



Massachusetts Clean Energy Center

Request for Interest (“RFI”):
Partners for a CriticalMass Program
RFI FY2026 CriticalMass

Date of Issue: August 6, 2025
Responses Due: October 7, 2025

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

I. BACKGROUND AND RFI SUMMARY

Massachusetts has laid out ambitious and legally binding goals for decarbonization between now and 2050. The state has released several planning documents to inform the pathway to decarbonization (for example, [MA Decarbonization Roadmap](#) and [MA Clean Energy and Climate Plan for 2050](#)).

New technologies and business models will play a crucial role in achieving these goals. The state has a world-class cleantech innovation ecosystem to rely upon, driven by our leading research universities, our strong network of private capital investors, incubators and accelerators, and our network of state agencies. However, crucial gaps in scaling remain.

New technologies are never commercialized in a vacuum. All startups must raise money, attract customers, and compete in the marketplace to achieve scale. A well-functioning ecosystem addresses all these needs, providing the funding and support necessary to develop successful ventures. However, many climate entrepreneurs attempting to solve our hardest decarbonization challenges face additional hurdles.

Many newly developed climate technologies face regulatory, procurement, policy, and deployment issues above and beyond the normal challenges a startup commercializing in a typical “free market” must contend with. Those technologies often proceed successfully through the prototyping and first demonstration phase (TRL 2-8, through existing MassCEC Emerging Climatetech programming), but then struggle to jump the chasm towards commercialization and profitability as they work to acquire early adopters and first customers, or to secure meaningful market traction.

A recent feasibility study for this program, identified several reasons why technology startups encounter friction at this stage in development:

- Growth stage startups are unable to find and navigate working with large scale demonstration partners.
- Most investors do not know how to price or navigate regulatory/policy/deployment risk, dampening investment in some areas and funneling capital towards a narrower subset of challenges, or an earlier technological stage.
- Existing grant-making structures that do not include the necessary partnership-focus and “hand holding” to adequately fill the gap left by the aforementioned challenges.

Based on the information gathered during the feasibility study, MassCEC has determined that solving these problems will require the following complementary and equally important program components for the CriticalMass program:

- Robust partnership-focused support programming that can provide more than just funding or entrepreneurial education. We envision an effective program being one that can engage with both public/regulated entities (such as state agencies, regulators, policymakers, and utilities) and project partners (such as corporates, municipalities, universities, and investors) with the express purpose of forging effective partnerships to break down barriers to deployment and scaling.

- TRL 8+¹, proven, emerging technology grants or other funding mechanisms that offer a larger grant size and more support that is commensurate with the scale needed to support a proven, emerging technology.

II. ABOUT MASSCEC

The Massachusetts Clean Energy Center (“MassCEC”) is a state economic development agency dedicated to accelerating the growth of the clean energy sector across the Commonwealth to spur job creation, deliver statewide environmental benefits and to secure long-term economic growth for the people of Massachusetts. MassCEC works to increase the adoption of clean energy while driving down costs and delivering financial, environmental, and economic development benefits to energy users and utility customers across the state.

MassCEC’s mission is to accelerate the clean energy and climate solution innovation that is critical to meeting the Commonwealth’s climate goals, advancing Massachusetts’ position as an international climate leader while growing the state’s clean energy economy. MassCEC is committed to creating a diverse, equitable, and inclusive organization where everyone is welcomed, supported, respected, and valued. We are committed to incorporating principles of diversity, equity, inclusion, and environmental justice in all aspects of our work in order to promote the equitable distribution of the health and economic benefits of clean energy and support a diverse and inclusive clean energy industry. MassCEC strives to lead and innovate in equitable clean energy and climate solutions.

III. GOALS OF RFI AND PROGRAM DETAILS

MassCEC is requesting interest from eligible Project Partners (“Project Partners”) (as set forth in section IV of this RFI) who have interest in working with growth stage startups (“Startup”) who will be deploying their technologies at a commercial scale with the Project Partner.

Per [M.G.L. c. 23J § 1 as amended pursuant to Chapter 179 of the Acts of 2022 “An Act Driving Clean Energy and Offshore Wind”](#), and further revised per “[An Act Relative to Strengthening Massachusetts’ Economic Leadership](#)”, for the purposes of this RFI, “Clean Energy” and “Climatetech”, referred to together as “Climatetech” herein:

“Clean Energy” shall mean “advanced and applied technologies that significantly reduce or eliminate the use of energy from non- renewable sources including, but not limited to: (i) energy efficiency; (ii) demand response; (iii) energy conservation; or (iv) technologies powered, in whole or in part, by the sun, wind, water, geothermal energy, including networked geothermal and deep geothermal energy, hydrogen produced by non-fossil fuel sources and methods, alcohol, fuel cells, fusion energy or any other renewable, non-depletable or recyclable fuel; provided, however, that “clean energy” shall include an alternative energy generating

¹ Please refer [here](#) for a full list of TRL definitions.

source as defined in clauses (i) to (vi), inclusive, of subsection (a) of section 11F½ of chapter 25A.”

For the purposes of this RFI, the terms “Clean Energy Research” shall mean “...advanced and applied research in new clean energy technologies including: (i) solar photovoltaic; (ii) solar thermal; (iii) wind power; (iv) geothermal energy, including networked geothermal and deep geothermal energy; (v) wave and tidal energy; (vi) advanced hydropower; (vii) energy transmission and distribution; (viii) energy storage; (ix) renewable biofuels, including ethanol, biodiesel and advanced biofuels; (x) renewable, biodegradable chemicals; (xi) advanced thermal-to-energy conversion; (xii) fusion energy; (xiii) hydrogen produced by non-fossil fuel sources and methods; (xiv) carbon capture and sequestration; (xv) energy monitoring; (xvi) green building materials; (xvii) energy efficiency; (xviii) energy-efficient lighting; (xix) gasification and conversion of gas to liquid fuels; (xx) industrial energy efficiency; (xxi) demand-side management; and (xxii) fuel cells; provided, however, that "clean energy research" shall not include advanced and applied research in coal, oil, natural gas or nuclear power other than fusion energy.”

“Climatetech” – clean energy and any other advanced and applied technologies that contribute to the decarbonization of the economy, reduce and mitigate greenhouse gas emissions or mitigate the impacts of climate change through adaptation, resilience and environmental sustainability.

“Climatetech company” – a business corporation, partnership, firm, unincorporated associated or other entity engaged in research, development, innovation, manufacturing, deployment or commercialization of climatetech technologies in the commonwealth and any affiliate thereof, which is, or the members of which are, subject to taxation under chapter 62, 63, 64H or 641.

“Climatetech research” - clean energy research and other advanced and applied research in new climatetech technologies.

For the purposes of this RFI, the following are defined here and will be used going forward:

1. Project Partner (“Project Partner”) – the Project Partners will consist of corporates, universities, and/or municipalities, utilities, non-profits, or other entities that can provide a demonstration site. These entities will be integral partners in the funded startup-led projects and will provide a demonstration site, resources, and potentially additional funding resources.
2. Growth Stage Startup (“Startup”)² – the Startup’s technology will be at TRL8+ with the intention of this project being the first commercial deployment or the last pilot project before commercialization.

² The Startup RFP will have an open application period of Startups will be submitting applications in May and June of 2025, with awards being made in August of 2025.

3. Support Service Advisor (“Support Service Advisor”) - a third-party entity to facilitate building and maintaining relationships between Project Partners and Startups and to assist with Startup support throughout the project, such as identifying federal grant opportunities and implementation of the deployed technology.
4. Expert in Residence (“EIR”)³: EIRs might include, but are not limited to, people with the following areas of expertise: project financing, investment/equity/debt, legal/regulatory/permitting, human resources, negotiation tactics/customer acquisition, manufacturing/production, among others. This will be provided through the Support Service Advisor.

CriticalMass Program Summary

CriticalMass provides grant funding of up to One Million Dollars (\$1,000,000) per project and provides successful applicants with partnership-focused support (such as corporates, municipalities, organizations, investors, state agencies, regulators, policymakers, and utilities) to scale and deploy novel clean energy and climate technologies that demonstrate strong potential for commercial viability and market penetration while providing significant measurable clean energy and/or climate benefits.

CriticalMass funding may be used to support scaling and deployment of any technology or proposed business model that meets MassCEC’s definition of climatetech provided that the project is located in MA⁴. Particular emphasis will be placed on identifying projects in one or more of the following areas:

1. **Energy & Electricity** – increasing renewable energy generation and modernizing the grid
2. **Transportation** – transitioning to zero-emissions vehicles, enhancing public transit, and promoting alternative fuel options
3. **Manufacturing & Industry** – Adopting carbon reducing technologies and processes, sustainable production practices through a circular economy, and carbon capture related technologies
4. **Agriculture & Water** – adopting sustainable farming and forest management practices and leveraging nature-based solutions
5. **Buildings** – improving energy and heating efficiency, transitioning to renewable sources, and implementing sustainable construction practices/materials
6. **Resilience and Adaptation** – implementing climate-smart planning, strengthening infrastructure, and promoting nature-based solutions to reduce vulnerability to climate change

MassCEC has determined that Project Partners can serve as a resource to Startups and play a large strategic role in early deployments. Project Partners have an array of potential resources, such as deployment space, financial resources, and capability to serve as a strategic partner, that would assist the Startup with its deployment and commercialization success.

³ The EIRs will be part of the Support Service Advisor team.

⁴ Projects must be located in Massachusetts; however, Startups and Project Partners may be located anywhere in the US.

Project Partners are expected to participate in Startup selection & project planning, and are anticipated to participate in recurring meetings with Startups (i.e., monthly), and attend networking events.

MassCEC anticipates CriticalMass having several benefits to the Project Partners:

- Gain exposure to vetted emerging climate technologies that could assist with meeting the Project Partner's climate goals.
- Leverage working with a Startup who will be receiving grant dollars from MassCEC for the deployment of the technology.
- Further assess the value of these technologies and how they can help with improving Project Partner's processes and potentially be an investment opportunity.
- Have the opportunity to network and build relationships with peers, state and local officials, and Startups.
- Have the opportunity to work with investors to further enhance the scale of the project.
- Have the support of MassCEC and other stakeholders in navigating relationships with Startups.
- Have the opportunity to be connected with MassCEC industry experts and gain knowledge on how to overcome market and project barriers.
- Gain insights and have potential influence on public sector decisions in Massachusetts that affect the Project Partner's markets or areas of interest.
- If a university, have the potential for students to work with the Startup, either through an internship, case study or guest lecturer in a class.
- Gain access to market insights.

The CriticalMass program will run as follows:

1. MassCEC and Program Support Service Advisor will recruit Program Partners, receive key problem statements or areas of project interest for them, and work with MassCEC to incorporate into the CriticalMass Startup RFP and Project Partner Appendix.
2. Once the CriticalMass Startup RFP and Project Partner Appendix are posted, Startups will have the chance to submit concept papers to Project Partners they are interested in working with.
3. Project Partners will meet with Startup applicants for an initial discussion of projects/partnerships and if the Startup will submit a full application with that Project Partner.
4. Startups will submit applications to the CriticalMass Program.
5. MassCEC will invite top Startup applicants to a pitch day, which Program Partners will attend.
6. Awards will be made and contracting will begin between Startup awardee ("Awardee") and MassCEC (and in parallel between Awardee and Project Partner).
7. Startup Awardee will begin work, meeting with Program Support Service Advisor monthly to discuss project plan, funding needs, relationship with Project Partner, logistics of

project execution, etc.

8. Startup Awardee will attend annual networking event with Project Partners, potential investors, industry stakeholders.
9. Startup Awardee will attend 2-4 webinars throughout the project with other federal/state agencies, such as Massachusetts's MassDevelopment, or the Department of Energy's Loan Program Office or Office of Clean Energy Demonstrations.
10. Startup Awardee will have 1-2 meetings throughout the project with MassCEC technology experts.
11. Startup Awardee will have up to 4 meetings with EIRs throughout their project.
12. Startup Awardees will complete work (approximately 2-3 years after project begins).

IV. TIMELINE

This timeline is subject to change at MassCEC's discretion.*

Release of the RFI	August 5, 2025
Interest forms due	October 7, 2025
Approval of Project Partners	Week of October 20, 2025
Sign Letter Agreement	November 20, 2025
Startup RFP posted	Winter 2026
Concept Papers submitted to Project Partners Due Date	Mid-April 2026
Startup to Submit Full Application to CriticalMass	Mid-April 2026
Awards Made	Summer 2026

** All dates are estimated and subject to change.*

V. ANTICIPATED EXPECTATIONS OF PROJECT PARTNERS

Upon approval of Project Partners, as a result of this RFI, selected Project Partners will enter into a Letter Agreement with MassCEC⁵.

⁵ This Letter Agreement will be between the Project Partner and MassCEC. The purpose of this Letter Agreement is to outline the roles and expectations of the Project Partner for participating in the program.

As part of the CriticalMass program, Project Partners are expected to contribute the following, at minimum, which will largely be reflected in the Letter Agreement between the Project Partner/s and MassCEC:

- Dedicate one single person from the Project Partner's organization to be the primary point of contact throughout the duration of their participation in the CriticalMass Program.
- Review relevant Startup applications and attend pitch days.
- Attend networking events with Startups and investors to determine the feasibility of the project and potential partnerships.
- Enter into a contract or other similar commitment with the Startup/s that is awarded the CriticalMass grant and is matched with you for the project. MassCEC's Program Support Service Advisor will advise the Startup during this process.
- Meet with the Startup/s as needed throughout the project (most likely weekly in the beginning of the project and less frequently during the project).
- If feasible, provide cost-share (cash/in-kind), technical/business support, and other commercialization assistance to the Startup.

InnovateMass is a MassCEC grant program that targets the stage of technology development right before the targeted stage of this CriticalMass Program. Examples of successful pilot projects through the [InnovateMass](#) Program are listed below, as reference for examples of the types of projects that could be leveraged into CriticalMass:

Aeroshield was awarded a grant to demonstrate its aerogel insulated glass units for high-performance windows, which replace the air gap in a traditional double-pane window to create energy efficiency windows at cost. It worked with multiple partners, including Jeld-Wen, Inc., ODL, Inc., the National Renewable Energy Lab and Lawrence Berkely National Lab and were able to test for optical and thermal performance in real-world conditions.

AM Batteries was awarded a grant to demonstrate a solvent-free manufacturing technology to reduce the carbon footprint of manufacturing lithium-ion batteries and increase energy density. It partnered with Microvast, a Li-ion battery solutions provider, to install a pilot solvent-free electrode manufacturing line to demonstrate the technology.

VI. HOW TO SUBMIT INTEREST

To respond to this RFI, please submit the following information listed below. The submission must include all relevant attachments, sent by email to criticalmass@masscec.com. "CriticalMass" must appear in the email subject line. Please note that these responses will be included in an Appendix that will be posted with the CriticalMass RFP.

Submissions must include the following:

- I. Problem statement narrative

- a. A few problem statements or areas that are of particular interest to your organization. (These problem statements will be used in the Startup RFP if your organization is ultimately approved to be part of the CriticalMass program).
 - b. Technologies that you might have already identified or are interested in deploying within your organization.
- II. Organization goals
 - a. Your organization's climate/innovation goals, roadmap for implementing strategies for these goals, and what technical barriers you have identified thus far.
 - b. If applicable, please explain any climate technologies your organization has already implemented.
 - c. Who from the organization will be involved in this project and who will be the main point of contact for the entire duration of the Startup and Partner projects. Please include their name, role, email, and phone number.
- III. Prior Experience
 - a. Your organization's experience working on climate related deployment projects and results of those projects.
 - b. Your organization's experience working with startups, either for deployment projects or in other capacities.
- IV. Resources/Contributions
 - a. What is the demonstration site you are primarily considering offering?
 - b. Cost-share resources you are willing to contribute to the project. This can be either in the form of cash or in-kind cost-share. Examples include but are not limited to equipment, space, dedicated staff time, testing resources, certifications, etc.
 - c. Technical/business expertise that your organization has to offer and how this will beneficially impact Startups.
 - d. Other resources your organization may be willing to consider contributing throughout the project .
- V. Optional: Additional feedback
 - a. If you are interested in participating in this program, but not in the way described in this RFI, please submit feedback on your preferred involvement.

Please keep submissions to a 5-page maximum.

Please note that response to this RFI is non-committal at this time, and further conversation will occur to formally commit as a Project Partner.

VII. SELECTION CRITERIA

MassCEC will reach out to potential Project Partners after the submissions of interest forms to set up a call to discuss next steps.

MassCEC will evaluate potential Project Partners based on:

- Ability to support Startups and implementation/deployment of projects;
- Commitments to the project/program, as discussed in Section V above;
- Level of commitments, resources, contributions; and
- Prior experience working with Startups and assisting with early deployments and commercialization of climatetech.

VIII. QUESTIONS

Please submit all questions in writing to criticalmass@masscec.com no later than April 9, 2025. “CriticalMass Program RFI Questions” must appear in the subject line.

IX. GENERAL REQUEST FOR PROPOSALS CONDITIONS

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. Any documentary material, data, or other information received by MassCEC from an Applicant is therefore a public record subject to disclosure. Applicants shall not send MassCEC any confidential or sensitive information in response to this RFI.

DISCLAIMER & WAIVER AUTHORITY

This RFI 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, to waive minor irregularities in submittal requirements, to modify the anticipated timeline, to request modifications to an application, to negotiate with any qualified Applicants, to change the application guidelines, and to cancel or modify the RFI in part or in its entirety.

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

CONTRACT REQUIREMENTS

Upon MassCEC’s authorization to proceed with the proposal, MassCEC and the Project Partner will execute a contract, substantially in the form of the Sample Agreement located in Attachment B, which will set forth the respective roles and responsibilities of the parties.

Each Applicant is required to review the Sample Agreement in Attachment B, and if applicable, submit a revised version with any tracked changes clearly marked with its Application to this RFI. Please note that MassCEC may accept or reject any such proposed changes or further negotiate this agreement at its sole discretion

Letter Agreement

This Letter Agreement is made and entered into as of [MM DD YY] (the “Effective Date”) by and between the **Massachusetts Clean Energy Technology Center** (“MassCEC”), an independent public instrumentality of the Commonwealth of Massachusetts with a principal office and place of business at 294 Washington Street, Suite 1150, Boston, MA 02108, and **[PARTICIPANT NAME]** (“Participant” or “Project Partner”) with a principal office and place of business at [Participant Address] .

The following terms and conditions (collectively, the “**Terms**”) outlined in this MOU apply to the relationship between the MassCEC and Participant, including their respective roles and responsibilities as related to CriticalMass.

- Dedicate one single person from the Project Partner’s organization to be the primary point of contact throughout the duration of their participation in the CriticalMass Program.
- Review relevant Startup applications and attend pitch days.
- Attend networking events with Startups and investors to determine the feasibility of the project and potential partnerships.
- Enter into a contract or other similar written commitment with the Startup/s that is awarded the CriticalMass grant and is matched with Project Partner for the project.
- Meet with the Startup/s as needed throughout the project.
- If feasible, provide cost-share (cash/in-kind), technical/business support, and other commercialization assistance to the Startup.
- Meet with awarded Startup as needed, most likely weekly in the beginning of project creation and then as needed for the duration of the project.

The term of Letter Agreement shall commence on the Effective Date, and shall expire on [Date – Month DD, YYYY] (the “Term”) unless this Letter Agreement is terminated by either MassCEC or Participant at any time for a material breach of any term of the Letter Agreement.

Participant hereby agrees to protect the physical security and restrict access to all Startup data compiled for, used by, or otherwise in the possession of Participant in performance of the Services in accordance with reasonable business practices.

As a public entity, MassCEC is subject to the Commonwealth’s Public Records Law, codified at M.G.L. c. 66. Thus, any documentary material, data, or other information received by MassCEC from an applicant is a public record subject to disclosure. Participant agrees and acknowledges that it shall not send MassCEC any confidential or sensitive information under this Agreement. Participant acknowledges and agrees that MassCEC, in its sole discretion, shall determine whether any particular document, material, data, or other information is exempt from or subject to public disclosure.

Participant grants to MassCEC a limited, non-exclusive, royalty-free license to use Participant’s logo on all promotional materials relating to the Program, including, but not limited to, MassCEC’s website materials, reports, and presentations.

IN WITNESS WHEREOF, the Parties have caused this MOU to be executed and delivered as a document under seal as of the date first above written.

Massachusetts Clean Energy Technology Center [Participant Name]

By: _____

Name: _____

Title: _____

Date: _____

By: _____

Name: _____

Title: _____

Date: _____