

Geothermal Energy in the Agrihood

Heating, cooling, and hot water account for approximately 60% of the average home's energy use, making the three combined the largest energy expense for homeowners. Geothermal systems solve this problem by providing environmentally-friendly, cost-saving heating, cooling, and hot water so you can live more comfortably in your home without sacrifice.



No Noisy Outdoor
A/C Unit, Quieter
Indoors



Even and
Comfortable
Air Flow



Even and
Comfortable
Temperature



Integrated
Humidification
System



Often Outlasts
Other Systems



Can Assist in
Providing Hot
Water



Lower Carbon
Emissions

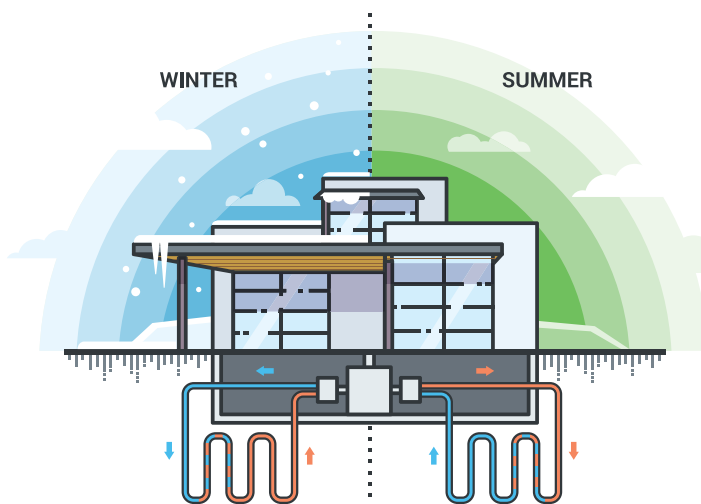


Higher
Efficiency

WINTER

Heating Mode

In winter time, fluid circulating through the earth loop or well absorbs stored heat from the ground and carries it indoors. The geothermal heat pump compresses the heat to a higher temperature and distributes it throughout the home.



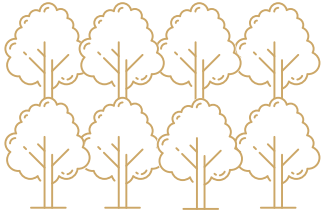
SUMMER

Cooling Mode

In summer, heat from the home is rejected to the cooler earth through buried pipes. The cooled circulating fluid returns to the heat pump completing the cycle. The fluid is typically cooler than the outside temperature, providing a more efficient means of air conditioning.

ESTIMATE *CO₂ Reductions*

Putting a geothermal system in a typical home is equal in greenhouse gas reduction to:



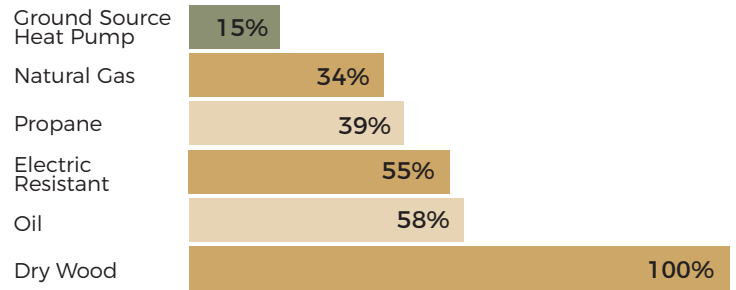
Planting an Acre of Trees



Taking Two Cars Off the Road

Source: Geothermal Heat Pump Consortium www.geoexchange.org

ESTIMATE *CO₂ Reductions*



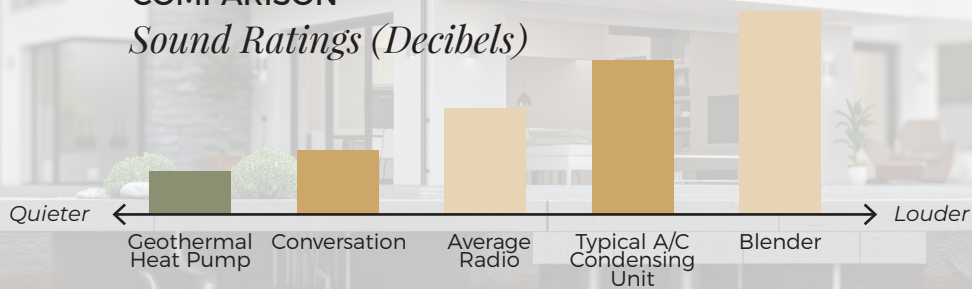
Estimated CO₂ emissions for a building with 39,000 Btu/hr design heat loss at -3°F. Estimates based on the following CO₂ emission rates: Electricity, 0.76 lb CO₂/KWH; Natural Gas, 110 lb CO₂/MBTU; Propane, 126.7 lb CO₂/MBTU; Oil, 188.6 lb CO₂/MBTU; Dry Wood, 323.8 lb CO₂/MBTU. Source: 2013 Phoenix Energy Supply

COST REDUCTION *Tax Benefits*

Homebuyer is eligible for a federal income tax credit for 30% of costs under Section 25D of the Inflation Reduction Act. Please see bit.ly/middlegeo and consult with your accountant.



COMPARISON *Sound Ratings (Decibels)*



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