

Clean Heat Standard Equity Advisory Group  
 Tuesday, September 17, 12:30-3:00 PM ET  
 Agenda

Meeting Link: <https://cbi-org.zoom.us/j/87383177532>

Participant Agenda

|       |   |              |
|-------|---|--------------|
| 12:30 | <b>Welcome &amp; Review of agenda</b><br><ul style="list-style-type: none"> <li>● Initiate recording</li> </ul>   | Mia          |
| 12:35 | <b>Review and approval of 09/17/2024 meeting minutes</b>  | Mia          |
| 12:40 | <b>Updates from TAG liaisons</b>  | Emily / Matt |
| 12:45 | <b>Updates from the PUC</b>   | Dominic      |
| 12:50 | <b>Guest Speaker</b> - Vermont Public Interest Research Group - Ben Ederly Walsh  | Mia          |
| 1:20  | <b>Public Comment</b>   | Ashira       |
| 1:30  | <b>Continued Conversation on Manufactured Homes</b> - Guest Speakers<br>Gayle Pezzo and Mary Houghton   | Chris        |
| 1:50  | <b>Public Comment</b>   | Ashira       |
| 2:00  | <b>Conversation on low income credit requirement feasibility</b><br><i>If we assume that meeting the Low Income credit requirement is difficult/impossible, what is the EAG's recommendation to suggest to the legislature?</i> | Ashira       |
| 2:25  | <b>Workplan for responding to PUC Draft Rule</b>  | Ashira       |
| 2:30  | <b>Report Editing Subgroup Update</b>   | Ben / Mia    |
| 2:45  | <b>Public Engagement Subgroup Update</b>  | Ashira       |
| 2:55  | <b>Next Steps</b>   | Ashira       |
| 3:00  | <b>Close</b>  | Mia          |

# Clean Heat Standard demographic impacts

## Renters and landlords

### Overview

In Vermont about 27% (approximately 72,636) of households are renters.<sup>1</sup> Vermont renters live in a variety of housing types, not limited to multifamily structures. An estimated 17,029 renter households or 23% of renters live in single family homes, and 3,215 (4%) live in manufactured homes<sup>3</sup>.

Vermont renters tend to be disproportionately lower income, with 51% of them (approximately 36,711 households) earning at or below 60% of the Area Median Income (AMI), and 80% earning below 120% of AMI.<sup>4</sup>

A significant majority of renter households, 77.4%, rely on fossil fuels for heating.<sup>5</sup> Data on which Vermont renters pay for which utilities is limited, but Census data indicates that only about 23% of renters (16,447 households) have all utilities included in their rent.<sup>12</sup> The remaining 77% of renters may have any combination of water, heat, and electricity included or not included in their rent.

According to the Department of Energy's Low-Income Energy Affordability Data (LEAD) tool, Vermont renters at 30% or below the AMI face an energy cost burden of up to 15%. For those earning between 30% and 60% of AMI, the energy burden can reach up to

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<sup>1</sup> U.S. Census Bureau: American Community Survey 5-year estimates, 2018-2022 (Table B25032) housingdata.org

<sup>3</sup> U.S. Census Bureau: American Community Survey 5-year estimates, 2018-2022 (Table B25024) housingdata.org

<sup>4</sup> U.S. Census Bureau: American Community Survey 5-year estimates, 2018-2022 (Table B25118, B25119) housingdata.org

<sup>5</sup> U.S. Census Bureau: American Community Survey 5-year estimates, 2018-2022 (Table B25040) housingdata.org

<sup>12</sup> U.S. Census Bureau: American Community Survey 1-year estimates, 2022 (Table B25069). It is likely that a significant portion of these households with utilities included in rent reside in subsidized housing, particularly senior housing, where this practice is more common.

7%. An energy burden of 6% or above is considered high.<sup>14</sup> [Mia look for data on renters using LIHEAP](#)

## Existing challenges / gaps in existing programs

### *Technical Challenges*

An earlier section of this report discussed the technical challenges in weatherizing and electrifying Vermont's existing housing stock, and many of these issues will be encountered in rental homes. Over 33% of rental housing in Vermont was built in 1939 or earlier.<sup>15</sup>

Implementing clean heating systems in rental housing can be challenging due to the diversity and complexity of the housing stock. Different housing types will require different programs and approaches to implementing new technology. Many of Vermont's renters live in older single family homes converted to multifamily structures [Mia add citation](#), with floor plans that can make it difficult to install clean heat technology, such as mini-splits.

New construction can and should design around electrified systems. However, these systems are more complex and can require more long-term costs due to skilled maintenance needs. These additional upgrades increase the developer's cost of the project, potentially reducing the incentive to decarbonize the heating system.

### *Financial Challenges*

Rental property owners and tenants face similar challenges to homeowners when it comes to adopting clean heat measures, such as upfront costs, complexity of retrofitting, and the need for specialized systems. However, additional impediments arise due the split financial incentives between property owners and tenants that homeowners don't face, and some efficiency programs are not available in rental properties [link to program guide](#). Unless crafted correctly, low- and moderate-income renters may not realize any benefits of the CHS, though they may still be burdened with higher fuel costs.

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<sup>14</sup> U.S. Department of Energy, [Low-income Energy Affordability \(LEAD\) tool](#), 2024

<sup>15</sup> U.S. Census Bureau: American Community Survey 5-year estimates, 2018-2022 (Table B25036) [housingdata.org](#)

Some landlords have made significant efficiency investments in their properties, while others financially are unable to or are unwilling to. In addition, there is a wide range of financial capacity and technical expertise among property owners, with some rental property companies owning hundreds of units, and some ‘mom and pop’ landlords only owning a single unit.

Renters often face challenges in reducing their fossil fuel use due to what is commonly called the "split incentive"<sup>17</sup>. When tenants are responsible for paying for heating expenses separately from rent, the benefits of energy efficiency upgrades such as reduced utility costs and greater comfort are enjoyed by tenants, while the costs of making these investments are typically covered by landlords, who do not directly benefit from savings. This misalignment of financial incentives can discourage landlords from investing in efficiency improvements, leading to challenges in reducing overall carbon emissions and utility costs in rental properties.

### *Special considerations for subsidized affordable housing*

Approximately 14,670 renter households, or 18% of all renters, live in multifamily subsidized affordable housing.<sup>23</sup> (Mia Identify specific programs) Subsidized housing serves Vermont’s lowest-income households, with half of residents earning less than \$17,000<sup>24</sup>.

While these households benefit from cost protections due to housing funding restrictions that cap both overall housing costs and estimated utility expenses, many still face significant financial burdens. Some receive assistance through the Low-Income Home Energy Assistance Program (LIHEAP)<sup>25</sup>, though the benefit is often modest due to their relatively lower energy costs.

Despite rent stabilization protections, the development of affordable housing faces increasing challenges due to rising costs. Building apartments in line with Efficiency Vermont’s High-Performance track (required for projects funded by Vermont Housing Finance Agency and Vermont Housing & Conservation Board) is estimated to cost over

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<sup>17</sup> Hynek, Levy and Smith, “[Follow the Money](#)”: [Overcoming the Split Incentive for Effective Energy Efficiency Program Design in Multi-family Buildings](#). American Council for and Energy-Efficient Economy, 2012.

<sup>23</sup> Vermont Directory of Affordable Rental Housing, September 2024 via [housingdata.org](https://housingdata.org).

<sup>24</sup> [Vermont Housing Finance Agency analysis](#) of HUD Low Income Housing Tax Credit (LIHTC) data, 2021.

<sup>25</sup> [Low Income Home Energy Assistance Program \(LIHEAP\)](#) – Federal program intended to assist low-income households with paying for home energy needs.

\$62,000 per multifamily unit<sup>26</sup>. However, Efficiency Vermont is restricted to offering rebates based on savings achieved beyond code, meaning that with each code update, it becomes more difficult to demonstrate the savings and recover costs. Affordable housing developers receive only up to \$3,700 per unit from Efficiency Vermont to cover these additional costs beyond basic code, leading to an estimated gap of \$1.8 million in upfront costs for an average affordable housing.

There are long term benefits to highly efficient building design. However, the lack of full incentives means that most of the cost is borne by public funding intended for building or maintaining affordable housing, making it more challenging for affordable housing funders and developers to house the most vulnerable Vermont renters.

### *Policy and Funding Program Gaps*

The most effective program for assisting renters and overcoming the split incentive in Vermont is the Weatherization Assistance Program (WAP).<sup>27</sup> It is estimated that 30% to 40% of homes weatherized each year by WAP are renter occupied.<sup>28</sup> There are an estimated 50,833 renter households under 80% AMI, equal to about 70% of all renters<sup>29</sup>.

Buildings with low-income tenants are eligible for WAP to fully cover cost-effective weatherization measures and heat pumps<sup>30</sup> once any required health and safety upgrades and repairs are paid for by the landlord. In 2023, the estimated average energy savings for households that utilized WAP was 30%.

However, WAP only serves renters or properties with tenants at or below 80% AMI. An estimated 21,803 Vermonters or 30% of renters are above this threshold and would not qualify for WAP services. More households may be income eligible but live in a building with higher income households that is excluded from multifamily WAP eligibility<sup>31</sup>.

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<sup>26</sup> Vermont Housing Finance Agency, [Assessing energy rebates in Vermont affordable housing](#), September 2024.

<sup>27</sup> [Weatherization Assistance Program \(WAP\)](#) – Program that provides funding for home energy efficiency upgrades to low-income households, helping to reduce energy costs, improve comfort, and lower carbon emissions.

<sup>28</sup> [2024 Report on Performance Indicators for the Vermont Weatherization Assistance Program](#)

<sup>29</sup> U.S. Census Bureau: American Community Survey 5-year estimates, 2018-2022 (Table B25118, B25119) [housingdata.org](https://www.housingdata.org)

<sup>30</sup> This is a temporary program offered using federal ARPA funds.

<sup>31</sup> **Ben to cite technical manual – 2/3 of units must be 80% AMI or lower**

Existing weatherization incentives outside of WAP are inadequate to cover the costs of additional upgrades to buildings that would allow weatherization and electrification projects to be implemented. **Emily to find data on non-WAP renter projects completed.** If a private landlord incurs costs that are not covered by existing funding programs, it is likely that those additional costs will be passed onto tenants through increased rents.

Vermont Housing Finance Agency (VHFA)<sup>32</sup> offers a state-funded pilot on-bill financing program called the Weatherization Repayment Assistance Program (WRAP), which landlords can participate in with renter consent<sup>33</sup>. The program is targeted to households between 80-120% AMI. The renter pays the program charge on the utility bill until they move and experiences the benefits of lower heating costs, at which time the next tenant takes over the charges on the utility bills. There has been a slow program uptake overall, especially among renters. It may be difficult to make the case for renters to invest in a property they do not own, even if they can save on costs.

Vermont Housing and Conservation Board (VHCB)<sup>34</sup> offers a program to address split incentive which also has renters pay towards weatherization projects. (GW) This program is funded through funds designated to build new housing. Weatherization in affordable housing needs a separate bucket of funding. Who is accountable for weatherization statewide? **Mia to research**

In Burlington, the Minimum Housing Code Weatherization Ordinance “is designed to ensure that rental properties are also properly weatherized to keep tenants warm in the winter, cool in summer, and reduce costs, while helping the city achieve its net zero energy goals.”<sup>35</sup> This municipal ordinance applies to high energy use rental buildings and is enforced by the Department of Permitting & Inspections (DPI) to ensure compliance. Currently, no statewide ordinance or enforcement mechanism exists to ensure adequate weatherization in rental properties. Though Burlington has a strong policy and enforcement process in place, project implementation has proved difficult due to workforce constraints. **Ben to research – Pike’s draft language: It should be noted that Burlingtons net zero energy goals are to reduce and eve**

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<sup>32</sup> [Vermont Housing Finance Agency \(VHFA\)](#) – Non-profit organization that provides financing, grants, and support to promote affordable homeownership and rental housing opportunities for low- and moderate-income residents in Vermont.

<sup>33</sup> **Additionally, WRAP is only available in properties with 5 or fewer units.**

<sup>34</sup> [Vermont Housing and Conservation Board \(VHCB\)](#) – State agency that provides funding and support to protect natural resources and develop affordable housing, balancing community development with land conservation in Vermont.

<sup>35</sup> [Burlington Minimum Housing Code Weatherization Ordinance](#)

ntually eliminate fossil fuel use in the thermal and ground transportation sectors, not to reduce greenhouse gasses.

## Potential benefits of CHS for renters

In order to comply with Vermont's Global Warming Solutions Act of 2020, greenhouse gas emissions must be lowered to 80% below 1990 levels by 2050.<sup>36</sup> In the Vermont Climate Action Plan, a primary pathway to these reductions is through decarbonization of the thermal sector.<sup>37</sup> The Clean Heat Standard will help the state to reach these emissions reductions goals and work to mitigate the impacts of climate change – benefiting all Vermonters. If implemented with equity and affordability in mind, the CHS could lower costs to heat and cool homes in the long run, particularly when switching from sources such as oil and propane. According to the US Department of Energy, paired with weatherization upgrades homes that switch from propane to an electric heat pump can generate up to \$2,811 annually in savings, or up to \$2,822 when switching from fuel oil.<sup>38</sup> In cases where buildings are weatherized and mini-splits are installed, residents will enjoy less drafts in the winter and the comfortability of air conditioning in the hotter months.

## Potential harms of CHS for renters

The implementation of the CHS could create financial burden that is shifted onto tenants because of the increased costs associated with CHS compliance. These increased costs could result from landlords recouping investments in property upgrades, increased electricity costs, or the increase in heating costs compared to natural gas per BTU.

While some programs, such as the WAP and Vermont's Housing Improvement Program (VHIP)<sup>39</sup>, already include rent stabilization provisions, there is a need for more comprehensive protections to ensure that CHS implementation does not disproportionately impact low-income tenants. If private landlords utilize incentives to improve their properties, there may be temptation to displace low-income tenants in favor of higher-income tenants that can pay higher rents. (MW)

Due to the size and complexity of some multi-family housing, heat pumps may not be as effective as the system it replaces, causing cold spots in the building such as in the

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<sup>36</sup> Vermont Global Warming Solutions Act of 2020.

<sup>37</sup> Initial Vermont Climate Action Plan December 2021.

<sup>38</sup> U.S. Department of Energy, [For Most Americans, A Heat Pump Can Lower Bills Right Now](#)

<sup>39</sup> Vermont Housing Improvement Program (VHIP) – State program offering grants for repairs needed to bring vacant rental units up to code, add new units, or create accessory dwelling units to increase availability of fair market housing in Vermont. <https://accd.vermont.gov/vhip/vhip-2021-2024WAP>

basement which could lead to frozen pipes in the winter. The need for unanticipated maintenance could also impose further costs on landlords, who might again pass these expenses on to tenants.

## Recommendations

### *Engaging and Incentivizing Landlords/ Financing Solutions for non-profit housing*

One of the primary challenges in implementing CHS in rental properties is ensuring landlord participation and engagement, particularly private for-profit landlords. A possible solution would be to create a **centralized call center or clearinghouse** where renters can reach out to engage their landlords in the program. Additionally, the development of a targeted information campaign would be useful. (Jen M) This would facilitate communication and help bring more landlords into the fold.

It is also important to engage non-profit, institutional landlords in discussions around program development, as they often have a mission to maintain affordable housing (PP). For non-profit landlords who own multifamily properties, capital improvements are heavily reliant on grants, and any increase in operating costs often gets passed on to tenants who cannot afford it. Therefore, the state should provide grants for these landlords to cover the costs of converting to clean heat systems. (CT)

Beyond grants, overcoming the upfront costs of extensive building upgrades will require additional financing options such as further incentives and financial support for home repairs, code upgrades, and electric service upgrades. This could include **companion legislation** to ensure that only landlords who demonstrate financial need—such as those with low-income tenants—receive assistance. It could also require that landlords provide proof that they could not otherwise self-fund the required upgrades (BB). While landlords should be financially responsible for home repairs, such as removing vermiculite or upgrading wiring, **low-interest loans** could be offered to ease the financial burden, especially when low-income residents are involved (GW). Once these required upgrades are complete, existing programs such as WAP and VHIP can provide weatherization funding for eligible properties.

### *Addressing Regulatory Barriers*

Enforcing building codes is crucial to ensuring energy efficiency and safety in rental properties. While local initiatives, such as Burlington's weatherization ordinance, demonstrate potential, they face workforce challenges and cannot meet all needs on their own. To address these gaps, the state should advocate for standardized rental



building codes and their enforcement, which would establish the necessary infrastructure to enhance the quality of rental properties and support decarbonization efforts (MW). These upgraded building codes should require energy efficient heating systems in existing buildings and clean heating systems in new buildings. In tandem, there should be financial incentives for builders to comply with these new building codes.

### *Systematic Infrastructure Upgrades*

Develop a state system to perform a needs assessment (CT) in order assess weatherization opportunities in rental properties (SS). For all population segments, state should focus on replacement costs to turn over HVAC systems. Identify existing programs that are going into homes already where HVAC systems could be flagged as high priority (BB). Use state generated needs assessment to create an inventory of HVAC systems and have capital on hand to target conversion opportunities with a strategic replacement schedule (SS). A quality system for upgrades that includes enforcement could create the infrastructure for higher quality rentals with safety and emissions reductions in mind.

### *Provide different approaches for different housing types*

Due to the complexity of the rental housing stock, different solutions need to be implemented for a variety of situations. Different financing options will need to be made available for non-profit housing organizations than for private for-profit landlords. Affordable housing units are protected by rent stabilization requirements, however there will be gaps in funding to implement the most efficient clean heat options. For private landlords are more likely to pass costs of upgrades onto tenants, so financing options will require rent stabilization measures. Older housing will require more robust funding options for weatherization.

### **Code update/enforcement discussion?**

**It is important for rent stabilization measures to be implemented in tandem with new programs for clean heat measures**

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## Resources:

- [DOE energy burden data](#)

- [CHS data workbook](#)
  - *MW – can share info on VHFA produced resources*
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## Notes

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## Parking lot

GW - happy to help, HUD lists that are auto-qualified

Hydronic heating systems hard to replace

Electric resistance coil heating systems are cheap to install and maintain but expensive to run.

CT - fluctuating fuel costs will be issue no matter if CHS is implemented. HPs do lower costs and variability in home heating, how do we find money to get there

Renters have no say in type of heating system

Tenants crank heat and leave windows open when heat is included in rent

Adoption of programs to help landlords and tenants move away from fossil fuels

- BB - landlords with hydronic heating systems have some options for decarb. There seems there would be an incentive to rent to LI tenants so that the property gets WAP upgrades.

Some programs may not be available for rental properties such as:

<https://www.encyvermont.com/rebates/list/heat-pump-water-heaters#:~:text=Income%2Deligible%20Vermonters%20can%20get,to%20help%20offset%20the%20cost.>

WAP will become more desirable for these credit avenues

PP - CHCs shouldn't be distributed until LMI credits are fulfilled. Changes in building codes would be helpful.