

Heating Bill Comparison

Date: October 2009

A 2000 ft² home in Michigan uses nearly 85.3 million Btu of heat (MBtu) per winter. The annual heating bill is calculated as such:



A = annual heating bill in dollars
 B = Energy demand (MBtu / year) = 85.3
 C = retail fuel price
 D = heat content of fuel
 E = furnace efficiency factor

$$A = \frac{B C}{D E}$$

Fuel	C	D	E	A
electricity	\$0.1044 / kWh	0.00341 MBtu / kWh	1	\$ 2,612
propane	\$2.17 / gal	0.09165 MBtu / gal	0.85	\$ 2,376
wood pellets	\$225 / ton	15.38 MBtu / ton	0.7	\$ 1,783
heating oil	\$1.91 / gal	0.13869 MBtu / gal	0.8	\$ 1,468
oak wood (dry)	\$225 / cord	28.2 MBtu / cord	0.5	\$ 1,361
natural gas	\$9.24 / Mcf *	1.029 MBtu / kcf	0.85	\$ 901
corn kernels	\$3.20 / bushel	0.3903 MBtu / bushel	0.8	\$ 874
coal	\$54.42 / ton	25.09MBtu / ton	0.8	\$ 231

* Mcf = thousand cubic feet

