#### CSIR-Central Mechanical Engineering Research Institute

M.G. Avenue, Durgapur-713209

# CALL FOR EXPRESSIONS OF INTEREST for Installation of Solar Power Tree in Schools under CSIR 800 Mission Programme

COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH (CSIR) is premier R&D Organisation in India and was constituted in 1942 by a resolution of the then Central Legislative Assembly. CSIR is known for its cutting edge R&D knowledgebase in diverse S&T areas, is a contemporary R&D organization. Having pan-India presence, CSIR has a dynamic network of 38 national laboratories, 39 outreach centres, 3 Innovation Complexes and 5 units. CSIR's R&D expertise and experience is embodied in about 4600 active scientists supported by about 8000 scientific and technical personnel.

CSIR covers a wide spectrum of science and technology – from radio and space physics, oceanography, geophysics, chemicals, drugs, genomics, biotechnology and nanotechnology to mining, aeronautics, instrumentation, environmental engineering and information technology. It provides significant technological intervention in many areas with regard to societal efforts which include environment, health, drinking water, food, housing, energy, farm and non-farm sectors. For more details, please visit the web: www.csir.res.in

#### About CSIR-CMERI

Central Mechanical Engineering Research Institute (CSIR-CMERI), established in 1958, is a constituent laboratory of CSIR in Durgapur, West Bengal, India. This institute is the only National level research institute in the domain of Mechanical Engineering and allied sciences. For more details visit the official website: <a href="https://www.cmeri.res.in">www.cmeri.res.in</a> or wikipedia page.

#### **About the Scheme:**

On the occasion of celebrating its Platinum Jubilee, CSIR, through its constituent laboratory, CSIR-CMERI, Durgapur is promoting high-end research for creating awareness in the society. In 2017, CSIR-CMERI will be celebrating its Diamond Jubilee. To commemorate this auspicious occasion, CSIR-CMERI wishes to install 20 numbers of Solar Power Tree in different Schools in the districts of Bankura & Burdwan, West Bengal.

This initiative, which is a part of the *Rural Sector Project* under CSIR 800 Mission Programme, will provide one Solar Power Tree of 1 kW capacity to each shortlisted school. Therefore, statement of "Expression of Interest" is invited from each interested school for installation of such prototype in its campus.

## The deadline of receiving application in the proposed format (Annexure-I) is 31.01.17 (18:00Hrs).

For any queries Visit. http://www.cmeri.res.in

OR

Please Contact

Resource Planning & Business Development Group

CSIR-CMERI, Durgapur

M.G. Avenue, Durgapur-713209

Phone: 0343-6510327, 6452015, 6510252 Fax No.0343-2548204

Email: bdg@cmeri.res.in, bdgcmeri@gmail.com

#### **About Solar Power Tree:**

Solar Power Tree produces electricity with an innovative vertical arrangement of solar panels in a single structure. It drastically reduces the requirement of land thereby keeping the land character unaltered. Even cultivable land can be utilized for harnessing solar energy with simultaneous farming.



#### 1kW Solar Power Tree for Schools:

Under the present project, as envisaged by CSIR-CMERI, it has been decided to install a prototype of 1kW-Solar Power Tree in each shortlisted school. The specifications of the said prototype are given below:



#### Specifications:

Peak Power : 1kW

Full Load Capacity : 600W (Avg) Footprint Area Required : 4 sq. ft.

Arial Span Area : 10 ft. Diameter

Expected Life : 25 Years (As specified by the panel manufacturer)

Load : DC LED tube lights and DC fans (NOT under warranty)

Battery Backup : NIL (only for day time utilization)

Electrical accessories : As required

#### **Guidelines for Eligibility:**

1) Preference will be given to Govt./Govt.-aided schools having minimum 50 students.

- 2) This scheme is primarily intended for day schools in rural areas.
- 3) However, CSIR-CMERI reserves the right to consider exceptional/ special cases.

#### **Terms and Conditions:**

- 1) Each school should provide necessary space for installation of the prototype.
- 2) The offered load from CSIR-CMERI under this scheme is DC in nature, i.e. DC Light, DC fans etc. No battery backup will be provided.
- 3) Schools that need power during night hours/ cloudy weather will have to arrange their own battery backup facility at their own cost.
- 4) The transportation cost of Solar Power Tree from CSIR-CMERI's office to the installation site will be borne by the concerned school.
- 5) The design of the foundation for Solar Power Tree will be provided by CSIR-CMERI; however, execution of civil work including its expenditure will be the sole responsibility of the concerned school.
- 6) Each school should nominate one faculty member as Nodal Officer for coordinating and proper implementation of this project.
- 7) Each school should identify one person who will be trained for routine maintenance of "Solar Power Tree" at the cost of respective school.
- 8) The School Authorities are supposed to contact with CSIR-CMERI and other equipment manufacturers/suppliers of Solar Power Tree in case of emergency.
- 9) During hand-over of the prototype each school will have to sign necessary documents with CSIR-CMERI to complete the installation process.
- 10) CSIR-CMERI reserves the right to impose additional conditions, if necessary.

#### **Application procedure:**

**Step 1:** Filled in the 'Expression of Interest Format'

**Step 2:** Take print of the Completed Format in School letter head and put signature

with official seal.

**Step 3:** Submit the scanned copy of the completed 'Expression of Interest Format'

to: bdg@cmeri.res.in via email.

The subject line of the email should be: EOI: (SCHOOL NAME)

#### Selection:

Applications received by CSIR-CMERI will be reviewed by the concerned project team and competent authority. Only shortlisted schools will be informed/ contacted via e-mail by end of January, 2017.



### **Expression of Interest Format**



Your contact details		
Name of School		
Category		
Address		
Year of Establishment		
In-charge		
Nodal Officer		
Designation		
Telephone		<b>A</b>
Mobile		
Email		Leading states
Block District		
BDO		6
ВОО		
Size of the Organization		
	100	
No.s of Teaching Personnel:		CS/A-INDIA
No.s of Assisting Staff:		
No.s of Students:		
No.s of Classrooms:		
No.s of other Rooms:		
Type of the Organization:		
a. Direct Government		
b. Govt Aided		
d. Non-governmental organizations		
g. Private sector		
Details of Electrical Load at Schools (No. of FANs, Lights, Computer and others)		
Existing: please specify the wattage		

Desired: please specify the wattage (DC load will be provided)		
I hereby declare that the information provided above is correct.		
(Signature of the Nodal Officer with date)		
I agree to the stipulated terms and conditions, as mentioned above, and have 'No Objection' to installing one prototype of 1kW Solar Power Tree within our institute / school campus. The Solar Power Tree will be helpful for our organization in terms of saving electricity bills and promoting Clean Energy Technology.		
(Signature of the Head of the Organization with date)		
SEAL OF INSTITUTION		