

MassDEP Discussion Draft Regulation
Voluntary Clean Heat Standard Early Registration Program
For Stakeholder Comment Only
November 2023

MassDEP is developing a Clean Heat Standard (CHS) program, as directed in the 2025/2030 and 2050 Clean Energy and Climate Plans. This discussion draft describes an “early action” voluntary registration program that sets up the procedures to register and generate clean heat credits from installing heat pumps as a residence’s primary heating system. MassDEP intends that these credits could be used for compliance with a future Clean Heat Standard, assuming such a program is eventually finalized. More specifically, the voluntary registration program will allow projects to generate ‘full electrification’ credits associated with the full electrification of a residence’s primary heating system (i.e., when a new clean heat system is installed).¹ Credits generated at projects serving households eligible for a low-income discounted electricity rate will be identified as equity credits.

To be eligible for credits in the early action concept, a heating system must be:

- An air-source or ground-source (geothermal) heat pump
- Capable of meeting 100% of a residence’s heating needs
- Installed at a residence to displace a combustion heating system² or to heat new construction
- Installed after a specific date (i.e., January 1, 2024)
- Energy Star certified
- *For ASHPs only:* meet Cold Climate Air Source Heat Pump Specification Version 4.0 published by Northeast Energy Efficiency Partnerships effective January 1, 2023 or any version thereafter

Registration process: Registration of clean heat projects and issuance of clean heat credits will occur via an online platform created for MassDEP, the Clean Heat and Emissions Tracking System (CHETS). To register a clean heat project, a property owner, or someone acting on their behalf, will need to submit a qualification application to MassDEP that includes information about the location and project, and demonstrates that a clean heat system that meets the eligibility criteria has been installed.

MassDEP will offer a streamlined registration and verification process for projects that are registered through DOER’s Alternative Portfolio Standard program, DOER’s Building Benchmarking program, and projects that received a whole home electrification rebate through Mass Save.

Credit generation: After a project is deemed eligible, it will be assigned credits within CHETS. For simplicity, MassDEP will assign full electrification clean heat credits to each clean heat project based on the number of residential units for which the project provides heat.³

¹ Credits associated with the ongoing operation of a heating system are not included in the early action program, although projects that qualify in the early action program may receive administrative benefits in generating credits associated with operation of a clean heat system once a Clean Heat Standard is established.

² System owners must remove all combustion space heating equipment or commit to limit utilization of remaining combustion equipment to during clean heat system downtime (e.g., repair or service).

³ For example, a clean heat project that provides heat to a single-family residence would receive 1 full electrification clean heat credit whereas a clean heat project that provides heat to 10 apartments would receive 10 full electrification clean heat credits. The equity designation for credits would be handled in the same way (i.e., if 3

Discussion Draft Regulation

310 CMR 7.77 Voluntary Clean Heat Standard Early Registration Program

(1) Purpose. The purposes of 310 CMR 7.77 are to prevent and control pollution to the atmosphere, as required by M.G.L. c. 111, §§ 142A and 142B and to support Massachusetts in achieving greenhouse gas emissions reductions goals established pursuant to M.G.L. c. 21N. The regulatory authority for 310 CMR 7.77 is M.G.L. c. 21N.

(2) Definitions. The definitions in 310 CMR 7.00: *Definitions* apply to 310 CMR 7.77. The following additional terms have the following meanings when they appear in 310 CMR 7.77. Where a term defined in 310 CMR 7.00: *Definitions* also appears in 310 CMR 7.77, the definition in 310 CMR 7.77 is applicable for the purpose of 310 CMR 7.77.

Air Source Heat Pump (ASHP). An electric heating system that uses compression and evaporation to transfer thermal energy from the ambient outdoor environment to a thermal load.

Authorized Agent. An individual that serves under an agreement entered into by each owner of a clean heat system for all dealings with the Department related to 310 CMR 7.77.

Clean Heat System. Equipment serving a residence's annual space heating load that meets the eligibility criteria in 310 CMR 7.77(4).

Clean Heat and Emissions Tracking System (CHETS). An online platform designed to be used to track clean heat credit generation and ownership under a Clean Heat Standard.

Clean Heat Standard. A strategy for limiting emissions from heating described in the Massachusetts Clean Energy and Climate Plan for 2025 and 2030 and the Massachusetts Clean Energy and Climate Plan for 2050.

Complementary Programs. The Department of Energy Resources' Alternative Portfolio Standard, the Mass Save Energy Efficiency Programs, and the Department of Energy Resources Building Benchmarking Program.

Electric Distribution Company. A company engaging in the distribution of electricity or owning, operating or controlling distribution facilities as defined in M.G.L. c. 164, § 1.

End-Use Customer. A person or entity in Massachusetts that purchases electrical energy from an electric distribution company.

Equity Full Electrification Clean Heat Credit (Equity Full Electrification CHC). Full Electrification CHCs that meet the requirements in 310 CMR 7.77(4)(c).

Full Electrification Clean Heat Credit (Full Electrification CHC). Electronic records produced and tracked by the Clean Heat and Emissions Tracking System that identify the installation of a clean heat system that meets the full electrification requirements in 310 CMR 7.77(4) at a location in Massachusetts.

of the apartments in the 10-apartment building had occupants on low-income electric rates, that project would generate 10 full electrification CHCs, 3 of which would be designated as equity full electrification CHCs).

Ground Source Heat Pump (GSHP). An electric heating system that uses compression and evaporation to transfer thermal energy from the ambient underground or water environment to a thermal load.

Owner. Any individual or entity that, alone or in conjunction with others, has legal ownership over the real property upon which a clean heat system is located, including, without limitation, a duly authorized agent of the owner.

(3) Applicability. 310 CMR 7.77 applies to owners who install qualifying clean heat systems and choose to voluntarily register those clean heat systems in the Clean Heat and Emissions Tracking System (CHETS).

(4) Clean Heat Eligibility Criteria. To generate full electrification CHCs, a heating system shall meet the criteria in 310 CMR 7.77(4) and receive a statement of qualification from the Department as described in 310 CMR 7.77(6).

(a) Eligibility criteria for all clean heating systems. Each clean heat system shall:

1. be used to provide space heating at a residence in Massachusetts;
2. be installed on or after January 1, 2024;
3. be sized to meet 90-120% of the total heating load at the outdoor design temperature, per the Manual J Residential Load Calculation Design Conditions as published by the Air Conditioning Contractors of America for the purpose of identifying the heating load of a building, throughout 100% of the conditioned space;
4. be installed to displace a combustion heating system or to provide heat in new construction;
5. be Energy Star™ certified;
6. be installed at a residence where a clean heat system has not previously been registered in CHETS;
7. be installed by licensed contractors in accordance with the National Electric Code and the manufacturer's specifications; and
8. conform to all applicable municipal, state, and federal codes, standards, regulations, and certifications, as well as program requirements.

(b) Additional eligibility criteria for air-source heat pumps (ASHPs). The ASHP heating system shall meet the Cold Climate Air Source Heat Pump Specification, as published by Northeast Energy Efficiency Partnerships for the purpose of identifying ASHP heating systems suitable for use in cold climates.

(c) Additional eligibility criteria for equity full electrification CHCs. Full electrification CHCs shall designated as equity full electrification CHCs if the associated clean heat system serves an end-use customer that is eligible for a low-income discounted rate of an electric distribution company.

(5) Clean Heat System Qualification and Registration in CHETS.

(a) Qualification Application. The owner shall submit a qualification application in a format specified by the Department through CHETS. Each qualification application shall include:

1. Basic Project Information. The qualification application shall include basic project information, including but not limited to:

- a. contact information;
- b. installation site address;
- c. unique building identifiers;
- d. square feet of conditioned space;
- e. property ownership information;
- f. electricity billing meter identifiers; and
- g. occupancy status.

2. Clean Heat System Information. The qualification application shall include, but not be limited to:

- a. make;
- b. model; and
- c. rated capacity.

3. Proof of Installation. The qualification application shall include a copy of a final invoice or information deemed sufficient by the Department to demonstrate installation of the clean heat system. The invoice shall include the make, model, and rated capacity of the clean heat system as well as a date of operability.

4. Licensed Professional Information. The qualification application shall include the name and contact information for any contractors installing the clean heat system. The Department may request evidence of relevant contractor certifications from the owner or directly from the contractor.

5. Equity Status. For clean heat systems applying to generate equity full electrification CHCs, the qualification application shall include evidence that the end-use customer of the clean heat system meets the requirements of 310 CMR 7.77(4)(c).

6. Other Information. Any additional information required by the Department.

7. Attestation. The owner shall sign a written statement in a form specified by the Department attesting that all information provided is true and accurate, and that either:

- a. all combustion space heating in the building has been removed; or
- b. the owner commits to limit the utilization of any remaining combustion equipment on site to during clean heat system downtime (e.g., repair or service).

(b) Submission by an Authorized Agent. For any clean heat system, the owner may identify an authorized agent by completing a signed agreement in a format prescribed by the Department for the authorized agent to submit through CHETS. The agreement shall include, but not be limited to, the following provisions:

1. The owner authorizes the authorized agent to submit a qualification application for the owner's clean heat system(s) in CHETS; and
2. The owner transfers their rights to any full electrification CHCs and equity full electrification CHCs generated by the clean heat system in CHETS to the authorized agent.

(c) Submission Format and Process. The Department may specify the format and process for any submission required pursuant to 310 CMR 7.77, including electronic submission requirements.

(d) Qualification Application Review Procedures.

1. The Department shall electronically notify the owner when the qualification application is administratively complete or if additional information is required pursuant to 310 CMR 7.77(6)(a).
2. If the Department determines that participation in a complementary program provides sufficient evidence, the Department may waive some or all application requirements for a clean heat system or category of clean heat systems.

(e) Issuance of a Statement of Qualification.

1. If the Department finds that a project meets the requirements for eligibility as a clean heat system, the Department shall issue a statement of qualification in CHETS and add the clean heat system to the clean heat registry within CHETS.
2. The statement of qualification shall specify the number of full electrification CHCs generated by the clean heat system, calculated pursuant to 310 CMR 7.77(6)(b) and (c), whether the clean heat system can generate equity full electrification CHCs, and, how many equity full electrification CHCs the system can generate if the clean heat system provides heat to multiple residential units, pursuant to 310 CMR 7.77(6)(d).

(f) Registration of Clean Heat Systems. Upon issuance of a statement of qualification pursuant to 310 CMR 7.77(5)(e), the Department shall add each clean heat system to the clean heat registry in CHETS.

(6) Full Electrification Clean Heat Credit Generation Procedures. Following registration of a clean heat system in CHETS pursuant to 310 CMR 7.77(5)(f), the Department shall allocate full electrification CHCs to the owner subject to the following provisions:

- (a) Full electrification CHCs shall be created and tracked in CHETS.
- (b) Clean heat systems that provide space heating to a single residential unit shall be allocated one full electrification CHC.

(c) Clean heat systems that provide space heating to multiple residential units shall be allocated one full electrification CHC per residential unit served.

(d) Full electrification CHCs shall be designated as equity full electrification CHCs if the residential unit served by the clean heat system meets the eligibility requirements in 310 CMR 7.77(4)(c).

(e) Notification Requirements.

1. Each owner shall notify the Department of any changes they are aware of in the technology, operation, emissions, fuel sources, or other characteristics of the clean heat system that may affect the accuracy of the information included in the clean heat registry. The notification shall be submitted electronically to the Department through CHETS no later than five days following the end of the month during which such changes were implemented. The notification shall state the date the changes were made to the clean heat system or status and describe the changes in sufficient detail to enable the Department to determine if changes to the clean heat registry are warranted.

2. Each owner shall notify the Department of any changes in the ownership or contact information for the clean heat system. The notification shall be submitted electronically to the Department via CHETS no later than five days following the end of the month during which such changes were implemented.

(7) Inspection and Record Retention.

(a) Document Inspection. The Department may audit the accuracy of all information submitted pursuant to 310 CMR 7.77. The Department may request and obtain from any owner information that the Department determines necessary to monitor compliance with and enforcement of 310 CMR 7.77.

(b) Audit and Site Inspection. Upon reasonable notice to an owner, the Department may conduct audits, which may include inspection and copying of records and site visits to the facility of a clean heat system, or including, but not limited to, all files and documents that the Department determines are related to compliance with 310 CMR 7.77.

(c) Record Retention. All documentation used to demonstrate eligibility for any provision of 310 CMR 7.77 shall be retained for five years and provided to the Department electronically or in hard copy as requested by the Department.