Clean Heat Standard Equity Advisory Group Tuesday, May 14, 12:30-3:00 PM ET Agenda

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

Draft Participant Agenda

12:30	Welcome & Review of agenda	Mia
	Initiate recording	
12:35	Review and approval of 4/30/24 meeting minutes	Mia
12:40	Updates from the PUC	Dominic Gatti,
		PUC
1:00	Technical Advisory Group Report and on-going collaboration	Emily / Matt
	Update from TAG liaison	
1:05	Division of Task Groups	Ashira
	Based on Report Outline	
1:35	Public Comment (10 min)	Ashira
1:45	Equity Rubric Question from TAG	Ashira
2:05	Feedback Public Engagement Subgroup	Emily
	Who can be the liaison with Erin?	
2:25	Feedback from Credit Ownership Group	Mia
2:45	Public Comment (10 min)	Ashira
2:55	Next Steps	Ashira
3:00	Close	Mia

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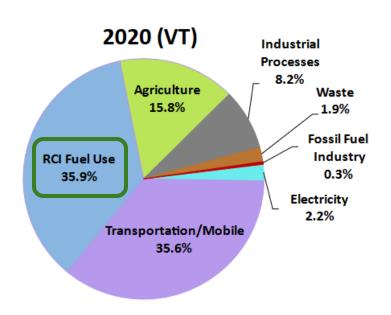


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State of Vermont Public Utility Commission

Overview of the Clean Heat Standard

In 2021, the Vermont General Assembly passed the Global Warming Solutions Act, which requires Vermont to reduce its greenhouse gas emissions by 80% (from 1990 levels) by 2050, with interim requirements in 2025 and 2030. Vermont's Agency of Natural Resources publishes a Greenhouse Gas Inventory every year that provides information on GHG emissions, including the amount from each sector.



The portion labeled RCI (residential, commercial, industrial) fuel use represents the GHG emissions from the heating sector.

In 2023, the Vermont General Assembly passed Act 18, which requires the Public Utility Commission ("PUC") to provide a draft Clean Heat Standard ("CHS") rule to the Legislature by January 15, 2025. Act 18 provides direction as to the general structure of the CHS but requires the PUC to propose significant and important details. The CHS rule would become effective only upon a positive vote of the Legislature. Ultimately, it will be Vermont lawmakers who decide whether and how the CHS will be implemented.

Frequently Asked Questions

What is a Clean Heat Standard?

The purpose of the CHS is to reduce the amount of fossil fuel-based heating fuels sold in Vermont to reduce greenhouse gas emissions from the heating sector. The CHS does this by requiring any company that delivers heating fuels into Vermont to obtain a certain amount of Clean Heat Credits each year. The CHS calls these companies "Obligated Parties."

What is an Obligated Party required to do under the CHS?

Under Act 18, an Obligated Party must obtain and then retire (i.e., not sell or save) a certain number of Clean Heat Credits every year. These businesses can deliver "Clean Heat Measures" (such as weatherization services, heat pumps, biofuel) themselves, purchase Clean Heat Credits from other entities doing that work, or pay a Default Delivery Agent – appointed by the PUC – to generate the credits they are obligated to retire in any given year.

What is a Clean Heat Credit?

A Clean Heat Credit represents the amount of carbon emissions avoided as a result of activities such as weatherization, installation of an electric heat pump, or delivery of a renewable or bio-based fuel. Act 18 requires the PUC to consider a number of technical factors in assigning the appropriate number of Clean Heat Credits to any given activity. The PUC will determine how many Clean Heat Credits will need to be retired by Obligated Parties every year so that emissions from the heating sector will decrease enough that Vermont's heating sector meets the 2030 and 2050 requirements set out in the Global Warming Solutions Act.

What is a Clean Heat Measure?

A Clean Heat Measure is some technology, fuel, or activity that results in less greenhouse gas emissions related to heating. Examples include: weatherization, electric heat pump, and biofuels.

How would I receive services under the CHS?

The CHS would not necessarily change how services are delivered. For example, Community Action Partnerships would continue to deliver weatherization for customers with low income, and individual homeowners could opt to have a heating company install heat pumps. The CHS would operate behind the scenes, and the carbon reduction requirements are expected to lead to increased incentives for clean heat services.

Who would be affected by the CHS?

At a high level, the CHS would affect every Vermonter who uses heating oil, propane, kerosene, or natural gas to heat their home or business. Although individual customers

are not regulated under the CHS, certain heating fuel providers would be. The costs of the CHS requirements are expected to increase the cost of heating fuels.

What would the CHS cost?

This type of program has not been implemented before, and the costs associated with complying with the program are not yet known. The PUC is working with a Technical Advisory Group to estimate the costs of the CHS. This estimate is not expected to be complete until the winter of 2024.

What will be the effect on my fuel bill?

The price per gallon of heating fuel is expected to increase. However, depending on the type of Clean Heat Measure a homeowner installs there should be a decrease in overall energy costs (through weatherization) or more stable and predictable heating costs (through the use of electric heat pumps).

Are there any equity considerations in Act 18?

Yes. Act 18 requires that at least 16% of the necessary Clean Heat Credits that a fuel dealer retires must come from customers with low income and an additional 16% from customers with moderate income. The Act also requires the PUC to consider increasing those percentages to maximize benefits to customers with low and moderate income in the early years.

What are greenhouse gas (GHG) emissions?

Greenhouse gases are gases that trap heat in the atmosphere. They include carbon dioxide (CO_2) , methane (CH_4) , nitrous oxide (N_2O) , and fluorinated gases. The Vermont Greenhouse Gas inventory and the related potential Clean Heat Standard focus on human-caused emissions.

See "Overview of Greenhouse Gases," United States Environmental Protection Agency. https://www.epa.gov/ghgemissions/overview-greenhouse-gases

How would I install Clean Heat Measures at my home or business?

The Clean Heat Standard would not change how you would install Clean Heat Measures – you would still contact your local heating and cooling contractor or heating fuel provider, just as you do now. You may be able to install some weatherization measures on your own. The Clean Heat Standard may result in additional incentives for installing Clean Heat Measures; that is one of the things that we are looking at with this rulemaking.

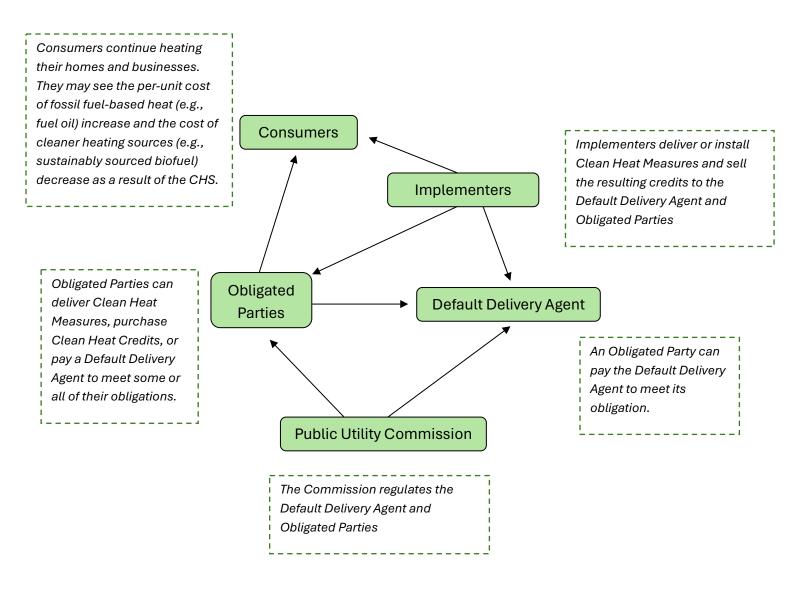
How can I be involved in the potential Clean Heat Standard process?

You can participate in several ways. First, you can participate in public engagement sessions held by the Public Utility Commission's public engagement consultant, the Vermont Partnership for Fairness and Diversity. Second, you can follow and file

comments on the Public Utility Commission's rulemaking through the online case management system ("ePUC"). The website for the Clean Heat Standard rulemaking has links to the related cases, 23-2220-RULE and 23-2221-INV:

https://puc.vermont.gov/clean-heat-standard. Third, you can contact your Legislator directly: https://legislature.vermont.gov/people/search/2024.

Simplified Diagram of Potential Clean Heat Standard Interactions



The Commission intends for this entire resource to promote public understanding and simplify publicly available information related to the design of the potential Clean Heat Standard. All materials are for <u>informational use only</u>. Orders, which are documents signed by the Commissioners and issued by the Clerk of the Commission, are the official means of communicating the Commission's decisions.

Last updated 5/3/2024			

CHS EAG Final Report Outline

Tasks (from Act 18)

- Assessing whether customers are equitably served by clean heat measures and how to increase equity;
- Providing feedback to the Commission on the impact of the Clean Heat Standard on the experience of Vermonters with low income and moderate income
- Providing recommendations to ensure that renters and residents of manufactured homes have equitable access to clean heat measures.
- Identifying actions needed to provide customers with low income and moderate income with better service and to mitigate the fuel price impacts calculated in section 8128 of this title;
- Recommending any additional programs, incentives, or funding needed to support customers with low income and moderate income and organizations that provide social services to Vermonters in affording heating fuel and other heating expenses

Introduction

Executive Summary

Legislative Directive

- What Act 18 includes
- Other requests from PUC

Inventory of existing clean heat landscape

Needs

- Research on existing demographics of households in targeted groups
 - Ex. how many low income households? where do they live?
 - Energy burden research

Identification of research gaps in needs

Existing services

- Stakeholder mapping
- List of existing programs surveyed by PUC

Design process

Equity Framework

- Guiding principles
- Rubric

Review of public engagement process

- Task from Act 18: Recommend strategies for engaging Vermonters with low income and moderate income in the public process for developing the Clean Heat Standard program.
 - o Discuss how we did this.
- Comments on public feedback received
- · Link to additional resources for engagement
 - Climate Council

Credit Ownership

- Issues
- Recommendations
 - How to ensure that customers benefit from reduced costs of measures
 - How to ensure consumer protection

Impacts

- Potential benefits of CHS
 - Addressing existing challenges/gaps in existing programs
- Costs
 - Existing challenges
 - Role of credit costs
 - Increased fuel costs
 - Comment on unknown factors
- Households that are not readily able to access clean heat measures
 - Existing challenges/gaps in programs
 - o Potential benefits of CHS
 - o Potential harms of CHS
 - Recommendations
 - Suggestions to assist households with homes that need updates (electrical panels, etc) to access CHS measures
 - How will enabling upgrades be viewed as part of CHS measures?
- Demographics
- Specific groups' needs:
 - Vermonters of Color

(Not in statute but we should center POC)

- Existing challenges/gaps in existing programs
- Potential benefits of CHS
- Potential harms of CHS
- Recommendations

Low income households

- Existing challenges/gaps in existing programs
- Potential benefits of CHS
- Potential harms of CHS
- Recommendations
- LIHEAP recipients
- Organizations serving low-income households
 - Shelters, food banks

Moderate income households

- Existing challenges/gaps in existing programs
 - Financing
- Potential benefits of CHS
- Potential harms of CHS
- Recommendations

Manufactured homes

- Existing challenges/gaps in existing programs
- Potential benefits of CHS
 - Manufactured home replacement as clean heat measure
- Potential harms of CHS
- Recommendations

Renters

- Existing challenges/gaps in existing programs
- Potential benefits of CHS
- Potential harms of CHS
 - Risk of tenant displacement

- Recommendations
- Multifamily buildings
- Subsidized housing

Small businesses

- Existing challenges/gaps in existing programs
- Potential benefits of CHS
- Potential harms of CHS
- Recommendations

Obligated entities

- Existing challenges/gaps in existing programs
- Potential benefits of CHS
- Potential harms of CHS
- Recommendations

Implementation recommendations

- Mechanism for PUC to ensure equity in its processes
 - Continued consumer education
 - Providing information to public on credit value
 - Continued public engagement
 - Transparency
 - Consumer protection
 - Omsbudperson role at PUC
 - Consumer protection role for another agency (VT Attorney General's Office?)
- Additional research needs recommended for implementation

- Metrics for success
 - o How will PUC assess whether this has been implemented equitably?
- On-going equity review
 - o Recommendation to continue EAG work in some capacity after January?
 - o Should another group/body be created/tasked with equity review?

Additional comments from individual EAG members

Other (not sure how to group)

• carbon emission factors, life cycle analysis methodology



Instructions

Go to

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What design elements / report structure could be added or changed in the report outline?

unanticipated consequences identified in the CHS carbon emission factors, life cycle analysis methodology The most important job of the EAG is to naviagte the increased cost of heating fuel versus the benefit the funds provide low and modeate income
Vermonters. This can not be accomplished unless......

....unless we know the increased cost of fuel. If the credit price is 70-cents per gallon, we may have a different response than if it was 10-cents a gallon

don't believe credit ownership is important enough to warrant its own topic section

The report structure should focus on cost of credits.

Funding sources

Lack of identified funding sources for assistance



What design elements / report structure could be added or changed in the report outline?

Cost of credits.

not making the distintion b/n topics and structure but would inlclude my previous postings

Gaps in existing assistance programs

see my previous postings

Consumer education and transparency with transfer of creditOngoing involvment with PUC oversight

How will PUC set the rate? Based on equity considerations? Or the resources necessary to meet the mandates in the Global Warmiong Solutions Act. One is a low number, the other is very high.

see previous submissions



What topics / content could be included in the report? What does the EAG need to discuss?

Lack of funding sources

Gaps in existing assistance programs

Possibility on front loading low moderate income credit requirements Consumer awreness of program and continuing PUC involvement for consumer protection and education

The PUC must decide whether to set the credit price that reflect equity concerns or whether to base it on meeting the mandates of GWSA. The former is a lower per gallon fee. The latter is high.

The PUC faces the choice of increasing heating costs by 20-30% in the effort to get Vermonters to use less or failing to meet the GWSA mandates.

Focusing execution on of CHS low and moderate income owners first

The PUC needs to ensure that every gallon is tracked and counted. There are hundreds of businesses who sell fuel in and into Vermont but less than 70% have registered. This is a problem of equity.



What topics / content could be included in the report? What does the EAG need to discuss?

The EAG could also determine that the Clean Heat Standard is NOT equitable and urge lawmakers to reject it.

The most equitable solution may be to use all the credits for the low income weatherization program

Movile homes

May XX, 2024

Ms. Holly Anderson, Clerk Vermont Public Utility Commission 112 State Street Post Office Drawer 20 Montpelier, Vermont 05620-2701

Re: **Case No. 23** – EAG comments on Staff Proposal: Initial Ownership of Clean Heat Credits

Dear Clerk Anderson,

The Equity Advisory Group (EAG) for the Clean Heat Standard (CHS) proceeding (Case No.23) has continued to review the straw proposal created by the Vermont Public Utility Commission ("Commission") Staff on credit ownership issues ("Staff Proposal: Initial Ownership of Clean Heat Credits") and wishes to provide additional feedback on matters to consider as the Commission continues its rulemaking.

The EAG reiterates its position that credit ownership for installed measures should originate with the owner of the property in which the property is being installed. This should be the framework even though in many cases, the credit may be immediately thereafter traded to an entity offering financing or incentives.

A system that has credits belonging to the property owner can provide an additional incentive for pursuing greenhouse gas-reducing improvements to their property. Another type of ownership system, for example, one in which the entity providing financing or rebates or otherwise induces the project to occur, will be less equitable and more complicated. This approach would reduce or eliminate negotiating power for low-and moderate-income households to potentially obtain better pricing for these improvements. In addition, since projects may have multiple parties offering financing or incentives, determining who "induces" the project could potentially be complex and create disputes about ownership. In the view of the EAG, transfer of credit ownership should be a matter of contract negotiation, one that is well-supported by information provided to the property owner to aid their decision-making.

The EAG discussed a general waiver of this principle in the final rules if another entity entirely pays for a project, particularly for the Weatherization Assistance Program (WAP). However, other members feel that it may be simpler to have all ownership for installed measures originate with property owners and have WAP recipients sign an

agreement transferring their credits to the WAP agency or the Vermont Office of Economic Opportunity (OEO).

EAG members agree that this credit ownership methodology should be applied to early action clean heat credits for installed measures. EAG members have heard reports that some contractors have already asked property owners to preemptively release credits when installing clean heat measures. However, there cannot have been informed consent transferring ownership of credits during this period, as property owners could not have reasonably understood the potential value of their credits before a CHS framework had been established. It is also unknown whether these property owners were offered any value in exchange for these credits, or whether these projects happened because of the anticipated CHS or would have happened regardless.

EAG members feel that the ownership structure for installed measures proposed above, with property owners initially owning credits, should be the same during the early action period and the full CHS implementation. EAG members acknowledge that retroactively seeking consent to obtain credits from property owners may represent a significant logistical challenge. Nevertheless, it would be inequitable to treat property owners differently during different phases of the CHS implementation.

The EAG felt it was important to provide as much feedback on credit ownership as possible by the May 17th deadline requested by the Commission Staff. However, EAG members still have unresolved questions about issues related to credit ownership, particularly for delivered measures. The EAG anticipates continuing to discuss these issues and providing feedback to the Commission as the CHS framework is finalized.

Sincerely,

Mia Watson, Chair

On behalf of the Clean Heat Standard Equity Advisory Group

VERMONT CLEAN HEAT CREDIT

Customer Information & Agreement Form

Credits may be associated with the product or service described in this document and recognized by the State of Vermont under Act 18 of 2023.

Clean Heat Credit Qualifying Energy Product Delivered	Delivery Date	Gallons/Tons	
Clean Heat Credit Qualifying Appliance Installed	Installation Date	Manufacturer/Mod	lel
Name of Heating Fuel/Service Company	Name of Technician/Delivery Driver		
Company Address	City/Town	State	Zip Code
Company Contact Phone			E-mail
Customer Type: () Residential () Commercial	Custome	r Name/Business	
Customer Address	City/Town	State	Zip Code
Customer Phone		Customer E-mail	
I hereby grant, convey, transfer, and/or assign all cinstallation or delivery of the above energy product Company identified on this form free of any liens, or the standard s	t, appliance, or service desc		
Customer Name	Customer Signature		Date
I attest my household income is less than 6 I attest my household income is less than 1 I decline to state my income.			

The information below is needed to satisfy the requirements set forth in Act 18 and the Clean Heat Standard.

Household Size	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person
60% of State Median Income (SMI)	\$34,525	\$45,149	\$55,772	\$66,396	\$77,019	\$87,642
Household Size	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person
120% of State Median Income (SMI)	\$69,050	\$90,298	\$111,544	\$132,792	\$154,038	\$175,284

The Public Utility Commission recommends that the following information be obtained and retained by heating service and heating fuel businesses to substantiate potential clean heat credit early action measures.

Deliverer/Installer Information

- Deliverer/Installer business name
- Deliverer/Installer contact name
- Deliverer/Installer full business address
- Deliverer/Installer full business email address
- Deliverer/Installer business phone number

Customer Information

- · Address where measure was delivered/installed
- Primary contact name (customer and business, if applicable)
- · Primary contact address (if different from installation/delivery address)
- Primary contact email address
 Primary contact phone number
- Account type (residential or commercial)

Clean Heat Measure Information

- · Date of installation/delivery
- Description of Clean Heat Measure delivered/installed with an explanation of the scope of work that may yield Clean Heat Credits

Baseline

- Equipment
 - · Description of baseline equipment/condition
 - * Make/model (if applicable)
 - * Fuel type (if applicable)
 - * Include any relevant equipment efficiencies and data establishing historical fossil fuel use (if applicable)
 - * Whether equipment will be removed or will remain

Weatherization Measures

- · Energy audit report, initial blower test, if applicable
- Baseline state of insulation and weatherization in the building(s)

Costs/Incentives

- Total cost of measure documented through invoices for purchase of any equipment, materials, and installation costs (assuming a physical measure has been installed at the location). Invoices should include quantities, make/models, and costs.
- Indicate cost share for the measure, if applicable (e.g., what the recipient paid, what costs were borne by the installer/deliverer, etc.)
- Other consumer incentives provided for energy, equipment or service (if known)

Measure-specific Information

- For heat pumps (all types), water heaters, solar hot water, electrical appliances providing thermal end uses and advanced wood heating, the following should also be provided:
 - * Photos of nameplates with model numbers of any equipment being replaced and of any new equipment after it has been installed
 - * Inspection notes or certifications provided related to the system
- For Renewable Propane, BioHeat, Biodiesel, Renewable Diesel, and wood pellets, the following should also be provided:
 - * Documentation of ongoing deliveries, detailing the dates and amounts (gallons) delivered and the blend provided. In the case of blended biofuels, additional documentation that certifies the actual blend percentage purchased/delivered.
 - * If no equipment is being replaced, then photos of nameplates with model numbers of existing equipment should be documented.

Any other information and supporting documentation that will help an evaluator understand where assumptions came from or other unique aspects of the operations of the measures at the location.

STATE OF VERMONT PUBLIC UTILITY COMMISSION

Case No. 23-2220-RULE

Proceeding to design the potential Clean Heat	
Standard	

Order entered: 12/12/2023

ORDER ADDRESSING EARLY ACTION CREDITS

I. INTRODUCTION

On June 30, 2023, the Vermont Public Utility Commission ("Commission") issued an Order opening this rulemaking proceeding to design the potential Clean Heat Standard. In response to a request for clarity on what documentation and other record keeping would be required to substantiate early action credits pursuant to 30 V.S.A. § 8124(c), the Commission requested comments from stakeholders and members of the public on this topic on September 18, 2023. In today's Order, the Commission establishes preliminary documentation and record-keeping practices for potential early action credit claims. This Order should guide clean heat measure providers in documenting their work related to the installation and delivery of clean heat measures that have been ongoing since January 1, 2023, and up until the potential implementation of the Clean Heat Standard.

II. PARTICIPANT COMMENTS

The Commission received 11 comments and 11 reply comments giving feedback on early action credit documentation requirements.

General

The Conservation Law Foundation ("CLF") states that any guidance should be clearly marked with a disclaimer that revisions are likely following analytical work that will form the basis for the program---such as lifecycle emissions, carbon-intensity values, and credit ownership. Thomas Weiss, the Department of Public Service ("Department"), Vermont Gas

¹ 30 V.S.A. § 8124(c): "Early action credits. Beginning on January 1, 2023, clean heat measures that are installed and provide emission reductions are creditable. Upon the establishment of the clean heat credit system, entities may register credits for actions taken starting in 2023."

Systems, Inc. ("VGS"), and Vermont Electric Cooperative Inc. ("VEC") each commented on what measures should be considered potentially eligible for early action credits – with Mr. Weiss and the Department supporting just those that are explicitly listed in 30 V.S.A. § 8127(d), and VGS and VEC seeking regulatory certainty of what constitutes an early action measure. Vermont Public Power Supply Authority ("VPPSA") opined that establishing guidance on early action credits is premature and may set an inappropriate precedent. VGS, the Vermont Fuel Dealers Association ("VFDA"), and the Heating and Cooling Contractors of Vermont ("HCCV") all raised the importance of customer privacy. VPPSA, Efficiency Vermont, and the Town of Stowe Electric Department ("Stowe Electric") all agreed that the Technical Advisory Group should be formed expeditiously and provide clarification on the scope of documentation needed.²

Comments Addressing Recordkeeping and Documentation for Early Action Credits

The VFDA, HCCV, and Clean Fuels Alliance America all suggest that the statutorily required information alone should be sufficient to document early action activities.³ These participants also suggest what records should serve to substantiate this information –invoices, work orders, delivery tickets, and customer self-attestations for income level.

The Department suggests a detailed list of information to substantiate all early action measures. The Department acknowledges that the Commission may expand or narrow what is required based on future recommendations by the Technical Advisory Group. The Department also recommends that notice be provided to customers who undertake clean heat measures that their information may be shared with the Department and its contractors for evaluation and verification purposes. The City of Burlington Electric Department and Green Mountain Power Corporation agree with the Department's recommendations.

The Agency of Natural Resources ("ANR") provided its own list of information and documentation to require for clean heat measure verification. ANR contends that there should be no difference in the information collected to verify either an early action credit or a credit within

² 30 V.S.A. § 8128(a).

³ Act 18 provides a specific list of information required for general credit registration: "the location of the clean heat measure, whether the customer or tenant has a low or moderate income, the type of property where the clean heat measure was installed or sold, the type of clean heat measure, and any other information as required by the Commission." 30 V.S.A. § 8127(l)(2).

the implementation period of the program. ANR's list includes items that would inform its data tracking and analysis efforts related to measuring and tracking progress on climate action and the greenhouse gas emissions inventory.

Efficiency Vermont recommends that the current documentation and recordkeeping requirements for verification of the energy efficiency utility ("EEU") and Renewable Energy Standard Tier III programs be used for early action credits.

Stowe Electric recommends a tracking and reporting protocol that matches the system in place for Efficiency Vermont and the Vermont electric distribution utilities for heat pump measures under a joint rebate program. Stowe Electric also suggests reporting the name of the applicable distribution utility ("DU") jurisdiction in the early action credit program. Stowe Electric contends that this would encourage clean heat measure installers to communicate with the DUs and EEUs to take advantage of existing marketing and outreach campaigns.

Mr. Weiss provided a detailed list of information that would be needed to substantiate a clean heat credit. Mr. Weiss acknowledges that there is substantial overlap among the recommendations as well as some complementary suggestions. Mr. Weiss suggests that certain information may be required for all early action measures whereas other required information may be unique to individual categories of measures.

III. <u>Discussion and Conclusion</u>

General

As more is determined about the design of the potential Clean Heat Standard, and more information is developed through this rulemaking process and the work of the Technical Advisory Group, it may be necessary to revisit and revise the documentation and recordkeeping for early action credits.

We provide the following guidance regarding the information that the Commission recommends entities obtain and retain to claim credits for the delivery or installation of eligible clean heat measures listed in 30 V.S.A. § 8127(d).⁴ Additionally, given the broader definition of

⁴ 30 V.S.A. § 8127(d): "List of eligible measures. Eligible clean heat measures delivered to or installed in residential, commercial, and industrial buildings in Vermont shall include: (1) thermal energy efficiency improvements and weatherization; (2) cold-climate air, ground source, and other heat pumps, including district, network, grid, microgrid, and building geothermal systems; (3) heat pump water

"clean heat measure" in statute and referenced in the text guiding early action credits, the Commission leaves it to the discretion of those engaged in such activities to preserve documentation of potential measures beyond the statutory list.⁵

The Commission adopts customer-privacy-related considerations put forth by several participants. Namely, as mentioned by VGS, the VFDA, and HCCV, all personal customer information should be kept secure by the entity that is collecting the information, as well as their agents and contractors. Additionally, as recommended by the Department, a disclosure notification should be provided to customers who undertake clean heat measures that their information may be shared with the Department and its contractors for evaluation and verification purposes.

Today's Order expressly *does not* address the topics of credit creation, valuation, or ownership. Those topics will be addressed in the future following additional process and input. In the meantime, because the question of credit ownership remains unresolved, we note that Mr. Weiss proposes a helpful and practical suggestion: that documentation of potential clean heat measures generated by the installer/deliverer should be shared with the property owner and retained by the installer/deliverer.

Documentation of Early Action Credits

The Commission must balance the desire to minimize the administrative burden on providers related to clean heat measures with the fact that the success of this program will depend, in part, on regulators' ability to accurately verify and account for the savings that result from clean heat measures. Therefore, we intend to be broad in our guidance on documentation

heaters; (4) utility-controlled electric water heaters; (5) solar hot water systems; (6) electric appliances providing thermal end uses; (7) advanced wood heating; (8) noncombustion or renewable energy-based district heating services; (9) the supply of sustainably sourced biofuels; (10) the supply of green hydrogen; (11) the replacement of a manufactured home with a high efficiency manufactured home and weatherization or other efficiency or electrification measures in manufactured homes; and (12) line extensions that connect facilities with thermal loads to the grid."

⁵ 30 V.S.A. § 8123(3): "'Clean heat measure' means fuel delivered and technologies installed to enduse customers in Vermont that reduce greenhouse gas emissions from the thermal sector. Clean heat measures shall not include switching from one fossil fuel use to another fossil fuel use. The Commission may adopt a list of acceptable actions that qualify as clean heat measures."

and recordkeeping of early action measures to increase the chance that early action measures will generate credits if the Clean Heat Standard program goes into effect.

Given this aim, the Commission has primarily adopted the documentation suggested by the Department, which is the entity responsible for verification of clean heat measures and resulting credits if the Clean Heat Standard goes into effect, and which has decades of experience performing a similar function in the energy efficiency context and for energy transformation projects under the Renewable Energy Standard.⁶ The inclusion of additional documentation is intended to increase specificity, and therefore the likelihood that a potential early action measure will become creditable.

Retaining documentation of the following information does not guarantee eligibility of an action for credit. Even so, we believe collecting as much of this information as is practicable will maximize the likelihood of a measure being awarded credit.

Accordingly, based on the feedback received from stakeholders, we recommend that the following information be obtained and retained to substantiate potential early action measures.

General Information

- 1. Deliverer/Installer Information
 - a. Deliverer/Installer business name
 - b. Deliverer/Installer contact name
 - c. Deliverer/Installer full business address
 - d. Deliverer/Installer full business email address
 - e. Deliverer/Installer business phone number

2. Recipient Information

- a. Address where measure delivered/installed
- b. Primary contact name (customer and business, if applicable)
- c. Primary contact address (if different from installation/delivery address)
- d. Primary contact email address

⁶ Documentation suggested by the Department is in bold text.

- e. Primary contact phone number
- f. Account type (residential or commercial)
- g. Income indicator (self-attestation) Low⁷ / Moderate⁸ / Neither
- 3. Clean Heat Measure Information
 - a. Date of installation/delivery
 - b. Description of Clean Heat Measure delivered/installed
 - i. Explanation of the scope of work that may yield Clean Heat Credits
- 4. Baseline
 - a. Equipment
 - i. Description of baseline equipment/condition
 - 1. Make/model (if applicable)
 - 2. Fuel type (if applicable)
 - 3. Include any relevant equipment efficiencies and data establishing historical fossil fuel use (if applicable)
 - 4. Whether equipment will be removed or will remain
 - b. Weatherization
 - i. Energy audit report, initial blower test, if applicable
 - ii. Baseline state of insulation and weatherization in the building(s)
- 5. Costs / Incentives
 - a. Total cost of measure documented through invoices for purchase of any equipment, materials, and installation costs (assuming a physical

⁷ 30 V.S.A. § 8123(5) "Customer with low income' means a customer with a household income of up to 60 percent of the area or statewide median income, whichever is greater, as published annually by the U.S. Department of Housing and Urban Development or a customer who qualifies for a government-sponsored, low income energy subsidy." Per 2023 data from the U.S. Department of Housing and Urban Development, Vermont statewide 4-person family median income is \$101,600 (https://www.housingdata.org/documents/purchase-price-and-rent-affordability.pdf).

⁸ 30 V.S.A. § 8123(6) "'Customer with moderate income' means a customer with a household income between 60 percent and 120 percent of the area or statewide median income, whichever is greater, as published annually by the U.S. Department of Housing and Urban Development."

- measure has been installed at the location). Invoices should include quantities, make/models, and costs.
- b. Indicate cost share for the measure, if applicable (e.g., what the recipient paid, what costs were borne by the installer/deliverer, etc.)
- c. Incentive program(s), amount(s) and incentive source (e.g., energy efficiency utilities, distribution utilities, Clean Energy Development Fund, or other)

6. Other

a. Any other information and supporting documentation that will help an evaluator understand where assumptions came from or other unique aspects of the operations of the measures at the location

Measure-specific Information

- 7. For heat pumps (all types), water heaters, solar hot water, electrical appliances providing thermal end uses and advanced wood heating, the following should also be provided:
 - a. Photos of nameplates with model numbers of any equipment being replaced and of any new equipment after it has been installed
 - b. Inspection notes or certifications provided related to the system
- 8. For biofuels and green hydrogen deliveries, the following should also be provided:
 - a. Documentation of ongoing deliveries of biofuels, detailing the dates and amounts (gallons) delivered and the blend provided. In the case of blended biofuels, additional documentation that certifies the actual blend percentage purchased/delivered.
 - b. If no equipment is being replaced, then photos of nameplates with model numbers of existing equipment should be documented.
- 9. For line extensions, the following should also be provided:
 - a. Explanation of the load shape: when the use of the measure will occur throughout the day, week, year to be relatable to ISO-NE and

Vermont system peaks

b. Description of any electric load shifting, if applicable

SO ORDERED.

Dated at Montpelier, Vermont, this _	12th day of December, 2	.023
A C	Anthony Z. Roisman Margaret Cheney	PUBLIC UTILITY COMMISSION OF VERMONT
	J. Riley Allen)

OFFICE OF THE CLERK

Filed: December 12, 2023

Clerk of the Commission

Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Commission (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: puc.clerk@yermont.gov)

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