

# Eau Claire Energy Cooperative

## COMPARE ENERGY COSTS - GEOTHERMAL HEAT PUMPS TO FOSSIL FUELS HEATING COST COMPARISON

Geothermal Heat Pump (GHP) with a COP of 4.3 price/kWh	Fuel Oil 80% efficient price/gallon	LP 92% efficient price/gallon	Natural Gas 92% efficient price/therm	Cost per Million BTU	
\$0.084	\$0.64	\$0.48	\$0.53	\$5.72	* Off-Peak (Dual Fuel & Heat Storage) base rate Oct. - May billing periods
\$0.086	\$0.66	\$0.49	\$0.54	\$5.86	
\$0.088	\$0.67	\$0.50	\$0.55	\$6.00	
\$0.090	\$0.69	\$0.52	\$0.56	\$6.13	
\$0.092	\$0.70	\$0.53	\$0.58	\$6.27	
\$0.094	\$0.72	\$0.54	\$0.59	\$6.41	
\$0.096	\$0.73	\$0.55	\$0.60	\$6.54	
\$0.098	\$0.75	\$0.56	\$0.61	\$6.68	
\$0.100	\$0.76	\$0.57	\$0.63	\$6.81	
\$0.102	\$0.78	\$0.59	\$0.64	\$6.95	
\$0.104	\$0.79	\$0.59	\$0.65	\$7.06	
\$0.106	\$0.81	\$0.61	\$0.66	\$7.22	
\$0.108	\$0.82	\$0.62	\$0.68	\$7.36	
\$0.110	\$0.84	\$0.63	\$0.69	\$7.52	
\$0.112	\$0.85	\$0.64	\$0.70	\$7.63	* General Purpose base rate Oct. - May billing periods
\$0.114	\$0.87	\$0.65	\$0.71	\$7.77	
\$0.116	\$0.89	\$0.67	\$0.73	\$7.90	
\$0.118	\$0.90	\$0.68	\$0.74	\$8.04	
\$0.120	\$0.92	\$0.69	\$0.75	\$8.18	
\$0.122	\$0.93	\$0.70	\$0.76	\$8.31	
\$0.124	\$0.95	\$0.71	\$0.78	\$8.45	

Fuel	BTU Heat Content
GHP/COP of 4.3	14,676/kWh
Fuel Oil	140,000/gal
LP	91,500/gal
Natural Gas	100,000/therm

Example: If you are comparing a geothermal heat pump with a COP of 4.3, at \$0.084/kWh (8.4 cents/kWh), to a 92% efficient LP system, you would have to buy LP at \$0.48/gal., or less, to have as low an operating cost as the geothermal heat pump.

\* ECEC rates subject to change at any time

updated Jan 2023