

GWSA Implementation Advisory Committee (IAC) Meeting

October 12, 2021, 12:00 PM – 2:00 PM

Virtual Meeting on Windstream

Meeting Minutes – Approved 12/10/21

Welcome, approving the June 28th IAC meeting minutes, agenda overview

Undersecretary of Energy and Climate Solutions, Judy Chang, called the meeting to order at 12:03 PM after quorum was met. After welcoming everyone, Undersecretary Chang called for review of the draft minutes of the June 28th IAC meeting. Hong-Hanh Chu noted minor edits at the bottom of page 3. The amended draft minutes was approved by majority with 2 abstentions. Undersecretary Chang then provided an overview of the meeting agenda.

Sector and cross-sector updates from IAC work groups and state staff

Buildings sector updates

IAC's Buildings IAC Working Group: Cammy Peterson reported that the working group met with DOER about the Mass Save Energy Efficiency Plan for 2022-2024, as well as briefly discussed the stretch code and Commission for Clean Heat.

Mass Save Energy Efficiency Plan for 2022-2024: Maggie McCarey updated the IAC on aligning energy efficiency programs with long-term climate priorities. Secretary Theoharides released a letter of determination with a GHG emissions goal for the 2022-2024 Energy Efficiency plan in July, which required significant updates from the program administrator's proposal in April. A regular EEAC meeting on 10/13/21 will feature a review of proposed changes to bring the plan in line with the GHG goal. The plan will emphasize envelope retrofits and electrification and redouble focus on equity outcomes, especially targeting customer types with low rates of participation historically (low-income, English language limitations, renters, etc.). Summary of questions and responses below:

- What mechanisms are being thought of to help funding to support electrification at scale? Mass Save is a ratepayer-funded program. A key part this process is a shift in how those funds are invested – focusing on longer-term reductions rather than short term gains (e.g., lighting). However, the program is also seeking areas to leverage additional funding, such as affordable housing and federal funding.
- Does the plan include high-intensity industrial end-uses? The commercial plan includes the Industrial sector.
- Has the Mass Save three-year plan draft been redistributed since the EEA goals were published in July? Yes, the latest updates to the proposal should be available on the EEAC website as of the week of Oct. 4th.

Stretch Energy Code: Maggie McCarey provided update that DOER is working on a straw proposal that meets the 2021 Climate Law's requirements, including a specialized stretch energy code.

Commission on Clean Heat: Undersecretary Chang updated the IAC that the Commission's participant list is almost finalized. In the meantime, EEA has retained two consulting teams to support the

Commission, as well as a Task Force composed of key staff from relevant state agencies. Summary of question and response below:

- Will the Commission still aim to put a draft regulatory framework in place by the end of this calendar year (per the Interim 2030 CECP)? Because of current timing constraints and the ongoing 20-80 docket, that piece of the Commission's work will probably be delayed to 2022. The Commission itself will need to set its own agenda and calendar once it is fully convened.

MassCEC's Whole Home Heat Pump Program: Peter McPhee provided an update on MassCEC's pilot program that evaluated consumer demand, technological applicability, and cost-benefit of whole home heat pump retrofits from gas. High level takeaways from the program thus far include (1) significant customer demand, often greater than contractor availability, although the supply-chain is expanding, and (2) very positive response from the consumer side and the performance of the technology.

Summary of the questions and responses below:

- What was the seasonal COP and was coolant leakage measured in homes? A survey of performance will be published in a study soon. MassCEC did not measure refrigerant leakage.
- Could you provide a bit more detail on the consumer satisfaction/dissatisfaction data? [MassCEC's blog \(https://www.masscec.com/blog/2021/09/13/masscec-pilot-showcases-success-whole-home-heat-pumps\)](https://www.masscec.com/blog/2021/09/13/masscec-pilot-showcases-success-whole-home-heat-pumps) has more information.
- Were the heat pumps eligible for Energy Star approval? All installed units were from NEEP's list of high efficiency units.
- Did MassCEC look at installed cost trends? Cost information and other studies are available on the blog. The length of time here is too short to see a lot of long-term trends. The average installation cost was about \$18,000 which may seem high but isn't high considering it's the heating system, cooling system, and distribution, not just a furnace swap-in.

MassCEC's Passive House Program: Beverly Craig presented on MassCEC's Passive House Program, see slides 4-10 of meeting slide deck. Eight affordable housing projects were awarded funding to build and certify to Passive House standard. The reported incremental cost averaged 2.4% which contractors noted was within contingency and less variable than other variables, such as architectural elements. Largest cost savings are in down-sizing heating systems. Largest cost increase was in ventilation, needing to bring fresh air to every room, rather to a central vent, which is now in high demand post-COVID.

Summary of questions and responses below:

- What's the size range for the 8 passive house developments? Typically about 30 units, but ranging up over 100.
- What portion of the Passive House use natural gas and are any using GSHPs? Space heating almost 100% are ASHP, usually VRF. But all funded projects do have gas-powered central hot water systems, but extra space was required to accommodate new heat pump water heater technology that is becoming available.

Transportation sector updates

IAC's Transportation Working Group: Sarah Simon reported that the working group discussed options to approach transit and mobility-focused GHG reductions, such as reducing the number of vehicles per

household. The work group also discussed a desire to hear from recommendations from the comment period EEA plans to put into the 2025/2030 CECP.

Statewide Long-Range Transportation Plan: Steve Woelfel updated the IAC that MassDOT has retained consultants to support their Long-Range Transportation Plan and expect to release the updated plan in 2023. The timeline for the process is still tentative, but anticipating key engagement opportunities in the Winter, followed by some work in Spring of 2022, then additional engagement in the Summer of 2022. The plan will have some key focuses, such a strategic gap analysis and key tracking metrics to support performance-based planning. Many elements are pending federal action on infrastructure funding. Summary of question and response below:

- Does the consultant’s scope of work include evaluation of VMT reduction strategies? Not explicitly, but it will certainly be a part of the consultant’s work.

Land and Electric sectors updates

IAC’s Land Use and Nature-Based Solutions Working Group: Steve Long reported that the working group discussed EEA’s proposed work-plan for natural and working land (NWL) inventory, policy development, and stakeholder engagement. The group generally applauds EEA’s new programs that have been created or expanded in FY22 as part of the Resilient Lands Initiative. They [recommended greater clarity on the updated estimate of net carbon sequestration in MA natural and working lands \(NWL\)](#). [At the same time, they](#) are anxious for EEA to move beyond [NWL](#) inventory evaluation and planning and into program deployment for “no-regrets” strategies. They suggested a directory of programs and funding for municipalities and NGOs to support activities related to protection, management, and restoration of NWL. The group also had a joint meeting with the IAC’s Electric Sector Working Group to discuss DOER’s Technical Potential of Solar Study. They would like DOER to analyze optimal solar placements that avoid and mitigate any environmental impacts. They suggested a scenario-based approach to evaluate the costs and benefits of placing solar entirely on already-developed land.

Technical Potential of Solar Study: Eric Steltzer gave a quick overview of DOER’s plan to evaluate the future of solar in Massachusetts given the need for additional renewable energy to achieve net zero emissions. The scope of the study is still in development but will be finalized soon. The study will kick off in early 2022.

Resilient Lands Initiative: Kurt Gaertner gave a quick overview of the Resilient Lands Initiative (RLI, see slide 18 of meeting slide deck). The Initiative is under review within EEA and across Secretariats to ensure that it is well-aligned with other key goals and maximizes the support for and inclusion of resilient land elements across the activities of EEA’s sister agencies. Summary of question and response below:

- Is RLI coordinated with the Stretch Energy Code, such as limiting tree removal as part of any housing development? EEA already has significant tree planting and retention programs (e.g. Greening the Gateway Cities tree planting program, tree retention model bylaws and incentives) and those programs are tightly aligned with energy programs, since local tree canopy results in significant energy savings.

Cross-sector updates

IAC's Climate Justice Working Group: Eugenia Gibbons reported that the working group discussed EEA's outreach strategy and incorporation of environmental justice into the broader context of the 2025/2030 CECP. The group suggested a public calendar of different upcoming public meetings to better communicate the information and coordinate attendance. They also discussed wanting to know how EEA is taking submitted comments on the Interim 2030 CECP and incorporating them into the 2025/2030 CECP. The group had submitted a list of key metrics that can be used to track equity outcomes.

Clean Energy Workforce Development: Tamika Jacques provided an overview of MassCEC's workforce development programs and strategy, with a focus on workforce equity as a foundation to the agency's key initiatives in economic development and clean energy innovation (see slides 20-26 of the meeting slide deck). MassCEC is establishing a Clean Energy & Equity Workforce Working Group and will undertake a workforce needs assessment to better understand and address existing and future clean energy workforce, minority business, employer, and current and former fossil fuel worker needs.

Clean Energy & Climate Plan for 2025 and 2030

Undersecretary Chang provided an update on EEA's approach and timeline to complete the 2025/2030 CECP (see slides 28-37 of the meeting slide deck). EEA is still in the modeling phase of evaluating approaches to reach 50% emissions reduction, but the 2025/2030 CECP will have many elements of the Interim 2030 CECP. Economy-wide emission limits and sector-specific emission sublimits for 2025 and 2030 are expected to be proposed in March 2022. EEA is proposing to set emission limits and sublimits relative to the 1990 gross emissions level while separately tracking net emissions (relative to 1990) to evaluate progress toward Net Zero by 2050. EEA is also proposing that emission sublimits align with key sectors in MassDEP's Statewide GHG Inventory.

Feedback on IAC and IAC work group meetings

A couple of IAC members appreciated the dialogue and set-up of today's meeting. Eugenia Gibbons suggested that the IAC meeting more frequently than quarterly could be helpful. Cammy Peterson said that using the IAC meetings as a hub is useful while IAC workgroups meet more frequently.

Public Comments

A member of the public suggested a working group or set of meetings that are more devoted to funding.

Another member of the public indicated their appreciation for the IAC meetings being open to the public to observe remotely.

Meeting was adjourned at 1:58pm.

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

1. Meeting Agenda¹
2. Meeting Minutes of June 28th, 2021²
3. Meeting Slides³

IAC Member/Delegates in attendance:

Organization	Name
A Better City (ABC)	Kate Dineen
Boston University	<i>absent</i>
City of Boston	Alison Brizius
Conservation Law Foundation (CLF)	Caitlin Peale Sloan
Commonwealth Green Low Income Housing Coalition	David McMahon
Environmental Entrepreneurs (E2)	Sarah Simon
Environmental League of Massachusetts (ELM)	Nancy Goodman
Eversource	Catherine Finneran
Fraunhofer Center for Sustainable Energy Systems (CSE)	Kurt Roth
Health Care Without Harm	Eugenia Gibbons
Mass Audubon	Michelle Manion
Massachusetts Institute of Technology (MIT)	<i>absent</i>
Massachusetts Municipal Wholesale Electric Company (MMWEC)	Jason Viadero
Metropolitan Area Planning Council (MAPC)	Cammy Peterson
National Grid	Mackay Miller
Northeast Clean Energy Council (NECEC)	<i>absent</i>
The Nature Conservancy (TNC)	Steve Long
Union of Concerned Scientists (UCS)	Paulina Muratore

Others in attendance:

Affiliation (if applicable)	Name		
		Department of Energy Resources (DOER)	Alexis Washburn
ABC	Isabella Gambill	DOER	Catie Snyder
ABC	Yve Torrie	DOER	Chelsea Kehne
City of Boston	Kat Eshel	DOER	Eric Friedman
CLF	Staci Rubin	DOER	Eric Steltzer
Climate Action Now, Western Mass	Jeff Clark	DOER	John Mirandette
		DOER	Samantha Meserve
		DOER	Joanne Bissetta

¹ <https://www.mass.gov/event/october-12-2021-meeting-of-the-gwsa-implementation-advisory-committee-iac-2021-10-12t120000-0400-2021-10-12t140000-0400>

² <https://www.mass.gov/event/june-28-2021-meeting-of-the-gwsa-implementation-advisory-committee-iac-2021-06-28t140000-0400-2021-06-28t160000-0400>

³ <https://www.mass.gov/event/october-12-2021-meeting-of-the-gwsa-implementation-advisory-committee-iac-2021-10-12t120000-0400-2021-10-12t140000-0400>

DOER	Joanna Troy
DOER	Maggie McCarey
DOER	Marian Swain
DOER	Nina Mascarenhas
DPU	Megan Wu
Executive Office of Energy and Environmental Affairs (EEA)	Andrew Kimball
EEA	Benjamin Miller
EEA	Beth Card
EEA	Daniel Gatti
EEA	Dunbar Carpenter
EEA	Hong-Hanh Chu
EEA	Judy Chang
EEA	Kurt Gaertner
EEA	Nicole Cooper
Elders Climate Action Energy Solutions	Allan Fierce Erin Kempster
Eversource	Tracy A. Gionfriddo
Green Energy Consumers	Anna Vanderspek
Legislative Aide to Rep. Meschino	Jon Hamilton
LISC	Emily Jones
Office of Senator Barrett	Dina Nathanson
Office of Senator Barrett	Lexi Concannon
MA State Senate	Audrey Horst
Massachusetts Clean Energy Center (MassCEC)	Ariel Horowitz
MassCEC	Galen Nelson

MassCEC	Peter McPhee
MassCEC	Bev Craig
MassCEC	Rees Sweeney-Taylor
MassCEC	Jennifer Daloisio
MassCEC	Tamika Jacques
Massachusetts Department of Environmental Protection (MassDEP)	Christine Kirby
MassDEP	Sharon Weber
Massachusetts Department of Transportation (MassDOT)	Steve Woelfel
Mass Forest Alliance	Chris Egan
MASCO	Janice Henderson
National Grid	Julia Gold
NECEC	Sean Burke
NECE	Emmy Tolsdorf
The Northbridge Group	Bruce Phillips
Rich May Law	Joe Dorfler
Sierra Club	Veena Dharmaraj
Sierra Club	David Heimann
Town of Sherborn	Dorothea Von Herder
Union of Concerned Scientists	Paula Garcia
Sustainable Westborough	Pete Dunbeck
	Bob Fitzpatrick
	Brianna Rockwell
	Cathy
	Clare
	Tony Rogers