Reference document for the Indo-U.S. PACEsetter Fund

PACEsetter Fund

Early-stage grant funding to accelerate the commercialization of innovative off-grid clean energy products, systems, and business models

A fund to support the Promoting Energy Access through Clean Energy (PEACE) track of the U.S.-India Partnership to Advance Clean Energy (PACE)

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1. Background

Energy access is crucial for improving the quality of life for India's citizens and their economic conditions, and 24/7 energy availability remains an important economic development priority for the Indian government. Off-grid, clean energy technologies, combined with innovative financing models, market-based solutions, and policy alignment, have tremendous potential to become a transformative agent of economic opportunity and rural development.

In 2013, the Governments of the Republic of India and the United States of America launched **Promoting Energy Access through Clean Energy (PEACE)** as a new track under the U.S.-India Partnership to Advance Clean Energy (PACE), alongside the existing research (PACE-R) and deployment (PACE-D) tracks. PEACE aims to harness commercial enterprise to bring clean energy to individuals and communities un-served and underserved by the electricity grid, and to develop best practices and lessons learned.

2. About the PACEsetter Fund

In June 2015, the Governments of the Republic of India (through the ministry of New and Renewable Energy) and the United States of America (through the US Embassy) jointly established **the PACEsetter Fund**, an INR 50 crore (USD 7.9 million) to support the PEACE initiative by providing early-stage grant funding to accelerate the commercialization of innovative off-grid clean energy products, systems, and business models.

The objectives of the PACEsetter Fund is to support the PEACE initiative by providing early-stage grant funding to accelerate the commercialization of innovative off-grid clean energy products, systems, and business models.

The Fund's main purpose is to improve the viability of off-grid renewable energy businesses that sell small scale (under 1 megawatt) clean energy systems to individuals and communities without access to grid connected power or with limited/intermittent access (less than 8 hours per day).

Administering Agency in India

The Indo-U.S. Science and Technology Foundation is the Administrator of the Fund. Both the governments of the Republic of India and the United States of America would each make available 250 million Indian Rupees for the grants and program administration over a period of 5 years. IUSSTF receives MNRE's contribution through IREDA and Government of USA contribution is made directly by the US Embassy to IUSSTF.

The Indo-US Science and Technology Forum (IUSSTF) is an autonomous society that has been established under an agreement between the Governments of India and the United States of America on March 21, 2000 with a mandate to promote and catalyze Indo-US bilateral collaborations in science, technology, engineering and biomedical research through substantive interactions between academia, industry and governmental agencies of the two countries.

3. **Eligibility**

- To be eligible, projects must be focused on improving the viability of off grid renewable energy businesses and non-governmental organizations that provide energy services to individuals and communities in India without access to grid connected power or with limited or intermittent access of less than 8 hours per day using small scale (under 1 megawatt) clean energy systems.

- The Fund will award grants for direct support of innovative technology, business models, and programs including but not limited to: rural energy services companies (full scale integrated operators); rural distribution companies/franchisees; operations/maintenance companies; technology implementers/ system integrators; and enterprises.

- The Fund will also consider awarding grants for product development, studies, research, capacity building and technical assistance, as long as this support will provide clearly significant support to the companies and non-governmental organizations that sell small scale (under 1 MW) clean energy systems to individuals and communities with no or limited access to grid connected power.

- Projects on general public awareness, stand-alone seminars and workshops, research and development projects without a clear path towards implementation, will not be considered for funding through the PACEsetter Fund.

4. **Funding Decision and Priorities:**

Decisions on PACEsetter Fund grant making criteria and grant funding are made by a Steering Committee Board composed of representatives from the Governments of India and the United States. The Steering Committee will be advised by the Techno-Financial Expert Committee comprising of governmental and non-governmental experts from both countries. The following priorities will receive strong consideration in grant-making decisions:

- **Innovation:** The PACEsetter Fund is focused on accelerating the commercialization of innovative off-grid clean energy solutions.

- **Early-stage funding:** The PACEsetter Fund is intended to provide early-stage grant funding that would allow businesses to develop and test innovative products, systems, and business models.

5. **Fund Size:** The PACEsetter Fund launches Call for Expressions of Interest (EoI) up to $2 million will be made available with grant sizes ranging from $50,000 to $300,000.

6. **Overview of Funding Round:** The application process will have following stages:

- **Stage 1:** All interested applicants are invited to submit an Expression of Interest, following the guidelines. From these initial submissions, the Techno-Financial Expert Committee (TFEC) will identify and short list EOIs who will be invited to submit detailed proposal.

- **Stage 2:** Submission of detailed proposal by the shortlisted teams. These submitted detailed proposals will be shared with TFEC for preliminary screening.

- **Stage 3:** Teams of the screened detailed proposals will be called for a Presentation before TFEC for selection of awards.

- **Stage 4:** Subject to their compliances with the observations & recommendations of the TFEC and approval by the Funding Agencies, final award announcement is made.

- **Stage 5:** Release of Award Grant.

7. **How to Apply:** To apply for funding, submit an Expression of Interest (EoI) by the deadline. All EoIs must be submitted on the email pacesetter@indousstf.org with the indicated format available on www.iusstf.org.

8. **General Guidance on Proposals:**

Below guidance is not exhaustive, but is designed to help interested organizations to develop proposals:

- Proposed projects should be innovative and transformational. Proposals should make clear how they are adding value and not duplicating an existing solution; multiple forms of innovation are eligible and will be considered. Proposals should also clearly illustrate how the work proposes to overcome fundamental economic, social, or technical barriers to off-grid electricity access.
- Proposed projects should be in the early stages of development, defined broadly as the critical transition phase between concept and scale-up, where access to conventional forms of investment is limited and support from the PACEsetter Fund would be most impactful.
- Proposals should demonstrate how they would be replicated and scaled up to have wider impact.
- Proposals should demonstrate that the project has sufficient buy-in from the necessary stakeholders to deliver the expected outcomes.
- Proposals should specify if they already have funding available from other sources.
- The maximum life-cycle of a project should not exceed 24 months.
- The Fund places strong emphasis on evidence-based results. Proposals must clearly define the indicators of success in the application form to show incremental gain during the project lifecycle.
- The Fund also places a strong emphasis on sharing the results. Organizations will be required to submit progress reports on regular intervals or on the achievement of key milestones for the duration of the project, and submit a project completion form within three months of the project conclusion along with the audited fund utilization certificate.

All applicants MUST use this form to apply

Instructions:

1. Do not exceed the world limit where specified.
2. Use 11 point font.
3. All questions should be answered clearly. Incomplete applications will be disqualified.
4. Submit the completed EOI to pacesetter@indousstf.org by the said date of submission.
5. By submitting this EoI, you are certifying that the answers to the questions are accurate to the full extent of your knowledge.

Section A: General Information

Project Title	
Project Type Delivery of energy services/ Technology or product development/ Training & capacity-building/ Business development support/ Research/Other	
Project Location/s *(District/State)*	
Stage of development (initial concept/ proof of concept/ demonstration/scale-up)	
Total Funding Request (INR/USD)	
Lead Implementing Organization	
Other Partnering Organization	

Section B: Project Information

Project Description (max 500 words)	
Expected Outcomes (max 200 words) Describe the short and long-term outcomes and impacts of the project	
Expected duration of project	Years Months
Advantages of the approach (max 250 words) What are the existing competing solutions that seek to address the same challenge as your project? What makes your project distinctive and unique in comparison with the competing alternatives? Why is it a game-changing intervention?	

Results Indictors List specific results and indicators you will use to measure success of this project towards achievement of impacts and outcomes. Examples are given here; you may develop additional indicators as needed that best reflect project goals and performance	• Increased renewable energy capacity added • Increased access to energy services for un- or under-served populations • Increased energy savings achieved • Increased number of innovative clean energy tools, technologies, and methodologies developed, tested, and/or adopted • Increased number of clean energy enterprises with improved business operations • Quantity of greenhouse gas emissions reduced, measured in metric tons of CO2e • Increased number of beneficiaries with relevant skills in clean energy technologies, business models, etc.
Monitoring and Evaluation approach (max 150 words)	
Project sustainability and long-term viability. What steps shall be taken to make the project scalable and sustainable in the long-term? (max 200 words)	
Project Risks (max 200 words) What are the main risks and challenges in the execution of the project (market risks, regulatory risks, financial risks, business model risks, etc.)?	
Impact on women and other vulnerable populations (150 words)	

Section C: Budget

Total Budget (INR or USD)	
Budget Details Describe specific activities to be supported under this grant, include cost estimates under each task for which PACEsetter funding shall be utilized (max 250 words)	
Has the applicant received U.S. Government/Government of India in the past for this or a similar project? (if yes please specify the name of donor, amount and year)	Yes/No
Other sources of funding for the project, if applicable	

Section D: Applicant Details

Name of the Organization	
Address Please include phone numbers, fax, emails and website	
Applicant Type Private/non-governmental entity/ Academic or research institution/ Private individual/ Other	
Primary Point of Contact	Name: Title: Email address: Telephone:
Secondary Point of Contact	Name: Title: Email address: Telephone:
Information on Lead implementing organization (max 250 words) • Overview and mission • Relevant experience and track record • Project team (key personnel, skills & experience) • Provide up to 3 past performance references that can speak to ability of applicant to achieve results, successfully implement a project of similar magnitude and complexity	
Partner Organizations If applicable, and what skills and experience they will contribute to the implementation and scale of the project:	

All applicants MUST use this form to apply

Formats includes following Section(s):

A. **General Information**
B. **Executive Summary**
C. **Project Information**
D. **Business Strategy**
E. **Budget Summary**
F. **Applicant Details**
G. **Other information**

Instructions:

1. Do not exceed the word limit where specified.
2. Use 11 point font.
3. All questions should be answered clearly. Incomplete applications will be disqualified.
4. Submit the completed format to **pacesetter@indousstf.org** by the said date of submission.
5. Those who are likely to be screened will be called for Presentation in front of the Techno-Financial Expert Committee (TFEC) in _____. A final confirmation mail will be sent to the shortlisted teams.
6. By submitting this detailed proposal, you are certifying that the answers to the questions are accurate to the full extent of your knowledge.

Section A: General Information

1.	**Project Title**	:			
2.	**Project Type** *(Delivery of energy services/ Technology or product development/ Training & capacity-building/ Business development support/ Research/Other)*	:			
3.	**Stage of Development** *(Initial concept/ Proof of Concept/ Demonstration/Scale-up)*	:			
4.	**Total Funding Request** *(INR/USD)*	:			
5.	**Lead Implementing Organization**	:			
a.	**Status of the Company**	:			
b.	**Name of the Key Person**	:			
c.	**Contact**	:			
d.	**Details**	**Corporate Office**		**Registered Office**	**Project Location**
e.	**Full Address:** **State** **STD Code** **Mobile** **E-mail:**				
6.	**Other Partnering Organization (*if any*)**	:			
a.	**Status of the Company**	:			
b.	**Name of the Key Person**	:			
c.	**Contact**	:			
d.	**Details**	**Corporate Office**		**Registered Office**	**Project location**
e.	**Full Address:** **State** **Ph.** **Mobile** **E-mail:**				

Section B: Executive Summary (500 words)
(Please ensure that the Executive Summary clearly address the following points)

7. What is the problem you are trying to solve?
8. What is your proposed solution?
9. Do you have a working prototype?

10. How is your solution better/different from the existing solutions in terms of features and/or affordability?
11. What is your business plan and commercialization strategy?
12. Does your product/service have significant societal impact?
13. Budget Summary (Funding sought from PSF):

Year	Milestone	Milestone (in details)	Indian Partners (in INR)	US Partners (in INR)	Total (in INR)
Year 1					
Year 2					
Grand Total					

Milestones to be defined as follows:
- *For a 2-year project: Up to 4 Milestones of 6 months each (or) 2 milestones of 1 year each milestones of 1 year each*

Section C: Project Information

14. Project Description:
a) Describe the problem and the proposed solution. (Max 250 words)
b) What are the existing competing solutions that seek to address the same challenge as your project? What makes your project distinctive and unique in comparison with the competing alternatives? Why is it a game-changing intervention? (Max 300 words)
c) Stage of development: *(Please provide a justification for your answer to Section A: General Information Q.3 above (max 100 words))*

15. Intended Outcomes:
a) Describe the desired outcomes and impacts of the project (max 250 words):
b) Expected duration of project activities (*in months*)
c) Key Milestones:

Stage	Milestone Details	Time *(in months)*
Milestone 1		
Milestone 2		
Milestone 3		

16. Result Indicators:
List specific results and indicators you will use to measure the success of this project.

17. Monitoring and evaluation approach:
Describe your method for monitoring progress and evaluating impact (Max 300 words)

18. Project sustainability and long-term viability:
What steps shall be taken to make the project scalable and sustainable in the long-term? (Max 200 words)

Section D: Business Strategy

19. Business model:
Describe your business model, approach, and overarching business strategy (Max 250 words)

20. Market size and customer definition:
   a) Describe your target customer (100 words)
   b) Describe market size (100 words)
   c) Describe competition and respective market share (200 words):

21. Commercialization Strategy:

   a) Describe your commercialization strategy (Max 250 words):
   b) Is there a commercial entity, which has been set up already?
   c) If yes, please list details: location, date of incorporation, registration number, etc.
   d) Is there a proprietary component of the product or technology? Are licensing fees or patent restrictions involved? (100 words)

22. Marketing Strategy:

Describe your marketing strategy if you have one. Include information such as channels to be used for sales/marketing, existing and expected partners, etc. (Max 300 words)

23. Risks and Challenges:
   i.   Technology development and/or manufacturing challenges (if any)
   ii.   Deployment challenges (e.g. last mile distribution, supply chains, etc.)
   iii.   Financial and business model challenges
   iv.   Regulatory compliances/ environmental clearances/any other.
   v.   Government approvals required before commercialization of the product/process and expected time required for such approvals.
   vi.   Other risks and challenges.

Section E: Budget Summary

24. Total Project Period   :   _____   *(in months)*

   Milestone of the Project:

Milestone (in details)	Period (in months) for each stage	Role of the project team (Activities to be performed)

25. Budget Details for the Project: *(To be provided by all partners)*

Table I: Budget Break-up for various milestones-

Milestone	Role of the project team *(Activities to be performed)*	Total (INR)
Milestone 1		
Milestone 2		
Milestone 3		
Total		

Table II: Total Budget of the Project-

S. No.	Expenditure Heads	Amount (INR)
1.	Manpower	
2.	Consultancy from external agencies	
3.	Equipment	
4.	Consumables	
5.	Operation and Maintenance (one year)	
6.	Field trials	
7.	Domestic travel	
8.	International travel	
9.	Contingencies*	
10.	Other expenses – Transport/Plant fencing etc.	
Grand Total		

- *The Manpower budget including Consultancy from external agencies should be reasonable with respect to the Overall Project Cost.*
- *All figures mentioned in the above table should be in Indian Rupee (INR) only. No additional funds will be released.*
- *No institutional overheads/indirect costs are permitted.*

Table III: Budget Break-up for Partner(s) for various milestones:-

S. No.	Expenditure Heads	Milestone 1	Milestone 2	Milestone 3	Total Cost (INR)
Duration *(Number of months)*					
1.	Manpower				
2.	Consultancy from external agencies				
3.	Equipment				
4.	Consumables				
5.	Field trials				
6.	Domestic travel				
7.	International travel				
8.	Contingencies				
9.	Other expenses				
Grand Total					

26. Justification on the Manpower, Equipment and Consumables details (to be provided by all partners):

I.   Manpower/Consultancy:

Name (s)	Designation Position	Annual salary package	Time allocated for project (%)	Man-month(s) work on the project	Salary allocated to the project	Role in the project and justification

II.   Consultancy:

Name (s)	Designation Position	Annual salary package	Time allocated for project (%)	Man-month(s) work on the project	Salary allocated to the project	Role in the project and justification

III.   Equipment details:

No.	Particulars	Quantity	Cost per unit	Total Cost (INR)	Justification

IV.   Consumables:

S. No.	Particulars	Amount (INR)	Justification

27. Total Budget of the Project including other funding:

S. No.	Particulars	Total Cost (in INR)
1.	Overall Cost of the Project	
2.	Expected from the PACEsetter Fund	
3.	Funding from other sources (Please specify in detail, separately)	
	A. Grants received from governmental/non-governmental agencies	
	B. Grants received from Venture Capital (VC)	
	C. Grants received from Angels Network investors	
4.	Any other details	

Section F: Applicant Details

28. Brief biographies of key team members including related experience and accomplishments (100 words each):

29. Information on Lead Implementing Organization (Max 500 words):

    i.   Overview and mission:
   ii.   Relevant experience and track record:
  iii.   Provide up to 3 past performance references that can speak to ability of applicant to achieve results, successfully implement a project of similar magnitude and complexity:

30. Information on Partner Implementing Organizations (Max 500 words)(if any):

    i.   Overview and mission:
   ii.   Relevant experience and track record:
  iii.   Provide up to 3 past performance references that can speak to ability of applicant to achieve results, successfully implement a project of similar magnitude and complexity:

Section G: Other Information

31. Other relevant information, if any (200 words):