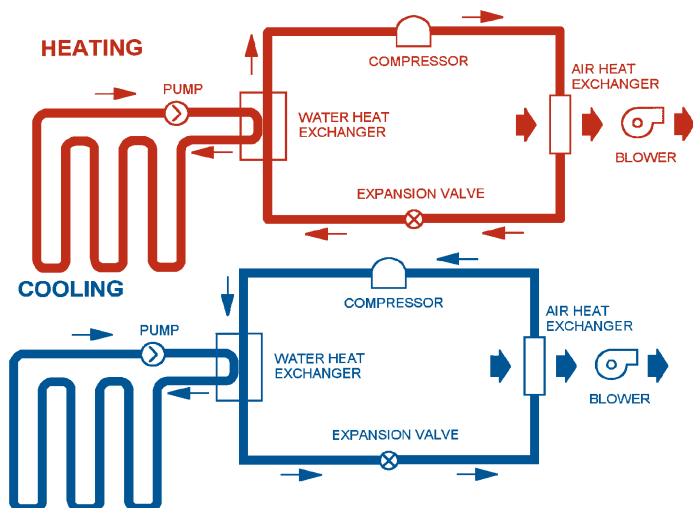


Why install a ground source heat pump system?

Although ground source heat pumps (GSHP) require a larger initial investment than other heating and cooling systems, they provide the most efficient heating and cooling system available. While fuel costs rise, ground source heat pumps will pay back your investment with huge savings. For either new home construction or to replace old forced air systems where there's already ductwork, a GSHP conserves energy to save you money. A complete heating and cooling system operates at up to an average of 350 percent efficiency.

How does the ground source heat pump work?

- Water and anti-freeze solution circulates through a series of ground loop pipes buried six to eight feet in the ground.
- Ground loops transfer heat; under-ground temperatures remain stable. In the heating mode, heat pumps use a typical refrigeration system to extract heat from the ground loops, concentrate the heat and circulate heat through standard ductwork.
- The system reverses in summer to provide air conditioning and uses standard ductwork to circulate cool air throughout the home.
- \$400 per ton rebate for qualifying heat pump systems installed in 2012. Rebate application must be submitted to qualify.



Home heating cost comparison

Propane	11.5¢/kWh residential rate
70% Efficient standard unit	Equivalent to 62 cents/gal. propane
90% Efficient high-efficiency unit	Equivalent to 79 cents/gal. propane
Natural Gas	11.5¢/kWh residential rate
70% Efficient standard unit	Equivalent to 67 cents/therm natural gas
90% Efficient high-efficiency unit	Equivalent to 87 cents/therm natural gas

GSHP operating cost calculated at 350 percent efficiency. Rates do not reflect any variable wholesale power cost adjustment that may be required. Rates are subject to change.

For Ground Source Heat Pump systems, members may be eligible for 0-2.99% financing up to 10 years, maximum loan amount of \$25,000. Contact Center for Energy and Environment at (855) 335-5835 for details.

GSHP systems may qualify for Interruptible Heating/Cooling rate of 6.1¢/kWh Sept. - May and 9.7¢/kWh June - August providing:

1. An operational whole-house fossil fuel backup heating system is present.
2. The GSHP equipment is compatible with and properly wired for the following heating and cooling season control strategy:
 - Heating- continuous interruption, max 12 hours/day, 400 hours/heating season.
 - Cooling- approximate 15 minute cycled interruption, max 6 hours/day, 200 hours/cooling season.

Call your East Central Energy trusted energy advisors or visit eastcentralenergy.com for more information.

Electric heat is a great deal!

Compare the facts. With ECE's off-peak rates, electric heat can be more economical than other fuel sources. And because there's no flame or danger of harmful fumes, electric heat is the safest heating option available.

Annual fuel cost comparison

System	Efficiency	Energy	Unit cost	Annual Heating Cost
Ground source heat pump on residential rate	350%	7,550 kwh	\$0.115/kwh	\$868
Electric thermal storage on ES rate	100%	26,255 kwh	\$0.053/kwh	\$1,392
Conventional electric system on dual fuel/storage water heating rate	100%	26,255 kwh	\$0.057/kwh	\$1,497
Conventional electric system on dual fuel only rate	100%	26,255 kwh	\$0.061/kwh	\$1,602
LP gas furnace LP gas/air source heat pump	90%	1,067 gal* 534 gal/6,556 kwh	\$2.00/gal \$0.074/kwh	\$2,134 \$1,552**
Oil furnace	85%	763 gal*	\$3.00/gal	\$2,289
Natural gas Natural gas/air source heat pump	90%	995 therms* 498 therms/6,556 kwh	\$1.10/therm \$0.074/kwh	\$1,095 \$1,033**

Reduced rates do not reflect any variable wholesale power cost adjustment that may be required. Rates are subject to change.

* to determine a more accurate heating cost, multiply the energy number shown by the unit cost that you are currently charged for your fuel.

** Air source heat pump is rated at 200% efficiency, and is calculated to provide 50% of the heating energy.

Annual energy use based on heating a 1600 sq. ft. (32'x 50') home with R=19 walls and R=44 ceiling including an insulated lower level requiring 89,506,000 BTUs heat energy annually.