The Clean Heat Standard

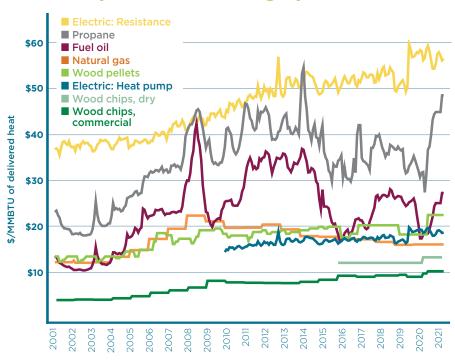
A Performance Standard to Reduce Climate Pollution and Heating Costs

The Clean Heat Standard proposal was developed over the course of a year by a diverse group of experts and stakeholders across Vermont. Implementing the Clean Heat Standard as designed by this working group and described below is a key recommendation in Vermont's Climate Action Plan.

The Clean Heat Standard would:

- → Reduce climate pollution from fossil fuel heating, which makes up more than a third of Vermont's greenhouse gas emissions.
- → Help Vermonters save money on energy by providing services and incentives to switch from high-cost, price-volatile fossil fuels like propane and fuel oil to lower-cost, more price-stable clean heating options like heat pumps, heat pump water heaters, and advanced wood heat. Heating fuel expenses currently make up over a third of Vermonter's energy costs. This proposal aims to reduce the cost of heating, especially for lower and middle income households who currently face a disproportionately large "energy burden."
- → Require fossil fuel corporations to provide cleaner heating options and/or to pay for pollution reduction measures that benefit Vermonters — something we have long required of Vermont's utilities.

Cost comparison of heating options over time



Source: Biomass Energy Resource Center, 2021. Note: electricity prices presented here are a statewide average. Electricity prices vary by utility territory.

- → Allow Vermonters to voluntarily choose whether to switch to cleaner heating options and, if so, provide flexibility in deciding which options are right for them. The Clean Heat Standard will ensure that fossil fuel companies pay for services and incentives that can lead to cleaner and lower cost heating.
- → Put Vermont on a predictable pathway to achieve significant pollution-reduction over time, in line with Global Warming Solutions Act requirements. Emissions reductions will be tracked with rigorous, accurate, and transparent lifecycle greenhouse gas accounting.



Clean Heat Standard FAQs

Q1: What is the CHS based on? Has this been done before?

Like Renewable Portfolio Standards (RPSs) that now exist in Vermont and ~30 other states to clean up the electricity sector and the Low Carbon Fuel Standards that exist in California, Oregon, and Washington to clean up the transportation sector, the Clean Heat Standard would utilize the proven model of a performance standard to clean up the heating sector. Vermont would be the second state to implement a Clean Heat Standard, following Colorado. Vermont is well-positioned to draw upon prior, similar experience with our Renewable Energy Standard (RES) and energy efficiency programs, including how to assess performance measures and make continuous improvements to ensure a transparent, strong, and accountable system.

Q2. What effect will the CHS have on heating costs?

The CHS will make clean heating options more widely available at lower cost, making clean heating both easier and more affordable for Vermonters. The goal is to help Vermonters get off of the high cost, rollercoaster-like prices of heavily polluting fuels like fuel oil and propane (about half of Vermonters currently heat with one of those two fossil fuels, which are shown in gray and purple in the graph on page 1) and be able to take advantage of lower-cost, more price stable, cleaner options, like heat pumps and efficient wood heating.

Based on the track record of similar programs in other states, for Vermonters who decide to continue using fossil fuels in the near-term.

price impacts will likely be minimal to modest, only increasing gradually over long time periods, with time and assistance provided to move away from dependence on polluting fossil heating systems. For instance, in Oregon, a similar program called the Clean Fuels Program has already reduced climate pollution by 5% while only raising the price of gasoline 1%.

Q3. How can the CHS advance equity?

It is essential to ensure a CHS centers equity, and that must be informed by early and ongoing public engagement with frontline communities and impacted Vermonters. However, as a starting point, to advance equity in the energy transition a CHS should:

- Require a high fraction of Clean Heat credits to come from serving low & moderate income homes
- Provide extra credits for providing clean heat in rental housing
- Link clean heat services with weatherization jobs, especially via the Weatherization Assistance Program serving low- and moderate-income Vermonters
- Make incentive payments income-sensitive

Q4. Who is responsible for meeting CHS requirements?

As proposed in the Clean Heat Standard white paper, the obligated parties would be the corporations and utilities that supply fossil heating fuels (large, importing wholesalers, not retail fuel dealers). In more technical terms, the obligation would be placed on the "first jurisdictional importer of fuels."

Q5. Who decides what is "clean"?

The CHS will ensure that heating fuels sold into VT are assessed on a lifecycle GHG emissions basis to ensure the program actually reduces emissions and doesn't just move them elsewhere. This is the approach already taken by California's Low Carbon Fuel Standard and Oregon's Clean Fuels Program, drawing on lifecycle assessments from the GREET model developed at Argonne National Laboratory. An independent Technical Assessment Group (TAG) would conduct the assessments, drawing on peer-reviewed scientific studies, as currently happens with assessments of Vermont's efficiency utilities and for compliance with Tier 3 of the Renewable Energy Standard in transparent public processes, subject to Public Utility Commission (PUC) review.

Q6. What effect will the CHS have on fuel dealers and their customers?

The CHS was designed with Vermont fuel dealers and utilities at the table. One of its goals is to enable fuel dealers to develop sustainable business models by selling a more diverse range of clean heating solutions to Vermonters.

Q7. What effect will the CHS have on utilities and their customers?

The CHS is designed to create a more level playing field between utilities and fuel dealers. Right now, utilities and their customers are delivering and paying for the vast majority of energy efficiency and fossil fuel reduction.

