NW OR & SW WA
Portland
Breakout Housekeeping

• Breakout: 45 minutes
• Air Quality CEU conducted after the breakout
• To ask a question, unmute yourself, add it to the chat or raise your hand
• If you want to join another session, leave the room (bottom right screen) and the host can reassign you
• We can mute you, but only you may unmute yourself
• If you are dialing in on your phone only and want to mute or unmute yourself, press *6
NW OR & SW WA Agenda

• In-Depth 2021 Incentive Changes
• 2020 Opportunities and Performance
  • 0.24 Windows Tier
  • Manufactured Homes HP Promo
  • Rental Incentives
  • DHP in Rentals Promo
  • Increased Incentives for Select NW Natural Customers: Cottage Grove & Creswell
• Multifamily Program Updates
  • Expanding Participation in small multifamily
  • Multifamily Participation trends
  • Multifamily Market Snapshot
  • Oregon COVID Response
  • Residential Infill Project
• EPS New Construction
  • COVID Impacts on new homes
  • 2021 Cash Incentives
  • Early Design Assistance
  • Additional offerings in 2020
• Central AC AHRI Review
2021 Heat Pump Conversion Changes

Qualified Primary Heating Source Change:

<table>
<thead>
<tr>
<th>Primary Heating Source</th>
<th>Cost Effective?</th>
<th>Qualified?</th>
<th>Requires Cut In’s?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Furnace</td>
<td>Yes</td>
<td>Qualified</td>
<td>No</td>
</tr>
<tr>
<td>Baseboard heat</td>
<td>No</td>
<td>Not Qualified</td>
<td>Yes (Increases Cost)</td>
</tr>
<tr>
<td>Wall/Ceiling Heat</td>
<td>No</td>
<td>Not Qualified</td>
<td>Yes (Increases Cost)</td>
</tr>
</tbody>
</table>

Requirement Addition:
• Auxiliary heat lockout must be completed on all Heat Pump Conversions

<table>
<thead>
<tr>
<th>January 1, 2021 – March 31, 2021</th>
<th>April 1, 2021 – December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>$950</td>
<td>$700</td>
</tr>
</tbody>
</table>
Heat Pump Advanced Control Changes

<table>
<thead>
<tr>
<th>Install Scenario</th>
<th>Qualified?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat Pump replacing Heat Pump</td>
<td>Yes</td>
</tr>
<tr>
<td>Adding auxiliary lockout to existing heat pump</td>
<td>Yes</td>
</tr>
<tr>
<td>Heat pump conversion from electric furnace</td>
<td>No</td>
</tr>
</tbody>
</table>

- Heat Pump Advanced Controls may no longer be stacked with Heat Pump Conversions, as auxiliary lockout will be required for Heat Pump Conversions.
2020 Opportunity and Performance
Windows – NW OR & SW WA

- New Windows Tier: $6 in OR & WA

Majority of 0.24 windows are being installed in Existing Single Family

New 0.24 Windows Tier Install Map
Manufactured Homes Heat Pump Promotion

RFQ Open:
- October 16, 2020- November 16, 2020
- Home Retrofit Trade Allies
- $2,500 for DHP, $3,000 for HP in Manufactured Homes

Selection Criteria: 2021
- Pricing
- History of serving Manufactured Homes communities
- Ability to reach diverse customer base
Manufactured Homes Heat Pump Promotion – NW OR

- 2020 Regional Results
  - 17 DHP
  - 179 HP
- Statewide:
  - 91 DHP
  - 349 HP
Rentals Incentives: Single-Family Homes

• Increased Incentives for Single-Family Rentals

• Trade Ally Requirements:
  • Enrolled in Instant Incentives
    • Talk to your account manager to enroll

• Customer Requirements:
  • Non-owner Occupied, single-family rental properties
  • Oregon & Washington
### OR Rental Incentive Amounts: Single-Family

<table>
<thead>
<tr>
<th>Upgrade</th>
<th>Rental Incentive</th>
<th>Incentive Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ductless Heat Pump</td>
<td>$1,000</td>
<td>2021</td>
</tr>
<tr>
<td>Heat Pump</td>
<td>$1,000</td>
<td>2021</td>
</tr>
<tr>
<td>Extended Capacity Heat Pump</td>
<td>$1,650</td>
<td>2021</td>
</tr>
<tr>
<td>Gas Furnace</td>
<td>$550-$1,000</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Heat Pump Water Heater</td>
<td>$270</td>
<td>2021</td>
</tr>
<tr>
<td>Smart Thermostat</td>
<td>$100</td>
<td>2021</td>
</tr>
<tr>
<td>Attic Insulation</td>
<td>$0.50-$1.25 per square foot</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Wall Insulation</td>
<td>$0.50 per square foot</td>
<td>2021</td>
</tr>
<tr>
<td>Floor Insulation</td>
<td>$0.40 per square foot</td>
<td>2021</td>
</tr>
</tbody>
</table>

*Incentive availability and timeline subject to change*
WA Rental Incentive Amounts: Single-Family

<table>
<thead>
<tr>
<th>Upgrade</th>
<th>Rental Incentive</th>
<th>Incentive Timeline*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Furnace</td>
<td>$550 $1,000</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Gas Tankless Water Heater</td>
<td>$200 $400</td>
<td>2021</td>
</tr>
<tr>
<td>Smart Thermostat</td>
<td>$100</td>
<td>2021</td>
</tr>
<tr>
<td>Attic Insulation</td>
<td>$0.60 $1.25 per square foot</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Wall Insulation</td>
<td>$0.60 $0.75 per square foot</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Floor Insulation</td>
<td>$0.60 $0.75 per square foot</td>
<td>Bonus through: March 31, 2021</td>
</tr>
</tbody>
</table>

*Incentive availability and timeline subject to change
NW OR & SW WA
Single-Family Rental Incentives

• NW OR and SW WA Single-Family Rentals: ~112,000

• Single-Family Rental Projects: 2,320

Rental Installs 2015 - Today

- Ceiling insulation: 42%
- Ductless heat pump: 26%
- Floor insulation: 17%
- Gas furnace: 12%
- Heat pump replacement: 2%
- Wall insulation: 1%
DHP in Rentals Promo

• RFQ Open: October 16, 2020 - EO 2021
  • $1,750 - $2,000 DHP Incentive
  • Non-Owner-Occupied Rentals
  • Single-Family Rentals and Small Multifamily Rentals
  • Price Capped offering; customer out of pocket cost max $2,500

• Requirements
  • Home Retrofit or Multifamily Trade Ally
  • Enrolled in Home Retrofit Instant Incentives
  • Meet Program 9 HSPF Requirements per AHRI
  • Meet price caps

• 2020 participants will need to reapply via the 2021 RFQ.
Increased Incentives for Select NW Natural Customers: Cottage Grove & Creswell

• Limited-time: increased incentives for NW Natural customers in Cottage Grove & Creswell through July 31, 2021
  • Gas Furnaces, windows, insulation

• Single-family, manufactured homes and small multifamily properties

• Application & details: www.energytrust.org/nwnaturalpromo

• To be listed as a preferred Local Trade Ally on the website, reach out to your account manager

• Standard incentives also available
**Limited-Time Increased Incentive Amounts: Cottage Grove & Creswell – July 31, 2021**

<table>
<thead>
<tr>
<th>Upgrade</th>
<th>Increased Incentive Amount</th>
<th>Property Type</th>
</tr>
</thead>
</table>
| Gas furnace      | $1,000                    | • Single-Family Properties  
                   |                             | • Single-Family Rental Properties  
                   |                             | • Manufactured Homes  
                   |                             | • Side-by-side duplex, triplex, fourplex, townhomes and rowhomes |
| Windows          | $8 per square foot        | • Single-Family Properties  
                   |                             | • Single-Family Rental Properties  
                   |                             | • Manufactured Homes  
                   |                             | • Side-by-side duplex, triplex, fourplex, townhomes and rowhomes |
| Wall insulation  | $0.95 per square foot     | • Single-Family Properties  
                   |                             | • Single-Family Rental Properties  
                   |                             | • Side-by-side duplex, triplex, fourplex, townhomes and rowhomes |
| Attic insulation | $1.25 per square foot     | • Single-Family Properties  
                   |                             | • Single-Family Rental Properties  
                   |                             | • Side-by-side duplex, triplex, fourplex, townhomes and rowhomes |
| Floor insulation | $0.70 per square foot     | • Single-Family Properties  
                   |                             | • Single-Family Rental Properties  
                   |                             | • Manufactured Homes  
                   |                             | • Side-by-side duplex, triplex, fourplex, townhomes and rowhomes |
Eligibility Area

• NW Natural customers in Cottage Grove & Creswell

• Limited-time increased incentives through July 31, 2021

• [www.energytrust.org/nwnaturalpromo](http://www.energytrust.org/nwnaturalpromo)
Multifamily Market Update
Expanding participation in small multifamily

- Opportunity identified in small multifamily
  - Duplex, triplex, fourplex
  - Doubled participation from 2017-2020
    - 10% to 20% served
- Offerings tailored for small multifamily
  - DHP Rental Promotion
  - $1,000 bonus DHP incentive
  - Up to $1.25/sq. ft. insulation
  - $1,000 gas furnace
- Targeting rural areas
Multifamily participation trends

Percentage of total eligible multifamily market served by market type from 2017-2020
Multifamily participation trends

Percentage of total eligible multifamily market served by property size from 2017-2020
Multifamily participation trends

Percentage of total eligible multifamily market served by region from 2017-2020
Multifamily Market Snapshot

• Increasing number of tenants not able to pay rent

• New multifamily construction slowing

• Vacancies expected to rise next year as eviction protections expire

• Assisted living retrofit market limited
Oregon COVID Response

• Changes to Eviction Moratoria
  • Eviction protection for tenants
• Executive Order extends "Emergency Period"
  • Eviction protection through December 31st
• Tenants have until March 31st, 2021 to pay off the debts from April 1st to September 31st
• Multnomah county has specific guidelines
Portland Only – Residential Infill Project Approval

• City Council approved in August 2020

• Zoning reform for Portland’s residential neighborhoods

• Opens door for more housing options
  • Single family conversion to multifamily
  • Four to six dwelling units per lot
  • Six dwellings allowed if half are affordable housing
COVID impacts on the new homes industry

- Supply shortages
  - Air conditioning units
  - Lighting fixtures
  - Appliances
- Lumber price increases
- Skilled labor shortage
- Construction delays due to staggered trades
- Building industry slowly getting back to business as usual
- Low interest rates are creating higher demand
Available cash incentives in Oregon (2021)

- $1,123 - $5,223 cash incentives to help builders move beyond code
- $750 net zero incentive
- $300 - $1,889 verification incentive
- $250 affordable housing verification incentive
- $200 solar ready incentive
- $200 energy smart homes incentive
- Varying incentives with solar installs
- Varying incentives for early design and solar design assistance
Early design assistance (EDA) meetings are your first concrete step!

“90% of your energy decisions are made before a hammer hits a nail” – John Tooley

EDA = Pre-construction meeting for design review with builder, verifier, verifier account manager and subcontractors

Opportunity to:

• Maximize energy efficiency and EPS incentives
• Strengthen communication between subcontractors
• Integrate solar/solar ready into the design
Additional Offerings in 2020

In 2020, builders that are part of Energy Trust of Oregon’s EPS New Construction offering can take their new homes to the next level with two new incentive packages:

1. **Net Zero Homes:** Include an installed solar PV system that can offset a home’s entire electric load

2. **Energy Smart Homes:** Include appliances and equipment that are smart grid interactive, making it possible for customers to participate in utility programs designed to lower energy usage during peak periods—now or in the future
Central AC AHRI Review
Central AC Review

- Central Air Conditioner qualifications review
  - How to verify SEER compliance using Qualifying Products List (QPL)
  - How to verify EER compliance using AHRI
  - Ensuring application is accurate and complete

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Incentive</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| Central air conditioner | $250      | Minimum nominal Seasonal Energy Efficiency Rating (SEER) of 15 or greater for the outdoor unit, and a minimum total system Energy Efficiency Rating (EER) of 12 or greater. Ask your contractor to verify the outdoor unit can be found on the qualifying products list and that the total system achieves a minimum 12 EER rating via the AHRI website to ensure your installation qualifies.
Central AC Review

- SEER Requirements
  - Verify **outdoor unit** meets 15 SEER requirement by referencing Energy Trust of Oregon Qualifying Products List

Requirements

Minimum nominal Seasonal Energy Efficiency Rating (SEER) of 15 or greater for the outdoor unit, and a minimum total system Energy Efficiency Rating (EER) of 12 or greater.

Ask your contractor to verify the outdoor unit can be found on the **qualifying products list** and that the total system achieves a minimum 12 EER rating via the [AHRI](http://www.ahri.com) website to ensure your installation qualifies.
Central AC Review

- QPL may not include all qualifying units. Contact Energy Trust Residential team if a model appears to be missing.

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Name</th>
<th>Model Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Standard</td>
<td>SILVER 16</td>
<td>4A7A6, 4A7L6</td>
</tr>
<tr>
<td>American Standard</td>
<td>GOLD 17</td>
<td>4A7C7, 4A7A7</td>
</tr>
<tr>
<td>American Standard</td>
<td>PLATINUM 18</td>
<td>4A7V8</td>
</tr>
<tr>
<td>American Standard</td>
<td>PLATINUM 20</td>
<td>4A7V0</td>
</tr>
<tr>
<td>Amana</td>
<td>AVXC20</td>
<td></td>
</tr>
<tr>
<td>Amana</td>
<td>ASXC18</td>
<td></td>
</tr>
<tr>
<td>Amana</td>
<td>ASXC16</td>
<td></td>
</tr>
<tr>
<td>Amana</td>
<td>ASX16</td>
<td></td>
</tr>
<tr>
<td>Bryant</td>
<td>LEGACY</td>
<td>105A, 116B, 105A</td>
</tr>
<tr>
<td>Bryant</td>
<td>PREFERRED</td>
<td>125B, 126CA, 127A</td>
</tr>
<tr>
<td>Bryant</td>
<td>EVOLUTION</td>
<td>186B, 187B, 187BN, 180C, 180B, 189BNV</td>
</tr>
<tr>
<td>Carrier</td>
<td>COMFORT 15, COMFORT 16</td>
<td>24AA5, 24ABC06, 24AAA6</td>
</tr>
<tr>
<td>Carrier</td>
<td>PERFORMANCE 16, PERFORMANCE 17</td>
<td>24AP86, 24ACC06, 24ACB7</td>
</tr>
<tr>
<td>Carrier</td>
<td>INFINITY 16, INFINITY 17, INFINITY 19, INFINITY 20, INFINITY 21</td>
<td>24ANB6, 24ANB7, 24VNA9, 24VNA0, 24ANB1</td>
</tr>
<tr>
<td>Coleman</td>
<td>LX SERIES</td>
<td>CC7, CC17</td>
</tr>
<tr>
<td>Coleman</td>
<td>ECHELON</td>
<td>AC21, AC19</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX16SA</td>
<td>DX16SA</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX16TC</td>
<td>DX16TC</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX17VSS</td>
<td>DX17VSS</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX18TC</td>
<td>DX18TC</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX20VC</td>
<td>DX20VC</td>
</tr>
<tr>
<td>Goodman</td>
<td>GSX16</td>
<td>GSX16</td>
</tr>
<tr>
<td>Goodman</td>
<td>GSXC16</td>
<td>GSXC16</td>
</tr>
<tr>
<td>Goodman</td>
<td>GSXC18</td>
<td>GSXC18</td>
</tr>
<tr>
<td>Lennox</td>
<td>XC13</td>
<td>XC13</td>
</tr>
<tr>
<td>Lennox</td>
<td>T6ACX</td>
<td>T6ACX</td>
</tr>
<tr>
<td>Lennox</td>
<td>EL16XC1</td>
<td>EL16XC1</td>
</tr>
<tr>
<td>Lennox</td>
<td>XC16</td>
<td>XC16</td>
</tr>
<tr>
<td>Lennox</td>
<td>XC20</td>
<td>XC20</td>
</tr>
<tr>
<td>Lennox</td>
<td>SL18XC1</td>
<td>SL18XC1</td>
</tr>
<tr>
<td>Lennox</td>
<td>XC21</td>
<td>XC21</td>
</tr>
<tr>
<td>Lennox</td>
<td>XC25</td>
<td>XC25</td>
</tr>
<tr>
<td>Payne</td>
<td>PA16NA</td>
<td>PA16NA</td>
</tr>
</tbody>
</table>
Central AC Review

- EER Requirements
  - Verify **entire system** meets minimum 12 EER requirement via AHRI lookup

Requirements

Minimum nominal Seasonal Energy Efficiency Rating (SEER) of 15 or greater for the outdoor unit, and a **minimum total system Energy Efficiency Rating (EER) of 12 or greater**

Ask your contractor to verify the outdoor unit can be found on the **qualifying products list** and that the total system achieves a minimum 12 EER rating via the [AHRI](https://www.ahri.com) website to ensure your installation qualifies.
**Central AC Review**

- AHRI Directory – online resource tool to lookup ratings for many HVAC system combinations, including Central AC.
Central AC Review

- In order for a Central AC system to receive an incentive, the entire system listed on AHRI must be installed.
- Essentially, if it’s listed, it needs to be installed

Certificate of Product Ratings

AHRI Certified Reference Number: 9311647
Date: 10-12-2020
Model Status: Production Stopped

AHRI Type: RCU-A-CB (Split System: Air-Cooled Condensing Unit, Coil with Blower)
Series: 15 SEER AC - HIGH EER
Outdoor Unit Brand Name: CARRIER

Outdoor Unit Model Number (Condenser or Single Package): 24AAA536A*>030*
Indoor Unit Model Number (Evaporator and/or Air Handler): CNPH*>4221AL*
Furnace Model Number: 59*N*060V17**14
Central AC Review

• Some AHRI combinations do not require a specific indoor blower/air handler. In these instances, a coil and outdoor unit can be paired easily with an existing furnace/blower.

• These systems are identified as “RCU-A-C”

Certificate of Product Ratings

AHRI Certified Reference Number: 201776131
Date: 10-12-2020
Model Status: Pr

AHRI Type: RCU-A/C
Split System: Air-Cooled Condensing Unit, Coil Alone
Series: PERFORMANCE 16 AC
Outlook Unit Brand Name: CARRIER

Outdoor Unit Model Number (Condenser or Single Package): 24APB648A*030*
Indoor Unit Model Number (Evaporator and/or Air Handler): CAP**8021AL+TDR

Only the outdoor unit and indoor coil are specified
Central AC Review

• Some rated systems do require a specific air handler/blower (typically matching the brand of the outdoor unit and coil)
  • These systems are identified as “RCU-A-CB”

The outdoor unit, indoor coil AND furnace/air handler are specified
Central AC Review

• Ensuring Central AC application is completed correctly:

Confirm each model listed on the AHRI certificate is included on this application

Either attach a copy of the AHRI certificate, or provide the corresponding AHRI cert. #
Central AC Review

- Still have questions?
  - Reach out to your local account manager and schedule a Central AC/AHRI training to discuss each of these steps in-depth
Indoor Air Quality

- What does Indoor Air quality mean to attendees?
- How are they seeing this manifest in their work?
Thank you

Marshall Johnson
Residential Sr. Program Manager
marshall.johnson@energytrust.org

Kate Wellington
Multifamily Program Manager
kate.wellington@energytrust.org
Central OR
Breakout Housekeeping
Central OR Agenda

- In-Depth 2021 Incentive Changes
- 2020 Opportunities and Performance
  - 0.24 Windows Tier
  - Manufactured Homes HP Promo
  - Rental Incentives
  - DHP in Rentals Promo
- Multifamily Program Updates
  - Expanding Participation in small multifamily
  - Multifamily Participation trends
  - Multifamily Market Snapshot
  - Oregon COVID Response
- EPS New Construction
  - COVID Impacts on new homes
  - 2021 Cash Incentives
  - Early Design Assistance
  - Additional offerings in 2020
- Central AC AHRI Review
2021 Heat Pump Conversion Changes

Qualified Primary Heating Source Change:

<table>
<thead>
<tr>
<th>Primary Heating Source</th>
<th>Cost Effective?</th>
<th>Qualified?</th>
<th>Requires Cut In’s?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Furnace</td>
<td>Yes</td>
<td>Qualified</td>
<td>No</td>
</tr>
<tr>
<td>Baseboard heat</td>
<td>No</td>
<td>Not Qualified</td>
<td>Yes (Increases Cost)</td>
</tr>
<tr>
<td>Wall/Ceiling Heat</td>
<td>No</td>
<td>Not Qualified</td>
<td>Yes (Increases Cost)</td>
</tr>
</tbody>
</table>

Requirement Addition:

- Auxiliary heat lockout must be completed on all Heat Pump Conversions

<table>
<thead>
<tr>
<th>January 1, 2021 – March 31, 2021</th>
<th>April 1, 2021 – December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>$950</td>
<td>$700</td>
</tr>
</tbody>
</table>
## Heat Pump Advanced Control Changes

<table>
<thead>
<tr>
<th>Install Scenario</th>
<th>Qualified?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat Pump replacing Heat Pump</td>
<td>Yes</td>
</tr>
<tr>
<td>Adding auxiliary lockout to existing heat pump</td>
<td>Yes</td>
</tr>
<tr>
<td>Heat pump conversion from electric furnace</td>
<td>No</td>
</tr>
</tbody>
</table>

- Heat Pump Advanced Controls may no longer be stacked with Heat Pump Conversions, as auxiliary lockout will be required for Heat Pump Conversions.
2020 Opportunity and Performance
Windows – Central Oregon

- New Windows Tier: $6 in OR

- Majority of 0.24 windows installed in New Homes in Central OR

New 0.24 Windows Tier Install Map
Manufactured Homes Heat Pump Promotion

**RFQ Open:**
- October 16, 2020-November 16, 2020
- Home Retrofit Trade Allies
- $2,500 for DHP, $3,000 for HP in Manufactured Homes

**Selection Criteria: 2021**
- Pricing
- History of serving Manufactured Homes communities
- Ability to reach diverse customer base
Manufactured Homes Heat Pump Promotion – Central Oregon

- 2020 Regional Results
  - 8 DHP
  - 30 HP

- Statewide:
  - 91 DHP
  - 349 HP
Rental Incentives: Single-Family Homes

• Increased Incentives for Single-Family Rentals

• Trade Ally Requirements:
  • Enrolled in Instant Incentives
    • Talk to your account manager to enroll

• Customer Requirements:
  • Non-owner Occupied, single-family rental properties
  • Oregon & Washington
## OR Rental Incentive Amounts: Single-Family

<table>
<thead>
<tr>
<th>Upgrade</th>
<th>Rental Incentive</th>
<th>Incentive Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ductless Heat Pump</td>
<td>$1,000</td>
<td>2021</td>
</tr>
<tr>
<td>Heat Pump</td>
<td>$1,000</td>
<td>2021</td>
</tr>
<tr>
<td>Extended Capacity Heat Pump</td>
<td>$1,650</td>
<td>2021</td>
</tr>
<tr>
<td>Gas Furnace</td>
<td>$550-$1,000</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Heat Pump Water Heater</td>
<td>$270</td>
<td>2021</td>
</tr>
<tr>
<td>Smart Thermostat</td>
<td>$100</td>
<td>2021</td>
</tr>
<tr>
<td>Attic Insulation</td>
<td>$0.50-$1.25 per square foot</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Wall Insulation</td>
<td>$0.50 per square foot</td>
<td>2021</td>
</tr>
<tr>
<td>Floor Insulation</td>
<td>$0.40 per square foot</td>
<td>2021</td>
</tr>
</tbody>
</table>

- *Incentive availability and timeline subject to change
# WA Rental Incentive Amounts: Single-Family

<table>
<thead>
<tr>
<th>Upgrade</th>
<th>Rental Incentive</th>
<th>Incentive Timeline*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Furnace</td>
<td>$550 $1,000</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Gas Tankless Water Heater</td>
<td>$200 $400</td>
<td>2021</td>
</tr>
<tr>
<td>Smart Thermostat</td>
<td>$100</td>
<td>2021</td>
</tr>
<tr>
<td>Attic Insulation</td>
<td>$0.60 $1.25 per square foot</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Wall Insulation</td>
<td>$0.60 $0.75 per square foot</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Floor Insulation</td>
<td>$0.60 $0.75 per square foot</td>
<td>Bonus through: March 31, 2021</td>
</tr>
</tbody>
</table>

*Incentive availability and timeline subject to change*
Central OR Single-Family Rental Incentives

- Central OR Single-Family Rentals: 11,491
- Central OR Single-Family Rental Projects: 88

Rental Installs 2015 - Today
DHP in Rentals Promo

• RFQ Open: October 16, 2020 - EO 2021
  • $1,750 - $2,000 DHP Incentive
  • Non-Owner-Occupied Rentals
  • Single-Family Rentals and Small Multifamily Rentals
  • Price Capped offering; customer out of pocket cost max $2,500

• Requirements
  • Home Retrofit or Multifamily Trade Ally
  • Enrolled in Home Retrofit Instant Incentives
  • Meet Program 9 HSPF Requirements per AHRI
  • Meet price caps

• 2020 participants will need to reapply via the 2021 RFQ.
Multifamily Market Update
Expanding participation in small multifamily

• Opportunity identified in small multifamily
  • duplex, triplex, fourplex
  • Doubled participation from 2017-2020
    • 10% to 20% served

• Offerings tailored for small multifamily
  • DHP Rental Promotion
  • $1,000 bonus DHP incentive
  • Up to $1.25/sq. ft. insulation
  • $1,000 gas furnace

• Targeting rural areas
Multifamily participation trends

Percentage of total eligible multifamily market served by market type from 2017-2020
Multifamily participation trends

Percentage of total eligible multifamily market served by property size from 2017-2020
Multifamily participation trends

Percentage of total eligible multifamily market served by region from 2017-2020
Multifamily Market Snapshot

- Increasing number of tenants not able to pay rent
- New multifamily construction slowing
- Vacancies expected to rise next year as eviction protections expire
- Assisted living retrofit market limited
Oregon COVID Response

- Changes to Eviction Moratoria
  - Eviction protection for tenants
- Executive Order extends "Emergency Period"
  - Eviction protection through December 31st
- Tenants have until March 31st, 2021 to pay off the debts from April 1st to September 31st
- Multnomah county has specific guidelines
Portland Only – Residential Infill Project Approval

• City Council approved in August 2020

• Zoning reform for Portland’s residential neighborhoods

• Opens door for more housing options
  • Single family lots converted to multifamily
  • Four to six dwelling units per lot
  • Six dwellings allowed if half are affordable housing
Covid impacts on the new homes industry

- Supply shortages
  - Air conditioning units
  - Lighting fixtures
  - Appliances
- Lumber price increases
- Skilled labor shortage
- Construction delays due to staggered trades
- Building industry slowly getting back to business as usual
- Low interest rates are creating higher demand
Available cash incentives in Oregon (2021)

- $1,123 - $5,223 cash incentives to help builders move beyond code
- $750 net zero incentive
- $300 - $1,889 verification incentive
- $250 affordable housing verification incentive
- $200 solar ready incentive
- $200 energy smart homes incentive
- Varying incentives with solar installs
- Varying incentives for early design and solar design assistance
Early design assistance (EDA) meetings are your first concrete step!

“90% of your energy decisions are made before a hammer hits a nail” – John Tooley

EDA = Pre-construction meeting for design review with builder, verifier, verifier account manager and subcontractors

Opportunity to:
• Maximize energy efficiency and EPS incentives
• Strengthen communication between subcontractors
• Integrate solar/solar ready into the design
Additional Offerings in 2020

In 2020, builders that are part of Energy Trust of Oregon’s EPS New Construction offering can take their new homes to the next level with two new incentive packages:

1. **Net Zero Homes:** Include an installed solar PV system that can offset a home’s entire electric load

2. **Energy Smart Homes:** Include appliances and equipment that are smart grid interactive, making it possible for customers to participate in utility programs designed to lower energy usage during peak periods—now or in the future
Central AC AHRI Review
Central AC Review

- Central Air Conditioner qualifications review
  - How to verify SEER compliance using Qualifying Products List (QPL)
  - How to verify EER compliance using AHRI
  - Ensuring application is accurate and complete

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Incentive</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central air conditioner</td>
<td>$250</td>
<td>Minimum nominal Seasonal Energy Efficiency Rating (SEER) of 15 or greater for the outdoor unit, and a minimum total system Energy Efficiency Rating (EER) of 12 or greater. Ask your contractor to verify the outdoor unit can be found on the qualifying products list and that the total system achieves a minimum 12 EER rating via the AHRI website to ensure your installation qualifies.</td>
</tr>
</tbody>
</table>
Central AC Review

- SEER Requirements
  - Verify **outdoor unit** meets 15 SEER requirement by referencing Energy Trust of Oregon Qualifying Products List

Requirements

Minimum nominal Seasonal Energy Efficiency Rating (SEER) of 15 or greater for the outdoor unit, and a minimum total system Energy Efficiency Rating (EER) of 12 or greater.

Ask your contractor to verify the outdoor unit can be found on the qualifying products list and that the total system achieves a minimum 12 EER rating via the AHRI website to ensure your installation qualifies.
QPL may not include all qualifying units. Contact Energy Trust Residential team if a model appears to be missing.

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Name</th>
<th>Model Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Standard</td>
<td>SILVER 16</td>
<td>4A7A6, 4A7L6</td>
</tr>
<tr>
<td>American Standard</td>
<td>GOLD 17</td>
<td>4A7C7, 4A7A7</td>
</tr>
<tr>
<td>American Standard</td>
<td>PLATINUM 18</td>
<td>4A7V8</td>
</tr>
<tr>
<td>American Standard</td>
<td>PLATINUM 20</td>
<td>4A7V0</td>
</tr>
<tr>
<td>Amana</td>
<td>AXXC20</td>
<td>AXXC20</td>
</tr>
<tr>
<td>Amana</td>
<td>ASXC18</td>
<td>ASXC18</td>
</tr>
<tr>
<td>Amana</td>
<td>ASXC16</td>
<td>ASXC16</td>
</tr>
<tr>
<td>Amana</td>
<td>ASX16</td>
<td>ASX16</td>
</tr>
<tr>
<td>Bryant</td>
<td>LEGACY</td>
<td>105A, 116B, 105A</td>
</tr>
<tr>
<td>Bryant</td>
<td>PREFERRED</td>
<td>125B, 126CA, 127A</td>
</tr>
<tr>
<td>Bryant</td>
<td>EVOLUTION</td>
<td>186B, 187B, 187BN, 180C, 180B, 189BNV</td>
</tr>
<tr>
<td>Carrier</td>
<td>COMFORT 15, COMFORT 16</td>
<td>24AAAS, 24ABCD, 24AAAD</td>
</tr>
<tr>
<td>Carrier</td>
<td>PERFORMANCE 16, PERFORMANCE 17</td>
<td>24ABSP, 24ACCD, 24BEBB</td>
</tr>
<tr>
<td>Carrier</td>
<td>INFINITY 16, INFINITY 17, INFINITY 19, INFINITY 20, INFINITY 21</td>
<td>24AN6, 24AN8, 24VNA9, 24VNA10, 24ANB1</td>
</tr>
<tr>
<td>Coleman</td>
<td>LX SERIES</td>
<td>CC7, CC10</td>
</tr>
<tr>
<td>Coleman</td>
<td>ECHELON</td>
<td>AC21, AC19</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX16SA</td>
<td>DX16SA</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX16TC</td>
<td>DX16TC</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX17VSS</td>
<td>DX17VSS</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX18TC</td>
<td>DX18TC</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX20VC</td>
<td>DX20VC</td>
</tr>
<tr>
<td>Goodman</td>
<td>GSX16</td>
<td>GSX16</td>
</tr>
<tr>
<td>Goodman</td>
<td>GSXC16</td>
<td>GSXC16</td>
</tr>
<tr>
<td>Goodman</td>
<td>GSXC18</td>
<td>GSXC18</td>
</tr>
<tr>
<td>Lennox</td>
<td>XC13</td>
<td>XC13</td>
</tr>
<tr>
<td>Lennox</td>
<td>T6ACX</td>
<td>T6ACX</td>
</tr>
<tr>
<td>Lennox</td>
<td>EL16XC1</td>
<td>EL16XC1</td>
</tr>
<tr>
<td>Lennox</td>
<td>XC16</td>
<td>XC16</td>
</tr>
<tr>
<td>Lennox</td>
<td>XC20</td>
<td>XC20</td>
</tr>
<tr>
<td>Lennox</td>
<td>SL18XC1</td>
<td>SL18XC1</td>
</tr>
<tr>
<td>Lennox</td>
<td>XC21</td>
<td>XC21</td>
</tr>
<tr>
<td>Lennox</td>
<td>XC25</td>
<td>XC25</td>
</tr>
<tr>
<td>Payne</td>
<td>PA16NA</td>
<td>PA16NA</td>
</tr>
</tbody>
</table>
Central AC Review

- EER Requirements
  - Verify **entire system** meets minimum 12 EER requirement via AHRI lookup

**Requirements**

Minimum nominal Seasonal Energy Efficiency Rating (SEER) of 15 or greater for the outdoor unit, and a minimum total system Energy Efficiency Rating (EER) of 12 or greater.

Ask your contractor to verify the outdoor unit can be found on the **qualifying products list** and that the total system achieves a minimum 12 EER rating via the **AHRI** website to ensure your installation qualifies.
Central AC Review

- AHRI Directory – online resource tool to lookup ratings for many HVAC system combinations, including Central AC.
Central AC Review

• In order for a Central AC system to receive an incentive, the **entire system listed on AHRI** must be installed.
• Essentially, if it’s listed, it needs to be installed

![Certificate of Product Ratings](image-url)
Central AC Review

- Some AHRI combinations do not require a specific indoor blower/air handler. In these instances, a coil and outdoor unit can be paired easily with an existing furnace/blower.
- These systems are identified as “RCU-A-C”

![Certificate of Product Ratings]

Only the outdoor unit and indoor coil are specified.
Central AC Review

• Some rated systems do require a specific air handler/blower (typically matching the brand of the outdoor unit and coil)
• These systems are identified as “RCU-A-CB”

The outdoor unit, indoor coil AND furnace/air handler are specified
Central AC Review

- Ensuring Central AC application is completed correctly:

<table>
<thead>
<tr>
<th>Cooling Incentive</th>
<th>Requirements</th>
<th>Incentive amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>One incentive per residence. Residence must be serviced Portland General Electric (PGE) or Pacific Power</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Confirm each model listed on the AHRI certificate is included on this application

- Either attach a copy of the AHRI certificate, or provide the corresponding AHRI cert. #
Central AC Review

• Still have questions?
  • Reach out to your local account manager and schedule a Central AC/AHRI training to discuss each of these steps in-depth
Indoor Air Quality

- What does Indoor Air quality mean to attendees?
- How are they seeing this manifest in their work?
Thank you

Marshall Johnson
Residential Sr. Program Manager
marshall.johnson@energytrust.org

Kate Wellington
Multifamily Program Manager
kate.wellington@energytrust.org
Southern OR
Breakout Housekeeping
Southern OR Agenda

• In-Depth 2021 Incentive Changes
• 2020 Opportunities and Performance
  • 0.24 Windows Tier
  • Manufactured Homes HP Promo
  • Rental Incentives
  • DHP in Rentals Promo
• Multifamily Program Updates
  • Expanding Participation in small multifamily
  • Multifamily Participation trends
  • Multifamily Market Snapshot
  • Oregon COVID Response
• EPS New Construction
  • COVID Impacts on new homes
  • 2021 Cash Incentives
  • Early Design Assistance
  • Additional offerings in 2020
• Central AC AHRI Review
Southern Oregon breakout only

- Specific fire content <here>
2021 Heat Pump Conversion Changes

Qualified Primary Heating Source Change:

<table>
<thead>
<tr>
<th>Primary Heating Source</th>
<th>Cost Effective?</th>
<th>Qualified?</th>
<th>Requires Cut In’s?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Furnace</td>
<td>Yes</td>
<td>Qualified</td>
<td>No</td>
</tr>
<tr>
<td>Baseboard heat</td>
<td>No</td>
<td>Not Qualified</td>
<td>Yes (Increases Cost)</td>
</tr>
<tr>
<td>Wall/Ceiling Heat</td>
<td>No</td>
<td>Not Qualified</td>
<td>Yes (Increases Cost)</td>
</tr>
</tbody>
</table>

Requirement Addition:
• Auxiliary heat lockout must be completed on all Heat Pump Conversions

<table>
<thead>
<tr>
<th>January 1, 2021 – March 31, 2021</th>
<th>April 1, 2021 – December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>$950</td>
<td>$700</td>
</tr>
</tbody>
</table>
Heat Pump Advanced Control Changes

<table>
<thead>
<tr>
<th>Install Scenario</th>
<th>Qualified?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat Pump replacing Heat Pump</td>
<td>Yes</td>
</tr>
<tr>
<td>Adding auxiliary lockout to existing heat pump</td>
<td>Yes</td>
</tr>
<tr>
<td>Heat pump conversion from electric furnace</td>
<td>No</td>
</tr>
</tbody>
</table>

- Heat Pump Advanced Controls may no longer be stacked with Heat Pump Conversions, as auxiliary lockout will be required for Heat Pump Conversions.
2020 Opportunity and Performance
Windows: Southern Oregon

- New Windows Tier: $6 in OR

- Majority of 0.24 windows installed in Single Family in Southern OR

New 0.24 Windows Tier Install Map
Manufactured Homes Heat Pump Promotion

RFQ Open:
- October 16, 2020-November 16, 2020
- Home Retrofit Trade Allies
- $2,500 for DHP, $3,000 for HP in Manufactured Homes

Selection Criteria: 2021
- Pricing
- History of serving Manufactured Homes communities
- Ability to reach diverse customer base
Manufactured Homes Heat Pump Promotion – Southern Oregon

• 2020 Regional Results
  • 59 DHP
  • 117 HP

• Statewide:
  • 91 DHP
  • 349 HP
Rental Incentives: Single-Family Homes

• Increased Incentives for Single-Family Rentals

• Trade Ally Requirements:
  • Enrolled in Instant Incentives
    • Talk to your account manager to enroll

• Customer Requirements:
  • Non-owner Occupied, single-family rental properties
  • Oregon & Washington
### OR Rental Incentive Amounts: Single-Family

<table>
<thead>
<tr>
<th>Upgrade</th>
<th>Rental Incentive</th>
<th>Incentive Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ductless Heat Pump</td>
<td>$1,000</td>
<td>2021</td>
</tr>
<tr>
<td>Heat Pump</td>
<td>$1,000</td>
<td>2021</td>
</tr>
<tr>
<td>Extended Capacity Heat Pump</td>
<td>$1,650</td>
<td>2021</td>
</tr>
<tr>
<td>Gas Furnace</td>
<td>$550-$1,000</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Heat Pump Water Heater</td>
<td>$270</td>
<td>2021</td>
</tr>
<tr>
<td>Smart Thermostat</td>
<td>$100</td>
<td>2021</td>
</tr>
<tr>
<td>Attic Insulation</td>
<td>$0.50-$1.25 per square foot</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Wall Insulation</td>
<td>$0.50 per square foot</td>
<td>2021</td>
</tr>
<tr>
<td>Floor Insulation</td>
<td>$0.40 per square foot</td>
<td>2021</td>
</tr>
</tbody>
</table>

*Incentive availability and timeline subject to change*
# WA Rental Incentive Amounts: Single-Family

<table>
<thead>
<tr>
<th>Upgrade</th>
<th>Rental Incentive</th>
<th>Incentive Timeline*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Furnace</td>
<td>$550 $1,000</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Gas Tankless Water Heater</td>
<td>$200 $400</td>
<td>2021</td>
</tr>
<tr>
<td>Smart Thermostat</td>
<td>$100</td>
<td>2021</td>
</tr>
<tr>
<td>Attic Insulation</td>
<td>$0.60 $1.25 per square foot</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Wall Insulation</td>
<td>$0.60 $0.75 per square foot</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Floor Insulation</td>
<td>$0.60 $0.75 per square foot</td>
<td>Bonus through: March 31, 2021</td>
</tr>
</tbody>
</table>

*Incentive availability and timeline subject to change*
Southern Oregon Single-Family Rental Incentives

• Southern Oregon Single-Family Rentals: ~30,000

• Single-Family Rental Projects: 274

Rental Installs 2015 - Today
DHP in Rentals Promo

- RFQ Open: October 16, 2020 - EO 2021
  - $1,750 - $2,000 DHP Incentive
  - Non-Owner-Occupied Rentals
  - Single-Family Rentals and Small Multifamily Rentals
  - Price Capped offering; customer out of pocket cost max $2,500

- Requirements
  - Home Retrofit or Multifamily Trade Ally
  - Enrolled in Home Retrofit Instant Incentives
  - Meet Program 9 HSPF Requirements per AHRI
  - Meet price caps

- 2020 participants will need to reapply via the 2021 RFQ.
Multifamily Market Update
Expanding participation in small multifamily

- Opportunity identified in small multifamily
  - duplex, triplex, fourplex
  - Doubled participation from 2017-2020
    - 10% to 20% served

- Offerings tailored for small multifamily
  - DHP Rental Promotion
  - $1,000 bonus DHP incentive
  - Up to $1.25/sq. ft. insulation
  - $1,000 gas furnace

- Targeting rural areas
Multifamily participation trends

Percentage of total eligible multifamily market served by market type from 2017-2020
Multifamily participation trends

Percentage of total eligible multifamily market served by property size from 2017-2020
Multifamily participation trends

Percentage of total eligible multifamily market served by region from 2017-2020
Multifamily Market Snapshot

• Increasing number of tenants not able to pay rent

• New multifamily construction slowing

• Vacancies expected to rise next year as eviction protections expire

• Assisted living retrofit market limited
Oregon COVID Response

- Changes to Eviction Moratoria
  - Eviction protection for tenants
- Executive Order extends "Emergency Period"
  - Eviction protection through December 31st
- Tenants have until March 31st, 2021 to pay off the debts from April 1st to September 31st
- Multnomah county has specific guidelines
Portland Only – Residential Infill Project Approval

• City Council approved in August 2020

• Zoning reform for Portland’s residential neighborhoods

• Opens door for more housing options
  • Single family lots converted to multifamily
  • Four to six dwelling units per lot
  • Six dwellings allowed if half are affordable housing
Covid impacts on the new homes industry

- Supply shortages
  - Air conditioning units
  - Lighting fixtures
  - Appliances
- Lumber price increases
- Skilled labor shortage
- Construction delays due to staggered trades
- Building industry slowly getting back to business as usual
- Low interest rates are creating higher demand
Available cash incentives in Oregon (2021)

- $1,123 - $5,223 cash incentives to help builders move beyond code
- $750 net zero incentive
- $300 - $1,889 verification incentive
- $250 affordable housing verification incentive
- $200 solar ready incentive
- $200 energy smart homes incentive
- Varying incentives with solar installs
- Varying incentives for early design and solar design assistance
Early design assistance (EDA) meetings are your first concrete step!

“90% of your energy decisions are made before a hammer hits a nail” – John Tooley

EDA = Pre-construction meeting for design review with builder, verifier, verifier account manager and subcontractors

Opportunity to:
• Maximize energy efficiency and EPS incentives
• Strengthen communication between subcontractors
• Integrate solar/solar ready into the design
In 2020, builders that are part of Energy Trust of Oregon’s EPS New Construction offering can take their new homes to the next level with two new incentive packages:

1. **Net Zero Homes**: Include an installed solar PV system that can offset a home’s entire electric load

2. **Energy Smart Homes**: Include appliances and equipment that are smart grid interactive, making it possible for customers to participate in utility programs designed to lower energy usage during peak periods—now or in the future
Central AC Review

- Central Air Conditioner qualifications review
  - How to verify SEER compliance using Qualifying Products List (QPL)
  - How to verify EER compliance using AHRI
  - Ensuring application is accurate and complete

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Incentive</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central air conditioner</td>
<td>$250</td>
<td>Minimum nominal Seasonal Energy Efficiency Rating (SEER) of 15 or greater for the outdoor unit, and a minimum total system Energy Efficiency Rating (EER) of 12 or greater. Ask your contractor to verify the outdoor unit can be found on the qualifying products list and that the total system achieves a minimum 12 EER rating via the AHRI website to ensure your installation qualifies.</td>
</tr>
</tbody>
</table>
Central AC Review

• SEER Requirements
  • Verify **outdoor unit** meets 15 SEER requirement by referencing Energy Trust of Oregon Qualifying Products List

Requirements

Minimum nominal Seasonal Energy Efficiency Rating (SEER) of 15 or greater for the outdoor unit, and a minimum total system Energy Efficiency Rating (EER) of 12 or greater

Ask your contractor to verify the outdoor unit can be found on the **qualifying products list** and that the total system achieves a minimum 12 EER rating via the **AHRI** website to ensure your installation qualifies.
Central AC Review

• QPL may not include all qualifying units. Contact Energy Trust Residential team if a model appears to be missing.
Central AC Review

• EER Requirements
  • Verify **entire system** meets minimum 12 EER requirement via AHRI lookup

Requirements

Minimum nominal Seasonal Energy Efficiency Rating (SEER) of 15 or greater for the outdoor unit, and a minimum total system Energy Efficiency Rating (EER) of 12 or greater.

Ask your contractor to verify the outdoor unit can be found on the qualifying products list and that the total system achieves a minimum 12 EER rating via the AHRI website to ensure your installation qualifies.
Central AC Review

- AHRI Directory – online resource tool to lookup ratings for many HVAC system combinations, including Central AC.
Central AC Review

• In order for a Central AC system to receive an incentive, the **entire system listed on AHRI** must be installed.
• Essentially, if it’s listed, it needs to be installed

![Certificate of Product Ratings](image-url)
Central AC Review

- Some AHRI combinations do not require a specific indoor blower/air handler. In these instances, a coil and outdoor unit can be paired easily with an existing furnace/blower.
- These systems are identified as “RCU-A-C”

Certificate of Product Ratings

- Outdoor Unit Model Number (Condenser or Single Package): 24APB648A*030*
- Indoor Unit Model Number (Evaporator and/or Air Handler): CAP**8021AL*+TDR

Only the outdoor unit and indoor coil are specified
Central AC Review

• Some rated systems do require a specific air handler/blower (typically matching the brand of the outdoor unit and coil)
  • These systems are identified as “RCU-A-CB”

The outdoor unit, indoor coil AND furnace/air handler are specified
Central AC Review

- Ensuring Central AC application is completed correctly:

<table>
<thead>
<tr>
<th>Upgrade type</th>
<th>Requirements</th>
<th>Incentive amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualifying Central Air Conditioner</td>
<td>System must be a qualifying central air conditioner serving most or all of the home. Residences primarily heated with a heat pump do not qualify.</td>
<td>$250</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Central Air Conditioner</th>
<th>New heating system installed cost (if applicable):</th>
<th>System Capacity (Tons):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installed Cost: $</td>
<td>$</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outdoor Manufacturer:</th>
<th>Outdoor Model:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor Evaporator Coil Manufacturer:</td>
<td>Indoor Evaporator Coil Model:</td>
<td></td>
</tr>
<tr>
<td>Furnace/Blower Manufacturer:</td>
<td>Furnace/Blower Model #:</td>
<td></td>
</tr>
</tbody>
</table>

- Confirm each model listed on the AHRI certificate is included on this application.

- Either attach a copy of the AHRI certificate, or provide the corresponding AHRI cert. #
Central AC Review

• Still have questions?
  • Reach out to your local account manager and schedule a Central AC/AHRI training to discuss each of these steps in-depth
Indoor Air Quality

• What does Indoor Air quality mean to attendees?
• How are they seeing this manifest in their work?
Thank you

Marshall Johnson
Residential Sr. Program Manager
marshall.johnson@energytrust.org

Kate Wellington
Multifamily Program Manager
kate.wellington@energytrust.org
Eastern OR
Eastern OR Agenda

- In-Depth 2021 Incentive Changes
- 2020 Opportunities and Performance
  - 0.24 Windows Tier
  - Manufactured Homes HP Promo
  - Rental Incentives
  - DHP in Rentals Promo
- Multifamily Program Updates
  - Expanding Participation in small multifamily
  - Multifamily Participation trends
  - Multifamily Market Snapshot
  - Oregon COVID Response
- EPS New Construction
  - COVID Impacts on new homes
  - 2021 Cash Incentives
  - Early Design Assistance
  - Additional offerings in 2020
- Central AC AHRI Review
2021 Heat Pump Conversion Changes

Qualified Primary Heating Source Change:

<table>
<thead>
<tr>
<th>Primary Heating Source</th>
<th>Cost Effective?</th>
<th>Qualified?</th>
<th>Requires Cut In’s?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Furnace</td>
<td>Yes</td>
<td>Qualified</td>
<td>No</td>
</tr>
<tr>
<td>Baseboard heat</td>
<td>No</td>
<td>Not Qualified</td>
<td>Yes (Increases Cost)</td>
</tr>
<tr>
<td>Wall/Ceiling Heat</td>
<td>No</td>
<td>Not Qualified</td>
<td>Yes (Increases Cost)</td>
</tr>
</tbody>
</table>

Requirement Addition:
- Auxiliary heat lockout must be completed on all Heat Pump Conversions

<table>
<thead>
<tr>
<th>Period</th>
<th>Cost Effective</th>
<th>Qualified</th>
<th>Requires Cut In’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 2021 – March 31, 2021</td>
<td>$950</td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 1, 2021 – December 31, 2021</td>
<td>$700</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Heat Pump Advanced Control Changes

<table>
<thead>
<tr>
<th>Install Scenario</th>
<th>Qualified?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat Pump replacing Heat Pump</td>
<td>Yes</td>
</tr>
<tr>
<td>Adding auxiliary lockout to existing heat pump</td>
<td>Yes</td>
</tr>
<tr>
<td>Heat pump conversion from electric furnace</td>
<td>No</td>
</tr>
</tbody>
</table>

- Heat Pump Advanced Controls may no longer be stacked with Heat Pump Conversions, as auxiliary lockout will be required for Heat Pump Conversions.
2020 Opportunity and Performance
Windows: Eastern Oregon

- New Windows Tier: $6 in OR
- Majority of 0.24 windows installed in Single Family in Eastern OR

New 0.24 Windows Tier Install Map
Manufactured Homes Heat Pump Promotion

RFQ Open:
- October 16, 2020- November 16, 2020
- Home Retrofit Trade Allies
- $2,500 for DHP, $3,000 for HP in Manufactured Homes

Selection Criteria: 2021
- Pricing
- History of serving Manufactured Homes communities
- Ability to reach diverse customer base
Manufactured Homes Heat Pump Promotion – Eastern Oregon

• 2020 Regional Results
  • 7 DHP
  • 7 HP

• Statewide:
  • 91 DHP
  • 349 HP
Rental Incentives: Single-Family Homes

• Increased Incentives for Single-Family Rentals

• Trade Ally Requirements:
  • Enrolled in Instant Incentives
    • Talk to your account manager to enroll

• Customer Requirements:
  • Non-owner Occupied, single-family rental properties
  • Oregon & Washington
## OR Rental Incentive Amounts: Single-Family

<table>
<thead>
<tr>
<th>Upgrade</th>
<th>Rental Incentive</th>
<th>Incentive Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ductless Heat Pump</td>
<td>$1,000</td>
<td>2021</td>
</tr>
<tr>
<td>Heat Pump</td>
<td>$1,000</td>
<td>2021</td>
</tr>
<tr>
<td>Extended Capacity Heat Pump</td>
<td>$1,650</td>
<td>2021</td>
</tr>
<tr>
<td>Gas Furnace</td>
<td>$550-$1,000</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Heat Pump Water Heater</td>
<td>$270</td>
<td>2021</td>
</tr>
<tr>
<td>Smart Thermostat</td>
<td>$100</td>
<td>2021</td>
</tr>
<tr>
<td>Attic Insulation</td>
<td>$0.50-$1.25 per square foot</td>
<td>Bonus through: March 31, 2021</td>
</tr>
<tr>
<td>Wall Insulation</td>
<td>$0.50 per square foot</td>
<td>2021</td>
</tr>
<tr>
<td>Floor Insulation</td>
<td>$0.40 per square foot</td>
<td>2021</td>
</tr>
</tbody>
</table>

- *Incentive availability and timeline subject to change*
Eastern Oregon Single-Family Rental Incentives

- Eastern OR Single-Family Rentals: ~5,000
- Single-Family Rental Projects: 39

Rental Installs 2015 - Today

- Ceiling insulation
- Ductless heat pump
- Floor insulation
- Gas furnace
- Wall insulation
DHP in Rentals Promo

- RFQ Open: October 16, 2020 - EO 2021
  - $1,750 - $2,000 DHP Incentive
  - Non-Owner-Occupied Rentals
  - Single-Family Rentals and Small Multifamily Rentals
  - Price Capped offering; customer out of pocket cost max $2,500

- Requirements
  - Home Retrofit or Multifamily Trade Ally
  - Enrolled in Home Retrofit Instant Incentives
  - Meet Program 9 HSPF Requirements per AHRI
  - Meet price caps

- 2020 participants will need to reapply via the 2021 RFQ.
Multifamily Market Update
Expanding participation in small multifamily

- Opportunity identified in small multifamily
  - duplex, triplex, fourplex
  - Doubled participation from 2017-2020
    - 10% to 20% served
- Offerings tailored for small multifamily
  - DHP Rental Promotion
  - $1,000 bonus DHP incentive
  - Up to $1.25/sq. ft. insulation
  - $1,000 gas furnace
- Targeting rural areas
Multifamily participation trends

Percentage of total eligible multifamily market served by market type from 2017-2020
Multifamily participation trends

Percentage of total eligible multifamily market served by property size from 2017-2020

![Bar chart showing the percentage of total eligible multifamily market served by property size from 2017 to 2020. The chart compares unknown, 1-4 units, 5-9 units, 10-19 units, 20-49 units, 50-100 units, and 100+ units for each year.](chart)
Multifamily participation trends

Percentage of total eligible multifamily market served by region from 2017-2020
Multifamily Market Snapshot

• Increasing number of tenants not able to pay rent

• New multifamily construction slowing

• Vacancies expected to rise next year as eviction protections expire

• Assisted living retrofit market limited
Oregon COVID Response

• Changes to Eviction Moratoria
  • Eviction protection for tenants

• Executive Order extends "Emergency Period"
  • Eviction protection through December 31st

• Tenants have until March 31st, 2021 to pay off the debts from April 1st to September 31st

• Multnomah county has specific guidelines
Portland Only – Residential Infill Project Approval

• City Council approved in August 2020

• Zoning reform for Portland’s residential neighborhoods

• Opens door for more housing options
  • Single family lots converted to multifamily
  • Four to six dwelling units per lot
  • Six dwellings allowed if half are affordable housing
Covid impacts on the new homes industry

- Supply shortages
  - Air conditioning units
  - Lighting fixtures
  - Appliances
- Lumber price increases
- Skilled labor shortage
- Construction delays due to staggered trades
- Building industry slowly getting back to business as usual
- Low interest rates are creating higher demand
Available cash incentives in Oregon (2021)

- $1,123 - $5,223 cash incentives to help builders move beyond code
- $750 net zero incentive
- $300 - $1,889 verification incentive
- $250 affordable housing verification incentive
- $200 solar ready incentive
- $200 energy smart homes incentive
- Varying incentives with solar installs
- Varying incentives for early design and solar design assistance
Early design assistance (EDA) meetings are your first concrete step!

“90% of your energy decisions are made before a hammer hits a nail” – John Tooley

**EDA** = Pre-construction meeting for design review with builder, verifier, verifier account manager and subcontractors

Opportunity to:

- Maximize energy efficiency and EPS incentives
- Strengthen communication between subcontractors
- Integrate solar/solar ready into the design
Additional Offerings in 2020

In 2020, builders that are part of Energy Trust of Oregon’s EPS New Construction offering can take their new homes to the next level with two new incentive packages:

1. **Net Zero Homes:** Include an installed solar PV system that can offset a home’s entire electric load

2. **Energy Smart Homes:** Include appliances and equipment that are smart grid interactive, making it possible for customers to participate in utility programs designed to lower energy usage during peak periods—now or in the future
Central AC AHRI Review
Central AC Review

- Central Air Conditioner qualifications review
  - How to verify SEER compliance using Qualifying Products List (QPL)
  - How to verify EER compliance using AHRI
  - Ensuring application is accurate and complete

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Incentive</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central air conditioner</td>
<td>$250</td>
<td>Minimum nominal Seasonal Energy Efficiency Rating (SEER) of 15 or greater for the outdoor unit, and a minimum total system Energy Efficiency Rating (EER) of 12 or greater.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ask your contractor to verify the outdoor unit can be found on the <a href="#">qualifying products list</a> and that the total system achieves a minimum 12 EER rating via the <a href="#">AHRI</a> website to ensure your installation qualifies.</td>
</tr>
</tbody>
</table>
Central AC Review

• SEER Requirements
  • Verify **outdoor unit** meets 15 SEER requirement by referencing Energy Trust of Oregon Qualifying Products List

**Requirements**

Minimum nominal Seasonal Energy Efficiency Rating (SEER) of 15 or greater for the outdoor unit, and a minimum total system Energy Efficiency Rating (EER) of 12 or greater

Ask your contractor to verify the outdoor unit can be found on the **qualifying products list** and that the total system achieves a minimum 12 EER rating via the AHRI website to ensure your installation qualifies.
Central AC Review

- QPL may not include all qualifying units. Contact Energy Trust Residential team if a model appears to be missing.

### Qualifying Central Air Conditioning Outdoor Units

**Residential and Existing Multifamily**  
**Effective February 1, 2020**

Models listed below are known to meet the manufacturer-listed minimum 15 SEER requirement and the minimum total system EER of 12 or greater for central air conditioning outdoor units. If you have questions about model eligibility or to verify eligibility of a model not found on this list, please contact us at residential@energytrust.org for single family homes and multifamily@energytrust.org for multifamily residences.

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Model Name</th>
<th>Model Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Standard</td>
<td>SILVER 16</td>
<td>4AAP, 4ABB</td>
</tr>
<tr>
<td>American Standard</td>
<td>GOLD 17</td>
<td>4AAP, 4ABB</td>
</tr>
<tr>
<td>American Standard</td>
<td>PLATINUM 18</td>
<td>4APL</td>
</tr>
<tr>
<td>American Standard</td>
<td>PLATINUM 20</td>
<td>4APL</td>
</tr>
<tr>
<td>Amana</td>
<td>AVXC20</td>
<td></td>
</tr>
<tr>
<td>Amana</td>
<td>ASXC18</td>
<td></td>
</tr>
<tr>
<td>Amana</td>
<td>ASXC16</td>
<td></td>
</tr>
<tr>
<td>Amana</td>
<td>ASX16</td>
<td></td>
</tr>
<tr>
<td>Bryant</td>
<td>LEGACY</td>
<td>106A, 116B, 116A</td>
</tr>
<tr>
<td>Bryant</td>
<td>PREFERRED</td>
<td>126B, 126C, 127A</td>
</tr>
<tr>
<td>Bryant</td>
<td>EVOLUTION</td>
<td>186B, 187B, 187BN, 180C, 180B, 180BNV</td>
</tr>
<tr>
<td>Carrier</td>
<td>COMFORT 15, 16</td>
<td>24AAAC, 24BBCC, 24AAAD</td>
</tr>
<tr>
<td>Carrier</td>
<td>PERFORMANCE 16, 17</td>
<td>24AAPB, 24ACCB, 24ACC8</td>
</tr>
<tr>
<td>Carrier</td>
<td>INFINITY 16, 17, 18, 19, 20, 21</td>
<td>24ANB6, 24ANB8, 24VNA9, 24VNA0, 24VNB1</td>
</tr>
<tr>
<td>Coleman</td>
<td>LX SERIES</td>
<td>CC7, CC17</td>
</tr>
<tr>
<td>Coleman</td>
<td>ECHELON</td>
<td>AC21, AC19</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX16SA</td>
<td>DX16SA</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX16TC</td>
<td>DX16TC</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX17SS</td>
<td>DX17SS</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX18TC</td>
<td>DX18TC</td>
</tr>
<tr>
<td>Daikin</td>
<td>DX20VC</td>
<td>DX20VC</td>
</tr>
<tr>
<td>Goodman</td>
<td>GSX16</td>
<td>GSX16</td>
</tr>
<tr>
<td>Goodman</td>
<td>GSXC16</td>
<td>GSXC16</td>
</tr>
<tr>
<td>Goodman</td>
<td>GSXC18</td>
<td>GSXC18</td>
</tr>
<tr>
<td>Lennox</td>
<td>X13</td>
<td>X13</td>
</tr>
<tr>
<td>Lennox</td>
<td>T6AXC</td>
<td>T6AXC</td>
</tr>
<tr>
<td>Lennox</td>
<td>EL16XC1</td>
<td>EL16XC1</td>
</tr>
<tr>
<td>Lennox</td>
<td>X16</td>
<td>X16</td>
</tr>
<tr>
<td>Lennox</td>
<td>X20</td>
<td>X20</td>
</tr>
<tr>
<td>Lennox</td>
<td>SL18XC1</td>
<td>SL18XC1</td>
</tr>
<tr>
<td>Lennox</td>
<td>X21</td>
<td>X21</td>
</tr>
<tr>
<td>Lennox</td>
<td>X25</td>
<td>X25</td>
</tr>
<tr>
<td>Payne</td>
<td>PA16NA</td>
<td>PA16NA</td>
</tr>
</tbody>
</table>
Central AC Review

• EER Requirements
  • Verify **entire system** meets minimum 12 EER requirement via AHRI lookup

Requirements

Minimum nominal Seasonal Energy Efficiency Rating (SEER) of 15 or greater for the outdoor unit, and a minimum total system Energy Efficiency Rating (EER) of 12 or greater.

Ask your contractor to verify the outdoor unit can be found on the qualifying **products list** and that the total system achieves a minimum 12 EER rating via the **AHRI** website to ensure your installation qualifies.
Central AC Review

- AHRI Directory – online resource tool to lookup ratings for many HVAC system combinations, including Central AC.
Central AC Review

• In order for a Central AC system to receive an incentive, the **entire system listed on AHRI** must be installed.
• Essentially, if it’s listed, it needs to be installed
Central AC Review

- Some AHRI combinations do not require a specific indoor blower/air handler. In these instances, a coil and outdoor unit can be paired easily with an existing furnace/blower.
- These systems are identified as “RCU-A-C”

![AHRI Certificate of Product Ratings](image)

Only the outdoor unit and indoor coil are specified
Central AC Review

• Some rated systems do require a specific air handler/blower (typically matching the brand of the outdoor unit and coil)
  • These systems are identified as “RCU-A-CB”

![Certificate of Product R](image)

AHRI Certified Reference Number: 9311647
Date: 10-12-2020

AHRI Type: RCU-A-CB (Split System: Air-Cooled Condensing Unit, Coil with Blower)
Series: 15 SEER AC - HIGH EER
Outdoor Unit Brand Name: CARRIER

- Outdoor Unit Model Number (Condenser or Single Package): 24AAA536A*030*
- Indoor Unit Model Number (Evaporator and/or Air Handler): CNPH*4221AL*
- Furnace Model Number: 59*N*A060V17**14

The outdoor unit, indoor coil AND furnace/air handler are specified
Central AC Review

- Ensuring Central AC application is completed correctly:

Confirm each model listed on the AHRI certificate is included on this application

Either attach a copy of the AHRI certificate, or provide the corresponding AHRI cert. #
Central AC Review

• Still have questions?
  • Reach out to your local account manager and schedule a Central AC/AHRI training to discuss each of these steps in-depth
Indoor Air Quality

• What does Indoor Air quality mean to attendees?
• How are they seeing this manifest in their work?
Thank you

Marshall Johnson
Residential Sr. Program Manager
marshall.johnson@energytrust.org

Kate Wellington
Multifamily Program Manager
kate.wellington@energytrust.org
Extra slides