# Clean Heat Standard (CHS) Conversation

#### Thursday, September 26th, 9:30-11:00 am

## Introduction

**Background**

* Public Utility Commission (PUC) – Independent body that fully regulates electric and natural gas utilities and has some regulatory authority over telecommunications and cable providers.
* Global Warming Solutions Act (GWSA) – Vermont law passed in 2020 that requires reductions in Vermont’s greenhouse gas (GHG) emissions.
* Act 18 – law passed in 2023 that requires the PUC to propose rules that would implement a Clean Heat Standard (CHS) by January 15, 2025. The legislature will then vote on whether to implement the CHS. The law provides the broad structure of a Clean Heat Standard and requires the PUC to fill in the details.

**High-Level Overview**

* The purpose the CHS is to achieve greenhouse gas emissions reductions as required by the GWSA. It specifically addresses the thermal sector.
  + Thermal sector covers non-transportation fuels; these are mainly heating fuels but also include propane used for cooking and fossil fuels used for commercial applications such as kiln drying or sugaring.
* Anyone who sells heating fuels into or within Vermont is required to register with the PUC. A subset of that group (those who first imported thermal fossil fuels into Vermont) will be required to take action to reduce GHG emissions.
* Act 18 requires the PUC to construct the program to ensure that customers with low and moderate income receive a significant portion of program benefits. Ben Bolaski speak to this part and the role of the Equity Advisory Group

**How the Clean Heat Standard works**

* The PUC identifies Clean Heat Measures, which are activities that reduce thermal sector GHG emissions—examples include heat pumps, weatherization, and fuel-switching. It calculates, on a lifecycle basis, how much each measure reduces GHG emissions.
  + A certain number of combined measures will equal a Clean Heat Credit, which is how the parties who are required by law to reduce GHG emissions will show they are complying with the CHS.
* Every three years the PUC calculates how many Clean Heat Credits are needed to reduce Vermont’s thermal emissions from current levels to what is needed to meet the GWSA requirements.
* Every year we look at how much fossil fuel each regulated fuel dealer or wholesale importer sold the prior year and convert that into GHG emissions. Then, based on the reductions we must achieve, we tell each regulated fuel dealer or importer how many clean heat credits they have to retire.
* From there, the regulated entity has two options:
  + 1) Pay a Default Delivery Agent a certain dollar amount per Clean Heat Credit and the Default Delivery Agent performs clean heat measures to get the necessary Clean Heat Credits.
  + 2) Demonstrate that they can achieve the requirements on their own by implementing Clean Heat Measures themselves, or by buying Clean Heat Credits from other entities that are implementing Clean Heat Measures.

## Discussion

* Clean Heat Standard doesn’t address the ‘[Split incentive problem’](https://www.nepm.org/2024-04-24/landlords-renters-incentive-climate-action), making it difficult for clean heat measures to reach renters. It would be challenging to address this through CHS; therefore, the Equity Advisory Group’s Report will recommend parallel programs to create a more equitable ecosystem.
* Consider low-income Vermonters as having no upfront money to do this. Often (not always) they also have low credit scores.
* I have found that in implementing grants for clean heat, not only do weatherization clients not have disposable cash, they are extremely debt-averse and do not want to take out loans at all.
* Most of our clients are on fuel assistance. This allows for only one fuel type. They cannot afford to pay any more [which would happen if they lost fuel assistance], that's why weatherization is there in the first place. It's about anti-poverty, more money in their pockets.
* There would be downsides if weatherization increases costs, this could damage working relationship with clients. If the Clean Heat Standard can increasingly be tied to fuel dealer level so that they fund a portion of weatherization rather than the consumer, that could help. Curious to hear more details about the credits themselves.
* Echo what others say: our clients don't want another bill, period (debt averse). Upfront capital is definitely a problem. Current incentives do not apply because they're through taxes, and low-income Vermonters don't pay enough taxes to get the incentive.
* Client of NEKCA who had flood damage from this summer sent in a video with his story. He has an oil furnace, is a senior citizen on a fixed income and tight budget, and receives fuel assistance. He is doing the right things already: he’s weatherized his home through NETO and has a heat pump already (couldn't remember how it was installed, whether incentives/NETO was involved). He knows how to survive on a low income, with fuel assistance he can do that. But if he uses only the heat pump, he's concerned it will cost more than running the furnace, because he would no longer get fuel assistance [because of switching to electricity]. He would like to run only his heat pump, but it would be too expensive. He understands and agrees with the goals of switching to clean energy, but the impact of doing so would ‘burn my wallet’.
* A major concern with the idea of fuel suppliers doing weatherization services themselves: where would they get the contractors? We can barely find them, and we definitely could not compete with big companies with lots of money. Unless you're going to build the subcontractor base as part of this, that's a big red flag. And, if the fuel suppliers are also going to focus on low-income households, they'll do all the easy-to-weatherize homes and leave Community Action Agencies to deal with the difficult homes (those that need roofs, floors, pest control, vermiculite remediation, etc. before any weatherization can even start—money would have to go towards these).
* Goal of the program is 16% of services to low income & 16% of services to mid-low income. Federal funding only supports lowest income level 'poorest of the poor'. There's not enough money to do the next 16% (mid-low income). State funding is reducing drastically, and that's how we help the mid-low income. It's how we replace roofs and replace knob-and-tube and remove vermiculite. There's a funding cliff coming up in the next 5 years. Pay attention to what the limitations of fed funds are, so we need to keep that in mind. We're not funded past 2029 right now. The way that the funding shifts, when ARPA money dries up for multi-family, that will add demand to the WAP program and further reduce money available for that. Look at the equity of the funding sources. Even though you might see the same amount of funding [for services going to different income tiers], the composition of where that funding actually comes from [Federal vs. State] matters a lot and makes a difference in who you can serve.
* As a middle-class Vermonter, single parent of two kids, $1.70 increase in my fuel would not leave me with any money to fuel switch or weatherize etc. Middle class is not considered in the Clean Heat Standard and will be left out, won't be able to make clean heat improvements.
* Everything you say the Clean Heat Standard wants to do, Community Action Agencies are doing a great job at already; we need more money to do more of it.
  + [Context provided from Clean Heat Standard team member]: I wouldn't expect many obligated parties to get into weatherization on their own. Short term would be more of what's already happening—likely they would obtain clean heat credits generated by the Weatherization Assistance program (obtaining credits through this) to meet their obligations.
* Important to consider the things CHS wouldn't cover such as roof repair etc.
* There's a lot of work & data & targets out there. Remember it's people we're trying to serve. A lot of time, programs and legislation have a different effect than what's intended. We can say there's structure and guidelines (to prevent fraud, malfeasance) but then things become so restrictive that the very people we're trying to help don't benefit. We really need to do case studies as we develop procedures, legislation, and programs. Look at people within a certain profile and ask how it will affect them, then design program to help them. Sometimes the focus on the target prevents people from focusing on who is going to help you meet the target. Let's not get ahead of ourselves setting lofty goals before we find out how it will impact people we serve.
* Our clients are very on top of their finances. The fans we put into homes are $10-15 per year. A big complaint is that $10-15 per year is a huge factor for them. This shows not only how in touch with their budget they are, it also shows how even minor expenses like this are a concern.
* If we're trying to incentivize a behavior change for people living with economic difficulty, there needs to be the opportunity to shoulder the burden with assistance and not have to choose between or sacrifice other things (such as medical support, phone bill).
* I want us to ask who owns houses—not the lowest income people, they're probably renting. Would love to see statistics on that by town (income vs. homeownership). [Clean Heat Standard team member provided homeownership by income data.] We work from LIHEAP lists (everyone who receives fuel assistance) to reach out to people who haven't been served yet. A lot of them have already been served.
* I am working on Rutland Planning Commission’s survey of housing stock. The town has an aging population; they tend to own their own homes. They're getting pinched with the cost of operating them. Some are turning towards short-term room rentals to supplement income. We cannot talk about energy transition without also talking about housing issues.
* There are services Community Action Agencies don’t yet provide to low income Vermonters. For instance, 30% of the homeowners we serve at CVOEO own mobile homes (not sure how this compares to statewide proportion). Most of them have less than 100 amp service, all of which would need to be upgraded to 200 amp for any of the clean heat measures to function. Because of the water system design in a mobile home, a ductless heat pump or mini-split wouldn't work. They would need to be ducted heat pumps in order to make sure water doesn't freeze because drinking water and wastewater are designed to run in same cavity as ducts, which are designed to lose heat into that space to prevent freezing.
* I see folks in the Northeast Kingdom aging in place who own their homes (which are also aging), they are struggling to keep these homes together. I often speak with people who don't qualify for my program, middle class, interested in making the clean heat transition.
* Over the last 4 years, demand for basically every kind of contractor has increased. There are **no** extra contractors, so the price we're paying has doubled! Costs are through the roof to get any of these services done. Contractors are only doing the jobs they want to do (and those aren't the low-income households). Legislature needs to understand there is no workforce.
* Interest from multiple participants in talking with legislators or having legislators come out to see what their program does.

[Responses from Clean Heat Standard team members]

It's not clear to me that people who came up with the CHS ever talked to people with low-income clients -- the legislature needs to hear from you. CHS is a market-based system that is modeled on the regulated electric sector. The PUC can impose rules and requirements about where credits need to come from, but at the end of the day CHS assumes market will respond. In a large state like California, that can drive down cost through competition. But a small state like Vermont is different.

Regarding tying the Clean Heat Standard to fuel dealer level—that is the case, but they'll impose/pass on costs to customers.

Regarding getting more money to Community Action Agencies—that money has to come from somewhere. The CHS and PUC proposals are designed to keep the funding source for clean heat activities within the same sector (thermal). They’re designed to try to get the industry itself to fund these kinds of programs. What I'm hearing is if legislature wants to use general funds or progressive taxation, that's different than CHS and the legislature would need to hear that.

This has been valuable. The Equity Advisory Group has talked about similar concerns. Straight tax on fuel is more direct and potentially limits costs of the program. However, the Equity Advisory Group notes that tax on fuel is directly regressive on low-income households. There’s also the option to do nothing, but that doesn't address inequities of status quo. Equity Advisory Group’s final report will reflect many of your concerns, interested in how we thread that needle.