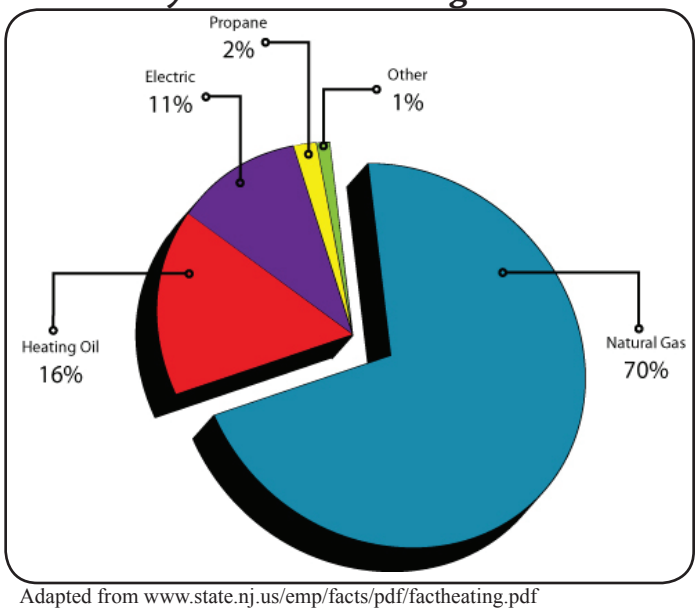
clearing the air about Wood Heat

99% of New Jersey households heat their homes with gas, oil, electric, or propane. These non-renewable fossil fuels contribute to greenhouse gas emissions even before they enter your home. The extraction, processing, storage, and shipment of these fuels also contribute to global warming. One way to cut down on our reliance on these non-renewable resources is to supplement our heating with a renewable natural resource, wood. With an EPA certified wood stove and seasoned dry wood, wood heat is a smart choice for the environment as well as for reducing heating costs.

New Jersey household heating sources



Adapted from www.state.nj.us/emp/facts/pdf/factheating.pdf

Q. *What amount of particulate emissions does a wood stove emit per hour?*

A. Older woodstoves emit from 40 to 60 particulate grams per hour. However, EPA certified stoves emit 70% less particulates - two to five grams per hour.

Q. *How do I know if my wood stove is EPA certified?*

A. Look for a metal sticker on the back of the appliance. Anything manufactured after July 1, 1992 has been EPA certified and conforms to emissions standards.

Q. *What should I burn in my stove?*

A. Never burn anything but wood that has been seasoned. Seasoned wood has been stored in a dry location for a year or more. Dry wood is lighter, produces more energy, starts easier, produces less C02 and particulates, and is safer to use.

Q. *I need to buy a new woodstove, where can I compare models?*

A. Visit www.epa.gov/woodstoves for a list of stoves and efficiency ratings, emissions, and heat output.

Does cutting down trees for firewood contribute to deforestation?

When trees marked for firewood are part of a forest management plan, as they are in the NJ Parks and Forestry Firewood Program, the trees are cut for specific reasons. Foresters may decide to cut trees for a thinning to achieve better spacing and growth or to promote specific species for future stand composition. Thinning stands of trees improves the vigor of the remaining trees for sustained health and growth.

How can I get the most heat from burning wood?

- ✓ Choose the proper size stove
- ✓ Buy the most efficient design you can afford
- ✓ Burn only fuel designed for your stove
- ✓ Burn seasoned wood
- ✓ Make fires small and hot
- ✓ Install a stack thermometer
- ✓ Remove excess ashes
- ✓ Insulate your house
- ✓ Clean your smokestack/chimney
- ✓ Inspect your stove twice a year

firewood characteristics

species	heat	gross heat value*	ease of splitting	ease of starting	coaling qualities	sparks
Alder	M-L	16,480.0	easy	fair	good	moderate
Apple	VH		difficult	difficult	excellent	few
Ash	H	22,513.0	easy-mod	fair-diff	good-exc	few
Aspen	L	15,467.7	easy	easy	good	few
Beech	H	24,457.9	difficult	poor	good	few
Birch	M	20,884.2	easy	easy	good	moderate
Boxelder	M-H		moderate	fair-diff.	excellent	many
Cedar	M-L		easy	easy	poor	many
Cherry	M	20,437.4	fair	poor	excellent	few
Cottonwood	L	15,858.6	easy	easy	good	moderate
Douglas-fir	M	22,732.4	easy	easy	fair	moderate
Elm	M	20,046.6	very diff	fair	good	very few
Grand & subalpine firs	L	17,400.0	moderate	easy	poor	moderate
Hemlock	M-L	16,483.0	easy	easy	poor	many
Hickory	VH	28,422.6	easy	fair	excellent	moderate
Juniper	M		difficult	fair	good	many
Larch (tamarack)	M	25,833.6	easy-mod.	easy	fair	many
Locust	VH	29,260.2	very diff	difficult	excellent	very few
Maple, Red	M	19,209.0	fair	poor	fair	few
Maple, Sugar	H	23,787.8	easy	poor	excellent	few
Oak, Red	H	24,681.3	easy	poor	excellent	few
Pines, Southern	M	22,196.2	easy	easy	fair-poor	moderate
Pine, others	L	19,000.0	easy	easy	fair-poor	moderate
Poplar	L	14,071.0	easy	easy	fair	moderate
Spruce	L	15,272.8	easy	easy	poor	few
Willow	L	16,800.0	easy	fair	poor	moderate

* Gross Heat Value is expressed as 1000 BTU's per air-dried cord. 1 BTU = amount of heat required to raise the temperature of 1 pound of water by 1°F. It takes about 10,000 BTU's to heat a load for laundry; and about 150 million BTU's to heat the average home.

references

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