

➤ Water Heating

A. Description

The Water Heating product is designed to encourage Colorado customers to purchase and install high-efficiency natural gas or electric water heating equipment for residential use. The product's objectives are to increase demand for high-efficiency water heating equipment among Public Service residential customers, increase the availability in the marketplace, capture energy savings with customers' water heating needs and help them understand the immediate and long-term value of purchasing and installing high efficiency equipment. In addition to providing a cash incentive and long-term operational savings to customers, this product promotes market transformation through increasing customer demand. Participants receive a rebate for the purchase and installation of qualifying water heaters.

~~Customers may choose their own independent residential water heating contractor or installer, or install the unit themselves. Eligibility requirements for participation include being either a residential natural gas or electric customer. The product is applicable only for the purchase of qualifying new natural gas standard storage tank water heaters, natural gas tankless water heaters or electric heat pump water heaters installed in new or replacement applications. Qualification for an incentive is a minimum efficiency of 0.64 Uniform Energy Factor (UEF) for medium draw standard tanks, 0.68 UEF high draw standard tanks, 0.87 UEF tankless natural gas water heaters. Electric heat pump water heaters also qualify for an incentive. In recognition of future demand response opportunities, heat pump water heaters that are CEA/ANSI enabled will receive a higher incentive. The product is applicable only for the purchase of qualifying new natural gas standard storage tank water heaters, natural gas tankless water heaters or electric heat pump water heaters installed in new or replacement applications. Qualification for an incentive is a minimum efficiency of 0.64 Uniform Energy Factor (UEF) for medium draw standard tanks, 0.68 UEF high draw standard tanks, 0.87 UEF tankless natural gas water heaters. ENERGY STAR® electric heat pump water heaters also qualify for an incentive. In recognition of future demand response opportunities, heat pump water heaters that are CEA/ANSI enabled will receive a higher incentive. For natural gas water heaters, customers may choose their own independent residential water heating contractor or installer or install the unit themselves. Electric heat pump water heaters must be installed by a registered contractor.~~

The Water Heater product is included in the portfolio to encourage the purchase of high-efficiency water heaters as a common replacement item in customers' homes. Alternate product design and delivery to Public Service customers will be considered in an effort to reduce costs and improve cost-effectiveness. Additionally, the Company ~~is~~ has investigating ~~investigated~~ the energy storage potential of electric water heaters, which in conjunction with the future availability of interval meter data, will help better identify strategies to shift energy use from peak to off-peak periods.

B. Targets, Participants & Budgets

Targets and Participants

The energy savings and participation targets were developed based on historical participant data, current market conditions, and projected sales of water heaters. Proposed savings were estimated on a per-unit basis using the projected number of participants.

Budgets

Budgets for the Water Heating product were developed based on the expected costs per participant, and include costs associated with engaging heating, ventilation, and air conditioning (HVAC) installers in the Colorado service territory. Specifically, this includes newsletters and email to the contractor community. An internal Trade Relations Manager will also reach out to trade allies and develop key relationships to ensure product success. The overall marketing budget for consumers was determined by the number of marketing communications necessary to continue education and awareness of the product and to encourage participation. This product is often cross-marketed with the Residential Heating product to offer customers yet another way to save on natural gas and electric costs in the home.

C. Application Process

Customers can expect to receive a rebate six to eight weeks after submitting an application. The product does not require preapproval. Rebates for new home construction are negotiated between the builder and resident/new homebuyer to determine who will receive the cash rebate. Customers or contractors who receive an incentive through another DSM product (e.g., Home Performance with ENERGY STAR® or ENERGY STAR® New Homes) for the same equipment are not eligible to receive a rebate through this product.

The customer will learn about the Water Heating rebate product through bill messaging, retailers that sell water heaters on site, the HVAC community and ~~low-cost~~ advertising and promotions such as newsletters and email. The typical sales cycle for gas water heaters starts with a customer either purchasing and installing a water heater on their own or hiring an HVAC technician to install it. For heat pump water heaters, the typical sales cycle begins with a customer hiring a contractor, learning about energy efficient models, and purchasing and installing the unit. Following installation, the customer or trade partner submits a completed Public Service rebate application and equipment invoice. In either case, the water heater could be purchased through the contractor or a retailer. Following installation, a completed rebate application form and invoice are submitted to Public Service. Forms are mailed or emailed to the utility by either the contractor or the customer. Invoices must reflect the same information provided on the rebate application form, specifically manufacturer and model number, size or capacity (gallons), BTU, Uniform Energy Factor, equipment type, serial number and installation and purchase dates. Other information gathered on the rebate application form includes the unit size, draw pattern, efficiency level, the customer's account number, mailing address (if different from the installation address), customer signature, and contractor signature, unless the equipment was self-installed.

D. Marketing Objectives & Strategies

Marketing tactics may include the following: email, bill inserts, communications on the Company's website, tradeshow, trade communications, trainings, direct mail, newsletters, and HVAC community relationship building.

Specifically:

- Public Service contractor communications are timed according to appropriate seasons for the equipment. Since water heating demand is year-round, this provides flexibility with marketing seasonality. To maximize the value of messaging, the Water Heating product is often cross-marketed with the Residential Heating product.
- Internet pages for Water Heating are developed for customers and the pages are updated according to equipment efficiency changes and available promotions.
- The Company will participate in tradeshow related to water heating to provide information about the product, and/or make a formal presentation. The Trade Relations Manager also presents product details, objectives and policies to trade partners at various contractor meetings.
- Trade partners also support Water Heating promotions. Training, meetings, telephone calls, letters and newsletters with biannual frequency keep the trade informed about the product and help increase awareness among new contractors as well as ensure proper application rules are followed. Customers can obtain information on contractors from the Company's website.¹ Contractors are encouraged to register with the Company as a registered contractor and obtain a contractor ID number.

As an important marketing channel, the HVAC community helps ensure product guidelines, eligibility requirements and processes are clearly communicated. This product relies heavily upon HVAC installers; they are on the frontline with customers as trusted individuals hired to perform service installation projects in their homes.

E. Product-Specific Policies

Customers and installers must adhere to all product rules listed on the reverse side of the rebate application forms. An invoice for the equipment is required along with the rebate application form. Invoices must reflect the same information provided on the rebate application form, specifically manufacturer and model number, size or capacity in gallons, BTU, Uniform Energy Factor, equipment type, serial number and installation and purchase dates.

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http://www.xcelenergy.com/Save_Money_&_Energy/Residential/Supplemental_Information/Contract_or_Legal_Disclosure

These rebates are available to residential Xcel Energy account holders. Customers must have residential natural gas service with Xcel Energy to qualify for the rebate for Natural Gas Water Heaters. Customers must have residential electric service with Xcel Energy to qualify for the rebate for Electric Heat Pump Water Heaters. All equipment must be new and permanently installed. Used or reconditioned equipment is not eligible for a rebate.

Additional qualifications for particular types of equipment are as follows:

To be eligible for a natural gas storage water heater rebate, the storage tank must be no larger than 55 gallons.

To be eligible for a heat pump water heater rebate, the customer must use a registered contractor for the installation of the new system. These contractors have agreed to the terms of the product. A list of registered contractors can be found on the Xcel Energy website. To be eligible for the higher rebate for a “grid-enabled” water heater, the customer must purchase and install a water heater eligible to participate in the Company’s demand management programs for water heaters. The Company maintains a list of eligible model numbers, which is available on the Company’s web site.

Equipment eligibility is determined using the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) Directory of Certified Product Performance² or ENERGY STAR[®] Qualified Products on the ENERGY STAR website.³ The Company’s Rebate Operations team reviews each application for accuracy and qualifications prior to mailing a rebate check. In the event of insufficient information, the rebate application and invoice are returned to the customer with a letter requesting additional information.

Customers applying for a water heater rebate will be rebated at the level indicated in that calendar year’s approved DSM Plan. Customers are allowed to submit a rebate application for more than one water heater at a time, as some larger homes may require more than one; however, if more than one unit is installed at an address one application per unit is required to receive a rebate for each unit.

F. Stakeholder Involvement

Ongoing consumer awareness and usability research studies are used to identify potential product modifications and enhancements. Product-specific studies are conducted every few years, allowing past participants and contractors to provide feedback about their experiences with the product. Public Service staff also engages with stakeholders for best practice sharing via the Consortium for Energy Efficiency’s (CEE) High Efficiency Residential Gas Water Heating Initiative.⁴

² <https://www.ahridirectory.org/ahridirectory/pages/home.aspx>

³ <https://www.energystar.gov/>

⁴ CEE Energy Efficiency Program Library: <http://library.cee1.org/content/cee-high-efficiency-residential-natural-gas-water-heating-initiative>.

G. Rebates & Incentives

Rebates for qualifying equipment are shown in the table below.

Water Heater Type	Rebate
.64 UEF Storage Water Heater (Medium Draw)	\$50
.68 UEF Storage Water Heater (High Draw)	\$50
.87 UEF Tankless Water Heater	\$100
Electric Heat Pump Water Heater	\$400
Electric Heat Pump Water Heater (Enabled)	\$450 <u>\$500</u>

Rebate applications must be submitted by ~~July 31~~ September 30 of the following year after purchase and installation to qualify for a rebate.