

AmplifyMass Application Process and Eligibility

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Summary

The Massachusetts Clean Energy Center's AmplifyMass program provides funding of up to \$300,000 for academic or startup company projects pursuing cost share or adders for a federal/non-federal prime award ("<u>Prime Award</u>") (such as awards from ARPA-E, NSF, DOE, and USABC), as well as funding of up to \$100,000 for academic projects that are not tied directly to a prime grant. In these cases, projects must aim to commercialize or substantially de-risk an innovation that falls within MassCEC's mission.

Eligibility

Applicant Eligibility

Eligible applicants include Massachusetts based startup companies and nonprofit research or academic institutions/universities.

These applicants are eligible to apply for <u>cost-share support</u> or <u>adder funding</u>.

"Cost share support" is defined by this program as grant funding that an applicant is seeking from MassCEC that is required by the prime award. In other words, the prime award is contingent upon the applicant contributing a specified amount of funding, called cost share funding.

For cost-share support, awards are typically a fraction of the required cost-share and the total project cost. For cost-share support, applications must be submitted **before the primary funding is contracted**.

"Adder funding" is defined by this program as grant funding that an applicant is seeking from MassCEC that is not required by the prime award but would be used to expand or enhance the clean energy project scope funded by the prime award. In assessing requests for adder funding, MassCEC places special consideration on what the project will be able to accomplish with the adder funding that it wouldn't be able to otherwise. Adder funding budget items should clearly and directly expand or enhance additional clean energy project outcomes and be linked to project work (I.E., not used for overhead). The AmplifyMass application form allows space for adder funding justification.

Eligibility for Companies

Companies applying must be a small business, as outlines by the United States Small Business Administration's "Table of Small Business Size Standards."

Companies must also have a significant Massachusetts presence. This means the applicant must have a majority of the following located in Massachusetts (i.e., 3 out of 4, or 2 out of 3 if only 3 are applicable):



- Company headquarters
- Primary sales & marketing
- Primary manufacturing operations
- Primary research & development operations

If the applicant is a Massachusetts-based company currently working as a subcontractor under a prime award to a different entity, it is still eligible to apply for AmplifyMass.

Eligibility for Academic Universities/Institutions and Nonprofits

Academic/university applicants and nonprofit research institutions may also submit applications for **individual or follow-on projects** that are **not cost share or simultaneous "adder" scopes.** Such applications must aim to commercialize an innovation or substantially de-risk an innovation for commercialization purposes.

• Applications without a prime grant or which follow a concluded prime grant will be evaluated on a case-by-case basis. These awards are **capped at \$100,000.**

If the applicant is an academic institution, it must be a Massachusetts academic institution.

If the applicant is a Massachusetts-based academic university or institution currently working as a subcontractor under a prime award to a different entity, it is still eligible to apply for AmplifyMass.

Project Eligibility

All projects must meet MassCEC's definition of Clean Energy in order to be eligible.

- The term "Clean Energy Technologies" 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..."." (See 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") Please note that technologies related to coal, oil, nuclear power, woody biomass , and natural gas (except where used in fuel cells) will not be considered Clean Energy Technologies for purposes of this RFP.
- "Clean energy research", 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, woody biomass, or nuclear power other than fusion energy.

While AmplifyMass funding may be used to support development of any technology that meets MassCEC's definition of "clean energy" (see above), particular emphasis will be placed on identifying projects in the following four (4) focus areas (the "Focus Areas"):

- 1. High performance buildings
 - a. Impactful, resilient, and cost-effective electrification technologies and approaches to decarbonizing the building sector
- 2. Clean transportation
 - a. Technologies that address the market barriers to electric vehicle deployment across weight classes, as well as technologies that reduce GHG emissions through vehicle-mile travelled reduction and reduction of fuel usage in vehicles that have no electrification solution at present
- 3. Offshore wind
 - a. Project risk and cost reduction, market confidence enhancement and economic development that advance this new industry
- 4. Net zero grid'
 - a. Technologies that enable a transition to a modernized and smarter grid which can host sufficient clean energy and flexible load resources to reach Net Zero, such as microgrids and energy storage

Technologies that 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 that 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 it also substantially reduces release of greenhouse gases associated with this reliance.

Eligible projects must be pursuing a Prime Award (unless the applicant meets the eligibility outlined above as an academic institution without a Prime Award). Please see the following sections for more information on the budgetary preferences and evaluation criteria.

Technologies proposed under AmplifyMass should be between Technology Readiness Level ("TRL") 2 ("technology concept and/or application formulated") and TRL 8 ("actual systems completed and qualified through test and demonstration")¹. Please <u>use this calculator</u> to ensure appropriate TRL.

¹ https://api.army.mil/e2/c/downloads/404585.pdf



AmplifyMass Application Process

Step 1: All application materials should be submitted via email to <u>amplifymass@masscec.com</u>. Applications must be complete before being considered for processing. MassCEC will confirm receipt of application materials.

Step 2: MassCEC will issue a funding decision by either issuing a firm commitment letter to provide costshare or adder support, or by sending an email stating the proposal was not selected for funding. For awarded projects, a funding agreement will be provided for review at this time.

Step 3: Upon execution of funding agreements with both MassCEC and the corresponding prime award (if applicable), funds will be disbursed to awardees based on mutually agreed-upon milestones and deliverables, as negotiated per the contract.

Please see sample grant agreements for <u>universities</u> and <u>companies</u>. If the applicant has any questions or concerns about the template, please submit them with the application.

Applications are accepted on a **rolling basis**. If Program funding is exhausted prior to the end of a fiscal year, MassCEC reserves the right to close the program to new applications until such time as additional funding may be authorized. MassCEC employs a diligent review process of each application, in the order that they are received. MassCEC will respond shortly after submission to confirm receipt of its application. Depending on the volume of applications, the review process can take a variable amount of time depending on the subscription to the program (up to six months). MassCEC may contact the applicant sooner if there are questions on the application. Please keep this timeline in mind when applying to AmplifyMass in order to meet the cost share commitments related to the prime award.

The ideal time to apply is **concurrently with or soon after the submission of the prime award application**. Applicants are welcome to apply for AmplifyMass at any point in their prime award review process up until the execution of a Cooperative Agreement or similar agreement with the prime award agency. However, applicants are advised to keep in mind that the AmplifyMass review process can take up to six months

The AmplifyMass application is intentionally designed to leverage the prime award application and is therefore intended to be straightforward and rapid to fill out. The application form is 5 pages and should take no more than 2-3 hours to complete. Please do not exceed the space limits provided in the application form.

Applicants are encouraged to partner with other entities (universities, companies, etc.) both within and outside the Commonwealth if appropriate for the project. However, the award will only be disbursed to a single Massachusetts-based organization and all agreements will be signed with the applying Massachusetts-based organization. The Massachusetts-based organization must be playing a significant role in the project and MassCEC reserves the right to use its discretion in making this determination.

Application Materials

Applications must include the following materials:

<u>AmplifyMass Application (PDF)</u> or in<u>Word format (.doc)**</u>



- Completed MassCEC Budget Template
- <u>Authorized Applicant's Signature and Acceptance Statement</u>
- Copy of the project proposal submitted to federal/non-federal prime funder, if applicable (for ARPA-E applicants, include both the concept paper and the full application) with confidential information redacted. (Please note: MassCEC is a quasi-public entity and is subject to the Freedom of Information Act.)

If Available, please submit:

- Feedback from prime award agency
- Responses to reviewer comments from prime award agency review process
- Statement of Project Objectives or other scope document associated with prime award
- Bios or resumes for key team members

AmplifyMass applicants are asked to provide an analysis of the "Total Addressable Carbon" (TAC) of their project in the application. The TAC is an estimate of the greenhouse gas emissions that can be reduced, avoided, or remediated assuming wide adoption of a technology or practice. The TAC analysis is designed to give both the applicant and MassCEC a strong sense of what sources of greenhouse gas emissions the proposed project would impact, and how large those potential impacts could be.

Applicants are encouraged to use tools such as <u>the CRANE tool</u>, or other credible public data sources such as the United States Department of Energy's <u>Energy Information Administration</u>, the U.S. Environmental Protection Agency's <u>National Emissions Inventory</u> (especially for greenhouse gases other than carbon dioxide), the <u>EPA's Greenhouse Gases Equivalencies Calculator</u>, and others. Analyses may be based on a state-wide, national, or international framing. Applicants should seek primarily to identify the total carbon emissions currently associated with the sector targeted by their technology or practice (for example, transportation or residential heating). For example, a technology to reduce the cost of solar panels would impact the <u>approximately 1,250 million metric</u> tons of carbon dioxide emitted every year from electricity generation in the United States.

To the greatest extent possible, applicants should also seek to estimate an "optimistically plausible" amount of those emissions that could be reduced, avoided, or remediated given widespread adoption of the proposed solution. Order-of-magnitude estimates are acceptable, as the goal of the analysis is primarily conceptual rather than precise. Applicants are encouraged to consider both direct and indirect effects as appropriate and to explicitly describe assumptions, especially assumptions related to cost reductions or barriers to adoption.

Acceptable alternatives to a TAC analysis include an avoided-energy analysis for energy efficiency technologies and LCOE reduction analyses for energy generation technologies.

AmplifyMass Evaluation Criteria

Applications undergo a review process that evaluates the following criteria:

• Technical merit and innovativeness;



- Potential impact to the energy sector or to greenhouse gas emissions;
- Potential impact to the Commonwealth;
- Value of MassCEC support; and
- General programmatic fit in the context of the pool of active applications.

This review process entails several steps. MassCEC first ensures that applicants meet the program's eligibility criteria. Applications are then submitted to subject-matter experts for technical review. Finally, applications are surveyed by an internal award selection committee to identify the most compelling proposals among the competitive AmplifyMass pool, based on the criteria listed above.

Letters of Consideration

Applicants may apply for a Letter of Consideration to bolster their prime award applications. This is not a commitment, but rather a letter stating eligibility. Upon confirming eligibility of the application, MassCEC may issue a Letter of Consideration indicating that MassCEC has received the application to our program and that it will be considered for review according to our process.

This letter can be submitted as part of the applicant's full application to the prime award of interest. *To receive a Letter of Consideration, companies and academic teams should submit all of the materials referenced above. Requests for a Letter of Consideration must be submitted with two weeks' notice.*

Program Budget and Use of Funds

Awards are subject to availability, meaning that each fiscal year, a specified dollar amount is budgeted for AmplifyMass. Once that budget has been spent, no further awards can be made. The budget is subject to annual review and renewal. While program staff endeavors to ensure that budget is available throughout the entire fiscal year, MassCEC cannot guarantee program availability at all times. In the case that a large number of MA-based awardees are awarded in the same application round, MassCEC reserves the right to reduce the amount of each individual award in order to provide awards to a larger number of awardees.

The maximum allowable grant amount is **\$300,000**. Awards that are not tied to a specific prime awarding agency are capped at **\$100,000** (see above for eligibility).

Funds will be dispersed to selected grantees on a milestone basis, which will be mutually agreed upon during the contracting process. Each milestone will have deliverables, which must be submitted and approved before receiving the funding for that specific milestone.

Applicants are encouraged to **ask for what they need** with the expectation that the proposal may not receive the full amount requested, based on availability of MassCEC funds. MassCEC has internal guidelines for funding based on project parameters, including leveraged funds, which are used to determine the amount of funding a project may be awarded.

Leveraged funds are defined as the total project budget to be spent in Massachusetts, less the award amount sought from MassCEC. The Leveraged Funds Factor (LFF) is the value of the leveraged funds



divided by the value of the grant request. Please see the table below for the program's minimum LFF requirements.

Grant Request	Minimum LFF
no prime	N/A
up to \$199,999	1
\$200,000 - \$299,999	2

Leveraged funds are not the only factor MassCEC considers when determining award amounts. MassCEC may also consider factors such as, but not limited to:

- Institutional and programmatic fit
- Proposed use of funds
- Available program budget

Eligible Costs

MassCEC generally prefers for AmplifyMass funding to go directly to project development costs (such as equipment purchases, hiring of PhD students, etc.). However, it is understood that requested overhead coverage is often unavoidable, particularly for university applicants where there are institutional overhead policies in place. Therefore, the AmplifyMass grant can be used to cover overhead costs in certain situations. The appropriate percentage of the grant allocated to overhead costs varies depending on the institution and can be negotiated with MassCEC after application submission. For company applicants, on the other hand, MassCEC would expect the request to cover overhead far less frequent, and the amount requested to be a much lower percentage of the total grant.

Interactions with Other MassCEC Programs

Applicants may apply for the same project to both AmplifyMass and another MassCEC program, provided that it has not been *awarded* funds under another MassCEC program for the same scope of work. MassCEC has no restrictions against considering applications for the same project in multiple programs but will only award a project under at most one program. Applicants are encouraged to consider both programmatic fit and timeline considerations when determining which program(s) to apply under.

If the applicant is a previous awardee of another MassCEC program, such as Catalyst or InnovateMass, it is still eligible to apply, provided that the scope of work being proposed under the AmplifyMass project is unique and does not replicate work that MassCEC has previously funded. However, MassCEC reserves the right to disqualify applications which have not been compliant with previous MassCEC awards.