

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

December 10, 2021, 1:00 PM – 3:00 PM

Virtual Meeting on Windstream

Meeting Minutes – Approved 2/18/22

### **Welcome, approving the October 12<sup>th</sup> IAC meeting minutes**

Roll call was taken by Hong-Hanh Chu. Undersecretary of Energy and Climate Solutions, Judy Chang, called the meeting to order at 12:07 PM after quorum was met. After welcoming everyone, Undersecretary Chang called for review of the draft minutes of the October 12<sup>th</sup> IAC meeting. Several IAC members note that they had not yet been able to review the minutes and suggested that the review and approval of minutes be tabled until the end of the meeting, time-permitting, or next meeting if not.

### **Updates from Undersecretary Chang**

Staff across the Executive Branch is still reviewing the new **federal Bipartisan Infrastructure Law** to understand what funding is available and where (e.g. highway and electric vehicle charging infrastructure, electric school buses, grid resilience and upgrades, other environmental remediation and resilience initiatives). The law includes a formal reauthorization of a previous federal highway funding mechanism that had lapsed and was being funded through continuing resolution (i.e., not all of the funds in the law are *new* funds).

The Governor's **EJ Advisory Council** and **Commission on Clean Heat** are anticipated to be convened very soon, likely January 2022.

Undersecretary Chang gave a high-level overview of the process to develop the **final CECP for 2025 and 2030**, most of such information has already been covered in the previous IAC meeting and the October 14 & 15 public meetings. IAC questions/comments and responses are summarized below:

- Comment: The natural and working lands (NWL) baseline and goal should include carbon storage in addition to emissions and sequestration. Response: EEA will revisit the statutory requirements and will make corrections to slide 7 of the meeting slide deck if needed.
- Will the 2025 CECP be its own document or will be incorporated into the 2030 CECP? The two will a single document.
- Is any new modeling being undertaken for the 2030 CECP? EEA is continuing to work with Evolved Energy Research to model pathways to 50% emissions reduction by 2030, including new capabilities to analyze at sub-state level, as well as a new bid just awarded to analyze the macroeconomic, workforce, and equity impacts, costs, and benefits of CECP policies.
- Does the Commonwealth has any sense of the timing when funding from the Bipartisan Infrastructure Law will become available? The timing will depend on the specific funding allocations, many of which require the Commonwealth to develop a spending plan before any funding is approved. Even after the law's passage, many details of how funds will be dispersed, allocated, and awarded are still under negotiation at the federal level.
- How will the Governor's recent announcement about TCI-P impact the CECP? How will it alters our modeling for 2030 emissions and policies? The Administration is disappointed to lose the regional collaboration represented by TCI-P, but is evaluating alternative funding sources, such

as the Bipartisan Infrastructure Law, that could supplant the financial resources anticipated from TCI-P. Modeling for 2030 in the CECP does not change dramatically: GHG reductions from clean transit will still require deploying electric vehicles and charging infrastructure and those changes are still key levers within the model. However, the source of funding for programs supporting those will need to adapt and that's a question of policy development across state agencies and the IAC, rather than a key element of modeling.

### **Update on Greenhouse Gas Fluxes and the NWL Inventory**

Hong-Hanh Chu gave a technical overview of different types of greenhouse gas fluxes, MassDEP's current inventory of biogenic emissions from combustion, preliminary updated estimates of NWL carbon flux in Massachusetts, and EEA's plan to update the tracking of carbon flux on NWL and NWL-derived products. She also briefly discussed policy implications for achieving net-zero emissions with a smaller net carbon sequestration estimate from NWL in Massachusetts. IAC questions/comments and responses are summarized below:

- What is the detailed breakout of the biogenic combustion category and what emissions factors are used? The exact methodology is available in the workbook that is Appendix C to MassDEP's GHG Emissions Inventory. MassDEP uses EPA emissions factors for the biogenic combustion calculations.
- What is the scale of carbon stored in durable wood products? Preliminary NWL inventory updates indicate that less than a million tons of carbon dioxide equivalent are stored in durable wood products, which is relatively small, but that proper management of forests can produce durable wood products and encourage greater sequestration in remaining live forests by reducing competition for sunlight, nutrients, water, etc.
- What extent is the Commonwealth computing carbon storage in agricultural soils, especially as a result of composting practices and organic waste streams? This is an element of the biogenic fluxes discussed on slides 13 and 14 of the meeting slide deck, but there is still a lot of work to be done to add accuracy and precision to the methodology.
- What policies might be included under the goal of reducing biogenic combustion emissions? The use of ethanol is a major driver of biogenic emissions at the moment, so policies to electrify vehicles or any other thermal use are a good example of policies that will also reduce biogenic combustion emissions. The 2050 Roadmap Study found that truly carbon-neutral advanced biofuels, while still somewhat hypothetical at this point, may be appropriate to deploy as a better alternative to fossil fuel combustion in a limited number of end-uses that are hard to electrify. More study of tradeoffs in this system would be necessary.
- How are forests, including new forests, being accounted for in the new inventory methodology? Forests are being classified into various subclasses in the new methodology. EEA generally follows the EPA accounting practices and converted land is considered new forest for 20 years.

### **IAC Work Groups Report Outs**

Undersecretary Chang formally thanked Eugenia Gibbons, who is transitioning to a new role and thus is no longer an IAC member, for her contribution to the IAC since she joined in 2019. She also noted that Staci Rubin will be the sole chair of the Climate Justice Work Group until a replacement for Eugenia can be appointed.

- **Electricity:** Caitlin Peale Slone reported that the electricity work group is closely watching developments with the 2022-2024 Mass Save® plan and the 2025/2030 CECP, and is holding off on further comments until that process is complete.
- **Transportation:** Sarah Simon reported that the work group understands that EEA is seeking to incorporate greater VMT-focused policies, stemming from changes to land-use and housing density, and would like to see if and how that has altered any modeling. She noted the challenge associated with these types of policies, as they require coordination and collaboration with other agencies outside of EEA. She also wondered how policy priorities around diesel fuels and the medium- and heavy-duty fleets might fit into the 2025/2030 CECP, especially given the co-benefit of particulate matter emission reductions and how hydrogen might fit into a transportation decarbonization pathway. EEA response: CECP policies are likely to remain neutral on incentives for battery-electric compared to hydrogen, but that our expectation given the current market is that battery-electric has a significant technological advantage over hydrogen except in certain niche applications. Paulina Muratore asked if the Commonwealth was going to adopt the California Advanced Clean Trucks Rule by the end of this year in order to include Model Year 2025 in its regulation. EEA response: MassDEP intends to meet this deadline and may file an emergency regulation to do so.
- **Buildings:** Cammy Peterson reported that the work group had been updated on a range of ongoing policies and issues, including the 2022-2024 Three-Year Mass Save® plan, the Stretch Code, and new seats on the BBRs. She noted that the work group and EEA staff had discussed and landed on an engagement approach for the coming weeks in order to evaluate new policy priorities that might be incorporated into the 2025/2030 CECP as well as how to keep the work group abreast of ongoing deliberation from the Commission for Clean Heat.
- **Land Use and Nature-Based Solutions:** Steve Long reported that the work group intends to produce a working paper by February that aligns with EEA's NWL policy priority hierarchy and make recommendations for EEA to expand current programs, augment funding for key initiatives, and develop a broader framework for developing new policy areas, including new legislative priorities at the statehouse and how to deploy federal infrastructure dollars for resilient infrastructure in the NWL. Michelle Manion underscored the tight timeline between now and March, when a new policy slate is scheduled to be available. She asked if the Commonwealth had any analytical results regarding solar deployment and how that might impact land cover. EEA response: our energy pathways modeling does include solar deployment but does not include locational siting at a sub-state level. A separate study by DOER will evaluate the siting of solar, balancing technical potential, cost considerations, and environmental impacts.
- **Climate Justice:** Staci Rubin reiterated thanks to Eugenia Gibbons and espoused hope for a new representative of the same caliber. She reported that the Climate Justice Work Group is hoping to expand the Commonwealth's outreach and engagement efforts to bring underrepresented voices to the table. She also highlighted that the work group is interested in engaging with workforce development programs to ensure that training, education, and certification programs are producing real jobs and that the work group will continue working with the other work groups to ensure that climate justice principles are inculcated in all other workstreams. She also reminded EEA of the work group's suggestions of having a calendar of public meetings, their

suggested metrics for equity assessment of policies, and the importance of community engagement directly influencing state decisions.

### October 12<sup>th</sup> 2021 Meeting Minutes

Steve Long proposed an amendment to the minutes to note that he had mentioned the smaller net carbon sequestration estimate in the work group report out, and moved that the minutes be approved with such amendment. Cammy Peterson seconded the motion. The motion passed with no dissent.

### Public Comments & Questions

Public comments/questions and responses are summarized below:

- How is EEA going to reconcile the deadline for the 2025/2030 CECP, which must be released by July 1, and the state budget, which is being negotiated now and will be finalized between now and July? Is there close coordination between these 2 efforts? Coordination between the executive branch and the legislative branch will be crucial.
- Is new construction of housing and commercial spaces included in the Commonwealth's projections of sequestration and forest growth? The Harvard Forest research presented in the Land Sector Technical Appendix to the 2050 Roadmap includes a projection of development, including built square feet and accessory areas, such as lawns, driveways, and parking lots.
- Comment: The Commonwealth needs to reconcile active logging sponsored by DCR with its NWL goals. DOER is rolling back restrictions on the combustion of biomass for energy.
- How is the Commonwealth going to approach Chapter 61 tax incentives that promote forest management, which have a carbon impact?
- How much is EEA's focus on pursuing carbon sequestration from outside of the state? The Commonwealth is still evaluating options and is not locked into one policy or program over another at present especially since regional, national, and global markets for carbon offsets are still nascent. For now the Commonwealth is trying to lock down analysis and methodology – policy will come later.

At 3:04pm Undersecretary Chang concluded the meeting.

### 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	<i>absent</i>
Environmental Entrepreneurs (E2)	Sarah Simon
Environmental League of Massachusetts (ELM)	<i>absent</i>
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)	Sebastian Eastham
Massachusetts Municipal Wholesale Electric Company (MMWEC)	<i>absent</i>
Metropolitan Area Planning Council (MAPC)	Cammy Peterson
National Grid	Mackay Miller
Northeast Clean Energy Council (NECEC)	Peter Rothstein
The Nature Conservancy (TNC)	Steve Long
Union of Concerned Scientists (UCS)	Paulina Muratore

**Others in attendance:**

<b>Affiliation (if applicable)</b>	<b>Name</b>		
350 Mass	Curt Newton	MA State Senate	Audrey Horst
ABC	Isabella Gambill	Massachusetts Clean Energy Center (MassCEC)	Ariel Horowitz
Arcadia Center	Ben Butterworth	Massachusetts Department of Environmental Protection (MassDEP)	Christine Kirby
City of Boston	Hannah Payne	MassDEP	Sharon Weber
CLF	Staci Rubin	MassDEP	William Space
Department of Energy Resources (DOER)	Shevie Brown	Massachusetts Department of Transportation (MassDOT)	Steve Woelfel
DOER	Catie Snyder	Mass Forest Alliance	Chris Egan
DOER	Joanne Bissetta	Mass Audubon	Heidi Ricci
DOER	Marian Swain	MAPC	Van Du
DPU	Megan Wu	PLAN-NE	Cathy Kristofferson
Executive Office of Energy and Environmental Affairs (EEA)	Judy Chang	Pope Energy	Doug Pope
EEA	Beth Card	Sierra Club	David Zeek
EEA	Andrew Kimball	Sierra Club	Veena Dharmaraj
EEA	Daniel Gatti	Town of Barnstable	Gordon Starr
EEA	Dunbar Carpenter	Town of Pepperell	Anthony Beattie
EEA	Hong-Hanh Chu	UCS	Paula Garcia
EEA	Benjamin Miller	Wärtsilä	Bhawramaett Broehm
EEA	Kurt Gaertner		Glen Ayers
EEA	Nicole Cooper		Marc Breslow
Elders Climate Action	Allan Fierce		Mike Duclos
Elders Climate Action	Arnie Epstein		Paul Dale
Energy Solutions	Eliot Stein		Geordie Enoch
Green Energy Consumers	Kai Salem		Julia Gold
Office of Senator Barrett	Evie Hobbs		Roger Luckmann