





Kentucky Energy Efficiency Meeting

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Agenda

- Introduction
- Overview of Key Programs
 - Whole-Home Measured Savings Rebates (HOMES)
 - Home Electrification and Appliance Rebates (HEAR)
 - Training for Residential Energy Contractors (TREC)
 - Other federal programs: tax credits (25C), GGRF, CPRG
- Q&A and Discussion





The Building Performance Association is a membership-driven 501(c)6 industry association dedicated to advancing the home and building performance industry.

BPA reaches more than 20,000 individuals and organizations working in contracting services, weatherization, product manufacturing and distribution, program administration, building science, and nonprofits through our various programs and events.

The AnnDyl Policy Group is a Washington, DC-based policy strategy firm that brings together extensive knowledge, experience, and expertise to take a substantive approach on policy and advocacy.

We specialize in advanced grid infrastructure, energy efficiency, smart technology, demand response, clean energy financing, renewable energy, carbon and climate policy, and much more.







IRA: Key EE and Workforce Development Programs

Program	Funding	Status	
HEAR: Home Electrification & Appliance Rebate Program	\$4.5B	States working on applications, anticipate mid-2024 program availability	
HOMES: Home Energy Performance-Based, Whole-House Rebates	\$4.3B	States working on applications, anticipate mid-2024 program availability	
TREC: Training for Residential Energy Contractors	\$200M	\$150M available for State applications, due January 31, 2024	
GGRF: Greenhouse Gas Reduction Fund	\$27B	Award to Solar4All applicants and green banks in 2024, funding available subsequently	
25C Tax Credit (30% of cost)	\$12.4B CBO estimate	Available now; capped at \$1,200 for envelope + \$2,000 for heat pump or HPWH	

- Signed into law on August 26, 2022.
- Nearly \$370
 billion in support of clean energy and energy efficiency



Residential Rebate Programs: HOMES vs. HEAR



Requires
rebates be applied
with income
verification at the
"point of sale"

HOMES Energy Rebates

Projects must achieve a certain amount of **energy savings** to qualify for rebates.

Rebates **double** for low- and moderate-income individuals.

Larger rebates are available for retrofits that save more energy.

Two approaches: **modeled** savings and **measured** savings

HEAR Program

Appliance		Rebate Amount (Maximum)
	Heat Pump (for space heating and cooling)	\$8,000
000	Electric Stove, Cooktop, Range, or Oven, or Clothes Dryer	\$840
	Heat Pump Water Heater	\$1,750
Z.	Electric Wiring	\$2,500
	Electric Load Service Center (Breaker Box)	\$4,000
	Insulation, Air Sealing, and Ventilation	\$1,600

Kentucky Allocation: \$67,319,140

Kentucky Allocation: \$66,927,750





Residential Rebate Programs: What 's included?

Eligible measures:

- > **HEAR:** Specified electric appliances, including:
 - ➤ heat pumps, HPWH, electric stoves, ranges, and ovens, air sealing, insulation, electric wiring, and electric panel upgrades
- > **HOMES:** Technology-neutral, primary categories of improvements:
 - > Weatherization, e.g. attic/wall insulation, sealing windows, duct sealing
 - > HVAC, e.g. higher-efficiency AC, heat pump, or furnace

Not eligible:

- > Health and safety remediation (e.g. mold, asbestos)
- > Solar panels / battery storage
- > EV charging



DOE Requirements for HOMES & HEAR State Programs



- ▶ Required minimum low-income funding allocations:
 - ➤ Low-Income **Single-Family** (~40%)
 - > Low-Income **Multifamily** (10%)
 - > States *may* increase these allocations
- ► Stacking encouraged
- ► Multifamily buildings can combine funds for larger projects
- ► Audit and cost estimate requirements
- ▶ \$200 Disadvantaged Community contractor incentive





Home Energy Rebates in the Inflation Reduction Act

am funds.2 States can apply for these funds until January 31. 2025.

ate-specific HOMES and HEEHR program launch dates and parameters will <u>vary</u>. DOE Ily "expects households to be able to access these rebates in much of the country in







HOMES: *Modeled Savings Pathway*

Energy Savings	Single-Family	Multifamily		
20 – 34	\$2,000 or 50 percent of the project cost (whichever is less).	\$2,000 per dwelling unit, with a maximum of \$200,000 per multifamily building.		
percent	DOUBLE for low-income households: \$4,000 or 80 percent of the project cost (whichever is less).			
35 percent and over	\$4,000 or 50 percent of the project cost (whichever is less).	\$4,000 per dwelling unit, with a maximum of \$400,000 per multifamily building.		
	DOUBLE for low-income households: \$8,000 or 80 percent of the project cost (whichever is less).			

Contractors use approved software to model homes using past utility data, assess potential improvements, and predict energy savings.



HOMES: *Measured Savings Pathway*



Energy Savings

Single-Family & Multifamily

\$2,000 payment rate per kilowatt hour saved equal to a 20 percent reduction for the average home in the state, or **50 percent** of project cost.

15 percent and over

DOUBLE for LMI individuals, **\$4,000** payment rate per kilowatt hour saved equal to a 20 percent reduction per home or dwelling unit, or **80 percent** of project cost. For multifamily buildings to qualify, at least 50 percent of residents must be LMI.

Aggregators use approved software to measure home energy usage post-installation, providing rebates based on actual achieved energy savings.

Potentially
higher rebates for leaky & poorly insulated homes.

Aggregators can provide upfront payments to building owners, avoids waiting for rebate payments.







- > HOMES Energy Audit Requirements **BPI-1100/1200**
- ➤ HOMES Energy Modeling Requirements **BPI-2400**
- > States will be required to set and issue third-party certifications.
- > Broad definition of **Aggregators**
- > ENERGY STAR required for heating, cooling, and water heating products
- > Groundbreaking Data Access Guidelines
- > \$200 Contractor/Aggregator Installer Benefit for underserved households (per dwelling unit)







- ► Low to Moderate Income (LMI) households are eligible for rebates **up to a total of** \$14,000 for electric systems/appliances.
- ▶ Income qualified at point of sale.
 - > <150% AMI = **50%** of project cost
 - > <80% AMI = **100%** of project cost

Appliance		Rebate Amount (Maximum)
	Heat Pump (for space heating and cooling)	\$8,000
000	Electric Stove, Cooktop, Range, or Oven, or Clothes Dryer	\$840
	Heat Pump Water Heater	\$1,750
	Electric Wiring	\$2,500
7 •	Electric Load Service Center (Breaker Box)	\$4,000
	Insulation, Air Sealing, and Ventilation	\$1,600







- > Rebate Processing
 - > State plans will need to ensure **processing of rebates within 4 weeks of receipt**.
- > Fuel Switching and Home Assessments
 - In-Person Assessments (Heat Pumps)
 - Geolocated Photos (all other projects)
- > Smart Technology
- > Combine Equipment Rebates in Multifamily Properties
- > Categorical Eligibility Approved As Income Verification Method



Residential Rebate Programs: Stacking Overview



Clarification
Needed: HOMES
+ 25C

Allowed

Prohibited

(as of October 13, 2023)

HOMES Modeled + HEEHR

(for separate upgrades)

HOMES Measured +
HEEHR

(for HEEHR energy saving

upgrades only)

25C + HEEHR

HOMES Measured + HOMES Modeled

Stacking either rebate with other federal funds

(for separate upgrades)

Stacking rebates with other federal funds

(for the SAME single upgrade)



¹³ All three GGRF categories list energy efficiency retrofits as an eligible expense: NCIF and CCIA projects may inclu-whole-home retrofits for 1-to 4-family homes and manufactured homes to improve energy efficiency (NCIF p. 1) CCIA p. 12; SFA projects may include enabling upgrades that include energy efficiency measures, up to 20% of the cost (SFA p.).
¹⁴ This assumes the HOMES rebate follows the Modeled Approach to energy savings and is based on predictions. A Measured Approach may provide similar or greater rebate based on an aggregator model and actual savings of at leasures.

sured Approach may provide similar or greater rebate based on an aggregator model and actual savings of at lea *across a portfolio – but as noted, cannot be combined with a HEERF rebate, per DG guidance. cording to the National Bureau of Economic Research (NBER), from 2005-2012, just 11 percent of the benefits previous iterations of the 25C and 25D (Residential Energy Efficient Property Credit Just credits went to yers making under \$40.000 per year. Taxpayers making under \$20.000 per year received just one percent of the lifts. In contrast, 62 percent of the benefits went to taxpayers making over \$75.000 per year. National Bureau o price Research, "The Distributional Effects of U.S. Clean Energy Tax Credits." *//www.journals.uchicago.edu/doi/epdf/10.1086/685597.211.

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Renter Opportunities and Protections

- > For low-income projects, for a period of two years, building owners must:
 - > Continue to rent to low-income tenants
 - > Not increase rents or evict tenants to seek higher rent due to energy improvements
 - > These requirements transfer in the event the building is sold
 - > Provide written notice of landlord obligations/tenant rights
- > Renters may pursue rebates themselves, with building owner permission.
 - > Appliances must stay with the property, and are NOT owned by the tenant.



Qualified Contractor Lists



- ➤ To receive HOMES & HEAR funding, states will need to describe how they plan to generate **Qualified Contractor Lists**.
- > States will need to determine qualification(s) that contractors will be held to, potentially including (but not limited to):
 - > Home performance industry credentials
 - > Training requirements
 - > Business insurance and licensure
 - > Skills standards
 - ➤ Labor standards
- > States will also need to **plan out delisting processes** to protect against fraud and abuse.





Training for Residential Energy Contractors (TREC)

Program Goals / Methods

- Reduce the cost of training contractor employees
- Provide testing and certification of contractors
- Partner with nonprofit organizations

Program Examples (DOE)

- ➤ Training programs for "hard and soft skills necessary to electrify homes and make them more energy-efficient"
- Upskill incumbent workers and support professional growth
- On-the-job training, mentorship, apprenticeship, and job placement
- Pre-apprenticeship and registered apprenticeship training programs

- ➤ IRA provides a total of \$200M for State-Based Home Energy Efficiency Contractor Training Grants
- ➤ In July 2023, DOE opened **\$150M** in formula funds to state applicants:
 - > \$2.4M allocated for Kentucky
- Lots of flexibility on how to allocate training funding



Residential Tax Credits:



Available now!

Existing Homes:

25C Energy Efficient Home Improvement Credit, 25D Residential Clean Energy Credit

25C: 30% for residential energy efficiency upgrades, electric heat pumps and heat pump water heaters

- > Stackable with state and federal incentives
- Renters can qualify for HVAC equipment and energy audits (but NOT insulation, air sealing, windows, doors)
- > \$3,200 maximum allowable annual credit
 - > Up to \$1,200 for efficiency upgrades; up to \$2,000 for heat pumps and HPWHs
- > Audits: Requires written report of measures/savings
 - > As of Jan. 1, 2024, requires "qualified" auditor certification (AEE, ASHRAE, BPI, BSI, or RESNET)

25D: 30% for the costs of solar panels, geothermal heat pumps, and other clean energy systems.

New Homes: 45L New Energy Efficient Home Credit

\$2,500 for ENERGY STAR New Homes

\$5,000 for DOE Zero Energy Ready Home (ZERH)

Multi-family residences must meet prevailing wage standards for full credit









Greenhouse Gas Reduction Fund (\$27B)

Solar for All (\$7B)

- > Programs: 1) Residential solar 2) Community solar; 3) Solar + Storage for remote areas
- > Enabling upgrades included
- ➤ Awards expected July 2024

National Clean Investment Fund (\$14B) & Clean Communities Investment Accelerator (\$6B)

- ➤ Green Bank-type entities, loans for homeowners and EE businesses
- > Expected awards in spring/summer 2024

Climate Pollution Reduction Grants (\$4.6B)

- > Supports broad range of activities
 - Building sector examples
 include efficiency incentives, HVAC
 incentives, building performance
 management programs
 and transportation, electric power,
 and industrial sector uses.
- ➤ Awards expected October 2024





Contractor Survey: Tell us what you think!

BPA and AnnDyl are conducting a survey to address many of these questions to complement our discussions today.



Or enter the following in your browser:

https://www.surveymonkey.com/r/3CHVD2L





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