

Annual Home Heating Cost Comparisons

Annual heating costs for a heating load of 100,000 BTU / hour

Type of Heating System	Electric/Gas Rate	Estimated Annual Heating Cost
Ground Source Heat Pump	\$.09 / kWh	\$2,059
Air Source Heat Pump w/ natural gas backup (90% AFUE)	\$.09 / kWh \$1.10 / therm	\$2,564
Natural Gas Furnace (90% AFUE)	\$.09 / kWh \$1.10 / therm	\$2,852
Natural Gas Furnace (80% AFUE)	\$.09 / kWh \$1.10 / therm	\$3,324
Air Source Heat Pump w/ propane backup (90% AFUE)	\$.09 / kWh \$1.60 / gallon	\$3,722
Air Source Heat Pump w/ electric resistance backup	\$.09 / kWh	\$4,171

(Additional heating and cooling cost comparisons can be calculated at www.mncee.org/siteapps/hvaccalc)

Princeton Public Utilities offers the following rebates for residential heat pumps:

Air Source Heat Pumps

Split systems and single package < 65,000 BTU/h:

\$200 + \$75/SEER for each 1 SEER above 14.0 SEER (must be ENERGY STAR-qualified)

Through-the-wall Split Systems < 30,000 BTU/h:

\$200 Rebate (must be ENERGY STAR qualified and SEER \geq 16)

Through-the-wall Single Package < 30,000 BTU/h:

\$200 Rebate (must be ENERGY STAR qualified and SEER \geq 16)

Ground Source Heat Pumps

Closed-Loop Systems:

\$200 Rebate/Ton + \$25/Ton for each EER above 14.1 (EER \geq 14.1 and COP \geq 3.3)

Open-Loop Systems:

\$200 Rebate/Ton + \$25/Ton for each EER above 16.2 (EER \geq 16.2 and COP \geq 3.6)

Direct Expansion (DX) Systems:

\$200 Rebate/Ton + \$25/Ton for each EER above 15.0 (EER \geq 15.0 and COP \geq 3.5)

You may also be eligible for a Federal Energy Tax Credit of up to \$300 for high-efficiency heat pumps. Contact your tax advisor for advice and Princeton Public Utilities for an informational factsheet.

