

Fuel Heating Cost Comparison (SD)

April 2011

Fuel Type	Heat Value/ Therms/Unit	Unit Cost	Unit Cost Per Therm	Appliance Type	Appliance Efficiency (%, COP, or AFUE)	Cost Per Therm
Wood	200/Cord	\$125/Cord	\$0.63	Fireplace	38%	\$1.64
Wood	200/Cord	\$125/Cord	\$0.63	Stove	72%	\$0.87
Electric	0.03413/kWh	\$0.102/kWh	\$2.98	Baseboard	100%	\$2.98
Electric	0.0529/kWh	\$0.102/kWh	\$1.92	Air-Air Heat Pump	1.55 COP	\$1.92
Electric	0.1024/kWh	\$0.102/kWh	\$0.99	Earth-Air Heat Pump	3 COP	\$0.99
Propane	0.915/Gal.	\$2.28/Gal.	\$2.49	Furnace	80% AFUE	\$3.11
Propane	0.915/Gal.	\$2.28/Gal.	\$2.49	Furnace	90% AFUE	\$2.77
#2 Oil	1.39/Gal.	\$3.29/Gal.	\$2.37	Furnace	72% AFUE	\$3.29
Pellets	150/Ton	\$239.50/Ton	\$1.60	Stove	80% AFUE	\$2.00
Natural Gas	1/Therm	\$0.743/Therm	\$0.74	Furnace	80% AFUE	\$0.93
Natural Gas	1/Therm	\$0.743/Therm	\$0.74	Furnace	90% AFUE	\$0.83
Natural Gas	1/Therm	\$0.743/Therm	\$0.74	Furnace	64% AFUE	\$1.16

Cost per 100,000 Btus delivered as useable heat

British Thermal Unit (Btu) is the amount of energy needed to raise the temperature of 1 pound of water 1°F.

Based on altitude and atmospheric pressure in Helena, MT

1,000 Btu = 1 cubic foot

1,000,000 Btu = 1 dekatherm

100,000 Btu = 1 therm

The fuel comparisons shown are based on NorthWestern Energy's rates for electricity and natural gas and are subject to change. Monthly meter charges and/or tank rental charges are not included in the comparisons and need to be included if calculating a change in fuel sources. If you are comparing costs to other fuels or other energy providers, please adjust for fuel or rate cost difference applicable to your market area.