

# Technology-to-Market Programs



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# AGENDA

- **Introduction and Overview**
- **Catalyst**
  - *Priya Yadav, MassVentures, VP of Investments*
- **Diversity in Cleantech – Early Stage (DICES)**
  - *Maddy Zelif, Program Coordinator*
- **AmplifyMass**
  - *Leslie Nash, Program Director*



## Mission:

The Massachusetts Clean Energy Center'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.

## *How we approach our work:*



### **Innovation**

MassCEC supports innovation to develop new solutions to unmet challenges, and reduce cost and increase performance of existing solutions.



### **Workforce Development**

MassCEC ensures we have a diverse and equitable workforce that is trained and ready to take part in the growing clean energy industry.



### **Market Development**

MassCEC de-risks commercially ready technologies paving the way for broad adoption, filling gaps unmet by the private sector.



# MassCEC's clean energy programs and investments have awarded over **\$442M** and attracted over **\$2.5B** in private and federal capital



## SINCE 2010 MASSCEC HAS:

Awarded **\$159M** for technology innovation and company growth

Enabled a **73%** increase in clean energy jobs

Awarded over **47,000** clean energy projects

Supported over **900** companies

Built the **1st** U.S. offshore wind port in New Bedford

Tested **52** wind turbine blades at the Wind Technology Testing Center



## Massachusetts' Clean Energy Industry is Robust

**44,000** direct jobs added since 2010, totaling **104,000+** workers in 2022

Economic contribution of **\$1.8B** in state and local taxes, and **\$3.5B** in federal taxes in 2022

**\$14.2B** contributed to the Gross State Product in 2021



## MassCEC has Trained Tomorrow's Clean Energy Workforce

**5,400+** college and vocational internships

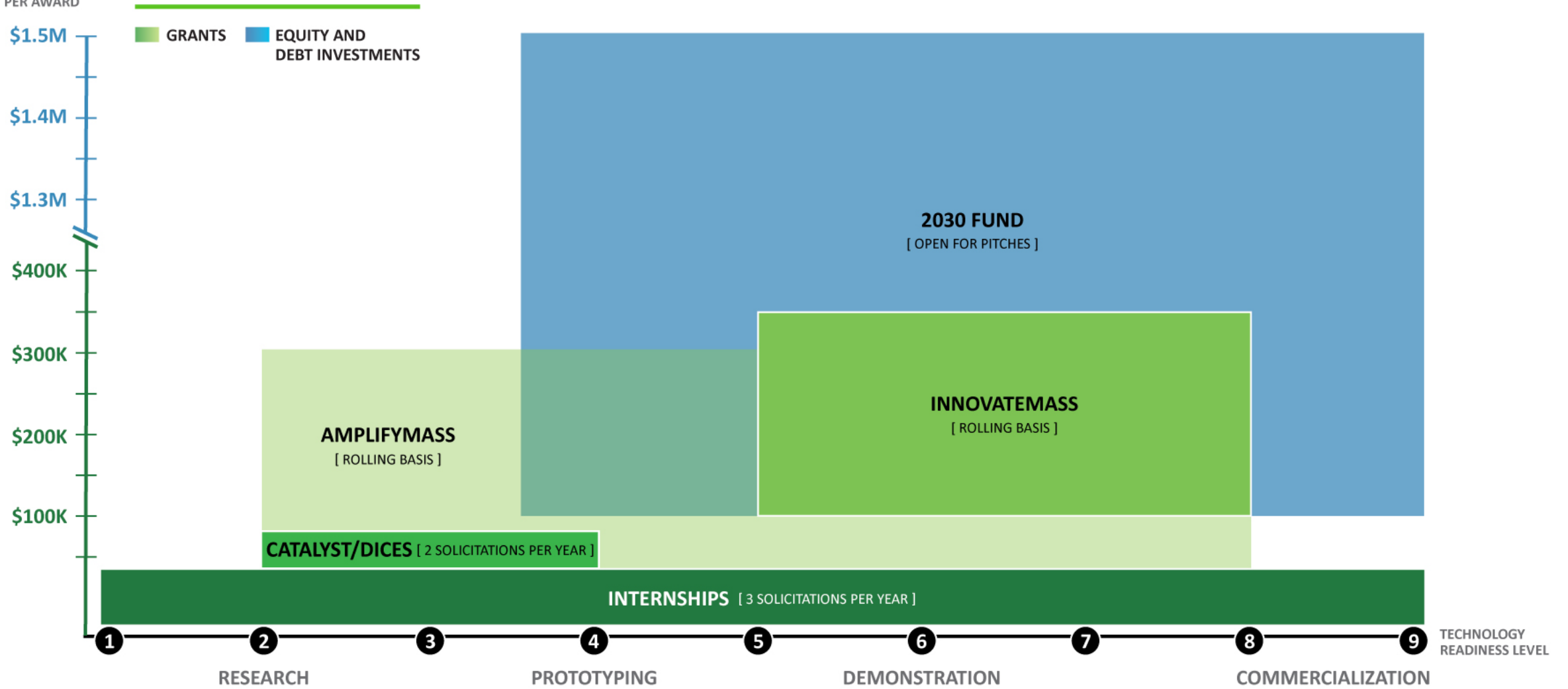
**670+** employers offering internship opportunities

**3,600+** certificate trainees

**64%** of interns are women or minorities

FUNDING AMOUNT PER AWARD

## Funding Opportunities



# Focus Areas



**Net Zero  
Grid**



**High Performance  
Buildings**



**Clean  
Transportation**



**Offshore  
Wind**



**Significant Decarbonization  
(Other)**



**Tech 2 Market – Investments -- Workforce**

# MassVentures' Mission & Activities

Support the innovation economy and economic growth initiatives of the Commonwealth by helping to transfer research and early-stage innovations to viable technology businesses and jobs.

## MV Capital

### Investment

Deep Tech Venture Fund  
RLF loans

### Non-dilutive Grants

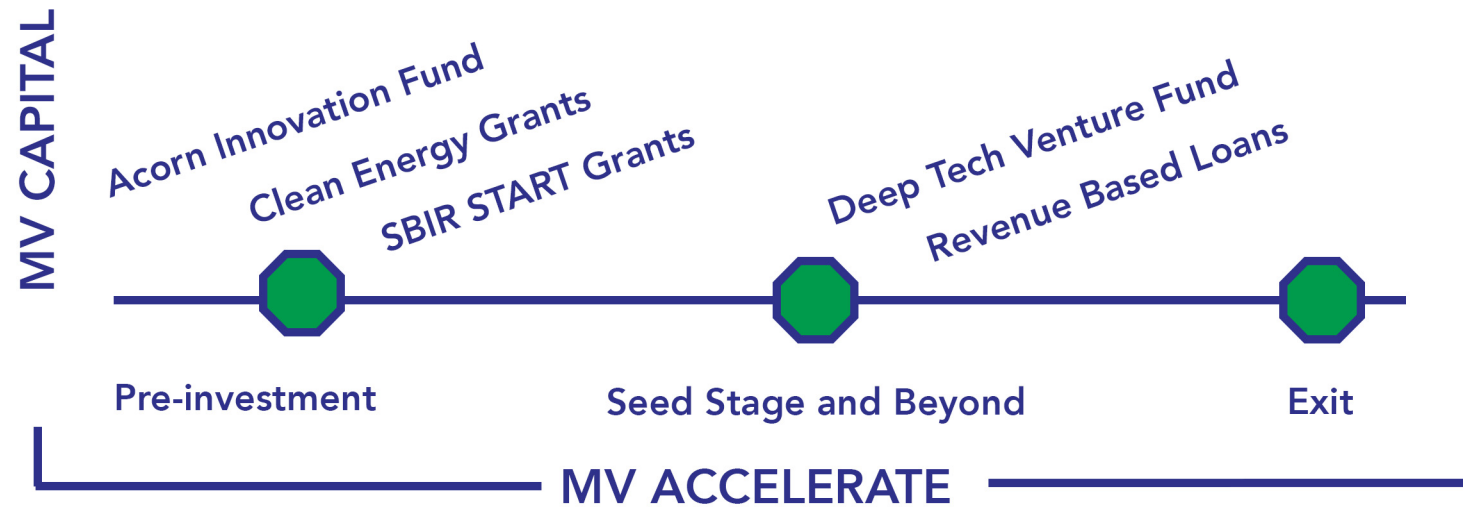
START grants  
MassCEC Catalyst grants  
Acorn Innovation grants

## MV Accelerate

Commercialization Accelerator  
Partner Program  
MassVX  
InnovateMass  
SBIR Support  
MALSI  
Mass Tech Transfer Center

# MassVentures' Platform

Is end to end, from pre-investment to exit. We offer mentoring & business guidance, grants, investments and follow on funding. We are intentional in supporting founders who have diverse backgrounds or are from diverse geographies in the state.





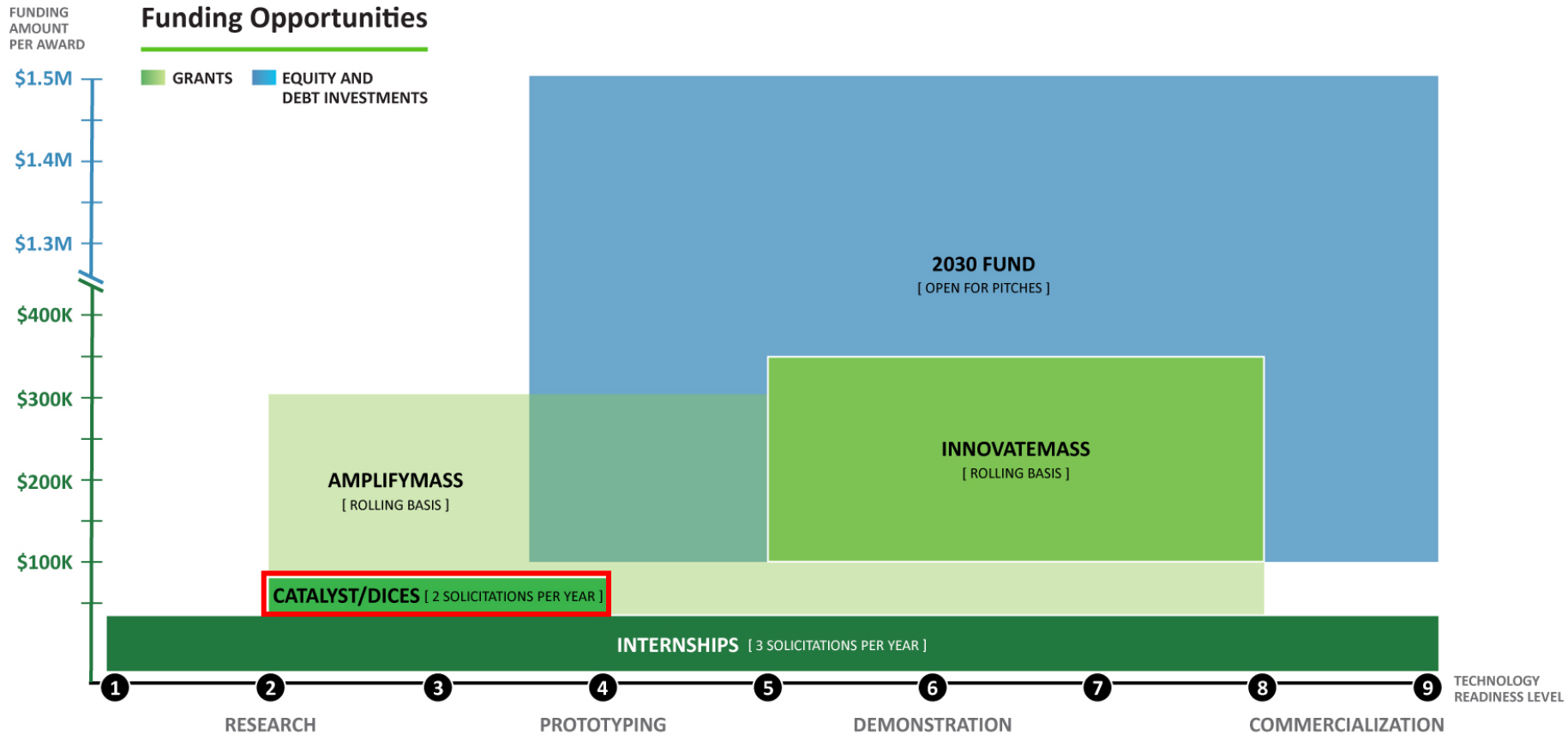
# Catalyst & Diversity in Cleantech – Early Stage (DICES)

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Windows lose  
**\$200B/yr**  
in thermal energy  
worldwide



# Scaling Markets Beyond Technological Readiness



# Catalyst & DICES

Enabling researchers and young companies to develop prototypes



## Support

- Grants of up to \$75,000 for cleantech prototype development
- Technical and business support from MassCEC and MassVentures



## Timing

- Solicitations 2x/year. Spring & Fall
- Open now!



## Eligibility

- TRLs 2-4
- Catalyst: MA-based startups & MA-based researchers
- DICES: MA-based eligible woman- and minority- owned startups

**Competitive  
Two-Step  
Application  
Review Process**

**Award Projects**

**Business &  
Technical  
Support**

# Eligibility - DICES

Applicants who are interested in applying for the DICES Program must complete the following additional steps [PRIOR to applying](#):

1. [Follow this link to complete the 30-second self assessment](https://www.mass.gov/forms/ta-ke-the-certification-self-assessment) as part of the Certification Program for the Supplier Diversity Office of MA

<https://www.mass.gov/forms/ta-ke-the-certification-self-assessment>

PART OF [Certification Program for SDO](#)

OFFERED BY [Supplier Diversity Office \(SDO\)](#)

## Take the certification self-assessment

This interactive tool will ask you a few questions about your business and will recommend the next steps for SDO and third-party certifications your business may be eligible for.

### You will need:

**Disclaimer:** This self-assessment provides general guidance on whether your company/organization may qualify for the Supplier Diversity Office (SDO) programs. However it does not guarantee eligibility for inclusion in the Small Business Purchasing Program (SBPP) or in any of the diversity categories overseen by SDO. Eligibility for the SBPP is made through the COMMBUYS SBPP registration process and eligibility for SDO certification is determined through a certification investigation conducted by the SDO.

## General Questions

Are you a

- for-profit business
- non-profit organization
- government organization

# Eligibility - DICES

2. Submit a screenshot/download of the results page as an attachment to your Catalyst application

## Woman Business Enterprise (WBE) Certification

Your company should apply for WBE certification. As a Massachusetts-based new applicant, start the process by registering for and attending a **Pre-Certification Workshop**. The workshop covers our certification criteria, process and required documents. Once you complete the workshop, you will receive a copy of the certification application form to complete.

If you have questions please contact the Supplier Diversity Office at [webmaster.sdo@mass.gov](mailto:webmaster.sdo@mass.gov) or 617-720-3129.

Let us help you get started! Click "Next" to enter your contact information.

« Previous  
←

Progress

Next »  
→

# Eligibility - DICES

If your application is selected for an award, it is encouraged (not required) that you complete the [full SDO certification process](#)

The screenshot shows the Mass.gov website page for SDO Certification. At the top, there is a search bar with the text "Search Mass.gov" and a "SEARCH" button. Below the search bar, the page is identified as "PART OF Certification Program for SDO" and "OFFERED BY Supplier Diversity Office (SDO)". The main heading is "Apply for diversity certification as a Massachusetts-based business". Below this, it states "SDO Certification is a free service". A note with a clock icon says: "Companies with a principal place of business in Massachusetts interested in obtaining certification from the Supplier Diversity Office are required to attend a mandatory, two-hour pre-certification workshop prior to submitting an application." There are two buttons: "Register for the Pre-certification Workshop" and "COVID-19 Effect Message for Supplier Diversity Clients". At the bottom, there are two tabs: "THE DETAILS" and "CONTACT". Under "THE DETAILS", there are three sub-sections: "What you need", "How to register", and "Downloads". Under "CONTACT", there is a section for "Supplier Diversity Office" with "Phone" (617-502-8843) and "Online" options.

Mass.gov

Search Mass.gov

SEARCH

PART OF [Certification Program for SDO](#)

OFFERED BY [Supplier Diversity Office \(SDO\)](#)

## Apply for diversity certification as a Massachusetts-based business

SDO Certification is a free service

Companies with a principal place of business in Massachusetts interested in obtaining certification from the Supplier Diversity Office are required to attend a mandatory, two-hour pre-certification workshop prior to submitting an application.

[Register for the Pre-certification Workshop](#)

[COVID-19 Effect Message for Supplier Diversity Clients](#)

**THE DETAILS**

**CONTACT**

**What you need**

**What you need**

The Supplier Diversity Office certifies companies as Massachusetts Minority Business Enterprises (MBE), Women Business Enterprises (WBE), Veteran Business Enterprises (VBE), and Portuguese Business

**Supplier Diversity Office**

Phone

617-502-8843

Online

# Catalyst and DICES Program Benefits

- Access to a vast network of partners
- Expert local market and policy insights
- Mentoring from MassCEC and MassVentures
- Finalist receive complimentary pitch coaching and business mentoring

# Application Requirements

- ✓ Overview of technology and merit
- ✓ Clean energy impact
  - ✓ GHG avoidance from cost declines, efficiency improvements, etc.
- ✓ Commercialization potential and proposed business model
- ✓ Project plan (what, when, where, how much)
- ✓ Project budget summary
- ✓ Information on team members



# What do we mean by “prototype”?

“a first, typical or preliminary model of something, especially a machine, from which other forms are developed or copied” (*Dictionary.com*)

- NOT basic research
- Early-stage technology design, development, and validation
- Test a concept, use to evaluate your design
- You are creating a “thing” – not an idea
- Real, working system or product
- Generating data to show the invention works

# What are we looking for?

## STRENGTHS OF THE PROJECT ✓

- ✓ Technical merit
- ✓ Technology is promising, new, and disruptive!
- ✓ Commercialization potential
- ✓ Market is large and/or growing, strong value proposition
- ✓ Market need exists
- ✓ Strong project plan
- ✓ Achievable within timeline and budget
- ✓ Will result in meaningful product development progress
- ✓ Knowledgeable team members
- ✓ Clear understanding on the steps needed for commercialization
- ✓ High likelihood of success

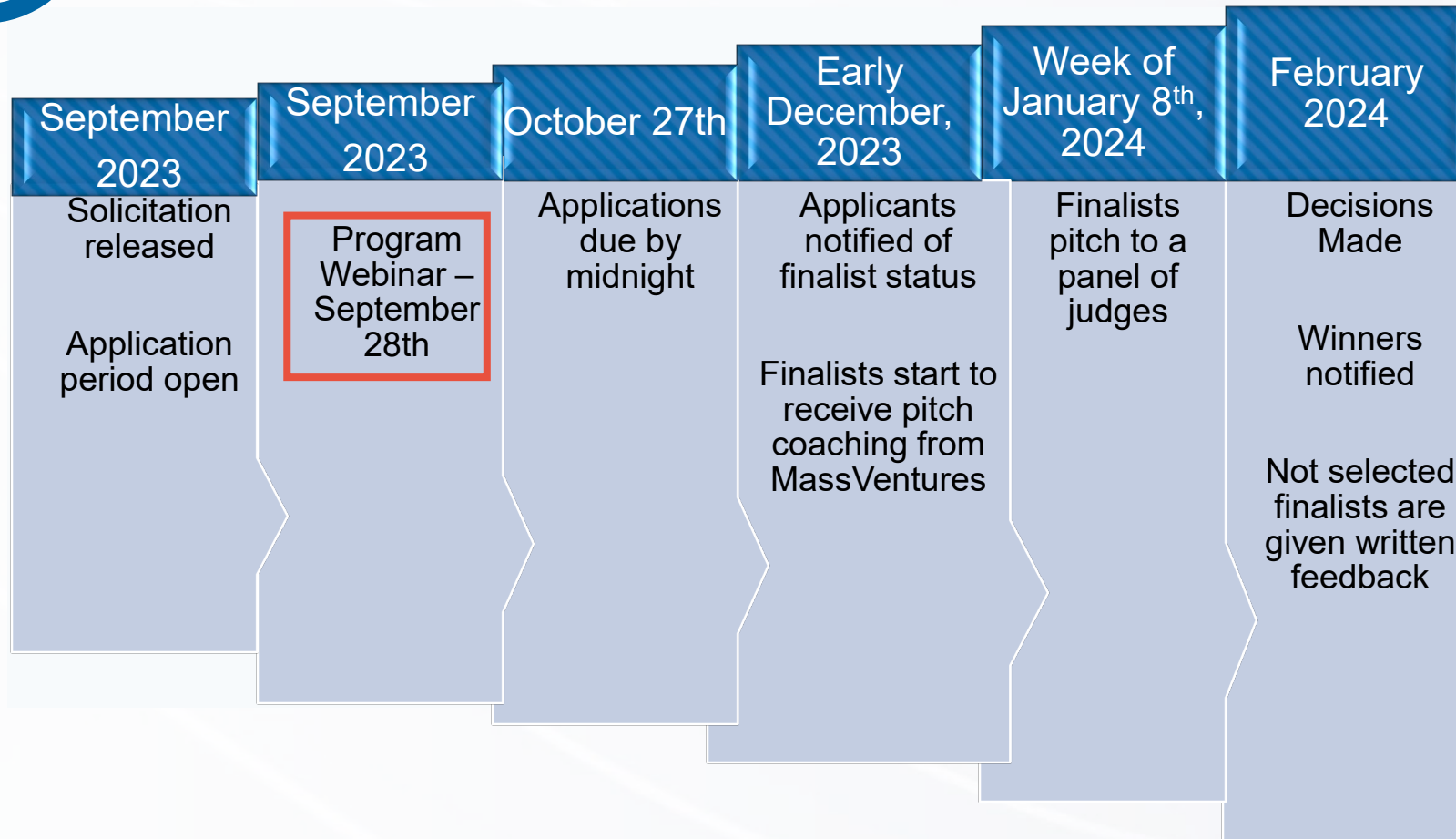
## PROGRAMMATIC FIT



- ✓ Clean energy impacts
- ✓ Proposed technology demonstrates potential for measurable climate impacts through reduction of fossil fuel use
- ✓ Potential for follow-on funding
- ✓ Likelihood of market entry for university projects
- ✓ Likelihood of attracting private investment for start-ups
- ✓ High likelihood of success mattering



# Timeline and Logistics

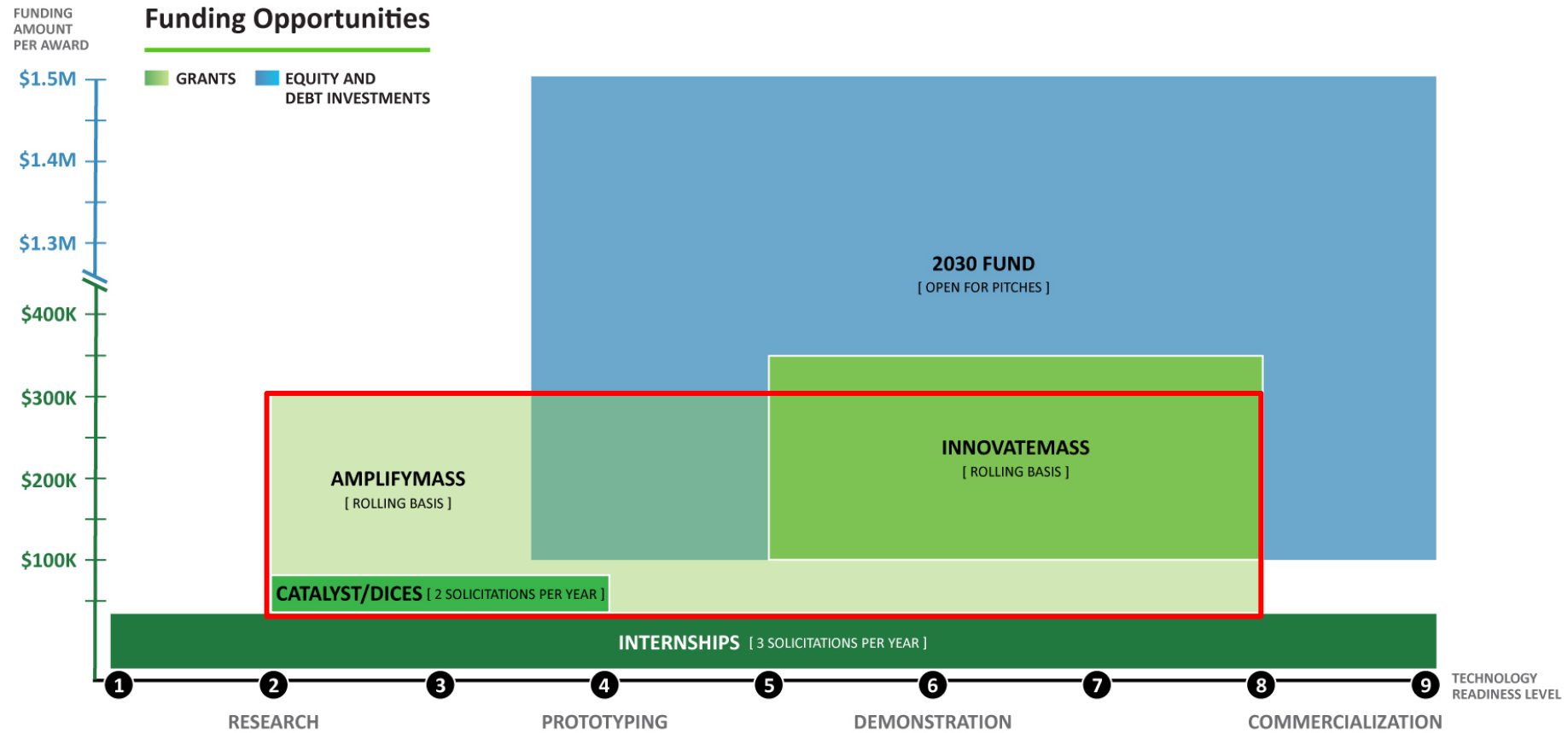


# AMPLIFYMASS

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# SCALING MARKETS BEYOND TECHNOLOGICAL READINESS



Supporting MA young companies and researchers on federal and non-federal awards via cost share



## Support

- Cost-share or adder grants for a prime award
- Up to \$300,000



## Timing

- Applications are accepted on a rolling basis
- Applications must be submitted to MassCEC before the primary funding is contracted



## Eligibility

- Companies must be a small business and be based in MA
- MA-based universities or non-profits
- TRLs 2-8

**Competitive  
Two-Step  
Application  
Review Process**

**Award Projects**

**Leverage  
Federal Funding**

# What are we looking for?

## STRENGTHS OF THE PROJECT ✓

- ✓ Technical merit
- ✓ Technology is promising, new, and disruptive!
- ✓ Potential impact to the energy sector
- ✓ Potential impact to Massachusetts
- ✓ Value of MassCEC support
- ✓ We are filling a meaningful gap
- ✓ Knowledgeable team members
- ✓ Clear understanding on the steps needed for commercialization
- ✓ **High likelihood of success**

## PROGRAMMATIC FIT



- ✓ Clean energy impacts
- ✓ Proposed technology demonstrates potential for measurable climate impacts through reduction of fossil fuel use
- ✓ Potential for market entry
- ✓ For companies: improve competitiveness in existing market
- ✓ For researchers: clear path to industrial relevance
- ✓ **High likelihood of success mattering**

# RECENTLY AWARDED PROJECTS

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## **Fraunhofer USA**

Aiming to develop a novel, technology-assisted approach to conducting thermal retrofits in buildings.

## **ADL Ventures**

Aiming to establish a national advanced building construction collaborative that convenes key industry players, provides technical support to business owners, and deploy highly enabling technologies to reduce constructions carbon footprint.

## **NewGrid, Inc.**

Developing a grid optimization technology with the potential to reduce the cost of grid congestion by 25-50%, saving over \$1B annually

## **WPI (Center for Advanced Research in Drying, Professor Yagoobi)**

Multi- year effort focused on reducing energy consumption in drying processes within the food and agriculture, pulp and paper, chemicals, and pharmaceutical industries.



# Questions?

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[PYadav@Mass-Ventures.com](mailto:PYadav@Mass-Ventures.com)

QUESTIONS?

