

# **Request for Proposal (RFP)**

## 1. Introduction

The Ashoka Centre for a People-centric Energy Transition (ACPET) is a transdisciplinary centre with a vision to see the global south, particularly India, transitioning to a sustainable, secure, equitable energy pathway leading to the well-being of all on time, under the International Foundation for Research & Education (IFRE) at Ashoka University, is currently seeking proposals for 01-unit of procurement, installation, and commissioning of a Solar-Based Lift Irrigation Project at Rajahara, Nawabazar block of Palamu District, Jharkhand, India. The primary objective of this project is to facilitate the availability of irrigation water over a distance of approximately 1000 meters. This will be achieved by implementing a 7.5 HP Solar Lift cum drip Irrigation Pump System, constructing a Pump House, and laying a PVC pipeline to ensure efficient water distribution for agricultural purposes.

## 2. Project Overview

This project aims to implement a sustainable irrigation solution that utilizes solar energy to lift water efficiently for agricultural purposes. The selected vendor will supply, install, and commission the solar lift irrigation system.

#### 3. Scope of Work

The scope of work includes, but is not limited to, the following:

## A. Supply of Equipment:

- a. 7.5 HP Solar-Powered Surface Pump with multi-meter connected VFD controller
- b. Polycrystalline / Monocrystalline Solar Modules (Total requirement to be fulfilled 8000 W)
- c. HDPE Pipes (80/110mm flexible, ISI marked)
- d. PVC Foot Valve with Clamps and Fittings (ISI marked)
- e. PVC Non-Return Valve (NRV) with Clamps and Fittings (ISI marked, pressure rating 2.5 Kgf/Sq.Cm)
- f. Quick Release Coupling (QRC) Outlets (CI) with Clamps and Accessories (ISI marked)
- g. Water Brick and RCC Chamber (2 ft length, 2 ft width, 2 ft depth 1.5 ft below ground and 0.5 ft above ground)
- h. Discharge point slab to avoid erosion
- i. 160 mm Diameter PVC Pipes
- j. Solar Panel Mounting Structure
- k. An approximate water distribution line of 1000 meters with at least ten outlets is needed.
- 1. Construction of pump house or other infrastructures necessary to successfully operate solar-based water.



## B. Installation:

- a. Complete installation of the solar pump system and associated infrastructure as per industry standards and specifications.
- b. Ensure proper integration of all components for efficient and reliable operation.
- c. Conduct thorough testing and commissioning of the entire system to validate its functionality.
- d. Provide comprehensive training to the local operators on the operation and maintenance of the system.
- e. Provide a Remote Monitoring System (RMS) to monitor system operations smoothly.

#### 4. Documentation:

- a) Furnish all necessary documentation, including operation manuals, warranty information, and maintenance guidelines.
- b) Offer a minimum 5-year comprehensive warranty on the supplied equipment and system.
- c) Provide dedicated after-sales support and maintenance services for five years of operation.
- d) Theft and equipment damage insurance coverage is to be offered for all supplied equipment.

## **5.** Proposal Requirements

Interested vendors are requested to submit a detailed proposal that includes the following:

- a. Company Profile: Background information, experience in similar projects, and references.
- b. Technical Proposal: Detailed specifications of the proposed solar lift irrigation system, including equipment details, installation methodology, and timeline.
- c. Financial Proposal: A comprehensive cost breakdown, including all materials, labor, and any additional charges.
- d. Warranty and Support: Information on warranty terms and post-installation support services.
- e. Project Management and Implementation Plan: Outline your approach to project management, installation, testing, and commissioning, along with the roles and responsibilities of your team.



f. After-Sales Support and Maintenance: Describe your plan for providing after-sales support, maintenance services, and training for the local operators.

## 6. Submission Guidelines

- (i) Proposals must be submitted by 17<sup>th</sup> Sept'2024.
- (ii) All proposals should be sent electronically to <u>acpet@acpet.ashoka.edu.in</u>.
- (iii) For any inquiries regarding this RFP, please get in touch with Mr. C Surendran at +91 9911195954.
- (iv) Bid opening date: 18<sup>th</sup> September 2024, 3.00 pm

# 7. Evaluation Criteria

- a) Compliance with technical specifications and overall system design (40%)
- b) Cost-effectiveness and transparency in pricing (20%)
- c) Vendor experience and past performance on similar projects (20%)
- d) Quality of proposed equipment and materials (10%)
- e) Comprehensiveness of the after-sales support and maintenance plan (10%)

## 8. Payment schedule

- (i) Planning, blueprint submission, and procurement: 30 %
- (ii) Installation, Commissioning, and Testing 35 %
- (iii) Successfully operating for 1000 hours with AMC and Warranty-35 %

## 9. Terms and Conditions

- a) Timely Completion: The project timeline is strict (30 days from the date of issuance of the work order), and financial penalties will be imposed for delays in installation and commissioning. The vendor shall complete the delivery and installation of the equipment within the agreed-upon timeframe. Any delay in delivery or installation will incur a late delivery fine of Rs.5000 per day.
- b) 24/7 AMC Support: This is a mandatory 24/7 maintenance contract with fast response times and penalties for non-compliance. The vendor must provide service and maintenance for the equipment for at least one year from the installation date, covering any faults or issues at no extra cost.
- c) Training: The vendor shall provide comprehensive training to the local water management committee. This training will cover the equipment's operation, maintenance, and troubleshooting to ensure its proper use and longevity.



- d) On-site Cooperation: A designated project manager is required. Penalties are imposed for non-cooperation or delays during installation or maintenance.
- e) All-Inclusive Pricing: The bid must cover all costs, including equipment, labor, and transportation. No additional charges are accepted post-contract.
- f) Contractor Responsibility: Full accountability for equipment handling and all labor costs, including unforeseen work, within the bid price.
- g) Requirements from bidder
  - a. The bidder must be registered under the Indian Companies Act, 2013, or the Limited Liability Partnership (LLP) Act, 2008.
  - b. Valid PAN card and GST registration are mandatory
  - c. Minimum **three** years of experience in executing similar projects in Jharkhand or neighboring states.
  - d. Successful completion of at least **two** projects of similar nature and complexity in the last **five** years.
  - e. Average annual turnover of at least **30** lakhs in the last **three** financial years.
  - f. Positive net worth and profitability for the last **two** financial years.
  - g. Preference will be given to bidders with an established office or operational presence in Palamu district or neighboring areas.
  - h. Demonstrated technical capability to execute the specific work required in Rajhara, including relevant equipment and skilled personnel.
  - i. Submission of all relevant certificates, project completion reports, and financial statements as proof of meeting the above criteria.

Note: The exact requirements may be adjusted based on the specific nature of the work and local regulations in Rajhara of Palamu District of Jharkhand.

## 10. Conclusion

ACPET is committed to facilitating people-centric energy transition practices and improving the livelihood of the Rajahara village community. We look forward to receiving your proposals and working together to implement this essential solar-based irrigation project. Thank you for your interest in contributing to sustainable agricultural practices through clean energy technology.

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Note: To be considered for selection, please ensure that all proposals adhere to the guidelines outlined in this RFP. All rights are reserved with IFRE. In case of any dispute, issues will only be settled in New Delhi. (Notification issued date: 6th September '24, extension of submission of RFP by 2 days, extended date of submission 17<sup>th</sup> September '24)