



Overview

The Maryland Energy Innovation Institute (MEI²) is focused on translating university energy research into new clean energy companies in the State of Maryland and thus simultaneously benefiting our environment and creating high paying jobs to help our State economy. MEI² proposes a unique opportunity through the following seed grant program to bridge the gap between academic transformative laboratory research results and prototype demonstrations to obtain investor interest. This call will support multiple seed grant awards with a maximum award ceiling of \$100,000 USD as well as potential Phase 2 awards with a maximum ceiling of \$200,000 USD for those projects that received a prior seed grant. The total amount of funding available for the FY2022 Seed Grant Program is \$400,000 USD. 17 Seed Grant awards have been made to recipients across the University System of Maryland and to Johns Hopkins University. Success rate is dependent upon the number of proposals, but is typically **40%** or higher. Previous recipients can be found at: <https://energy.umd.edu/grantsawardschallenges>

Criteria

Eligibility: All full-time tenured or tenure track faculty members at any Maryland state academic institution or Maryland companies affiliated with and commercializing inventions created by those faculty.

Program Focus: The intent of the program is to foster commercialization by translating energy research into a prototype device or process through technology development, creation and/or advancement of university start-up companies within the state of Maryland.

Expectations: The project should advance energy technology and economic growth in Maryland. The device or process should have appropriate intellectual property protection (invention disclosure, patent application, or patent) filed with the applicant institution. At the end of one year, a report that describes work done and includes a commercialization plan will be the final deliverable for the project. The plan should include: 1) clear market assessment and strategy; 2) a viable revenue model; and 3) a strategy for financing the plan.

Review: Funding for the seed grants will be awarded on a competitive basis. The MEI² Investment Committee will review and select proposed projects. Applicants should not expect detailed written critiques of their proposals. Proposals will be reviewed for: 1) the likelihood of attracting outside funding, 2) innovative and scholarly merit, and 3) potential for commercial readiness.

MEI², in its sole discretion, selects projects for funding on a competitive basis with the primary aim of advancing the State of Maryland's interest in clean energy. MEI² is under no obligation to fund any particular proposed project and MEI² reviewers assume no liability related to proposals.

Allowable Expenses: Research supplies; purchase or rental of equipment and materials; travel for project purposes (excluding travel to meetings or symposia); salary support for a temporary position (1 year or less) technician, or research associates (post-docs), and/or graduate students, and/or

commercialization consultants.

Unallowable Expenses: Salaries for PIs; administrative support

- **Conditions of the Award:** Money must be spent within 12 months of receipt of award to advance technology as described in the proposal. The awardees must submit an intermediate report after 6 months and a final report no later than 3 weeks after the end of the funded project. Awardees must submit a proposal to at least one external funding agency within 18 months of receiving the seed funding, and provide information on the seed funding (e.g., grant funds, publications, conferences) annually. Awardees should also acknowledge MEI² in any publications that result from the energy seed grant.

Proposal Content:

Signed proposal cover sheet (see attachment)

MEI² endeavors to protect confidential information but neither MEI² nor outside reviewers can guarantee confidentiality or security of the information submitted in a proposal.

Project Proposal (maximum 8 single-spaced pages) including:

- Project Motivation—rationale for project and potential for investment (2 pages maximum)
- Project Description (4 pages maximum)
 - Description of market and why proposed technology provides a unique or preferred solution to meet those market needs
 - Detailed description of the technology device or process summarizing previous results obtained
 - Description of intellectual property secured
 - Description of proposed technology development and why it is necessary to secure follow on investment funding
 - Brief risk assessment
- Additional Information including References (including full titles) 1 page maximum
- Targeted Proposal Budget - (see template for budget and justification: be specific about what the funds will be used for and how the PIs will allocate funds between the PIs).

Phase 2 Proposal Addenda

Phase 2 proposals must also include progress made on the technical and business aspects of the previous proposal as well as a more complete business plan towards commercialization (3 pages max)

Proposals must be submitted electronically to Cathy Stephens (csteph5@umd.edu) as a combined .pdf prior to close of business on Wednesday, December 22, 2021.

Additional Information Required (not included in page count)

- Recent Current and Pending funding statement that includes recent governmental (local, state or federal) support related to the project, all current governmental support, and all proposals for other government support that are pending (**see attached**); For the Current and Pending, indicate the relationship of each project to the proposal
- Provide information on angel, seed or venture funding already received or are actively being

- sought for this project
- Biosketches (not included in page count) – 2-page NIH or NSF format (all senior personnel)

**The MEI² Investment Committee reserves the right to adjust the award amount given to less than what is proposed.*

The Maryland Energy Innovation Accelerator (MEIA) is a State of Maryland-sponsored venture development and advancement program focused on commercializing advanced energy and climate technologies developed at Maryland-based businesses, universities, and federal laboratories. MEIA provides Startups with access to domain experts, strategic partners, professional services, and project management support to execute commercialization milestones. To form or augment Startup Teams, MEIA recruits and engages experienced, industry-specific business executives and entrepreneurs (“energy executives”) who want to become founders or executives of the Startup to perform its commercialization activities. This energy executive model creates higher quality leadership teams that, when combined with great technology, produce the investible Maryland-based companies that form the foundation of an emerging clean energy and climate technology cluster.

MEIA provides three programs that represent a three-tiered approach that moves technology from concept to demonstration: 1) Pre-Accelerator – A 2-month customer-discovery program for the earliest technologies from universities and labs; 2) Launchpad – A 6-month commercialization planning program for high-potential technologies in universities or labs; and 3) Accelerator – A 6+ month program for established companies looking to fill senior roles, to demonstrate technology, and to obtain third-party capital investment.

MEI² encourages those interested in Energy Seed Grant funding to reach out to MEIA (www.mdeia.org) for help and advice for developing the market section of the seed grant proposal. MEI² also encourages Energy Seed Grant funding recipients to meet with MEIA to discuss the development of the required commercialization plan. *Note: The MEIA program is sponsored by the State of Maryland, and it is free to participate.*



MARYLAND ENERGY INNOVATION INSTITUTE

Energy Innovation Seed Grant Request for Proposals FY2022

COVER PAGE

Title:

PI names and affiliations:

Name of Partnering Company (if applicable):

Total amount requested:

Statement of how this project translates research into technology and enables private investment (technology validation):

FINANCIAL AND REPORTING OBLIGATIONS

By signing, the PIs understand the conditions of the award (below).

CONDITIONS OF THE AWARD

Awards are for one year, and funds must be spent within the year time frame. The final scientific and financial report must account for and demonstrate how seed funds enabled the research. No-cost extensions are not offered except under extreme circumstances (*i.e. COVID or other research shut down*). A mid-term report should outline advances towards scientific and other milestones and should be submitted promptly.

Promoting the success of MEI² energy seed grant teams is a central mission of the MEI²; therefore, PIs agree to:

- Provide scientific progress report to the MEI² at 6.5 months.
- Provide scientific progress report and a summary of expenses to the MEI² at 13 months.
- Submit a proposal to at least one external funding agency within 18 months of receiving the seed funding, and provide information on the outcomes of the seed funding (e.g., grant funds, publications, conferences) annually.
- Acknowledge MEI² in any publications that result from the energy seed grant.

By signing the below, you acknowledge that the award is administered on a cost-reimbursable basis if the PI is not a University of Maryland College Park faculty member.

PI: _____

Date: _____

PI/Company Partner: _____

Date: _____



ESTIMATED BUDGET

Allowable Expenses: Research supplies; purchase or rental of equipment for new research; user fees for campus facilities; tuition; and direct salary and [fringe based on current rate](#) for a temporary position (1 year or less) for technicians, research associates (post-docs), graduate students, and/or commercialization consultants; travel for project purposes (excluding travel to meetings or symposia). Please draft your budget with guidance from departmental grants coordinator or financial administrator.

Unallowable Expenses: Salaries for PIs, administrative support, general telephone services and postage, alterations or renovations of laboratory space, purchase of laboratory or office furniture, purchase of periodicals and books, and dues and memberships in scientific societies.

Cost Categories	Description	Costs
Personnel (e.g. pre-doc, post-doc, lab staff, hourly)		
Personnel (e.g. pre-doc, post-doc, lab staff, hourly)		
Personnel (e.g. pre-doc, post-doc, lab staff, hourly)		
Personnel (e.g. pre-doc, post-doc, lab staff, hourly)		
Tuition		
Fringe benefits		
Equipment (must be well justified)		
Supplies		
Other (detail)		
Other (detail)		
Other (detail)		
Total of all Costs		0



MARYLAND ENERGY INNOVATION INSTITUTE

Energy Innovation Seed Grant Request for Proposals FY2022

BUDGET JUSTIFICATION

Please provide a short justification for all budgeted cost categories above (i.e., Personnel, Tuition, Fringe, Equipment, Supplies, Other).

CURRENT AND PENDING SUPPORT (TEMPLATE)

Current:	Pending:			
Title:				
Source of Support:				
Senior Personnel:				
Total Award Amount:		Total Award Period Covered:		
Location of Project:				
Person-months Per year Committed to Project		Cal:	Acad:	Summer:
Relationship to Proposal:				