

Request for Proposals

MIT Energy Initiative (MITEI) Seed Fund Program

Application deadline – January 18, 2011

The MIT Energy Initiative requests proposals for its Spring 2011 round of seed fund grants.

The Initiative's Seed Fund Program supports innovative, early-stage research projects. The program is not designed to provide additional resources for projects that are already underway. Through the grants MITEI seeks to encourage researchers from across MIT to collaborate in exploring new energy-related ideas and to open up new avenues for energy-related research employing the full range of Institute capabilities. Proposals across the entire spectrum of energy and related environmental research areas are eligible.

While the call is, as always, open to proposals on any energy topic, MITEI members are also interested in proposals on end-use energy efficiency. Example areas of interest are attached.

FUNDING AVAILABLE

It is anticipated that awards will be made for up to \$150,000, with periods of performance of up to two years. These grants will be supported with Seed Fund Program funding provided through the MITEI Founding and Sustaining Members Program. Proposals that are submitted but not funded in this round may be reconsidered for support in the next round of seed grants, approximately one year later.

KEY DATES

December 20, 2010 – RFP for seed fund proposals

January 18, 2011 – Seed fund grant application deadline

March 4, 2011 – Review meeting with MITEI Governing Board and MIT Energy Council

April 1, 2011 – Start date for seed fund projects

ELIGIBILITY AND RESTRICTIONS

The MITEI Seed Fund Program is open to all who, at the start of funding, are MIT faculty or members of the research staff with principal investigator privileges. **No researcher may be listed as PI on more than two proposals submitted in any given funding round.**

APPLICATION PROCESS

It is not necessary to route these proposals through OSP prior to submission. Please complete the cover page along with the body of the proposal in accordance with the attached application format. In addition, the provided Co-funding/Background IP form(s) must be submitted along with the proposal. For budget preparation, please contact the MITEI Financial Office: Natalie Liang, Eva Huang or Tonie Stephenson (nliang@mit.edu, evahuang@mit.edu, or tostephe@mit.edu). The completed documents **should be sent electronically as 3 separate files (proposal, budget, co-funding/background IP)** to energyseedfunds@mit.edu by the January 18, 2011 deadline.

List of requirements for consideration:

1. Cover page
 - a. Use the Cover Page template provided and complete the information requested for each PI on the project
 - b. Include the following statement on the cover page: **"This proposal may include potentially patentable material that has not been publicly disclosed. Please**

distribute only to individuals who are involved in the review process and who have received the MITEI proposal review instructions, and treat this material as confidential information.”

2. Body of the proposal
 - a. Submit no more than 5 pages of text, exclusive of references and illustrations
 - b. Include a brief abstract that can be shared publicly
 - c. Include the following statement in the footer of each page of your proposal: “MITEI Proposal review – do not distribute”
3. Budget
 - a. Please contact the MITEI Financial Office for help in preparing the proposal budget: Natalie Liang, Eva Huang or Tonie Stephenson (nliang@mit.edu, evahuang@mit.edu, or tostephe@mit.edu).
 - b. Submit the budget as a separate excel file along with the proposal
4. Co-funding/Background IP form
 - a. Submit a separate signed form for each PI listed on the proposal
 - b. Submit the form(s) as a separate PDF along with the proposal

REVIEW AND SELECTION PROCESS

The review criteria will emphasize the importance of the scientific problem, novelty of the ideas, and potential impact of the work. How the proposed work complements ongoing energy research on campus will be considered. The promise of opportunities for long-term funding to continue the research project beyond the seed fund period of performance will also be considered. The MITEI Governing Board will advise the MIT Energy Council on awards.

CONDITIONS

1. Project management – The PI is directly responsible for performance of the work in the proposal and should not serve as proxy for others.
2. Co-funding – Any anticipated external source of support for the proposed project must be declared at the time of submission. If co-funding becomes an issue during the seed fund proposal/project process, this should be discussed with MITEI leadership prior to use of such funds.
3. IP – If the PI has existing IP relevant to the proposed project, this must be declared at the time of submission.
4. No researcher may be listed as PI on more than two proposals submitted in any given funding round.
5. Deliverables – PIs are expected to submit an interim report at the end of the first year and a final report at the end of seed fund support. The reports will be helpful in promoting the projects and in assisting PIs with finding support to continue the research and grow the projects once seed funding is finished.
6. In addition, PIs should send publications resulting from the seed fund award to MITEI, ATTN: Karen Gibson (kgibson@mit.edu).

Submission of a seed fund proposal constitutes acceptance of conditions and requirements herein.

ATTACHMENT

While the call is, as always, open to proposals on any energy topic, MITEI members are also interested in proposals on end-use energy efficiency. Example areas of interest are:

- Buildings and infrastructure. New materials and components to improve energy performance, e.g., HVAC technologies, lighting, etc. Novel information/control systems. Systems integration. Community scale systems efficiency. Smart infrastructure that enhances energy efficiency.
- Transportation. Increased fuel efficiency, freight transportation systems, light weight materials, etc.
- Efficiency in processes and operations. For example, how can waste heat (especially low grade heat) and energy lost through pressure drops in industrial processes be economically captured and utilized?
- Evaluation and implementation of energy efficiency projects. Real world returns to energy efficiency investments and regulations that require these investments. Measurement of the costs and benefits of real world or field returns to energy efficiency investments. Exploration of factors that determine individuals' investments in energy efficiency technologies. Understanding source of differences between engineering and real world estimates of returns to energy efficiency technologies.
- Integration of energy efficiency technologies with distributed renewable generation sources.

We also encourage multidisciplinary submissions. For efficiency proposals only, we will allow budget over \$150,000, up to a \$250,000 maximum, for proposals involving at least three faculty from different disciplines.

This proposal may include potentially patentable material that has not been publicly disclosed. Please distribute only to individuals who are involved in the review process and who have received the MITEI proposal review instructions, and treat this material as confidential information

COVER PAGE

Application for Support from the MIT Energy Initiative (MITEI) Seed Fund Program

Title of seed fund proposal:

Contact Information:

Please provide the following information for **each** Principal Investigator:

Name:

Title:

Department, Division, Center and/or Laboratory:

Telephone number:

Email address:

MIT room number:

Summary Proposal Information:

Requested period of performance:

(Not to exceed two years)

Requested start date: (Earliest start date April 1, 2011)

Requested end date:

Total funding requested:

(Attach the provided budget page in appended format)

Co-funding/Background IP:

(Attach a separate Co-funding/IP form for each PI and Co-PI)

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**Application for Support from the
MIT Energy Initiative (MITEI) Seed Fund Program**
Please do not exceed five pages of text.

Proposal Title

Abstract

Provide a brief description of the project goals and the problem the research is seeking to address that can be shared in descriptions of the MITEI seed fund program on the web, in written documents, and with external entities that may be interested in supporting the research beyond seed funding.

Project Description

Describe the opportunity and approach. The project description should include the objectives for the period of work and expected significance, and the proposed activity's relation to longer-term goals of the project. Describe how this piece of work complements other work on campus.

More specifically, the seed fund proposals should address the following questions:

1. What is the definition of the problem?
2. Why is the topic important?
3. What are the implications?
4. What is the potential for impact?
5. What can be accomplished in 1-2 years?
6. What is known and what is novel in the approach?
7. What are the anticipated challenges?
8. What is the methodology?
9. What are the longer-term goals of the research?
10. How does the research complement other work on campus?

Research Team and Collaborations

List the names and titles of members of the research team and describe their roles in the project. Collaborations are not required, but multidisciplinary projects are encouraged.

Resources and Budget

Describe the approximate resources (people, equipment, materials) required to complete the project. Funding may be requested for up to a two-year period of performance. Normal MIT overhead rates for research grants apply. Include any co-funding issues relevant to the proposal. Include budget sheet and co-funding/background IP form in the attached format.

Background IP and Co-funding Disclosure

Any third party(ies) that is anticipated to be a source of support for the proposed project must be identified, and any necessary special terms and conditions negotiated, in advance of consideration for funding in order to eliminate any potential conflict in MIT IP and other contractual obligations to the MITEI Sponsor and to any other funding source(s).

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