MA ENERGY EFFICIENCY ADVISORY COUNCIL

SECRETARY'S GREENHOUSE GAS (GHG) EMISSIONS-REDUCTION GOALS FOR 2025-2027

March 20, 2024

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GOAL OF TODAY'S MEETING

- Review background of GHG Goal
- Goal Scenario 1
- Goal Scenario 2
- Notable Priorities
- Emissions Factors
- How does this compare to the CECP

GHG GOAL BACKGROUND

- **The 2021 Climate Act, An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy, introduced the requirement for the Secretary of the EEA to release a greenhouse gas goal for the MassSave program's three year plans. Section 3B states:**
  - *Not later than March 1 of every third year of each plan approved under section 21 of chapter 25, the secretary shall set a goal, expressed in tons of carbon dioxide equivalent, for the succeeding plan's necessary contribution to meeting each statewide greenhouse gas emissions limit and sublimit adopted pursuant to this chapter.*
- **Secretary Theoharide's previously set the GHG goal for the 2022-2024 plan with an aggregate goal of 845,000**

2025-2027 GOAL SCENARIO 1

- **Scenario 1 is the primary statewide electric and natural gas goal for the 2025-2027 plans – totals 1 million metric tons with an assumed cost of <$5B**

	Joint Statewide Energy Efficiency Plan	Joint Statewide Gas Efficiency Plan
2030 Annual Cumulative GHG Emission Reductions (tons)	625,000	375,000

2025-2027 Plans	Residential and Income Eligible Electric Energy Efficiency	Residential and Income Eligible Gas Efficiency	Commercial and Industrial Electric Energy Efficiency	Commercial and Industrial Gas Efficiency
2025 Annual Cumulative Emissions Reduction (tons)	125,000	89,000	63,000	14,000
2030 Annual Cumulative Emissions Reduction (tons)	415,000	325,000	210,000	50,000

2025-2027 GOAL SCENARIO 2

- New to this letter, the Secretary directs the Program Administrators to model the achievement of 2.2 million metric tons of emissions reductions in 2030
- This scenario should follow the same relative sector allocations as Scenario 1
- It should also maintain a similar ratio of equity/market rate investment
- Meant to support decisions around securing more EE/Decarbonization funding

2025-2027 PLAN PRIORITIES

- **Secretary issued a set of priorities that she expects will guide the PAs to achieving the GHG goal**
  - Continued prioritization of decarbonization measures, including the development of a green school decarbonization initiative
  - Further emphasis on intergenerational equity and equitable delivery of programs, including a focus on renters and low/moderate income
  - Developing a plan framework for the inclusion of market transformation activities to support long term savings
  - Utilizing a 1.5% discount rate for the social cost of carbon, in alignment with the emphasis on intergenerational equity
  - Support enhancements of customer journey by adopting programmatic designs that support customer adoption of decarbonization technologies
  - Significantly increase workforce development investments through and in coordination with MassCEC

GHG GOAL – ELECTRIC EMISSIONS FACTORS

- The 2022-2024 GHG Goal letter established the following electric emissions factors:

Year	Metric Tons of Emissions per MWh (metric tons of CO_2e)
2025	0.1869
2030	0.1065

- These values were from a draft version of the CECP and have been updated to reflect final 2025/2030 CECP modeling

Year	Metric Tons of Emissions per MWh (metric tons of CO_2e)
2025	0.2359
2030	0.1277

- These changes results in a roughly 20% higher emissions factor for electricity, benefiting efficiency while reducing impact of electrification

GHG GOAL – FUEL EMISSIONS FACTORS

- **The 2022-2024 GHG Goal letter established the following fuel emissions factors:**

Year	Natural Gas (metric tons of CO_2e/MMBtu)	Heating Oil (metric tons of CO_2e/MMBtu)	Propane (metric tons of CO_2e/MMBtu)
2025	0.05307	0.07879	0.06307
2030	0.05307	0.07879	0.06307

- **These factors are direct combustion factors from the EPA. 2025-2027 has added in upstream emissions established in the 2024 AESC**

Year	Natural Gas (metric tons of CO_2e/MMBtu)	Heating Oil (metric tons of CO_2e/MMBtu)	Propane (metric tons of CO_2e/MMBtu)
2025	0.06534	0.08848	0.07849
2030	0.06534	0.08848	0.07849

- **While varying fuel to fuel, the increase in fossil fuel EFs is roughly comparable to the electric EFs**

Thank You

Questions?