

File No. 223/2/2020-Solar R and D

भारत सरकार/ Government of India

नवीन और नवीकरणीय ऊर्जामंत्रालय / Ministry of New & Renewable Energy

(अनुसंधान और विकास विभाग /R&D Division)

Block 14, CGO Complex
Lodhi Road, New Delhi-110003
Dated: 05th April, 2022

OFFICE MEMORANDUM

Subject: Invitation of proposals for pilot demonstration of New and Innovative Solar Applications under GIZ's bilateral project titled "Innovative Solar Areas (IN-Solar)"- regarding

GIZ, Germany is implementing a bilateral project titled "Innovative Solar Areas (IN-Solar)" with MNRE. The objective of the IN-Solar project is to find innovative ways for expanding the applications of solar photovoltaic. Under this project, the proposals are invited with ideas for pilot demonstration of new and innovative solar applications. The details of invitation of proposal indicating the teams, eligibility, financing, application form etc. are given in Annexure. The Last date of submission of application is 28th April, 2022.

2.0 The proposals may be submitted the prescribed format, online through the link - <https://forms.gle/P55MaPTdkA4Pvww17> . For any further details, **Shri Arun Kr. Choudhary, Scientist B, MNRE** (email: akchoudhary.mnre@gov.in) and **Shri Abhinav Jain, Advisor, Indo German Energy Programme, GIZ** (email: abhinav.jain@giz.de.) may be contacted.

This has the approval of Secretary MNRE.



(Dr. Anil Kumar)
Scientist D

Email: anil.kumar.mnre@nic.in

To:

1. NIC for uploading on MNRE website
2. Director General, National Institute of Solar Energy (NISE), Gurugram for uploading on the website of NISE
3. CMD, Indian Renewable Energy Development Agency Limited (IREDA), New Delhi for uploading on the website of IREDA .
4. MD, Solar Energy Corporation of India Limited (SECI), New Delhi for uploading on the website of SECI.
5. PI, National Centre of Photovoltaic Research and Education (NCPRE), IIT Bombay for uploading on NCPRE website

Invitation of proposals for pilot demonstration of new and innovative solar applications

Azadi Ka Amrit Mahotsav (AKAM) is an initiative of the Government of India to celebrate and commemorate 75 years of progressive India and the glorious history of its people, culture and achievements. Under the ambit of AKAM, MNRE in partnership with GIZ is inviting ideas (Ideas@75) for pilot demonstration of New and innovative solar applications under the bilateral project titled Innovative Solar Areas (IN-Solar).

The objective of the IN-Solar project is to find innovative ways for expanding the application of photovoltaic to optimize the use of land. Proposals/Ideas are invited from participants to implement the ideas that are technically viable but need pilots to assess their technical performance and financial assessment. Only those participants shall participate in the idea challenge who are willing to implement/pilot their ideas on the ground if selected under the challenge.

To identify ideas which can be funded for pilot, an idea challenge with following thematic area is floated by MNRE. Within the above overall objective, the themes under which the participants shall submit the idea are:

1. Solar PV installation on innovative sites e.g. waste landfill, closed mines etc.
2. Vertical installation of solar PV e.g. building integrated solar, solar for fencing, road side PV, agro PV etc.
3. Decentralized innovative solar application e.g. PVT for cooling, cold storage,
4. Green hydrogen-based applications
5. Any other innovative application of Solar PV

The participants can submit their application only under one theme.

Please fill the online form - <https://forms.gle/P55MaPTdkA4Pvww17>

Organizations eligible to participate

1. A company/start-up incorporated under the companies act
2. Research Institutions/NGO/Academic institutions/ Societies registered under the society act.
3. Foreign companies/ Research Institution in Partnership with Indian company/ Research Institutions/NGO/Academic institutions/ Societies.

Jury

A committee consisting of a representative from MNRE, NISE and GIZ will evaluate the proposal submitted by the participants.

Co-financing for pilot demonstration

The winner will be provided with a maximum of 200,000 Euro (for procurement of materials) to implement the pilot project. The duration for the pilot implementation would be no more than 6 months from the formal signing of the agreement. The participant needs to clearly define the commercial interest/other interest for carrying out the pilot project. It is expected from the participant to also invest soft components (manpower/land/etc.) for the project.

Selection of Participants

The participants are requested to submit their concept ideas in the format attached as **Annexure-I** with the note. The shortlisted participants would be required to make a presentation in front of the Jury. The results and score would be announced further to which GIZ will enter into contract with individual winner to disburse the grant for the pilot project. The broad parameters to be considered for evaluation of the ideas is attached as **Annexure-II**.

Applications Form
Title of the proposed pilot project:
Thematic Category: Solar PV installation on innovative sites e.g. waste landfill, closed mines etc. Vertical installation of solar PV e.g. building integrated solar, solar for fencing, road side PV, agro PV Decentralized innovative solar application e.g. PVT for cooling, cold storage etc., Green Hydrogen based applications Any other innovative application of Solar PV
Summary of proposed application (not to exceed 150 words)
Describe the innovative land neutral feature of the proposed pilot
Name of Organization: Category: A company/start-up incorporated under the companies act Research Institutions/NGO/Academic institutions/ Societies registered under the society act Foreign companies/ Research Institution in Partnership with Indian company/ Research Institutions/NGO/Academic institutions/ Societies Name of the Proposer: Designation: Official Postal Address: Phone/Mobile: Email:

Technical Details

It is desirable to cover the following aspects in the document

- Description of science behind the design/innovation
- Description of working of the design/ approach/innovation (use sketch/drawing, - patent, photographs, video to explain the working)
- Technological challenges in pilot implementation
- Novelty of the design
- Similar project implemented Nationally/Internationally (if any)
- Indicate how your design/approach is better than the currently available approaches
- Cost details of the system including bill of material
- Levelized Cost of Electricity Calculations

Details of relevant work so far

Development work done so far, including involvement of agencies, consultation with expert, identification of site for pilot

Patenting of the design/innovation, if any

Tie-up for design, fabrication etc with any external agencies, if any

Techno-economic/market feasibility studies/reports, if any

Consumer/User feedback

Scalability of the proposed pilot

Dovetailing of the pilot with ongoing scheme or Central/State government

Any other relevant information

Declaration

I / We declare that all the statements made in this application are true, complete and correct to the best of my/our knowledge and belief. In the event of any information, found false or incorrect, my/our candidature will stand cancelled and all my/us claims will be forfeited. I / We have read all the terms and conditions for participating in the idea challenge.

Place:

Date:

Signature of the proposer

Annexure-II

The ideas for the pilot implementation would be evaluated based on the following broad parameters.

Stage 1

Whether the idea proposed by the participant meets the basic requirement of the idea challenge.

- i. The application is filled and complete in all respect and submitted along with supporting document
- ii. Proposed pilot meets the objective of the challenge and falls under the defined category

Stage 2

Application which are qualified in stage one would be evaluated for stage 2.

Evaluation of application (50 Marks)

Equal weightage would be provided for all the parameters. The committee at its discretion, can decide to change the weightage for different parameters or add new parameters for evaluating the pilot project.

- a. Degree of innovation for the proposed pilot
- b. Scalability of proposed solution
- c. Ease of implementation
- d. Cost-effectiveness
- e. Impact

Evaluation of presentation (50 marks)

A virtual/physical presentation from the participant would be required from the applicants in stage 2.