



EAN 2019 Network Summit Pitch Process DRAFT

Context

The Energy Action Network and the State of Vermont share a commitment: to meet 90% of our energy needs through increased efficiency and renewables by 2050 and to significantly reduce Vermont's greenhouse gas emissions. Whether your motivation for this work comes from a place of economic opportunity, moral responsibility, or something else, achieving a just, thriving, and sustainable energy transition is one of the great challenges and opportunities of our time.

As of 2019, Vermont has made mixed progress. While we're at 19% renewable energy use overall, our emissions have *increased* 16% since 1990 and we are far away from both our total energy and our emissions reduction commitments. Vermont's nearest term climate goal is the Paris Climate Agreement, which requires at least a 26% reduction in GHG emissions below 2005 levels by 2025. As of the most recent data, Vermont was only 2% below 2005 emissions levels.

The primary roadblocks to our energy and emissions progress are continued fossil fuel use in the Transportation and Thermal sectors. While the electric sector was 63% renewable as of 2017, the Transportation and Thermal sectors were only 5% and 19% renewable, respectively. Together, those two sectors are responsible for over 70% of our greenhouse gas emissions. Additionally, a recent systems analysis conducted as part of EAN's Vermont Energy Future Initiative makes clear that Vermont needs more effective interventions in the following areas, in particular: policy and regulatory reform; public engagement, and workforce development/workforce transition.

Pitch Invitation

We have a lot of work to do by 2025 to bend the curve and achieve our commitments. That is why we want to ***hear your pitch*** for promising opportunities to help Vermont transition to renewable energy and reduce emissions, especially **in the transportation and thermal sectors** and especially with **public policy, public engagement, and workforce development/workforce transition strategies**. Pitch topics could be new policies or regulations, programmatic ideas, proof-of-concept pilot projects, or something else.

Selected proposals will be invited to present at the EAN 2019 Network Summit on Thursday September 26th at Champlain College in Burlington. The length of the presentation will be determined by the number of pitches we select but assume there will be a short (5-10 minute) presentation, possibly followed by a brief Q&A or panel discussion. If appropriate, ***selected proposals will also be eligible for seed funding via EAN.***

Please submit your pitch by completing the form below and emailing it to jduval@eanvt.org by **Aug. 30, 2019** with the subject line "2019 Summit Pitch." **A selection committee will review all proposals.** Notification for the selected pitches will come by September 11, 2019.

Pitch Selection Criteria

EAN's mission is to **achieve Vermont's 90% renewable by 2050 total energy commitment and to significantly reduce Vermont's greenhouse gas emissions in ways that create a more just, thriving, and sustainable future for Vermonters.**

With that mission in mind, we are seeking strategic interventions in the energy system that will:

- Provide significant reductions in fossil fuel use and GHG pollution from energy, particularly focusing on the thermal and transportation sectors
- Encourage growth in the number of clean energy jobs in Vermont
- Help Vermonters become more energy-secure and resilient
- Create a stronger and more just Vermont economy
- Support an energy landscape that both benefits from and protects our natural resources and working lands

EAN approaches our work together through five strategic leverage areas to enable systemic change at a scale and pace necessary to achieve Vermont's energy & emissions commitments:

- Policy & Regulatory Reform
- Public Engagement
- Workforce Development/Workforce Transition
- Technology Innovation
- Capital Mobilization

Pitch Submission Form

With these goals and criteria in mind, please answer the questions below. Note: Questions 9-13 can be answered individually or in one comprehensive narrative. (Total pitch submission **no more than 4 pages**).

1. Pitch Submitted By (Name(s) or Organization(s)):

Gabrielle Stebbins, Energy Futures Group (presenter will be Gabrielle or someone within the heating industry)

2. Contact Email Address(es):

gstebbins@energyfuturesgroup.com

3. Contact Phone Number(s):

802-825-9515

4. Pitch Title: (one line)

Heating Feebates: Driving Uptake in Clean Heating Equipment Purchases

5. Pitch Summary: (one paragraph)

What if there was a way to reduce greenhouse gas emissions; displace fossil fuels with local, renewable energy; improve the health of Vermonters; and grow our State economy, all at the same time – and all without increasing the overall tax burden of Vermonters? There is: implementing a “fee and rebate” or “feebate” program on heating equipment. Generally, a feebate is designed to impose a fee on inefficiency and shift those funds to efficient or clean choices in order to incent the buyer to make the better choice. Specifically, a feebate for heating equipment purchases would lower the cost for consumers who make purchases of renewably fueled or more efficient space or water heating appliances (including advanced wood heat boilers and furnaces, efficient wood or pellet stoves, cold climate heat pumps, solar or heat pump water heaters, and more efficient combustion equipment. These rebates would be paid for by revenue from fees applied to the purchase of inefficient fossil fuel heating appliances (ex. fuel oil, propane, and coal boilers, furnaces, and stoves). The total value of the rebates would be equal to the total amount of fee revenue collected, making the whole “feebate” program revenue-neutral. Rebates and fees on the purchase of heating equipment would have a double-benefit of discouraging socially and environmentally harmful choices, while also providing funds to further incentivize and reward socially and environmentally beneficial choices that will help Vermont meet its statewide energy, emissions, health, and economic goals.

6. What Energy Sector(s) Does this Pitch Apply to? (Check all that apply):

- D Energy Efficiency **X**
- D Electricity **X**
- D Transportation
- D Thermal Heating and/or Cooling **X**
- D Other: _____

7. Which Criteria Category(ies) Does it Address? (Check all that apply):

- D Significant reductions in fossil fuel use and GHG pollution from energy **X**
- D Clean energy jobs **X**
- D Energy security and resilience **X**
- D A stronger and more just Vermont economy **X**
- D Sustainable energy landscape **X**
- D Other: _____

8. Which Leverage Areas Would It Attempt to Shift? (Check all that apply):

- D Policy & Regulatory Reform **X**
- D Public Engagement **X**
- D Workforce Development/Workforce Transition **X**
- D Technology Innovation **X**
- D Capital Mobilization **X**

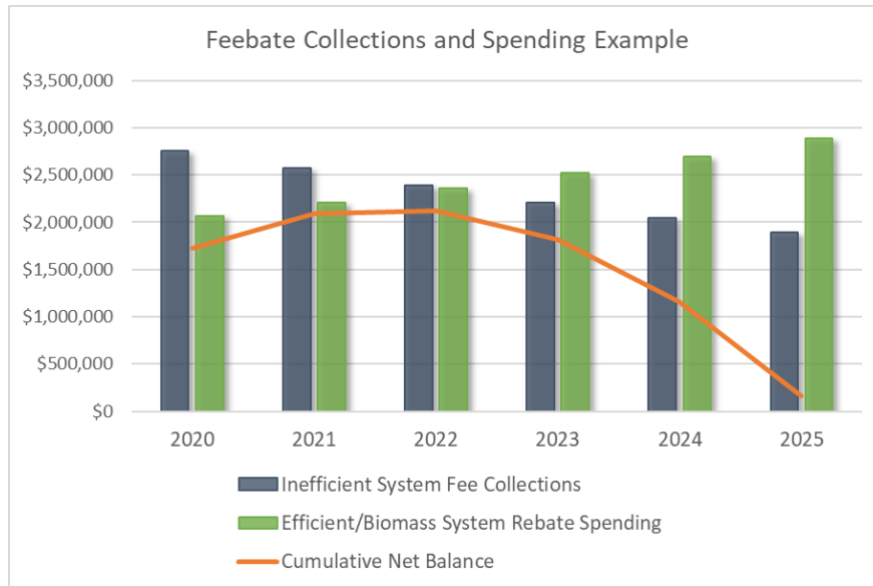
9. Scale of Impact on Vermont’s Energy and Emissions Goals: If this proposal came to fruition, how would it help meet Vermont’s energy and emissions goals by 2025 and/or 2050? Please outline assumptions and, if available, provide calculations-- especially for emissions reduction estimates.

The fee and rebate levels could be set based on State goals for renewable energy adoption. For instance, if we wish to double our use of advanced wood heating by 2025 and see similar growth in cold climate heat pumps, fees could be set with the intent of sufficiently incentivizing/ disincentivizing market activity to achieve those goals. If this pitch is selected, emissions reduction estimates will be included in the September 26th, 2019 presentation.

10. Benefits/Costs of this Proposal for Vermont and VermonTERS: Including, where possible, economic (local economic development and jobs), financial (consumer savings), social, public health, and environmental.

Crucially, since Vermont does not produce any fossil fuel and because 80 cents on every dollar spent on fossil fuel drains out of our state economy, every purchase of renewable heating equipment will keep more money in state, resulting in a virtuous economic development cycle that will create more local jobs and grow Vermont wealth. Furthermore, unlike a gas/fuel/carbon tax, a “feebate” on purchases of heating equipment does not penalize low-income VermonTERS who may be stuck with a fossil fuel heating system for the time being. The fee or rebate only applies when a consumer has already decided to make a new purchase. The rebate would make renewable heating options more affordable for every VermonTER (including low-income VermonTERS). And since renewable heating options generally cost more up front (at least, in the absence of a feebate) than fossil fuel options but since they *also* generally save consumers much more money over their lifetime (maintenance and fuel costs are generally lower and/or more stable with renewable options), reducing the up-front cost of renewable and efficient options has a double benefit: helping low-income VermonTERS save money both at the point of purchase and on an annual basis for years to come. Also, since a feebate would discourage inefficient fossil fuels and encourage renewable and efficient combustion equipment, it does not “pick winners” among various technologies (electric vs. solid vs. liquid fuels) -- rebates can equally be used for efficient wood stoves, cold-climate heat pumps or efficient combustion equipment.

In the near-term, raising funds to cover the costs of eliminating sales tax on efficient heating equipment could be done by imposing a fee on inefficient equipment. The following are the results of an initial analysis that examined these impacts; if selected for a presentation on September 26th, the analysis would be reviewed and updated if needed.



11. Collaboration: Who have you collaborated with to develop this proposal and who else would need to be engaged for it to succeed?

The concept of a feebate on heating system equipment has been discussed amongst a variety of stakeholders for several years including various legislators, state regulators, local non-profits and individuals working in the heating industry. If this pitch were to be selected as a presentation on September 26th, additional outreach to key stakeholders would occur and the findings from this outreach would be included in the presentation.

12. Decision-Makers: Who is necessary to move this proposal forward (e.g., Legislature, Governor, a regulatory agency, a business, organization, a media outlet, etc.)

This proposal would likely require action by the Legislature and the Governor. It could potentially be implemented by the Clean Energy Development Fund (CEDF), particularly given the CEDF’s recent role in providing advanced wood heating incentives. Additionally, concerted outreach to those working in the heating industry and the general public would need to occur to explain how the feebate would work and what the implications (both positive and negative) would be for the heating industry and consumers. It is worth noting that, for businesses that currently install or service fossil-fuel heating systems *and* are actively looking for mechanisms to transition to alternative business models, a feebate can assist in this transition.

13. Strategy and Key Considerations: Outline the overall strategy, including any gaps, barriers, and opportunities for moving this proposal forward.

The fee and rebate structure could be designed simply, for ease of implementation, or in a more tiered/refined manner that would charge higher fees for more inefficient heating equipment and/or give larger rebates for efficient renewable heating equipment that use a higher percentage of renewable energy. Certain exemptions could also be made for heating equipment in the rare cases where there is not yet a renewable alternative.

Focusing on equipment vs. fuel makes sense for many reasons. Vermonters generally don’t have a goal of

purchasing fossil fuel – we purchase fossil fuels simply because it is what the equipment that we currently have demands in order for us to heat our homes and to get around. Changing the price of fuel will likely not change behavior in the short run, since *fuels* have a very inelastic price elasticity of demand (i.e. the amount of fossil fuel people buy generally stays the same even in the face of higher fuel prices)... and since people's fuel choices are driven by the *assets* they have: vehicles, heating systems, etc.). Incentivizing people to buy renewable and efficient equipment at time of purchase can avoid decades of locked-in fossil fuel demand or inefficiencies... and not penalize (in the way that a fuel tax can) low-income Vermonters who may be, for the time being, stuck with fossil fuel heating systems, vehicles, equipment and appliances without much recourse.

14. Timeline: To meet our 2025 goals, we need some proposals that can be implemented in the next year. How “ripe” is this idea and what timeline do you foresee for this proposal to be developed and implemented?

Implementing a feebate on space and water heating equipment could be an achievable short-term goal. With entities such as our efficiency utilities, the CEDF, the Efficiency Excellence Network and others, the structures to implement a feebate are available, while the mechanisms can be streamlined to allow for a quick start up (see comment above, with regards to the structure of the feebate). The key challenge (and opportunity) in making a feebate on heating systems a reality is public, industry and political will. If the feebate is strategically developed in coordination with key industry stakeholders, and properly explained to all Vermonters, then it is likely that political will, would follow. Further, as Vermont’s building energy code continues to require greater efficiency (with a goal of “net zero by design by 2030 for all new buildings and retrofits/additions), establishing this feebate helps to align policy and price signals to the marketplace and beyond.

15. Budget: If this is a program or project for which you are seeking funding to implement, please outline a basic budget here, including both expenses and funding sources.

Galvanizing support and working with stakeholders to ensure this concept moves forward will clearly take a champion and labor hours. Further, the initial set up and ongoing implementation for an entity to oversee the feebates would also incur an initial cost that could then be maintained through utilization of a small portion of the fees collected on inefficient equipment. However, at this time, we have not estimated what these overall (and likely not extravagant) costs would be.