



SAVE TODAY. SAVE TOMORROW.  
SAVE FOR GOOD.

# Exploring Models for Combining Resources to Advance Debt-Free Home Upgrades

September 27, 2023  
10:45 AM – 12:15 PM EST





## **Moderators:**

**Taylor Jantz-Sell**

Environmental Protection Agency (EPA) - ENERGY STAR Products

**Maggie Kelley Riggins**

Southeast Energy Efficiency Alliance (SEEA) - Senior Program Manager

## **Panelists:**

**Alon Abramson**

Philadelphia Energy Authority (PEA) - Director of Residential Programs

**Casey Fields**

Duke Energy - Strategy and Collaboration Manager





# Environmental Protection Agency

## Taylor Jantz-Sell

ENERGY STAR Products  
Equitable Home Upgrades





# ENERGY STAR Home Upgrade Elements

Average cost at least \$250/m<sup>2</sup> (\$23/ft<sup>2</sup>) or \$40-\$50,000 per home \$40,000/home

\$10-50k/home \$5 Trillion to upgrade the remaining 120 million homes

## ENERGY STAR Home Upgrade (ESHU)

- Heat pump HVAC (\$10,000+ depending on house size; could be \$20,000)
- Heat pump water heaters (\$2,000-\$3,000)
- Smart thermostats (\$150)
- Attic insulation and air sealing (\$1.50/sf. Air sealing varies widely: \$0.30/sf to \$2.00/sf)
- Storm windows (\$150) per window
- Electric ready (\$1000-\$10,000)



HEATING & COOLING



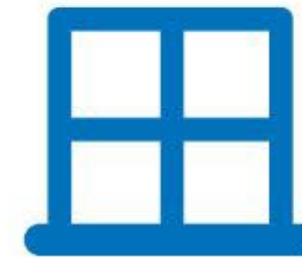
WATER HEATER



SMART THERMOSTAT



ATTIC INSULATION



WINDOWS

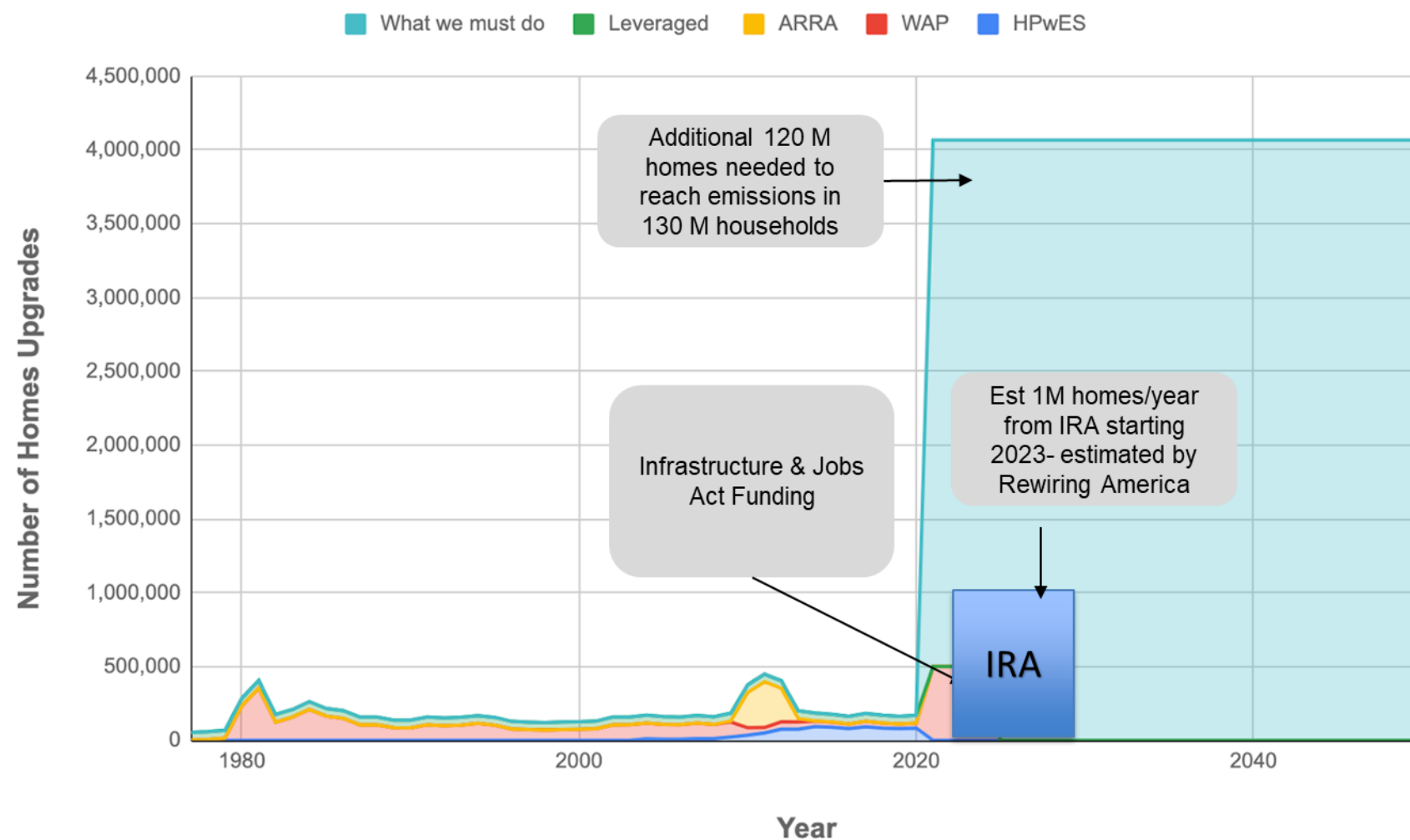


EV READY

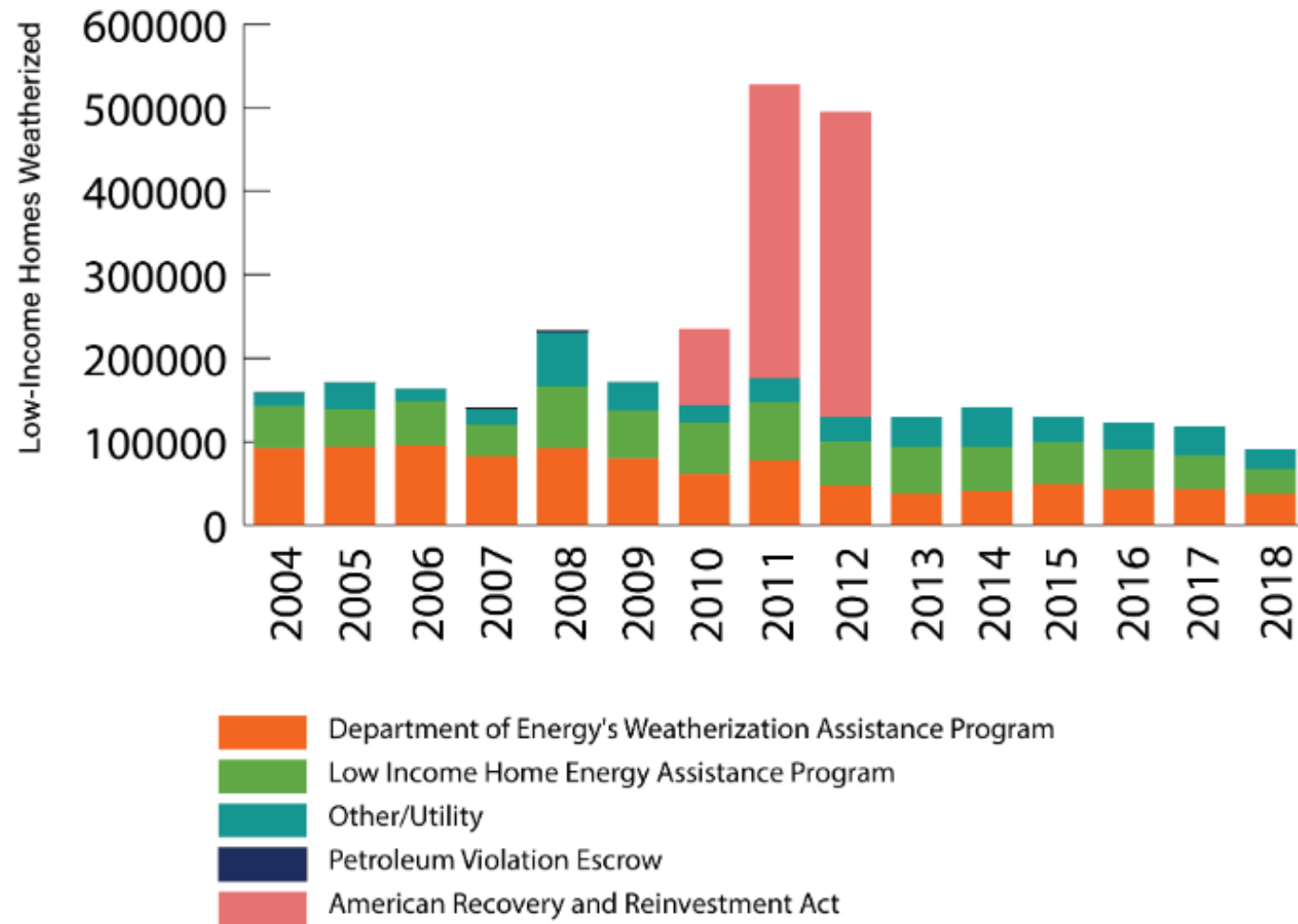


# None of these methods (including recent legislation) come close to meeting the need – more radical and scalable solutions are needed

Upgrades are expensive and no methods have scaled



## Number of Low-Income Homes Weatherized by Funding Source



Source: NASCSP (2004-2018), WAP Annual Funding Surveys

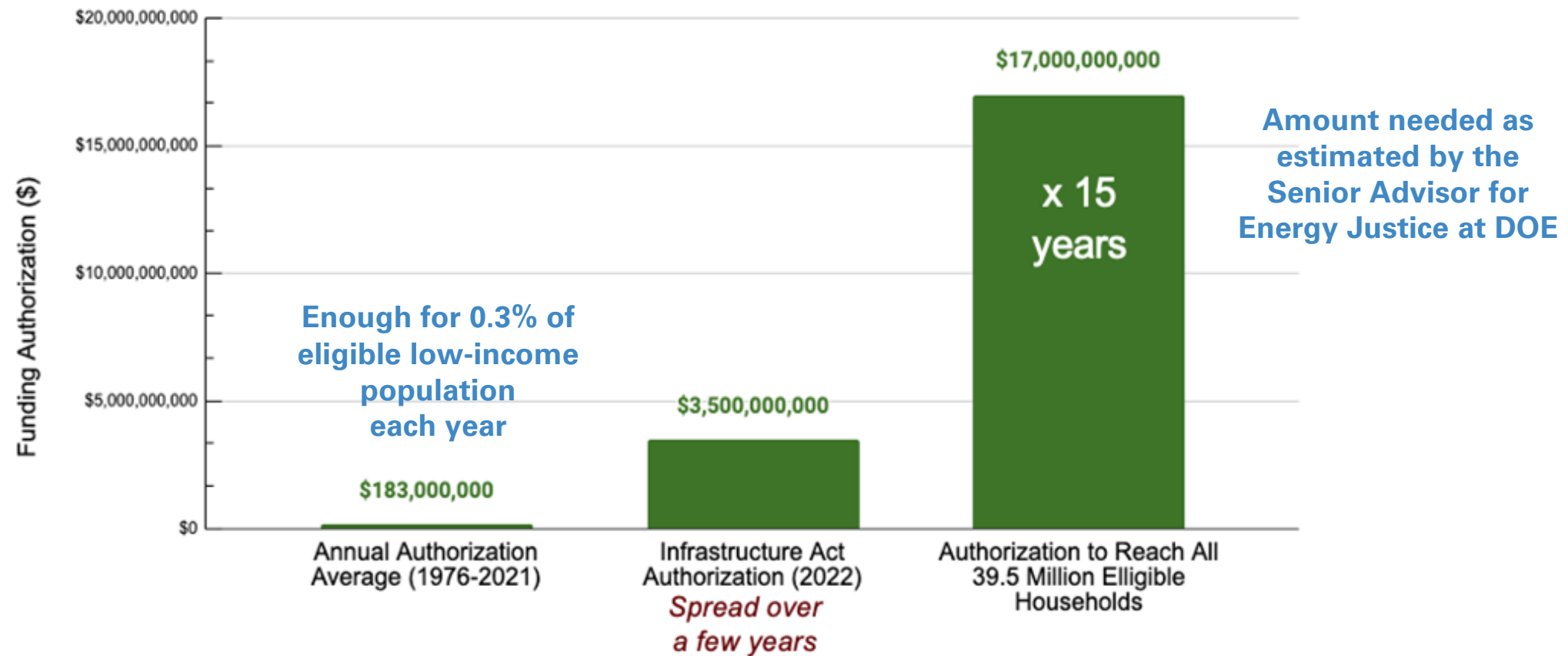
- About 30% of U.S. households, or **36.8 million households**, are eligible for weatherization.
- Only about **0.2% of low-income households** in the United States receive weatherization services each year.



## For low-income households, the federal funding rate has been ~100X smaller than needed

Taxpayer \$  
can't meet the  
need

Department of Energy Weatherization Assistance Program Funding Authorization:  
Historical Annual Average Contrasted with Infrastructure Bill and Responsive Scenario



Carley, Konisky, Reames. Section 2.1.1. of Policy Options to Enable an Equitable Energy Transition. 2021. Raimi, D (ed). Resources For the Future.





## **Inflation Reduction Act Rebates, Utility Income Eligibility Programs, and Weatherization Programs are not enough to ensure equitable access to efficient home upgrades.**

Loans just aren't an option for many

Energy efficiency loan uptake is historically low

Loans are unfavorable but can be the only option in an emergency

Better alternatives for all incomes needed

40% of the US is not "credit worthy"



## Features of Inclusive Utility Investment (IUI)



**Inclusive** = accessible to all independent of creditworthiness



**Utility** = an approved utility tariff; recovery tied to premise/site/meter vs. an individual



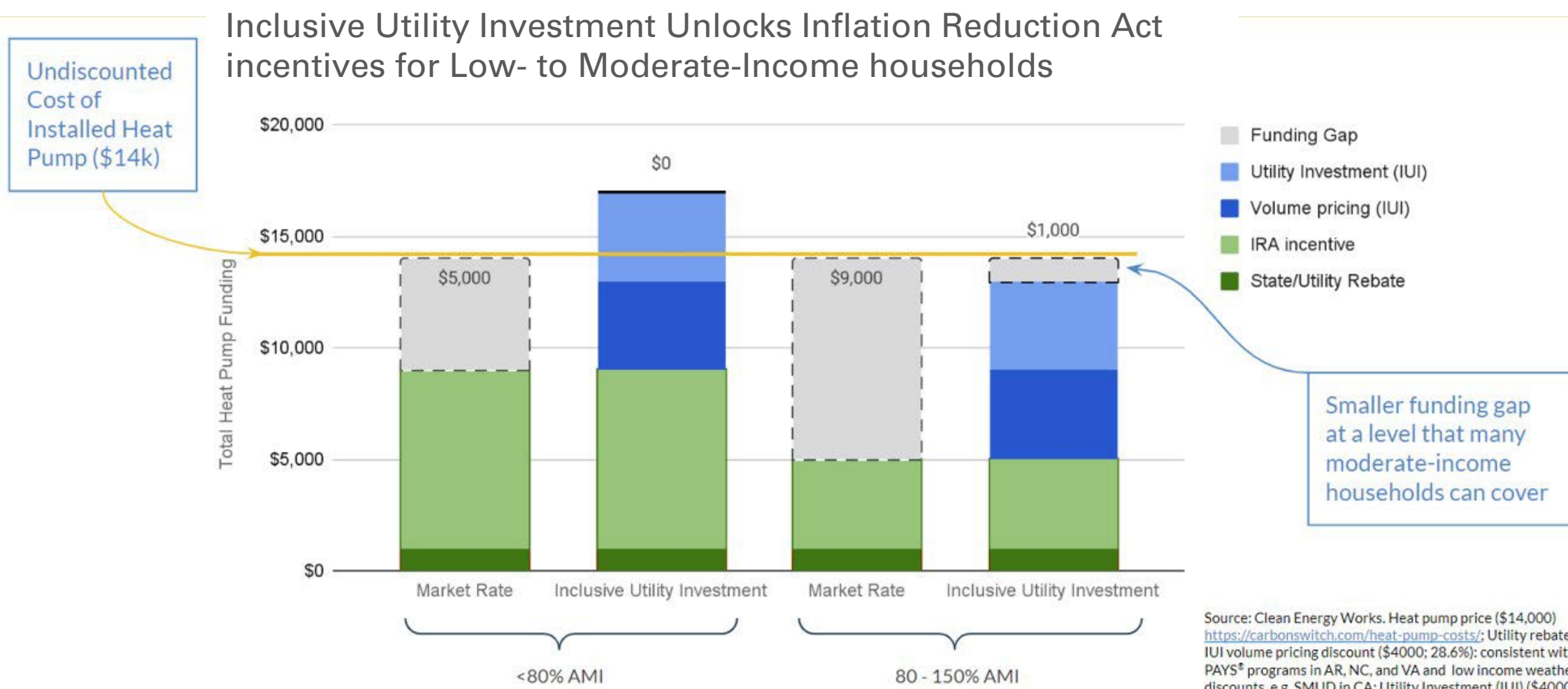
**Investment** = treated as an investment like supply side; utilities earn a rate of return/return on equity



# Consumer Loans vs Inclusive Utility Investment

Inclusive Utility Investments	Consumer Loans
Evaluates <b>savings opportunity of the building</b> , considering structure and usage history - without regard to customer's income, credit score or renter status	Evaluates the <b>customer's credit, income, assets</b>
Tied to the <b>meter</b>	Tied to the <b>property owner</b>
Available to <b>all residential and commercial</b> customers including renters	Available only to <b>property owners</b>
<b>Automatically applies to successor</b> customers with notice	Typically <b>not transferable</b>
Payment is subcharge of utility bill, treated the same as essential utility services, unless explicitly specified otherwise.	Debt collections typically not accepted as essential utility service, so opportunity is <b>limited to credit-approved counterparties</b>

# Inclusive Utility Investments can help low-income customers access Inflation Reduction Act rebates by combining a new source of funds and volume discounts to fully eliminate upfront costs



Source: Clean Energy Works. Heat pump price (\$14,000) <https://carbonswitch.com/heat-pump-costs/>; Utility rebate (\$1000): Assumed; IUI volume pricing discount (\$4000; 28.6%): consistent with EEutility managed PAYS<sup>®</sup> programs in AR, NC, and VA and low income weatherization program discounts, e.g. SMUD in CA; Utility Investment (IUI) (\$4000) conservative estimate, for five programs studied by LBL average program investments ranged from \$6200-\$8200; Evergy reported average



# Advancing Debt-Free options like Inclusive Utility Investment

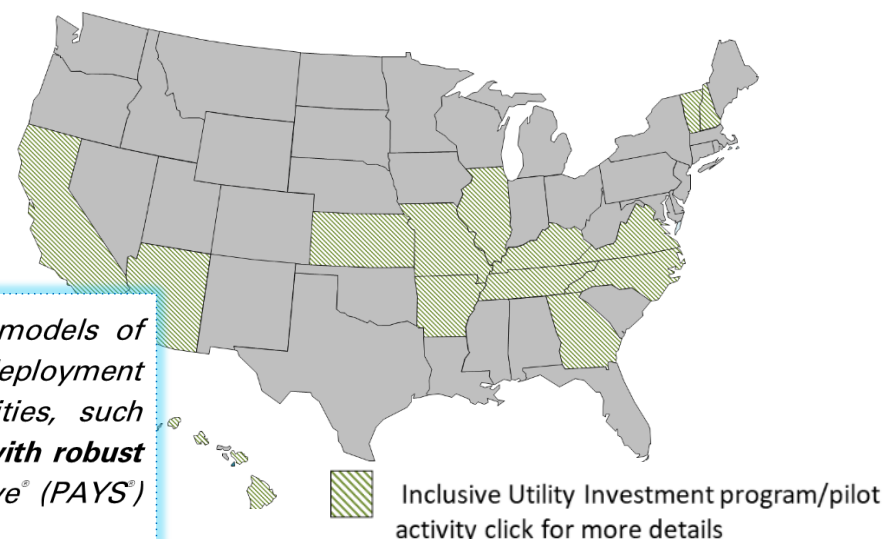
## May 2021

- ❖ EPA Administrator Michael Regan's announcement at the White House Roundtable on Accelerating Building Decarbonization with Government and Industry



*"We are working on accelerating emerging models of success at expanding the scale of efficiency deployment in underserved and overburdened communities, such as... **inclusive utility investment approaches with robust consumer protections** like the Pay As You Save® (PAYS®) model."*

Inclusive Utility Investment Program Activity in the United States (last updated May 2023)



## April 2022

- ❖ EPA launched a new hub for best practices to position "[Inclusive Utility Investment](#)" officially to [distinguish this method from debt based or propriety methods.](#)

### Inclusive Utility Investment

What is Inclusive Utility Investment? ▶

What Key Barriers Does Inclusive Utility Investment Address? ▶

Target Sectors & Measures: Who Can This Model Serve & Which Upgrades Are Best Suited to the Model? ▶

What Important Consumer Protections Should Be Included in an Inclusive Utility Investment Program? ▶

Sources of Program Capital: Where Does the Money Come from to Fund these Programs? ▶

Stakeholder Engagement ▶

### RESOURCES

- Watch a video by Appalachian Voices: "How your electric utility can improve your home's energy efficiency"
- Resource Library
  - **New Content!** Case Study: Making Energy Efficiency Upgrades More Accessible
  - **New Content!** ENERGY STAR® Resources for State and Tribal High-Efficiency Electric Home Rebate Programs
- Current Programs
- ENERGY STAR Home Upgrade
- EPA Press Release





## ENERGY STAR Home Upgrade Service Provider Partnership

The EPA's ENERGY STAR Program is partnering with companies and Community-Based Organizations (CBOs) who function as a **trusted concierge** for energy efficiency home upgrade services and provide **robust consumer protections**.

Together, we will accelerate adoption of **ENERGY STAR Home Upgrades**, which present an opportunity for Americans to confidently lower energy bills and improve home comfort and health.





## ENERGY STAR Home Upgrade Service Provider Partnership will give partners the opportunity to:

1. Enhance the perceived value of their offerings by associating them with the widely recognized, **trusted ENERGY STAR label**
2. Collaborate with ENERGY STAR to identify priority consumer sub-segments for **tailored outreach**
3. Capitalize on ENERGY STAR **educational efforts and resources** targeted to the low-income and disadvantaged community (LIDAC) market segment to create a better informed, more receptive customer base
4. Benefit from forthcoming ENERGY STAR **technical support** designed to facilitate braiding of rebates, incentives and services at a local level

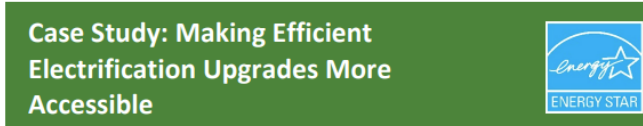
Subject matter  
expertise  
& Resource  
building



# EPA Advancing Debt-Free Program Innovations

## ❖ Case Studies

- ❖ Midwest Energy's [How\\$mart Program](#)
- ❖ Philadelphia Energy Authority's [Built to Last](#)
- ❖ Summary page of existing and forthcoming Energy Efficiency Home Upgrade Assistance for Low- to Moderate-Income Households



### Leveraging Inclusive Utility Investments with the Kansas Weatherization Assistance Program

**How\$mart**® is an Inclusive Utility Investment program of Midwest Energy - a customer-owned electric and gas cooperative in western Kansas. The program successfully collaborates with the Kansas Weatherization Assistance Program (WAP) to make efficiency upgrades accessible to more of its members. The collaboration came about through weatherization program staff and Midwest's auditors attending the same trainings and certification programs. The natural synergy between the programs led to a partnership that assists members who are eligible for WAP to obtain more comprehensive energy efficiency upgrades that WAP funds would not cover. They found that the WAP program could fund and implement air sealing, insulation, and duct sealing upgrades, and How\$mart® could fund installations of heating and cooling systems. Over the past twelve years, How\$mart® has successfully referred hundreds of members to the Kansas WAP program and 90 members have been referred by the Kansas WAP to Midwest Energy.

In Hays, Kansas, Frida Smith's<sup>1</sup> home was drafty, with a few bills forced her to cut back on other necessities. There were home improvements. Fortunately, she was able to request cost through the Department of Energy's WAP run through WAP auditor recommended installing attic insulation, air sealed, and certified air conditioner. Based on the savings and cost estimates, attic insulation, air sealing, and furnace could be funded by the relationship between the WAP and Midwest Energy audit fund the installation of a new air conditioner at no upfront cost. Recovered by the utility through a tariff of about \$20/month she decide to move. The combined upgrades are saving her \$100/month. A successful collaboration resulted in a safer, more comfortable and lower cost heating and cooling that frees up almost \$400/month.

Midwest Energy is a customer-owned electric and natural gas cooperative in western Kansas. Their How\$mart® program allows for cost recovery over equipment. Unlike most Inclusive Utility Investment programs using the Pay-As-You-Go model, How\$mart® members pay for the equipment up front, but the utility recovers the cost through a tariff. Now, with unprecedented funding from federal, state, and utility programs, there are more opportunities for low- and moderate-income families to make energy saving home upgrades.

For more information on Inclusive Utility Investment visit [www.energystar.gov](http://www.energystar.gov). Learn about the ENERGY STAR Home Upgrade at [www.energystar.gov/homeupgrade](http://www.energystar.gov/homeupgrade).

<sup>1</sup> Note: the name in the case study has been changed to protect the member's privacy.




### A Holistic "One-Stop Shop" Home Repair & Efficient Electrification Program

**Built to Last (BTL)** is a "one stop shop" whole home repair program created to serve homeowners who are living in neighborhoods with high poverty rates across the City of Philadelphia. The program was created by the Philadelphia Energy Authority (PEA) and brings the city's home repair, energy conservation, and healthy homes programs into a coordinated service package. BTL allows programs to layer and streamline their services to address common pain points for serving overburdened households. Existing programs' current funding, when layered strategically, can provide 60-70% of the funds needed to fundamentally restore homes. BTL finds external funding to fill in the gaps to avoid deferrals and get the projects completed.

Homeowners in Philadelphia apply through a single application that screens eligibility for all benefits and allows for inter-agency data sharing while protecting personal information. Eligible benefits are identified, and homeowners are screened for government, nonprofit, and utility housing services: Weatherization Assistance Program (WAP), Lead and Healthy Homes, Basic Systems Repair Program funded by Community Development Block Grants, aging in place and adaptive modification programs, utility energy and water conservation programs, Low Income Usage Reduction Program, and programs run by Habitat for Humanity Philadelphia. Required home improvements are matched with applicable funding sources and construction is managed and streamlined across multiple programs.

BTL concluded its first pilot in 2022 and served 50 homes. The results were clear and positive:

- 100% reported feeling safer in their homes,
- 50% reported improvements to their chronic illness,
- 50% reported lower utility costs.



Photo caption: Senator Casey, Secretary Granholm, and Nancy with her new heat pump and rooftop solar system.



<sup>1</sup> Source: Policy Options to Enable an Equitable Energy Transition (PDF, 3.01 MB) [EXIT](#)



# Southeast Energy Efficiency Alliance (SEEA)

**Maggie Kelley Riggins**  
Senior Programs Manager





## OUR MISSION

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To optimize the use and impact of energy to enhance the quality of life in the Southeast.

## OUR VISION

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All people in the Southeast live and work in healthy and resilient buildings, utilize clean and affordable transportation, and thrive in a robust and equitable economy.

## OUR VALUES

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### Take Initiative

We take responsibility for realizing a better quality of life in the Southeast.



### Earn Trust

We pursue our work with benevolence, competence, and reliability.



### Value Others

We seek, respect, and promote diverse perspectives.



### Pursue Equitable Solutions

We recognize, acknowledge, and account for a history of prejudice and inequality in Southeastern communities.



# Philadelphia Energy Authority

## Built to Last

### Alon Abramson

Director of Residential Programs





# Philadelphia's Energy Issues

- Generationally persistently high poverty rate (23.5%), very old housing stock with 38% of all homes needing repair
- Federal Reserve estimates that the home repair need in Philadelphia MSA is \$3.7 billion.
- 4<sup>th</sup> highest rate of asthma in US
- Heat differential between poorest and wealthiest neighborhoods is 22°F
- Residents below 30% AMI pay 18% of their income to utilities (**energy burden**), making Philly one of the most energy-burdened cities in the US.
- >50% of African-American households at any income level and 30% of all renters face **energy insecurity** at least once a year, which has gotten worse during COVID.
- Unemployment rate among African American men is typically twice the citywide average.



# Philadelphia Energy Authority: Building a Robust, Equitable Clean Energy Economy

- The Philly model is a national leader – equity first, project + workforce.
  1. Creating demand for skilled labor through project development, and then ensuring equitable, diverse supply via well-trained workforce
  2. Correcting market inequities, bringing additional resources to bear locally, creating systems that allow for innovation and collaboration, ensure all communities have access to capital

# Built to Last Home Example



Funded by layering:

- Basic Systems Repair Program
- Weatherization Assistance Program
- Habitat for Humanity
- Supplemental BTL funds



Sec. of Energy Granholm and Sen. Casey observing heat pump and solar installations at the BTL home



# Built to Last – The Platform



# Built to Last Home Repairs

## Basic Systems

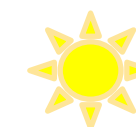
- Roof
- Electric
- Plumbing (interior/exterior)
- HVAC + Hot Water
- Structural Issues

## Energy Efficiency

- Weatherization
- Insulation (esp. attic)
- LED lighting
- Efficient windows/doors
- Low-flow water fixtures



## Enhanced Energy Measures



- Solar (where feasible)
- Heat pump (heat + AC)
- Fuel switching

## Health and Safety

- Trip and fall hazards
- Excess moisture
- Lead paint
- Mold
- Pests



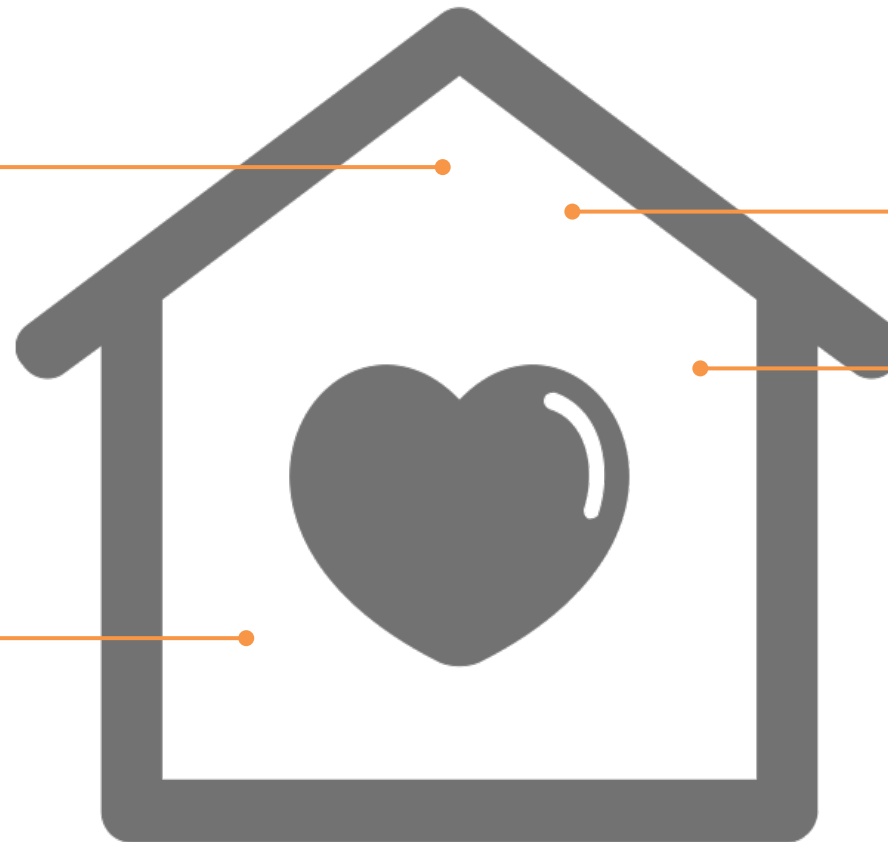
# Built to Last Partners

## Repair Programs

Phila. Housing Development Corporation  
Energy Coordinating Agency  
Philadelphia Corporation for Aging  
Phila. Department of Public Health  
Habitat for Humanity Philadelphia

## Utility Programs

Philadelphia Water Department  
Philadelphia Gas Works  
PECO (*Act 129, LIURP, De Facto Heating Program*)  
American Water Resources  
H2O Fund



## Legal Services

Community Legal Services  
Philadelphia VIP

## Health and Housing Counseling

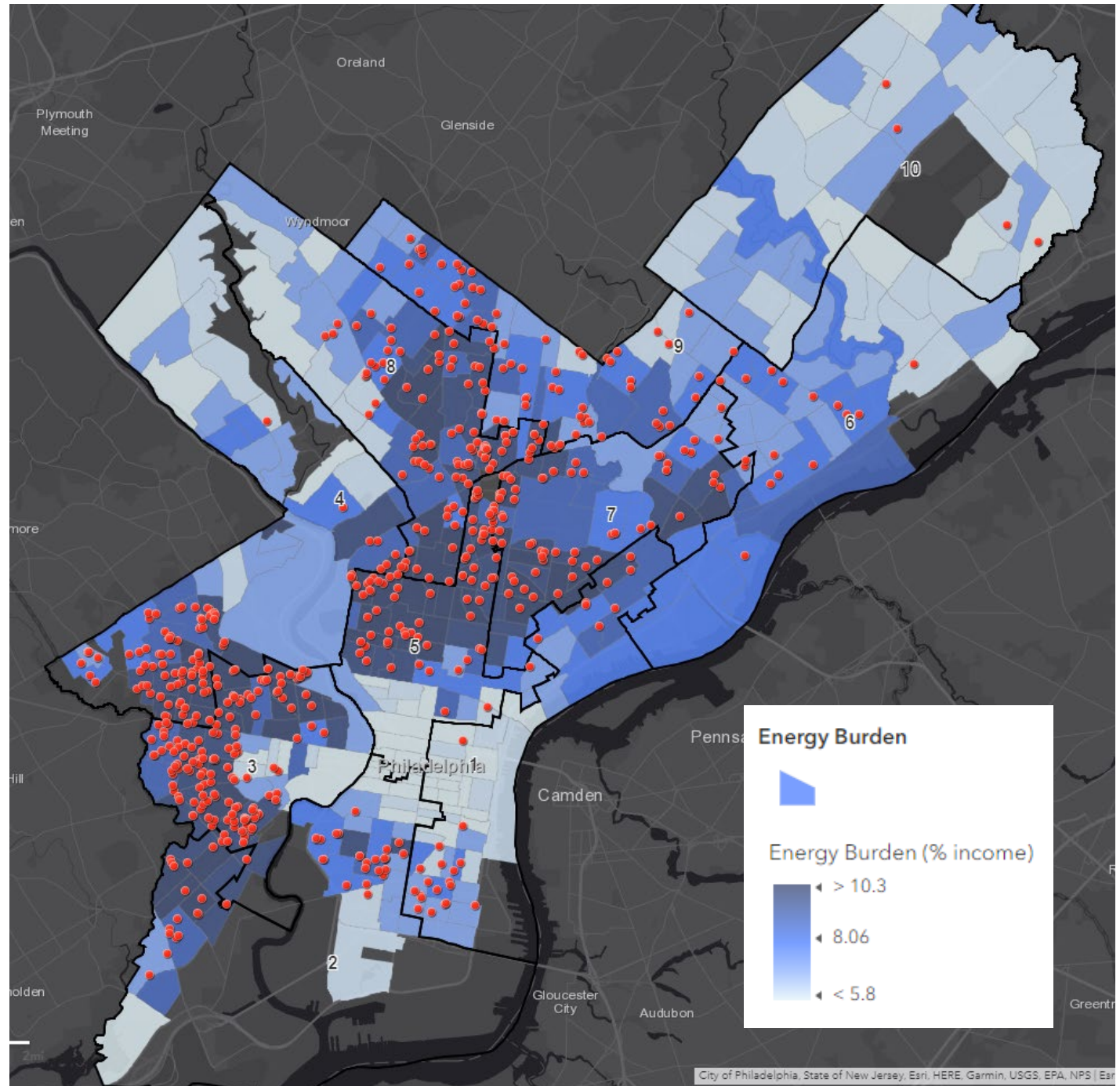
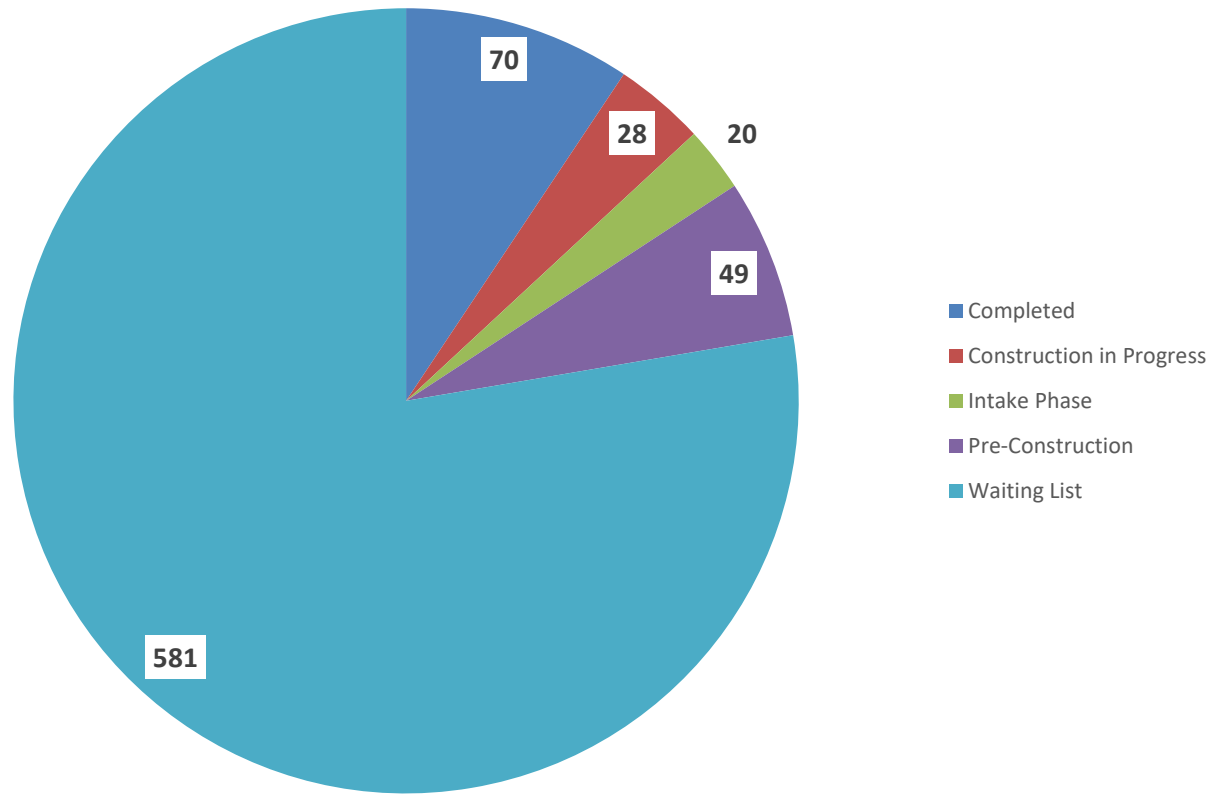
Jewish Families and Children's Services  
Philadelphia Association of CDCs  
Utility Emergency Services Fund  
Neighborhood Energy Centers  
Clarifi





# Program Scale

BTL Homes (748 total)





# Built to Last Pilot Initial Outcomes

- **Home is safer\*: 100% of participants**
- Improved chronic illness\*: 50% of participants
- Lower utility costs\*: 50% of projects
  
- **Solar PV: 70% of projects**
- Some electrification: 50% of projects
- Avoided WAP deferrals: 25% of projects

Total Pilot Projected Spending (all funders)	Estimated Spending per Home (all funders)
<b>\$2.5M</b>	<b>\$39K</b>
Average PEA Spending per Home	Unique funding sources leveraged per home
<b>\$14K</b>	<b>3.6</b>

\* self-reported in post-construction survey, too early to evaluate actual energy savings



# Highlights

- 50-home pilot was completed – evaluation currently underway
- BTL Scaling Goals:
  - FY23: 50 homes, FY24: 150 homes, FY25: 250 homes
- Funding Secured:
  - \$7.7MM Pennsylvania Whole Home Repairs Act (\$1.3MM for workforce)
  - \$2MM William Penn Foundation (+ additional funding for Inflation Reduction Act capacity)
  - \$2.1MM Congressionally Determined Spending award
  - \$2MM DOE award for Weatherization Enhancement and Innovation (Incl. research to track value (energy + health) of holistic home repairs)
  - \$2MM HUD Lead & Healthy Homes award
  - \$800K PHFA PHARE awards
  - \$690K Green Family Foundation to support low-income solar revolving fund
  - Support from Highmark and Barra Foundations through GHHI
- Sponsorships from Peirce Phelps/Carrier and RMI to demonstrate electrification





# Built to Last and the IRA

Built to Last is a great example of the complex cross-sector, strategic braiding of funding and collaboration needed to maximize and equitably distribute the benefits of the IRA

- Building partner capacity to scale reach of program
- Layering residential rebates and tax incentives to deepen impact
- Raising flexible funding to address what other programs cannot
- PEA and PGCC serving as backbone organizations to reduce cost, time and administrative burden to partners
- Supporting community-based organizations and BTL partners in identifying and applying to grants
- Exporting this model to the rest of Pennsylvania
  - Including low- and moderate-income solar and workforce components

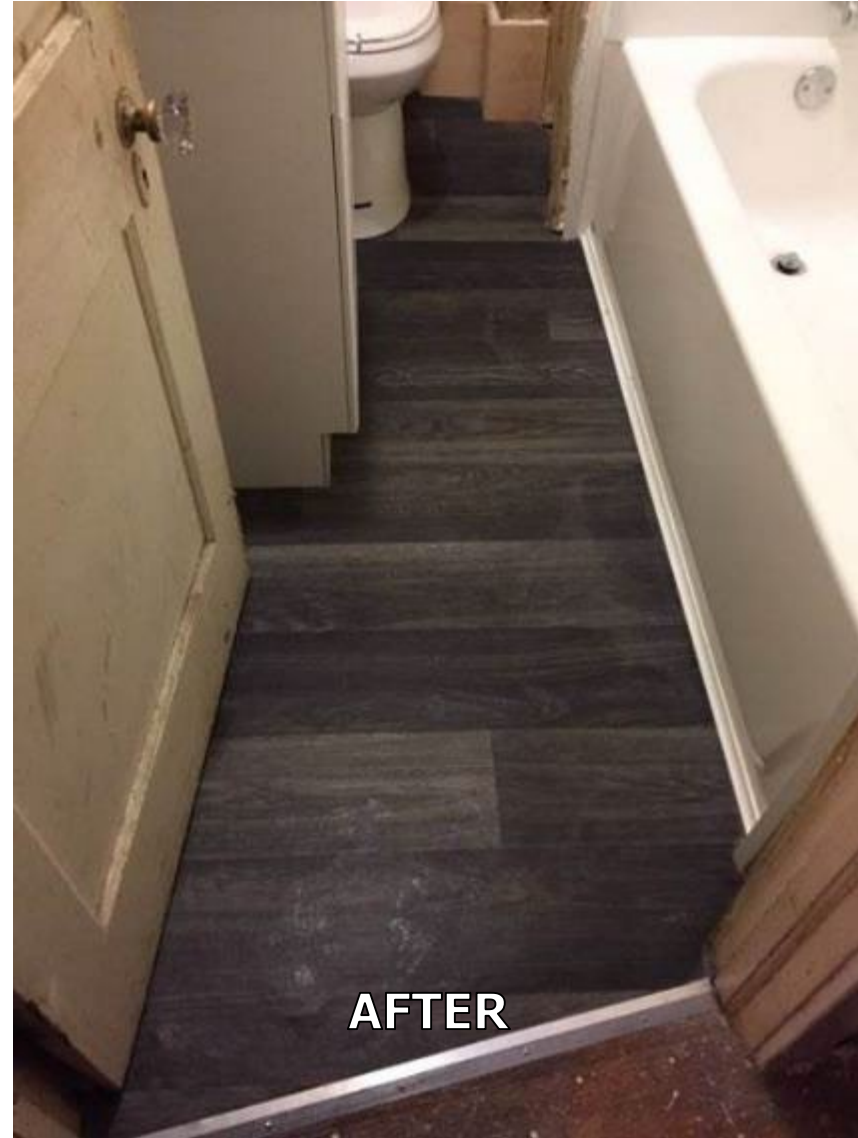


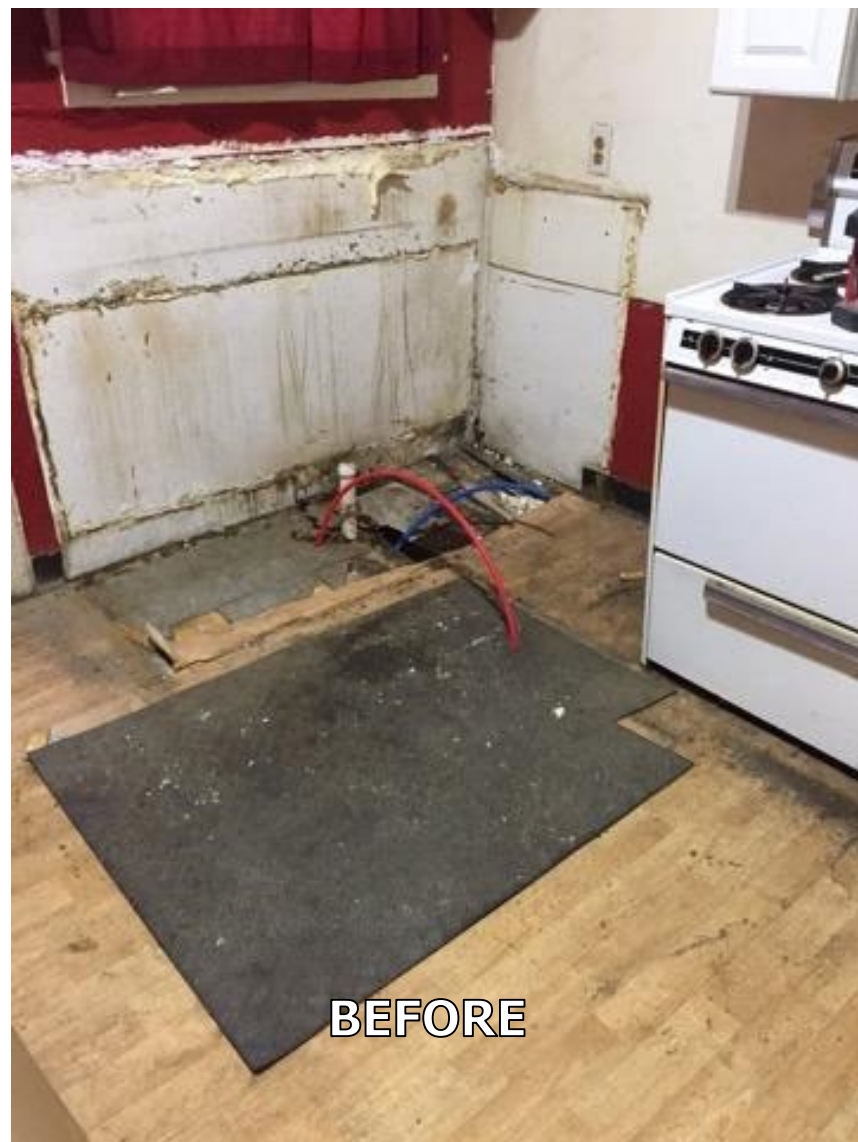
# Green Retrofit Immersive Training (GRIT)

- 1<sup>st</sup> year: 11 of 15 grads employed in industry-relevant jobs, average wage \$15.40/hour
- Third 20-student cohort concluded in 2023
- **Training:** 12 weeks, hosted by ECA, earning 5 credentials
- **Internship:** 6 weeks, working in the field with FRP and PVTTC
- Designed as workforce development pairing for Built to Last, to ensure pipeline of talent for contractors that will experience rise in workload
- Supported by Phila Dept of Commerce and William Penn Foundation



Half of GRIT class on an in-person training day at ECA.



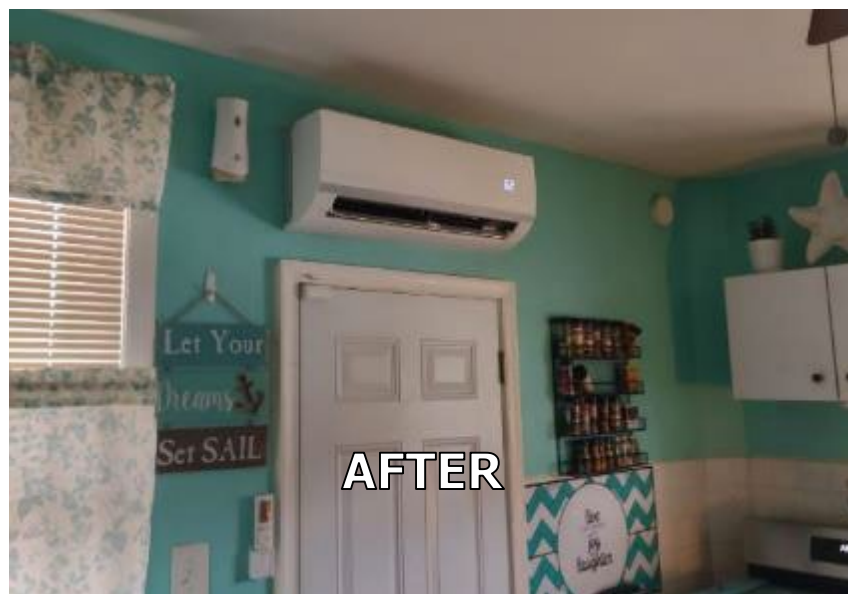




















# Duke Energy

## Single Family Home Retrofit & Multi-Family New Construction Pilot

### Casey Fields

Strategy and Collaboration Manager





# Customer Insights & Analytics

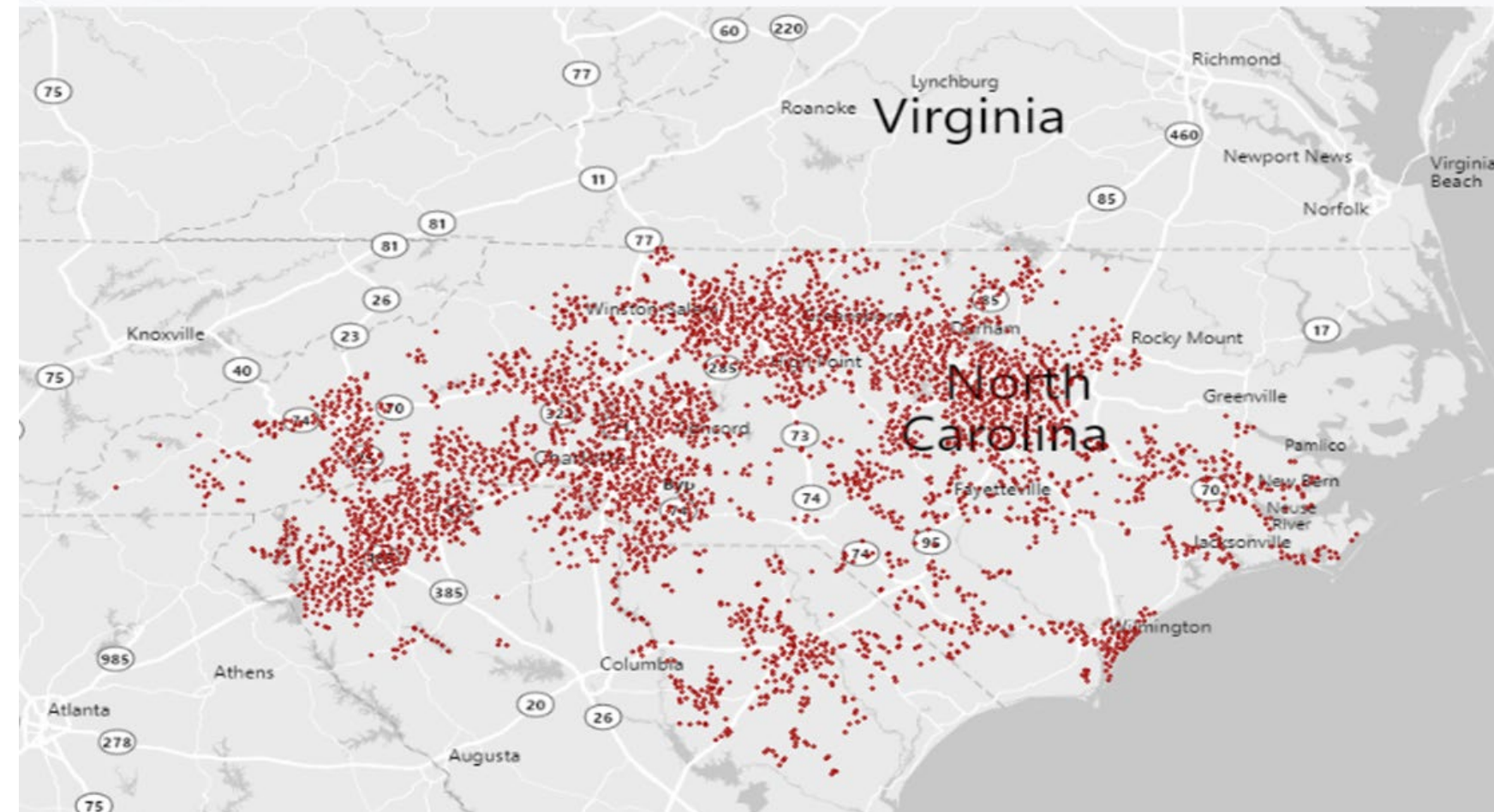
We are identifying energy efficiency potential using AMI and demographic data.

## Why?

- To get a targeted group of **high propensity customers for marketing**
- To reach customers with biggest potential impact
- To **mitigate risk** of customer attrition from marketing to completing the improvements

Potential Savings Area Quartiles

Quartiles ● 75







# Improve & Save Single Family Retrofit Program

## Program Description

A residential program designed to make homes more efficient and save customers money by reducing energy usage through tariffed residential improvements that are paid for as part of the home's Duke Energy bill coupled with Duke's Smart \$aver program.

Duke Energy will pay for the installation and equipment up-front.

Improvements include:

- HVAC replacement w/ Duct Sealing
- Water Heater replacement
- Attic insulation and Air Sealing
- Smart thermostat

## Solving Customer Problems

 Affordable Payments

Average total monthly energy bill is less with the TOB charge than it is before the improvements so that customers can afford the upgrades.

 No Credit Barriers

No credit check or home lien. Access to low interest rates that may not otherwise be available to customers

 Older Homes

Customers will be able to update older homes and receive Smart \$aver incentives.

 Moving Out







The TOB charge is associated with the home. If someone moves out the TOB charge will persist with the next resident.

 Maintenance

Maintenance will be provided to ensure the continued operation and efficiency of the equipment



# Single Family Home Retrofit Customer Journey

-  Step One: Learn about the program through direct marketing
-  Step Two: Sign-up online and schedule an initial evaluation
-  Step Three: Understand what the home needs to reduce monthly energy usage based on tests and analysis
-  Step Four: Select improvements from a list of options based on energy savings
-  Step Five: Duke manages the Install, removal of old materials and equipment, Quality Assurance and Inspection and permitting
-  Step Six: Make affordable monthly payments as part of the Duke Energy bill



# Multi-Family New Construction (MFNC) Pilot

## Pilot Description

A pilot designed to incent multi-family project developers to upgrade to more energy efficient equipment and building materials by enabling renters to pay the incremental costs of the upgrades as part of their monthly electricity bills.

Duke Energy will pay for the difference from the builder's original selection to more energy efficient selections.

Improvements may include:

- HVAC upgrade
- Water Heater upgrade
- Insulation upgrades
- ENERGY STAR® Appliances
- Smart thermostat

## Product Features

 **Energy Payment**

Renter's average total monthly energy bill is less with the TOB repayment amount than it would have been with less efficient options.

 **Monthly Payment on the Bill**

The TOB repayment amount will show as a line item on the monthly electricity bill.

 **Non-Payment**

Low risk of a customer not paying the TOB repayment amount as the electricity is subject to disconnect for non-payment.

 **Move In/Move Out**

The TOB repayment amount is associated with the premise. If someone moves out the TOB charge will persist with the next account.

 **Maintenance**

Property owner or management would provide routine maintenance to ensure the continued operation and efficiency of the equipment.



# Multi-Family New Construction Customer Journey



Step One: Developers learn about the pilot through the New Construction EE Design Assistance (NCEEDA) Program



Step Two: Developers work with EE Design Assistance Program to understand options



Step Three: Select energy efficient upgrade measures from report that EE Design Assistance provides



Step Four: Builder manages the installation of selected measures



Step Five: Duke Energy completes verification of EE measures installed and provides Property Manager information on program to provide to prospective renters



Step Six: Renters make affordable monthly payments as part of the Duke Energy bill



# Tariffed On-Bill Program Overview



## Smart Saver® Built-In Savings

- Pilot (700-1000 rental units)
- Work with property developers to install more energy efficient features in rental units (as compared to minimum building code)
- Duke pays the incremental costs of the more efficient features
- Renters pay for the incremental costs over time as part of their electric bill

NC		Filed	Approved
DEP	Multi-Family New Construction (MFNC) ToB Pilot	Sep '22	Aug '23



## NC Smart Saver® Early Replacement and Retrofit with Improve and Save ("Improve & Save")

- Duke Energy will fund the installation of energy efficiency improvements that a residential customer pays for over time through a flat monthly amount on their bill.
- Solution = **Smart Saver Early Replacement and Retrofit Program** (approved EE program) + **ToB Monthly Charge Program** (optional, newly filed payment mechanism)
- Supports NC House Bill 951
- Supports SC DEP Rate Case Settlement Agreement
- Available to single family, mobile home, multi-family
- Evaluating expansion to DEF & DEI

NC		Filed	Approved
DEC & DEP	Residential Smart Saver® Early Replacement and Retrofit Energy Efficiency Program	Sep '22	Aug '23
	Residential ToB Tariff - Electric Customer Monthly Charge	Sep '22	Aug '23



## SC ToB Monthly Charge PILOT w/ Smart Saver® Early Replacement and Retrofit

SC		Filed	Launch
DEC & DEP	Residential Smart Saver® Early Replacement and Retrofit Energy Efficiency Program	Apr '23	Q3 '23?
DEP	Residential ToB Tariff - Electric Customer Monthly Charge <b>Pilot</b>	Q4 '23	Q1 '24?

\*Launch dates depend on receiving regulatory approval





# Example – 26% Savings, Low- to Moderate Income



### Current Status

- Baseboard heat
- Insufficient insulation
- Drafty
- 2,167 kWh monthly avg usage

### Intervention

- Mini-splits
- Attic insulation
- Air sealing

### Energy Savings

- 564 kWh est. monthly savings (26%)

## 5-Year Customer Value Proposition

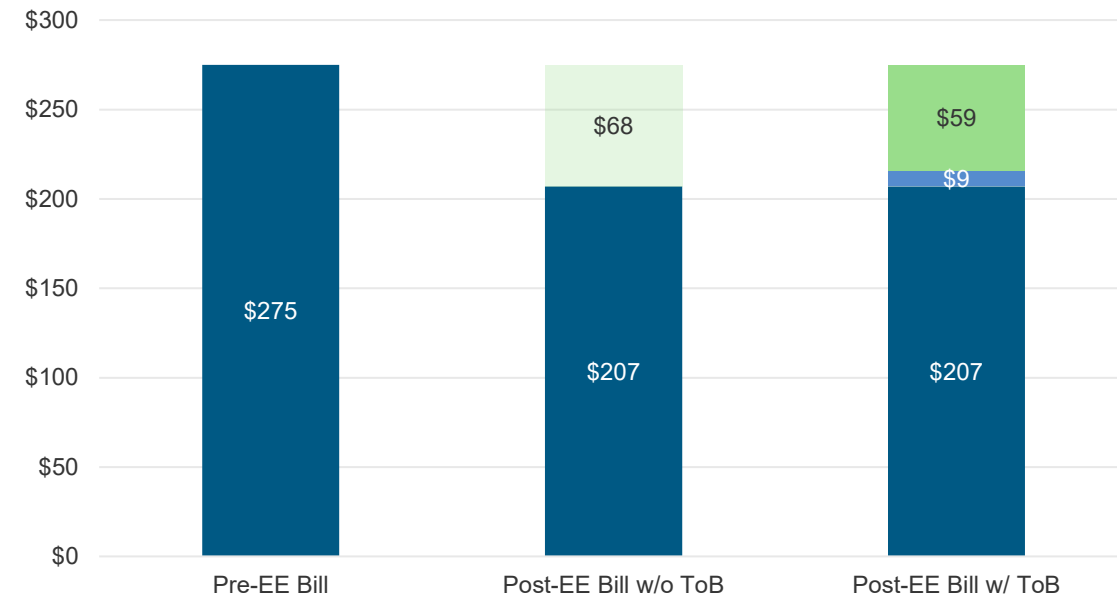
ToB?	No	Yes
Upfront Cost	\$736	\$0
Bill Savings	\$4,080	\$3,540
Net Savings	\$3,344*	\$3,540*

\*Does not account for the added value to the house



Total Cost	\$15,000
HEEH Rebate	-\$9,600
Smart \$aver ER&R	-\$4,664
<hr/>	
Remaining Cost	\$736
ToB or Upfront Cost	-\$736
<hr/>	
<b>Remaining Upfront Cost</b>	<b>\$0</b>

Est. Monthly Average Bill



# High Energy Usage Assistance





# HIGH-ENERGY USE PILOT



**Promotional Information will be sent to Customers who meet these requirements:**

**Requirement 1 Usage Eligibility:**

- Minimum of 17,800 KWH Annually

**Requirement 2 Income Eligibility:**

- At or below 200% of Federal Poverty Level.
- Current enrollment in qualifying programs.

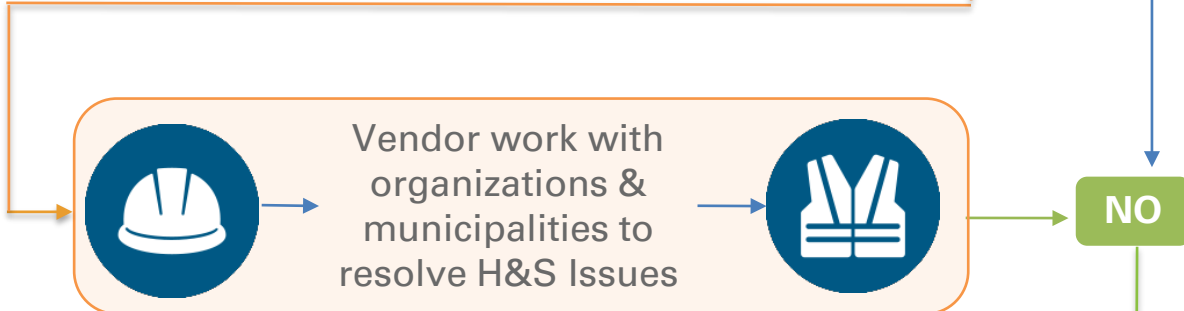
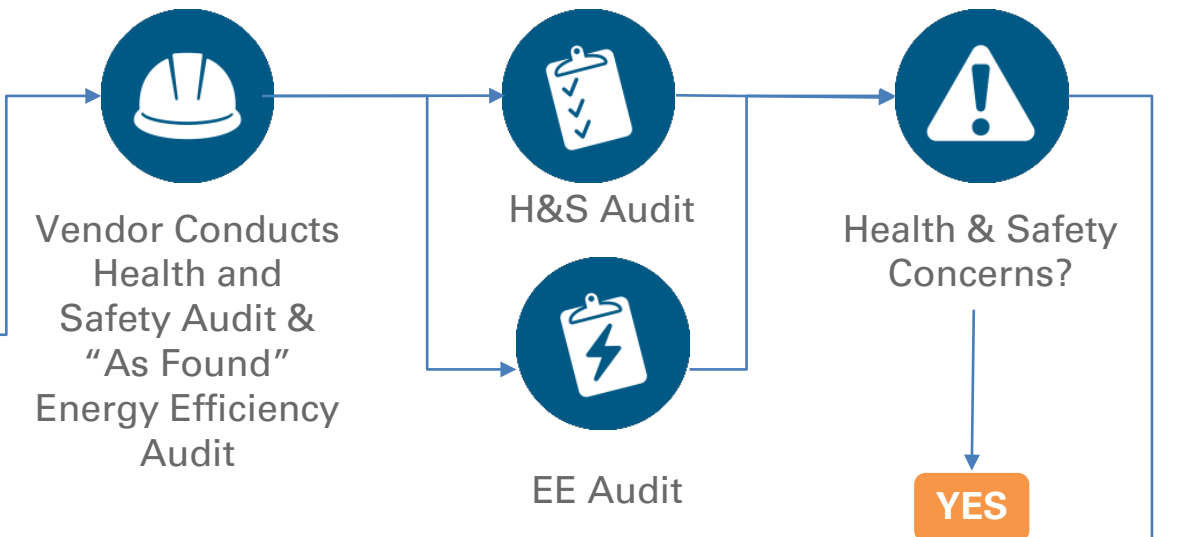
The High-Energy Use Pilot will install deep home retrofits at no cost to the customers with the aim of reducing energy bills for individual customers in DEC.

This pilot will target high electricity, low-income, DEC customers who are homeowners or renters in Mecklenburg, Forsyth and Guilford counties.



**Health and Safety Work Complete**

**Energy Efficiency Work Complete**



- EE upgrade may include:**
1. HVAC Replacement
  2. Energy Star Refrigerator Replacement
  3. Comprehensive Air Sealing
  4. LED Light Bulbs
  5. Duct Sealing
  6. Heat Pump Water Heater
  7. Insulation (Attic and Belly)
  8. Fauset Aerators

**Sub-Contractor Completes Work**







# Customer Problem

Install deep home retrofits with the aim of permanently reducing unaffordable energy bills.



### Measures could include:

- HVAC Replacement
- Comprehensive Air Sealing
- Insulation (Attic and Belly)
- Duct Sealing
- Heat Pump Water Heater
- Energy Star Refrigerator Replacement
- Tier 1 Base Load Package

- Some customers need assistance to resolve **health and safety issues** in the home before EE measures can be installed.
- Duke Energy will partner with State/Local/Federal organizations and **the Pilot vendor to remediate these issues**, and then retrofit the customer’s home with EE measures.
- **Duke Energy will fund** EE measures at no cost to the customers with High Electrical Usage. **State/Local/Federal will fund** the remediation of Health and Safety(H&S) issues.

## Durham Project

# 40%

40% of homes could not be weatherized due to Health and Safety Concerns

## High-Energy Use Pilot

# 60%

DOE estimates that this pilot may experience up to 60% of homes with Health and Safety Concerns.



# Customer Solution

- The pilot is in **compliance with requirements** from a rate case settlement from **July 2020**.
- Builds on the experience of the **Income-Qualified Weatherization Pilot in Durham**
- The Pilot will provide **deep retrofits** at no cost to the income qualified customers with high electrical usage as defined in the **Project Scope**.

# Pilot Estimates

1,000 Participants over a 2-year period

## Identify Low Income

- Acxiom Research
- Government Pre-Qualified



## Income Eligibility

- At or below 200% of Federal Poverty Level.
- Enrollment in LIEAP or similar state/federal programs.

## Usage Eligibility

- Top 50% of Electrical Users
- Minimum of 17,800 KWH Annually



SAVE TODAY. SAVE TOMORROW.  
SAVE FOR GOOD.

# Thank you!

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