
GWSA Regulations Stakeholder Meeting

Massachusetts Department of Environmental Protection

November 2, 2016 - Boston, MA

November 3, 2016 - Worcester, MA

Agenda

- **10:00 AM – 11:00 AM:** **Overview**
- 11:00 AM – 12:00 PM: Gas-insulated switchgear
- 1:00 PM – 2:00 PM: Requirements for transportation
- 2:00 PM – 3:00 PM: State vehicle fleet
- 3:00 PM – 4:00 PM: Methane leaks from the natural gas distribution system
- 4:00 PM – 5:00 PM: General stakeholder discussion



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Massachusetts Supreme Judicial Court:

“...this court concluded that the plain language of [GWSA, Section 3(d)] requires the department to promulgate regulations that address multiple sources or categories of sources of greenhouse gas emissions, impose a limit on such emissions that may be released, limit the aggregate greenhouse gas emissions that are released from each group of regulated sources or categories of sources, set greenhouse gas emissions limits for each year, and set limits that decline on an annual basis.”

May 17, 2016



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Executive Order 569:

***“The Department of Environmental Protection shall promulgate final regulations that satisfy the mandate of Section 3(d) of [GWSA and the SJC Kain decision] by August 11, 2017, having designed such regulations to ensure that the Commonwealth meets the 2020 statewide emissions limit mandated by the GWSA....The Department of Environmental Protection shall:
...consider limits on emissions from, among other sources or categories of sources, the following: (i) leaks from the natural gas distribution system; (ii) new, expanded, or renewed emissions permits or approvals; (iii) the transportation sector or subsets of the transportation sector, including the Commonwealth’s vehicle fleet; and (iv) gas insulated switchgear...”***

September 16, 2016



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Global Warming Solutions Act of 2008

Section 3(c):

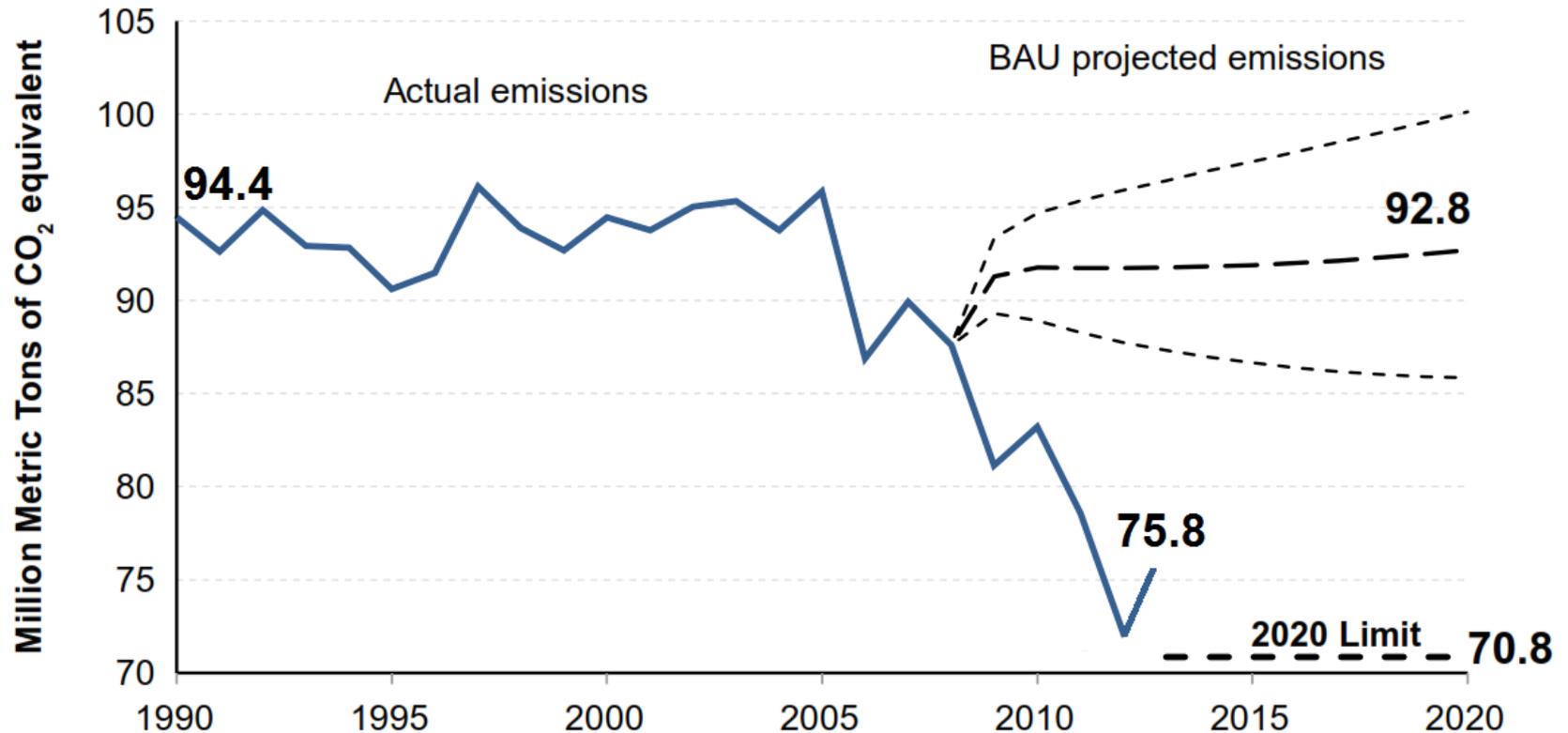
“Emissions levels and limits associated with the electric sector shall be established by the executive office and the department, in consultation with the department of energy resources, based on consumption and purchases of electricity from the regional electric grid, taking into account the regional greenhouse gas initiative and the renewable portfolio standard.”

Section 3(d):

“The department shall promulgate regulations establishing a desired level of declining annual aggregate emission limits for sources or categories of sources that emit greenhouse gas emissions.”



MA GHG Emissions Inventory



Emissions in 2013 were 75.8 MMTCO₂e, which is 19.7% below 1990 level.



Overview of Required GHG Reductions

2020 Emission Limit	25.0% below 1990 Emissions
2013 Actual Emissions (most recent inventory)	19.7% below 1990 Emissions
Additional Reductions Needed (2013 – 2020)	5.3% below 1990 emissions* (minimum)

- December 2015 - EOEEA Clean Energy and Climate Plan (CECP) Update lists policies that “will reduce emissions to at least 25% below the 1990 level by 2020.”

* Throughout this presentation, quantities of greenhouse gas (GHG) emissions are expressed as a percent of 1990 emissions, consistent with the approach used in the CECP Update



Draft Reductions from New and Existing MassDEP Regulations

MassDEP Regulation	New or Draft Amendment?	Section 3(d)?	Estimated Reductions 2013 – 2020*
Transportation Sector Regulations			3.2 - 4.1%
Vehicle GHG Standards	N/A (Existing)	No	
Requirements for MassDOT	Amend	Yes	
State Vehicle Fleet	New	Yes	
Electricity Sector Regulations			4.0%
Clean Energy Standard for Retail Sellers	New	No	
Generator Emissions Caps	New	Yes	
Methane Leaks from Gas Distribution System	New	Yes	0.05%
Gas Insulated Switchgear	Amend	Yes	0.01%
Total			7.3% - 8.2%

* Electricity and transportation reductions are aggregated in this table to avoid double counting across policies.



Transportation Sector Reductions

Source of Reductions	Estimated Reductions 2013 – 2020
Vehicle GHG Standards (Calculated in a manner consistent with the 2015 CECP Update)	3.1%
Requirements for Transportation	0.1% - 1.0%
State Vehicle Fleet (Reflects potential purchases of efficient/electric vehicles)	<0.01%
Total	3.2% - 4.1%

MassDEP intends for amended transportation requirements to add an emissions cap reflecting the combined effect of the regulations listed in this table.



Electricity Sector Reductions

Source of Reductions	Estimated Reductions 2013 – 2020*
Coal Fired Power Plan Retirements (Net of gas generation increase compensating for Brayton, Salem, Mt. Tom, Pilgrim shutdowns)	- 0.2%
Renewable Portfolio Standard (RPS)	0.7%
All Cost Effective Energy Efficiency + Appliance Standards (Net of projected 2020 electric vehicle load)	2.2%
New Clean Electricity (Estimate reflects DOER supply assessment with surplus in-region RE)	1.3%
Total	4.0%

* Assumes that natural gas generation compensates for other changes in load and generation. New MassDEP regulations would establish an emissions cap that reflects aggregate changes in emissions resulting from the policies listed above.



Timeline

- November 7, 2016 Electricity sector meetings
- November 16, 2016 Stakeholder discussion draft comment deadline
- December 16, 2016 Propose regulations
- February 24, 2017 Complete public hearings
- August 11, 2017 Promulgate final regulations



Information posted at:

<http://www.mass.gov/eea/agencies/massdep/air/climate/section3d-comments.html>

Staff Contact:

Jordan Garfinkle

jordan.garfinkle@state.ma.us

617-292-5904

Comments (requested by Wednesday 11/16):

climate.strategies@state.ma.us

