

A woman with long brown hair, wearing glasses and a grey sweater with a black and white geometric pattern, is working on a complex piece of scientific equipment. She is looking up and reaching into a rack of electronic components. The equipment is filled with various wires, connectors, and electronic modules. The background is a plain white wall.

Making Massachusetts the World's Climate Innovation Lab

Dr. Emily Reichert, CEO
Massachusetts Clean Energy Center



MASSACHUSETTS
CLEAN ENERGY
CENTER®

ABOUT MASSCEC

Massachusetts Clean Energy Center (MassCEC) is a quasi-state economic development agency dedicated to accelerating the growth of the clean energy and climatetech sector across Massachusetts.

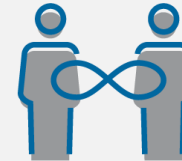
THE BASICS

- Created in 2008 as part of An Act Relative to Green Jobs in the Commonwealth
- Locations in Boston, Charlestown, and New Bedford
- Staff of 130+
- Board of Directors comprised of economic development leaders from business, government, higher education, labor, and the nonprofit sector
- Chaired by Energy & Environmental Affairs Secretary Rebecca Tepper

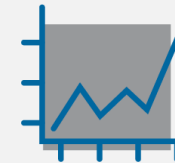
KEY ATTRIBUTES



Innovative & Flexible



Collaborative



Results-Oriented & Data Driven



Statewide Approach

ACCELERATING DECARBONIZATION

We contribute to meeting our state's ambitious climate goals by tackling barriers to widespread use of clean energy and climate technology in buildings, transportation, and the grid.



MASSCEC'S WORK BY FOCUS AREA

EMERGING CLIMATE TECH

We help new climate-focused businesses grow faster by backing a vibrant community of researchers, startups, and established industry players - creating an ecosystem where they connect and thrive.



LARGE SCALE DEPLOYMENT: OFFSHORE ENERGY

We're building a cutting-edge offshore energy industry, marshaling world-class ports while addressing supply chain and workforce development challenges.



CLEAN ENERGY & CLIMATE WORKFORCE DEVELOPMENT

We're growing a diverse and talented clean energy workforce by supporting a dynamic network of community-based organizations, labor, training providers, schools and employers committed to a sustainable future for all.





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MASSACHUSETTS Climatetech Economic Development Strategy & Implementation Plan

February 2025



CLIMATETECH

encompasses a wide range of tech solutions across sectors that further mitigation, adaptation, and resilience



Energy



Transportation



Buildings



Industry &
Manufacturing



Agriculture,
Food & Nature



Carbon
Management



Adaptation
& Resilience

Mitigation

Capture or Reduce Greenhouse
Gas (GHG) Emissions

Adaptation & Resilience

Prepare For and Respond To The Impacts
of Climate Change

MASSACHUSETTS IS (ALREADY) A NATIONAL LEADER

in climatetech investment with a world-class climatetech innovation ecosystem

The Commonwealth's robust climatetech ecosystem is anchored on many elements, including...

INNOVATION

#1

in US climatetech startups per capita¹

#3

in US climatetech patent filings²

INVESTMENT

#2

largest
US climatetech ecosystem over past 5 years³

\$14B

invested
in climatetech since 2019³

WORKFORCE & EDUCATION

#2

in clean energy jobs per capita⁴
(#7 overall)

#1

most educated state in US across degree levels⁵

POLICY & AMBITION

#1

most environmentally friendly state⁶

Net Zero

Target by 2050
One of 15 states with NZ target

WHY A CLIMATECH ECONOMIC DEVELOPMENT STRATEGY?

A unique, time-limited opportunity to be a global climatech leader

THE TRANSITION PRESENTS AN OPPORTUNITY TO DRIVE GROWTH ACROSS MA...

The climatech industry is growing at 25% per year with headroom for further growth and equitable job creation in key sectors for MA

FEDERAL INVESTMENT FLOW IS UNCERTAIN...

As the new federal administration signals a shift away from climate innovation, MA must bolster its existing strengths and catalyze private investment

THE CLIMATE CRISIS REQUIRES URGENT INNOVATION...

34% of the path to Net Zero requires technology not yet on the market – Massachusetts is a climatech innovation leader that can develop and scale these technologies

...AND COMPETITION IS ACCELERATING

Since 2021, MA's share of climatech investment in the US has declined while other states' climatech industries have accelerated

WHAT THIS STRATEGY WILL ACHIEVE



Grow, retain, and attract climatech companies as they scale & commercialize



Drive equitable growth & create high-quality jobs across the state through a Climate Corridor



Become the destination for climatech capital and expand leadership as a place for investment



Remain the #1 state for R&D & innovation in climatech, building on existing strengths

SCALING CLIMATETECH SOLUTIONS

Climatetech firms look different and have different needs depending on stages of maturity development

	Research & Development	Prototype Validation	Pilot & Launch	Scaling	Full Scale Deployment
Definition	Prove technology concept in laboratory setting	Prototype and first demonstration in a relevant environment	Pilot & demonstration in real-world conditions, sell to first customers (e.g., first-of-a-kind facility)	Scale manufacturing footprint & ramp commercial sales (e.g., facility #2)	Scale and transform markets, iterate on tech, and continue to scale footprint
Scale (approx.)	Technology Readiness Level (TRL)¹ 1-3 ~1-5 employees	TRL 4-6 ~5-50 employees	TRL 7-8 ~25-250 employees	TRL 9+ ~250-1k employees, ~100k+ ft ²	Largest scale operations 500+ employees, ~1M+ ft ²
Illustrative Firms	  	  	  	 	  
	Technology Valley of Death	Commercialization Valley of Death	Profitability Valley of Death		

BUILDING THE CLIMATE CORRIDOR: A REGIONAL APPROACH

Integrates unique regional strengths to leverage MA's full potential and ensure that all regions benefit from climatetech leadership

1 Berkshires

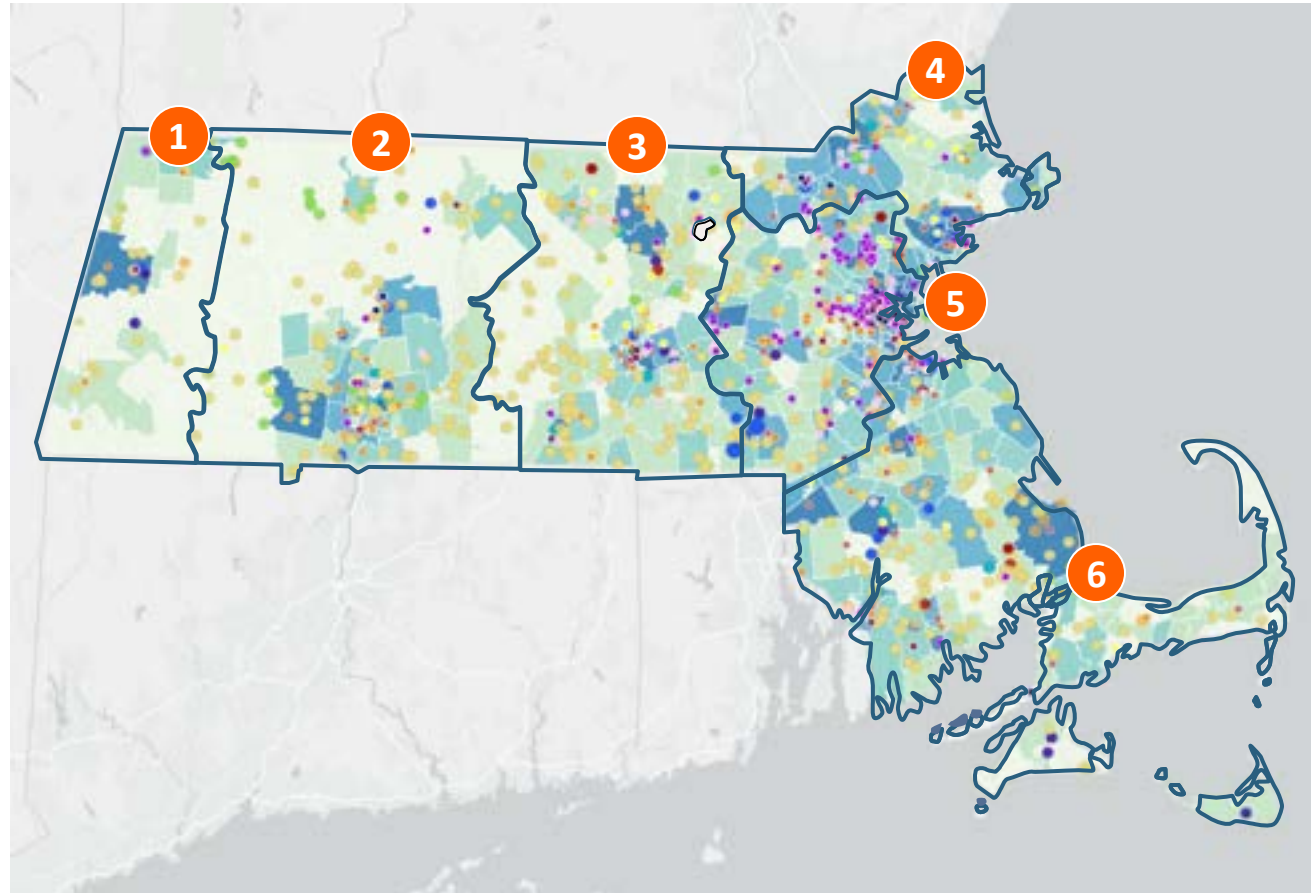
Near-term opportunity to **contribute to climatetech supply chain and AgTech leadership**, with opportunity to develop brownfield sites for **larger-scale manufacturing** particularly in long-term

2 Pioneer Valley

Strongest opportunities for **scaled industrial climatetech manufacturing**, due to cheap renewables, site avail., and base of industrial talent & innovation

3 Central

Innovation hub driving leadership in **advanced climatetech manufacturing** with particular focus on energy storage, bio-manufacturing, and industrial decarbonization



4 Northeast

Leader in **advanced climatetech manufacturing** requiring **high-skilled labor**, and leadership in key elements of the offshore wind ecosystem

5 Greater Boston

Most dense cluster in the Massachusetts climatetech **innovation ecosystem**, generating R&D and startup activity across sectors and serving as 'HQ epicenter' of the state

6 Southeast & Cape

Leader in **national blue economy**, building on deep research & deployment assets and legacy as first mover in offshore wind

EXISTING CLIMATECH STRENGTHS & ASSETS SPAN ALL SIX REGIONS

Companies, Research Institutes, and Organizations With a Focus on Climatech Exist Across Massachusetts*

	Climatetech companies	Ecosystem organizations (e.g., incubators, accelerators, investors)	Research, higher ed. & training institutions
1 Berkshires	  	 	  
2 Pioneer Valley	  	  	   
3 Central MA	   	 	   
4 Northeast MA	   	 	   
5 Greater Boston	    	    	     
6 Southeast & Cape	   	   	    



*This is a sample of the many partners we work with.

HOW WE GET THERE: THE MASS LEADS ACT PROVIDES NEW TOOLS

Provides MassCEC with economic development tools needed to help attract, retain and grow climatetech companies in the Commonwealth

Expanded Mandate to Climatetech

The legislation expanded MassCEC's charge and scope from solely "clean energy" to "climatetech" encompassing clean energy + technologies in mitigation + adaptation + resilience.

Capital Investment: Up to \$400 million

- To support **climatetech organizations** as they innovate, manufacture, commercialize, and deploy technologies.
- To support **offshore wind** economic development, expanding the Commonwealth's lead and innovation in this critical sector.

Tax Incentives: Up to \$300 million

For a new **tax incentive program** to help attract, retain, and grow **climatetech companies** in Massachusetts.



ANTICIPATED IMPACT

This climatetech strategy has potential to create significant economic impact in Massachusetts over the next ten years

1,300

COMPANIES
SUPPORTED

MassCEC is expected to directly fund **300+** companies and support **1,000+** additional companies⁴

35,000

JOBS CREATED²
25,000+ Individuals Trained

MassCEC funding to companies is expected to create **15,000+** new jobs; additional support to climatetech ecosystem enables the creation of **20,000+** more in the next 10 years

7x

ADDITIONAL FUNDS
ATTRACTED³

Every \$1 invested by MassCEC catalyzes **\$7** in additional public and private investment into climatetech, leading to **\$14 Billion** in incremental investment over next 10 years

Beyond economic impact, this strategy will reduce statewide GHG emissions, improve health and wellbeing across the state (especially in environmental justice communities), and create more affordable energy for Massachusetts residents.



1. Total companies directly funded by MassCEC, supported by MassCEC-funded incubators/accelerators, or receiving non-financial supports and services from MassCEC. 2. New jobs created in next ten years (assuming an increase in FY26 funding maintained annually). 3. Additional private and federal investment received by MassCEC awardees. Note: Estimates based on historic MassCEC program data on program participants, jobs created, and leveraged funds, as well as third-party analyses (e.g., from the Donahue Institute) and benchmark examples (e.g., MLSC tax incentive outcomes). As estimates are drawn from historic averages, actual impact of FY25 MassCEC spend may slightly differ due to different ecosystem and macroeconomic conditions; values shown here are intended to be approximate and directional. This estimate includes repeat companies often seen across both tech to market and investment programs.

MASSACHUSETTS CLEAN ENERGY CENTER (MASSCEC) is a state economic development agency dedicated to accelerating the growth of the climatetech sector across the Commonwealth to spur job creation, deliver statewide environmental benefits, increase affordability, and to secure long-term economic growth for the people of Massachusetts

To learn more about MassCEC's program and funding opportunities, visit [MassCEC.com](https://masscec.com).

To subscribe to MassCEC updates, visit [MassCEC.com/subscribe](https://masscec.com/subscribe).

