



# **GWSA Implementation Advisory Committee (IAC) Meeting**

*June 9th, 2023*

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**Executive Office of Energy & Environmental Affairs**



# Agenda

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1. Review of Meeting Minutes
2. Updates and Introductions
3. 2050 CECP Update and Priorities Moving Forward
4. Climate Pollution Reduction Grant (CPRG) Engagement Plan
5. IAC Work Group Updates
6. Public Comments

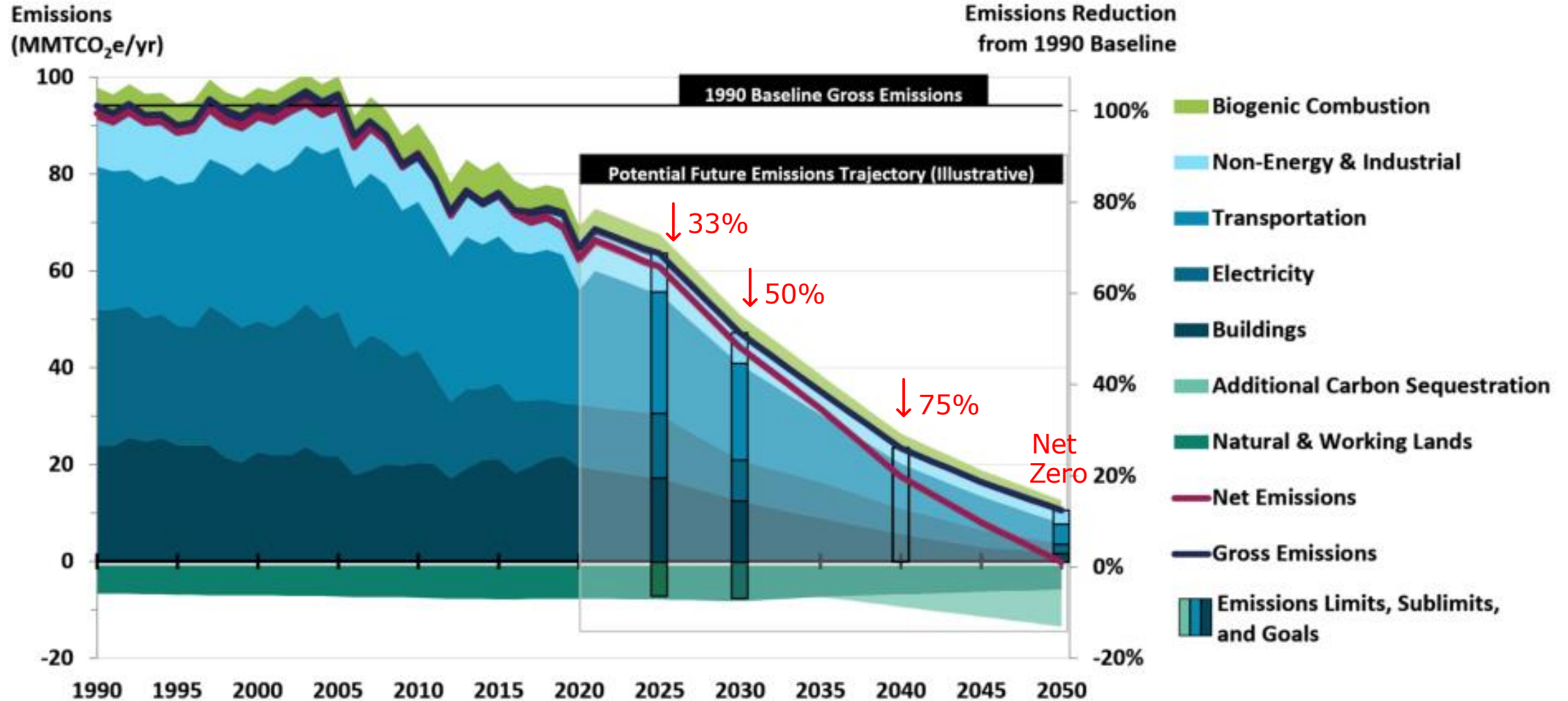


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# **2050 CECF Update and Priorities Moving Forward**



# Mapping Massachusetts' GHG Reduction Goals



# 2050 CECBP KEY BENCHMARKS

Achievement of the Commonwealth's greenhouse gas emissions limit of at least 85% below the 1990 baseline level and net-zero emissions in 2050

## TRANSPORTATION

**97%**

of light-duty vehicles  
(5 million) electrified

**93%**

of medium- and heavy-duty  
vehicles (over 350,000)  
electrified or non-emitting



## NON-ENERGY AND INDUSTRIAL

**52%**

of industrial energy use electrified

**90%**

reduction in solid waste disposal



## BUILDINGS

**80%**

of homes (over 2.8 million)  
heated and cooled by electric  
heat pumps (including those with  
on-site fuel backups)

**87%**

of commercial space is  
heated by either electricity  
or alternative fuels

## NATURAL AND WORKING LANDS

**40%**

of lands and waters in MA  
permanently conserved

**64,400 acres**

of new riparian and urban  
tree cover



## ELECTRIC POWER

**2.5-fold**

increase in electric load  
compared to 2020

**97%**

of electricity consumed is from  
clean and renewable sources



## JOB AND HEALTH BENEFITS

**65,000**

additional full-time jobs created  
from the clean energy transition

Up to **\$4.7 billion**  
in health benefits



## Areas of Increased Focus: **Transportation**

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### Current Decarbonization Tools

- Vehicle emissions standards (via CARB) mandating EVs as an increasing proportion of annual sales
  - MOR-EV rebate program
  - Fleet charging grants and advisory services
  - Zoning strategies like MBTA Communities
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### Areas of Increased Focus

- Improving **EV incentives and support** with updates to MOR-EV
  - Deploying **EV charging infrastructure** at scale, accounting for grid integration (via the Electric Vehicle Infrastructure Coordinating Council)
  - Exploring the **role of EVs in demand response** programs
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## Areas of Increased Focus: **Buildings**

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### Current Decarbonization Tools

- Electrification pilots and demonstrations
  - Building codes (Stretch & Specialized)
  - Mass Save incentives
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### Areas of Increased Focus

- Launching a **Clean Heat Standard**
  - Easing the **customer experience** of various building decarbonization solutions (currently scoping Clearinghouse models), with a focus on Environmental Justice populations
  - **Transitioning** the natural gas system
  - Establishing a “**climate bank**”
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## Areas of Increased Focus: **Power**

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### Current Decarbonization Tools

- Portfolio standards
- Procurements (OSW, solar, regional projects)
- Load management (largely energy efficiency, storage)
- Integration & transmission

### Areas of Increased Focus

- Advancing **load management** with virtual power plants, efficient use of the grid, and demand-side solutions
- **Removing barriers** to and further **engaging with EJ populations** on responsible clean-energy infrastructure development
- Working with **regional partners** on clean generation and transmission
- Increasing opportunities for **out-of-state clean generation**
- Ensuring an **electrification-ready grid**





## Areas of Increased Focus: **Natural & Working Lands**

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### Current Decarbonization Tools

- Grants for land acquisition, conservation, and tree planting grants
  - Healthy soils incentives & technical assistance
  - Forest management incentives
  - Wetlands restoration
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### Areas of Increased Focus

- Developing a **holistic land-use strategy**
  - Incorporating **Indigenous technical knowledge**
  - Deploying **sustainable management strategies** via the Forest Climate Initiative
  - **Incorporating resilience** in environmental regulations and permitting
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## Areas of Increased Focus: **Resilience, Workforce & Equity**

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Massachusetts' Executive Office of Energy & Environmental Affairs views the following as **central components** of its Climate work, even if they do not have direct GHG mitigation impact.

### ➤ **Building Climate-Resilient Communities**

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- Launching the Office of Climate Science
- Rolling out MVP 2.0
- Developing a statewide framework for resilience progress tracking

### ➤ **Building a Climate-Ready Workforce**

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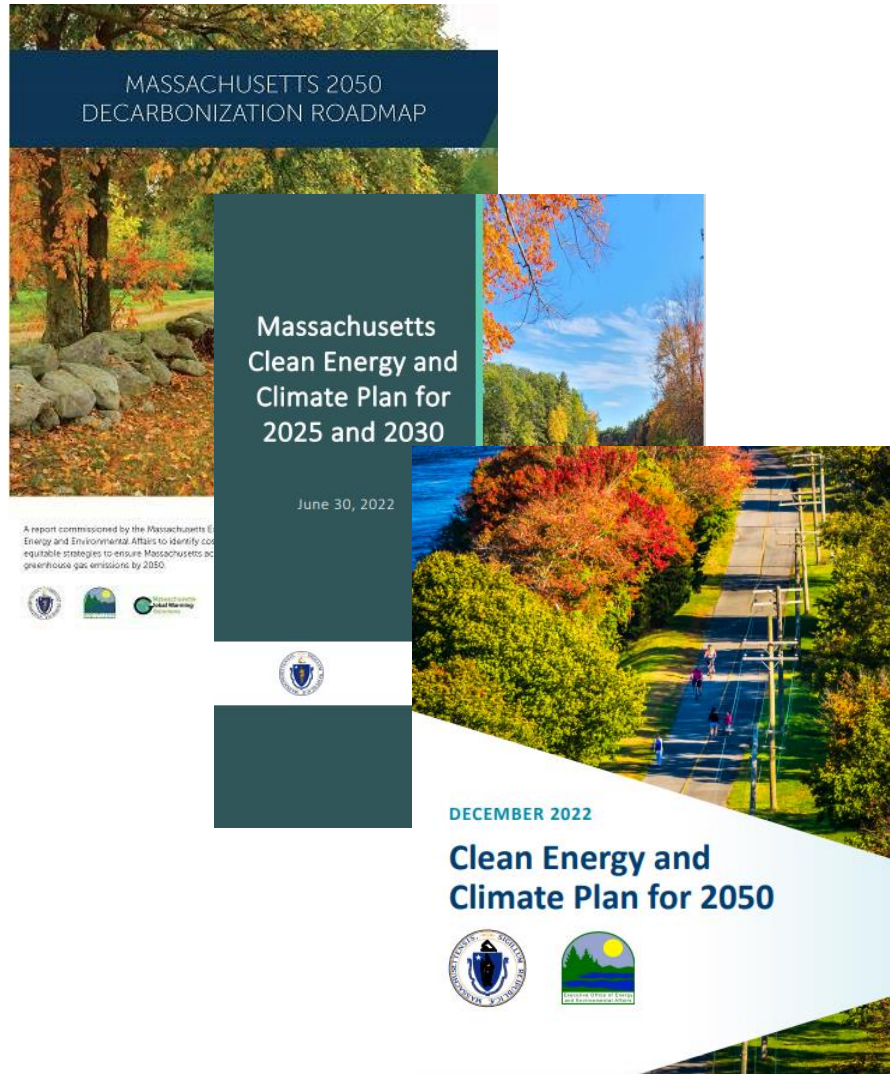
- Working with labor unions to increase training for new industry entrants and incumbent workers
- Developing a Climate Service Corp
- Expanding awareness & resources

### ➤ **Ingraining Environmental Justice Into Everything We Do**

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- Prioritizing environmental justice populations who have been historically marginalized: low-income residents, communities of color and residents who lack English proficiency
- Aligning the Environmental Justice Council (EJC), internal EJ Task Force, Interagency EJ Working Group, Massachusetts EJ Table around a consistent mission and vision

# IAC's Next Steps



As EEA focuses on implementation, the IAC will be essential in:

- Advising how best to implement key initiatives
- Informing the development of priority projects
- Sourcing new ideas and strategies



# **Climate Pollution Reduction Grant**

## **Presentation to Global Warming Solutions Act Independent Advisory Committee**

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**June 8, 2023**



# Climate Pollution Reduction Grant (CPRG): Agenda

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1. Overview
2. Quantitative Elements of the CPRG Planning Process
3. Qualitative Elements of the CPRG Planning Process
4. Stakeholder Elements of the CPRG Planning Process
5. Discussion



# Climate Pollution Reduction Grant (CPRG): Overview

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- Non-competitive \$250 million in total;
  - \$3 million for each state
  - \$1 million for Metropolitan areas (Boston and Worcester and southeastern Massachusetts)
  
- The goal of the CPRG process is threefold:
  1. Support analysis into a small number of “priority” climate actions as a foundation to compete for a \$4.6 billion competitive round of funding for CPRG “Implementation Grants” in 2024.
  2. Extend analysis of the full suite of measures included in the Clean Energy Climate Plan
  3. Match the entire range of federal funds from IRA and BIL programs can help achieve climate action plans
  
- Timeline:
  - Submit applications with a detailed workplan (15 pages) **April 28;**
  - Funds released to states **Summer 2023**
  - Workplan execution **June-December**
  - Priority Climate Action Plan due **March 2024**
  - Implementation Application **January 2024**

# Climate Pollution Reduction Grant (CPRG): Massachusetts Goals

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- Analyze the benefits and costs of measures that reduce climate pollution;
- Plan to optimally match the full range of federal climate funding available under the Bipartisan Infrastructure Law and the Inflation Reduction Act with the Commonwealth's climate actions;
- Deepen state government's engagement with communities across the Commonwealth around climate investments.

# Climate Pollution Reduction Grant (CPRG): All of Government



## Working Groups to Engage Secretariats Across State Government in Climate Planning

Analytics Work Group	Analytic review of existing plans	EEA
	Quantification of Costs and Benefits	EEA, EOED, HHS
LIDAC Work Group	Low Income and Disadvantaged Communities Benefits Analysis	HHS, DHCD, EEA
Intersection of Federal Funds and Optimization Work Group	Optimization of Federal Funding Opportunities	EOHED, DOT, EEA, EOE, A&F
Workforce Development Work Group	Workforce Development	EOLWD, MassCEC, EOE, EOVS, EOPS, EEA





# Quantitative Elements of the Statewide CPRG Planning Process

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1. **Identify a focused list of priority measures for climate action implementation.** It is expected that the Priority Climate Measures will draw from each major sector of emissions and may include potential measures that cut across sectors as reported in the CECP such as, port infrastructure or water system infrastructure measures.
2. **Develop quantified GHG reduction measures for prioritized climate actions** across each major sector of economic activity. This work will seek to develop an assessment that attributes GHG reduction potential to more specific policy measures, rather than bundles of measures as currently defined within the CECP. This exercise will also enable a prioritization exercise to more precisely include emission reduction potential among the factors considered in evaluating which measures to pursue first.
3. **Conduct a cost analysis** to better understand the total cost of the prioritized measures, to identify how costs will be shared among actors such as state government, electric and gas ratepayers, and private customers.
4. **Conduct a benefits analysis** that will incorporate greenhouse gas emissions and air quality improvements (e.g., criteria air pollution and air toxics), improved public health outcomes, economic benefits, increased climate resilience, for individual measures and for suites of measures.
5. **Benefits analysis for low-income and disadvantaged communities** to integrate the existing environmental justice mapping of EJ populations across Massachusetts with the list of climate action measures contained in the CECP and an assessment of the categories of benefits including (but not limited to) reduction of GHGs and co-pollutants, increased resilience, improved access to services and amenities, job creation, energy burden, and workforce development.



# Qualitative Elements of the Statewide CPRG Planning Process

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1. **Authority to implement** each of the climate action measures contained within the PCAP.
2. **Match federal funding federal with Priority Climate Action measures.** This exercise will identify the cost of implementation of the measures within the PCAP, detail the existing sources of funding from state taxpayers and/or ratepayers for the measure, and identify potential federal funds. The federal funds matching exercise will include formula, competitive, and tax-based federal funding available under the BIL and IRA.
3. **Strategically sequence workforce initiatives** and better map skill transition. The Workforce Planning Analysis will focus on the measures included in the PCAP to identify specific steps that can integrate the range of existing programs and create new programs where gaps exist to enable the measures included in the PCAP.
4. **Diagnose barriers to implementation:** such as, allocation of costs between private customers and a group of ratepayers or industrial supply chain complexity for clean energy solutions.



# Matching Federal Funding Opportunities with Climate Actions Creates “Braided” Funding for Specific Measures

## Funding sources

- IRA tax credits & deductions
- IRA loans
- IRA grants
- GHG Reduction Fund
- CPRG Phase 2
- IIJA Clean school bus
- MA ACT School Bus
- IIJA charging & fuel infra
- MasseVIP WFC Incentives
- IIJA EECBG
- MA SMART
- MA Green Communities
- Ind. Eff. & Decarb
- MA 2030 Fund
- MA Offshore Wind Works
- DoT Low/No Emission grant
- National Electric Vehicle Infrastructure (NEVI)

## Capital stacks

- Electrification of buses
- Installing EV charging stations
- Net zero homes construction
- Heat pump for new school
- Cement manufacturing decarb
- Residential utility Solar PV
- Offshore wind

Illustrative Only

# Stakeholder Consultation Elements of the Statewide CPRG Planning Process

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1. **Environmental Justice Consultation.** The primary vehicle for engagement with environmental justice stakeholders will be existing internal and external bodies such as: the EJ Council, the internal EJ Taskforce, the cross-secretariat interagency working group, the advocacy-led MA EJ Table, the Attorney General's EJ Office, as well as public health institutions to assess public health outcomes on EJ populations.
2. **Stakeholders via state-convened councils:** GWSA IAC meetings, Energy Efficiency Advisory Council (EEAC), Grid Modernization Advisory Council and Electric Vehicle Infrastructure Coordinating Council meetings.
  - Provide feedback on prioritized climate action measures
  - Provide feedback on scope of costs and benefits
  - Provide information and perspective on alignment of federal funding with CECP goals
3. **Municipalities** via the Green Communities Program network and communications channels and Regional Planning Agencies bimonthly MARPA meetings and individual RPA consultations
4. **Labor** via monthly touchpoints with AFL-CIO, Building Trades Council and additional labor organizations as relevant
5. **Others** via consistent topical engagement on decarbonization.



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# **IAC Work Group Updates**



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# Public Comments