

# COLD CLIMATE HEAT PUMP STUDY

INFORMATION SHEET  
COLORADO



## Overview

As part of our commitment to clean energy and reducing carbon emissions, Xcel Energy is funding a beneficial electrification study in partnership with the National Renewable Energy Laboratory (NREL). NREL will provide unbiased analysis of how the cold climate heat pumps perform in Colorado's varied climates. In addition to tracking the heat pump's performance, costs and energy savings, NREL will also be evaluating the homeowner's satisfaction with the technology.

## What is a cold climate heat pump?

A modern variable capacity cold climate heat pump is used to cool and heat a home until the outdoor temperature is 5°F. Below that temperature, heating will be supplemented by a backup system. The cold climate heat pump study will include centrally ducted heat pumps and mini-split heat pumps. Xcel Energy's technical definition of a centrally ducted cold climate heat pump is minimum efficiency ratings of SEER 18, EER 12.5, HSPF 10.5, and the rated heating capacity at 5°F is at least 70% of the heating capacity at 47°F. Xcel Energy's definition of a cold climate mini-split heat pump are minimum efficiency ratings of SEER 18, EER 12.5, HSPF 9.5, and the rated heating capacity at 5°F is at least 70% of the heating capacity at 47°F.



## What participating residential customers need to know

- Participation pays double rebates for the cold climate heat pump
  - \$2,000 for centrally ducted cold climate heat pumps (standard rebate \$1,000)
  - \$1,200 for mini-split heat pumps (standard rebate \$600)
- The home must have natural gas and electric service from Xcel Energy
- The previous home heating system must be a natural gas furnace or boiler
- A **participating cold climate heat pump study contractor** must be used for the purchase and installation of the system
- Homeowner requirements
  - Agree to study terms and conditions
  - Allow Xcel Energy, or its agents, to place a monitoring system on the heat pump, at no cost
  - Complete the rebate application to receive the regular cold climate heat pump rebate
  - Respond to market research inquiries regarding your usage patterns and satisfaction
  - Within reason, expectation to remain the homeowner until April 2024, when the study ends
- A copy of the final study findings will be provided

## What participating residential contractors need to know

- The heating load calculation and equipment selection must be reviewed and approved by Xcel Energy's agent prior to system installation
- A monitoring system will be installed at no cost; it must stay intact throughout the study period
- An extra trade incentive of up to \$900 will be given when the customer rebate check is cut:
  - \$200 for signing and abiding by the study's trade partner terms and conditions
  - \$200 for being on site when the monitoring system is installed
  - \$500 for providing an electrician to install the monitoring system
- All rebate rules and Quality Installation best practices apply