

# ENERGY Selector

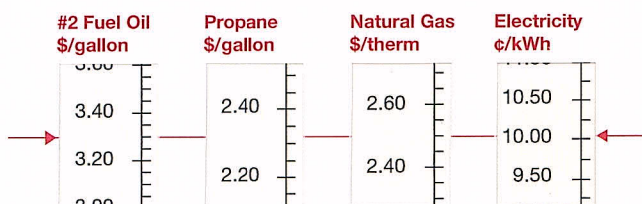
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Use this Energy Selector to make an "apples-to-apples" comparison of various heating fuels on the basis of cost per BTU.

This Energy Selector contains the data for eight different fuels, including traditional fossil fuels, as well as renewable biomass fuels. To find the equivalent costs of each of these eight fuels for the same BTU heating value, simply align the slide to the current price for one of the fuels and then read straight across (on both sides).

The equivalent prices of the various fuels have the same cost per BTU. **If any fuel can be purchased for less than its equivalent price, then there is a savings involved.** For example, when the price of propane is \$3.30 per gallon, the equivalent price of electricity is 14.25 cents per kWh. If electricity can be purchased for less than its equivalent price when propane is \$3.30 per gallon, then using electric resistance heat will yield a savings compared to propane.

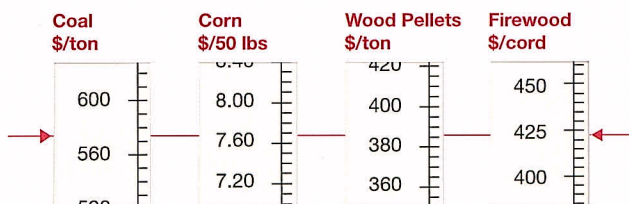
Continuing with this example, if the price of electricity is 9.5 cents per kWh, then the most that you should pay for propane to get the equivalent amount of heat is \$2.20 per gallon.



For example, if the quoted price for #2 fuel oil is \$4.50 per gallon, move the slide so that the arrows point to \$4.50 for fuel oil. Then read straight across for equivalent prices of \$3.15 per gallon for propane, \$3.40 per therm for natural gas, and 13.75 cents per kWh for electricity.

On the other side, read equivalent prices of \$790 per ton of coal, \$10.50 per 50 pounds of shelled corn, \$530 per ton of wood pellets, and \$580 per cord of firewood.

Please see the other side for proper interpretation of equivalent prices.



An effective strategy for coping with the high costs of energy is to establish dual (or triple) fuel capability so that you can switch easily from one fuel to another.

### Assumptions Used in Developing This Energy Selector

Fuel	Energy Content	Efficiency
Coal	13,100 BTU/lb	75%
Corn	6,970 BTU/lb	75%
Electricity	3,412 BTU/kWh	100%
Firewood	24 x 10 <sup>6</sup> BTU/cord	60%
#2 Fuel Oil	139,400 BTU/gal	80%
Natural Gas	100,000 BTU/therm	85%
Propane	91,600 BTU/gal	85%
Wood Pellets	8,200 BTU/lb	80%

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Penn State College of Agricultural Sciences research, extension, and resident education programs are funded in part by Pennsylvania counties, the Commonwealth of Pennsylvania, and the U.S. Department of Agriculture.

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Code # UB042 40M06/08reedhahn4806

For timely information on various energy issues, visit <http://energy.cas.psu.edu/>.

For further information, contact Dr. Dennis Buffington at [dbuffington@psu.edu](mailto:dbuffington@psu.edu).

