

# Eau Claire Energy Cooperative

## COMPARE ENERGY COSTS - GEOTHERMAL HEAT PUMPS TO FOSSIL FUELS

Geothermal Heat Pump (GHP) with a COP of 3.5 price/kWh	Fuel Oil 65% efficient price/gallon	LP 92% efficient price/gallon	Natural Gas 92% efficient price/therm	Cost per Million BTU	
\$0.062	\$0.47	\$0.44	\$0.48	\$5.19	
\$0.064	\$0.49	\$0.45	\$0.49	\$5.36	
\$0.066	\$0.50	\$0.47	\$0.51	\$5.53	
\$0.068	\$0.52	\$0.48	\$0.52	\$5.69	
\$0.070	\$0.53	\$0.49	\$0.54	\$5.86	
\$0.072	\$0.55	\$0.51	\$0.55	\$6.03	
\$0.073	\$0.56	\$0.51	\$0.56	\$6.11	* Off-Peak (Dual Fuel & Heat Storage) base rate
\$0.074	\$0.56	\$0.52	\$0.57	\$6.20	Sept. 21 - May 20
\$0.076	\$0.58	\$0.54	\$0.59	\$6.36	(after NWPA Rate Credit)
\$0.078	\$0.59	\$0.55	\$0.60	\$6.53	
\$0.080	\$0.61	\$0.56	\$0.62	\$6.70	
\$0.082	\$0.62	\$0.58	\$0.63	\$6.86	
\$0.084	\$0.64	\$0.59	\$0.65	\$7.03	
\$0.086	\$0.66	\$0.61	\$0.66	\$7.20	
\$0.088	\$0.67	\$0.62	\$0.68	\$7.37	
\$0.090	\$0.69	\$0.63	\$0.69	\$7.53	
\$0.092	\$0.70	\$0.65	\$0.71	\$7.70	
\$0.094	\$0.72	\$0.66	\$0.72	\$7.87	
\$0.096	\$0.73	\$0.68	\$0.74	\$8.04	
\$0.098	\$0.75	\$0.69	\$0.75	\$8.20	
\$0.100	\$0.76	\$0.70	\$0.77	\$8.37	
\$0.102	\$0.78	\$0.72	\$0.79	\$8.54	
\$0.104	\$0.79	\$0.73	\$0.80	\$8.71	
\$0.106	\$0.81	\$0.75	\$0.82	\$8.87	
\$0.107	\$0.82	\$0.75	\$0.82	\$8.96	* General Purpose base rate
\$0.108	\$0.82	\$0.76	\$0.83	\$9.04	Sept. 21 - May 20
\$0.110	\$0.84	\$0.78	\$0.85	\$9.21	(after NWPA Rate Credit)
\$0.112	\$0.85	\$0.79	\$0.86	\$9.38	
\$0.114	\$0.87	\$0.80	\$0.88	\$9.54	
\$0.116	\$0.88	\$0.82	\$0.89	\$9.71	
\$0.118	\$0.90	\$0.83	\$0.91	\$9.88	
\$0.120	\$0.91	\$0.85	\$0.92	\$10.05	
\$0.122	\$0.93	\$0.86	\$0.94	\$10.21	
\$0.124	\$0.94	\$0.87	\$0.96	\$10.38	

**Fuel**  
GHP/COP of 3.5  
Fuel Oil  
LP  
Natural Gas

**BTU Heat Content**  
11,945/kWh  
140,000/gal  
91,500/gal  
100,000/therm

Example: If you are comparing a geothermal heat pump with a COP of 3.5, at \$0.073/kWh (7.3 cents/kWh), to a 65% efficient fuel oil system, you would have to buy fuel oil at \$0.56/gal., or less, to have as low an operating cost as the geothermal heat pump.

\* ECEC rates subject to change at any time

For more information on the NWPA Rate Credit go to [www.ecec.com](http://www.ecec.com) or call ECEC at 715-832-1603

