

**Clean Heat Standard (CHS)  
2024 Initial Written Stakeholder Comments  
February – April 2024**

In March 2024, MassDEP posted a [discussion document](#) on options for crediting non-residential buildings and added a new “Q0” section at the beginning of the CHS [FAQ](#) document listing program design options under consideration. At the same time, MassDEP announced that it was concluding this phase of the CHS stakeholder process and set an informal final comment deadline of April 5, 2024. In March and April, MassDEP held a technical session on crediting for non-residential buildings and three virtual community meetings: two focused on prior stakeholder comments and the program design options described in the FAQ Q0, and one on crediting for non-residential buildings.

Below, MassDEP has summarized high level themes from the comments received between February 9 and April 8, 2024. This summary includes comments received on [discussion draft](#) regulatory language for a voluntary early registration program released in November 2023.

Copies of all comments received during this time have been posted on the [CHS webpage](#)<sup>1</sup>, along with copies of comments received earlier in 2024 and 2023 and their accompanying summaries. Additional comments may be submitted at any time to [climate.strategies@mass.gov](mailto:climate.strategies@mass.gov).

**Voluntary early registration program**

MassDEP published [discussion draft regulatory language](#) for a voluntary early registration program for full electrification projects in November 2023. Commenters were generally supportive of the concept of the voluntary early registration program (Acadia Center, DES, EDF) with some suggesting it should be expanded to include other types of projects, such as heat pumps installed at small businesses (EDF), heat pump water heaters (Acadia Center), and all technologies and fuels that could be credited under the CHS (DES, Global). Commenters emphasized that projects registered in the early registration program should be eligible to generate emission reduction clean heat credits as well as full electrification clean heat credits (Acadia Center) and opposed MassDEP’s suggestion to limit the types of full electrification projects that could participate in the early registration program (EDF).

The early registration program included eligibility criteria for projects to qualify for full electrification credits in the CHS. Commenters provided detailed feedback on and suggestions for potential eligibility criteria, including:

- Support for the requirement to meet the Northeast Energy Efficiency Partnership’s cold climate air source heat pump specification (Acadia Center, EDF)
- Opposition to the requirement to include licensed contractor information (SRECTrade)
- Detailed technical considerations MassDEP should evaluate (Duclos)

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<sup>1</sup> See MassDEP’s website for recordings and slides from past CHS stakeholder meetings: <https://www.mass.gov/lists/past-clean-heat-standard-meeting-materials>

- Suggestions for additional types of proof of installation beyond invoices, such as utility permission to operate, inspection records, or operating data (SRECTrade)

Commenters were divided on the voluntary early registration program's approach of allowing residences to keep fossil fuel heating systems for emergency use, with some supporting the approach (EDF) and others suggesting that full disconnection of fossil fuel heating systems should be required (Boston).

Commenters emphasized support for full electrification crediting in specific scenarios, such as public housing (BHA), certified Passive House buildings (Duclos), and hybrid heating systems (Duclos).

Commenters also provided suggestions for how to go about registering full electrification projects, including allowing customers to pre-qualify for full electrification credits before installing a heat pump (Boston), providing a list or database of licensed contractors (Boston, EDF), restricting submission of applications by authorized agents to avoid disputes with homeowners (BHA), committing to a certain number of on-site inspections to identify and discourage fraud (EDF), and including consumer protection measures (Boston). Commenters also suggested there should be multiple ways to demonstrate eligibility for the equity carve out beyond a customer being on a discounted electric rate and that a different eligibility criterion would be appropriate for certain types of buildings, such as master metered low-income multifamily housing (BHA, EDF).

Commenters also addressed the Clean Heat and Emissions Tracking System (CHETS), with one suggesting that MassDEP should utilize an existing tracking system rather than creating a new one (Dandelion Energy). Another commenter suggested that CHETS allow third-party application programming interfaces (APIs) and allow authorized agents to act as aggregators and manage multiple projects within a single account (SRECTrade). One commenter emphasized the importance of the integrity and security of CHETS and requested clarification as to whether CHETS would handle both full electrification and emission reduction clean heat credits (Irving Oil).

### **Crediting for non-residential buildings**

MassDEP published a [discussion document](#) on crediting for non-residential buildings in March 2024 that described mechanisms for crediting emission reductions from electrification and the use of certain non-pipeline delivered clean fuels in commercial and industrial buildings.

Stakeholder feedback on crediting for non-residential buildings focused on which fuels and technologies should be eligible. No commenters opposed crediting for electrification, and many commenters suggested that the CHS should establish a minimum level of electrification required for non-residential buildings in addition to the crediting described in the discussion document (CLF et al.). Commenters were divided on the inclusion of renewable natural gas (RNG) and hydrogen produced from renewable energy that is not blended with fossil fuels. Some supported inclusion of these fuels (Eversource, Irving Oil) and further supported crediting these fuels if they are utility delivered (MCSE, National Grid) whereas many others opposed inclusion of these fuels (Acadia Center, CLF et al.) and requested quantitative analysis from MassDEP as to whether these fuels needed additional state incentives due to existing federal support for these fuels (Acadia Center).

## FAQ Q0

In March 2024, MassDEP published an update to the [FAQ](#) that included a new Q0 describing seven potential changes to the draft program framework released in November 2023 and asked for stakeholder feedback on those options.

*Bullet 1: Adjust the annual rate of increase of the emission reduction standard so that it reaches 4 MMT by 2030 (instead of 5 MMT) and reduce the per-residence crediting rate for heat pumps from 5.0 MT to 4.0 MT for full electrification projects and 2.5 MT to 2.0 MT for other heats.*

Commenters generally supported the idea of reducing the per-residence crediting rate for the operation of heat pumps (Blake, DES, EDF, Jaysan, Kowalski, PGANE, Sumner) but were divided on whether the overall emission reduction standard should be lowered in conjunction with this change. One commenter supported lowering the overall standard (DES), another opposed lowering the standard (EDF), and another requested additional quantitative analysis about this change (Acadia Center). Many commenters suggested that MassDEP add emission reduction crediting for water heating from the start of the program, rather than adjusting the standard down to leave room to add water heating later (Acadia Center, CLF et al.).

*Bullet 2: Hold the annual emission reduction standard constant at 4.0 MMT after 2030 and limit emission reduction credit generation from heat pumps to no more than five years after initial registration for any clean heat project.*

One commenter supported this change (DES) whereas many others requested additional quantitative analysis to evaluate the suggested changes (Acadia Center, CLF et al., Dandelion Energy, EDF). Many of these commenters were particularly concerned about whether this change would reduce the motivation for heating fuel suppliers to comply via electrification relative to delivery of liquid biofuels and making alternative compliance payments (Acadia Center, CLF et al., EDF). One commenter questioned whether this change would result in fewer emission reductions than required to meet Massachusetts' climate goals (EDF). Another commenter noted that payback periods for heat pumps are 7-15+ years so crediting should not be limited to 5 years (Dandelion Energy).

*Bullet 3: Delay the emission reduction credit holding requirement for electricity sellers from 2031 until 2035.*

While several commenters supported this idea (Acadia Center, EDF, Green Energy Consumers), many continued to question the need for any obligation on the electric sector (Acadia Center, CLF et al., EDF, Green Energy Consumers, Vizy). One commenter argued that the CHS should close the price gap between heating with natural gas versus heating with a heat pump (Acadia Center) and another argued that the CHS should be designed to reduce the surcharge Mass Save puts on electric ratepayers (Green Energy Consumers). Conversely, several commenters opposed this change (Blake, DES, Jaysan, Kowalski, PGANE, Sumner) and some suggested the obligation on propane should be delayed (Blake, Jaysan, Kowalski, PGANE, Sumner).

*Bullet 4: Refine the applicability of the just transition fee.*

One commenter supported the idea of refining the applicability of the just transition fee and requested additional details (EDF), whereas another opposed having a just transition fee in the CHS at all (DES).

*Bullet 5: Do not allow emission reduction credit for renewable diesel or biodiesel blends above B20 unless they are derived from waste feedstocks.*

Commenters were divided on the potential changes to biofuel eligibility for crediting, with many supporting the potential changes (Acadia Center, CLF et al.) and others opposing them (Clean Fuels, DES, Global, Irving Oil, MEMA, Sprague). One commenter supporting the change further argued that MassDEP should not allow crediting for any biofuels derived from non-waste feedstocks (Acadia Center). Commenters opposing the changes emphasized that renewable diesel is a drop in solution and does not require modifications to existing infrastructure (Clean Fuels, DES, Global, Sprague), nor do biofuel blends above B20 (MEMA), and questioned assertions that crop-based biofuels compete with food production (Clean Fuels, Irving Oil)

*Bullet 6: Better Align the CHS with Mass Save.*

Commenters supported alignment and coordination with Mass Save (Acadia Center, BHA, Boston, CLF et al., EDF, Eversource, Green Energy Consumers, Rewiring America) and one suggested MassDEP and the Energy Efficiency Advisory Council develop a joint management plan for Mass Save and the CHS (Green Energy Consumers).

*Bullet 7: Consider assigning default ownership of emission reduction credits from operation of heat pumps to electricity suppliers instead of homeowners.*

Many commenters opposed this change without additional quantitative analysis as to whether 1) customers would still capture the value of the emission reduction credits associated with the operation of their heat pumps and 2) fossil fuel suppliers would be less incentivized to comply using emission reduction credits from electrification (Acadia Center, CLF et al., EDF). One commenter raised concerns that this change would misalign the financial risk and reward associated with generating emission reduction credits from heat pumps (Dandelion Energy). One commenter emphasized that the best way to verify use of heat pumps should be considered separately from how to assign default credit ownership (Acadia Center). One commenter emphasized that default credit ownership should be with the retailer for delivered clean heat and the homeowner for installed clean heat (DES).

## **Other Topics**

Commenters addressed a variety of topics beyond the voluntary early registration program, crediting for non-residential buildings, and Q0 in the FAQ, including previous stances on which technologies should be eligible for crediting and detailed supporting information. MassDEP has focused this summary on commenters' new and/or evolved stances and has not reiterated all points of view that have been previously expressed and summarized in earlier rounds of comments.

Commenters continued to express:

- Concerns about the lack of deep technical stakeholder engagement on the potentially complex and wide-ranging economic impacts and how additional technical stakeholder engagement is needed (Acadia Center, CLF et al.)

- Reiterated concerns expressed in the formal public comment period on proposed amendments to 310 CMR 7.71 about confidential competitive information that may be revealed under the proposed amendments (DES, Irving Oil, MEMA)
- Concerns about equity impacts of heat pumps and argued that drop-in renewable fuels and/or propane may better serve environmental justice communities (Blake, Jaysan, Kowalski, MEMA, PGANE, Turner).

Commenters specifically requested:

- MassDEP should share additional quantitative analysis and modeling with stakeholders (Acadia Center, Boston, CLF et al., Irving Oil, MEMA)
- MassDEP should set a limit on how much of a company's compliance obligation can be met via ACP (Acadia Center, CLF et al.)
- MassDEP should add an equity carve-out to the emission reduction standard (DES)
- MassDEP should maintain the equity provisions and direct a significant portion of ACP funds to support participation by low-income households, including paying for bill assistance and pre-work, such as asbestos removal (Boston)
- MassDEP should consider providing assistance to moderate income households as well (Boston)
- MassDEP should consider that the time value of carbon means reductions in the near term are more valuable than reductions later (Clean Fuels, Global, MEMA, NE Chapter, Sprague)
- MassDEP should allow stacking of incentives, focus the CHS on crediting for installation of equipment, and not disadvantage municipal aggregation programs (Boston)
- MassDEP should only include an obligation on the electricity sector if detailed quantitative analysis supports the decision (Acadia Center, Boston, CLF et al., Rewiring America)
- MassDEP should apply the full electrification standard to the electricity sector and not to fuel oil, propane, or natural gas suppliers (DES)
- MassDEP should set ACP prices at a level that incentivizes compliance through purchase of credits and not ACPs and should update them periodically to align with market costs (Boston)
- MassDEP should not include propane as an obligated sector in the CHS until the carbon intensity for electricity is lower than propane and propane blends (Blake, Jaysan, Kowalski, PGANE, Turner)
- MassDEP should pursue an alternative approach that prioritizes rapid installation of standardized energy efficient hybrid heat pumps with smart controls to displace 60-80% of a building's heating requirements with multiyear bulk purchases of heat pumps and installations that homeowners could access at a set price to rapidly scale the market (Luttik)
- MassDEP should clarify how the CHS will interact with the Alternative Portfolio Standard for geothermal (Dandelion Energy)
- MassDEP should delay implementation of the CHS beyond 2026 (Irving Oil)
- MassDEP should assign default ownership of biofuel credits to the entity making investments to blend or import biofuels or should allow credit transfers based on contractual agreements between entities (Irving Oil)
- MassDEP should allow banking of emission reduction credits (DES)
- MassDEP should apply weather normalization to all eligible fuels and technologies, not just electrification (DES)

## Commenters

- Acadia Center\*
- Albrecht, Raymond on behalf of MEMA (MEMA)
- Blake, Jim (Blake)
- Boston Housing Authority (BHA)
- City of Boston (Boston)\*
- Clean Fuels Alliance America (Clean Fuels)
- Dandelion Energy and Carbon Solutions Group (Dandelion Energy)
- Diversified Energy Specialists (DES)
- Duclos, Michael (Duclos)\*
- Conservation Law Foundation joined by Acadia Center, Environmental League of Massachusetts, Green Energy Consumers Alliance, and Pipe Line Awareness Network for the Northeast (CLF et al.)
- Environmental Defense Fund (EDF)\*
- Eversource Energy (Eversource)
- Galligan, Conor (Galligan)
- Global Partners LP (Global)\*
- Green Energy Consumers Alliance (Green Energy Consumers)
- Irving Oil Terminals Inc. (Irving Oil)
- Jaysan Gas Service, Inc. (Jaysan)
- Kowalski, Christopher (Kowalski)
- Luttik, Peter (Luttik)\*
- Mass Coalition for Sustainable Energy (MCSE)\*
- Massachusetts Energy Marketers Association (MEMA)\*
- McNerney, Tim (McNerney)
- National Grid
- Northeast Chapter of the Combined Heat and Power Alliance (NE Chapter)\*
- Propane Gas Association of New England (PGANE)\*
- Rewiring America
- Sprague Energy (Sprague)
- SRECTrade
- Sumner Heating Co., Inc. (Sumner)
- Vizio, Anthony Dylan (Vizio)

\* indicates that the commenter submitted multiple comment letters between 2/9 and 4/5