

VERSION 1.3
HIGH EFFICIENCY HOMES



High Efficiency Homes™

2020 PROGRAM GUIDE

REQUIREMENTS FOR PARTICIPATION

CONTENTS

- Welcome 2
 - Contacts 2
- Overview 3
- CenterPoint Energy, TRC, & You 3
- Incentives 4
 - 2020 Incentive Structure..... 4
- Home Requirements 5
 - Home Location Requirements..... 6
 - Build and Certification Date Requirements..... 6
 - Efficiency Requirement 6
- Participant Requirements 7
 - Homebuilder Requirements..... 7
 - HERS Rater Requirements..... 7
 - HVAC Contractor Requirements..... 7
- Application for Incentives 8
 - The Process 8
 - Milestones..... 8
- Quality Assurance and Quality Control 9
 - Corrective Action Procedure 9
- Program Implementation..... 10
 - Training..... 10
 - Program Outreach and Advertising..... 10
- Appendices..... 11
 - A. CenterPoint Service Territory..... 11
 - B. ENERGY STAR Smart Wi-Fi Thermostats..... 12
 - C. AHRI Information 13
 - D. Energy Simulations 14

WELCOME

Welcome to the 2020 CenterPoint Energy High Efficiency Homes Program. As a high efficiency homebuilder, you are part of an elite group that is setting the standard for energy-efficient construction in Texas.

This program guide is designed to provide you with the information you will need throughout your participation in the CenterPoint Energy High Efficiency Homes Program. Should you run into any problems or have additional questions, we are here to help you.

CenterPoint Energy has contracted with TRC Companies (TRC) to implement the High Efficiency Homes Program for 2020. TRC Companies is nationally recognized for successful program design and implementation of utility distributed energy solutions including a wide array of residential energy efficiency programs. TRC's dedicated program team will work closely with CenterPoint Energy Program staff to support builders, raters and other market actors achieve success in the CenterPoint Energy High Efficiency Homes Program.

Thank you for your participation. We all look forward to working with you to advance home construction and promote energy efficiency in Texas.

Contacts

Drew Scatizzi, Program Manager
CenterPoint Energy
Email: andrew.scatizzi@centerpointenergy.com
Office: (713) 207-5618
Cell: (832) 993-2647

Tim McConkie, Program Manager
TRC Companies
Email: tmconkie@trccompanies.com
Direct: 346.280.3992

Deborah Hill, Operations Manager
TRC Companies
Email: dhill@trccompanies.com
Office: 252.459.6654

OVERVIEW

The CenterPoint Energy High Efficiency Homes (HEH) Program is a market transformation program offered by CenterPoint Energy and implemented by TRC Companies.

The program goal is to advance the energy efficiency of new residential construction in CenterPoint Energy's electric service area to help achieve the State's Energy Efficiency Goal.

Funding for the CenterPoint HEH Program comes from transmission and distribution pass through charges paid by electricity customers. As such, the program will strive to deliver the program in a market-neutral, nondiscriminatory manner to all eligible customers and all areas of CenterPoint Energy's electric utility service area.

As a market transformation program, the CenterPoint HEH program will use strategic efforts, including, but not limited to, incentives and education to reduce market barriers for the adoption of energy efficient technologies and practices.

This market transformation program is designed to aid new home builders that will promote the adoption of efficient building practices and products.

CENTERPOINT ENERGY, TRC, & YOU

CenterPoint Energy is a transmission and distribution utility (TDU) that provides safe and reliable electric service to over 2.5 million customers in the greater Houston metro area. As a TDU in the Texas deregulated electricity market, CenterPoint is required by the Public Utility Commission of Texas (PUCT) to offer a variety of energy efficiency programs to customers that provide value and verified energy savings. Since 2001, CenterPoint has sponsored a residential new construction energy efficiency program to meet energy savings goals and uses financial and non-financial incentives to transform the Texas new homes market by promoting the construction of ENERGY STAR certified homes and other homes built above code.

TRC one of the largest implementers of energy efficiency projects in the United States and partners with government, industrial and commercial customers to deliver energy savings. TRC manages energy efficiency projects to ensure customers conserve energy, increase operational efficiencies and maximize capital spending.

With your help, CenterPoint Energy, TRC and the High Efficiency Homes Program will contribute to meeting the State of Texas' energy savings goals and protect the environment at the same time.

INCENTIVES

Increased Incentives require an increased commitment to energy efficiency.

The High Efficiency Homes Program is a market transformation program. To achieve market transformation, the program is designed to incrementally increase the rigor of participation over time while providing incentives for builders to commit to highly efficient measures and processes. To this end, the 2020 incentive structure has been determined in response to current market barriers to adoption, availability of qualified labor, updated incremental costs and survey feedback solicited from past participants

2020 INCENTIVE STRUCTURE

Multiple pathways exist to allow multiple building types, sizes and fuel types an equal opportunity

The 2020 incentive plan has introduced new incentives to promote efficient technologies and procedures for efficient homes of all shapes and sizes. In addition, the 2020 High Efficiency Homes Program will also incentivize HERS Raters for their contributions to the program and a bonus measure will be available for homes installed with a qualified ENERGY STAR Certified Smart Thermostat¹.

Builders and Raters may do as they wish with the incentives earned through the High Efficiency Homes Program although it is encouraged that the funds are reinvested back into efficiency improvements. In fact, due to the planned year-over-year increases in rigor, a builder that does not make annual efficiency improvements may be unlikely to meet future program year requirements without a strategic plan in place to incrementally increase energy efficiency over time.

The High Efficiency Homes Program has the following incentives available to homebuilders and HERS raters for homes submitted to the program that are completed within the timeframe that constitutes the program year and meet all eligibility requirements. The mandatory minimum efficiency criteria to participate is 10% or 750 kWh of savings as demonstrated by the energy model.

There are three separate pathways to earn incentives in the program, with only one pathway's requirements to be met in order to comply with the efficiency standards of the program. Pathway 1: kWh Savings over Reference Home and Pathway 2: % kWh Savings over Reference Home are calculated as the difference between the as-built home and the program's reference home and are determined by the approved energy modeling software. Pathway 3: Prescriptive does not require a calculation of kWh savings between the reference and as built homes, but all 3 technology requirements must be met per tier. Homes that meet the requirements of more than one Pathway will earn the incentive associated with the highest tier.

¹ A list of ENERGY STAR Certified Smart Thermostats that meet the program requirement can be found in Appendix B.

Only **ONE** Pathway must be met

	Performance - Path 1	Percentage - Path 2	Prescriptive - Path 3			
	kWh Savings	% kWh Savings	Prescriptive			Incentive (\$)
Base Efficiency Tier	750	10%				\$100
Tier 1	1750	15%	R38 Attic	R13 - R15 Walls	16 SEER	\$250
Tier 2 [‡]	2500	20%	R38 Attic	≥R15 Walls	>16 SEER	\$500
High Efficiency Tier [‡]	3000	25%				\$750

[‡]: to qualify for Tier 2 or the High Efficiency Tier through either kWh pathway, at least one measure from the Tier 2 prescriptive pathway must also be met.

Additionally, to further encourage participating ENERGY STAR certified homebuilders and to promote the increased supply of ENERGY STAR certified new homes and products, two Bonus incentives are offered to homebuilders building ENERGY STAR certified homes or installing ENERGY STAR certified smart thermostats. The program will pay only one thermostat incentive per HVAC system.

Bonus Measure	Bonus Incentive
ENERGY STAR Certified New Home	\$75
ENERGY STAR Certified Smart Thermostat	\$25

Finally, to further support the HERS Raters that the High Efficiency Homes Program relies so heavily on, a Rater incentive will be paid to the HERS Rating Company of record for every home that earns a Tiered incentive.

Rater Measure	Rater Incentive
Every Approved Home	\$15

Note: If a project falls outside of program guidelines, a formal request outlining the reason for the exemption must be submitted and approved by the Energy Efficiency and Business Development Director.

HOME REQUIREMENTS

Requirements to participate exist for any particular home, as well as for participating homebuilders, HERS Raters, and HVAC contractors. Details for the requirements for each are contained in this section.

Eligible homes must meet the following criteria:

HOME LOCATION REQUIREMENTS

- Home must be located within the Greater-Houston area of CenterPoint Energy's service territory and receive electric distribution from CenterPoint Energy. Ultimately, this will be evident with the placement of a permanent electric utility revenue meter and the assignment of an ESI ID to the property address.

BUILD AND CERTIFICATION DATE REQUIREMENTS

- Only homes built within the following date boundaries of the 2020 program will be eligible. There are two date-boundaries that must be considered to determine eligibility.
 - a) The CenterPoint Energy permanent utility revenue meter must be set on or after September 1, 2019
 - b) The final certificate date, as self-reported by the HERS Rater, must be on or after November 1, 2019

EFFICIENCY REQUIREMENT

- The home must qualify for this above-code energy efficiency program by demonstrating the merits of the energy efficient home via one of the three pathways to a tiered incentive as described in the previous section.
- Evaluation of the three prescriptive measures that may impact Tier performance; Attic, Wall and SEER, will be done by comparing the Dominant value, as defined by from the supplied energy model, against the tier element.

Participant Requirements

There are three primary roles that make up program participations

Homebuilder Requirements

- Homebuilders will acquire builder permits as necessary to design, build, and market high efficiency homes that receive a CenterPoint Energy permanent revenue meter.
- Retain the services of a RESNET approved energy Rater to inspect and test the home as needed.
- Ensure all installed heating and cooling equipment efficiencies can be demonstrated with an AHRI certificate of efficiency that is dated between September 1, 2019 and December 1, 2020.
- Coordinate with HERS Rater and HVAC Contractor to share home information needed for a successful incentive request.
- Cooperate with information requests including Quality Assurance/Quality Control or field inspection requests.

HERS Rater Requirements

- Inspect and test homes appropriate to the energy code enforced in the jurisdiction where the home is being built.
- Adhere to the RESNET MINHERS, RESNET-ANSI Standards and, if applicable, the RESNET Guidelines for Multifamily Energy Ratings.
- Complete and provide an energy model that demonstrates compliance with all requirements of this guide.

HVAC Contractor Requirements

- Install only AHRI certified heating and cooling equipment that meets the SEER and/or HSPF expectations of the homebuilder.
- Provide the AHRI number of a certified equipment combination or a printed copy of a certified equipment combination that is dated between September 1, 2019 and December 1, 2020.²
- Provide HERS Rater and/or builder with information related to the efficiency of the home, including space conditioning efficiencies and mechanical ventilation flow rates (cfm), run-time (hours), and wattage of the fan providing fresh air ventilation (if known and applicable).

² AHRI certificates in “Active” or “Production Stopped” status are certified. Other statuses, such as “Discontinued” or “Obsolete” are not certified. See Appendix B for more info.

APPLICATION FOR INCENTIVES

UPON COMPLETION OF AN ELIGIBLE HOME, A REQUEST FOR AN INCENTIVE MUST BE COMPLETED.

The High Efficiency Homes Program is part of CenterPoint Energy's overall efficiency portfolio and is designed to help meet the state's energy savings goals. The program is overseen by a third party evaluator that requires certain data points be collected to ensure the integrity, validity and accuracy of efficiency claims. To this end, the High Efficiency Homes Program must collect numerous pieces to support the incentive payment and the claimed energy savings. We thank you in advance for supporting this effort.

THE PROCESS

For the 2020 program year, CenterPoint Energy will utilize a new platform, AEG Vision, for data collection and incentive processing. The home page for the Vision database can be found at the following web address:

<https://cnpheh.programprocessing.com>

Contact program management directly for database training.

MILESTONES

During the year, homebuilders must meet the Quarterly Milestone Performance Requirements. If a homebuilder fails to meet the milestones, all or a portion of a homebuilder's incentive allocation may be re-allocated to other builders meeting the milestones for the program to ensure incentive funds are used appropriately. Milestone percentages are calculated as the percentage of the participating homebuilder's allocation and will include homes submitted on the corresponding project.

Milestone Date	Performance Requirement
April 15, 2020	Homes representing at least 25% of the incentive allocation must be submitted to the Program
July 15, 2020	Homes representing at least 50% of the incentive allocation must be submitted to the Program
September 15, 2020	Homes representing at least 75% of the incentive allocation must be submitted to the Program
December 2, 2020	Homes representing at least 100% of the incentive allocation must be submitted to the Program

QUALITY ASSURANCE AND QUALITY CONTROL

In consultation with TRC, CenterPoint Energy will implement a Quality Assurance and Quality Control (QA/QC) field inspection program. The QA/QC program provides another layer of assurance to homebuilders that their homes meet ENERGY STAR® and/or the Program's requirements and that HERS Raters are following RESNET standards. Raters will be required to submit daily inspection schedules to CenterPoint Energy Inspectors to allow for scheduling of onsite QA/QC visits.

TRC will be performing an extensive desk QA/QC verification of homes submitted to the program to ensure all program requirements are met as outlined in this program manual. This will provide a higher level of program integrity and positively contribute to reporting results to the Public Utilities Commission of Texas.

Corrective Action Procedure

The goal of the QA/QC program's corrective action plan is to help achieve continuous improvements in the CenterPoint High Efficiency Homes Program®. The results and findings of the QA/QC program will be shared with participating homebuilders and raters as needed during the program year. Below are the examples of the corrective action steps implemented throughout the program year:

- 1st Offense: The HERS rating company and the builder will be notified and counseled by CenterPoint Energy and TRC program account managers.
- 2nd Offense: The builder and the HERS rating company will again be notified and the builder incentive for homes not meeting the requirement will be forfeited.
- 3rd Offense: The determination will be made by the Program depending on the circumstances and may include the HERS Rating company and/or builder being suspended from the Program for the remainder of the Program year.

In the event that a home has already been paid but does not pass the QA/QC process, the homebuilder will have their following months invoice reduced by the amount of the incentive from the home that did not pass QA/QC.

PROGRAM IMPLEMENTATION

The CenterPoint High Efficiency Homes Program can provide the following support to program participants upon request:

- Program, Operational and Technical Leaders are available to guide homebuilder partners through the lifecycle of the Program;
- Plan reviews and performance consulting to determine the most appropriate, cost effective measures needed to build ENERGY STAR® certified and High Efficiency Homes; and
- Support for homebuilder marketing staff to help successfully integrate High Efficiency Homes into corporate messaging.

Training

The Program can guide homebuilders in how to best promote the ENERGY STAR® brand and other energy-efficient program branding, communicate the associated benefits of buying an ENERGY STAR® certified or High Efficiency home, and improve their homes' energy performance.

Additional Technical training workshops focusing on energy-efficient construction best practices will be announced during the year.

Participating homebuilders are encouraged to take advantage of these resources to capitalize on the financial and marketing benefits associated with building ENERGY STAR® certified and High Efficiency homes.

Program Outreach and Advertising

CenterPoint Energy will sponsor an outreach and advertising campaign on behalf of homebuilders participating in the CenterPoint High Efficiency Homes Program®. The campaign will include TV spots, radio spots, outdoor billboards, online audio visual and video ads, online banner ads, email marketing and social media ads.

APPENDICES

A. CENTERPOINT SERVICE TERRITORY

Gas and Electric

Alvin***	League City***
Angleton**	Liverpool*
Baytown*	Manvel*
Beach City*	Meadows Place*
Beasley*	Missouri City*
Bellaire*	Mont Belvieu*
Brookshire*	Morgan's Point*
Brookside Village*	Nassau Bay*
Bunker Hill Village*	Needville*
Clear Lake Shores*	New Waverly*
Clute*	Oak Ridge North*
Conroe** *	Orchard*
Cut and Shoot**	Oyster Creek*
Danbury*	Panorama Village*
Deer Park*	Pasadena*
Dickinson***	Pearland**
East Bernard*	Piney Point Village*
El Lago*	Pleak*
Freeport*	Richmond*
Friendswood***	Richwood*
Galena Park*	Roman Forest*
Hedwig Village*	Rosenberg*
Hillcrest Village*	Santa Fe*
Hilshire Village*	Seabrook*
Hitchcock*	Shenandoah**
Houston*	Shoreacres*
Humble*	South Houston*
Hunters Creek Village*	Southside Place*
Jacinto City*	Spring Valley*
Jersey Village*	Stafford*
Jones Creek*	Sugar Land*
Katy*	Taylor Lake Village*
Kemah*	Texas City***
Kendleton*	Wallis*
La Marque***	Webster*
La Porte*	West Columbia***
Lake Jackson*	West University Place*
	Wharton*
	Willis**

Electric Only

Arocola
Bonney
Brazos Country
Cove
Fairchilds
Galveston
Iowa Colony
Jamaica Beach Village
Magnolia
Old-River Winfree
Pattison
Pine Island
Prairie View
Quintana
San Felipe
Sandy Point
Thompsons
Tiki Island
Tomball
Waller

* Indicates customers with electric and gas services

** Indicates customers with gas services only

*** Indicates customers with gas services and a minority of customers with electric services

- See more at: <http://www.centerpointenergy.com/en-us/Corp/Pages/communities-we-serve-HO.aspx>

B. ENERGY STAR SMART WI-FI THERMOSTATS

<https://www.energystar.gov/productfinder/product/certified-connected-thermostats/results>

The following list of thermostats that are ENERGY STAR certified was accessed from the ENERGY STAR website on 09/28/2019, use the link above for an up to date list of eligible thermostats.

Alarm.com Smart Thermostat ADC-T3000
Alarm.com Smart Thermostat B36-T10
American Standard Gold 824 ACONT824AS52DB
Braeburn 7205
Braeburn 7300
Braeburn 7305
Braeburn 7320
Bryant Housewise T6-WEM01-A
Carrier Cor TP-WEM01-A
Cor Cor 5C TSTWHA01
Cor Cor 7C TSTWRH01
ecobee SmartThermostat with Voice Control EB-STATE5*
ecobee3 EB-STATE3***-##
ecobee3 Lite EB-STATE3LT***-##
ecobee4 EB-STATE4***-##
EcoFactor simple S100 B
Emerson Sensi
Google Nest Learning Thermostat T3###**
Google Nest Thermostat E T4###**
Greenlite G2
Hive Thermostat SLT4
Honeywell Home D6 Pro Wi-Fi Ductless Controller DC6000WF1001
Honeywell Home RedLINK Prestige THX9421R****
Honeywell Home RedLINK Vision PRO 8000 TH8110R****
Honeywell Home RedLINK Vision PRO 8000 TH8320R****
Honeywell Home RedLINK Vision PRO 8000 TH8321R***
Honeywell Home Round Smart 2nd Generation TH8732WFH****
Honeywell Home T10 Pro Smart Thermostat THX***WF*****
Honeywell Home T5 Wi-Fi Thermostat RCHT8610WF****
Honeywell Home T6 Pro Wi-Fi Programmable Thermostat
Honeywell Home T6 Pro Wi-Fi Programmable Thermostat TH6320WF2***
Honeywell Home T9 Smart Thermostat RCHT9*10WF****
Honeywell Home WF Thermostat RTH6580
Honeywell Home Wi-Fi Smart Color Thermostat RTH9580WF****
Honeywell Home Wi-Fi Smart Color Thermostat RTH9585WF****
Honeywell Home Wi-Fi Thermostat 9000 TH9320WF****
Honeywell Home Wi-Fi Vision PRO 8000 TH8321WF****
Honeywell RedLINK Prestige THX9421R****
Honeywell RedLINK Vision PRO 8000 TH8321R***
LUX GEOx
LUX KONO
LUX LUX/GEO
PROSTAT PRS7325WF
Trane XL824 TCONT824AS52DB
Venstar Color Touch T7900
Venstar Explorer Mini T2000

C. AHRI INFORMATION



AHRI User Guide www.ahridirectory.org

Electric space heating and cooling efficiency levels must be demonstrated with a printed AHRI certificate of efficiency or a numerical equivalent, "AHRI Number". The directory can be found here: www.ahridirectory.org

The program database, eTRACK, includes a direct connection to the AHRI directory and only Active or Production Stopped status certificates can be queried.

Routinely, AHRI certificates "expire" and fall into Discontinued or Obsolete statuses – these are not "certified" AHRI certificates. See the AHRI user guide for more information.

The program recommends saving printed or electronically saving an AHRI certificate for every combination planned for installation in 2020 HEH program participating homes.

AHRI CERTIFIED
www.ahridirectory.org

Certificate of Product Ratings

AHRI Certified Reference Number : 202024001 Date : 01-02-2019 Model Status : Active

AHRI Type : RCU-A-CB Save copies with dates of Sept. 1, 2018, or later to prove validity during the program year, if necessary.

Series : 16 SEER AC Only "Active" or "Production Stopped" statuses are certified

Outdoor Unit Brand Name : CARRIER

Outdoor Unit Model Number (Condenser or Single Package) : CA16NA036*0**B*

Indoor Unit Model Number (Evaporator and/or Air Handler) : CNPH*4221AL*

Furnace Model Number : 59*P6A080E17**16

Region : Southeast and North (AL, AR, DC, DE, FL, GA, HI, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, AK, CO, CT, ID, IL, IA, IN, KS, MA, ME, MI, MN, MO, MT, ND, NE, NH, NJ, NY, OH, OR, PA, RI, SD, UT, VT, WA, WV, WI, WY, U.S. Territories)

Region Note : Central air conditioners manufactured prior to January 1, 2015 are eligible to be installed in all regions until June 30, 2016. Beginning July 1, 2016 central air conditioners can only be installed in region(s) for which they meet the regional efficiency requirement.

The manufacturer of this CARRIER product is responsible for the rating of this system combination.

Rated as follows in accordance with the latest edition of ANSI/AHRI 210/240 with Addenda 1 and 2, Performance Rating of Unitary Air-Conditioning & Air-Source Heat Pump Equipment and subject to rating accuracy by AHRI-sponsored, independent, third party testing:

Cooling Capacity (A2) - Single or High Stage (95F), btuh : 33400

SEER : 14.50 SEER should confirm the AC efficiency as seen in the energy model

EER (A2) - Single or High Stage (95F) : 12.00

D. ENERGY SIMULATIONS

The High Efficiency Homes Program can accept REM/Rate and Ekotrope formatted energy simulations that are completed to industry standards.

REM/Rate:

- Self-certification with the program efficiency requirement can be accomplished by generating a “Fuel Summary Report” with reference to the program baseline UDRH.
- 750 kWh or 10% savings is required to be eligible.

Ekotrope:

- Self-certification with the program efficiency requirements can be accomplished by following the instructions found on Ekotrope’s utility rebate program support page:
<https://ekotrope.freshdesk.com/support/solutions/folders/17000125530>
- 750 kWh or 10% savings is required to be eligible.