Keep Your Home Comfortable All Year Long

Stay warm in the winter and cool in the summer with energy-efficient electric heat pumps.
What is a heat pump?

Heat pumps are the latest in technology to keep your home comfortable year-round. They’re environmentally friendly, extremely efficient, and affordable to operate.

How do heat pumps work?

Heat pumps pull heat from the air or from underground and use it to heat your home in the colder months. They flow in reverse and use a refrigerant to cool your home in the warmer months.

To get the most comfort and efficiency from your system, use the time between ordering and installation to improve your home’s insulation and air sealing.

The benefits of heat pumps

**Efficiency:** Heating your home with a heat pump typically costs less than oil, propane, or electric baseboard heat and is more environmentally conscious.

**Dual Heating and Cooling:** In addition to providing heating efficiency, high-performance heat pumps help you save on cooling costs and are substantially more efficient than window A/C units.

**Financial Incentives:** Financial incentives are available to make purchasing and installing heat pump technology even more affordable.

Interested in learning more?
Visit [CleanHeat.ny.gov](http://CleanHeat.ny.gov)
Which heat pump is right for you?

Compare your options to determine the heat pump system that might be best for your home: cleanheat.ny.gov/planner

Geothermal Heat Pumps

Geothermal heat pumps (or ground source heat pumps) take heat from underground and use it to warm water. That water holds onto the heat until it gets pumped into your home to warm the air. This system is the most efficient type of heat pump, and it’s usually used in whole-home applications.

Best suited for:
Single family homes with lawn space to accommodate geothermal loops

Up to 4x more efficient than oil-fueled systems

Estimated annual savings of up to $1,500*

*Efficiency calculated by comparing heating performance of an ENERGY STAR-certified closed loop water-to-air geothermal heat pump to an ENERGY STAR-certified oil furnace.

Air Source Heat Pumps

Air source heat pumps extract heat from outside air that is then used for heating indoor spaces during the colder months. They can also extract heat from indoors and expel it outside to cool indoor spaces during the warmer months. Air source heat pumps can be used to heat or cool single rooms (partial load) and whole homes (full load).

Best suited for:
Single family homes (central and ductless options), apartments, additions, or rooms that always seem too hot or too cold, no matter what you do to the thermostat

Up to 3x more efficient than oil-fueled systems

Estimated annual savings of up to $900**

**Efficiency calculated by comparing heating performance of a Northeast Energy Efficiency Partnership (NEEP)-certified air-source heat pumps to an ENERGY STAR-certified oil furnace.

Heat Pump Water Heaters

Heat pump (hybrid) water heaters extract heat from the air surrounding the unit to heat water. They can replace electric or fossil fuel-powered water heaters that require much more energy to run efficiently—leading to big savings.

Best suited for:
Residences with basements or separate utility rooms (these units lose efficiency if installed in closets without ample clearance)

Approx. 3x more efficient than conventional electric resistance water heaters

Estimated annual savings of up to $350†

† When compared to conventional electric unit.

Heat pump water heater incentives are limited to one per customer.
Full Load vs. Partial Load: What’s the difference?

**Full Load**

Full-load—or whole-home—heat pumps will do all of the heating and cooling in the home or building. For replacement situations, your existing heating-and-cooling systems are no longer required.

| Responsible for 90-120% of the heating load |

**Partial Load**

In partial-load applications, your new heat pump will supplement your existing heating system, as well as cool your home during the warmer months.

| Responsible for less than 90% of the heating load |

What is right for your home or project?

*Find out at* [cleanheat.ny.gov/planner](http://cleanheat.ny.gov/planner)

**I have existing radiant heating.**

Cutting-edge ground-source geothermal technology can modernize your traditional system and make it more efficient.

**I have an existing forced air duct system.**

Consider a central or mini-split heat pump that replaces or supplements your existing heating system, while also replacing the air conditioning in its entirety.

**I have baseboards and/or radiators.**

Ductless units may be the right choice for you.

**I only need to heat or cool one room.**

A single ductless unit will sufficiently heat and cool your room.

**I’m working on a new construction project.**

For a smaller house or apartment, one or two ductless units will heat and cool your space sufficiently. A combination of a compacted ducted system with one or two additional ductless units for bedrooms, etc., would be a good choice. For peak efficiency, consider adding a ground-source geothermal heat pump.

**I’m looking to supplement my current heating system.**

If your current heating system is working fine but could use a boost, try adding one or two additional single-zone ductless units.

Questions?

Please feel free to reach out to me if you have a question that isn’t answered here, or if you’d like to install a new heat pump.

Contractor name

Phone number

For more information, visit CleanHeat.ny.gov