

Request for Proposals

MIT Energy Initiative (MITEI) Seed Fund Program

Application deadline – June 20, 2008

The MIT Energy Initiative requests proposals for its Spring 2008 round of seed fund grants. The Initiative's Seed Fund Program supports innovative, early-stage research projects addressing energy and related environmental issues. It is envisioned that funds will be granted across the entire spectrum of energy and related environmental research areas over the next five years.

AREAS OF INTEREST

MITEI is working to address science, technology, policy, and systems design issues required to meet the global energy/environmental challenge. Interdisciplinary research project proposals are strongly encouraged. Proposals may be submitted in any area of energy related research, including environmental research related to energy production, delivery and use.

Representative areas of interest include, but are not limited to, the following:

Science and technology for a clean energy future

- renewable energy sources (wind, solar, geothermal, waves, biofuels);
- electrochemical energy storage and conversion;
- core enabling science and technology (e.g., superconducting and cryogenic components, nanotechnology and materials, transport phenomena); and
- nuclear fusion.

Improving today's energy systems

- advanced nuclear reactors and fuel cycles that address cost, safety, waste, and nonproliferation objectives;
- affordable supply of fossil-derived fuels (oil, natural gas, coal) from both conventional and unconventional sources and processes;
- key enablers such as carbon sequestration;
- thermal conversion and utilization for dramatically enhanced energy efficiency, including in industrial uses;
- enhanced reliability, robustness, and resiliency of energy delivery networks; and
- system integration in energy supply, delivery and use;
- learning from the past and understanding current public attitudes towards energy systems;
- sound economic analysis of proposed policies for energy development and greenhouse gas mitigation;
- understanding and facilitating the energy technology innovation process; and
- in-depth integrative energy and technology policy studies that draw from faculty across the campus.

Energy systems for a rapidly evolving world

- science and policy of climate change;
- advanced, energy-efficient building technologies;
- advanced transportation systems, from novel vehicle technologies and new fuels to systems design including passenger and freight networks; and
- “giga-city” design and development, particularly in the developing world.

FUNDING AVAILABLE

It is anticipated that awards will be made for \$150,000 or less, 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 will be reconsidered for support in the next round of seed grants, approximately six months later. In the first round, MITEI was able to fund (or partially fund) fourteen proposals. We anticipate about half as many awards in this second round.

KEY DATES

June 20, 2008 – Seed fund grant application deadline
August 1, 2008 – Notification of seed fund grant recipients
September 1, 2008 – Earliest start date for seed fund projects

ELIGIBILITY

The MITEI Seed Fund Program is open to all MIT faculty, and to members of the research staff with principal investigator privileges.

APPLICATION PROCESS

(note new email address for electronic submission)

Please complete the cover and budget pages, along with the body of the proposal in accordance with the attached application format. Submit one copy of the proposal to the attention of Karen Gibson E40-467 no later than June 20, 2008. In addition, the proposal must also be sent electronically as a PDF file to energyseedfunds@mit.edu by the June 20, 2008 deadline.

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.

Cover Page

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

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

Title of seed fund proposal:

Requested period of performance:

(Not to exceed two years)

Requested start date: (Earliest start date September 1, 2008)

Requested end date:

Total funding requested:

(Attach budget page in appended format.)

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Please do not exceed five pages of text.

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.

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 budget sheet in the attached format.