

Comparing Fuel Costs

The following formulas allow you to compare the cost of different fuels based on their heating equivalents and typical heating system efficiency.

<u>Fuel</u>	<u>Heat equivalent</u>	<u>Burner Efficiency</u>	<u>Cost - \$/Million Btu</u>
Fuel Oil	138,500 Btu/gallon	75%	$\$/\text{MBtu} = \$/\text{gal} \times 9.6$
Waste oil	125,000 Btu/gallon	70%	$\$/\text{MBtu} = \$/\text{gal} \times 11.4$
Natural Gas	100,000 Btu/therm	75%	$\$/\text{MBtu} = \$/\text{therm} \times 13.3$
Propane	92,500 Btu/gallon	75%	$\$/\text{MBtu} = \$/\text{gal} \times 14.4$
Hard Coal	25,000,000 Btu/ton	60%	$\$/\text{MBtu} = \$/\text{ton} \div 15.0$
Hardwood	20,000,000 Btu/cord	60%	$\$/\text{MBtu} = \$/\text{cord} \div 12$
Softwoods	12,000,000 Btu/cord	60%	$\$/\text{MBtu} = \$/\text{cord} \div 7.2$
Wood Pellets	8,200 Btu/lb	80%	$\$/\text{MBtu} = \$/\text{ton} \div 13.1$
Wood Chips			
Green(50% m.c.)	4,000 Btu/lb	50%	$\$/\text{MBtu} = \$/\text{ton} \div 4.0$
Dry (10% m.c.)	7,400 Btu/lb	60%	$\$/\text{MBtu} = \$/\text{ton} \div 8.8$
Corn	8,200 Btu/lb	80%	$\$/\text{MBtu} = \$/\text{ton} \div 13.1$
Biofuels			
Vegetable oil	120,000 Btu/gal	70%	$\$/\text{MBtu} = \$/\text{gal} \times 11.9$
Electricity	3,412 Btu/kilowatt-hour	100%	$\$/\text{MBtu} = \$/\text{kw-hr} \times 293$

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