Building Up





Building your business on energy efficiency

A message from ... the Power of One[®] Energy Conservation Team

It is heating season, and many households are looking for ways to reduce monthly electric and natural gas bills. If you are a home builder or heating, ventilation and air conditioning (HVAC) contractor or supplier who works in Duluth, here is a way to help customers save money while building your business on energy efficiency. Through Dec. 31, 2016, Minnesota Power and the City of Duluth's ComfortSystems are offering mutual customers a joint \$400 rebate on qualified high efficiency natural gas furnaces with integrated electronically commutated motors (ECMs). More information is available at www.mnpower.com/ FurnaceECMCombo.

Fall and winter are good times to recommend that your customers sign up for a Home Energy Analysis (HEA). Minnesota Power offers a free HEA with Electric Energy Emphasis to help residential customers reduce energy usage in their homes. There also is a fee-based Advanced HEA with Building Diagnostics that uses blower door testing and thermal scans to identify air leaks, insulation deficiencies and other issues that may require professional services.

Mark your calendar for the 2017 Energy Design Conference & Expo, Feb. 20-22, at Duluth Entertainment Convention Center. Early bird registration now open at www.duluthenergydesign.com

Warmest wishes for the holidays!

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Eric Schlacks of ComfortSystems, Chad Trebilcock of Minnesota Power, and HVAC contractor Peter Krause in the mechanical room of a home warmed by a high efficiency gas furnace with an ECM.

\$400 Joint Rebate Can Fuel Sales of Furnaces with ECMs

As a contractor who specializes in heating, ventilation and air conditioning (HVAC) systems, Peter Krause's customers depend on him for knowledge and advice about what to install in their homes.

"People always ask, 'If it was your house, what would you do?'" said Krause, operations manager of Krause Sheet Metal and Heating & Cooling. That no longer is a hypothetical question. "I'm remodeling my house, and I personally put in a Carrier Infinity® high efficiency gas furnace with an ECM blower. It cost a little more money upfront, but the energy savings available now with the ECMs almost sell themselves."

Krause's home is located in Hermantown, but many of his residential customers live in Duluth, a community served by both Minnesota Power and the City of Duluth's ComfortSystems natural gas utility. Those customers are eligible to participate in a new joint rebate program that offers households served by both utilities \$400 in rebates on the installation of qualified high efficiency "When people hear they can save at least \$400 on a high efficiency heating system, they tend to look at better equipment."

Peter Krause, HVAC Contractor

natural gas furnaces with ECMs (\$200 from Minnesota Power and \$200 from ComfortSystems).

To qualify, a gas furnace must have an annual fuel utilization efficiency (AFUE) rating of at least 90% and feature an integrated variable speed ECM. The furnace's fuel capacity must not exceed 300,000 BTU per hour. In addition, installation must be completed by a program participating contractor. Krause believes the combined rebate will encourage more people to invest in this energy-saving heating option.

"It is huge," Krause said. "When people hear they can save at least \$400 on a high efficiency heating system, they tend to look at better equipment."

"This partnership is a good deal for customers and contractors," said Eric Schlacks, utility project coordinator, ComfortSystems. "We have streamlined the rebate process so contractors only have to submit one application form; then customers get their rebates in a single check."

Rebate savings are just the beginning. Forced air furnaces with ECM blower are quieter and less expensive to operate than those with standard permanent split capacitor (PSC) motors. Their adjustable speed design ensures optimal airflow at all times and uses significantly less electricity to deliver heat and maintain even, comfortable temperatures. Depending on usage, that can mean 25%–75% lower annual operating costs.



A Carrier 96.2% AFUE forced air gas furnace with an ECM, recently installed in a Duluth-area home.

"A high efficiency furnace with an ECM is definitely valuable to our customers in terms of energy and cost savings," said Chad Trebilcock, energy efficiency analyst II, Minnesota Power. "I'm proud that Minnesota Power and ComfortSystems have come together for a joint rebate that benefits our shared customers and contractor networks. We have partnered on home energy analysis projects in the past, but this takes it a step further. I hope to see more of these partnerships in the future."

Watch upcoming issues of Building Up for results of Minnesota Power research into Cold Climate Air Source Heat Pumps.

Home Energy Analyses ID Energy Savings

The first step toward home energy savings is understanding. Minnesota Power offers a free Home Energy Analysis (HEA) with Electric Energy Emphasis and rebates to help residential customers pay for a fee-based Advanced HEA with Building Diagnostics (\$200 rebate for electrically heated homes and \$100 for non-electrically heated homes). The Advanced HEA, performed by a participating building diagnostics auditor, results in a prioritized implementation plan for addressing air leaks and insulation levels as well as information on improving air quality and eliminating moisture issues. Direct your customers to **www.mnpower.com/hea** for more information.

Featured Incentives

Educate your customers about Minnesota Power's conservation incentives and build your business on energy efficiency.

Here are a few of the valuable rebates available through our participating HVAC contractor network:

Minnesota Power and ComfortSystems Joint Rebate: \$400 for installation of new 90% AFUE or higher gas furnace with integrated ECM blower; must be a customer of both Minnesota Power and ComfortSystems

Combo: ENERGY STAR® Air Source Heat Pump (ASHP) and ECM Fan: \$500 total rebates for proper installation of ENERGY STAR® ASHP with integrated all-season, whole-house applicable ECM fan motor on existing forced air furnace

New Forced Air Furnace with ECM Fan: \$200 rebate

Combo: New Forced Air Furnace with ECM Fan and CAC: \$375 rebate

Combo: New Forced Air Furnace with ECM Fan and Properly Installed ENERGY STAR® ASHP: \$600 rebate

Replacement Multi-Speed ECM Fan: \$100 rebate for replacing existing PSC fan motor with qualifying ECM fan in forced air furnace or heat pump air handler

Visit www.mnpower.com/rebates for complete information on rebates and other energy-saving tools to help your customers make effective energy choices and build your business on energy efficiency.

Conference & expo This annual performance energy-effici quality, rene

2017 Energy Design Conference & Expo Feb. 20-22, Duluth Entertainment Convention Center

This annual event is a "must-attend" for anyone interested in building science, high performance homes, commercial energy efficiency, emerging energy technologies, energy-efficient remodeling and rehab, mechanical and lighting systems, indoor air quality, renewable energy, building policy and codes, and more.

Mark your calendars! Early bird registration now open at **www.duluthenergydesign.com**