COLD-CLIMATE HEAT PUMP



Cold Climate Heat Pumps heat and cool your home at a fraction of the cost of conventional heating and cooling. Coupled with your existing oil or propane heating system, these hyper-efficient and quiet heat pumps work even in sub-zero temperatures to comfortably and efficiently heat your home. During summer these units reverse and efficiently keep your home cool.

SEE THE DIFFERENCE

(The numbers used below represent a typical installation; however, actual savings may vary.)

HOUSE BEFORE

- 850 gallons of fuel oil (\$4/gal)
- \$3400/yr for heat (117 MMBtu)

HOUSE AFTER

- 170 gallons oil + 7300 kWh electricity (\$0.15/kWh)
- \$680 (oil) + \$1100 (electric)
 \$1780/yr for heat (46 MMbtu)

NET SAVINGS = \$1620/yr (69 MMBtu - 59% Reduction) "Our Cold Climate Heat Pump has dramatically changed the way we heat and cool our home and business."

- Rick & Michelle Paya, RPM Engines Georgia, Vermont

WHAT IS A COLD CLIMATE HEAT PUMP (CCHP)?

CCHPs are an energy-efficient alternative to fossil fueled heating systems and air conditioners - even in colder climates and climates with moderate cooling needs.

When properly installed, a CCHP can deliver three times more heat energy to a home than the electrical energy it consumes (Source: U.S. Department of Energy). As a result, these systems can provide heat at a higher efficiency and lower cost than electric resistance heating, oil, or propane heating systems—and in some cases, for a lower cost than gas heating as well.

Installing a CCHP unit is incredibly easy. You don't have to dig up your yard to dig a well or have major duct work completed in your house. The units can be easily installed as a retrofit in less than one day. When heating with a CCHP, you may need a back-up heat source for when the temperature drops below sub-zero temperatures and you may choose to run your existing system at warmer temperatures if you have inexpensive fuel such as natural gas.

Efficiency Vermont offers CCHP rebates on both electrically heated and non-electrically heat homes. Visit <u>www.efficiencyvermont.com</u> to learn more about these rebates.

HOW DOES IT WORK?

CCHPs use electricity to transfer heat between indoor and outdoor air. Because they move heat rather than generate heat, these systems typically consume much less electricity than traditional electric, propane or oil heating systems. In cooling mode, heat pumps function like an air conditioner, moving heat from inside to outside the home. In heating mode, the refrigerant flow is reversed to extract low-temperature heat from outdoors and deliver concentrated high-temperature heat to the home.



During the summer: A CCHP pulls heat from inside your home and moves it outside to provide air conditioning.

During the winter: A CCHP pulls heat from outside and moves it into your home.

THE BENEFITS OF CCHPs INCLUDE:

- Increases the efficiency of your existing heating and cooling system and extends its life
- Provides energy-efficient heating for most of the winter and air conditioning in the summer. For the cooling months, you no longer have to worry about lifting a window air conditioning unit twice a year
- Delivers 3 times more heating energy to a home than the electric energy it consumes (Source: U.S. DOE) as CCHPs move heat instead of converting fuel to heat
- Installing a CCHP unit is incredibly easy. You don't have to dig up your yard to dig a well or have major duct work completed in your house. The units can be easily installed as a retrofit in less than one day
- · Helps move your home towards net-zero energy if combined with photo-voltaic systems

Incentives are available to reduce the cost of installing your CCHP. Visit www.efficiencyvermont.com/coldclimateheatpump or call 1-888-921-5990 for more information.





Efficiency Vermont

This program is available exclusively for GMP residential and business customers who are located in the former CVPS territory.