



## Massachusetts Clean Energy Center

Request for Information (“RFI”):  
Startup Companies for a CriticalMass Program  
RFI FY2025 CriticalMass

Date of Issue: February 20<sup>th</sup>, 2025

Responses Due: March 31<sup>st</sup>, 2025

All proposals must be submitted via [Microsoft Form](#)  
Please submit all questions to [criticalmass@masscec.com](mailto:criticalmass@masscec.com)

## I. GOALS OF RFI AND PROGRAM DETAILS

The Massachusetts Clean Energy Technology Center (“MassCEC”) is requesting information from climatetech growth stage startups (as defined below) who are interested in the future CriticalMass program and working on a commercial demonstration project with a project partner. This RFI will help MassCEC further inform the shape of the future CriticalMass program.

Please see below for a summary of the proposed structure of CriticalMass program.

### **CriticalMass Program Summary**

CriticalMass anticipates providing grant funding of up to One Million Dollars (\$1,000,000) per project and provide 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 adoption while providing significant measurable clean energy and/or climate benefits. The total number of projects that get funded will depend on the nature of the project proposals CriticalMass receives and available funds.

CriticalMass funding may be used to support scaling and deployment of any technology or proposed business model that meets MassCEC’s definition of Climatetech (as defined herein), provided that the project is located in MA<sup>1</sup>. Particular emphasis will be placed on identifying projects in one or more of the following areas, as long as the proposed innovation relates to advanced and applied technologies that significantly reduce or eliminate the use of energy from non-renewable sources:

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

The CriticalMass program is anticipated to run as follows:

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<sup>1</sup> Projects must be located in Massachusetts; however, Startups and Project Partners may be located anywhere in the US.

1. Program Support Advisor and MassCEC will recruit Program Partners, receive key problem statements or areas of project interest for them, and work with MassCEC to incorporate into the Startup RFP;
2. Startups will submit applications in response to the RFP released by MassCEC;
3. Program Partners will meet with Startup applicants for an initial discussion of projects/partnerships;
4. MassCEC will invite top Startup applicants to a pitch day, which Program Partners will attend;
5. Awards will be made and contracting will begin between Startup awardee ("Awardee") and MassCEC (and in parallel between Awardee and Project Partner) (Program Support Advisor will help the Awardee navigate its contracting with the partner);
6. Startup Awardee will begin work, meeting with Program Support Advisor and MassCEC monthly to discuss project plan, funding needs, relationship with Project Partner, logistics of project execution, etc.;
7. Startup Awardee will attend an annual networking event with Project Partners, potential investors, and industry stakeholders;
8. 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;
9. Startup Awardee will have 1-2 meetings throughout the project with MassCEC technology experts;
10. Startup Awardee will have up to 4 meetings with EIRs throughout their project
11. Startup Awardees will complete work (approximately 2-3 years after project begins).

**CriticalMass awards only "Clean Energy Technologies" or "Climatetech"**

For the purposes of this RFI, the term "Climatetech" 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, nondepletable or recyclable fuel..."
- ...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...

- ...and any other advanced and applied technologies that contribute to the decarbonization of the economy, reduce and mitigate greenhouse gas emissions or mitigate the impact of climate change through adaptation, resiliency, and environmental sustainability”
- (See M.G.L. c. 23J § 1 as amended pursuant [Chapter 179 of the Acts of 2022 “An Act Driving Clean Energy and Offshore Wind”](#) and as further amendment pursuant [“An Act Relative to Strengthening Massachusetts’ Economic Leadership”](#)).
- Please note that technologies related to coal, oil, woody biomass, natural gas (except where used in fuel cells), or nuclear power other than fusion energy will not be considered Climatetech for purposes of this RFI.

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

1. Project Partner (“Project Partner”) – the Project Partner(s) 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”) – the Startup’s technology will be at TRL8+ with the intention of this project being the first commercial deployment or last pilot project before commercialization.
3. Support Advisor (“Support 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”): 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 Advisor.

## II. ABOUT MASSCEC

The Massachusetts Clean Energy Technology 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. HOW TO SUBMIT INFORMATION

All responses should be submitted through the [Microsoft Forms link](#). Please review the Notice of Public Disclosure in Section V. Please note that anonymized responses may be shared publicly or with stakeholders.

For reference purposes, all questions asked in the survey can be found in the Appendix.

This RFI is not intended to legally bind either party and can be withdrawn at any time and for any reason.

### IV. ANTICIPATED OUTCOMES

As a result of this RFI, MassCEC is hoping to receive insights into what Startups need to successfully deploy their technology at a commercial stage and understand what partnerships would be most beneficial.

The received responses will help guide MassCEC on program creation and inform MassCEC on partnership models needed to create successful commercial deployment projects. A full RFP soliciting projects from Startups (CriticalMass) is anticipated to be launched in May 2025 with the insights learned from this RFI.

### V. 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 ("Public Records Law"). Any documentary material, data, or other information received by MassCEC is therefore a public record subject to disclosure. Respondents 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.

## VI. APPENDIX

**Reminder: please submit your response using the [online form](#)**

**For reference: questions as part of this Request for Information:**

*[all questions are required unless otherwise noted]*

<i>Question</i>	<i>Answer Format</i>
1. Name, company name, position, email	Short Answer Response
2. Are you a Massachusetts Based Startup?	Multiple choice: Yes/No
3. If you are not a Massachusetts Based Startup, are you planning or willing to relocate to MA?	Multiple choice: Yes/No
4. How many employees does your company have?	Multiple choice: 0-25, 25-50, 50-75, 75+
5. Does your technology or proposed business model meet MassCEC's definition of Climatetech?	Multiple Choice: Yes/No
6. If your technology or proposed business model does meet MassCEC's definition of Climatetech, which would it be categorized as?	Multiple Choice: Energy and Electricity, Transportation, Manufacturing and Industry, Agriculture and Water, Buildings, Resilience and Adaptation.
7. Based on the information in this RFI, do you have a project in mind?	Multiple choice: Yes/No
8. If you do have a project in mind, would the project be in MA?	Multiple choice: Yes/No/Unsure

9. If the project would not be in MA, where would it be?	Short answer response, optional
10. Based on the information in this RFI, do you have a partner in mind?	Multiple choice: Yes/No
11. If you do have a partner in mind, please share the name of that partner organization (or if preferred, just describe the partner).	Short answer response, optional
12. What types of partnerships are you interested in forming? What types of entities would be most beneficial to work with?	Multiple Choice (check all that apply): Large Corporates, Mid-size corporates, Small corporates, Universities, Large municipalities, Mid-size municipalities, Small municipalities, Utilities, Municipal Light Plants, Strategic Partners, Investors, other (with option to write in)
13. Please describe your previous projects, including which partners you worked with and where the project was located.	Short answer response
14. If you have worked with partners in the past, what were challenges you faced, if any?	Short answer response, optional
15. What other funding sources have you received to help fund pilot projects in the past?	Multiple choice/check all that apply: equity/convertible note, debt, grants, other: please describe text box
16. If you have received other funding sources in the past, please provide details on the project and what the total costs of the project were.	Short Answer Response
17. How much do you estimate your company will need in order to complete a commercial pilot of your technology?	Short answer response with a dollar sign prompt
18. How many years do you estimate your company will need in order to complete a commercial pilot of your technology as described in this RFI?	Multiple choice: 0-3 years, 4-7 years, 8+ years
19. What is the current valuation size of your company?	Multiple choice: Pre Seed, Seed, Series A, Series B, Series C, above Series C)
20. What do you anticipate being cost-share sources you could utilize in order to support a project as	Multiple choice/check all that apply: equity/convertible note, debt, grants, other: please describe text box

described in the RFI under the CriticalMass program?	
21. Why would a project as described in the RFI be critical to advancing your technology toward commercial viability and market traction?	Short answer response
22. Do you anticipate any local or state regulatory challenges related to the project?	Short answer response
23. Please share any feedback you have on the structure of the program based on this RFI	Short answer response