



# Climate Change and the Commonwealth

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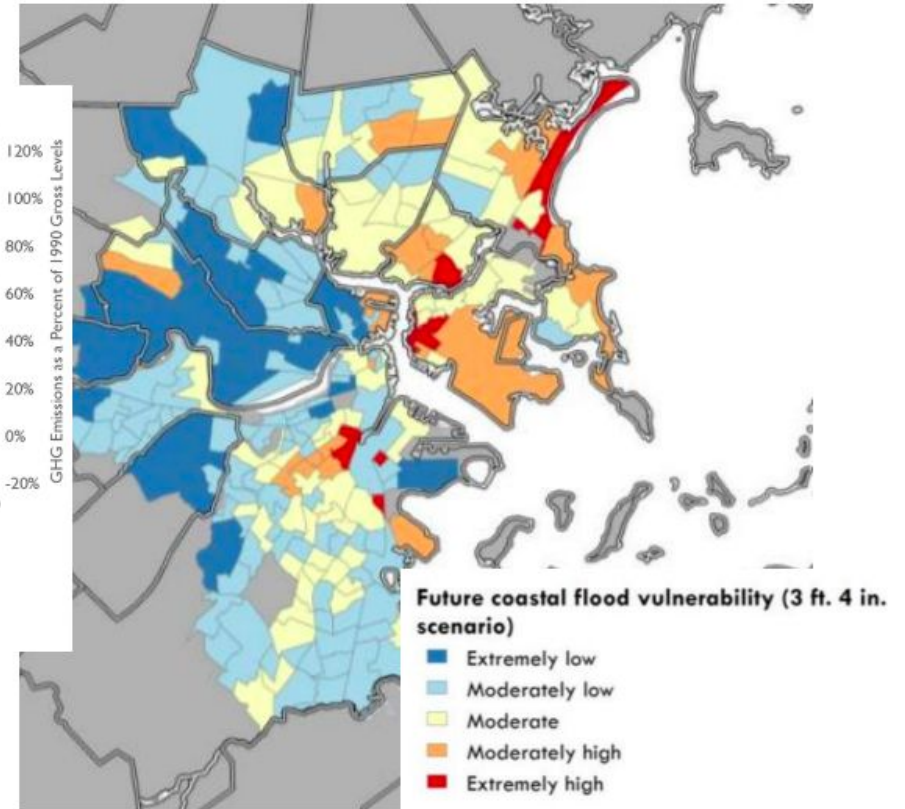
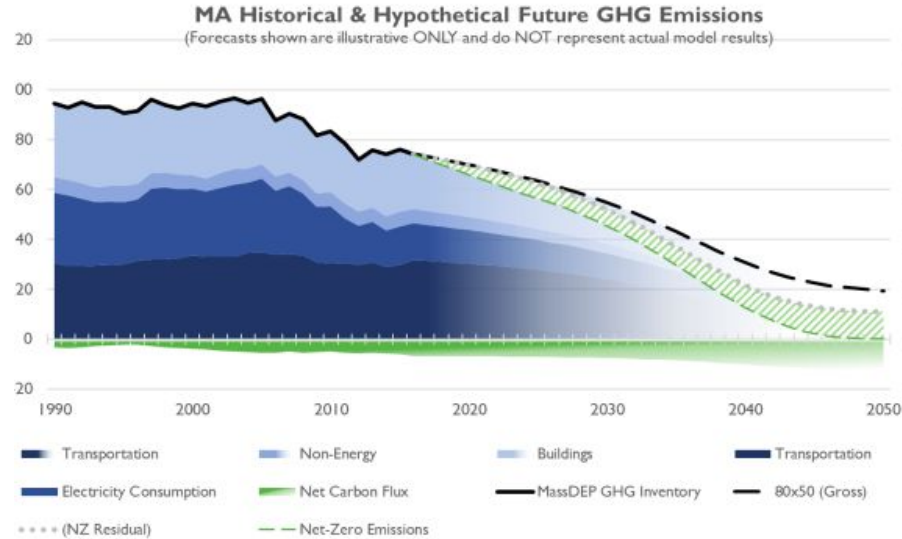


# Net Zero by 2050

MA Target Announced in January 2020

# Build climate resilience

Executive Order 569, September 2016



# MASSACHUSETTS 2050 DECARBONIZATION ROADMAP



A report commissioned by the Massachusetts Executive Office of Energy and Environmental Affairs to identify cost-effective and equitable strategies to ensure Massachusetts achieves net-zero greenhouse gas emissions by 2050.



December 2020



Do so affordably



Maintain a thriving economy

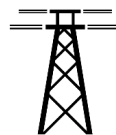


Ensure we bring everyone along,  
especially our most vulnerable residents

***Commonwealth has a range of options, but the most cost-effective, low-risk pathways share core elements:***



*Clean energy  
+ significant  
offshore  
wind*



*Interstate  
transmission to  
access renewable  
generation in other  
states & Canada*



*Electrification of  
transportation  
& building heat*



*Replacing  
energy  
infrastructure  
when it's up for  
replacement*

**Public comment period open through  
3/22/21 at [mass.gov/2030CECP](https://mass.gov/2030CECP)**

# Resilient MA Action Team (RMAT)



## Pilot launch spring 2021: *Climate Risk Screening and Design Standards for State Agencies*



### Planning horizons:

Present (2030), Mid-Century (2050), Mid-late Century (2070), End of Century (2100)



### Primary climate parameters:

Extreme precipitation, extreme heat, sea level rise/storm surge



### Design criteria:

Base flood elevation, cooling degree days, rainfall depth, and more



### Recurrence Intervals:

10-year (10%) or 100-year (1%), etc.

**Recommendations and Standards for this Asset**

Based on the information you have provided about this project, the following standards are recommended:

Select Climate Parameter

Sea Level Rise Storm Surge | Extreme Precipitation | Extreme Heat

Target Planning Horizon: 2050 | Intermediate Planning Horizon: N/A | Return Period: 200-yr (0.5%)

Tier 1 Methodology  
High Level of Effort

Applicable Design Criteria

- ✓ Tidal Benchmarks
- ✗ Base Flood Elevation (BFE)
- ✓ Design Flood Elevation (DFE)
- ✓ Wave Heights
- ✓ Duration of Flooding
- ✗ Design Flood Velocity
- ✓ Wave Forces
- ✗ Scour or Erosion

Methodology: Tidal Benchmarks

**DRAFT**



**MVP**

Municipal Vulnerability  
Preparedness

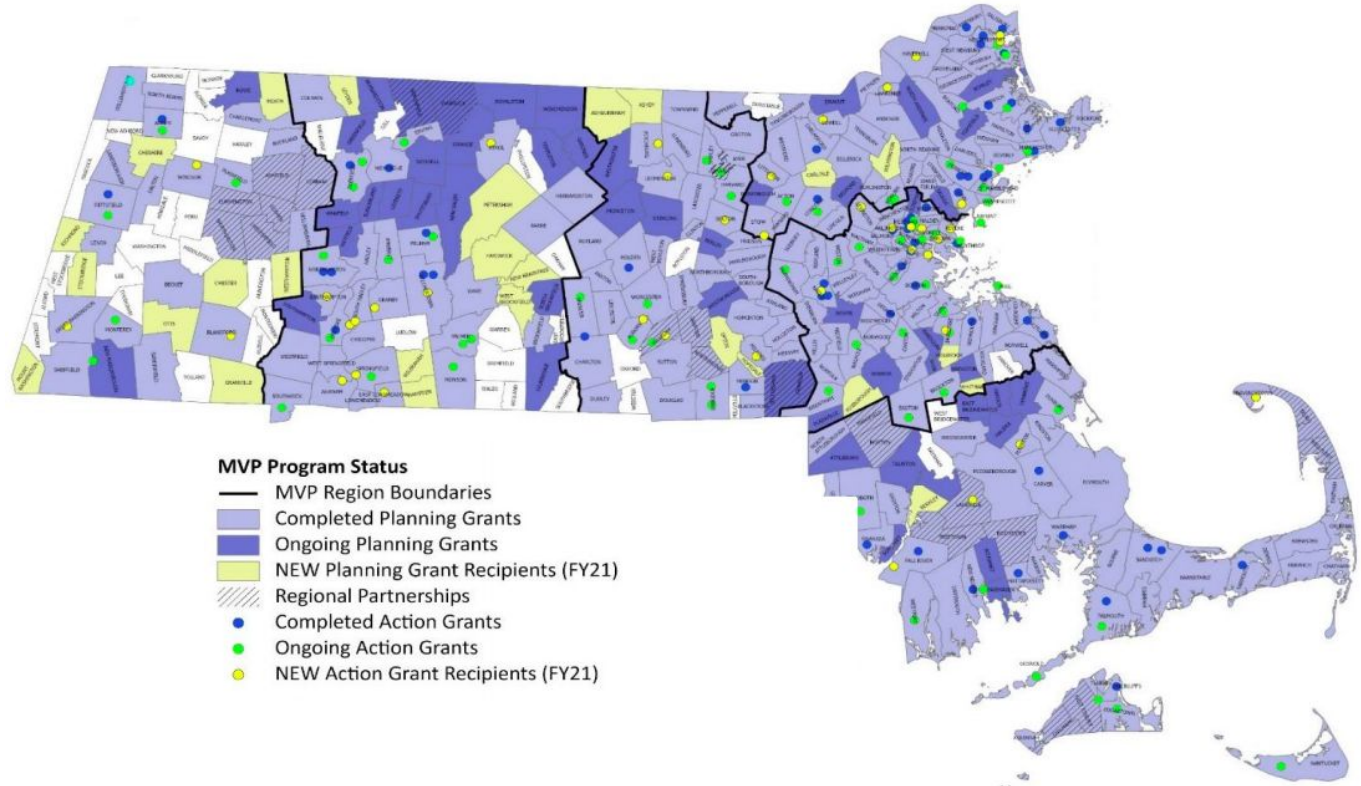
**\$44M awarded to date (since 2017)**

**89% (312 of 351)**  
municipal  
participation

**Funded Municipal Action  
Grant Projects**

**\$11M annually for:**

- Planning, Assessment, Capacity Building & Regulatory Updates
- Nature based Solutions for Ecological and Public Health
- Resilient Redesigns and Retrofits for Critical Facilities and Infrastructure





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**<https://www.mass.gov/mvp>**

**<https://www.mass.gov/info-details/resilient-ma-action-team-rmat>**

