

Clean Heat Standard Technical Working Group

2 February 2024

Agenda

- I. Intro and welcome. Acting Chair (10 minutes)
 - a. We won't have everyone introduce themselves We'll make sure there's quorum, note whether there are members of the public in attendance, and jump right in.
 - b. Take action on whether to record TAG meetings
- II. Review of the agenda. Acting Chair (5 minutes)
 - a. Additions, changes
- III. Review and approval of the minutes of the previous two meetings. Acting Chair (5 minutes)
- IV. Discuss election of TAG Chair and take action as appropriate Chair (5 minutes)
 - a. Is there a candidate? What action should we take?
- V. Updates from the PUC. PUC Staff and Acting Chair (30 minutes)
 - a. Status of PUC procedural schedule
 - b. PUC/ANR update on potential group facilitation
 - c. Introduction of the technical consultant and their scope of work
 1. You can find the SOW at <https://puc.vermont.gov/document/clean-heat-standard-technical-consultant-rfp>
 - d. Sequencing of TAG tasks
 1. Relating the TAG's work to the legislation's requirements
 2. Consideration of subgroups to focus on particular tasks
 1. Applicability of open meeting rules?
- VI. Emissions accounting. Ken Jones (30-40 minutes)
 - a. Clarify TAG's role and the timeline for TAG deliverables
 - b. Description of the issue/challenge
 - c. Discuss approaches for addressing the issue
 - d. Public comment (2 minutes per person, if possible)
 - e. Next steps (e.g., continue the discussion at the next meeting, identify further areas of inquiry, reach a consensus and communicate it to the PUC, etc.)
- VII. Credit ownership. PUC staff (30-40 minutes)
 - a. Clarify the TAG's role and timeline for TAG deliverables
 - b. Summary of recommendations submitted by participants in the rulemaking
 - c. Identify key issues
 - d. Discuss approaches
 - e. Public comment
 - f. Next steps
- VIII. Other subject matters. Acting Chair (10 minutes)
 - a. Emissions scheduling
 - b. Carbon intensity
- IX. Scheduling of TAG meetings. Acting Chair (10 minutes)
 - a. Day, time, frequency
- X. Closing. Acting Chair (5 minutes)
 - a. Other matters

To: Technical Advisory Group of the PUC for the Clean Heat Standard

From: Ken Jones, TAG member

Date: January 24, 2024

Topic: Addressing the Life Cycle and Inventory Differences in Clean Heat Credit Determination

It is my read of Act 18 that Life Cycle Analysis is the basis for establishing Clean Heat Credits. Therefore, the PUC should initiate the ruling to define a Clean Heat Credit:

Annual reduction in CO2e as measured by life cycle analysis

The PUC will then need to estimate the impact of life cycle analysis defined credits on the inventory-based requirements in the GWSA.

A first analytic step in carrying out this analysis is to produce the following table

Fuel	Life Cycle Analysis based CO2e emissions on a per MMBTU basis	Life Cycle Analysis based CO2e emissions on a physical unit basis	Inventory based CO2e emissions on a per MMBTU basis	Inventory based CO2e emissions on a physical unit basis
Fuel oil				
Propane				
Natural Gas				
Wood – cord wood				
Wood – pellet				
Wood – chip				
Electricity – resistance				
Electricity – heat pump				
RNG				
B-100 – from waste				
B-100 – from seed oils				

A second step is one that will be required even absent the LCA – Inventory calculation difference and that is to establish an estimate of the changes in each fuel use as the result of Clean Heat Measure installation. For example, the installation of a heat pump (ultimately in several categories) will reduce the use of fuel oil, propane, natural gas and wood by X amount. Those installations will also increase the use of electricity (characterized as electricity – heat pump). When the estimates for each category of Clean Heat Measure are established, the sum of changes in both the LCA calculated emissions and Inventory based emissions will result.

Establishing the retirement schedule for Clean Heat Credits will require an annual target for reductions in the Inventory-based reduction estimate. The iterative process for considering the number of installations of each clean heat measure category will repeat to arrive at an estimate for the number of each measure intended during the implementation year.

It is true that the Clean Heat Standard is based on the economic principle that obligated entities will pursue the most cost effective technology. However, until the market is established, which cannot happen before the PUC establishes rules for implementation, the analysis will have to be based on estimates. The consideration of the difference between LCA and Inventory-based emission calculations adds a complexity to the estimation process, but this will be one of many complexities and should not be the basis for slowing down the analytic process.

To: Technical Advisory Group of the PUC for the Clean Heat Standard

From: Ken Jones, TAG member

Date: January 24, 2024

Topic: Credit Ownership

The PUC has received several filings regarding their request on the topic of Clean Heat Measure Ownership. In general, the responses raise the following possibilities:

- Building owners are the initial owner
- Measure installers are potential owners
- Entities providing incentive funding are potential owners
- Obligated parties are potential owners
- There is a difference between credits established through installed measures and the delivery of reduced carbon fuels (RNG and biodiesel)

One response I did not find is the difference between early action credits (those established before ownership rules are finalized) and “regular” credits that will arise from measures installed after the PUC establishes ownership and credit value rules. There is a significant economic difference between these different forms of credits (specifically important for installed measures, and less so for delivered fuels with reduced carbon). Early action credits result from installations that were not prompted by dollar values for future credit claims. At the time when the PUC rules are finalized, those early action measure installations will immediately leap in value from zero to the PUC-established market rate. This is a clear definition of a “windfall” and deserves a particular consideration.

But, before the early action credit discussion, it is possible that the ownership issue for “regular” credits (established after a time certain in PUC rule making) can be clearly resolved:

All credits that result from installed measures are owned by the building (or facility, in the case of a district heat project) owner unless and until other parties that are involved in the installation and/or the financing of the installation have a signed agreement with the building owner regarding the ownership of those credits. Credits related to the delivery of reduced carbon fuels are owned by the fuel delivery company.

It is my suggestion that the PUC initiate draft language to be used by installers, incentive providers, Default Delivery Agents and obligated parties that will be required to be in place for any of those future clean heat measure projects to be allowed as credits available for the market and retirement.

Early Action Credits

It appears to be the intent of Act 18 that incentives be in place for the accelerated installation of clean heat measures starting on January 1, 2023. To my knowledge, there are no cases where installations have taken place with a financial consideration of receiving dollar benefits from the sale of clean heat credits. In fact, the PUC may want to put out a request for any cases where installers or others made business decisions based on the future receipt of clean heat credit compensation.

If those early actions took place without consideration of clean heat credit compensation, then the issue of the windfall should be addressed. Act 18 clearly intends for early action credits to be a part of the market for obligated parties to meet their reduction targets, but windfalls are typically a market flaw and the ownership structure should be designed to maximize economic and greenhouse gas emission reduction benefits.

The challenge with this ownership issue is that until the PUC rules are finalized, the value of the credit is close to zero, and therefore any market is taking on a significant risk to acquire those credits. There are three potential owners that could initiate an early credit collection process and direct the value of the windfall directly to the targets of Act 18.

The State – Revenues associated with the future windfall value of the credit could be directed to programs for the reduction of greenhouse gas emissions. Any rule allowing for the state to collect and market the credits could include directions for the use of the resulting revenues. Of course, the state will need to establish a mechanism for gathering early action credits.

The Default Delivery Agent – The PUC will need to establish a budget for the DDA, and prior to the market for credits being in place, the DDA(s) will have no additional revenue. The DDA will have to design and deliver a system for the accumulation of credits, and this system for early action credits should be consistent with its credit collection and tracking in place for out-years of the Clean Heat Credit system. The early credits will provide a “dry run” for this process and the revenues associated with early action credits can be used to reduce the future budget requirements for the DDA(s).

Obligated Parties – Obligated Parties have a requirement parallel to the DDA for participation in the gathering of Clean Heat Credits. Any obligated party that wishes to establish a system for collecting credits, including early action credits should be allowed to do so. The windfall value of the credits will decrease their costs for meeting reduction targets.

A PUC rule that describes the requirements for transferring credits should also include language that primes the pump for the administration of the early action credits through one or more of the three options identified, above.

This PUC rule will also need to address the differentiation of credits established through clean heat measures delivered to low and moderate income households.

Clean Heat Standard Technical Advisory Group

January 19, 2024, DRAFT Meeting Minutes

Attendees

- Members of the Technical Advisory Group present
 - TJ Poor (designee of Melissa Bailey), Vermont Department of Public Service
 - Jared Ulmer, Vermont Department of Health
 - Brian Woods, Vermont Agency of Natural Resources
 - Matt Cota, Meadow Hill Consulting
 - Luce Hillman, University of Vermont
 - Ken Jones, Individual
 - Michelle Keller, Fraktalas Energy
 - Casey Lamont, Burlington Electric Department
 - Sam Lehr, Coalition for Renewable Natural Gas
 - Emily Levin, Northeast States Coordinated Air Use Management
 - Emily Roscoe, Efficiency Vermont
 - Floyd Vergara, Clean Fuels Alliance America
 - Michael Wang, Argonne National Laboratory
 - Rick Weston, Individual
- Non-Member Participants
 - Ben Plotzker, Efficiency Vermont
- Participating Vermont Public Utility Commission staff
 - Erin Hicks-Tibbles
 - Tom Knauer
 - Deirdre Morris
 - Tracy Myers
 - Dominic Gatti
- Participating Members of the public
 - Annette Smith
 - John Brabant

Meeting commenced at 10:03 am ET

- Welcome
 - Commission staff intends to serve as the moderator for this meeting for the sake of efficiency as the group decides on leadership roles; if any members of the group object to this arrangement for today, make your concern known. No members indicated any issue with this arrangement.
 - The Department of Public Service notified Commission staff that Melissa Bailey designated TJ Poor to serve as a full member of the Technical Advisory Group on behalf of the Department.
 - Emily Roscoe of Efficiency Vermont notified Commission staff that she will be joined today by Ben Plotzker as a non-member participant from Efficiency Vermont to contribute to today's discussions.

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- Review agenda – opportunity for members to add agenda items
 - Commission staff walked through the proposed agenda. A member suggested, and the group assented to, adding a recap of the previous Equity Advisory Group meeting to the agenda. Other members chimed in to suggest this topic be addressed within the “PUC to share status of work on the Clean Heat Standard” section and that the minutes from the Equity Advisory Group meeting be included in the Technical Advisory Group’s meeting materials. Another member suggested adding the topic of wood and pellet stoves to the list; Commission staff indicated that they recognized the importance of the issue and would be happy to add it to the end of the agenda but did not have anything prepared on the subject.
- Review and approve 12/11/23 meeting minutes
 - Members had a brief discussion on how detailed meeting minutes should be, with some feeling that the level of detail in the draft minutes at hand was more detailed than they needed to be and others finding the level of detail useful for revisiting or catching up on previous meetings. Commission staff said they would continue to take as detailed and accurate minutes as possible, and that the Technical Advisory Group was welcome to decide to record meetings if it desired. Some members thought it would be useful to record to revisit conversations or watch meetings that they missed, others felt that it was unlikely that they (or others) would actually go back and watch a three-hour recording.
 - Group members also discussed the use of the chat feature in GoTo Meeting and what was an appropriate use of it, especially for non-Technical Advisory Group members. Some members argued that it was inappropriate and distracting to have non-members use the chat to functionally participate in the conversation. A member brought up that they felt having public comment only at the end of an agenda that covered a variety of topics was an insufficient way to hear and incorporate public input; they suggested adding a few minutes for public comment near the end of agenda items where the group was going to take an action. Commission staff asked if there were any objections to allowing approximately 2 minutes of public comment per person ahead of actions taken by the Technical Advisory Group; no objections were heard (10:33 am).
 - Some group members had a few requests for amending the previous minutes:
 - Ken Jones clarified that he is not part of the Energy Action Network (EAN) and does not represent EAN’s positions or opinions. He requested to remove the EAN designation from his name in the last minutes and on the appointment order.
 - Members named in public comments during the December 11, 2023, meeting as being inappropriate to serve as leaders from this group due to their previous organizational affiliation disputed the relevance of their former organization, rejected the accusation that they would be biased in this work, and emphasized that they do not have interests that would conflict with their work as part of the Technical Advisory Group.

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- A member suggested a correction to replace the phrase “group agreed that” with language that did not imply there was some formal action taken by the group to sanction an action or state an opinion on page 5 of the draft minutes.
- Commission staff said they would create a redline of the previous minutes incorporating the suggested for consideration and approval by this group at their next meeting.
- PUC to share status of work on the Clean Heat Standard
 - Commission staff provided an overview of the work that has been done since the Technical Advisory Group last met:
 - In Case No. 23-2220-RULE, the Commission issued orders on the topic tag system, early action credits, registration, a draft schedule, and some procedural orders. In this case, the Commission received filings on funding streams, credit ownership, advisory group procedures, and a legal briefing on the confidential treatment of business information. The Commission hosted workshops on funding streams and credit ownership. The Commission also published and went live with the fuel dealer registration form and requested fuel tax information from the Vermont Department of Taxes.
 - In Case No. 23-2221-INV, the Commission issued orders adopting a schedule and requesting comments on the criteria, number, and scope of Default Delivery Agent(s). No comments had been filed on that topic yet, but staff expected some soon.
 - For contractors, the Commission is moving forward in the process with both the Public Engagement Facilitator contractor and the Emissions Analyst technical consultant. Commission staff indicated that they were just waiting on signatures and would share more information as soon as it is available. Commission staff also said they were exploring contracting someone to serve as the support staff for the Technical and Equity Advisory Groups to assist with administrative tasks.
 - *Review of the last Equity Advisory Group meeting*
 - Commission staff provided a brief overview of what occurred at the last Equity Advisory Group meeting, mentioning that the group spent a substantial amount of time discussing draft procedures and officer roles, talked about the draft schedule that was published in the 23-2220-RULE case, and had a substantial discussion about possible funding streams. [The minutes of that meeting can be found here.](#)
 - Group members had further questions about the status of the technical consultant, and Commission staff clarified that they hoped to have signatures on contracts early the following week. Commission staff also clarified that their efforts to find an administrative contractor to support the advisory groups were distinct from both the Emissions Analyst technical consultant and the Public Engagement Facilitator consultant.

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- Group members also had further questions about the potential advisory group facilitator; Commission staff explained that they had heard both the Technical and Equity Advisory Groups clearly that they felt they needed more administrative support, and the Commission is looking for possible contractors now. The staff has written and circulated a brief description of work to try to solicit bids for a simplified bidding process but has yet to get any responses. A member asked if funding had been identified and staff said that if anyone has ideas for sources of funding, please share them with the Commission.
- Review current draft of procedures (incorporates public comment, TAG feedback)
 - Commission staff walked through the updated draft procedures, focusing on the most significant update, the addition of Section VII – Administration.
 - Group members had some suggestions on the procedures; specific suggested changes included changing an “or” to “and” in Section VIII(D) and (E) related to collaborating with the technical consultant, detailing how group members can collaborate on specific work products, and clarifying how Open Meeting Law applies to sub-groups of the Technical Advisory Group.
 - Group members discussed the use of Robert’s Rules of Order, pointing out that using Robert’s Rules of Order implies majority rule within the group. Some members continued to hold reservations about using what can be a rigid meeting organization system, others were more comfortable having a set of rules to organize the meetings around and were confident the group could adapt or amend the rules to fit their needs.
 - Group members also discussed the method of adoption and amendment of these procedures and expressed concern that having to get items changed through an Order of the Commission may slow down fixing broken procedures and suggested that Commission staff be authorized to make changes to the procedures.
 - Commission staff thanked the group for their input and said they would be going to the Commissioners to finalize the procedures soon.
 - At the conclusion of the discussion of draft procedures, a group member inquired if it would be an appropriate time to solicit public input on the procedures in accordance with the agreement made earlier in the meeting to take public input on individual agenda items; Commission staff pointed out that there had been multiple opportunities for written public comment on the issue and that the advisory group was not making a decision at this moment. Hearing no strong opinions from group members on this topic, Commission staff moved the meeting along in an effort to get to more substantive topics.
- Discuss election of Chair, Vice Chair
 - Commission staff solicited nominations from group members. Initially, Matt Cota nominated Brian Woods as Chair and TJ Poor as Vice Chair. Discussion on the nomination brought up a concern that both nominees are members of the Administration, and the Administration has not always been supportive of the potential Clean Heat Standard. Others pushed back and said that at no time has

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Department staff been unfair or biased in working on this topic. TJ Poor indicated that he does not have the capacity to serve as the chair. Matt Cota withdrew his nomination of TJ Poor to be Vice Chair.

- Brian Woods said he appreciated the nomination but would not be able to formally accept or decline until he had a chance to speak with others at his Agency. Other group members indicated support for Brian Woods to serve as Chair, pending support from the Agency of Natural Resources.
- Another member asked Rick Weston if he would be interested in serving in either leadership role. Rick Weston said he would be happy to serve however the group wanted him to.
- Luce Hillman nominated Rick Weston for Vice Chair, Ken Jones seconded (11:35 am). Discussion on the topic asked if there were any time limits for Officers; Commission staff said that the procedures were silent on that issue. A group member asked for bios or other information about Rick Weston and Brian Woods, Rick Weston directed members to his LinkedIn and said he could send around his resume. Ken Jones suggested the group take a break, and during the break Rick Weston's resume can be considered. Commission staff presiding heard no objections to the suggestion and the group recessed at 11:38 am.
- The group reconvened at 11:51 am. Floyd Vergara moved to postpone consideration of the nomination of Rick Weston until the group heard back from the Agency of Natural Resources on Brian Woods' ability to serve as Chair or the group otherwise had two people to consider as Chair and Vice Chair. Matt Cota seconded the motion (11:56 am). Discussion on this motion by group members covered a desire to keep moving forward and get to substantive topics, a concern about having only half a leadership team for the next meeting, and an understanding that the group would revisit the topic after Brian Woods got clarification from his Agency. The motion to postpone was defeated (11:59 am). Rick Weston was elected as Vice Chair (12:00 pm).
- Revisit sequencing of group's statutory tasks; see draft -RULE schedule
 - Commission staff walked the group through the draft schedule in Case No. 23-2220-RULE and asked the group members for informal feedback on what order the Commissions should consider these items in. Group members indicated that it would be helpful to understand how the statutory responsibilities of the Technical Advisory Group overlap with the items identified in the draft schedule. Group members also suggested that some tasks should be grouped together to streamline feedback provided by the Technical Advisory Group and commenters in general.
 - A group member pointed out that there were items for consideration by the Technical Advisory Group listed on the draft schedule that preparations have not begun for. Commission staff reiterated that the schedule was a draft and that the Commission would be putting out another order establishing a final schedule and that specific dates on the draft calendar were approximate.
 - The group discussed different ways to create the crossover list; having the technical consultant create the list, having support staff create the list, having a

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working group create the list, and having the Vice Chair create the list were all contemplated approaches. The Vice Chair said he would be comfortable working with Commission staff to put a crossover list together as it falls in line with the agenda-setting function assigned to the group leadership in the draft procedures.

- Discuss emissions accounting conflict
 - Commission staff introduced the issue of aligning emissions measurement between the Global Warming Solutions Act and the lifecycle approach required for potential Clean Heat Measures. The Department of Public Service and the Agency of Natural Resources explained the conflict. In summary, the fundamental issue is that Act 18 requires the potential Clean Heat Standard to achieve targets set by the Global Warming Solutions Act, which relies on the Vermont Greenhouse Gas Inventory, which tracks emissions in non-lifecycle terms, but the credit values for the potential Clean Heat Standard must be expressed in lifecycle terms. There is a way to approximate a conversion factor between lifecycle and non-lifecycle accounting, but developing them for each Clean Heat Measure and Clean Heat Measure component would be time-consuming, difficult, and rely on numerous assumptions. This issue directly impacts the potential success of the program because the marketplace for Clean Heat Credits would be immature and it would be difficult to predict exactly how obligated entities would respond to the dynamic relationship between the market and calculated equivalency factors based on contested assumptions.
 - Group members asked numerous questions on the topic which were answered and discussed by representatives from the Department of Public Service and the Agency of Natural Resources.
 - One group member asked about how lifecycle analysis might impact the 1990 emissions baseline, and if the mismatch in measuring emissions reductions would risk not properly complying with the Global Warming Solutions Act. In answering the first part of the question, the 1990 baseline numbers are not in lifecycle measurements and the Agency of Natural Resources does not currently have plans to recalculate the 1990 baseline using lifecycle measurements. The second question is more difficult to answer as obligated entities would seek the lowest cost way to satisfy their requirements, and depending on the calculations and revisions, actual greenhouse gas emissions savings may not be fully understood.
 - Another member presented the example of biofuels and how upstream emissions are accounted for across inventory sectors, and offered the idea of electrifying appliances as a way to understand where different kinds of savings are realized. They asked if Vermont had a specific building-sector goal or what percent of statewide emissions reductions need to be achieved in the building sector. The member offered California as an example of a place that has rectified the lifecycle vs point in time measurements for emissions, explaining how their low carbon fuel

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standard (LCFS) is worked into the economy-wide targets. Other members pushed back, saying that the California comparison was not as apt because the two programs are separate, even if they are working towards the same goal. The LCFS is lowering the carbon intensity of fuels in the transportation sector but does not inherit its goals from the larger, economy-wide reduction framework. Vermont is required to square the lifecycle credit system of the Clean Heat Standard with the jurisdictional measure of the Global Warming Solutions Act. Vermont could do the math to try to convert between the two measurement approaches, but it would not be perfect.

- Another member asked if this measurement discrepancy would be able to be rectified/refined later in the life of the program to ensure that assumptions made in the effort to create a lifecycle-to-inventory conversion factor were corrected to reflect reality and check that the overall program was on track. Other members replied that adjusting later in time poses two main issues. First, a conclusion that fewer emissions reductions than necessary were actually realized would have consequences under the Global Warming Solutions Act and may trigger severe action. Second, adjusting the emission rates of Clean Heat Measures and obligation totals down the line would be a major disruption to the Clean Heat Credit market and could undermine the success of the program as uncertainty around the value of credits could derail their function in the program.
 - Another member expressed the belief that this problem is not unique to Vermont and that California's approach to translating lifecycle crediting in the LCFS program into the larger emissions reduction accreditation system. They offered to share reports from California after the meeting and explained California's two-book style system for properly accounting for emissions reductions. They also said they would be interested in seeing modeling where the conflict between the two measurements arises.
 - A group member pointed out that the group was running up against the scheduled end time and asked if the group wanted to extend their current meeting. Commission staff presiding said they wanted to respect people's time and looked forward to continuing the conversation at a future meeting. Commission staff asked for consent to open this topic up for public comment; no objections were made and the floor was opened for public comment on the topic of the emissions accounting conflict. No public comments were made.
- Commission staff indicated that they expected the group to continue working on this topic at the next meeting, along with discussing questions of credit ownership and treatment of wood fuel. They mentioned that the newly elected Vice Chair will be expected to help fit these issues onto future agendas.
 - The floor was opened up for general public comment

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- John Brabant strongly advocated that the Technical Advisory Group record their meetings. He pointed out that smaller boards do it, it would likely be a simple thing to do, it would allow people who are not available to tune in during the day to keep up with the discussions, and it would be useful in revisiting these discussions in the future.
- Anette Smith noted that she appreciated the introductions at the beginning but felt they were no longer necessary, that she has observed the Climate Council extensively and the Administration has never obstructed its work, and that there was major news for the PUC, that new Chair had been named by the Governor.
- Commission staff said that they appreciated everyone's time and effort and that in the future, far more time would be spent on substantive issues. A member indicated that they wanted to meet again as a group within two weeks. Members discussed possible schedules for regular meetings, with some suggesting meeting every two weeks, others suggesting one full-group monthly meeting and smaller groups meeting to complete work between the monthly meetings. One member suggested meeting twice in a month but having the two meetings be at different times/days of the week.
 - One member said that the group needs to consider if the pace of work is actually realistic and that the group needs to be ready to recommend the Commission go to the legislature and say the current timeline is impossible if the group felt that was the case. Commission staff reminded the group that in the filings on the 23-2220-RULE schedule, two participants said the current timeframe was untenable and two participants explicitly suggested the Commission to go the legislature. A member said they believed the Equity Advisory Group would say something similar as the current pace does not leave enough time to have meaningful public engagement.
 - A member said they were interested in the idea of having working groups meet in between full Technical Advisory Group meetings but were not yet ready to establish those groups. They suggested meeting more frequently in the meantime and take meetings off in the future as the actual work was completed. Another member suggested meeting again in two weeks, on February 2, and discussing this topic again. Commission staff presiding asked if anyone was not able to make a meeting on Feb 2; hearing no conflicts, staff committed to sending out a notice for the next meeting.
- Brian Woods moved to adjourn, and Rick Weston seconded (1:14 pm). The meeting adjourned at 1:14 pm.
- ~~Discuss issue of credit ownership~~
- ~~Set meeting frequency and duration~~

Clean Heat Standard Technical Advisory Group

December 11, 2023, Meeting Minutes

Attendees

- Members of the Technical Advisory Group present
 - Melissa Bailey, Vermont Department of Public Service
 - Jared Ulmer, Vermont Department of Health
 - Brian Woods, Vermont Agency of Natural Resources
 - Matt Cota, Meadow Hill Consulting
 - Luce Hillman, University of Vermont
 - Ken Jones, ~~Energy Action Network~~
 - Michelle Keller, Fraktalas Energy
 - Casey Lamont, Burlington Electric Department
 - Emily Levin, Northeast States Coordinated Air Use Management
 - Emily Roscoe, Efficiency Vermont
 - Floyd Vergara, Clean Fuels Alliance America
 - Rick Weston
 - Patrick Wood, Ag Methane Advisors
- Participating Vermont Public Utility Commission staff
 - Erin Hicks-Tibbles
 - Tom Knauer
 - Deirdre Morris
 - Tracy Myers
 - Dominic Gatti
- Participating Members of the public
 - Ben Plotzker, Efficiency Vermont – supporting Emily Roscoe
 - Ben Cartwright, NV5 – consultant supporting the Department of Public Service’s potential study
 - Annette Smith
 - John Brabant
 - Thomas Weiss

Meeting commenced at 1:04 pm ET

- Welcome and introductions
 - Commission staff emphasized the importance of the Technical Advisory Group and reiterated that while Commission staff is running this meeting, it is the group’s meeting.
 - Individuals on the TAG and some members of the public introduced themselves (*see Attendees section above*).
- Reviewing agenda
 - Commission staff mentioned the materials that were posted ahead of the meeting, and provided a brief overview of the preplanned agenda.
 - A number of changes were made to the agenda by group members:

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- Moving the discussion of the election of officers for the Technical Advisory Group to after the conversation about the sequence of statutory tasks – Commission staff, hearing no objections to the suggestion made by Emily Levin, rearranged the order of the agenda items (1:29 pm).
- Adding a subpoint to the review of draft procedures to talk about non-member participation in meetings.
- Adding a subpoint to the review of draft procedures to discuss decision-making points and mechanisms for the Technical Advisory Group.
- Adding a subpoint to the review of draft procedures to discuss digesting public comments, administrative support, and the possibility of subcommittees.
- Group members inquired and got clarification about:
 - Update on the Commission hiring the consultants required by Act 18; Commission staff shared that they are in the contracting process for both the technical consultant and the public engagement facilitator.
 - If Commission staff was taking notes on the meeting; Commission staff took notes.
 - The role of the Commission in Technical Advisory Group meetings; Commission staff said they anticipated the Technical Advisory Group to be independent and, at an arm's length to provide expert advice, criticism, and technical input. Staff said they only plan to provide administrative support.
 - The role of the Technical Advisory Group in determining what constitutes an Early Action Credit; Commission staff outlined the current course of public comments on the topic, the then-forthcoming Order addressing the topic, and the potential interaction between the Technical Advisory Group, the technical consultant, and the Commission in making a final determination on awarding Early Action Credits if the Clean Heat Standard is enacted.
- Review key milestones in the PUC's work
 - Commission staff walked through the milestones and deadlines that are enumerated in statute and were listed in the preparatory materials for this meeting.
 - Group members inquired into what early deliverables the Technical Advisory Group may need to provide input on. Commission staff explained that the fuel dealer registration form and potential funding streams report are going through a public process. The Commission is interested in feedback from the Technical Advisory Group on how to contact fuel dealers regarding the registration form.
 - Group members discussed the availability of a definition of fuel dealers, and how the statutory definition of "fuel dealer" and "obligated party" would inform the registration effort.
- Review of draft procedures
 - Commission staff gave an overview of the process to date that went into the development of the draft procedures for the Technical Advisory Group and

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explained how public comments had been incorporated into the most recent draft, including a more explicit inclusion of the relevant open meeting law. Staff solicited feedback on the draft procedures from group members to inform the final version of the procedures. Group members shared their perspectives:

- Confirmed that Technical Advisory Group members from state agencies were voting members.
- Multiple members said that mapping out the tasks required of the group would be helpful in determining a longer-term schedule of work. They believe it would be useful to set and publish a schedule of work to maximize useful input from the group and the public.
- Members expressed interest in more details about the technical consultant and the relationship between the consultant and the advisory group; Commission staff said that the [Request for Proposals issued by the Commission](#) included major milestones and expectations. The Commission will share more information after it completes the contracting process.
- Group members discussed the idea of having an independent meeting facilitator for the Technical Advisory Group.
 - Some agreed that having one would be useful to fairly balance discussion of nuanced or contentious issues while keeping the group focused. They also felt that acting as Chair of the group might make it more difficult to participate in group discussions.
 - Others were less inclined towards hiring a facilitator and expressed concern that finding one would delay substantive work the group needs to tackle.
 - Commission staff indicated they are investigating the possibility of having such a position and inquired what level of expertise in clean heat-related subjects they would want the facilitator to have.
 - Some group members felt that a facilitator would not need to be closely familiar with clean heat-related issues as they would primarily help the group with administrative tasks. Some members agreed that a neutral, administrative facilitator would also help prevent the Chair from unduly influencing the conversations had by the advisory group. There was agreement that the potential facilitator would not have to be an expert on clean heat subjects but should be able to understand and focus comments made by members of the group.
- Members asked if Commission staff intended for references to the Technical Advisory Group's interaction with the technical consultant in the draft procedures to apply individually or collectively. Commission staff replied that they anticipated the group would act collectively, either through a liaison or by interacting with the consultant at group meetings.

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- Other members expressed the expectation that the consultant would attend most, if not all, of the Technical Advisory Group meetings.
- Members who were not appointed as representatives of named organizations asked if language in Section 3(e) of the draft procedures was meant to allow them to invite outside experts to contribute to group meetings and expressed a desire to be able to do so. Commission staff indicated that they did not read that section to disallow individual group members from bringing experts not affiliated with a named organization to contribute to the advisory group.
 - Group members agreed that they needed to make a decision on how to collectively make decisions. The group discussed the pros and cons of using Robert's Rules of Order, the simple majority threshold contemplated in the draft procedures, and the interim applicability of any decision-making processes pending the possible hiring of a meeting facilitator.
 - Ken Jones moved to direct the Commission to provide a report on the advantages and disadvantages of hiring a facilitator, seconded by Luce Hillman (12:18 pm). After further discussion among the group, the motion was amended to recommend that the Commission look into hiring a facilitator and report back to the group on the pros, cons, and timeline. Amended motion adopted by voice vote (observed by raising of hands) (2:23 pm).
 - Ken Jones moved to request the Commission explore and recommend a framework for how the Technical Advisory Group should arrive at decision points and collectively make decisions, seconded by Matt Cota (2:27 pm). Following a discussion that contemplated a minority report accompanying Technical Advisory Group decisions and what actions a procedure might apply to, the group unanimously adopted the motion (2:36 pm).
 - Noting that the group had defaulted to using a basic version of Robert's Rules of Order, Luce Hillman moved that the group use Robert's Rules until the group has a potential Chair or facilitator, seconded by Emily Levin (2:37 pm). After a brief conversation regarding the ability of Commission staff to temporarily act as parliamentarians and the confirmation of Dominic Gatti's willingness to fill that role at this meeting, the group adopted the motion by voice vote (observed by raising of hands) (2:38 pm).
 - Review of group's statutory role in the potential Clean Heat Standard
 - Commission staff provided an overview of the role of the Technical Advisory Group and its stated responsibilities.
 - Members clarified that the primary responsibility for developing lifecycle emissions analysis rests with the technical consultant, but the Technical Advisory Group will review their methodology and provide input on their analysis.

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- Group members discussed the difference between lifecycle analysis and the greenhouse gas inventory. It was brought up that the Vermont Agency of Natural Resources is currently under contract for work related to the greenhouse gas inventory and is engaged in other work in this area. It was noted that the Commission, with the advice of the group, needs to establish how the lifecycles of different clean heat measures relate to the sector reductions required by the [Global Warming Solutions Act](#). The group ~~agreed-discussed~~ would likely may be necessary among the Technical Advisory group, the technical consultant, the Agency for Natural Resources, and the Commission in figuring out these complicated relationships. Further conversation considered the viability of a Vermont-specific [GREET \(greenhouse gas, regulated emissions, and energy use in transportation model\)](#), the difference between lifecycle calculations and a greenhouse gas inventory, and recent revisions to the [Vermont Pathways Report](#).
- Group discussion on the sequence of statutory tasks
 - Commission staff referred to the list of statutory tasks identified by the Commission and asked the group what the best sequence of tasks might be.
 - Group members asked if the Commission had a recommendation; Commission staff responded that they don't want to be overbearing on the group, but suggested ownership methodologies may be ripe given the robust public record on the topic.
 - Group members expressed that a more clearly defined plan of work and status on different items from the Commission would be helpful in identifying where the Technical Advisory Group could interject. Group members asked for clarification on how the group's work would be incorporated into the Commission's decision-making, and if the Technical Advisory Group is expected to provide input on the first checkback report; Commission staff replied that they do not expect much input from the group on the checkback report, and that they hear the group requesting an expected timeline from the Commission on all of the topics that will be covered and where advisory group input would be most useful.
 - Commission staff observed that it did not seem like the exact sequencing of tasks was ripe for the meeting. Some members agreed and said they were interested in going through the list of tasks and identifying what prerequisite information would be needed to come to a conclusion on a topic at the next meeting. The group discussed how potential deviation from the current greenhouse gas inventory would put other decisions the group has to make into flux. Group members felt there are a lot of process questions that will need to be answered at the next Technical Advisory Group meeting, and the group will have to get started on substantive questions. Members expressed interest in a presentation from the Agency of Natural Resources on their lifecycle analysis work.
 - Group members expressed interest in receiving a digest of the public comments made through [ePUC](#). Commission staff explained the new [Clean Heat Standard website](#), [ePUC and CHS topic tags](#), and their practice of providing an overview of comments made in Orders responding to such comments.

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- Members identified the topic of credit ownership as a policy question rather than a technical question, but Commission staff pointed out that Act 18 explicitly requires the Commission to consult with the Technical Advisory Group on ownership methodology. Members asked Commission staff about how they envision consulting the group on questions like this, to which staff replied that there will be multiple ways the Commission will solicit input from the Technical Advisory Group, but often the Commission will get public comment on a matter and construct a straw proposal for the advisory groups to provide input on.
- Group members acknowledged that the procedures document doesn't capture the entire scope of what the Technical Advisory Group will do and requested a separate document that comprehensively covers what is expected of the group.
- Discuss election of Chair, Vice Chair, and Secretary
 - The group recognized that the group would need identified leaders soon, but no one was ready to step into such a position yet. The group discussed a desire to identify at least an interim Chair at the next meeting.
 - Melissa Bailey moved that the group requests the Commission develop the agenda for and facilitate the next group meeting, seconded by Patrick Wood (3:30 pm). A roll call vote was held and the motion was adopted by a vote of 10-3 (3:32 pm).
 - Commission staff said they would facilitate the next meeting and lean on items discussed in this meeting to populate the next agenda. Members of the group were also invited to suggest additional topics for the meeting.
- Upcoming CHS events
 - This item was not discussed due to time constraints.
- Schedule next meeting
 - The group expressed a desire to have Commission staff send another DoodlePoll to find a time to meet in January.
- Opportunity for Public Comment
 - Annette Smith – Vermonters for Clean Environment
 - Hears and understands the want for a facilitator, but has seen that the Vermont Climate Council uses a facilitator and it has created an odd environment that is not friendly for robust conversation. A Chair structure where someone has to take ownership may result in a better process and output. Believes that group should elect a Chair as soon as possible, and thinks it shouldn't be Rick Weston or Ken Jones because of their former organizations' involvement in the development and passage of Act 18. Suggests Melissa Bailey should be Chair, and thinks the Chair should be a distinct role different than a purely administrative role.
 - Audio-recorded meeting and can be contacted for a recording and vce@vce.org.
 - John Brabant – Vermonters for a Clean Environment
 - Recalled that Commission staff said they weren't recording the meeting but that the Technical Advisory Group gets to choose their own procedure,

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so suggests that the group should decide to record their meetings. Argued that it would be better for absent group members, in line with other Commission proceedings that are transcribed by a court reporter, useful for people who have to come late or leave early, and if a facilitator was hired they could use it. Noted that the Legislature has been making recordings for their work for more than 35 years. Doesn't believe it is appropriate for the group to rely on a member of the public to record the meeting.

- Thomas Weiss
 - Appreciated the informative meeting. Would appreciate a schedule that spells out when parties will be asked to provide input.
 - Notes that the statute authorizing the Technical Advisory Group calls for ten areas of expertise that the members are supposed to represent. Would appreciate it if the Commission could list what areas of expertise each group member fulfills in addition to their name and organizational affiliation.
- Adjourn 3:43 pm