MAHARASHTRA ENERGY DEVELOMENT AGENCY (MEDA)



SR. No./A-1/55,E-Ward MHADA Complex, Nagala Park, Near Zilla Parishad — 416003 E-mail ID: medakolhapur@mahaurja.com Website: www.mahaurja.com

Quotation Call

MEDA, Divisional Office Kolhapur is inviting quotations to Supply, Installation, Testing & Commissioning of total 500 LPD X 10 Nos of Evacuated Tube Collector (ETC) type Solar Water Heating System (Excluding of Storage Tanks) with 05 Years CMC and 05 Years Insurance at Javahar Navoday Vidhyalaya, Kagal Dist. Kolhapur.

- Date and time for submission of quotation : From 15/07/2023 to 21/07/2023
- Address for communication: Maharashtra Energy Development Agency, Divisional
 Office Kolhapur SR.No. 249/A-1/55, E Ward, MHADA
 complex ,Nagala Park, Near Zilla Parishad, Kolhapur-416003

The Divisional General Manager, MEDA, Divisional Office, Kolhapur shall have all rights to accept or reject any or all of the Quotations received hereunder.

Sd/-

Divisional General Manager MEDA, Divisional Office, Kolhapur

Date: 14/07/2023

2023/DOK/Technical/Desk -1/Quotation/K- 222/508

Quotation Call

To, (Supplier/Developer/Contractor/Integrator)

Sub: Supply, Installation, Testing & Commissioning of total 500 LPD X 10 Nos of Evacuated Tube Collector (ETC) type Solar Water Heating System (Excluding of Storage Tanks) with 05 Years CMC and 05 Years Insurance at Javahar Navoday Vidhyalaya, Kagal Dist. Kolhapur – Invitation to Quote

With reference to subject matter, we would like to invite your quotes in sealed condition for undertaking the subjected work with given technical specifications/technical standards by abiding the following terms and conditions —

• Details and Dates: -

1	System details	Name of Site	Capacity	Project Cost Rs. (Inclusive of all taxes and charges)
	ETC Type Solar Water Heating System.	Javahar Navoday Vidhyalaya , Kagal Dist. Kolhapur	500 LPD X 10 Nos	9,24,960/-
3	Date and time for submission of quotations.	From 15/07/2023; 10:00 Hrs to 21/07/2023 18:00 Hrs		
4	Date and time for opening of quotations.	24/07/2023; 10:00 Hrs		
5	Security Deposit	Rs. 28,000/- (to be deposited by online mode in favor of Maharashtra Energy Development Agency, Kolhapur)		
6	Address for communication and for quotation opening	Maharashtra Energy Development Agency, Divisional Office Kolhapur SR.No. 249/A-1/55, E Ward, MHADA complex, Nagala Park, Near Zilla Parishad, Kolhapur-416003		
7	Site location	Javahar Navoda	ay Vidhyalaya , Kag	al Dist. Kolhapur

1. ELIGIBILITY CRITERIA -

The manufacturer/supplier shall be eligible to quote for this work provided fulfilment of following.

- 1. Shall have a registered firm/company with GST registration.
- 2. Shall provide brief information in prescribed format (enclosed).
- 3. Shall not be black listed in any govt and/or other organizations.
- 4. Shall provide documentary proof about having experience of supply, installation and commissioning of minimum 3000 LPD Solar Water Heating System through Government Scheme or at Government Establishment /Institute.
- 5. Shall have an average turnover of Rs. 50 lakh per year for the FY 2019-20, 2020-21 and 2021-22 duly certified by chartered accountant.
- 6. Shall provide self-attested copy of IT returns for the FY 2019-20, 2020-21 and 2021-22 (Assessment Year 2021-22 and 2022-23.
- 7. Shall have arrangement of providing after sales service in Kolhapur/Sangli Dist for maintenance the system.

2. TERMS AND CONDITIONS -

- 1) Location for installation of Solar Water Heating System shall be assigned immediately by the user agency to the selected manufacturer/supplier/Installer to get the work done in stipulated time.
- 2) The installation of Solar Water Heating System should be done in excellent manner and meet technical standards prescribed by the MEDA.
- 3) As per the technical criteria set by the Ministry of New and Renewable Energy, Govt. of India the Solar Water Heating System should fulfill the BIS standards.
- 4) The manufacturer/supplier/Installer shall check the quality of water and assess the hardness of it and ensure that the system shall function seamlessly.
- 5) The manufacturer/supplier/Installer shall provide valid BIS certificate for the Solar Water Heating System from govt. approved test centers.
- 6) The Solar Water Heating System shall provide with name of company supplying the same along with installation date and contact details etc.
- 7) If the Solar Water Heating System does not function as per given standards then the loss incurred shall be borne by the supplier and paid Javahar Navoday Vidhyalaya, Kagal Dist. Kolhapur.
- 8) If contractor fails to complete the work then any balance payment along with Security Deposit will be forfeited and contractor shall be blacklisted.
- 9) Supplier shall give training of system operation to a person duly nominated by user agency and same shall be informed to divisional office Kolhapur.
- 10) The Contractor/Supplier/Installer should successfully complete the project within timeframe set out by the MEDA. For this purpose, Contractor/Supplier/Installer shall provide Activity Bar Chart within a week time after issue of Work Order.
- 11) The Contractor/Supplier/Installer shall provide the user manual, warranty card to the user agency and copy of same shall be provide to MEDA Kolhapur.
- 12) The Contractor/Supplier/Installer shall visit the site and ensure scope of work before submission of quote against the enquiry. In this context, the Contractor/Supplier/Installer should submit the Site Visit Report in given prescribed format duly certified by authorized person of user agency along with this quote.

- 13) The work being of limited nature and to seek prompt after sales service the Contractor/Supplier/Installer within Kolhapur/Sangli District shall be preferred while allotting the work against the invited quotes. Documentary proof in this matter need to be submitted by concern Manufacturer/Supplier along with quote.
- 14) The Contractor/Supplier/Installer shall provide the detailed information about Company/firm in attached Format (Contractor's Information sheet)
- 15) <u>The Contractor/Supplier/Installer</u> <u>shall submit their quotations in two different sealed</u> <u>envelopes i.e. First envelop shall contains documents a per the technical eligibility criteria and</u> <u>Second envelop shall contain Financial details (quoted rate).</u>
- 16) <u>The Contractor/Supplier/Installer should mention the subject on each sealed envelope i.e</u>

 <u>Technical Envelop and Financial Envelop.</u>
- 17) The financial envelop of technically qualified proposals will only be opened.

3. COMPREHENSIVE MAINTENANCE CONTRACT (CMC)

- i. The complete Solar Water Heating System shall have warrantee against any manufacturing/ design/installation defects for a minimum period of 5 years.
- ii. Responsibility of cleaning and security of Solar Water Heating System shall be bound to the User Agency.
- iii. During the CMC period, successful Contractor/Supplier/Installer should visit the site quarterly (after each 03 months) and ensure the successful working of Solar Water Heating System. Also Contractor/Supplier/Installer shall maintain the visit log book at the site. If any problem occurs in working of Solar Water Heating System; supplier shall attend the system within 48 hours and rectify the problem immediately.
- iv. In case if supplier fail to provide service during the CMC period, the Performance Bank Guarantee should be forfeited and Contractor/Supplier/Installer shall be blacklisted.

4. TERMS OF PAYMENT:

- A. 80% of the total project cost shall be released after successful installation and commissioning of the Solar Water Heating System duly certified by Contractor/Supplier/Installer, Officer of MEDA & authorized person of User Agency along with submission of undertaking of comprehensive contract (CMC) for 5 years from date of commissioning and Insurance policy documents (covering Natural calamity, damage, fire, burglary) effective up to five year period from date of commissioning
- B. 20% of the total cost shall be released on receipt of two month successful performance report which should be duly certified by Officer of MEDA, authorized person of User Agency and Contractor/Supplier/Installer along with submission of performance bank guarantee of 10% amount of project cost from any Nationalized Bank valid for period of 5 years from date of commissioning of project.

5. BILLS TO BE ON PRINTED FORM (TAX INVOICE) :

- Contractor/Supplier/Installer shall submit the Tax Invoice in terms of the 70:30 ratio for basic amount i.e. 70% for goods and 30% for services, respectively by adding applicable GSD on renewable energy projects (i.e. 12% GST on Goods and 18% GST on Services).
- Contractor/Supplier/Installer shall submit the two separate Tax Invoices of 80% and 20% amount while releasing the 80% and 20% payment respectively. (Do not submit the Tax Invoice of 100% amount while releasing the first stage 80% payment)

6. **DEDUCTION:**-

- i. The TDS at the source will be deducted as per the Govt. rule and regulations.
- ii. MEDA will issue necessary certificates of TDS deduction.
- iii. C' / 'D' form will not be issued by MEDA.

7. SECURITY DEPOSIT -

- A sum of Rs. 28,000/- shall be deposited by the selected Contractor/Supplier/Installer as security deposit by online mode in favor of 'Maharashtra Energy Development Agency, Kolhapur on or before issuing of Work Order.
- ii. If the Contractor/Supplier/Installer fails to execute the work in given time or terminates the order prematurely then the security deposit will be forfeited and contractor shall be blacklisted and no excuses will be entertained.
- **8.** The security deposit will be returned to the Contractor/Supplier/Installer without interest after successful commissioning (i.e. all work is completed as per terms and conditions of work order) of system and receipt of two month successful performance report which should be duly certified by Officer of MEDA, authorized person of User Agency and Contractor/Supplier/Installer.

9. PENALTY -

A penalty of 1/2% of the total project cost shall be imposed on the contractor against a delay of
one week in project completion subject to a maximum of up to 10% of the total project cost. In
case the penalty exceeds 10% of the total project cost, the given order will be canceled & the
security deposit will be forfeited and the Contractor/Supplier/Installer shall be blacklisted.

10. TIME FRAME:

• The successful Contractor/Supplier/Installer will be required to commission the project within 30 Days from the date of issue of work order.

11. EXTENSION:

If project is not commissioned within the given time frame due to any inevitable reasons then
Contractor/Supplier/Installer shall seek the time extension for the project at least 07 Days in
advance before expiry of project completion period (30 Days) by giving satisfactory reasons for
same. However if the time extension is not taken before the project completion period then the
penalty clause of work order shall remain effective till the request is applied for the extension with
MEDA

12. CHECK LIST OF DOCUMENTS TO BE FURNISHED WITH BELOW QUOTATION -

- PAN and GST Details.
- Copy of IT Returns.
- Declaration on company letter head.

- Contractors Information Sheet.
- Annual Turnover Certificate.
- Work Experience Details.
- Site Visit Report.(in format)

We look ahead to seek your sealed quotation on or before 21/07/2023 till 18 Hrs. Thanking you,

Sd/-

Divisional General Manager MEDA, Divisional Office, Kolhapur

Encl. :-

- 1. Contractor Information Sheet.
- 2. Declaration Format.
- 3. Annual Turn Over certificate format.
- 4. Site Survey Form.
- 5. Details of Components of Solar Water Heating System.
- 6. Technical Specifications of Solar Water Heating System.

CONTRACTOR'S INFORMATION

Sr.No	Particulars	
1	Name of Firm	
2	Details of Mailing Address	
3	Firm Status (PSU/Incorporate/Ltd/Pvt.Ltd/LLP/Partnership/Proprietory	
4	Name & Designation Of Contact Person	
5	Contact No.	
6	E-mail Address for correspondence	
7	Firm website Address	
8	Firm registration No/ROC Establish Year of firm	
9	PAN No.	
10	GST No.	
11	Turnover (in Rs.) for FY 2019-20, 2020-21 and 2021-22	
12	Skilled manpower	
13	*Experience in Solar Water Heating System (LPD)	

Authorised Sign and Stamp

^{*} Enclose documentary evidence accordingly.

DECLARATION

(On company's letter head)

To,

Divisional General Manager,

Divisional Office Kolhapur

Maharashtra Energy Development Agency
(A Government of Maharashtra Institution)

Address: C. S. No. 249/A – 1/55, E Ward, Mhada Complex, Nagala Park, Near Zilla Parishad, Kolhapur - 416003

Respected Sir/Madam,

- 1. We have carefully read and understood all the terms and conditions of the quotation and hereby convey our acceptance to the same.
- 2. The information / documents furnished along with our offer are true and authentic to the best of my knowledge and belief, We are well aware of the fact that furnishing of any false information/ fabricated document would lead to rejection of our quotation at any stage besides liabilities towards prosecution under appropriate law.
- 3. We have apprised our self fully about the job to be done during the currency of the period of agreement and also acknowledge bearing consequences to of non-performance or deficiencies in the services on our part.
- 4. We have no objection, if enquiries are made about the work listed by us.
- 5. We have not been barred or blacklisted by any Government Agency / Department/ PSU or any such competent Government authority, organization where we have worked. Further, if any of the partners/directors of the organization /firm is blacklisted or having any criminal case against them, our quote shall not be considered. At any later point of time, if this information is found to be false, Divisional General Manager, Divisional Office Kolhapur, Maharashtra Energy Development Agency, may terminate the assigned contract immediately.
- 6. We have not been found guilty by a court of law in India for fraud, dishonesty or moral turpitude.
- 7. We agree that the decision of Divisional General Manager, MEDA, Divisional Office Kolhapur, in selection of quotation and shall final and binding to us.

For (Company Name)

Name of signing authority / Designation / Place / Date

Annual Turnover

Each Contractor must fill in this form including private/public limited company.

- Annual Turnover Data for the FY 2019-20, 2020-21,2021-22
- Name of Company:

Financial Year	Rs in Lacs
2019-20	
2020-21	
2021-22	

The information supplied should be the Annual Turnover of the Contractor in terms of the amounts billed
to clients for each year for work in progress or completed.

Signature of Applicant

Certified by Applicant's Auditor

(Affix Stamp)

SITE VISIT REPORT

(To be submitted on letterhead of contractor)

Date:
ex, Nagala Park, Near Zilla
& Commissioning of total 5000 LPD (500 LPD X 10
ating System (Excluding of Storage Tanks) with 05 Vidhyalaya , Kagal Dist. Kolhapur.
Date:
ation call for Supply, Installation, Testing & vacuated Tube Collector type Solar Water Heating Years CMC and 05 Years Insurance at Javahar site.
h site conditions, approach to site, requirement
requirement of quotation conditions etc.
ute the project successfully.
oject and complete them in the given time period.
Yours faithfully,
(Signature of Contractor)
Name of Contractor
Designation
Seal:

Details of Components of Solar Water Heating System

Sr. No.	ltem	Per	Quantityt
1	2	3	4
1	Supplying, installing, testing and commissioning of ETC solar water heating system without heat exchanger type of 500 LPD capacity with SS water tank of 0.5 mm thickness conforming to IS1239 Part-I:2004 complete as per specification no. ESD-SHWS-ETC (as per PWD CSR Elect. Item No. 4-1-9)		10
2	Supplying and erecting 25 mm dia gun metal gate valve complete with PN16 pressure rating, as per specification no. FF-VL/GVr. (as per PWD CSR Elect. Item No. 13-7-32)		10
3	Supplying and erecting non return valve 25 mm dia in position made of gun metal complete.(as per PWD CSR Elect. Item No. 16-6-19)		10
4	Supplying and erecting 25 mm dia. gun metal sluice valve at position with necessary materials complete.(as per PWD CSR Elect. Item No. 16-6-13)	unit	20
5	Supplying and erecting GI pipe 25 mm dia B class 4.05 mm thickness with resin bonded flap rock wool /glass wool insulation, with necessary material as per specification No. ESD-HWP/TGP (Item No. 4-2-3)	unit	100
6	Supplying and erecting 20/25 mm (ID/OD) Chlorinated polyvinyl chloride pipe (CPVC), thickness 2.6 mm conforming to IS 15778 (CTS Series) with necessary CPVC fittings and solvent cement for Solar Water Heater System as perspecification No. ESD-HWP/CPVC (Item No. 4-2-18)	unit	200
7	Providing and fixing board displaying information, suchas 'Name of work, Tender cost, Name of Contractor, Work completion and liability period etc', having rectangular shape of 1.20mx0.90m size made out 18gauge(1.25mm) thick mild steel sheet painted with one coat of Zinc chromate stoving primer and two coats of enamel paint on front side and grey stove enamel on back side and border/messages/symbols etc. with approved colour shade paint complete, on M.S.angle of size35x35x3mm frame with properly cross braced M.S. angles ofsize35mmx35mmx3mm duly painted including Two M.S. angle iron posts of size 65mmx65 mmx 6mm, 3.65m long painted with alternate black and white bands of 25 cm width including all fixtures etc. and fixing the boards in 1:4:8 concrete block of size 60 cm x 60 cm x 75cm including, excavation, refilling, transportation, and labor etc complete. Spec.Number As directed by Engineer in Charge (as per PWD SSR Civl. Item No.6.36)	Unit	1

<u>Technical Specifications for Solar Water Heating System (ETC Type)</u>

1. General Requirements

- i) System installed in high windy area will be well grouted/ clamped with collectors installed in a way that it is able to sustain the highest wind pressure of that area.
- ii) All the collectors will be south facing inclined at suitable angle to give best performance in winter
- iii) There will not be any shadow falling on the collectors from nearby structures or of other collectors in front or back row
- iv) Hot water pipe lines of any kind in colder regions will be fully insulated from the point of drawl of water from tank to delivery points. In other regions also care will be taken to avoid heat losses from pipelines.
- v) System will be installed nearest to the point of hot water usage to avoid longer pipeline & higher heat losses.
- vi) Where water quality is bad either FPC based systems with Heat Exchanger or ETC based systems will be installed.
- vii) The workmanship & aesthetics of the system will be good and it should be visible to anybody
- viii) Air vent pipe, make up water and cold water tanks will be installed as required for smooth functioning of the system
- ix) There won't be any leakage observed in the system from tanks/ collectors/ pipelines
- No electric back up will be provided in hot water storage tank at places where electric geysers are already installed. At places where electric geysers are not installed, electric back up could be provided in upper portion of storage tank, if necessry. Other option is to have an instant/ small geyzer in bathroom with outlet of solar hot water storage tank connected to its inlet and thermostat set at say 40 C. This will help consuming less amount of electricity during non-sunny days.

2. Technical Requirements

• Evacuated Tube Collectors/ Heat pipes

Type of tubes: 3 layer solar selective (Inner layer of copper coating should be Visible).

Procurement : From reputed supplier (Details of supplier to be provided)

Storage Tanks, Piping, Support structure etc (To be all indigenous & not imported)

Inner tank material : SS 304 or 316 grade min/ MS or any other material with anticorrosive

Coating for hard water with chlorine contents.

Inner tank thickness : For SS minimum thickness will be 0.5 mm when using argon arc

> or metal inert gas for welding & 0.8 mm when using other type of welding. For MS it will be 1.5 mm. No leakage under any kind of

negative or positive pressure of water will be ensured.

: TIG / Seam/ pressurized weld (Open arc weld not permitted) Inner tank welding

Storage tank capacity : Not less than system capacity. In case of ETC based system,

reduce proportionately.

Volume of tubes & manifold not to be included in tank capacity.

storage tanks

Thermal insulation of : Minimum 50 mm thick CFC free PUF having density of 28-32 kg/ cu.m for domestic systems and 100mm thick Rockwool of 48 Kg per cu. m for other systems. For colder regions, it will be 1 ½ times atleast. In case of higher desity insulations, the thickness may

water pipes

Thermal insulation of : Minimum 50 mm thick rockwool or 25 mm thick PUF on GI pipes. hot For colder regions, it will be 1 ½ times atleast. In case of composite pipes, it will depend on region to region. For higher density insulations, the thickness may reduce proportionately.

Outer cladding & Frames: Al/ FRP or GI powder coated. MS may also be used with special anti-corrosive protective coatings. Thickness of sheets will be strong enough to avoid any deformation of the cladding.

Valves, cold water tank, standard make vent pipe, heat exchanger, make up

: Of ISI mark or

tank & instruments

Collectors, pipng,

tanks etc

Support structure for : Of non-corrosive material or have corrosion resistant protective coating. They will be strong enough to sustain their pressure during the lifetime of system.

