

## **Vermont Energy & Climate Summit** **2017 Pitch Submission Form**

**1. Pitch Submitted By (Your Name or Organization):**

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**4. Pitch Title: (one line)**

Increasing Advanced Wood Heating in Vermont

**5. Pitch Summary: (one paragraph)**

Expanded use of advanced wood heating is the single most efficient way to simultaneously meet our renewable energy commitments, mitigate carbon emissions, stimulate economic development and preserve and enhance our working forest landscape. Advanced wood heat offers tremendous opportunity for Vermont's environment and economy. The advanced wood heating market has been slow to develop - in part because of the equipment's capital cost, and also because the current price of fossil fuels erodes the short-term economic case for switching to from fossil fuels to wood. Reducing the capital cost of advanced wood heating systems with a sales tax exemption would make the systems more affordable and also demonstrate to Vermonter homeowners and businesses that the state is serious about advancing this important technology. Also, every dollar of lost tax revenue would be reinvested in the Vermont economy through purchases of heating systems and fuel that benefit Vermont businesses.

**6. What energy sector(s) does this Pitch apply to? (Check all that apply):**

- Energy Efficiency
- Electricity
- Transportation
- **X Thermal Heating &/or Cooling**
- All (Total Energy)
- None: Non-energy related carbon reduction proposal

**7. Which criteria category(ies) does it address? (Check all that apply):**

- **X Economic Activity**
- **X Affordability**
- **X Vulnerable Vermonters**

- Other

### **8. Scale of impact on Vermont's energy and climate goals:**

REV and the Biomass Energy Resource Center, with input from local and regional non-profits, businesses, and government officials developed a roadmap for expanded use of advanced wood heat to meet 35% of Vermont's thermal energy needs by 2030. Analysis found that achieving this goal would reduce oil consumption by 58,600,000 gallons per year (over 60% reduction) and reduce greenhouse gas emissions by 500,000 tons a year.\* It would also utilize 900,000 green tons of low-grade wood per year - an amount that Vermont's forests can more than sustain over time, as BEREC found in a [2007 study](#) - helping sustain the forest economy that keeps Vermont's forested landscape intact.

The sales tax exemption is just one important piece of a broader suite of activities designed to expand the market for advanced wood heating systems, which are described in the collaboratively developed *5 Year Action Plan* (attached). Every system installed and every ton of local wood pellets or chips used supports Vermont's climate goals of reducing GHG emissions and transitioning to renewable energy. Advanced wood heat is an essential component of Vermont's climate economy, and a sales tax exemption is one modest measure the legislature can take next year to demonstrate its support.

\*GHG reduction assumptions: One way to reach the 35% threshold is by increasing the number of wood heating appliances to 70,000 pellet stoves, 11,000 residential pellet boilers, 2,700 commercial and institutional pellet boilers, and 280 woodchip boilers. BEREC based the GHG reduction estimate on the basis of 161 lbs CO<sub>2</sub> per MMBtu for oil and 29 lbs CO<sub>2</sub> per MMBtu for wood. The methods by which they arrived at the 20 lbs CO<sub>2</sub> per MMBtu figure are outlined in [this 2016 document](#).

### **9. Benefits/costs of this proposal for Vermont and Vermonters:**

Benefits of an advanced wood heat sales tax exemption include:

1. **Retaining wealth in the state.** Vermont's fossil fuel dependence sends \$131 million out of state every year. Local wood heat keeps heating investments within the state, supporting local businesses and communities.
2. **Sustaining and creating jobs in the forest economy.** Foresters, loggers, and associated businesses are challenged by a significant decline in regional markets for low-grade wood. Expanding advanced wood heating provides a new use for that wood and helps sustain related businesses, e.g. logging contractors and sawmills.
3. **Keeping forests as forests.** Related to the point above, landowners need revenue from all types of wood coming off their land in order to implement healthy forest management that benefits forests long-term and makes harvests economical. Weak markets compromise forest health and make land conversion (i.e. losing forests indefinitely) more likely.
4. **Increasing affordability.** The capital cost of advanced wood heating systems is a significant barrier to residential and small business deployment. Current incentives from Efficiency Vermont and the Clean Energy Development Fund are helpful, but future years funding from the CEDF is unlikely due to insufficient funds. A sales tax exemption similar to that offered to other renewable energy solutions would help make advanced wood heat and cost-effective wood fuel accessible to more Vermonters - not only homeowners, but also

housing providers, and local businesses. looking to decrease ongoing heating and operating costs and make heating decisions that benefit their community.

5. **Displacing fossil fuels.** As described earlier, every advanced wood system that comes online eliminates oil consumption and reduces greenhouse gas emissions.

Exempting advanced wood heating systems from sales tax is a simple way to nudge the systems toward wider affordability and help reach the number of units needed to reach the 35% of thermal energy benchmark, which directly supports the state goal of 90% renewable energy.

#### **10. Decision-makers necessary for this proposal to be adopted or move forward**

Vermont Legislature & Governor

#### **11. Strategy and key considerations:**

Legislation was introduced in 2017 by Rep. Robert Helm (R-Rutland-2) and received an introductory bill hearing in the House Ways & Means Committee. See H.357 - An act relating to exempting indoor commercial and residential advanced wood boilers from the sales and use tax. Additional strategies for advancing local wood heating are described in the attached *5 Year Action Plan*.

#### **12. Timeline:**

We aim to enact legislation in this biennium, i.e. by the end of 2018.