

REQUEST FOR PROPOSALS:

Consultant to provide Energy Audit for Healthcare facilities in Assam & Meghalaya

SUMMARY OF PROCUREMENT

WRI India is planning to offer a fixed-price contract for an energy audit for five healthcare facilities — one in Assam and four in Meghalaya. The audit will evaluate energy consumption, including lighting, cooling, and medical equipment, using energy measurement devices and analyzers. The consultant will provide an audit report with recommendations for short-term and long-term energy reduction. Training sessions will be conducted at the facilities before and after the audit to enhance energy efficiency practices. Recommendations for energy-efficient appliances and practices for medical and non-medical equipment will also be included. The **First Energy Audit** before integrating Energy Efficiency (EE) measures to the facilities is to be completed by 23rd September 2024, the **Second (final) audit** after integrating EE measures to the facilities is to be completed by 7th February 2025 and proposals are due by 16th August 2024.

About WRI India

India Resources Trust, an independent charity shall be hereinafter referred to as “**WRI India**”, provides objective information and practical proposals to foster environmentally sound and socially equitable development. Our work focuses on building sustainable and livable cities and working towards a low carbon economy. Through research, analysis, and recommendations, WRI India puts ideas into action to build transformative solutions to protect the earth, promote livelihoods, and enhance human well-being.

About the WRI India Energy Program

The objective of WRI India’s Energy Program is to inform and guide India’s transition to cleaner energy. The program focuses on three interrelated aspects of this energy transition: enhancing energy access, scaling renewables among specific consumer categories, and achieving higher levels of energy efficiency. Our energy access work specifically aims at achieving Sustainable Development Goal (SDG) 7: affordable and clean energy; and through SDG 7, achieving other SDGs aimed at reducing poverty (SDG 1), improving good health (SDG 3), and climate action (SDG 13).

This project, on developing Net-Zero Energy Healthcare facilities through transitioning them using energy efficiency and renewable energy measures – is one of the program’s initiatives which focuses on developing Net-Zero Energy Healthcare facilities, aims to integrate renewable energy, energy efficiency, net metering, and battery storage technologies to achieve near net-zero energy, potentially eliminating fossil fuel use in these facilities.

SCOPE OF WORK AND DELIVERABLES

Purpose and Objective

The project aims to develop net-zero energy healthcare facilities in both peri-urban tertiary healthcare settings and rural primary healthcare facilities. The challenges addressed include

			Contract Demand (kVA)				acity	
01	Assam Healthcare 1	3 Phase	30kW/35.29 kVA	26.705238102915366, 92.47046552683403	2 floor building	50	20 kVA	Yes, 15 kW off grid (with grid charging facility)
02	Meghalaya Healthcare 1	1 Phase	5 kW	26.02874440931169, 92.00828190679302	Assam Type	10	N/A	N/A
03	Meghalaya Healthcare 2	1 Phase	3 kW	25.528354757275046, 90.85877258852219	RCC roof (Assam Type)	14	N/A	1 Solar panel with charger
04	Meghalaya Healthcare 3	1 Phase	1 kW	25.560407615344232, 90.96783192300423	2 floor, RCC roof	6	N/A	N/A
05	Meghalaya Healthcare 4	1 Phase	1 kW	25.470574374811118, 91.34075541657825	Assam Type	3	N/A	N/A

- (ii) Participate in meetings (online) with WRI India and relevant healthcare facilities to seek approvals for the energy audit when required.
- (iii) Support in capacity building sessions as defined in the contract to train the admin & team at site to support the audit.
- (iv) Intimate WRI India before the audit, on the formats/documents that will be used for the audit for the selected healthcare facilities. The audit will target a total of 5 healthcare facilities; any changes in these locations will be communicated to the consultant at least one week before the start of the audit. As part of the energy audit, the consultant will also be required to take all electrical measurements of electrical assets/loads.
- (v) Perform the energy audit by assessing current energy usage, energy performance of various appliances and equipment, power quality, identification of opportunities for energy efficiency improvement & energy savings and analyse the expected energy savings and payback period but not excluding the scope of energy audit identified by Bureau of Energy Efficiency. Additionally, the auditor shall incorporate the opportunities of passive design features for energy savings.
- (vi) Document the audit responses and data as per the template agreed, with feedback from WRI India.
- (vii) Analyze the breakdown of peak energy demand and energy consumption across various end use energy applications within the hospital.

- (viii) Conduct primary and secondary data collection of all major electrical equipment's and appliances both medical and non- medical being used in the hospital to establish the baseline.
- (ix) Determine the load profile and power signature of all major equipment and appliances under different operating conditions to understand their power consumption patterns. This data will be used to estimate potential energy savings from proposed interventions.
- (x) Perform detailed energy analysis to calculate energy performance indicators at both the facility level and at end use application level.
- (xi) Identify energy conservation measures to reduce energy wastage with zero cost or minimal cost implications.
- (xii) Identify energy efficiency interventions and perform cost benefit analysis for informed decision making, and categorize these interventions into low cost, medium cost, and high-cost measures.
- (xiii) Develop technical specifications along with vendor details for the proposed interventions to facilitate their implementation. Facilitate interactions between WRI and equipment manufacturers to implement these solutions.
- (xiv) Calculate the energy demand and energy consumption under the most optimized scenario by incorporating the proposed interventions. Based on this analysis provide recommendations for integrating a renewable energy system to achieve net zero energy facility.
- (xv) Take photographs of audited buildings and electricity infrastructure, including but not limited only to medical equipment, to depict their physical condition and record keeping for comparison before and after implementations, after obtaining consent from the concerned officials at the facilities.
- (xvi) Additionally, the consultant will provide all necessary support to achieve the objectives stated above, including but not just limited to arranging for the measuring equipment like Power & Harmonics analyser, Tachometer (Contact type), Non-contact tachometer/stroboscope, Lux meter, Combustion/Flue Gas analyser, Thermometer, Infrared thermometer (Non-contact type), Thermal imaging devices, Ultrasonic flow meter, Thermo-hygrometer, Conductivity meter, etc which will help achieve the overall objective of the energy audit.

2. Technical Support in developing guidelines for the proposed Net-Zero Energy Healthcare implementations –

- (i) Submit a detailed technical report based on the audit findings, feedback, cost-benefit analyses, and discussions with local stakeholders.
- (ii) Collaborate with WRI India throughout the process, providing expertise and support as required.
- (iii) Provide technical support to WRI India for the implementation of the proposed energy efficiency and renewable energy interventions as outlined in the energy audit report. Support developing technical specifications and tender documents to invite bids from prospective vendors for carrying out the proposed interventions, through weekly check in calls.

3. 'Measurement and verification report' to understand the energy savings achieved –

- (i) Conduct a final detailed energy audit of the selected healthcare facilities as suggested by WRI India to measure and verify to understand on energy saving achieved.
- (ii) Based on these observations and collected data, the consultant is required to submit "Measurement and verification report " as per the timeline mentioned below.

- (iii) And provide a recommendation note outlining to understand the existing energy consumption patterns and recommend an array of solutions for improving energy efficiency in these types of healthcare facilities., to minimize the energy load profile through such as behavioural interventions, energy-efficient equipment options, and clean energy solutions for similar healthcare facilities
- (iv) This will ensure the promotion of energy efficiency of the new appliances and equipment used in the facilities, enforce efficient use of energy, and minimize its planet-unfriendly impacts like greenhouse gas emissions.

TIMELINES

S. No.	Milestone	Timelines	Tasks/ Deliverables
1	Signing of contracts	1 st Week	<ul style="list-style-type: none"> Contract signing
2	Prepare the Audit team and finalize the audit formats	2 nd & 3 rd week	<ul style="list-style-type: none"> Discussion on the formats and project sites between the Energy Auditor team & WRI India Finalize formats & plans of Audits for all 5 sites.
3	Conduct Audit	4 th & 5 th Week	<ul style="list-style-type: none"> Start of Energy Audit Submission of weekly reports that capture Energy Audit progress
4	Submission of draft Audit report	5 th & 6 th Week	<ul style="list-style-type: none"> Completion of Data Collection Hand over the audit data in a digital format within 7 days from the completion of audit. The data should include the <ul style="list-style-type: none"> Raw files – responses from the respondents in original form along with corresponding identification and geotagged information Clean data – responses compiled in excel (for quantitative data) and MS word (for qualitative data) separately for different healthcare facilities across 2 states as per the finalized audit templates. Draft Energy Audit report – summary of data collected and critical observations: <ul style="list-style-type: none"> (a) Develop a recommendation note outlining detailed energy audit to state existing energy consumption patterns, recommend an array of solutions to minimize energy load profile such as behavioral interventions, energy efficient equipment options and clean energy solutions. (b) Conduct cost-benefit analysis for the proposed technical interventions covered in the guidelines.
5	Technical support for the implementation of energy efficiency interventions.	From 6 th to 13 th Week	<ul style="list-style-type: none"> Facilitate engagement with equipment manufacturers, architects, designers, who can undertake these tasks in the Energy audit regions. Light touch support limited to one-hour weekly call with WRI India team.

S. No.	Milestone	Timelines	Tasks/ Deliverables
7	Final report - Measurement and verification report	First week of February	<ul style="list-style-type: none"> Submit a detailed technical audit report based on the completed activities and comparing before and after interventions, to understand the energy savings achieved. and share the final report “Measurement and verification report” Along with supporting recommendation note outlining to understand the existing energy consumption patterns and recommend an array of solutions for improving energy efficiency in these types of healthcare facilities, to minimize the energy load profile through such as behavioral interventions, energy-efficient equipment options, and clean energy solutions for similar healthcare facilities

PAYMENT TERMS

S. No.	Deliverables	Payment
1	Contract Signing	20%
2	Prepare the audit team- Conduct the 1 st training session (online) for the facilities. Completion of 1st energy audit for all 5 facilities.	20%
3	Facilitation of all 5 audit reports; Completion of technical & cost benefit analysis.	20%
4	Completion of final audit at all 5 facilities i.e. 2nd audit, and final report submission (after the recommendations are implemented) to understand the energy savings achieved and sharing the “Measurement and verification report” along with other recommendations as mentioned in the RfP.	40%

Please note that the maximum budget estimate for this energy audit is restricted to INR 3,00,000/- inclusive of taxes and all necessary equipment.

The travel cost - including flight (from origin to Guwahati & Back), food, lodging and local transit to the sites will be taken care by WRI India for maximum of 2 personals – during first and second audits.

GUIDELINES FOR PROPOSAL SUBMISSION

Proposal content

Prospective organizations/consultants should submit:

- A statement of interest describing the proposed team and how it meets the above requirements.
- CVs of team members.
- Description of capabilities and relevant experience - Examples of and references (at least 3) for similar previous work.
- An outline of the proposed methodology and workplan. At a minimum the workplan is expected to contain the following
 - Security and Quality protocols, which will include:
 - Security requirements/data confidentiality- Confirm that data collection & storage security protocols are in place and describe in detail how collected data will be protected.

- Energy Audit Workplan, including each audit activity, which will at the minimum include the following detail:
 - Staff resources responsible for the different activities.
 - Schedule of trainings: in general, pre audit and post audit specific trainings at facilities.
 - Internal testing of instruments and/or data collection protocols.
 - Schedule of all activities related to data collection, with start and end dates.
 - Total number of days allocated of training for data collection activity and time allocation.
 - Clear indication of the roles and responsibilities of the different team members.
- A proposed budget with a breakdown of costs sufficient to assess reasonableness and compliance with our funder requirements. Please also indicate proposed payment milestones against the work milestones mentioned under the section “Timing”. This may be negotiated by WRI India at the time of contract signing.

Expression of Interest, Deadline for Questions, and Proposal

All expressions of interest and questions about this RFP must be received via email to the contact below by **16th August 2024, 6 PM (Indian Standard Time)**. Answers to the questions will be shared with all parties who have asked questions or otherwise expressed interest.

WRI India Energy Team - indiaenergy@wri.org

All proposals must be sent by **16th August 2024, 6 PM (Indian Standard Time)** in electronic format to the same contact listed above.

EVALUATION AND SELECTION

Evaluation Criteria

The following elements will be the primary considerations in evaluating all proposals submitted in response to this RFP:

- Completion of all required elements.
- The extent to which the organization’s/consultant’s proposal fulfils WRI India’s stated requirements as set out in the RFP.
- Experience of at least three years in conducting energy audits with similar projects. Experience in conducting health sector energy audits and/or energy audits in Assam/Meghalaya will be a plus.
- Overall cost of the organization’s/consultant’s proposal.
- Debarment and sanctions – WRI India will not consider proposals from organizations/consultants that are presently debarred by the Indian government or named on any restricted parties lists.
- Sustainability – WRI India values sustainability and all other factors being equal (i.e., equal scores for price and non-price), will favour a proposal to perform the work more sustainably.

The bidder offering the best overall value will be selected. For this procurement, price and nonprice aspects are of equal importance (50:50).

Selection Process

No proposal development costs shall be charged to WRI India, all expenses are to be borne by the bidders. WRI India may award to the bidder offering best value without discussions. However, WRI India reserves the right to seek bidder clarifications and to negotiate with those bidders deemed to be within a competitive range. WRI India may, at its discretion and without explanation to the prospective organizations/consultants, choose to discontinue this RFP without obligation to such prospective organizations/consultants or make multiple awards under this RFP. Contracts will not be awarded to organizations/consultants debarred by the Indian government or named on restricted parties lists.

Disclaimer

No part of this Request for Proposal shall be construed to be a document for offer. The acceptance of a proposal does not contractually bind WRI India. The vendor will have to sign definitive contractual documents which will govern its relationship with WRI India. The requirements mentioned in this document are subject to change.