Vermont Energy & Climate Summit

"Meeting Vermont's 2025 Energy & Climate Goals"

Pitch Submission Form

Let your ideas be heard!
This is your chance to get your energy or climate pitch
in front of 200 of Vermont's energy leaders and the Governor's Climate Action Commission

Vermont has a bold goal: to meet 90% of our energy needs through increased efficiency and renewables by 2050. We have also joined leading states across the country in a bi-partisan commitment to adhere to the Paris Climate Accord goals. Where are we now on achieving those goals and what can we do to bend the curve toward 2025 milestones along that path?

- **Energy**: The first milestone of Vermont's Comprehensive Energy Plan is to meet 25% of Vermont's total energy needs from renewable sources by 2025. The most recent status estimates put us at around 16% across heat, electricity and transportation (2016).

- **Climate**: The Paris Accord goal seeks a reduction in greenhouse gas (GHG) emissions of 26-28% from 2005 levels by 2025. Vermont's own statutes are even more ambitious: 50% reduction from 1990 levels by 2028. As of 2013, Vermont's GHG emissions decreased 11% from 2005 levels and actually *increased* 4% from 1990 levels.

Pitch Invitation

We have a lot of work to do over the next 8-10 years. That is why we want to ***hear your pitch*** for promising opportunities to help Vermont meet its 2025 goals. What will help bend the curve?

Selected proposals will be invited to present at the Vermont Energy and Climate Summit co-hosted by Energy Action Network (EAN) and the VT Climate Pledge Coalition (VCPC) on November 8th at Champlain College in Burlington. Please submit your pitch by using the form below and emailing completed proposals to **jduval@eanvt.org** **by Friday October 20th**.

(NOTE: Regardless of whether you are invited to present on Nov.8th -- notification will come by Wed. Oct. 25 -- *all submitted and complete proposals will be included in a full compilation to be submitted to the Governor's Climate Action Commission and the Vermont Legislature.)*

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Guiding Criteria: EAN's mission is to end Vermont's reliance on fossil fuels *and* to create efficient, clean, affordable, and secure electric, heating, and transportation systems for the 21st Century. The VT Climate Pledge Coalition is seeking pledges to reduce GHG reductions that will help Vermont meet Paris climate commitments. Together, we support the criteria outlined in Gov. Scott's Executive Order creating the **Vermont Climate Action Commission**, specifically that solutions must:

- Spur economic activity, inspire and grow Vermont businesses, and put Vermonters on a path to affordability;
- Engage all Vermonters, so no individual or group of Vermonters is unduly burdened; and
- Collectively provide solutions for all Vermonters to reduce their carbon impact and save money.

With these goals and criteria in mind, please answer the questions below. Questions 8-12 can be answered individually or in one comprehensive narrative. (Total pitch submission **no more than 3 pages)**.

1. **Pitch Submitted By (Your Name or Organization): Richard Faesy, Energy Futures Group**

2. **Contact Email Address:**

3. **Contact Phone Number:**

4. **Pitch Title:** (one line): Equipment vs. Fuel: A "Feebate" Program to Make VT Heating More Renewable

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 for heating appliance purchases -- providing rebates that lower the cost for consumers who make purchases of renwably fueled or powered heating appliances (including advanced wood heat boilers and furnaces, efficient wood or pellet stoves, cold climate heat pumps, solar or heat pump water heaters, etc.). These rebates would be paid for by revenue from fees applied to the purchase of 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):
   - ☐ Energy Efficiency **X**
   - ☐ Electricity **X**
   - ☐ Transportation **X**
   - ☐ Thermal Heating &/or Cooling **X**
   - ☐ All (Total Energy) **X**
   - ☐ None: Non-energy related carbon reduction proposal

7. **Which criteria category(ies) does it address?** (Check all that apply):
   - ☐ Economic Activity **X**
   - ☐ Affordability **X**
   - ☐ Vulnerable Vermonters **X**
   - ☐ Other

8. **Scale of impact on Vermont's energy and climate goals**: If this proposal came to fruition, how might it move the needle in helping to meet Vermont's energy and climate goals by 2025 and/or 2050? Please outline assumptions and, if available, provide calculations.

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.

9. **Benefits/costs of this proposal for Vermont and Vermonters**: Including, where possible, economic, financial, social, 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. Insert health data re: costs of fossil fuel… Furthermore, unlike a gas/fuel/ or carbon tax, a "feebate" on purchases of buildings and *equipment* does not penalize low-income Vermonters who may be stuck with a fossil fuel vehicle or 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 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. Finally, since a feebate would discourage fossil fuels and encourage renewable energy, it does not "pick winners" among various renewable technologies (electric vs. solid and liquid renewable fuels) -- rebates can equally be used for efficient wood stoves or for cold-climate heat pumps.

10. **<u>Decision-makers necessary for this proposal to be adopted or move forward</u> (e.g.,** Legislature, Governor, a regulatory agency, a business, organization, media outlet, or financing institution, etc.)

This proposal would likely require action by the Legislature and the Governor. It could likely be implemented by the Clean Energy Development Fund.

11. **<u>Strategy and key considerations</u>**: Outline the overall strategy, including 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. Also, while this proposal focuses on heating

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 equipment at time of purchase can avoid decades of locked-in fossil fuel demand ... and not penalize (in the way that a fuel tax can) low-income VT'ers who may be, for the time being, stuck with fossil fuel heating systems, vehicles, etc. without much recourse.

12. **<u>Timeline</u>**: To meet our 2025 goals, we need some proposals that can be implemented in the next couple of years as well as some "game changers" that will bend the curve even further out. What timeline do you foresee for your proposal to be developed and implemented?

<u>Suggested Reference Documents</u>:

Vermont's Comprehensive Energy Plan, 2016

Vermont's Total Energy Study, 2014

Vermont Agency of Natural Resources Climate Dashboard

EAN Annual Report, 2016

90% Renewable by 2050: Exploring Vermont's Efficiency & Renewable Energy Pathways, 2013