

Sponsored by the Grantham & Eastman
Energy Committees
Grantham Town Hall
7 PM February 28, 2017

OVERVIEW

- What isn't modern wood heat?
- What is modern wood heat?
- Cordwood, chips, or pellets?
- If all politics are local, why not economics?
- What will it cost me, what will it save me?

What isn't modern wood heat?



What is modern wood heat?



Modern wood heat system



cordwood



Lowest cost energy *only* if you have your own woodlot.

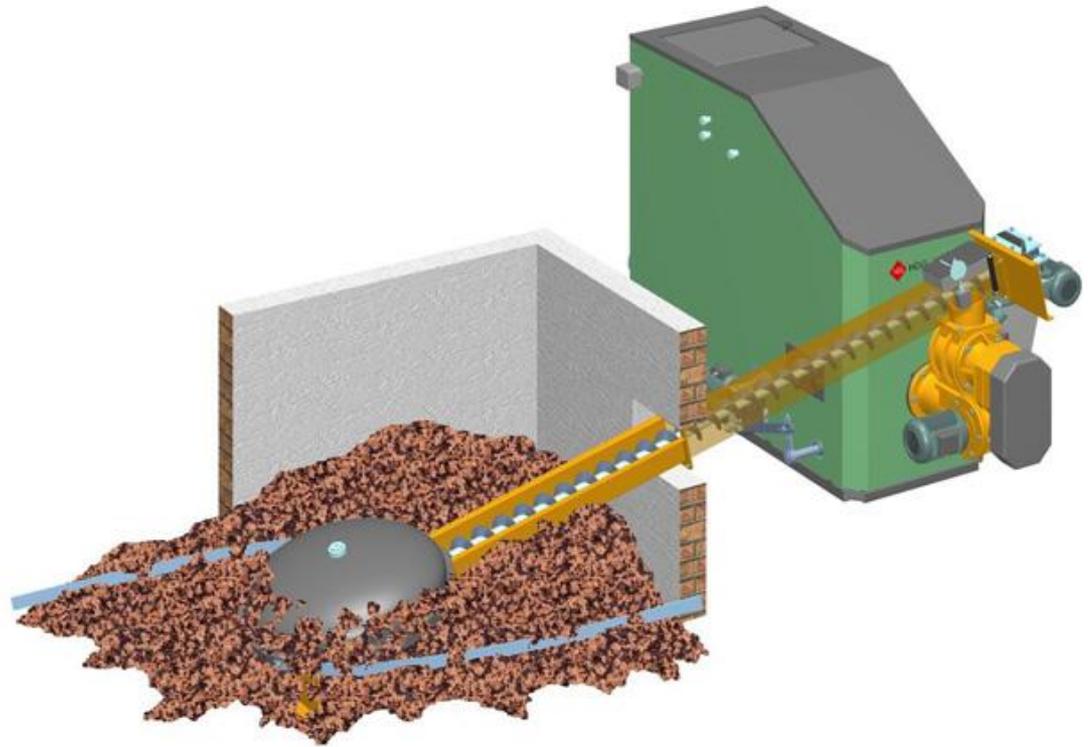
Lots of hard work!



Wood chips



Price & delivery is comparable to pellets, but feed mechanisms may be more prone to jamming, wood quality may vary.



Pellet procurement

(the old way)



=



Labor intensive, more expensive, eliminates going to the gym...

Pellet procurement

(the smart way)



=



Minimal labor, less expensive,
much cleaner than chips



Wood Heat Economics

When you buy oil, where does your money go?
The Middle East? Texas? The Dakotas? Not here!

When you buy wood, where does your money go?
New Hampshire, Maine, Vermont, maybe New York.

Boosting our local economy = better roads, etc.



2015 numbers for NH

>116 industrial WH systems operating.

7500 tons of pellets and 94,000 tons of chips, instead of 7,700,000 gallons of oil, were burned, saving \$11,800,000 in heating costs.

Kept \$5,800,000 in the State economy, generating \$35,900,000 in economic activity.

Carbon emissions reduced by 69,091 tons.

2016 NH Wood Energy Council

www.nhwoodenergycouncil.org

This **doesn't** include residential systems...

But, isn't this bad for our forests?

No, it's beneficial! NE's forest trees are growing ~75% faster than they're being harvested.

Pellets are 44% sawdust, from sawmills, 56% pulpwood and other low grade & diseased timber that is usually just left behind by loggers, and 1% from tree trimming and windfall.

With many of NE's mills closing down recently, there's even more wood available for heat & electricity generation.



The bottom line



Incentives:

NH Residential Bulk-Fed Wood-Pellet Central Boilers and Furnace Rebate Program (over \$225K available)

“provides a rebate payment of 40% of the system and installation cost, up to a maximum of \$10,000, for New Hampshire residents who invest in high-efficiency (80% or greater), bulk-fuel fed, wood-pellet central heating boilers and furnaces serving designed intent and installer-certified on or after July 9, 2016.”

- minimum 3.0 ton capacity bulk storage (plus \$100/ton over 3 tons)
- Primary residence only
- Recipient home must be heated by fossil fuel to qualify.

For Commercial: 40%, up to \$65,000, towards equipment and installation

- 30%, up to \$5,000, available as an add-on grant for qualifying thermal storage

<http://www.puc.state.nh.us/Sustainable%20Energy/RenewableEnergyRebates-WP.html>

Won't a fancy new system increase my property values and also, my taxes?

Yes to values, no to taxes, provided the Warrant is passed on March 14th at the Town Meeting.
(Please come and vote for it!)



System costs



Varies with:

- ✓ size and type of system,
- ✓ storage unit,
- ✓ ability to tie into existing distribution

\$12,000 to \$25,000 BEFORE rebates.

Financing is available through:

- ✓ Lake Sunapee Bank: Energy Efficient Home Loan program
- ✓ Sugar River Bank: home equity loan
- ✓ most credit unions in NH

What will it save me?

On average:

About \$100,000 over the 25 year life of your system, especially if petroleum fuel costs continue to rise.

Check installer contracts and look for (and compare) the warranty coverage, and an explanation of what happens if the installer or the system's manufacturer goes away (do this for all home improvements!). Make sure any installer assurances are written in the contract and that warranties are assigned to the residence itself, not the owner.

Time for:



our panel of experts!