

# Heat Pumps

## An Eco-Friendly Option

### How It Works

Heat pumps are designed to transfer heat, not create it, from one place to another. They do so by using similar technology to your fridge or air conditioner and burn no fossil fuels. Cold climate air-source heat pumps can extract heat from outdoor air at temperatures of  $-30^{\circ}\text{C}$  and can completely replace your current heating and cooling system.

### Make The Switch

Heat pumps can be installed as a ducted or ductless system and are approximately 3x more efficient than furnaces. A ducted unit will work the same as a central furnace while a ductless unit has a heat exchanger and blower and is usually mounted on your wall or floor. All heat pumps run on electricity.

It is important to remember that in order for heat pumps to lower your energy bills, you must make improvements to the building envelope before installation (i.e. increasing insulation, draft proofing, improving window efficiency). If not, it may be necessary to have a supplemental heat source. Although natural gas is currently cheaper than electricity, prices are steadily increasing. In the long-term, electricity will become cheaper especially with investments in renewable energy.

Depending on the size and type of heat pump, this technology will likely prove to lower energy bills throughout its lifetime, recoup the initial investment and lessen your reliance on fossil fuels.



### First Step

The **first step** after a home energy evaluation is to find **the right contractor** to make the switch. After sourcing three different written estimates, the contractors should read your EnerGuide report to align on the **necessary requirements** for installation and to evaluate all options for your home. An [Interest-Free Loan and Grant](#) are now available, making heat pumps cost-competitive.

### Compare and Choose

Air source heat pumps are mostly used in Ontario. Be sure to check the Heating Seasonal Performance Factor and the Energy Efficiency Ratio to understand its efficiency in all seasons. Higher numbers means higher efficiency ratings

### Resources

[The Atmospheric Fund \(TAF\)](#).

[Ottawa Home Services](#)

[Save on Energy](#)

Heat Pumps: [Heating and Cooling](#)