# Increasing Advanced Wood Heating in Vermont



#### Local Wood is:

#### **Advanced Wood Heat**

- 1) Utilizes highly efficient combustion technology
- 2) EPA certified negligible emissions
- 3) Supports healthy forest ecosystems
- 4) Utilizes local wood



### What is Local Wood?

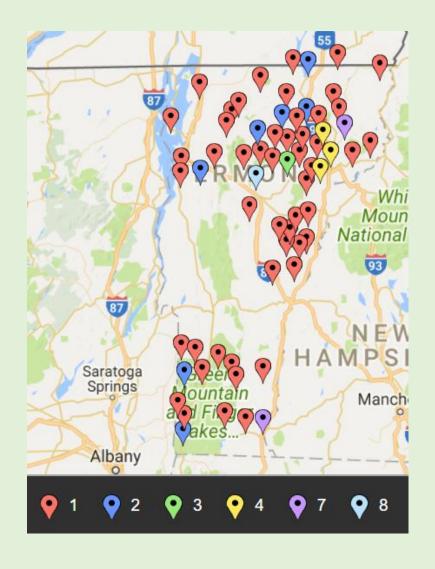


Advanced wood heat is highly efficient wood pellet or wood chip boilers that heat the entire home or building.

Much like traditional fossil fuels, the wood fuel arrives in a fuel delivery truck and is held in a storage tank or silo.

As you turn the dial on your thermostat, the fuel is automatically fed into the boiler to keep you warm.

### Who Uses Local Wood?





**Kate Butler** 

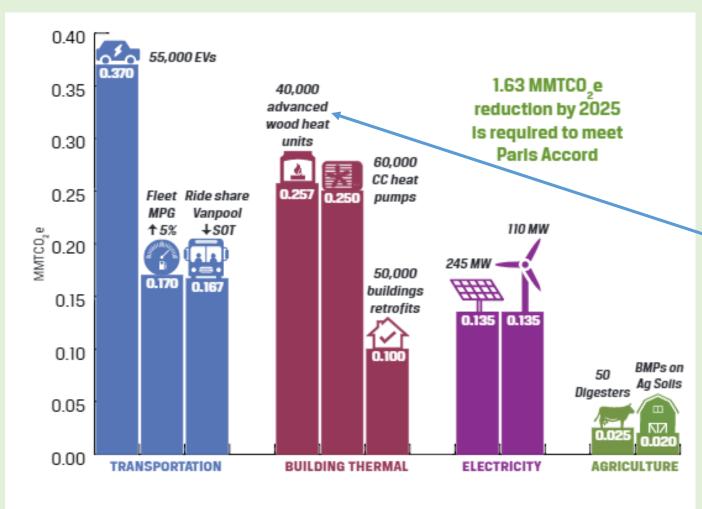
Labour of Love Landscaping & Nursery



- ✓ Local wood for heating keeps energy dollars local
- ✓ Supports and creates local jobs
- ✓ Develops markets for low-grade wood
- ✓ Fuel price stability and long term savings



### How Many do we Need?



An analysis of the Vermont Climate and Energy Summit determined that we need **40,000** advanced wood heat units installed to reach out goals. We currently have **480**.

### Local Wood = Local Jobs!

Fact: Nearly 1500 Vermonters currently work in the wood industry (Jobs in forestry, logging, pellet manufacturing and trucking).

Fact: Woody biomass was the only clean energy sector that saw a decline in jobs, according to the Vermont Clean Energy Industry Report.





# Local Wood is Local Good for our Economy!



**Fact:** Almost every dollar spent on local wood energy stays right here in Vermont.

Fact: \$.78 cents of every dollar we spend on imported fossil fuels leaves the region.

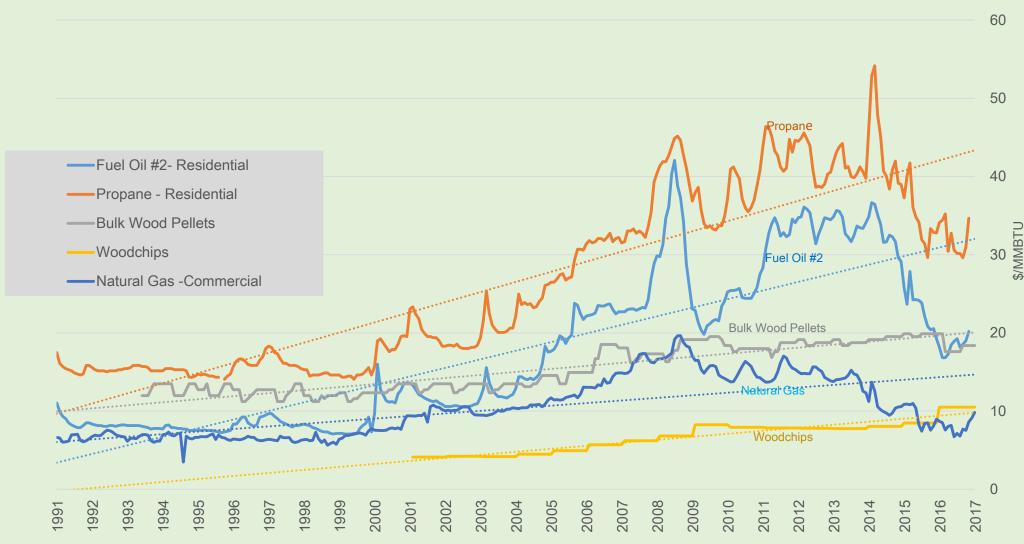
### Local Wood is Affordable for Vermonters!



**Fact:** The price of local wood fuel is one of the most stable fuel sources.

Fact: An estimated net \$70 million was retained in the Vermont economy in 2016 by Vermonters choosing to heat with wood rather than fossil fuels.

### Heating Fuel Price History



### Local Wood is Keeping Low Grade Markets Alive!



Fact: Without markets for low-grade wood, not only does healthy forest management become more difficult, but some landowners will be pushed into having to sell the land for development.

**Fact:** Landowners and foresters carry out good forest management and sustain the forested working landscape.

### How Much Local Wood is There?

Fact: Almost 80% of Vermont is forested.

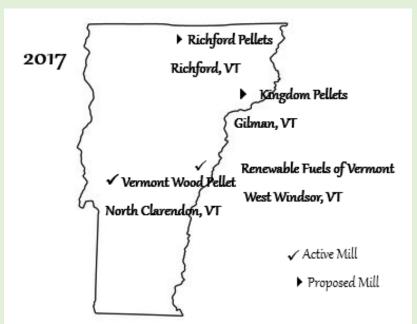
**Fact:** There are roughly 890,000 green tons of additional low grade wood grown annually in Vermont.



### Local Wood is in Dire Straights!

#### **Pellet Mills in Vermont**

In 2017, there were two operational pellet mills, with two more slated to come online.



In 2018, there is only one pellet mill operating in Vermont, and only one more in the pike.

## Diverse Support for Local Wood Heat

Biomass Energy Resource Center

Bourne's Energy

Calfee Woodland Management LLC

Cutting Edge Energy Systems

Forward Thinking Consultants LLC

Gagnon Lumber

Green Mountain Club

Hardwood Forestry Services, Inc.

**Housing Vermont** 

Innovative Natural Resource Solutions LLC

LandVest Timberland

Long Meadow Resource Management LLC

Lyme Green Heat Inc.

New England Wood Pellet LLC

North Woods Forestry

Northern Forest Center

Maine Energy Systems

Meadowsend Timberlands, LTD

Pellergy

Renewable Energy Vermont

**Sunwood Biomass** 

Tarm Biomass

**USDA** Forest Service

Vermont Agency of Commerce and Community

Development

**Vermont Conservation Voters** 

Vermont Department of Buildings & General Services

Vermont Department of Forests Parks & Recreation

Vermont Energy Investment Corporation

Vermont Natural Resources Council

Vermont Renewable Fuels

Vermont Sustainable Jobs Fund

**Vermont Woodlands Association** 

Watson Research

### Action Recommendations

- 1) Implement a state sales tax exemption on the purchase of qualifying advanced wood heating equipment and fuel.
- 2) Maintain funding for the Clean Energy
  Development Fund and Working Lands
  and streamline financing and incentives.

3) Increase the number of HVAC installers that can install and maintain advanced wood heating systems.



Local wood lowers and stabilizes energy costs and keeps dollars circulating in the local economy. Wood heat also creates and supports jobs in the forestry, wood processing, and transportation sectors.



