authorized Distributor or Representative in the state of Assam who shall conduct the business responsibility of the Manufacturer (if tender submitted by the manufacturer).
  - d. Company Profile relevant to the item supply along with Product literature/Specifications.
  - e. Valid ISO and FDA/CE relevant certificate of the Original Equipment Manufacturer.
  - f. (i) Should have manufactured or marketed the specific goods covered in the bid documents for at least 3 years.  
(ii) The Organisations shall provide proof of experience with & knowledge of modes of packaging distribution and transportation of such items under monsoon conditions.
  - g. Up to date Professional Tax/GST/Income Tax/GST Clearance certificate.
- III. Organisation should submit the valid PAN card.
- IV. The organisation should submit the self-declaration certificate to declare that the organization is not blacklisted.
- V. The organisation should be able to provide excellent service. It is expected that complaints will be attended to within 72 hrs of lodging and resolved within 12 working days. The company should provide a list of service centres or contact points in the state of Assam.
- VI. Declaration by the organisation that they will be able to execute the order in 2 months
- VII. The organisation should submit the documents to establish that the organisation has implemented projects of cumulative worth 1 Crore or more in the last financial year.

### **Cost of bidding:**

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

**The technical proposal shall contain:**

- I. Particulars of the Firm as per [Annexure - 2](#).
- II. Checklist of Documents to be submitted in First Envelope as per [Annexure - 3](#).
- III. The Organisations have to submit an acceptance letter of guarantee for 5 years for the total performance of the medical equipment.
- IV. The Organisations have to provide the nearest local service centre details, preferably in Guwahati.
- V. The Organisations have to sign all the pages of the documents as a token of acceptance of all terms and conditions.

**The financial bid shall contain:**

The rate quoted for supply and installation. The rate quoted should include all taxes levied by the State & Central Govt. Packing, and forwarding charges including transportation, loading & unloading and installation.

**Price schedule:**

The Organisations shall complete the price schedule as per [Annexure 5 - PRICE SCHEDULE](#) furnished in the Bidding Documents, indicating the total cost towards supply and installation. The SELCO Foundation will not pay any extra charges over and above the rate quoted by the Organisations.

**Fixed price:**

Prices quoted by the Organisations are firm and 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 months from the date of opening of the Second Envelope (Financial Bid). A Bid valid for a shorter period shall be rejected by SELCO as non-responsive.

**Format and Signing of Bid:**

The Organisations **shall give a set of hard copies of all the documents** on the sealed cover. The Bids are to be submitted by hand or post/courier to the below-mentioned address:

Procurement Officer - Tender No 08/2023-2024  
SELCO Foundation,  
#690, 15th Cross, 2nd Phase,  
JP Nagar, Bengaluru- 78,  
Email id: [procurement@selcofoundation.org](mailto:procurement@selcofoundation.org)

**Deadline for Submission of Bids:**

Bids must be received by SELCO not later than the time and date specified in the Invitation for Bids. SELCO may, at its discretion, extend this deadline for submission of the bid by amending the bid Documents in which case all rights and obligations of SELCO and Organisations previously subject to the deadline will thereafter be subject to the deadline as extended.

**Tender Opening:**

The Technical & Financial bids will be opened on the same day itself or later separately. The financial bids (Second Cover), of only technically qualified Organisations, will be opened. The Organisations Names, Bid Modifications, or Withdrawals, bid prices, Discounts and the presence or absence of the requisite details as SELCO, at its discretion, may consider appropriate will be recorded by the Purchasing 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 may, at its discretion, ask the Organisations 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 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 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 Organisations.

**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 Organisations or Organisations of the grounds for the said action.
- Any Bid with incomplete information is liable for rejection.



## Terms and Conditions of the Contract

1. **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 maintenance and service will commence from the date of completion of installation of the project and will be effective for a period of 5 (five) years. 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.
2. **Prices:** Prices provided by the Bidder, and accepted by SELCO 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 SELCO). The Project Costs are inclusive of taxes, transport, installation and 5 years maintenance service which will include minimum two visits to the sites per year. The costs mentioned here do not include replacement of spares while servicing.
3. **Payment Terms:** The above cost will be paid in 2 instalments. The 1st instalment of 50% will be paid along with the WO; the last instalment of 50% will be on receipt of the final invoice, installation report certified by Health Centre authority and SELCO's representative and bank guarantee. 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 H T Parekh Foundation and the Bidder will be paid only the net amount. The Bidder should submit the progress report to the Program Officer, HT Parekh Foundation and SELCO Foundation who will approve the invoice for payments based on the project performance and completion. The Bidder shall furnish a bank guarantee valid for the term of this Agreement, i.e., 5 years for a total AMC cost or 5% of the project cost whichever is higher, before the release of final instalment towards the service and maintenance of Solar Direct Drive (SDD) Vaccine Refrigerator with Deep Freezer (Combo).
4. **Insurance:** Insurance shall be arranged by the Bidder till the products are supplied to the end point and installation is completed. Arrangement of transport, warehouse for stocking and safekeeping of the material till the handover is within the Bidders scope of work and SELCO/HT Parekh Foundation will not be responsible for any missing item or damage that is incurred before the system is handed over to the respective Health centre representative. The bidder will ensure insurance coverage and damage to service staff by way of any accidents during the course of this engagement with SELCO/HT Parekh Foundation for providing the services covered under this agreement.

5. **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. Besides, SELCO/HT Parekh 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 SELCO/HT Parekh Foundation during normal working hours at Bidder or its sub-Contractor'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, the Bidder shall not be absolved to any degree from their responsibilities to ensure that products supplied, comply strictly with requirements of the Work Order 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 failing which the SELCO/HT Parekh Foundation shall have the right to reject goods and hold the Bidder liable for non-performance of contract.
6. **Packing:** The products shall be dispatched by the Bidder adequately packed in appropriate packing which should be suitable for inland carriage and ensure complete safety of goods from any kind of damage during transport and subsequent storage at the health centre.
7. **Assembly, Installation, after sales service and training:** 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. The Bidder shall provide necessary "After Sales Service" at site for a period of 5 years as agreed upon by the Parties. Any Complaints on the system will be resolved within 5 to 10 working days of reporting. Installation will be done as per the standards agreed upon. Active contact numbers will be displayed at the site for registering any complaints on the performance of the product. The Bidder will submit a plan of servicing to the foundation before the release of final payment. The bidder will arrange a minimum of two (2) visits per year to the site for maintenance for a period of five (5) years and submit a report to SELCO/HT Parekh Foundation on the servicing with a functioning status of each site.
8. **Delivery terms:** The delivery of the said products will be to the Health Centres as per the list provided by SELCO in writing and agreed by the Bidder. The time and delivery date as agreed between SELCO/HT Parekh Foundation and the Bidder shall be the essence of the contract. No variation shall be permitted, except with prior authorization in writing from SELCO/HT Parekh Foundation.

Late delivery (LD) clause with corresponding penalty clause will be applicable at 2% per week beyond a period of one month. Delivery Schedule and terms will be as per the WO.

9. **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, SELCO/HT Parekh Foundation shall have the right to purchase such products or other of similar description at the risk and cost of the bidder. The Bidder shall be liable to pay the cost of such purchase products and also the penalty under clause 8 above for resultant delay.
10. **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 SELCO/HT Parekh Foundation which shall be made as per clause 3 of this Agreement.
11. **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 SELCO/HT Parekh Foundation. SELCO/HT Parekh 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 SELCO for such disposal shall be to the account of the Bidder. The freight paid by SELCO/HT Parekh Foundation, if any, on the inward journey of the rejected material shall be reimbursed by the bidder to SELCO/HT Parekh 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 SELCO/HT Parekh Foundation, within 2 weeks of notification.
12. **Warranty:** The Bidder shall warrant that every material/product to be supplied shall be in accordance with the specifications agreed upon by both parties. 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 SELCO 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. The warrant will be according to manufacturer's warranty policies.

13. **Performance Guarantee:** The Bidder shall guarantee that any/all material used in execution of the Work Order shall be in strict compliance with characteristics requirements and specifications agreed upon. 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 SELCO/HT Parekh Foundation for 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 SELCO/HT Parekh Foundation by any ultimate user of the product with respect to the performance of the system (during the warranty period), the bidder should support SELCO/HT Parekh 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 during the first year will be made within 15 to 20 working days from the date of receipt of the Complaint at the site.

14. **Indemnity:** The Bidder shall at all times indemnify SELCO/HT Parekh 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 SELCO/HT Parekh Foundation, SELCO/HT Parekh 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.

### 3. 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 SELCO/HT Parekh Foundation or any customer or agent of SELCO/HT Parekh 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 SELCO/HT Parekh Foundation and will be true and faithful to SELCO/HT Parekh 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; SELCO/HT Parekh 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 SELCO/HT Parekh Foundation. The Bidder shall deliver to SELCO/HT Parekh Foundation all deeds, documents and paper in his possession relating to the business of SELCO/HT Parekh Foundation and further certify the same in writing..
- c. Both SELCO/HT Parekh Foundation and the Bidder fully and freely intend to create an independent contractor 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. SELCO/HT Parekh 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) SELCO is a charitable trust and HT Parekh Foundation is a Section 8 charitable institution 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. SELCO/HT Parekh 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.
- k. **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

### Solar Direct Drive Vaccine/Ice Lined Refrigerator and Deep Freezer

This is a solar powered combination product of vaccine/Ice Lined Refrigerator and Deep Freezer

Technical Specifications	
<b>Vaccine Storage capacity</b>	55-70 L
<b>Water Pack storage capacity</b>	10 -18 L
<b>Freeze Protection Compliance</b>	Grade A freeze protection compliant
<b>Refrigerant:</b>	R290/R600a – CFC free gas: zero/negligible ozone-depleting potential and very low global warming potential
<b>Operating temperature range</b>	+5 degrees C to +43 degrees C
<b>Cold chain autonomy</b>	at least 3 days
<b>Refrigerator Compartment:</b>	Entire chamber remains within an acceptable temperature range of +2 deg. C to +8 deg. C
<b>Corrosion resistance:</b>	The cabinet should be made of corrosion resistant material
<b>Wire Shelves</b>	The refrigerator compartment should contain 2 wire shelves for storing vaccines
<b>Freezer Ice Pack capacity</b>	The freezer compartment should be able to hold 24 Water/Ice Packs
<b>Display Thermometer</b>	PQS pre- qualified digital temperature recorder with alarm system with 30 days temperature history preferably with remote monitoring system
<b>Solar Panel</b>	800 - 1000 Wp
<b>Accessories</b>	Additional surge protector
	Minimum 30m cable to be provided for the solar panel to SDD refrigerator connection
<b>Minimum Warranty for SDD ILR &amp; Deep Freezer</b>	1 year
<b>Quantity Required</b>	16

## Technical Specification of Components:

### 1. Solar PV Module:

- The PV modules used must qualify to the latest edition of the IEC PV module qualification test.
- 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.
- PV modules must be tested and approved by one of the IEC authorized test centres. The module frame shall be made of corrosion-resistant materials, preferably anodized aluminium of 10 microns thickness.

### 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 Ten (10) years from the date of sale to the original customer

- Defects and/or failures due to manufacturing.
- Defects and/or failures due to quality of materials
- 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.

### PERFORMANCE WARRANTY:

- The degradation of power generated by the module shall not exceed 20% of the maximum rated power over the 25-year period and not more than 8% after the first ten years period.
- Should have a positive power tolerance
- Should be Anti - L.eT.I.D & P.I.D Resistant
- Panel degradation should be linear over a period for 25+ years
- Should be able to withstand downward force  $\geq 5400$  pascals
- Should be able to withstand uplift force  $\geq 2400$  pascals
- Should have tempered/toughened solar glass of 3.2 mm thickness
- Should have anti-reflective surface treatment
- Should have optically clear glass with high transmittance.

### 2. Module Mounting Structure (MMS):



- a. Hot dip galvanized M.S/ anodized aluminium of size not less than 50 mm x 50 mm x 6 mm size (for legs) and other square tubes of 2 mm thick (Rafter and Purlin) 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. For a Flat roof R.C.C installation, the MMS should be a minimum 2-legged structure (1 front leg, 1 back leg) and many such leg pairs to exist along the length of the MMS, (Maximum distance between each row pair should be 6 ft) . Each leg of M.M.S shall have a base plate at its bottom. The base plate at each leg should be of the size 150\*150\*6 mm. The base plate should have four stiffeners. Each stiffener will be placed perpendicular to the side of the base plate. The base plate should house four wedge anchors at each corner. The steel wedge anchors used should be 2-3 inches long (Depending upon the RCC roof thickness).
- c. The M.M.S should be designed such, it safely not only withstands the total panel weight but also withstand the high wind loads acting over it.
- d. The PV panels should be clamped to M.M.S only at the allowable points along the panel frame, which is specified by the panel manufacturer. Each panel should be clamped to the purlins using 4 clamps (2 clamps on each opposite sides of the panel). The clamps used should be of minimum 35\*3 mm size and that of anodized aluminium. The distance between the end clamp and the end of the rail (purlin end) should be minimum 25 mm long.
- e. All panels and MMS should be grounded together with grounding bolts.3.

### **3. Earthing:**

Earthing is a way of transmitting any instant electricity discharge directly to the ground by providing a low resistance path (using electrical cables wires with no joints or metal strips with lesser joints). This instant electricity discharge is mostly in the form of lightning, surge voltages entering through grid lines and due to fault current/leakage current in the system. The goal is to protect the appliances from voltage surges and protect the users from the risk of electrocution due to leakage/fault current in the system.

- Minimum of 3 m distance between each pit must be maintained and 1.5 m from building foundations and sumps.
- Should not combine AC earthing & DC Earthing.
- Earthing pits should have a chamber set above the ground and should be closed with a metallic lid/F.R.P lid and should have access for maintenance.
- Earth pit resistance should ideally be 0.5 Ohms and should not exceed 5 Ohms.

### **➤ 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 Aluminium /cast aluminium 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. The AJB should be placed in a shaded place, preferably at the mid-end of the MMS legs. IP67 grade AJBs should be used.

## **5. Cables:**

- For DC connections use only DC cables and same for AC connections use only AC cables and do not interchange or mixed.
- Cables from PV arrays and earthing cables should be given UPVC pipe protection. The end points of the conduit pipes should be protected from the rainwater/termites/insect's ingress by using appropriate sealant (Foam duct sealant).
- Cable Tie for outdoor application should be UV resistant. UPVC long "L-bend" pipes to be used wherever the cables pass through sharp edges/roof edges/angles in the wall.
- Cables should not be left open and should be covered through conduit pipes.

## **6. INSTALLATION, OPERATIONS AND MAINTENANCE MANUAL**

### **Contents: ●**

- Health and safety guidelines,
- Basic operations description,
- Cool-down time instructions to assure both acceptable temperatures and full autonomy is achieved, and Routine maintenance tasks (e.g. daily, weekly, and monthly).
- Correct handling to avoid component damage and for the safety of handling persons,
- Solar array site shading assessment tools and procedures,
- Electrical wiring diagram, SLD
- Installation & Commissioning procedure,
- Do's & Don'ts
- Technical maintenance tasks (e.g. daily, weekly and monthly),
- Periodic preventative maintenance procedures,
- Diagnostic and repair procedures,
- Itemised list of spare parts including part numbers,
- End-of-life resource recovery and recycling procedures, and
- User training guidance.

Printed user and routine maintenance instructions specifically directed at the health centre or store staff must be pictorial. All key information must be summarised on a single sheet that can be fixed onto the appliance cabinet at time of installation. The sheet should be sufficiently durable to last the life of the appliance and must be in a locally-understood language. Installation, repair and servicing instructions must be supplied in printed format and optionally on DVD and/or online, to instruct the

installation technician in installation standards and practices specific to the appliance and its power system. In addition, supporting video material supplied on DVD and/or online can be supplied to assist the instructor when delivering on-site user training.

#### ➤ **TRAINING**

Specific user training must be provided to the responsible, on-site appliance user. User training conducted by installers at time of installation is recommended. The legal manufacturer is required to provide specific user training instructions to enable an instructor (e.g., installation technician, health worker supervisor) to provide product specific user instructions to the responsible, on-site appliance user. Optional training courses are to be offered by the qualified supplier or a designated representative.

Training should contain:

- Effective use of the refrigerator on critical & non-critical situations
- Operation of the appliance & entire system
- Basic maintenance
- Do's & Don'ts
- Logging service complaints & scheduled maintenance call

## ANNEXURE 2: DETAILS OF THE ORGANISATION

Sr. No.	Description	Response
1	Name and address of the organisation (With pin code)	
2	Year of starting the organization & registration number (photocopy of registration certificate or any other relevant document to be enclosed)	
3	Name and Contact number of the Proprietor or Point of Contact	
4	Status of organisation- Proprietorship / Partnership/ Pvt Ltd / Limited/others	
5	Documents to prove cumulative business of Rs 1 Cr in the last financial year	
6	Experience of Supplier/supplier relating to supply of solar energy-based solutions (implementation documents and supporting certificates to be enclosed)	
7	Particulars of Physical Infrastructure and total strength of staff available in the organization relating to Supplier/supply/testing etc.,	
8	Organisation Bank address	
9	Evidence of existence (GST Registration) of local office in State of Assam.	

I abide by all the above terms & conditions.

SIGNATURE OF THE BIDDER and with office seal

PLACE:

DATE:

### ANNEXURE 3 – CONFIRMATION ON ENCLOSURES

Sl.No.	Description	Whether the Document is enclosed or not	Page No. From and to
1	Details of Organization as per Annexure – 2	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 registration and income tax returns filed in the last 2 financial years	YES/NO	
6	Acceptance to give 5 years guarantee for trouble free operation and maintenance.	YES/NO	
7	Evidence of existence (GST Registration) of local office in State of Assam. Preferably closer to the project districts	YES/NO	
8	Letter of declaration to confirm that the Organisations has not been black listed by any entity or institution	YES/NO	
9	Organisation bank details	YES/NO	
10	Signed, sealed copies of Annexure 1, 2, 3, 4, and 5	YES/NO	
11	ISO/CE/FDA/relevant certificates of the equipment quoted		

I abide by all the above terms & conditions.

SIGNATURE OF THE BIDDER and with office seal

PLACE:

DATE:

#### **ANNEXURE 4 - SCHEDULE OF TENDER**

Regarding Supply, Installation and maintenance for 5 years (including training) of a Solar Direct Drive (SDD) Vaccine Refrigerator with Deep Freezer (Combo) for 16 Health Centers across the state of Assam during the year 2023-2024.

Sl.No.	Scheduled activity	Within days (No.of days)	Accepted Schedule by date
1.	Supply starts after WO	30 days	
2.	Supply/Installation of all the equipment completed	45 days	

## ANNEXURE 5 - PRICE SCHEDULE

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

PRICE SCHEDULE FOR THE SUPPLY, INSTALLATION AND MAINTENANCE FOR 5 YEARS (INCLUDING TRAINING) OF A SOLAR DIRECT DRIVE (SDD) VACCINE REFRIGERATOR WITH DEEP FREEZER (COMBO) FOR 16 HEALTH CENTERS ACROSS THE STATE OF ASSAM DURING THE YEAR 2023-2024.

#### Rates quoted by the Organisations:

- The rates should be mentioned item wise clearly both in words and figures Item-wise details of rates quoted.
- Rates should be inclusive of GST.
- Rates should be inclusive of AMC from Year 2 to 5 but separately mentioned.
- Rates should include an average transportation cost for supply of solution category in the region of operation of the Organisations.

**Table 1: Cost of equipment**

Sl .No	Quote for Solar Direct Drive (SDD) Vaccine Refrigerator with Deep Freezer (Combo)	No of Equipm ent	Price in Rs/unit of Solar Direct Drive (SDD) Vaccine Refrigerator with Deep Freezer (Combo)	On site AMC/Unit cost up to 5 years (in RS)
1	Solar Direct Drive Ice Lined /Vaccine Refrigerator and Deep Freezer	Less than 10		
2	Solar Direct Drive Ice Lined/Vaccine Refrigerator and Deep Freezer	More than 11		

**CONDITIONS:**

If our tender is accepted, we hereby undertake to abide as per the stipulated Terms and Conditions to supplier and supply, installation and maintenance 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 Organisations  
\_\_\_\_\_ (Name of the Organisations), hereby certify that I have noted the technical specifications of solutions mentioned in Annexure 1, the prices quoted above are as per the details specified and in compliance with Annexure 1.

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 \_\_\_\_\_)