

**RESEARCH GRANT OPPORTUNITY
FOR
APPLIED RESEARCH PROJECTS ON SOLAR
PV MODULE CLEANING**

Program Solicitation: EPRC/58-2023-018

<http://researchgrant.eprc.gov.bd/>

Bangladesh Energy and Power Research Council

Power Division

June 2023

PROGRAM REQUIREMENTS

Program Title:

Research grant opportunity for applied research projects on solar PV module cleaning.

Synopsis of Program:

The purpose of this solicitation is to fund an applied research project that will develop technologies, tools, and strategies for innovative solutions for cleaning dust, dirt or other foreign material deposited on solar PV modules in Bangladesh to ensure their optimum performance. Taking into account Bangladesh's environmental and geographical context, the funded project under this grant solicitation will specifically develop and update technologies, tools, and strategies to clean the deposited dust, dirt (both organic and inorganic), foreign materials, etc. on photovoltaic modules, which have a significant impact on the transmittance, temperature, and roughness of PV modules, resulting in a reduction in power generation efficiency and service life of these PV modules.

These projects would develop technologies that can be replicated at different locations in Bangladesh and will ensure the optimum performance of currently installed PV module.

Research Focus Areas:

Proposers submitting applied research proposals can address the following key research topics of interest, but are not limited to:

- Dust, dirt and other foreign materials characteristics, accumulation, and impact on PV module performance;
- The influencing factor of dust depositing;
- Applicability & improvement of existing PV cleaning techniques like Manual cleaning, mechanical cleaning techniques, electrostatic dust removal technology, Self-cleaning coating (hydrophilic and hydrophobic) or developing new cleaning method.

Award Information:

The maximum funding amount and maximum duration for each project are listed below:

Program Solicitation	Maximum Project Duration	Maximum award amount Per Research Project
Solar PV module Cleaning	3 Years	BDT 4,00,00,000

BEPRC reserves the right to:

- Increase or decrease the duration and maximum award amount mentioned above.

Key Activities Schedule:

Key activities, dates and times for this solicitation and agreements resulting from this solicitation are presented below. An addendum will be released for any kind of amendment:

ACTIVITY	DATE
Solicitation Release	June 7, 2023
Deadline to Submit Applications	No hard deadline
Anticipated Notice of Award (NOA) Posting Date	One month after Govt. approval
Anticipated Grant Agreement Start Date	15 days after receiving NOA

Eligibility Information:

Who May Submit Proposals:

The categories of proposers eligible to submit proposals to BEPRC are described in the *BEPRC Grants Proposal Innovation Guideline*.

Limit on Number of Proposals per Organization:

There are no restrictions or limits.

Limit on Number of Proposals per PI or Co-PI: 1

An individual may be listed as PI, co-PI, and/or senior personnel in a single proposal under this solicitation area. Listing of an individual in multiple proposals under the same solicitation area and/or ongoing BEPRC funded projects will result in rejection of the proposal.

Proposal Preparation and Submission Instruction:

Full Proposal:

- Proposer must submit a full proposal via BEPRC's online portal: (<http://researchgrant.eprc.gov.bd>)
- *BEPRC Grants Proposal Innovation Guideline* will be applicable. The complete text of the mentioned guideline is available at: (<http://researchgrant.eprc.gov.bd>)

Collaborative Proposal:

- Proposers from two or more organizations may collaborate on a unified research project and submit the applied research projects under this solicitation. The PI must be a residential Bangladeshi.

Engaging Industry:

- Industrial engagement in cash or kind is highly encouraged for applied research projects submitted under this solicitation.

Proposal Evaluation and Award Information:

BEPRC Grants Proposal Innovation Guideline applies. The complete text of the mentioned guideline is available at: (<http://researchgrant.eprc.gov.bd>)

Inquiries:

Following officials may be contacted in case of any query:

- (1) Dr. Hasan Mahmud
Director (Innovation)
Bangladesh Energy and Power Research Council
Email: director.inno@eprc.gov.bd

- (2) Azfar Inteha
Deputy Director (Innovation)
Bangladesh Energy and Power Research Council
Email: dd.inno@eprc.gov.bd