

Corn vs. the Big 4

Here is B³'s real number cost comparison for heating with corn as compared to the major regional home fuel sources. Different fuel types are traditionally measured in dissimilar units and each unit type is capable of producing a different number of Btu per that unit. A "Btu" or British thermal unit is a standardized unit of energy, used in the power industry, to describe the potential energy content of a fuel. For that reason we have calculated each fuel type in terms of 100,000 Btu so that all 5 fuel types can be compared for dollar value.

August 2008 energy cost comparison

Fuel Type	Unit Name	Potential Energy per Unit	Amount of Unit needed to make 100,000 Btu	\$ Cost per Unit	\$ Cost per 100,000 Btu	% of extra \$ needed for 100,000 Btu
#2 Corn	bushel	504,000 Btu	0.1984 bushel	\$6.25	\$ 1.24	0%
Natural Gas	therm	100,000 Btu	1.0 therm	\$1.81	\$ 1.81	46% more
#2 Fuel Oil	gallon	139,000 Btu	0.7194 gallons	\$4.081	\$ 2.94	137% more
Propane	gallon	91,800 Btu	1.0893 gallons	\$3.20	\$ 3.49	181% more
Electricity	kilowatt hour	3,412 Btu	29.3083 kWh	\$0.145257	\$ 4.26	243% more

SOURCES and DATA (about our data collection methods and sources)

There is nothing worse than someone using numbers and statistics to manipulate your opinion to try to get you to believe what they want you to believe. We want you to know that these numbers are the un-manipulated truth, so here is how we got them. If you have any doubts as to how accurate our calculations are please feel free to collect the data and crunch the numbers yourself.

#2 Corn – The # 2 Corn price is B³'s actual current per bushel sales price.

#2 Heating Oil – The average home delivery oil price was calculated by calling the top 7 heating oil companies in the Baltimore metro area. The companies we called were Petro, Griffith, Rittenhouse, C. Hoffberger, Carroll Independent, Alliance Fuel and Husky. We recorded their standard no contract delivery price for over 150 gallons delivered. We then calculated the simple average of the 7 prices collected.

Natural Gas – The Natural Gas, (NG) price was recorded from the BG&E web site. This price is the commodity price per therm + the delivery charge per therm, but does not include the \$13.00 flat fee customer charge, so it is recorded at less than actual cost. For instance, if you use 10 therms of NG in one billing cycle at \$1.81 per therm + the \$13.00 flat fee customer charge your actual price would be \$ 3.11 per therm. If you use 30 therms of NG in one billing cycle at \$1.81 per therm + the \$13.00 flat fee customer charge your actual price would be \$ 2.24 per therm. As I have just illustrated your price can fluctuate wildly depending on how much NG you actually use in one month, but even if you used a million therms that price would never be less than \$1.81, and at that price corn is still much cheaper than Natural Gas.

Propane – The average home delivery Propane price was calculated by calling the top 3 Propane companies in the Baltimore metro area. The companies we called were Suburban Propane, AmeriGas and United Propane. We recorded their standard no contract per gallon delivery price. We then calculated the simple average of the 3 prices collected.

Electricity - The Electricity price was recorded from the BG&E web site. This price is the electric supply price per kWh + the delivery charge per kWh + the RSP charge per kWh + the state surcharge per kWh + the Franchise Tax per kWh + the local tax per kWh, but does not include the \$7.50 flat fee customer charge, or the \$0.37 MD universal Svc program charge so, as with the NG price, it is recorded at less than actual cost.



Baltimore Biomass Buyers Cooperative (a project of Sustainable Urban Infrastructures, Inc.) makes local, sustainably grown bio-mass available to its members for use as heating fuel. We are located at 2800 Sisson Street, Baltimore, MD 21211 For more information visit us at: www.baltimorebiomass.com