MASSACHUSETTS ENERGY MARKETERS ASSOCIATION

August 30, 2023

Massachusetts Department of Environmental Protection
100 Cambridge Street
Suite 900
Boston, MA 02114

Re: Comments on the Development of a Clean Heat Standard
Sent via email: climate.strategies@mass.gov

The undersigned are members of the Board of Directors of the Massachusetts Energy Marketers Association (MEMA), the trade association representing retail heating oil, renewable liquid biodiesel and propane marketers in the Commonwealth; along with wholesale suppliers of heating oil and biodiesel to New England and the Northeast; producers and distributors of renewable liquid fuels; and companies providing various goods and services to the industry.

Our association has been fully engaged in the stakeholder process (virtual community meetings) initiated by the Massachusetts Department of Environmental Protection (MassDEP) regarding the development of a Clean Heat Standard (CHS) regulation. Prior to MassDEP's activities on a CHS, MEMA Board member Charles Uglietto, served on former Governor Baker's Commission on Clean Heat, and chaired the Commission's work group on a CHS. The work group's recommendations were included in the ***Final Report: Commission on Clean Heat, November 30, 2022.***

The Board of Directors of MEMA believes it is important to provide the following comments to MassDEP on a CHS since the Department has indicated that a draft, or "straw" proposal for the regulation is forthcoming. And where noted, we cite sections of the Commission's final report, and the **Comprehensive Energy & Climate Plan** (CECP) to corroborate our comments.

- **Broad Biodiesel Feedstock Acceptance**

The Commonwealth's objectives to transform the electric grid – ISO New England (ISO NE) – to a system using only renewable fuels for power generation are laudable but this transformation will take many years to accomplish.

In the meantime, the Commonwealth should be utilizing every available pathway to reduce greenhouse gas emissions (GHG) now. Renewable liquid biodiesel, or biofuel, provides such a pathway. Hence, when developing a CHS regulation MassDEP should support the use of all advanced biofuel feedstocks that are recognized by the U.S. Environmental Protection Agency and allowed under biofuel blending mandates in New York, Connecticut, Pennsylvania, and Rhode Island.

The state's Alternative Energy Portfolio Standard (APS) program is proof that biofuel blended with traditional low-sulfur heating is an immediate and cost-effective method of reducing GHG emissions in homes and businesses using heating oil. However, unlike the APS program, MassDEP should not handcuff the heating oil industry at-large by limiting biofuel feedstock credit eligibility under a CHS to only used cooking oil, or so-called "waste" feedstock.

According to a recent study by economic consulting firm Bates White, incorporating higher biofuel blends in the Northeast could provide net emissions reductions of approximately seven million metric tons of CO2 per year.

The study found that, "Decarbonization of fuels currently used to heat homes and businesses can offer a cost-effective means to meet interim GHG reduction goals," thus, "easing the challenges of rapid electrification and the required buildout of renewable generation, transmission, and distribution infrastructure."

- **Scoring the Carbon Intensity of the Electric Grid**

The fuel mix for power generation at ISO NE is consistently dominated by natural gas, with only a small percentage allotted to renewable fuels. On August 30, 2023, natural gas was 53% of the grid's fuel mix, while renewables comprised only 5%. Like other fuels impacted by a CHS and given the state's focus on seeking millions of conversions from fossil fuel systems to air and ground source electric heat pumps, MassDEP must evaluate the carbon intensity of the electric grid.

The Commission on Clean Heat supports this evaluation. The Commission's final report states:

"MassDEP should evaluate how to address life cycle assessment for electricity, as well as the methodology for doing so, given the required decarbonization of the electric grid under existing standards such as RPS and the Clean Energy Standard (CES), as well as how the Massachusetts' GHG inventory methodology and the building sector sublimit methodology account for building and electric emissions." (Final Report: Commission on Clean Heat, Appendix C, p. 45)

“Massachusetts’ GHG inventory counts GHG emissions for electricity in the power sector. Given this, it will be important for MassDEP to determine the appropriate way to evaluate and consider the GHG impacts in the power sector of additional electricity demanded by electric heating technologies, including with regard to seasonal variation and the impact of heating demand on the electric grid during winter months.” (Final Report: Commission on Clean Heat, Appendix C, p. 45)

The final report also stated: “The accounting methodology for heat pumps should consider refrigerant leakage, and program design within the Clean Heat Standard and elsewhere should consider approaches for tracking, analyzing, and remediating refrigerant leakage.” (Final Report: Commission on Clean Heat, Appendix C, p. 46)

The good news is the MassDEP does not need to guess the emission calculations in the scoring of the grid. ISO NE has already published in-depth analysis of the annual average emissions profile for our region. ISO NE utilizes the EPA’s eGrid methodology in these calculations (see below). Although we would argue the Global Warming Potential (GWP) of Massachusetts electricity use is higher given the overwhelming reliance on natural gas in the state, especially during peak winter demand, the eGrid calculations remain extremely useful. However, it is important to recognize, that until such time that ISO NE operates on a 100% renewable fuel mix, the carbon intensity of the grid will only increase during cold weather months due to the anticipated acceleration of conversions from fossil fuels to electric heat pumps in the thermal sector, resulting in higher winter grid loads and higher winter peak loads.

Still, absent of any emissions calculations presented by MassDEP we maintain that ISO NE calculations, utilizing the EPA eGrid methodology, of the emission rates are a suitable scientific baseline. Given that the state of Massachusetts is an active member in ISO NE, it is logical that Massachusetts would utilize the calculation of an organization they are part of and is supported by Massachusetts rate payer’s fund.

Table 1-1
2020 and 2021 ISO New England Average Emissions (ktons) and Emission Rates (lbs/MWh)

Annual Average Emissions and Emission Rates						
	2020 Emissions (ktons)	2021 Emissions (ktons)	Total Emissions % Change	2020 Emission Rate (lbs/MWh)	2021 Emission Rate (lbs/MWh)	Emission Rate % Change
Native Generation						
NO_X	12.09	12.44	2.9	0.25	0.24	-4.0
SO_2	1.88	2.11	12.2	0.04	0.04	0.0
CO_2	31,028	33,439	7.8	654	658	0.6
Native Generation Plus Imports						
CO_2	33,168	34,555	4.2	560	574	2.4

https://www.iso-ne.com/static-assets/documents/2023/04/2021-air-emissions-report.pdf

- **Embracing the GREET Model**

MassDEP has indicated they may not use the globally accepted, highly regarded, and regularly updated Argonne National Laboratory GREET Model for Life Cycle Analysis (LCA) under a Massachusetts CHS. The idea that MassDEP would develop its own unique-to-Massachusetts LCA is inexplicable.

GREET has an impressive team of full-time scientists and engineers. GREET has over 50,000 users globally. GREET is used by the U.S. Department of Agriculture, the U.S. Department of Transportation, the National Aeronautics & Space Administration, the National Renewable Energy Laboratories, and in Massachusetts, GREET is embraced by the Massachusetts Institute of Technology. Additionally, the states of California, Washington and Oregon use GREET for their Low Carbon Fuel Standard programs.

GREET's LCA covers petroleum, natural gas, renewable energy fuels, electric systems, and hydrogen. There is simply no logical reason why MassDEP would not embrace the GREET model to guide a CHS.

- **The CHS Must Be Performance Based and Technology Neutral**

MassDEP must follow the CECP's guidance regarding a performance based and technology neutral CHS. The CECP states: "The fundamental purpose of the Clean Heat Standard is to reduce emissions, not to promote certain technologies for extrinsic reasons." **(**CECP, Appendix B-3, page 61**)**

The CHS must incorporate an array of heating options for homeowners and businesses such as renewable liquid biofuels that reduce emissions immediately, but do not require tens of thousands of dollars in equipment conversion costs. If MassDEP favors only electrification as a potential pathway to reduce GHG emissions under a CHS, then the regulation is simply an electrification rule and not one that is aimed at helping the state meet its ambitious decarbonization goals.

- **Oppose a "Yardstick" Approach for Credit Value**

It is unclear the effectiveness of a yard stick approach. Credit programs such as federal Renewable Fuels Standard, California's Low Carbon Fuel Standard, and the European Renewable Energy Directive (RED) are successful by providing exact credit values. The clarity given in the mechanics of the credit system, developed by years of study and refinement, are what make the successful framework that a credit system can thrive in. Our concern is that an ambiguous "yardstick" approach does not follow the scientific rigor in matching emissions reduction and economic incentive, but rather favors a political preference approach to emission reduction.

- **The Economic Impact of a CHS Needs to Be Determined**

The impact of a CHS on the prices for all heating fuels is going to be significant and despite MassDEP efforts to avoid labeling a CHS a tax, it is just that, and MassDEP must move swiftly to provide additional guidance on the impact the rule will have on heating oil, propane, and natural gas prices. This guidance must include the social cost of carbon figure that MassDEP intends to use in assessing all heating fuels, and the resulting impact on the Alternative Compliance Payment (ACP) for the CHS.

As MassDEP has noted, the Commission report states: "MassDEP should carefully assess the appropriate ACP price to ensure creation of credits is preferable, while also ensuring the cost-burden of ACPs does not unduly burden businesses and ratepayers." (Commission Report, Page 46).

- **Consumers Have a Right to Choose Their Energy Source**

In MassDEP's "discussion document" the Department cites a potential requirement under a CHS that heating oil, propane and natural gas utilities would need to reduce their existing customer base by 3% annually via the replacement of existing fossil-fueled heating equipment with air and ground source electric heat pumps. This requirement was not part of the Commission on Clean Heat's final report, nor is it cited in the CECP.

Any such requirement removes a customers' ability to choose the energy source they want for their home or business, and it would be an unprecedented action against established businesses across the Commonwealth. If MassDEP moves ahead with this requirement, our association will vigorously oppose a mandate that is designed to put our member companies out of business. Our association, and its counsel, believe that this action is in violation of the Dormant Commerce Clause and this constitutional protection takes precedent over state emissions goals.

Respectfully submitted,

Jim Blake, Eastern Oil & Propane, Danvers, MA
Will Beck, Sprague Energy, Portsmouth, NH
Mark Brideau, Brideau Energy, Fitchburg, MA
Scott Bouvier, Global Partners LP, Waltham, MA
Laura Carbone, Alvin Hollis, South Weymouth
Art Chaves, Coan Heating & Cooling, Natick, MA
Leslie Cernak, Heating Oil Partners, Easthampton, MA
Andrew Davison, Cape Cod Biofuels, Sandwich, MA
Bob Duffy, Devaney Energy, Newton, MA
Ben Fawcett, Fawcett Energy Partners, Kingston, MA
Michael Ferrante, Massachusetts Energy Marketers, Wilmington, MA
Erik Geckler, Mirabito Energy Products, Binghamton, NY

Doug Goodman, Dead River Company, ME
Kevin Horgan, Energy North/Haffner's, Lawrence, MA
Tim Kasiek, Petro Home Services, Peabody, MA
Michael Lamparelli, Lamparelli Oil, Stoughton, MA
Chris LeBoeuf, Falmouth Energy, Falmouth, MA
Scott E. MacFarlane, MacFarlane Energy, Dedham, MA
Patrick Melia, Melia Fuel, Marshfield, MA
Paul Nazzaro, Advanced Fuel Solutions, Andover, MA
Ted Noonan, Noonan Energy, Springfield, MA
Jake Nogueira, Atlantic Pratt, Braintree, MA
Dennis O'Brien, Sail Energy/Pioneer Oil & Propane, Portsmouth, NH
Steve Sack, Sack Energy, West Hartford, CT
Danny Silverman, Angus Energy, Fort Lauderdale, FL
Mike Trask, Hall-Trask Equipment, Braintree, MA
Carrie Tomforde, Irving Oil, Portsmouth, NH
Courtney Townsend, Townsend Energy, Danvers, MA
Charlie Uglietto, Cubby Oil & Energy, Wilmington, MA
Gavin Williams, Williams Energy, Braintree, MA
Ken Williams, Scott-Williams, Quincy, MA

Massachusetts Energy Marketers Association
36 Jonspin Road | Suite 231 | Wilmington, MA 01887
Tel: 781-365-0844 | Fax: 781-365-1420
www.massenergymarketers.org