

ENERGY STAR New Homes

A. Description

The ENERGY STAR® New Homes (“ESNH”) product provides builders of single-family and small multifamily homes with an incentive to exceed local building codes and elementary construction practices. Homebuilders are encouraged to look at the house as a system when considering deployment of energy saving and load reducing construction methods and installation of energy-efficient appliances. Homeowners benefit with lower energy bills, fewer maintenance concerns, higher resale value, and a more comfortable, quiet home. With interval data, homeowners will also see how efficient their home is starting out and gain a deeper appreciation and understanding of that efficiency.

The current product structure gives builders the flexibility to mix and match efficient technologies and building practices to meet the product requirements and qualify for a rebate. To qualify for a rebate, participants are required to build homes that exceed local building jurisdictions’ energy codes by at least 10%. To measure this, a rating must be completed on each home by a Residential Energy Services Network (“RESNET”) certified Home Energy Rating System (“HERS”) rater. The HERS rater provides a valuable service by consulting with the homebuilder during the construction phase and ensures the designed energy efficiency measures have been properly installed in the home. HERS raters will complete the rating for each home using a RESNET accredited software approved by the Company and will provide select informational details to the Company’s third-party implementer for evaluation. Energy savings are determined individually for each home based on the difference between the energy used by the reference home (or baseline home; modeled to match the local jurisdictional energy code) and the energy used by the new as-built home. The Company will continually evaluate this product structure to determine necessary adjustments to help the product remain cost-effective while adapting to accommodate higher energy codes.

One new program enhancement in 2021 is to pro-actively encourage and support jurisdictions to adopt the latest building codes within the residential new construction sector. It will give those communities the tools to improve the compliance with the new codes and ultimately help them reach their energy performance and economic development goals. This support will be designed to meet each jurisdiction where they are in the code adoption cycle and address current gaps in new code adoption across the state including: a lack of resources, lack of knowledge, and internal and external opposition to increasing code standards.

The Company utilizes a third-party implementer that works directly with local HERS raters to get homes enrolled in the product. HERS raters in the state of Colorado have established strong relationships with the builder community. HERS rating companies have the flexibility to participate in this product by completing a standard scope of work administered and managed by the Company’s third-party implementer. The HERS rater will model each home and test the home to measure the level of energy efficiency achieved. Once the home is completed, the HERS rater provides the required information to the third-party implementer who then determines if the home meets the product requirements and is eligible for a rebate. The third-party implementer is

responsible for reviewing the information submitted by the rater, working with the rater to correct or provide missing information and then reporting it to the Company. The third-party implementer provides product training for the rater and will assist with builder training as needed.

B. Targets, Participants & Budgets

Targets and Participants

The product targets builders who construct single-family and small multi-family homes up to four units. Energy savings and participation targets are based on historical product performance and growth forecast assumptions in the residential new construction marketplace. New construction growth continues to improve and barring any significant impacts to the financial sector, the Company anticipates this growth will continue to occur around 5% year over year. As predicted in the prior filing, more stringent International Energy Conservation Code[®] (“IECC”) adoption has continued throughout Company service territory, resulting in heaviest participation in the lowest performance tier. The Company has evaluated the incentives based on fuel type, mechanicals, and technological innovation and adjusted the incentive levels accordingly. The goal is to shift participation toward advanced performance tiers and more electric-only development, enabling decarbonization in the new construction sector.

Budgets

The product budget is primarily driven by forecasted participation for 2021 and 2022 and established rebate levels are designed to shift participation to more desired fuels and performance tiers. Additional costs include; product administration, promotional and outreach activities, measurement and verification. Product administration costs include Company labor and third-party implementer services, which are being competitively bid in 2020. Builder rebates and energy rater administrative fees comprise the majority of the product budget, followed by measurement & verification and advertising/promotion.

C. Application Process

Enrollment for this product is typically completed by the HERS raters on behalf of their clients (builders). HERS raters have strong, long established relationships with most of the builders operating within the Company’s Colorado service territory. To initiate the enrollment process, HERS raters will contact builders to encourage their participation, or the builder will contact a rater and express interest in constructing an energy-efficient home. The rater will explain the product offering and potential rebates available, review the home’s blueprints and building schedule, and enter the home details into the third-party implementer’s tracking database. The rater consults with the builder throughout the construction phase to build a home that qualifies for the product rebate.

When the home is completed, the HERS rater will perform an air-tightness test on the house and determine the energy impacts using an accredited RESNET rating software that has been approved for use by the Company. This information is submitted to the third-party implementer who will review and approve each home. The builder will receive a rebate based on the local energy code requirement and the percent savings beyond the code (BTC) achieved. Specific gas and electric

energy savings are determined by the Company using the HERS rater's modeling information. There is no rebate application for the builder or rater to complete since all required information is entered by the HERS rater into the third-party implementer's database using a web portal interface. The third-party implementer reviews and ensures all information is accurate and captured and works directly with the energy rater to correct any omissions or errors. Once the data is deemed complete, the third-party implementer is responsible for manually entering selected portions of the collected data for each home into the Company's database.

D. Marketing Objective & Strategies

The Company will update existing builder and homebuyer marketing materials and make them available to participants. ESNH has been very successful for the last two years. As a result, marketing efforts will change from enrolling builders in the Program to encouraging builders to build better homes. The objective of some of the builder marketing material is to increase product awareness and effectively communicate product benefits (energy savings, economics, and comfort/durability) along with the requirements for participation. The homebuyer collateral will continue to be an aid for builders to easily explain the benefits of an energy efficient home to their potential clients. A certificate of completion demonstrates the home successfully completed the product requirements and contains useful information such as the HERS index achieved and who rated the home. New, highly targeted direct to consumer marketing will highlight the primary benefits of efficient construction of comfort, durability, and resiliency, while highlighting the best builders in the Program. The cornerstone of this channel will be a new customer-facing website with information on the features and benefits of high-performance houses. It will also have resources to connect interested customers with capable high performance builders.

The Company's third-party implementer will engage in outreach activities with participants and stakeholders. The outreach objectives are intended to maintain good working relationships with builders and raters, ensuring they are satisfied with the product offering and to provide education and training support where needed. The third-party implementer will initiate monthly product update communications to all participants and hold in-person and conference-call meetings with raters along with routine email and phone communications.

The third-party implementer will provide training to participants (primarily raters) on the product requirements, the Company approved modeling software and use of their database system to improve efficiency and ensure more accurate data reporting. These activities are expected to encourage energy-efficient building practices resulting in increased energy savings. The Company is seeking partnerships with national organizations to extend the impact that energy efficiency measure implementation can have on market value of homes. While builders have the skills and resources to build more efficient housing, realtors, appraisers, and mortgage bankers lack the experience to properly assign and support a cash value to these improvements. Making efficient housing more valuable will drive increased efficiency deployment in the new homes market, with the ancillary benefit of extending into the built market.

The Company is also considering how renewable and electric vehicle programs and the ESNH product may be jointly marketed to customers. Other types of training will be identified with the assistance of the product participants, key stakeholders and the third-party implementer who will

be responsible for developing specific outreach plans. Key stakeholders include organizations such as local homebuilder associations, the Colorado Energy Office, the Colorado Code Compliance Collaborative and other related industry organizations.

To assist in building code compliance, the Company will continue and improve its one-on-one support for local officials, marketing materials available through various channels, and trainings designed to support awareness and implementation.

E. Product-Specific Policies

This product currently applies to builders of residential single-family buildings, small multifamily buildings and townhomes that receive combined electric and natural gas service, natural gas-only service, or year-round electric space conditioning from Public Service. Structures that have common conditioned space such as hallways and elevator shafts are not eligible to participate in the product. Additional product requirements are:

1. Raters must be RESNET certified and use the RESNET modeling software approved by the Company to model each home.
2. Raters must provide a RESNET-registered HERS rating for each home. Sample ratings are not accepted.
3. Raters must complete a Rater Field Checklist and the home must pass the applicable sections.
4. Builders will receive a rebate based on the local energy code requirement and the percent BTC. The percent improvement is determined using the Company approved modeling software to model the energy used by the reference home (or baseline home; modeled to match the local jurisdictional energy code) and the energy used by the new as-built home. The energy use is converted to MMBTU and the following formula is used to determine the percent improvement: $\frac{\text{Ref_Home_MMBTU} - \text{As-Built_Home_MMBTU}}{\text{Ref_Home_MMBTU}}$.
5. Homes that achieve ENERGY STAR certification and receive a percent BTC rebate (as detailed in Section G below) may be eligible for an additional \$100 rebate.
6. Natural gas-only participants are not eligible to receive the rebates for ENERGY STAR® radon fans or heat pump water heater measures.
- ~~7. Electric only homes are not eligible to receive the prescriptive rebates for the heat pump water heater or the clothes washer measures.~~
- ~~8.~~7. Homes qualifying for a product rebate are not eligible for Company's *separate prescriptive* rebates under the following products; Evaporative Cooling, Heating Efficiency, High Efficiency A/C, Insulation & Air Sealing, Thermostat Optimization, and natural gas Water Heating.
- ~~9.~~8. Impacts from PV or other renewable generation systems installed in the home will not be included in the percent BTC improvement (rebate) or energy savings calculations.

F. Stakeholder Involvement

The Company maintains ongoing relationships with the U.S. Environmental Protection Agency (EPA) and U.S. Department of Energy, which jointly oversee the national ENERGY STAR

program. The Company is an active Sponsor and participant in the national program, recognizing the strong customer awareness of the ENERGY STAR brand, and has received several ENERGY STAR awards for this product.¹

This product has received significant interest and input from external Colorado stakeholders in preparation of Plan filings and during Plan Settlement. This input has been valuable and taken under consideration for the product design.

The Company serves on the new home construction committee of the Consortium for Energy Efficiency, which meets regularly and works closely with the EPA. The third-party implementer attends RESNET conferences on behalf of the Company.

Public Service will strive to work with and engage Colorado stakeholders, such as the Colorado Energy Office, Southwest Energy Efficiency Project, Energy Efficiency Business Coalition, the Colorado Energy Code Collaborative, the City of Denver and others to partner when possible and continue the product's success. The Company is also seeking partnerships with national organizations like the Energy & Environmental Building Alliance (EEBA) to bring top class training and events to Colorado builders.

The Company will issue monthly communications to participating builders and energy raters, providing year-to-date product updates on participation, achievement, expenditures, and other important product information as it arises. The Company's third-party implementer communicates regularly with participating energy raters and builders, including requests for their input on training and education gaps related to energy efficiency and more specifically, how the product can assist filling those gaps.

G. Rebates & Incentives

Builders with qualifying homes are eligible to receive a rebate based on the local energy code requirement and the percent BTC improvement achieved (see *Product-Specific Policies* for details). A builder's home must achieve a minimum 10% BTC improvement to qualify.

Combo Homes - Rebate Levels – 2009 IECC or Lower and Percent BTC

Percent BTC	Rebate
10% - 14.999%	\$200
15% - 19.999%	\$350
20% - 24.999%	\$500
25% - 29.999%	\$650
30% - 34.999%	\$800
35% - 39.999%	\$1,000
40% and higher	\$1,400

¹ View the ENERGY STAR Awards Archive: <https://www.energystar.gov/about/awards/awards-archive>

Gas Only Homes - Rebate Levels – 2009 IECC or Lower and Percent BTC

Percent BTC	Rebate
10% - 14.999%	\$100
15% - 19.999%	\$175
20% - 24.999%	\$250
25% - 29.999%	\$325
30% - 34.999%	\$400
35% - 39.999%	\$500
40% and higher	\$700

Combo Homes - Rebate Levels – 2012, 2015, or 2018 IECC ~~or Higher~~ and Percent BTC

Percent BTC	Rebate
10% - 14.999%	\$250
15% - 19.999%	\$400
20% - 24.999%	\$600
25% - 29.999%	\$900
30% - 34.999%	\$1,300
35% - 39.999%	\$2,000
40% and higher	\$2,550

Gas Only Homes - Rebate Levels – 2012, 2015, or 2018 IECC and Percent BTC 2012 IECC or Higher and Percent BTC

Percent BTC	Rebate
10% - 14.999%	\$125
15% - 19.999%	\$200
20% - 24.999%	\$300
25% - 29.999%	\$450
30% - 34.999%	\$650
35% - 39.999%	\$1,000
40% and higher	\$1,275

Electric Only Homes - Rebate Levels – 2012, 2015, or 2018 IECC and Percent BTC 2012 IECC or Higher and Percent BTC

Percent BTC	Rebate
10% - 14.999%	\$500
15% - 19.999%	\$800
20% - 24.999%	\$1,200
25% - 29.999%	\$2,800
30% - 34.999%	\$3,92,600
35% - 39.999%	\$5,24,000
40% and higher	\$6,75,400

Combo Homes - Rebate Levels – 2021 IECC and Percent BTC

<u>Percent BTC</u>	<u>Rebate</u>
<u>10% - 14.999%</u>	<u>\$300</u>
<u>15% - 19.999%</u>	<u>\$550</u>
<u>20% - 24.999%</u>	<u>\$1,000</u>
<u>25% - 29.999%</u>	<u>\$1,500</u>
<u>30% - 34.999%</u>	<u>\$2,500</u>
<u>35% - 39.999%</u>	<u>\$4,000</u>
<u>40% and higher</u>	<u>\$4,750</u>

Gas-only Homes - Rebate Levels – 2021 IECC and Percent BTC

<u>Percent BTC</u>	<u>Rebate</u>
<u>10% - 14.999%</u>	<u>\$150</u>
<u>15% - 19.999%</u>	<u>\$275</u>
<u>20% - 24.999%</u>	<u>\$500</u>
<u>25% - 29.999%</u>	<u>\$750</u>
<u>30% - 34.999%</u>	<u>\$1,250</u>
<u>35% - 39.999%</u>	<u>\$2,000</u>
<u>40% and higher</u>	<u>\$2,375</u>

Electric-only Homes - Rebate Levels – 2021 IECC and Percent BTC

<u>Percent BTC</u>	<u>Rebate</u>
<u>10% - 14.999%</u>	<u>\$600</u>
<u>15% - 19.999%</u>	<u>\$1,100</u>
<u>20% - 24.999%</u>	<u>\$2,000</u>
<u>25% - 29.999%</u>	<u>\$3,000</u>
<u>30% - 34.999%</u>	<u>\$5,000</u>
<u>35% - 39.999%</u>	<u>\$8,000</u>
<u>40% and higher</u>	<u>\$9,500</u>

HERS raters who consult on qualifying homes are eligible to receive a rebate based on the rated home's performance better than local energy code. As with builder incentives, the rated home must achieve a minimum of 10% BTC for Raters to qualify.

Rater Incentives – All codes and Percent BTC of Rated home

<u>Percent BTC</u>	<u>Rebate</u>
<u>10% - 19.999%</u>	<u>\$75</u>
<u>20% - 29.999%</u>	<u>\$150</u>
<u>30% and higher</u>	<u>\$225</u>

The ENERGY STAR certified rebate is an *add-on* rebate available to qualifying homes that have earned ENERGY STAR certification and meet the following:

- a) Home must have both electric and gas service from Public Service or year-round electric space conditioning. Gas-only or electric-only homes served by the Company are not eligible;

- b) Home must qualify for a percent BTC rebate;
- c) HERS rater verifies the home meets all national ENERGY STAR certification requirements and;
- d) ENERGY STAR label is applied to the home's electrical breaker box.

ENERGY STAR Certified Rebate

ENERGY STAR certified	\$100
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The table below lists prescriptive rebates as another *add-on* rebate available to qualifying homes that have earned a percent BTC rebate and installed one or any combination of the qualifying measures listed below. Homes that receive natural gas-only service from the Company are not eligible for rebates associated with electric measures.

Appliance Rebate Levels for Qualifying Homes

Appliance	Rebate
ENERGY STAR Clothes Washer	\$40
ENERGY STAR Clothes Dryer	\$30
Heat Pump Water Heater	\$400 600
Heat Pump Water Heater with CTA2045 port	\$500 800
ENERGY STAR certified Smart Thermostat*	\$50
ENERGY STAR radon fan	\$20
High efficiency shower head (1.5 GPM)	\$3.50
High efficiency kitchen aerator (1.5 GPM)	\$1.25
High efficiency lavatory aerator (0.5 GPM)	\$1.50

* To qualify for the rebate, the device must be a certified ENERGY STAR connected thermostat and be compatible with the Company's Residential Demand Response program requirements.