



RAP[®]

REGULATORY
ASSISTANCE PROJECT

June 13, 2025

Clean Heat Standards: New Tools for Thermal Savings

Restructuring Roundtable – Boston MA

Richard Cowart, Principal

Fossil Heat is a Tough Climate Challenge

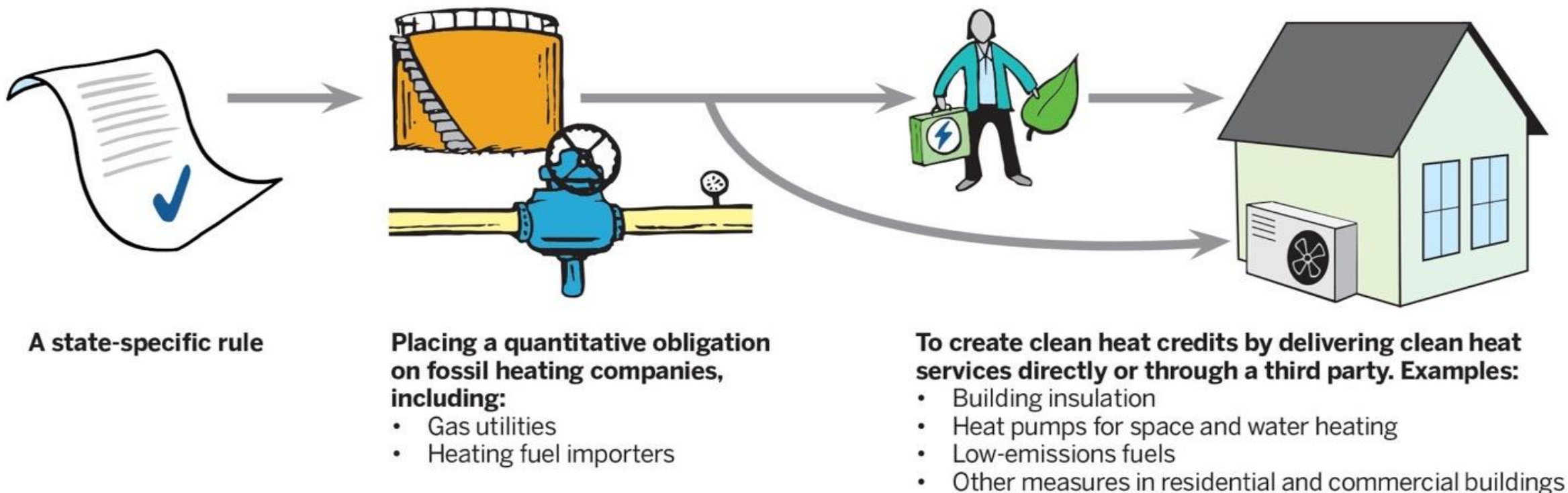
- Heat in buildings = 10% to 34% of climate emissions in US states; on the higher end in New England
- Home heat in the US is 58% fossil (49% gas)
- Essential to address equity
- Buildings are “hard” and “slow”

Basic Concept of a Clean Heat Standard

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

- Similar to a renewable portfolio standard
 - Increasing annual requirements pegged to state goals
 - Measured by **delivery at the customer level**
- Clean heat choices: Weatherization, electric heat pumps, heat networks, low-emission fuels
- Obligated parties and end-users can choose

Elements of a clean heat standard



CHS Design Choices

1. What is the obligation and who must perform?
2. How to promote equity and limit cost impacts?
3. What actions or fuels earn credits?
4. How does CHS mesh with efficiency, codes, utility regulation?

Clean Heat Guardrails:

(1) Affordability and Equity

- **Reduce cost uncertainty** – include cost caps, circuit breakers, etc.
- Promote measures that **lower heat bills** over time
- Require delivery to **low and moderate income HH**
- **Leverage existing programs** to deliver credits at lower cost

Clean Heat Guardrails:

(2) Environmental options

- **Require delivery** to end-users
- Award credits on **lifecycle emissions** basis
- Require minimum number of **installed measures**
- Exclude or limit credits for **unwanted fuels**
- No credits for **fossil-to-fossil switching**

Clean Heat Standards – Status

- **Vermont** Affordable Heat Act -- PUC alternative (stalled)
- **Massachusetts** “Framework Plan” under review
- **Maryland** Climate Council & Executive Order support CHS;
MDE (Dept of Environment) now designing the program
- **Colorado** Utility Clean Heat plans – being implemented by PUC
- At least **six other states** have expressed interest in CHS
- **NY, RI, CT** -- Fuel oil bio-blend mandates
- **France, UK, Ireland** -- working on CHS variations

Clean Heat Standard Benefits

- Sets clear mileposts
- **Fossil pays** - and in proportion to emissions
- **Supports other policies** for buildings (e.g. Wx,EE)
- Can **target delivery** to LMI HH, EJ communities
- Allows diverse clean heat resources, **customer choice**
- Performance standards work !



Source: Pixabay

Resources (1)

- Regulatory Assistance Project, "Meeting the Thermal Challenge: A Clean Heat Standard for Maryland," (October 2023)
- Regulatory Assistance Project, "A Clean Heat Standard for Massachusetts," Appendix B to the *Massachusetts Clean Energy and Climate Plan for 2025 and 2030*. (June 2022)
- Massachusetts Clean Heat efforts
- Vermont General Assembly, Senate Bill 5/Act 18 (2023), the "Affordable Heat Act," can be found at <https://legislature.vermont.gov/>

Resources (2)

- Richard Cowart and Chris Neme, “The Vermont Clean Heat Standard” (December 2021), a Vermont Energy Action Network whitepaper
- RAP/NESCAUM equipment Model Rule for Zero Emission Air Quality Standards (October 2024)
- Colorado PUC clean heat plan
- RAP (Santini et. al.) Clean Heat Standards Handbook, April 2024



About RAP

Regulatory Assistance Project (RAP)[®] is an independent, global NGO advancing policy innovation and thought leadership within the energy community.

Learn more about our work at raponline.org

Richard Cowart
rcowart@raponline.org

Nancy L. Seidman
nseidman@raponline.org

Louisa Eberle
leberle@raponline.org