



Massachusetts Clean Energy Center

Request for Proposals: InnovateMass
RFP FY2018-DEMO-02

Date of Issue: April 17, 2018
Proposals Due: June 1, 2018

All proposals must be submitted to:
innovate@masscec.com

I. SUMMARY

The Massachusetts Clean Energy Center (“MassCEC”) seeks applications to its InnovateMass Program (the “Program”) for (1) clean energy technology demonstration projects generally; and (2) clean transportation technology demonstration projects under the InnovateMass Round VI-b Spotlight: Clean Transportation and Mobility.

InnovateMass provides grant funding of up to \$250,000 per project and technical support for projects that are developing new clean energy technologies or innovative combinations of existing technologies that demonstrate a strong potential for commercialization while providing significant measurable clean energy, clean water and/or climate benefits.

Under the Clean Transportation and Mobility Spotlight, InnovateMass will also provide funding for projects that demonstrate innovations in clean transportation technologies. Clean transportation technologies are those which eliminate or reduce greenhouse gas emissions in any mode of transit (including personal, mass, and freight transportation sectors).

In addition to grant funding, the Program provides third party project management and technical support to all awardees to ensure that projects are successful. The Program technical consultant will meet regularly with awardees to review workplans, discuss and resolve technical and other project-related barriers, and review performance monitoring and evaluation plans.

Successful applicants will propose projects that address important energy or water challenges, help to grow the state’s clean energy economy, and contribute to Massachusetts’ continued clean energy and water innovation leadership. For both clean energy projects and the Clean Transportation Spotlight, this request for proposals (the “RFP”) invites participation in a two-part application process: applicants must first submit an application that consists of a completed InnovateMass Application Form and required documentation (the “Application”) that meets the criteria outlined below. In the event the Application is selected, the applicant will be invited to pitch their proposal to a panel of Program judges.

II. ABOUT MASSCEC

MassCEC is a publicly-funded agency dedicated to accelerating the success of clean energy technologies, companies and projects in the Commonwealth—while creating high-quality jobs and long-term economic growth for the people of Massachusetts. Since it began operating in 2009, MassCEC has helped clean energy companies grow, supported municipal clean energy projects and invested in residential and commercial renewable energy installations, creating a robust marketplace for innovative clean technology companies and service providers.

III. PROGRAM GOALS AND DESCRIPTION

The goal of InnovateMass is to accelerate the commercialization of clean energy technologies and related innovations between Technology Readiness Levels (TRL) 5 (“component and/or breadboard validation in relevant experiment”) and 7 (“system prototype demonstration in an operational environment”) by providing funding for demonstration projects to test and measure the performance

of the technology in order to advance its TRL. Technology demonstrations may also explore the viability of new or innovative business models, as applicable.

Successful applicants will demonstrate that:

- the technology used in the project has strong commercialization potential;
- they have developed a partnership which will allow the technology to be validated in a demonstration setting, including a project site;
- the proposed project will advance the technology's commercial readiness;
- the proposed project will enable an emerging clean energy company to demonstrate the value of its technology to potential customers and investors;
- they have secured the required cost share of **at least 50% of the total grant request, i.e.,** at least one-third of the total project budget;
- the proposed project addresses a critical energy/climate challenge and reduces or prevents greenhouse gas ("GHG") emissions; and
- the proposed project is viable, and feasible within the budget proposed and the timeframe allowed by the Program.

EXAMPLE PROJECTS

Examples of projects that were awarded in previous rounds of InnovateMass include:

- **Needham-based SolarOne Solutions (with the City of Somerville and CIMCON Software)** – \$88,779 (with a \$57,772 cost share) to fund networked, off-the-grid solar-powered lighting for pedestrian and bicycle paths. The lighting systems will allow for excess energy to be used to power other devices, such as security cameras, while providing more affordable and resilient lighting for pedestrian and bike paths than conventional electricity delivery infrastructure.
- **Waltham-based IVYS Energy Solutions (with McPhy Energy NA, Greentown Labs, Sparkplug Power, and Hyundai-Kia America Technical Center Inc.)** – \$150,000 (with a \$170,000 cost share) to deploy an electric vehicle fueling infrastructure (Fuel Cell and Battery Electric Vehicles) that will integrate with a solar-based energy storage system and demonstrate zero emission mobility.
- **Amesbury-based Building Envelope Materials (with Greentown Labs, the Boston Department of Housing and Community Development, and the Hudson Housing Authority)** – \$50,000 (with a \$25,000 cost share) to insulate the walls of four vacant units in an 80-unit low income multifamily building in Providence, RI with an innovative injection-foam insulation technology.

Examples of potential eligible Clean Transportation and Mobility Spotlight applications include:

- Demonstration of a technology that replaces or reduces the direct use of fossil fuels in transportation applications. Examples include, but are not limited to, plug-in hybrid electric, battery electric, hydrogen fuel cell, or bio-derived fuels.
- Deployment of advanced energy storage or energy management for existing clean transportation technologies.
- Demonstration of technologies for grid integration of clean transportation technologies.

IV. ELIGIBILITY

Eligible applicants include public and private entities (*e.g.*, clean energy companies, research and development institutions, academic institutions, state, local, and quasi-government agencies, along with school districts and nonprofits). Applicants are expected to form teams comprised of several entities (the “Application Team”) which will work together on the demonstration project, with the technology company designated as the lead (the “Lead Applicant”). The Lead Applicant will contract directly with MassCEC, will receive the grant funds, if awarded, and will be responsible for deliverables under the grant agreement. Application Teams may include any combination of the aforementioned eligible applicants. Application Team composition can vary, but must include at least one clean energy company, or in the case of the Clean Transportation Spotlight, at least one clean transportation technology company, and may include roles such as:

- One or more clean energy/transportation company(ies) with proprietary technology to be demonstrated;
- One or more potential clients who are able to provide a site for the demonstration project, funding and/or expertise;
- An organization that is not expected to be an immediate client but that is able to provide a site for the demonstration project funding and/or project-relevant expertise.

The clean energy/transportation technology company must be based in Massachusetts (see definition of a Massachusetts-based company below). Note that there is no requirement that the demonstration project site be in Massachusetts; *however*, Applications will be judged on the project’s projected clean energy and economic benefits generally as well as to the Commonwealth of Massachusetts in particular.

Software proposals are eligible but should endeavor to highlight the novel innovation at the core of the proposed technology.

Entities may submit more than one Application and be part of more than one Application Team.

INELIGIBILITY

Ineligible Technologies:

Technologies which directly improve the economics of extraction of coal, oil, or natural gas, or technologies related to construction of nuclear power, are not acceptable technologies for MassCEC funding. Technologies which impact the economics of reliance on coal, oil, or natural gas for energy services (except as used in fuel cell applications) are not eligible unless they also substantially reduce release of greenhouse gases associated with this reliance.

The Program provides funding for demonstration projects with technologies between TRL 5 and TRL 7. A technology that has not achieved at least TRL 5 will NOT be considered eligible.

Applicants may not submit projects for technologies that are not proprietary to the Lead Applicant. In addition, technologies that are widely deployed or commercially available in other markets (including international markets) will not be considered eligible for funding, unless there is a substantial difference

in the Massachusetts market which would require unique testing, validation, or changes to the technology in order to demonstrate the product’s commercial viability in the Commonwealth.

Ineligible Applicants:

InnovateMass seeks to fund technology demonstration projects. Applications that do not include a technology demonstration are not eligible to receive funding.

Applicants may not submit InnovateMass Program applications for the same idea or concept more than three times, unless there has been a substantial change in the technology or market which advances the case for an award. Additionally, please note that although applicants are encouraged to apply to multiple MassCEC grant award programs over their technology development lifecycle, MassCEC programs are designed such that each grant award program generally serves a company at a different stage of technology development. Applicants should reach out to MassCEC staff prior to applying if they are unsure of which program is the best fit.

V. ESTIMATED TIMELINE

RFP Released	Tuesday, April 17
Questions Due	Thursday, May 17
InnovateMass Applications Due	Friday, June 1 by 4:00 PM Eastern
Pitch Notifications	Monday, July 16
Mandatory Pitch Coaching for Finalists	Monday, July 16 – Friday, August 3
Pitch Session	Week of August 6

Responses to questions will be posted publicly on a rolling basis to the MassCEC website at www.masscec.com/innovatemass.

VI. BUDGET

InnovateMass awards of up to \$250,000 are paid to grantees on a milestone and deliverable basis. Milestones and deliverables are to be memorialized, with target completion dates and scopes of work associated with each milestone, in a detailed workplan (the “Project Workplan”; see template in Attachment B). For all selected applicants, the first milestone and associated deliverable will be the completion of an updated and more detailed Project Workplan, including budget estimates for each milestone; selected applicants will be eligible for a grant installment of up to 10% of their total grant for this first milestone. The final milestone and deliverable for all grantees will be the completion of a final report. Final report topics may include, but are not be limited to: the project’s overall execution, findings, challenges and solutions, and intended next steps. No less than 5% of the total grant amount may be allocated to this final milestone.

Grant funds will not be disbursed until initiation of the project, including the execution of a grant agreement and the final approval of the proposed Project Workplan by the Program Technical Consultant and MassCEC staff. Awardees will be notified in writing when each of these steps is complete. Teams of applicants (an “Applicant Team”) should give careful thought to their cash flow needs and must be prepared to support those needs. The grant agreement will require the Lead

Applicant to obtain MassCEC approval for changes or revisions to the Project Workplan or the budget.

Applicants should be aware that, if awarded, the contract will stipulate that if, after a period of six months from the date of the award notification, an awardee has not completed an approved Project Workplan, the award may be rescinded at MassCEC's sole discretion. This does not preclude the awardee from reapplying to the Program in a future funding round. If the project and final project milestones have not been completed after 24 months from the Project Workplan approval date, MassCEC reserves the right to reduce or rescind any remaining award amounts at its sole discretion.

ELIGIBLE BUDGET ITEMS

It is MassCEC's policy not to compensate for general administration, overhead, or general purpose expenses including general purpose materials or facilities. Budget items must:

- Be uniquely associated with the proposed project
- Be justified as to why it is a necessary and reasonable part of the project
- Be incurred after the execution of a grant agreement with MassCEC

All budget items generally fall into one of three categories: 1) eligible direct reimbursable expenses; 2) eligible cost share expenses; or 3) other budget items ineligible for neither reimbursement nor cost share. It must be clear why each budget item is necessary for the project. The following items are expenses that may be included in the project budget:

- **Materials, Equipment, Facilities and Supplies:** The equipment must be a new purchase. May include parts and equipment supplied to selected applicants as part of a lump-sum contract.
- **Transport (*i.e.*, transporting a key piece of equipment):** The proposal should document why transportation is required for the project.
- **Travel:** Allowable for consultants retained by Applicant Teams as a subcontractor only.
- **Direct Labor directly related to the InnovateMass project:** For each employee, list the name, title, anticipated number of hours worked and hourly rate, if applicable. Identify the basis for the pay rate used (*e.g.*, actual salary, composite rate, labor distribution report, technical estimate, state civil service rates, etc.). If composite rates are being proposed for a particular position or group category, please state the rate basis as a composite rate. If new hires are proposed, please explain the basis for how you determined their hourly rate. If applicants are selected for award negotiations, they may be required to provide payroll information or a certification statement to verify that the proposed rates are the actual rates being paid to the proposed individuals. If the awardee is dedicating Direct Labor toward its cost share requirement, it may only include gross wages + ER FICA + ER Medicare + SUI + FUTA.
- **Subcontractor (including project partner or host) Labor directly related to the InnovateMass project:** MassCEC must approve the use of any Subcontractor Labor in writing prior to awardee using MassCEC funds to pay for the expenses associated with such Subcontractor Labor.

Applicants are encouraged to consider MassCEC's [Clean Energy Internship Program](#) to find additional team members to assist with the project. For example, a project milestone may include the hiring of an intern in line with the commencement of any term of the tri-annual MassCEC Internship Program.

COST-SHARE REQUIREMENT

Awardees must provide cost share equivalent to at least 50% of the grant amount awarded (e.g. if an Applicant requests a \$200,000 grant, the Applicant Team must demonstrate that they will provide at least \$100,000 in cost share toward the project). Cost share must include at least 20% cash and may include up to 80% in kind costs, and must be used directly for the project during the Awardee's contract period.

Cash cost share is an actual cash payment that is recorded in the Lead Applicant's accounting system and supported by documentation. Examples of cash cost share payments for the purposes of this RFP include, but are not limited to:

- Payment for a site for the demonstration project, where the use of that site would normally incur a fee
- Payment for materials or the use of equipment directly related to the demonstration project
- Payment for services provided by contractors and consultants on the demonstration project (for monitoring or to assist in installation/maintenance for example)

In kind cost share may include direct labor of project team members at reasonable rates as well as services and materials used for the project; for example, use of equipment provided by a project partner.

INELIGIBLE BUDGET ITEMS

The following items should not be included in the project budget:

- Administrative expenses
- Overhead (including, but not limited to, telephone, electricity, rent for office/lab space)
- Miscellaneous office equipment and supplies, equipment and supply costs associated with general business operations, or equipment and supplies not related to the InnovateMass project
- Postage
- Printing
- Fringe benefits (including but not limited to health insurance, 401K plans or similar or other staff benefits)

VII. SELECTION CRITERIA

Applications will be evaluated on a competitive basis against the following criteria:

Criteria	Sub-Criteria
Minimum Threshold	<p>MassCEC will only consider applications that, in its sole judgment, meet the following minimum threshold criteria including:</p> <ol style="list-style-type: none"> 1. The Applicant Team and technology are eligible for selection. 2. The Application is complete and responsive to the RFP application requirements. 3. The Applicant Team has committed to the required level of cost share. 4. The Applicant Team is in good standing with any other awards received through MassCEC, other state agencies, or instrumentalities. 5. The application and technology are aligned with MassCEC and InnovateMass Program goals.
Potential of the Proposed Technology	<ol style="list-style-type: none"> 1. Identification of the industry pain point or opportunity area the technology seeks to address. 2. Identification of why the technology is both innovative and viable. 3. Understanding of existing alternative solutions/technologies and demonstration that the technology has the potential to be superior. 4. Demonstration of understanding of barriers and risks to technology success and proposed methods of addressing such barriers.
Commercialization Potential	<ol style="list-style-type: none"> 1. Demonstration of the commercialization potential of the proposed technology, including an identification of market for the product and how the proposed technology aims to address a market opportunity. 2. Identification of a compelling value proposition for the technology and a viable sales model. 3. Understanding of the policy and regulatory environment and its impacts on the commercialization potential of the technology. 4. Identification of a viable go-to-market strategy and how the demonstration project will move potential customers to choose the proposed solution. 5. Identification of a viable, sustainable business model.
Installation	<ol style="list-style-type: none"> 1. Clarity and viability of installation plan. 2. Demonstration of the suitability of the site for the proposed project, and the Application Team's ability to mitigate or manage any risks associated with the selected site. 3. Identification of a clear and thorough monitoring and evaluation plan.
Project Benefits	<ol style="list-style-type: none"> 1. Demonstration of meaningful economic development impacts to the Commonwealth resulting from successful completion of the proposed project. 2. Demonstration of meaningful greenhouse gas or energy use reductions resulting from widespread adoption of the technology.

Applicant Team	<ol style="list-style-type: none"> 1. Lead Applicant has relevant skills, qualifications, and experience to lead execution of the project. Other Applicant Team members have relevant skills, qualifications, and experience to support successful completion of the project. 2. Demonstration of the impact of the proposed project on Lead Applicant’s ability to develop commercialize the technology, as well as any benefits or impacts to other members of the Applicant Team. 3. Identification of the proposed InnovateMass project’s relationship to other projects funded or proposed to be funded by MassCEC.
Budget	<ol style="list-style-type: none"> 1. Identification of how grant funds and cost share will be allocated within the proposed project budget. 2. Reasonableness of the budget relative to the Project Workplan; cost-effectiveness compared to other similar applications.
Project Workplan	<ol style="list-style-type: none"> 1. A Project Workplan (Attachment B), including steps to assess progress and measure success. A strong Project Workplan will include a description of how necessary resources will be mobilized and how the work can be accomplished according to the proposed timeline. 2. An estimated timeline that fits the Project Workplan and highlights key project development and deployment landmarks that enable the project to begin within six months of an award. 3. Project Workplan is relevant to the goals of the Program, and achievable within a 24-month timeframe. 4. A description of how the Applicant Team intends to demonstrate successful completion of milestones under the InnovateMass Program, including (if applicable): <ul style="list-style-type: none"> • A detailed performance monitoring and verification plan for assessing the performance of pilot demonstration. • A clear articulation of project goals and/or design criteria. 5. A description of the metrics by which the proposed project will be measured upon completion.

VIII. HOW TO APPLY

After forming the Application Team and selecting the Lead Applicant, the Application Team must prepare and the Lead Applicant must submit a Proposal anchored by a completed Application Form.

It is the sole responsibility of the Lead Applicant to ensure that the Application is complete and properly submitted. At its discretion, MassCEC may request supplemental materials from the Lead Applicant and such materials must be submitted within ten (10) days of the request or the Application may be rejected without further review.

All of the following documents must be included in the Application:

- **InnovateMass Application Form**
- **Attachment A: Lead Applicant’s Signature and Acceptance Form**
- **Attachment B: Project Workplan.** Using the Project Workplan Template (Attachment B), the Lead Applicant must briefly describe the key tasks and milestones, responsible parties, and

timeline of the proposed demonstration project, including a proposed schedule for monitoring to obtain the required performance data. An approved Project Workplan will serve as the first reimbursable deliverable.

- **Attachment C: Project Budget.** The Lead Applicant must include an estimated budget, including total cost, total grant request, and total cost share (minimum 50% of grant request, i.e. one third of total project budget).
- **Attachment D: Completed TRL/CRL Calculator**
- **Attachment E: Signed Letters of Intent.** A signed Letter of Intent shall serve as the Concept Paper Application Cooperation Agreement indicating that, if awarded, the Applicant Team has agreed to work together to implement and manage the proposed project. This letter must be signed by each participating organization and must lay out each team member’s roles and responsibilities.

The completed Application and all other documentation (including the project budget) should be submitted to innovate@MassCEC.com in a single PDF file with an additional copy of the project budget in a separate Excel file. “InnovateMass Summer 2018 Application – [Company Name]” must appear in the e-mail subject line.

Applications must be received no later than Friday, June 1 at 4pm Eastern Time. Under no circumstances will MassCEC accept applications after that deadline.

IX. CONTACT INFORMATION FOR QUESTIONS

All questions regarding the InnovateMass Program and this RFP should be directed to:

Marinna Teixeira, Project Administrator
mteixeira@masscec.com

Questions must be received by **5 pm on Thursday, May 17**. Responses to all questions will be posted on a rolling basis to the InnovateMass website at www.masscec.com/innovatemass.

X. GENERAL REQUEST FOR PROPOSALS CONDITIONS

DEFINITIONS

For the purposes of this Program, the following definitions apply:

Clean Energy Companies are companies that have “...advanced and applied technologies that significantly reduce or eliminate the use of energy from non-renewable sources, including, but not limited to: energy efficiency; demand response; energy conservation and those technologies powered in whole or in part by the sun, wind, water, biomass, alcohol, wood, fuel cells any renewable, non-depletable or recyclable fuel...” This definition is based on MassCEC’s enabling legislation, Chapter 23J, Section 1 of the General Laws of Massachusetts (<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleII/Chapter23J/Section1>).

Clean Transportation technologies are those which eliminate or reduce greenhouse gas emissions in any mode of transit (including personal, mass, and freight transportation sectors).

Massachusetts-based Companies are companies which currently have and maintain a majority of the following in Massachusetts (i.e. if four apply, then three must be in Massachusetts, and if three apply, at least two must be based in Massachusetts): company headquarters (primary executives located in Massachusetts); primary research and development operations; primary manufacturing operations; primary sales & marketing office.

Technology Readiness Level (“TRL”) is a commonly used measure to assess the maturity of evolving technologies, prior to incorporating that technology into a system or subsystem. There are nine technology readiness levels; TRL 1 is the lowest and TRL 9 is the highest.

NOTICE OF PUBLIC DISCLOSURE

As a public entity, MassCEC is subject to Massachusetts’ Public Records Law, codified at Chapter 66 of the Massachusetts General Laws. Thus, any documentary material, data, or other information received by MassCEC from an applicant is a public record subject to disclosure. Applicants may not send MassCEC any confidential or sensitive information in response to this RFP.

DISCLAIMER & WAIVER AUTHORITY

This RFP does not commit MassCEC to award any funds, pay any costs incurred in preparing an application, or procure or contract for services or supplies. MassCEC reserves the right to accept or reject any or all applications received, waive minor irregularities in submittal requirements, modify the anticipated timeline, request modification of an application, negotiate with all qualified applicants, cancel or modify the RFP in part or in its entirety, or change the application guidelines, when in its best interests.

This RFP has been distributed electronically using MassCEC’s website. It is the responsibility of applicants to check the website for any addenda or modifications to a RFP to which they intend to respond. MassCEC accepts no liability and will provide no accommodation to applicants who submit an application based on an out-of-date RFP document.

CONTRACT REQUIREMENTS

Upon MassCEC’s authorization to proceed with the proposal, MassCEC and the Lead Applicant(s) will execute a contract which will set forth the respective roles and responsibilities of the parties. The template grant agreement is attached as Attachment F for informational purposes.