

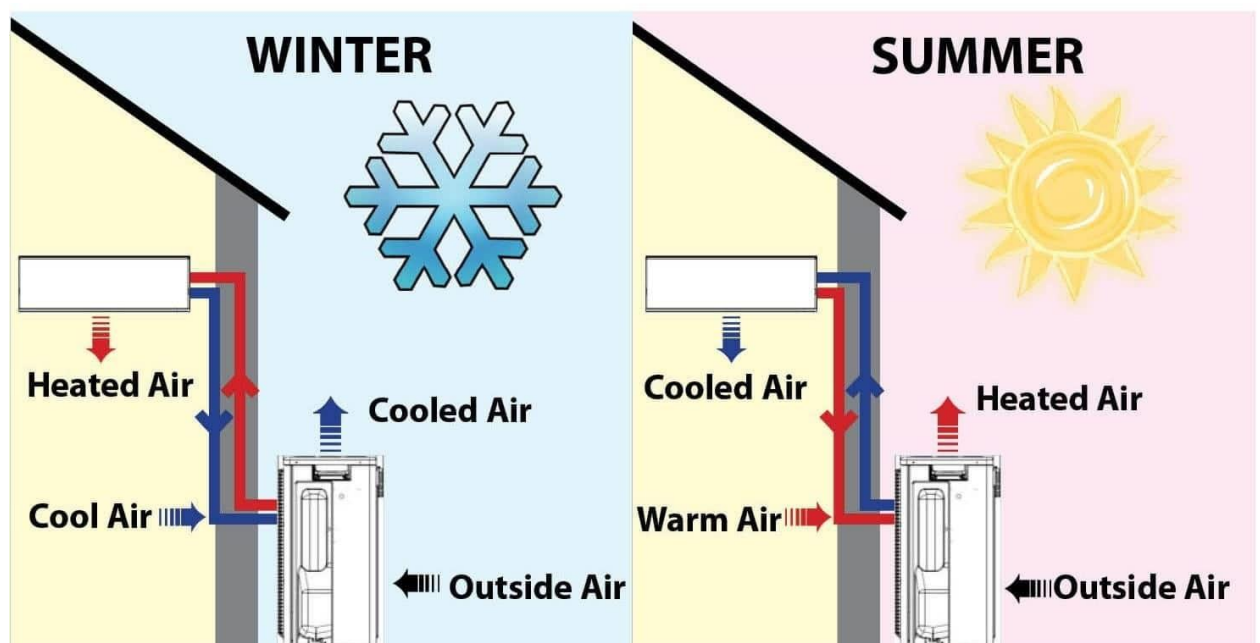


A Guide to Heat Pumps for New Haveners

Heat pumps are a safe, reliable way to both heat and cool your home that's energy efficient and great for the environment. Since they run entirely on electricity, they can be powered without fossil fuels. Heat pumps don't create heat (like a furnace or boiler); rather, they *move* heat between the inside and outside of your house. That makes them super efficient and allows them to function as both heaters and air conditioners. Air source heat pumps use heat from the air outside your home, while geothermal heat pumps exchange heat through tubes in the earth. Read on for more on heat pumps and how to get one installed.

What are heat pumps, and how do they work?

A heat pump is a heating, venting, and air conditioning (HVAC) system that can heat or cool a space using an indoor and outdoor unit. Here's how an air-source heat pump works: in hot weather, the heat pump is set to "cooling mode," in which the indoor unit pulls heat from your home and pushes it to the air outside. In cold weather, the heat pump's cooling mode works the opposite way: the outdoor unit pulls heat from outside to the house's interior, blowing through ducts or fan units mounted on the walls of your home. Counterintuitively, even in winter, there is a small amount of heat in the air, so in heating mode the heat pump captures this heat and transmits it into the home. Heat pumps also dehumidify the home through their natural heating and cooling processes even better than most air conditioners.



Source: [Lozier Heating & Cooling](#)

What are the benefits of heat pumps?

- **They're more energy efficient:** Because they transfer heat rather than generating it, heat pumps save a lot of energy compared to conventional heating and cooling systems. A



heat pump can deliver three to four times more energy than it consumes, while even high-efficiency gas furnaces cannot convert all the energy they receive into heat—they deliver less energy than they consume.

- **They're cost-effective:** Heat pumps can reduce electricity use by 50% compared to electric baseboard heaters. Combined with energy efficiency improvements, heat pumps may be able to lower heating and cooling bills for customers transitioning from oil, propane, and gas heating systems.
- **They're environmentally friendly:** A heat pump reduces your carbon footprint by using electricity instead of gas or oil. The electricity that powers a heat pump can be generated from renewable sources, such as solar or wind power, making it even greener.
- **They improve health and comfort:** A heat pump can provide a more consistent temperature throughout your home, without hot or cold spots. It also improves indoor air quality by filtering dust, pollen, and other pollutants from the air entering and exiting your home. It operates quietly and requires less maintenance than other systems.

What are the incentives for installing a heat pump in New Haven?

If you are interested in installing a heat pump, you can take advantage of the incentives below that can make it more affordable.

- **State rebates:** Energize CT offers [rebates for qualifying air source heat pumps](#) that meet certain efficiency standards. The rebate is tied to the size of the heat pump you install. Heat pumps are sized in tons (one ton is 10,000 BTUs of heating) and you'll receive a rebate of \$250/ton. If you hire an installer who is part of the Energize Connecticut Heat Pump Installer Network, you can get an additional mail-in or online rebate of up to \$1,000 per ton of capacity for an air source heat pump that replaces a fossil fuel system (up to \$15,000). Installers are trained and certified by Energize CT to ensure quality installation and customer satisfaction.
- **Federal tax credit:** You can claim a federal tax credit of 30% of the cost of your air source heat pump system. The tax credit applies to both equipment and labor costs, and is limited to \$2,000 annually. [See this page for an FAQ on the federal energy home improvement tax credit](#).

Can I speak to someone about whether heat pumps are right for my home?

You can receive cost-free advice about heat pumps, home electrification, and energy efficiency through cost-free energy counseling from Neighborhood Housing Service's [I Heart My Home program](#), sponsored by the City of New Haven. I Heart My Home's energy coaches work one-on-one with New Haven homeowners, renters, and landlords to access financial resources and complete home energy and electrification improvements—including heat pumps—at as low a cost as possible. [Fill out this brief form](#) (it takes less than 5 minutes) to schedule an initial **20-30 minute call and get started today!**

Or, if you're just interested in learning more about heat pumps, [schedule a cost-free consultation](#) with a heat pump specialist through Energize CT. To request a free consultation, visit the [Energize CT website](#) or call 1-877-WISE-USE (1-877-947-3873). A heat pump expert will contact you to assess your current heating and cooling system, home energy needs, and budget. They will also explain the different types of heat pumps available, the installation process, and



the incentives you can qualify for. They will help you find the best heat pump system for your home and connect you with a Connecticut Heat Pump Network installer if you decide to proceed with installing a heat pump.