



Ministry of New and Renewable Energy
Government of India



IUSSTF
Indo-US Science and Technology Forum



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)

Second Funding Round

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. In June 2015, these governments established the PACEsetter Fund, a new joint fund 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 PACEsetter Fund

The PACEsetter Fund is a INR 50 crore (USD 7.9 million) fund jointly capitalized by the Governments of the Republic of India and the United States of America.

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.

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 Techno Financial Expert Committee comprising of governmental and non-governmental experts from both countries. The Indo-U.S. Science and Technology Foundation is currently serving as the Administrator of the Fund.

The composition of the Committee is as follows:

Indian Side	USA Side
Steering Committee	
Secretary, MNRE	Ambassador, US Embassy
Joint Secretary (IR), MNRE	Mgmt. Counselor, US Embassy
Director General, The Energy and Resources Institute (TERI)	Minister Counselor, US Embassy
Chief Executive Officer, Centre for Innovation, Incubation and Entrepreneurship (CIIE)	Director USAID

Indian Side	USA Side
Techno-Financial Expert Committee	
Dr. Dilip Nigam, Adviser, MNRE	Mr Ray R Sudweeks, First Secretary for Energy Affairs
Dr. M R Nouni, Former Adviser, MNRE	Mr Kevin McCown, Energy Officer
Dr. O S Sastry, Former Adviser, MNRE	Mr. Sikander R Shah, Economic Advisor, U.S. Embassy
Dr. Sanjay Bajpai, Adviser/ Scientist, DST	
Prof. S C Srivastava, Professor, IIT Kanpur	
Mr. Rakesh Rewari, Former MD, SIDBI	
Mr R K Vimal, DGM, IREDA	

Overview of Second Funding Round

This Call for Expressions of Interest launches the second funding round of the PACEsetter Fund up to \$2 million will be made available for this round, with grant sizes ranging from \$50,000 to \$300,000.

The application process will have two stages:

- **Stage 1:** All interested applicants are invited to submit an Expression of Interest, following the guidelines outlined below. Call was announced on 27th May 2016 and the submission deadline was 12th October 2016.
- **Stage 2:** From these initial submissions, as per MNRE order no. 127/4/2017 – IR dated 13.3.2018, the PACEsetter Fund Techno Financial Expert Committee (TFEC) will identify and short list EOIs who will be invited to submit detailed proposal. Guideline for the detailed proposal is outlined below.
- **Stage 3:** Sharing of detailed proposals with the TFEC through link. Preliminary Screening of the detailed proposal by TFEC to shortlist final proposals.

- **Stage 4:** Presentation by the shortlisted teams to the TFEC for selection of final Awardees (Award to be given subject to their compliance with the observations & recommendations of the TFEC).

The timeline for this process is as follows:	
Call for Expressions of Interest (EOIs)	27 th May 2016
Last date for submission of Eols	12 th October 2016

Planned timelines for the process after receiving the approval will be as follows:	
Approval received on 26 Eols from U.S. Embassy	30 th July 2018
Approval received on 26 Eols from MNRE	18 th September 2018
Call for Detailed project proposal (Technical & Business Plan)	20 th September 2018
Submission Deadline	20 th October 2018
Sharing of detailed proposals with the TFEC through link	26 th October 2018
Expert Reviews on the detailed proposal	9 th November 2018
Preliminary Screening by the TFEC of the detailed proposal for selection of final proposals	19 th November 2018
Intimation mail to the teams	18 th January 2019
Presentation of the selected teams to the TFEC and selection of final awardees	19 th February 2019

The above timelines are subject to receiving timely approval & support from the Federal Bodies and the TFEC members.

Project 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.

Funding Priorities

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.

General Guidance on Proposals

The 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.

PACEsetter Fund – Second Funding Round Expression of Interest Form

All applicants MUST use this form to apply

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 EOI to pacesetter@indousstf.org
5. Application deadline: 20th October 2016.
6. 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 (<i>District/State</i>)	
Stage of development (initial concept/ proof of concept/ demonstration/scale-up)	
Total Funding Request (INR or USD)	
Lead Implementing Organization	
Other Partnering Organization	

Section B: Project Information

Project Description (max 500 words)	
<p>Expected Outcomes (max 200 words)</p> <p>Describe the short and long-term outcomes and impacts of the project</p>	
<p>Expected duration of project</p>	<p>Years Months</p>
<p>Advantages of the approach (max 250 words)</p> <p>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?</p>	
<p>Results Indicators</p> <p>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.</p>	<ul style="list-style-type: none"> • 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.
<p>Monitoring and Evaluation approach (max 150 words)</p>	
<p>Project sustainability and long-term viability</p> <p>What steps shall be taken to make the project scalable and sustainable in the</p>	

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 (max 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	

<p>Applicant Type Private/non-governmental entity/ Academic or research institution/ Private individual/ Other</p>	
<p>Primary Point of Contact</p>	<p>Name: Title: Email address: Telephone:</p>
<p>Secondary Point of Contact</p>	<p>Name: Title: Email address: Telephone:</p>
<p>Information on Lead implementing organization (max 250 words)</p> <ul style="list-style-type: none"> • 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 	
<p>Partner Organizations If applicable, and what skills and experience they will contribute to the implementation and scale of the project:</p>	

PACEsetter Fund – Second Funding Round Expression of Interest Form

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.
5. Application deadline: 20th October 2018.
6. Those who are likely to be screened will be called for Presentation in front of the Techno-Financial Expert Committee (TFEC) in November-end 2018. A final confirmation mail will be sent to the shortlisted teams.
7. 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 <i>(Delivery of energy services/ Technology or product development/ Training & capacity- building/ Business development support/ Research/Other)</i>	:			
3.	Stage of Development <i>(Initial concept/ Proof of Concept/ Demonstration/Scale-up)</i>	:			
4.	Total Funding Request <i>(INR/USD)</i>	:			
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 Ph. Mobile E-mail: Fax No.				
6.	Other Partnering Organization <i>(if any)</i>	:			
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 Ph. Mobile E-mail: Fax No.				

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 <i>(in months)</i>
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 (<i>Number of months</i>)				
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):



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