



GWSA Implementation Advisory Committee Meeting

April 12, 2021

2:00PM - 3:30M

New IAC Chair: Judy Chang, EEA Undersecretary of Energy



Agenda

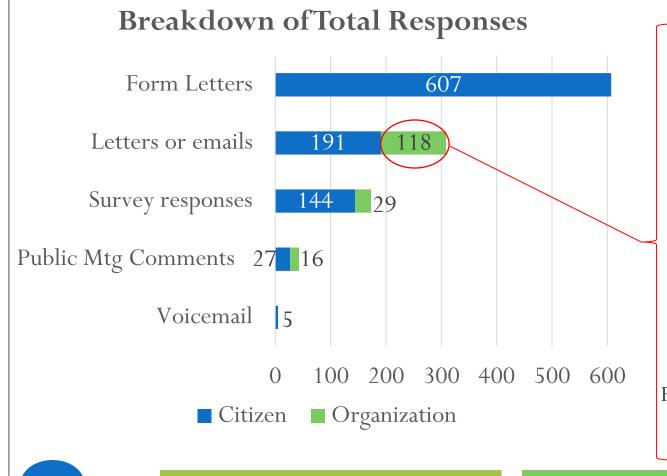
- Review draft meeting minutes of November 19, 2020
- Key themes/topics from received comments on the Interim Clean Energy and Climate Plan for 2030 (2030 CECP)
 - Discussion of EEA's plan to address these key themes/topics in the finalized 2030 CECP
- New GWSA requirements with "Next Generation Roadmap" legislation (S.9)
 - Discussion of the process to develop and finalize the 2025 & 2030 limits, sublimits, and roadmap plans
- Other IAC business
- Public comment

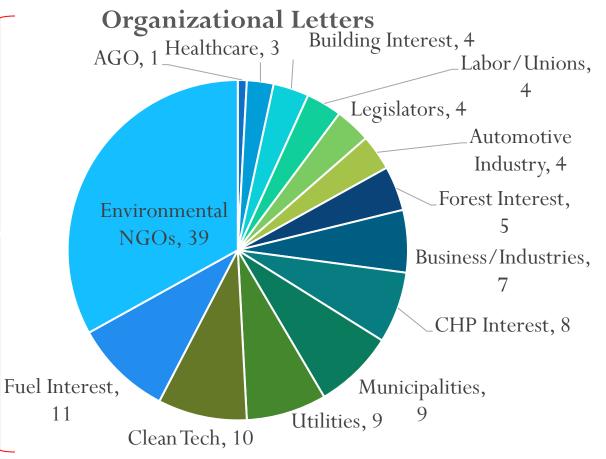
Key Themes/Topics from Received Comments on the Interim 2030 CECP

Summary of Comments (1 of 2)

- Public comments were open from 1/6/2021-3/22/2021
- Highlights
 - Over 1,100 comments received
 - 2 public meetings hosted with 338 attendees
 - Comments from over 50 cities/towns/planning agencies
 - A few joint comments with many municipalities represented
 - 3 groups of "form letters", plus several advocacy comments
 - Mass Audubon organized letter
 - Environmental justice focused letter
 - Canadian hydropower focused letter

Summary of Comments (2 of 2)





Key Issues from Comments: Cross-Cutting

- Significant support for 50% by 2030
- Advocates, citizens, municipalities, labor groups, and industries/businesses consistently raised the need for more commitment and specificity around:
 - 1. Equity and EJ in policy and support
 - 2. Just transition/workforce development and training programs, for both workers in fossil-based industries/businesses and environmental justice populations to build pipelines to high quality and family-sustaining jobs
 - 3. Funding and financing programs to support decarbonization

Key Issues from Comments: Transportation (1 of 2)

• Public transit policy & investment

• Many advocates and citizens asked for continued support and/or expansion of public transportation infrastructure and services.

Light-duty Vehicle Miles Traveled (VMT)

• Several advocates and citizens prefer a commitment to reducing light-duty VMT, not just stabilize it.

Zero emission vehicles (ZEV), incentives

- Several advocates and citizens prefer sooner and broader electrification, including explicit goals for classes of vehicles to be fully electrified (for example: 100% transit & school buses by 2030).
- Several advocates prefer ZEV incentives to be at point of sale, and more incentives for low-and-moderate income consumers.

Key Issues from Comments: Transportation (2 of 2)

TCI-P

• Several advocates and citizens prefer TCI-P to be implemented sooner & would like 70% of auction proceeds to go to EJ communities.

Electric vehicle (EV) charging

• Advocates and automobile industry requests for more explicit commitment to EV charging infrastructure build out (including explicit goal for # of charging stations).

Others requests include support for:

- Transit oriented development
- Bike/Pedestrian infrastructure
- E-bikes
- Hydrogen Fuel Cell Vehicles
- Pods (alternative form of ZEV transportation)

Key Issues from Comments: Buildings (1 of 2)

Net Zero building codes

- Some advocates ask for statewide, mandatory Net Zero codes sooner (i.e. 2025).
- Some industries/businesses are concerned about costs and prefer delaying in statewide implementation of Net Zero code.
- Real Estate associations oppose allowing municipalities to opt-in—want uniform, statewide code.

MassSave incentives relating to fossil fuel-based equipment

- Several advocates ask to end MassSave incentives for fossil fuel-based equipment immediately (not 2024).
- Gas utilities, fuel providers, and Combined Heat and Power (CHP) companies state that abandoning fossil fuel incentives is premature.

Coordination with DPU 20-80 docket

• Several advocates expressed concerns that gas utility 20-80 plans will not be consistent with the 2050 Roadmap findings/decarbonization.

Key Issues from Comments: Buildings (2 of 2)

• Electrification vs. fuel blending and Renewable Natural Gas (RNG)

- Some industries/businesses are concerned about the pace of electrifying heating is not feasible; and advocate that other heating options like biofuels, hydrogen, RNG should be incentivized.
- Some advocates prefer that the potential future use of biofuels or RNG/hydrogen would not delay electrifying heating.

Geothermal Micro Districts

• Some entities recommended pursuing using existing gas infrastructure to develop geothermal micro-districts, including utility pilots.

• Other topics include:

- Ban on gas leaf blowers
- Support for CHP

Key Issues from Comments: Energy Supply (1 of 2)

Renewable energy

- Many advocates prefer to increase Clean Energy Standard (CES) to 100% renewable by 2035.
- An advocate suggested that regional standard for RPS & CES instead of state-by-state
- Some energy companies requested for more on-grid connected storage & pumped hydro storage.

Offshore wind (OSW)

- Some advocates prefer 6 GW of OSW by 2030.
- Some emphasize the importance of OSW projects to minimize environmental impacts.

Solar

- Solar companies and some advocates pushed for 9.3 GW of solar by 2030.
- Many advocates expressed concerns with the land use impact of ground-mount solar projects and prefer more solar on developed/brownfield areas.

Key Issues from Comments: Energy Supply (2 of 2)

Biomass combustion

• Many advocates, the AGO, a state rep, and some citizens asked to end incentives/credit for biomass combustion.

Hydroelectricity

- Several advocates oppose procurement of hydroelectric resources from Canada.
- Some energy companies prefer pumped hydro as energy storage.
- Waste Combustion (see Non-Energy Emissions)
- Other topics include:
 - Infrastructure siting, especially in EJ communities
 - Rate protections, especially for low-and-moderate income customers remaining on natural gas

Key Issues from Comments: Non-Energy Emissions

Gas leak accounting

• Several stakeholders think the current EPA/MassDEP accounting for gas leaks needs to be updated.

SF6 regulations

• Utilities flagged that as more electricity infrastructure is built, it may be challenging to meet the SF6 regulations.

Waste Combustion

• Several citizens, advocates, and the Legislative Zero Waste Caucus pushed back against any continued incineration of waste. Some pushed for a plan to close facilities.

• Other topics that were raised:

Propane as HFC replacement

Key Issues from Comments: Land Use

• Forest management

- Some advocates prefer no tree cutting, especially on public lands.
- Others prefer climate-smart forestry practices, acknowledging dynamic forest ecosystem, and better accounting of forest carbon flow (such as leakage).

Harvested long-lived wood products

- Several groups advocated that wood building products are lower-carbon than concrete and steel, and recommended use of embodied carbon in evaluating building materials.
- Other advocates raised concerns about the cutting of trees for timber products and need to account for lifecycle of mass timber.

Carbon sequestration and land goals

• Some advocates prefer specific goals for biogenic carbon sequestration and/or conservation, reforestation, and restoration of natural and working lands, including metrics for measuring progress.

Urban tree planting

• Some advocates prefer explicit commitment to maintaining and increasing urban tree canopy, particularly in EJ communities.

Stakeholder engagement

- Several advocates and forestry groups prefer more stakeholder engagement around land sector analysis and policies.
- Other topic raised: wetlands and blue carbon

Addressing Key Themes/Topics from Received Comments in Finalized 2030 CECP

- Developing strategies, policies, and programs that can help Massachusetts reach 50% emissions reduction by 2030, with more specificity and timebound commitments
- Significantly expand discussion of and commitment to equity and just transition (including workforce development)
- Address progress tracking
- Consider public consultation and stakeholder engagement

New GWSA requirements of "Next Generation Roadmap" legislation (S.9)

Consultation

- Consult HED & MassDOT for sector-based sublimits (Section 3A)
- Consult MassDEP & DOER to adopt 2050 limit & interim limits (every 5 years) (Section 3)
- Consult "all state agencies and regional authorities (?) with jurisdiction over sources of GHG" on all elements of limits, sublimits, and roadmap plans (Section 4)

Additional Sections/Considerations

- GHG goals and programs in other states and nations
- Total costs and benefits (economic and others) using best available econ models, emission estimation techniques, and other scientific methods
- Regs or other measures undertaken (incl. distribution of emissions allowances) are equitable, minimize costs, maximize the total benefits to the commonwealth, and encourage GHG emissions reductions
- Consistencies across other air quality standards and emissions
- All other benefits including air pollutants, energy source diversification, etc.
- Administrative burden of implementation
- Emissions leakage
- Quantification and verification

Public Process

- Conduct public hearings on all interim limits, the 2050 limit, and accompanying roadmap plans
 - A portion of "these workshops" in regions that have the most significant exposure to air pollutants, including minority and low-income communities
- All modeling and analyses be made public, but can protect confidential information

Sublimits

- Sum of sublimits will not exceed statewide limit
- Sublimits for:
 - Electric power
 - Transportation
 - Residential heating and cooling
 - Commercial and industrial heating and cooling
 - Industrial processes
 - Natural gas distribution service
 - Others

- "Comprehensive, clear, and specific" roadmap plan to realize each limit
 - Each roadmap plan shall be consistent with each other, cumulative in effect, to realize the 2050 GHG limit
 - For each sector how to realize 2050 limit
 - Develop a Natural and Working Lands Plan
 - Quantify the emissions reductions from electric & gas energy efficiency programs
- Numerical benchmark & tracking for emissions reduction products, solutions, and improvements used to achieve GHG limits & sublimits
 - EVs
 - EV charging stations
 - Solar PV and thermal
 - Offshore wind
 - Carbon sequestration
 - Energy storage
 - Heat pumps
 - Anaerobic digestion

- Natural and Working Lands (NWL)
 - Contain a statewide baseline measurement & measure current carbon flux on NWL
 - Adopt statewide goals to reduce GHG emissions & increase carbon sequestration on NWL
 - Develop a NWL plan for each roadmap plan, including:
 - Outline actions to meet statewide goals, including land protection, management, restoration, legislation, laws, regulations, programs, grants, loans, incentives, public-private partnerships
 - Provide guidance & strategies for state agencies, authorities, municipalities, regional planning agencies, nonprofit organizations, landowners, and operators
 - The NWL baseline, goal, and plan shall be integrated into the inventory, baseline assessment, plan, and reporting requirements
 - NWL baselines, goals, and plans shall be consistent with state climate change adaptation and resiliency policies
 - NWL plan shall be developed and informed by a stakeholder process

Deadlines

- 2025 & 2030 emissions limits, sublimits, and roadmap plans shall be adopted and published by July 1, 2022
- Each "roadmap plan" shall be filed with:
 - Both houses
 - Committees on Ways and Means
 - Joint committee on Telecommunications, Utilities, and Energy
 - Joint committee on Environment, Natural Resources, and Agriculture

IAC Discussion

- Input for the CECP for 2025 and 2030
- Suggestions of how the IAC would like to be involved

Other IAC Business

Public Comments