HEATING FUEL COMPARISON CALCULATOR

Contact local suppliers for most accurate prices. This calculator will not provide an estimate of the cost to heat your home.

Fuel Type	Fuel Unit	Fuel Price Per Unit (dollars)	Fuel Heat Content Per Unit (Btu)	Fuel Price Per Million Btu (dollars)	Heating Appliance Type	Type of Efficiency Rating [4]	Effiency Rating or Estimate[5]	Approx. Efficiency (%)	Fuel Cost Per Million Btu (dollars)
Fuel Oil (#2)	Gallon	$2.65	138,690	$19.08	Furnace or Boiler	AFUE	78.0	78%	$24.46
Electricity	KiloWatt-hour	$0.038	3,412	$11.25	Furnace or Boiler	Estimate	98.0	98%	$11.48
					Air-Source Heat Pump [6]	HSPF [6]	7.7	226%	$4.99
					Geothermal Heat Pump	COP	3.3	330%	$3.41
					Baseboard/Room Heater	Estimate	100.0	100%	$11.25
Natural Gas [1]	Therm [2]	$0.95	100,000	$9.50	Furnace or Boiler	AFUE	78.0	78%	$12.18
					Room Heater (Vented)	AFUE	65.0	65%	$14.62
					Room Heater (Unvented)	Estimate	100.0	100%	$9.50
Propane	Gallon	$2.34	91,333	$25.62	Furnace or Boiler	AFUE	78.0	78%	$32.85
					Room Heater (Vented)	AFUE	65.0	65%	$39.42
Wood [3]	Cord	$200.00	22,000,000	$9.09	Room Heater (Vented)	Estimate	55.0	55%	$16.53
Pellets	Ton	$250.00	16,500,000	$15.15	Room Heater (Vented)	Estimate	68.0	68%	$22.28
Corn (kernels)	Ton	$200.00	16,500,000	$12.12	Room Heater (Vented)	Estimate	68.0	68%	$17.83
Kerosene	Gallon	$3.20	135,000	$23.73	Room Heater (Vented)	Estimate	80.0	80%	$29.67
Coal (Anthracite)	Ton	$200.00	25,000,000	$8.00	Furnace/Boiler/Stove	Estimate	75.0	75%	$10.67

NOTES:

1 Natural gas is typically sold to residential customers in units of "therms," but may be sold in units of hundreds of cubic feet (ccf).

2 One therm = 100,000 Btu, and is equivalent to about 97.18 cubic feet (or 0.972 ccf), when there are 1,029 Btu/cf.
To convert prices in $/Mcf (1,000 cubic feet) to $/therm, divide the $/Mcf price price by 10.29 .

3 The heat content value for a cord of wood varies by tree species and is greatly affected by moisture content; 20 million Btu per cord is a rough approximati

4 For definitions of Efficiency Ratings and referrals to where they can be obtained, click on the EFFICIENCY INFO tab below.
Some types of heaters do not have efficiency ratings; the ratings in the yellow cells are comparable estimates for new appliances with basic features.

5 The default values are the minimum efficiency standards set by the U.S. Department Energy. Estimated “ratings” are provided for heating equipment for which there are no DOE standards.

6 Air-Source Heat Pump Ratings: The actual heating efficiency and seasonal performance of a "conventional" air-source heat pump may vary significantly

from its rated heating season performance factor (HSPF). Below is a procedure for determining an adjusted HSPF for your location *for an air-source heat pump that uses only electric resistance heating as the auxillary heat source* . There are so-called "dual-fuel" or "hybrid" heat pump systems that are basically a heat pump integrated with a forced-air combustion appliance that uses natural gas, fuel oil or propane. In general, these systems use the heat pump for heating until outside temperatures reach the low 40's/high 30's (F), then switch to the combustion appliance for heating. The adjustment below does not apply to those types of hybrid heat pump/combustion appliance heating systems.

See the Technical Note for Air Source Heat Pumps in the EFFICIENCY INFO tab below for details on how the adjusted HSPF is calculated.

Default Fuel Price Sources (click on links below); see also Prices tab below.
http://tonto.eia.doe.gov/dnav/pet/pet_pri_dist_a_EPD2_PRT_cpgal_m.htm
http://www.eia.doe.gov/emeu/mer/prices.html
Cascade Natural GAS
OCEI
www.hearth.com/econtent/index.php/fuels/
www.hearth.com/econtent/index.php/fuels/
www.hearth.com/econtent/index.php/fuels/
www.nyserda.org/Energy_Information/nyeph.asp
www.hearth.com/econtent/index.php/fuels/

on.