GWSA Implementation Advisory Committee (IAC) Meeting

December 14, 2023, 3:00 PM – 5:00 PM
Virtual Meeting on Zoom
Meeting Minutes – *Draft*

Welcome, approving the 9/29/23 IAC meeting minutes, agenda overview

Undersecretary Antos called the meeting together at 3:05pm with quorum reached. Undersecretary Antos introduced a new member of the IAC Reverend Vernon Walker the Climate Justice Program Director at Clean Water Action. She also announced that Dr. Sebastian Eastham, Principal Research Scientist, MIT is going to be stepping down from the IAC at the end of the year.

- Undersecretary Antos also provided some highlights from the administration:
- DOER awarded \$27m in first round of Affordable Housing Deep Energy Retrofit Grant Program
- GMAC provided recommendations on the electric utilities electric-sector modernization plans
- DPU issued 20-80 order on the future of gas in Massachusetts
- Launched analysis of potential models for decarbonization clearinghouse and how relates to future of Mass Save

Encouraged all attendees to sign up for new and improved quarterly <u>EEA Climate Team Newsletter</u>. Will continue to provide news about resilience and support for communities in Massachusetts while also providing updates on various decarbonization efforts happening across the Commonwealth.

No discussion of the draft minutes for the last IAC meeting. Kate Dineen moved to approve the minutes. Meeting minutes were approved by majority.

Massachusetts Climate Report Card and Dashboard: Year 1 and Next Steps

Undersecretary Antos provided a detailed overview of the Massachusetts Climate Report Card and Dashboard.

OCIR Report Recommendation:

Recommendation #17: Publish an annual report card on the Commonwealth's progress to achieve mandated greenhouse gas emission reductions.

Beginning in fall 2023, Massachusetts will publish an annual Climate Report Card, developed by EEA, MassDOT, EOHLC, and EOED, in consultation with the Climate Office, to **inform Massachusetts residents of the progress the executive offices are collectively making to achieve CECP mandates.** Convened by Climate Office, these agencies will develop by November 1, 2023, a detailed design for the Report Card including metrics, data sets, format of presentation, and public-facing internet host. The Report Card will be published by December 1, 2023."

https://www.mass.gov/report/massachusetts-climate-report-card

Sector Assessments:

Each section contains the following parts:

<u>One-sentence takeaway</u>: the high-level assessment that distills the status of that sector in meeting climate goals and limits.

<u>Assessment:</u> a 1-paragraph narrative interpreting the various quantitative and qualitative information we use to assess sector progress.

<u>Metrics Table:</u> Key indicators used to assess progress, represented as a current value and target, if one exists.

<u>Challenges:</u> bulleted list of key barriers.

<u>How We Are Meeting the Moment:</u> bulleted list of key efforts underway (or soon to be underway) under the Healey-Driscoll Administration.

Transportation Decarbonization:

The Transportation sector is currently on track for progress to date. Interventions are needed – including a ramp up in electric vehicle adoption and charging infrastructure – to drive the rapid decarbonization required between 2025 and 2030.

Challenges

- Cost vs. gas-powered cars, particularly for low-income drivers
- Access to charging infrastructure
- Grid capacity for charging infrastructure
- Procurement
- · Reliability and restoration of the T

How We're Meeting the Moment

- Standards such as Advanced Clean Cars II
- Incentives such as MOR-EV rebates
- Charging infrastructure deployment

Building Decarbonization

The Buildings sector is currently on track for progress to date. Interventions are needed – including scalable solutions to weatherize and electrify homes – to drive the rapid decarbonization required between 2025 and 2030

Challenges

- Need to retrofit old/heterogeneous housing stock, posing challenges for one-size-fits-all solutions
- Need solutions for renters
- Consumer education/awareness
- Need to pair electrification with energy efficiency and demand control

How We're Meeting the Moment

- Updated energy codes (revised stretch code and new specialized energy code)
- Incentive programs, including awarding first \$27M of a \$50M fund to retrofit low-and-moderate income housing
- Clean Heat Standard

Power Decarbonization

The Power sector is on track for 2025. Supply chain, inflationary and commercial obstacles in particular in the offshore wind industry are delaying deployment of renewable energy, and significant interventions are needed to remain on track by 2030.

Challenges

- High inflation, rising interest rates, and ongoing supply-chain delays are increasing project costs
- Insufficient grid capacity and transmission constraints
- Restrictions on project siting and lengthy permitting battles
- Uncertainties around cost allocation
- Utilities are incentivized to build new infrastructure as opposed to optimizing use

How We're Meeting the Moment

- Issuance of New England's largest offshore wind solicitation
- Establishment of the Commission on Clean Energy Infrastructure Siting and Permitting
- Creation of Office of Federal and Regional Energy Affairs
- Release of technical potential of solar study and review of solar incentives
- Examination and improvement of demand response programs

Natural & Working Lands

The Natural and Working Lands sector is currently on track for 2025. Interventions are needed – including the ability to balance competing land-use needs and secure funding for conservation – to slow, stop, and reverse the loss of natural and working lands.

Challenges

- Loss of NWL acres
- Invasive insect pests
- Release of stored carbon in forests and wetlands
- Consistent long-term funding for land acquisition

How We're Meeting the Moment

- Forest as Climate Solutions Initiative
- Executive Order to develop biodiversity goals for 2030, 2040, and 2050
- Greening the Gateways Cities
- Wetlands Protection Act regulation

Climate Adaptation and Resilience

^{*}Note the Power Decarbonization slides were mistakenly left off of the slide deck. Slide deck was corrected and sent out to the IAC as follow up*

Massachusetts has made significant progress to advance state and local resilience to climate change, but more funding, policy, and regional coordination will be required as climate change worsens.

Challenges

- Extreme weather exacerbated by climate change already causing catastrophic losses
- Climate change impacts and losses are projected to intensify
- Significant additional funds will be needed to advance state, local, and regional resilience projects

How We're Meeting the Moment

- ResilientMass Plan
- Municipal Vulnerability Preparedness (MVP) Program
- Climate Community Roundtable
- Updating stormwater and wetland regulations
- ResilientCoasts
- Pursuing financing and federal funding opportunities

Environmental Justice

Massachusetts state agencies have made significant progress increasing their staffing capacity for environmental justice. This expanded capacity will enable the principles of environmental justice and equity to be implemented in a meaningful, coordinated way across all agencies.

Challenges

- Ensuring meaningful and equitable engagement
- Need to redesign processes
- Advancing environmental justice and equity in coordination among all EEA agencies and other secretariats
- Addressing the geographical divide

How We're Meeting the Moment

- The new EJ&E Office is building a team with experience, expertise, and a vision to drive the next steps of the EEA Environmental Justice Strategy.
- Ensure all Federal grant opportunities have meaningful input from the Justice40 Working Group.
- Advance EEA's diverse supplier program
- Develop an internal EJ&E Environmental Justice Action Plan
- Implement an equitable and just clean energy workforce development pipeline.

Undersecretary Antos introduced Stu Iler, Manager of Energy and Climate Analysis, to detail some of his work on the Report Card and the Dashboard.

Clean Energy & Climate Metrics Webpage

https://www.mass.gov/climatedashboard.

- Visualizations are public resources that provide key information and performance indicators relevant to Massachusetts' GHG emissions and the Clean Energy and Climate Plans.
- The information is broken into two categories:
 - GHG emissions spanning the entire Massachusetts' economy as captured by the state's
 GHG inventory; and
 - Sector-specific metrics that reflect progress within transportation, buildings, electricity, natural and working lands, and industrial/non-energy.
- Webpage first published at the end of 2022 to coincide with the release of the 2050 CECP.
- Updated last week to coincide with the release of the Climate Report Card. The data points presented on the webpage are a superset of the data in the Climate Report Card.

Feedback on Report Card and Dashboard and Looking Towards 2024

- How can EEA work with the IAC to increase the pace of GHG emissions reductions and meet the moment?
 - o Are there particular challenges or actions that you are interested in engaging on?
 - o Are the Work Groups open to providing feedback as particular opportunities arise?
 - Are there additional perspectives and experiences that should be represented?
 - Would the IAC and Work Groups agree to evaluate priorities in collaboration with EEA and propose a 2024 work plan for review at the next meeting?
- Feedback Specific to Metrics and Data Dashboard
 - What new content would be valuable to present, whether at the economy-wide level or for individual sectors?
 - How can we continue to refine and build our metrics and webpage to better track and inform progress?
 - Is there additional analysis that could help to evaluate progress within and across sectors?

A summary of questions, comments and responses is below.

- Caitlin Peale Sloan (CLF) noted that the Power slides had been left off of the slide deck being
 presented. This was acknowledged and a corrected version was sent out to the IAC. Katherine
 provided a verbal summary of the missing slides.
- Kurt Roth noted the importance of commercial building decarbonization and that he would like to be more involved with building retrofits input.
- Caitlin Peale Sloan expressed interest in hearing more about how the EEA is working on the U.S. climate alliance commitments.
- Dr. Gaurab Basu thanked for the information on EVs and charger metrics but is also interested in improving public transit metrics as well.
- Sarah Simon noted that it would be helpful to understand a breakdown of new vs. used EVs.
- Michelle Manion flagged the importance of considering cross sectoral strategies.
- Steve brought up the previous memo that was created by the work group chairs. This can be
 found on the GWSA IAC website. He seconded Michelle's comments and encouraged the IAC to
 continue to keep the cross-cutting dialogue going. He also raised the need to identify new
 sources of revenue, and this should be considered by the IAC going forward.

• Cleveland Cutler raised the question of environmental justice indicators and metrics. Would like to be involved in this work with the Climate Justice WG.

Climate Pollution Reduction Grant Development of Priority Measures

Undersecretary Antos introduced Jonathan Schrag, Deputy Climate Chief at the Office of Climate Innovation and Resilience (OCIR). Undersecretary Antos noted the importance of OCIR in ensuring a whole-of-government, integrated approach to the administration's climate priorities.

Buildings

- 1. Deep Energy Retrofits in Municipal Buildings: A state initiative to expand funding for energy retrofits in municipal buildings with a focus on weatherization and deployment of renewable energy.
- 2. Zonal Decarbonization ("cities of the future"): A state initiative to develop the model for regional decarbonization through multiple interventions in 2-3 neighborhoods to retire fossil fuel infrastructure, modernize electrical infrastructure, and transition buildings to all-electric operation.
- 3. School Decarbonization: A state initiative to develop the model for statewide school decarbonization through multiple interventions targeting buildings, fleets, land, and curriculum, with a geographic focus on schools in Gateway Cities.
- 4. Multi-State Coalition Air Source Heat Pump Distribution: A multi-state proposal to significantly increase the adoption of efficient air source heat pumps through supporting the supply chain, vendor and workforce development, and increasing consumer awareness and demand.
- 5. Multi-State Coalition Housing Pre-Weatherization: A multi-state program to provide services for pre-weatherization improvements to single and multi-family homes that require building improvements in order to qualify for state energy efficiency programs. The program would focus on tenant and low-income homeowners, be in addition to pre-weatherization services available through Mass Save, and would include workforce development.
- 6. District Heating: A state initiative to provide incentives to support ground source heat pump deployment, including utilization of waste heat from steam systems and a training center for district geothermal.

Transportation

- Medium- and Heavy-Duty Vehicle Electrification: Develop a fund to supplement and increase vehicle incentives through MOR-EV.
- Municipal Fleet Electrification: Accelerate municipal and state vehicle electrification through strategies such as vehicle rebates, procurements, and charging infrastructure.
- Multi-State Coalition Fast Charging Network for Medium and Heavy Freight Vehicles: A multistate coalition to deploy electric charging infrastructure for commercial medium- and heavyduty zero-emission vehicles at sites along major highway freight corridors in the Northeast. The coalition would select priority sites and incentivize private development of publicly accessible charging infrastructure.

Power

- Solar Installation on Non-residential Rooftops: A state initiative to increase solar deployment on large non-residential roof space, particularly in urban centers.
- Municipal Microgrids: A state initiative to develop interconnected renewable generation and storage in municipalities. Learn from the microgrid pilot project in Chelsea, Massachusetts to replicate this approach in other municipalities to strengthen community resilience and energy reliability.
- Multi-State Coalition Offshore Wind Enablement: A multi-state proposal to invest in port infrastructure to support offshore wind development and overcome supply chain bottlenecks. This program has a potential focus on opening new offshore wind areas, such as the Gulf of Maine.

Additional Concepts We've Heard

- East-West Rail
- E-Bike Incentives
- Municipal Aggregation of Power Supply
- Public Accessible Electric Vehicle Charging Infrastructure

Survey Results

Responses:

- 61 total responses (as of 12/13)
- 35 from municipal government staff
- "Other" is primarily advocacy organizations and individuals

Overall Rankings

Measure & Average Score on a scale 0 – 5:

•	Deep Energy Retrofits in Municipal Buildings 3.98 3.72
•	Zonal Decarbonization ("cities of the future") 3.78 3.76
•	School Decarbonization 4.16 4.20
•	Air Source Heat Pump Distribution 4.12 3.88
•	Housing Pre-Weatherization 4.03 4.00
•	District Heating 3.98 4.04
•	Medium- and Heavy-Duty Vehicle Electrification 3.53 3.40
•	Municipal Fleet Electrification 4.02 3.76
•	Fast Charging Network for Medium and Heavy Duty Freight 3.41 3.54
•	Solar Installation on Non-residential Rooftops 4.08 4.04
•	Municipal Microgrids4.05 4.12
•	Offshore Wind Enablement 3.88 3.96

Trends – Highest rated goals:

- 1. Enhancing resilience to climate change
- 2. Maximizing reach and accessibility of programs
- 3. Tie for #3:
 - a. Public Health

b. Empowering Independent decision-making among local communities and environmental justice populations

Equity and Environmental Justice Priorities

Survey Results

- Improve Public Health Outcome 4.38
- Reduce energy burden for low-income residents 4.32
- Increase access to transportation options 4.27
- Improve housing quality, comfort, and safety 4.22
- Increase local jobs and improve job quality 4.13
- Develop strong relationships with environmental justice community groups 3.73
- Reduce transportation costs 3.67

Trends – Benefis that consistently rank at the top include:

- Public Health
- Housing quality and access
- Transportation access and options
- Energy burden

IAC Work Group Updates

Undersecretary Antos thanked the workgroup chairs and members of the workgroups for their important work to date. She then called on the workgroup chairs to provide a report out of any workgroup work since the last IAC meeting.

- Climate Justice: Dr. Gaurab Basu motioned to nominate Reverand Vernon Walker to be the Co-Chair of the Climate Justice. This was seconded by Kate Dineen and Caitlin Peale Sloan and approved by the majority.
- Power WG: Caitlin Peale Sloan noted that if anyone would like to join the WG please reach out to her.
- Buildings WG: Chair Jeremy Koo noted that the WG was brought together to discuss the CPRG
 and the state's effort to explore options for developing a deep building decarbonization clearing
 house.
- Land Use WG: Steve Long noted that the WG did not have many opportunities for feedback in
 the CPRG so did not convene in fall. The chairs have been involved in the development of the
 Forest as Climate Solutions work. have not met formally but have worked collaboratively on
 shared documents and emails. The WG looks forward to reconvening and providing insight to
 implementation, identifying gaps and funding needs.
- Transportation WG: The work group convened to provide feedback and priorities for the CPRG that was submitted to Jonathan Schrag.

Public Comments

Courtney Forrester

- Are there any plans to include Waste or materials management in the Priority Climate
 Action Plan (PCAP). It is a sector that can be included. Inclusion of zero
 waste/sustainable materials mgmt projects allows them to be eligible for funding.
 Consider projects related to construction and demolition debris, plastics, reduce &
 reuse, composting these grants could be used to help support MA waste bans and
 enforcement, tracking, implementation/engagement, etc. Thank you for your
 consideration.
- Tina Grosowky asked about the development of the Climate campaign.
 - Patrick Forde (EEA) provided verbal update and that the launch would have in March 2024.

Undersecretary Antos asked for a motion to adjourn. Jeremy Koo motioed, Kurt Roth seconded. Meeting adjourned at 5:01PM.

Documents or exhibits used at the meeting (posted online afterwards)

- 1. Meeting Agenda
- 2. Meeting Minutes of September 29, 2023
- 3. Meeting Slides

Attendance 12/14/2023

IAC Member/Delegates in attendance:

Organization	Name
A Better City (ABC)	Kate Dineen
Boston University	Cutler Cleveland
City of Boston	Alison Brizius
Conservation Law Foundation (CLF)	Caitlin Peale Sloan
Commonwealth Green Low Income Housing	
Coalition	Dave McMahon
Environmental Entrepreneurs (E2)	Sarah Simon
Environmental League of Massachusetts (ELM)	Amy Boyd-Rabin
Eversource	Catherine Finneran
Fraunhofer USA	Kurt Roth
Mass Audubon	Michelle Manion
Massachusetts Institute of Technology (MIT)	absent
Massachusetts Municipal Wholesale Electric	
Company (MMWEC)	Jason Viadero
Metropolitan Area Planning Council (MAPC)	Jeremy Koo
National Grid	Melissa Lavinson
Northeast Clean Energy Council (NECEC)	Tim Snyder

The Nature Conservancy (TNC)
Union of Concerned Scientists (UCS)
Cambridge Health Alliance

Clean Water Action

Steve Long Paula García Gaurab Basu Vernon Walker

Name

Yve Torrie

Others in Attendance

Affiliation (if applicable)

A Better City

CRWA Zeus Smith (he/him)

CT DEEP Jeff Howard

DOER Seth Federspiel (he/him)

DOER Eric Friedman

DOER Ian Finlayson

DOER Joanne Bissetta

DOER Sophia Vitello

Eversource Tracy Gionfriddo

MA Division of Conservation Services Bob Wilber

Assa Forest Allianes Chris Far

Mass Forest Alliance Chris Egan

MassCECJennifer ApplebaumMassDEPSharon WeberMassEEAHanh Chu

MassEEA Katie Gronendyke (EEA)
MassEEA Melissa Mittelman

MassEEA Oleander Stone (they/them)

MassEEA Sarah Basham
MassEEA Stuart Iler
MassEEA Daniel Gatti
National Grid Stephen Woerner

OCIR Jonathan Schrag (He/Him)

PLAN Cathy Kristofferson

Allan Fierce

Arnie Epstein - Stow Charles Myers Courtney L Forrester Cynthia Lawton-Singer

Doug Pope Gordon Starr Janice Henderson

Jeff Clark Launa Zimmaro Mike Duclos

Steven Wenner, South Shore

Tina Grosowsky Vernon Walker Will Space