

ACEC/MA

Utilities and Energy Markets: State of the Industry Preparing for the Future

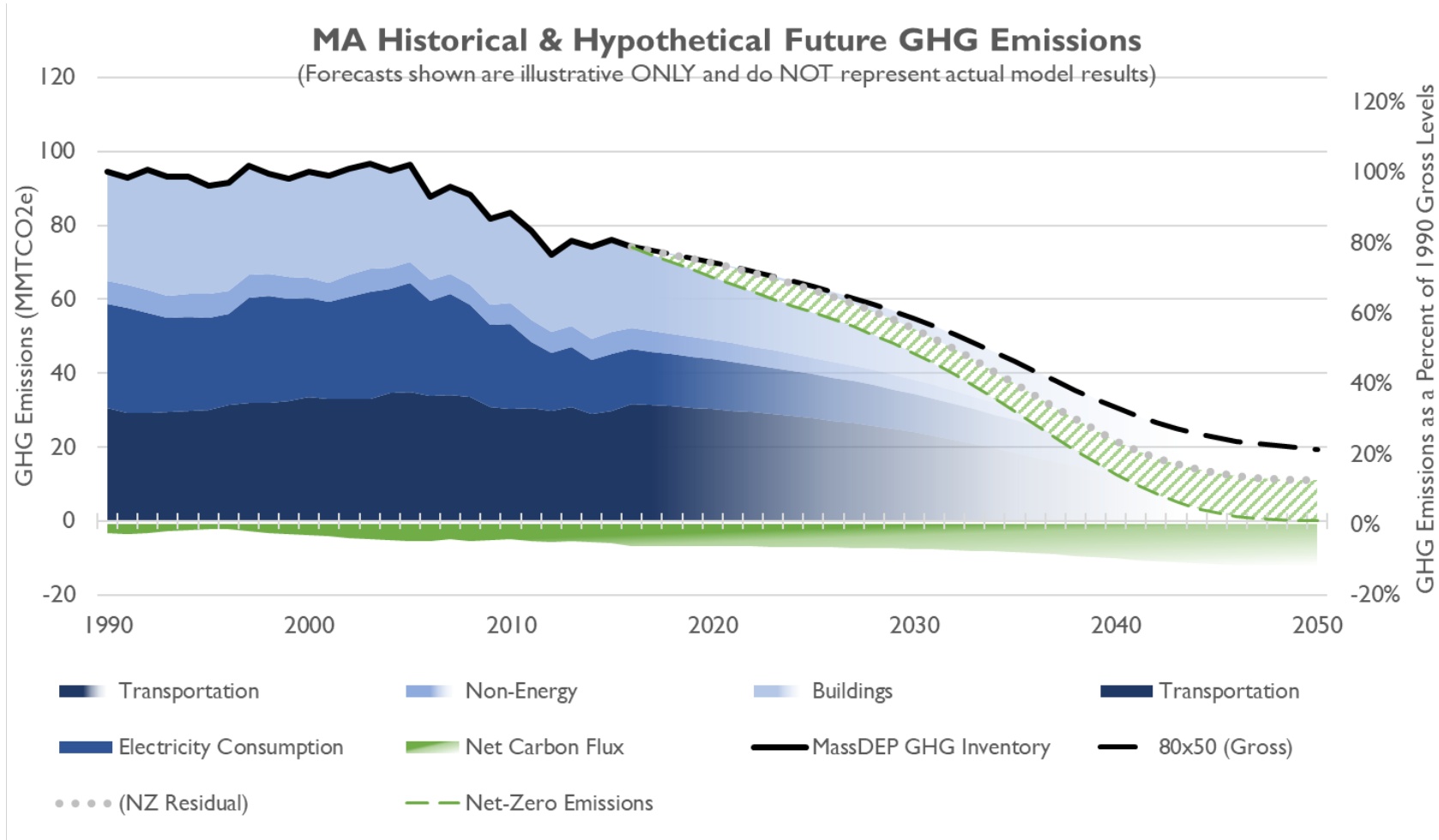
Kathleen Theoharides, Secretary

Massachusetts Executive Office of Energy and Environmental Affairs

April 15, 2021



Net Zero



S.9, An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy



GWSA Updates



Offshore Wind

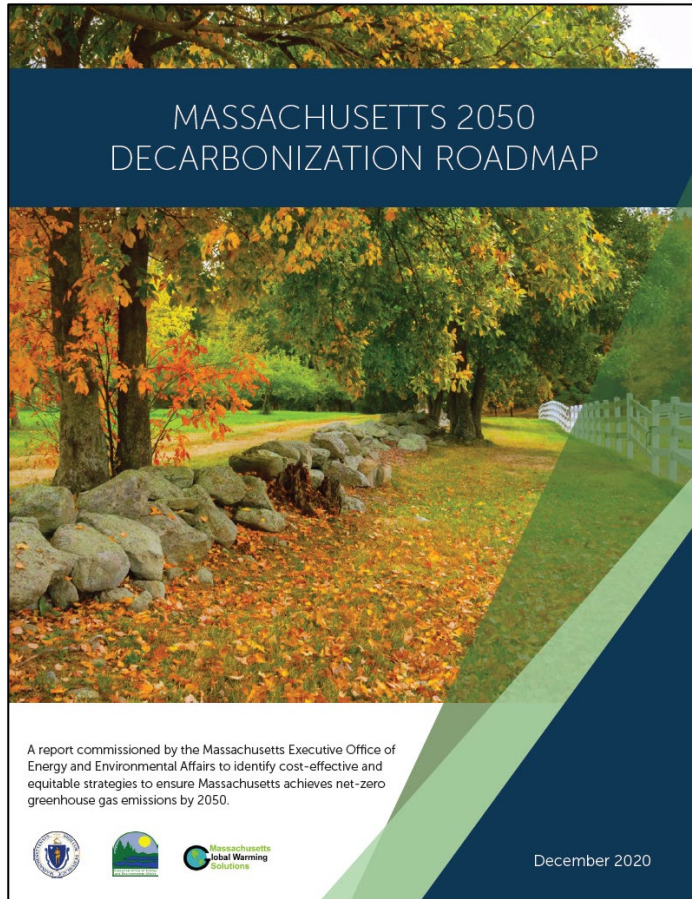


EE Building Code



Environmental Justice

2050 Decarbonization Roadmap



- Examined 8 economy-wide decarbonization scenarios through 2050
- Provides technologies, implementation options and overall cost
- Summary Report + six technical reports, each detailing analysis and detailed conclusions by sector (energy supply, transportation, buildings, non-energy, land use, economic and health impacts)
- **EEA used results of 2050 Roadmap Study analysis to develop of a cost-effective climate strategy for the current decade**

2050 Roadmap: Top-Level Findings

Massachusetts can achieve our 2050 climate goals, and if we are smart about our approach and the strategies we select:



Can do so affordably



Maintain a thriving economy



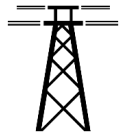
Ensure we bring everyone along, especially our most vulnerable residents

2050 Roadmap: Key Findings

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



A balanced clean energy portfolio anchored by a significant offshore wind resource



More interstate transmission to allow us to access renewable generation in other states and in Canada

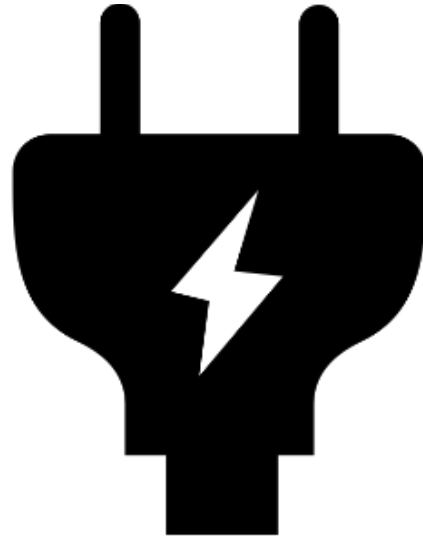


Widespread electrification of transportation and building heat



Reduce cost by replacing energy infrastructure at end of service life.

2030 Clean Energy and Climate Plan



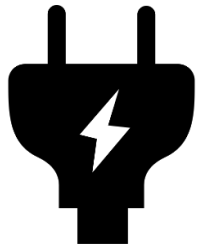
How Do We Get to 2030?



- ❑ *New Buildings*: Highly-efficient new construction
- ❑ *Existing Buildings*: ~ 1,000,000 Homes and ~ 350 million sq-ft of commercial property retrofitted with clean heating, high-efficiency insulation
- ❑ *Building Heat*: Fewer residential and commercial gas customers than today



- ❑ *Light-Duty*: Over 750,000 new EVs cars & trucks on the road
- ❑ *Med. & Heavy*: > 2,000 new ZEVs on the road + cleaner diesel fuel blends
- ❑ *Miles Travelled*: 15% reduction in light-duty commuter miles traveled



- ❑ *Generation*: 6,000 MW of new clean energy built and interconnected
- ❑ *Transmission*: First of several new regional transmission lines operational
- ❑ *System*: New ISO-NE transmission planning & clean energy markets are ready to add 1GW offshore wind & 500MW of solar every year, plus 2 or 3 more large transmission lines, through 2050

Senate Bill 9: Next Steps

Following Governor Baker signing Senate Bill 9:

- ▶ EEA is currently working to update the CECP for both 2025 and 2030 to align with the GWSA-provisions within the legislation.
- ▶ EEA is currently developing a plan and timeline for the CECP update process; new schedule forthcoming.
- ▶ EEA will create additional opportunities for engagement with stakeholders and members of the public.

Climate Adaptation

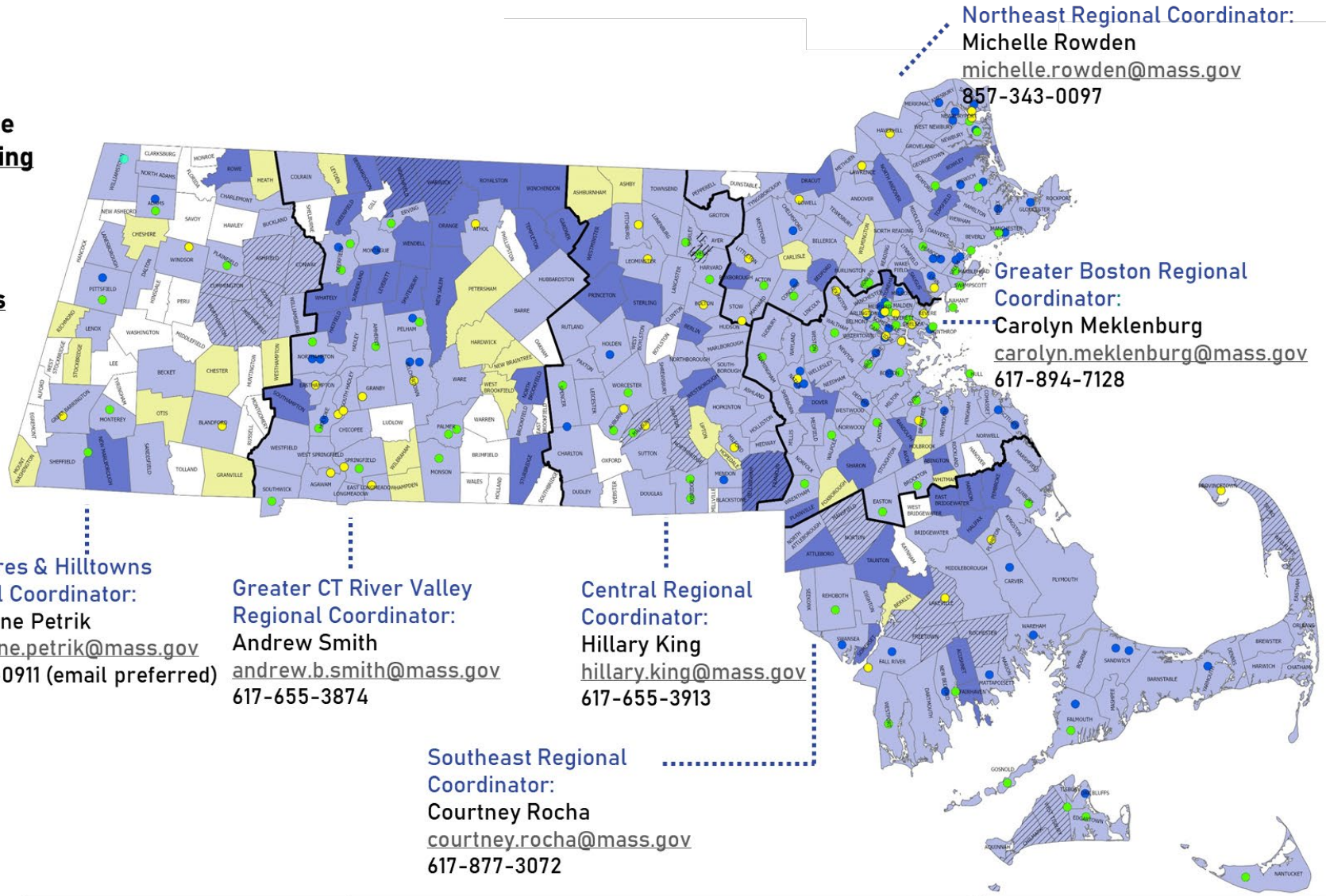
Community Resilience Building (CRB) Planning Grant Process

89% participation
312 communities

Action Grant Projects

FY 18: 37
FY 19: 36
FY 20: 53
FY 21: 41

Total Awards
\$44M to date



Northeast Regional Coordinator:
Michelle Rowden
michelle.rowden@mass.gov
857-343-0097

Greater Boston Regional Coordinator:
Carolyn Meklenburg
carolyn.meklenburg@mass.gov
617-894-7128

Berkshires & Hilltowns Regional Coordinator:
Carrienne Petrik
carrienne.petrik@mass.gov
617-875-0911 (email preferred)

Greater CT River Valley Regional Coordinator:
Andrew Smith
andrew.b.smith@mass.gov
617-655-3874

Central Regional Coordinator:
Hillary King
hillary.king@mass.gov
617-655-3913

Southeast Regional Coordinator:
Courtney Rocha
courtney.rocha@mass.gov
617-877-3072

- MVP Region Boundaries
- Completed Planning Grants
- Ongoing Planning Grants
- NEW Planning Grant Recipients (FY21)
- ▨ Regional Partnerships
- Completed Action Grants
- Ongoing Action Grants
- NEW Action Grant Recipients (FY21)

Updated: September 2020

83C Offshore Wind Procurements

- ▶ On March 11, 2021, DOER filed the next offshore wind RFP with the DPU for approval
 - ▶ Proposals up to 1600 MW
 - ▶ New provisions related to diversity, equity, inclusion, and environmental justice
 - ▶ Enhanced criteria for economic development
- ▶ Pending DPU approval, DOER is working to release final RFP in *May, 2021*.



Wholesale Market Reform

Fall 2020: New England states agree to pursue structural changes to the wholesale power market, release joint “Vision Statement” through NESCOE.

Recommendations to ISO-NE:

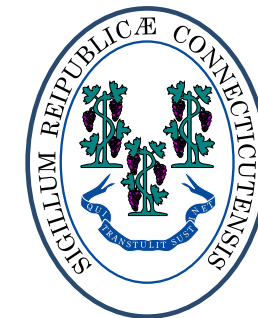
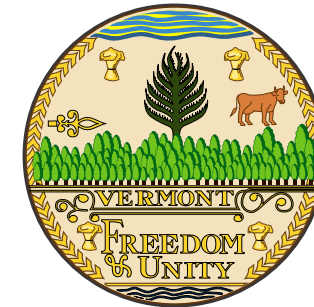
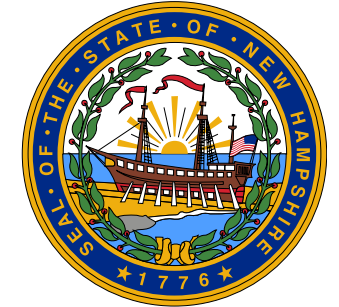
- Conduct a comprehensive long-term regional transmission planning process to integrate the new offshore wind resources necessary to meet state policy goals
- Modernize wholesale market structures to accommodate state clean energy goals
- Increase transparency and state voices in ISO governance

Next Steps

Upcoming Technical Conferences to be hosted by NESCOE to generate dialogue with interested stakeholders

Explore approaches to achieve the reforms needed

Report back to the Governors on proposed solutions later this year



Transportation and Climate Initiative Program



On December 21, 2020, Massachusetts, Connecticut, Rhode Island, and Washington, D.C. signed a bipartisan Transportation and Climate Initiative Program (TCI-P) MOU committing to a groundbreaking multi-state program that will cap and reduce emissions from transportation by 26% by 2032.



Invest in equitable, cleaner transportation options, and create significant new employment opportunities



Substantially improve public health across the Commonwealth and New England.

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Thank You!