

A Clean Heat Standard for Massachusetts

The clean heat standard is a regulation that would apply to providers of heating energy in Massachusetts, notably gas utilities and importers of heating oil and propane. These **obligated parties** would be required to serve Massachusetts' residential and commercial customers with gradually increasing percentages of **clean heat services** so that sales of fossil fuels are phased down. Over time, the clean heat standard would replace pipeline gas, fuel oil and propane heat with heat pumps, clean district energy, weatherization, and other verified low-carbon options.

Why do we need a clean heat standard?

The Commonwealth has ambitious goals to reduce climate pollution and to improve energy equity. Heating is one of the state's largest sources of climate pollution, accounting for about 34% of the state's climate emissions. Heating and cooling are essential services, and lower-income families and overburdened communities face higher energy burdens than other consumers. A clean heat standard can be a powerful tool toward meeting climate goals in an equitable manner.

To deliver large greenhouse gas savings from residential and commercial buildings on the time frame required by state legislation, communities need a **positive policy driver** to help building owners improve insulation and change heating systems in the existing building stock. The clean heat standard can be that policy driver, and it can amplify the beneficial impacts of other clean heat policies such as tax incentives and building codes.

What do we mean by clean heat?

The clean heat standard can be designed to promote a variety of heating technologies and fuels, in line with state policies. The standard could be structured to support:

- Weatherization and building improvements.
- Electrification for space and water heating and cooling, particularly heat pumps.
- Low-carbon district heating and geothermal systems.
- Certain biofuels and renewable gases.
- Solar thermal and advanced wood heating.
- Renewable hydrogen.

Because the main goal is to reduce climate pollution, the performance standard itself and the clean heat options are all **measured in tons of greenhouse gas emissions reduced**. Certain clean heat solutions, particularly fuel substitutions, should be **tested on a life-cycle basis** to address fuel production emissions in other states.

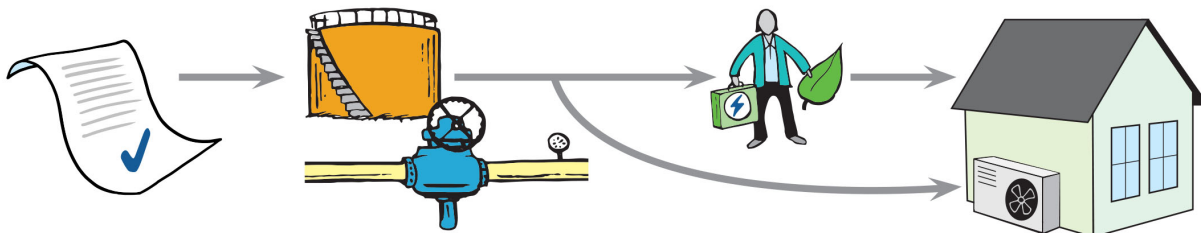
How is equity built into a clean heat standard?

One advantage of the clean heat standard is that specific provisions to promote equity and environmental sustainability can be built into its architecture from the outset. **To ensure that lower-income households and energy-burdened communities are not left behind**, the clean heat standard would involve those communities in program design and require that a substantial fraction of the required clean heat services be secured by delivering services to those customers.

How would the clean heat standard work?

The first steps in creating a clean heat standard are to determine the pace of emissions reductions needed in the thermal sector and to identify the parties that would be obligated to deliver those reductions. Massachusetts has benchmarks for emissions reductions in 2025 and 2030, but it will be necessary to set annual reduction goals to ensure continuous improvement and to appropriately pace the work required to transform heating fuels and systems.

A clean heat standard gives energy suppliers options for meeting their obligation, but the logic of the standard is straightforward: A regulation requires heating energy providers to implement clean heat services.



Each year, the obligated heating energy providers would need to demonstrate that they have earned or acquired enough **clean heat credits** to meet their annual responsibilities to reduce greenhouse gas emissions. A wide range of eligible service providers — not just obligated parties — can earn clean heat credits. This is an important feature of the clean heat standard, given the magnitude of the thermal challenge, and it allows a **market for clean heat credits** to evolve. For example, heating, ventilation and air conditioning (HVAC) contractors can earn credits if they deliver clean heat services even though they are not otherwise required to participate in the program.

A clean heat standard does not require homeowners or businesses to make any particular clean heat choices.

While customers will likely receive incentives, information and support, they will have flexibility in choosing their heating options and the timing for making switches and upgrading their buildings.