

Clean Heat Standards: New Tools for Thermal Savings

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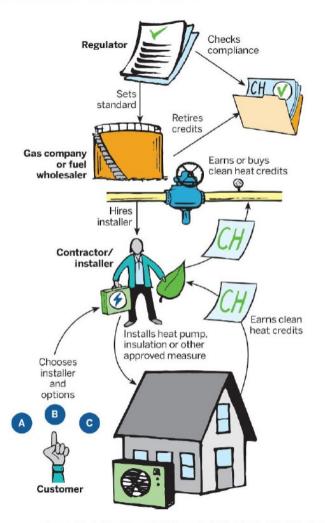
Basic Concept of a Clean Heat Standard (CHS)

The CHS is a **performance standard**, requiring heat providers to deliver a gradually-increasing percentage of low-emission heating services to customers.

- Similar to the renewable portfolio standard
 - Increasing annual requirements pegged to GHG goals
 - Measured by delivery at the customer level
- Clean heat choices: Weatherization, electric heat pumps, low-emission fuels
- Obligated parties can deliver efficiency and clean fuels, help convert heat systems, or purchase credits from others

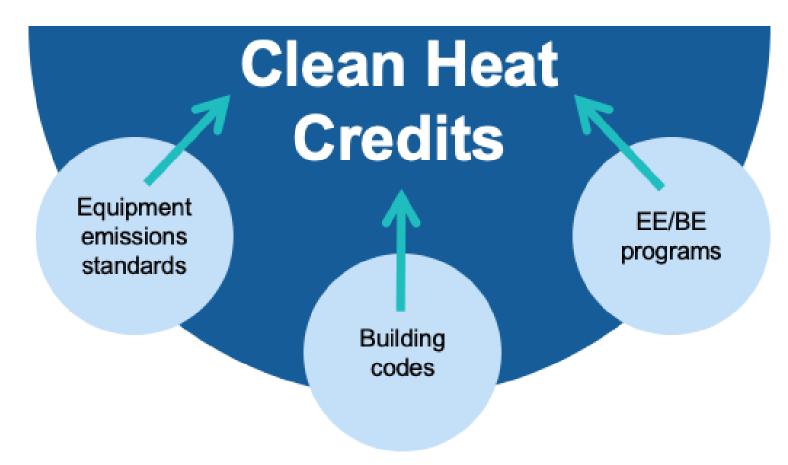
How a CHS Works

Figure 5. Clean Heat Standard sample processes



Source: Adapted from Cowart, R., & Neme, C. (2021). The Clean Heat Standard

Other Programs Support Clean Heat



When complementary programs deliver GHG savings they can earn Clean Heat Credits

Guardrails (1) Equity and Cost

- Progressive inclusion mandate -- deliver clean heat solutions to low- and moderate-income households
 - E.g., Vermont: >50% of residential savings must come from LMI households
- Support **installed measures** (e.g.,Wx, HPs)
 - Lower bills for energy-burdened households
- **Cost-containment** / "safety valve" provisions
 - Options: slow the pace; cap program costs

Guardrails (2) Environmental

- Credits earned on a net lifecycle basis, and only if delivered in state – i.e., no offsets
- Limits on fossil-to-fossil switching? Fossil EE?
- Limits on biofuels, RNG, and woody biomass if eligible, on what basis? Options:
 - Sustainability exclusions on certain fuel pathways
 - Caps on % from some actions (Colorado)
 - Carbon intensity limits (Vermont)
 - No incentives for "excess" methane and RNG

Why a Clean Heat Standard?

- We need a policy driver to deliver large GHG savings
 - Incentives alone not strong enough
 - Public funds and taxes not reliable enough
 - Building codes and bans not fast enough
 - Businesses need a predictable path
- CHS supports diverse heating solutions
- CHS allows multiple delivery pathways
- **Customer choice** will be important
- Performance standards work

Resources

- Regulatory Assistance Project, "<u>A Clean Heat Standard for</u> <u>Massachusetts</u>," Appendix B to the *Massachusetts Clean Energy and Climate Plan for 2025 and 2030. (June 2022)*
- Vermont General Assembly, Vermont Senate Bill S.5 (2023), the "Affordable Heat Act," can be found at <u>https://legislature.vermont.gov/</u>
- Richard Cowart and Chris Neme, "<u>The Vermont Clean Heat</u> <u>Standard</u>" (December 2021), a Vermont Energy Action Network whitepaper
- <u>Massachusetts Clean Heat efforts</u>



About RAP

Regulatory Assistance Project (RAP)[®] is an independent, non-partisan, non-governmental organization dedicated to accelerating the transition to a clean, reliable, and efficient energy future.

Learn more about our work at raponline.org



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