



SAVE TODAY. SAVE TOMORROW.
SAVE FOR GOOD.

2023 ENERGY STAR Products Partner Meeting

Improving the Home Envelope: Good Program Practices and Successful Examples

Presenters:

Doug Anderson – US EPA (Session Captain)

Chris McClellan - Eversource Energy

Amy Freeland – Georgia Power

Rebecca Olson – Minnesota Center for Energy and the Environment

September 28, 2023

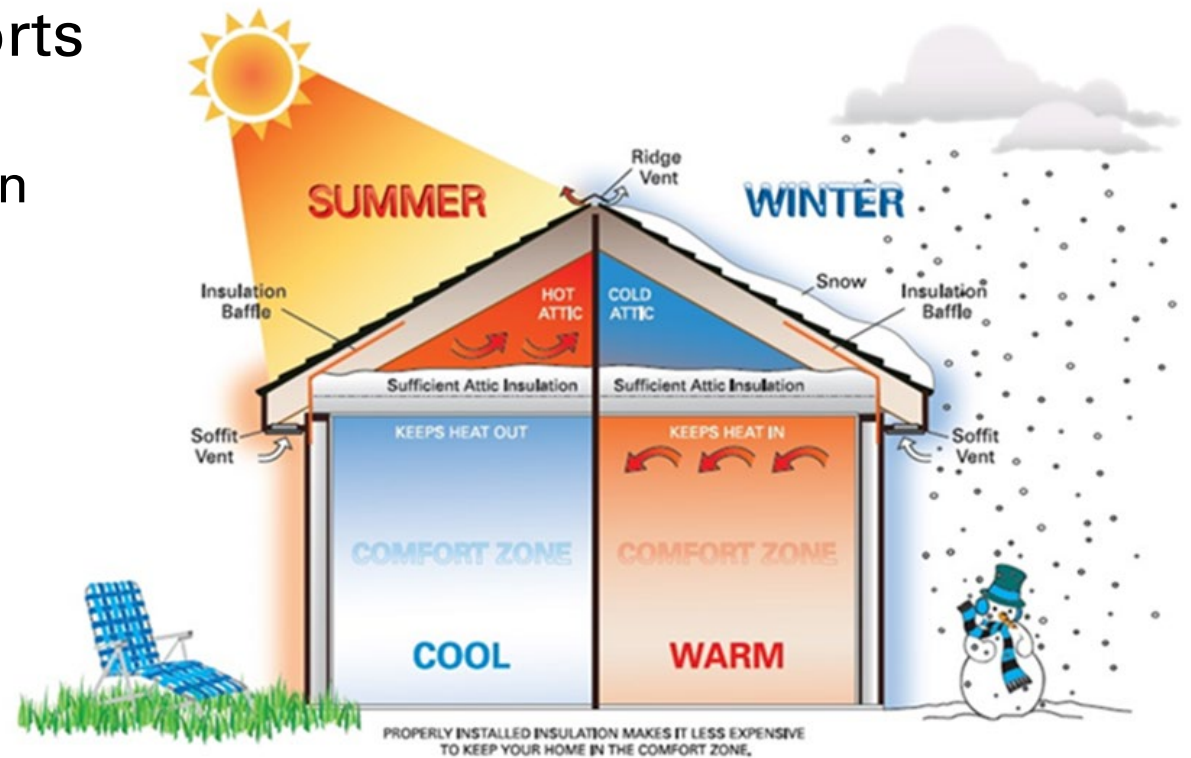




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AGENDA

- Quick ENERGY STAR Insulation Efforts
 - Federal Incentives
 - Program Details on Product Certification
 - Insulation Promotion - Rule Your Attic!
- Key to More Insulation: Utilities!
- Program presentations
 - Eversource
 - Georgia Power
 - Minnesota CEE
- Questions/General Discussion





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Federal Tax Credits and Rebates for Insulation

- **Federal Tax Credits (25C) from the Inflation Reduction Act (IRA) – 2023-2033**
 - 30% of project cost up to \$1200 for air sealing and insulating*
 - Does not include cost of installation
- **State Low-Income Electrification Rebate (IRA – High-Efficiency Electric Home Rebate Program) – Details TBD**
 - Up to \$1600 for **ENERGY STAR certified insulation**, air sealing, and ventilation
 - Rebate can be applied to 100% of project cost for low-income customer, and 50% of project cost for median-income customers
- **State Rebates (IRA – HOMES Rebate) – Details TBD**
 - \$2000 for 20 to 34% improvement in household energy efficiency
 - \$4000 for 35% or more improvement in household energy efficiency

*Overall total limit for an efficiency tax credit in one year is \$3,200, with a total limit of \$1,200 for any combination of home envelope improvements (windows/doors/skylights, insulation, electrical) plus furnaces, boilers and central air conditioners

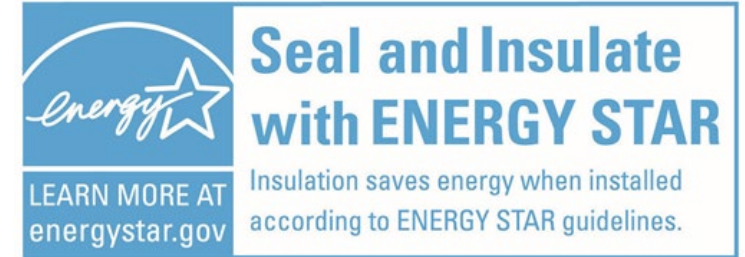




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ENERGY STAR Certified Insulation Program

- 3rd Party Certified R-value and requirements for flame resistance ensures high performance
- Manufacturers are required to include installation instructions
- Types of insulation include:
 - Batts and Rolls
 - Loose-fill and Blown-in
 - Rigid board
 - Sprayed foam
- More than **20** brand owner partners
- More than **43** certified product lines



[More information on ENERGY STAR certification for insulation can be found here](#)





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Rule Your Attic! Campaign Overview



What is it?

- Fall consumer-facing promotion to raise awareness of home insulation and encourage homeowners to check their attic insulation levels and taken action if needed
- Provides uniting message for all stakeholders

Who participates?

- ENERGY STAR sets schedule, provides content, and sends notices to stakeholders
- Utilities, EE programs, Contractors, Retailers, Manufacturers

Timing – This year, the RYA! Campaign is running from October 15 – early November

Tactics

- Mailings and messages to key stakeholder
- Organic and boosted social media, paid ads
- Social media content, images, guides, videos provided in RYA! toolkit

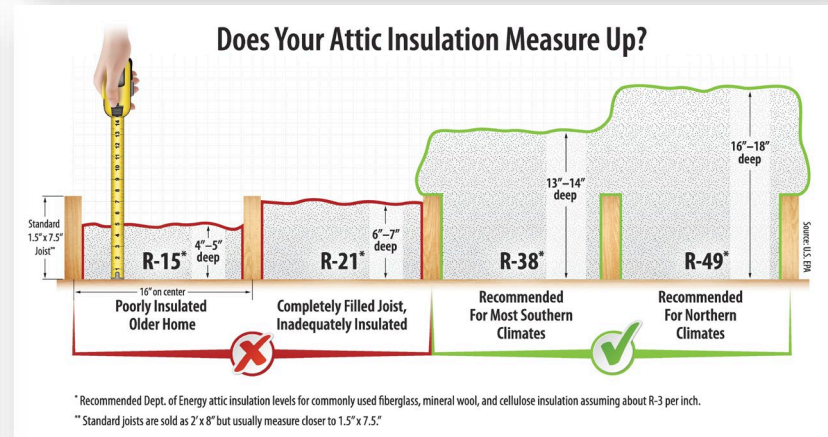
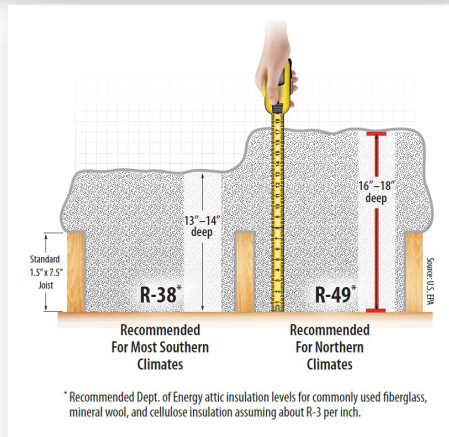
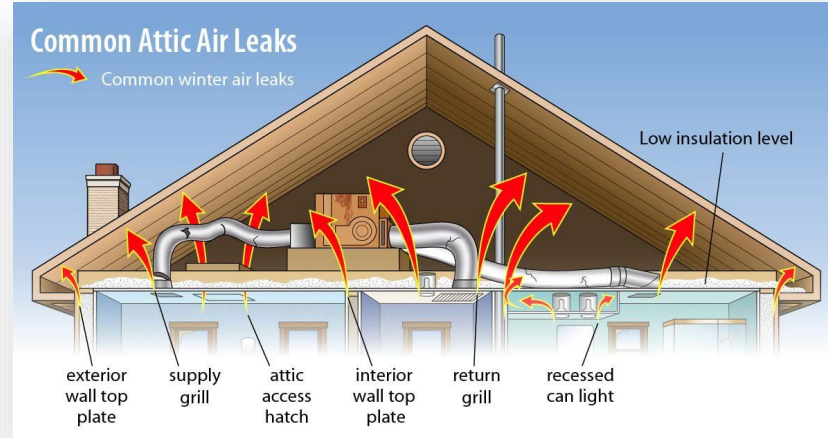
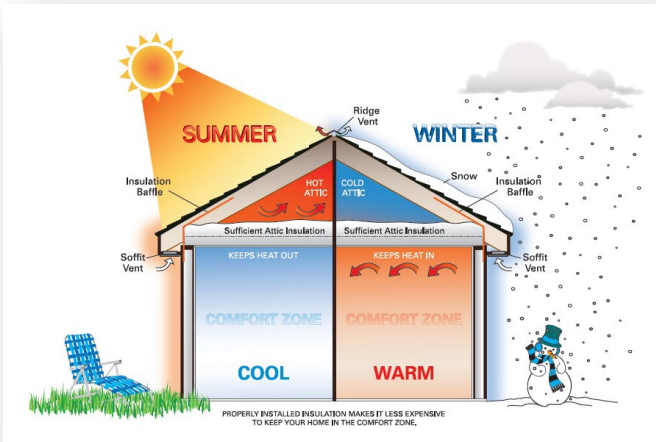




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Social Media Graphics

All graphics, gifs, and videos are available free to download.





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Key to More Home Insulation: Utility Programs

Insulation – the forgotten product

- A hidden opportunity - out of sight/out of mind
- Not much consumer marketing
- Many utility programs promote and incentivize insulation – but it's hard to message

Utility Insulation Program Opportunities

- Raise awareness of insulation so consumers ask for help – evaluations and improvements
- Safe and effective insulation installs require a robust program structure, contractor training, and QA – which costs \$\$

Q: What strategies are utility programs using to raise project numbers and improve project quality while striving to keep program costs down?





Chris McClellan, C.E.M.
Supervisor – Energy Efficiency
Eversource Energy

EVERSOURCE

Mass Save[®] Residential Retrofit Weatherization Program

Program Overview

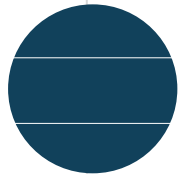
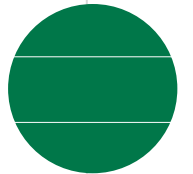
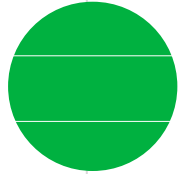
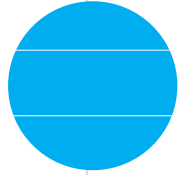
Market Rate Residential Customers

1-4 Family Retrofit Insulation and Air Sealing

Only Approved Methods, Materials, and Participating Contractors

Fixed-pricing Set by Competitive RFQ

“Whole Home Approach”



Program Stats



>100 participating
contractors

>30,000 project
completions per year
statewide

>50% QAQC
inspection rate

8% repair/return rate



Average Project

~\$5,000 total value

~\$4,000 incentive



Average Project Annual Savings

150 Therms (gas)

2,700 kWh (electric)

100 Gallons (oil,
propane)

Incentives



For Customers

75-100% instant insulation
incentive

100% instant air sealing
incentive

Pre-weatherization barrier
clearing support and
incentives



For Contractors

Merit-based work allocation

Direct Weatherization path

Participating Contractor
Referral path

Marketing support

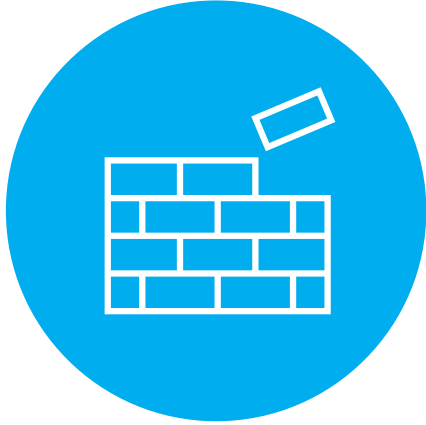
Workforce development

Marketing

- Statewide Marketing
- Program Administrator specific marketing
- All media types, broad and targeted campaigns
- Find-a-contractor tool on masssave.com
- Contractor-driven marketing
- Partner resources on MassSave.com/partners



Barriers to Success and Resulting Solutions



Health & Safety Barriers

(Knob & Tube, Combustion Safety, Mold/Moisture, Asbestos/Vermiculite)

Work scope applicability or eligibility

Sustaining demand through market transformation



Solutions

Consumer awareness and education

Comprehensive delivery model

Unparalleled incentive structure

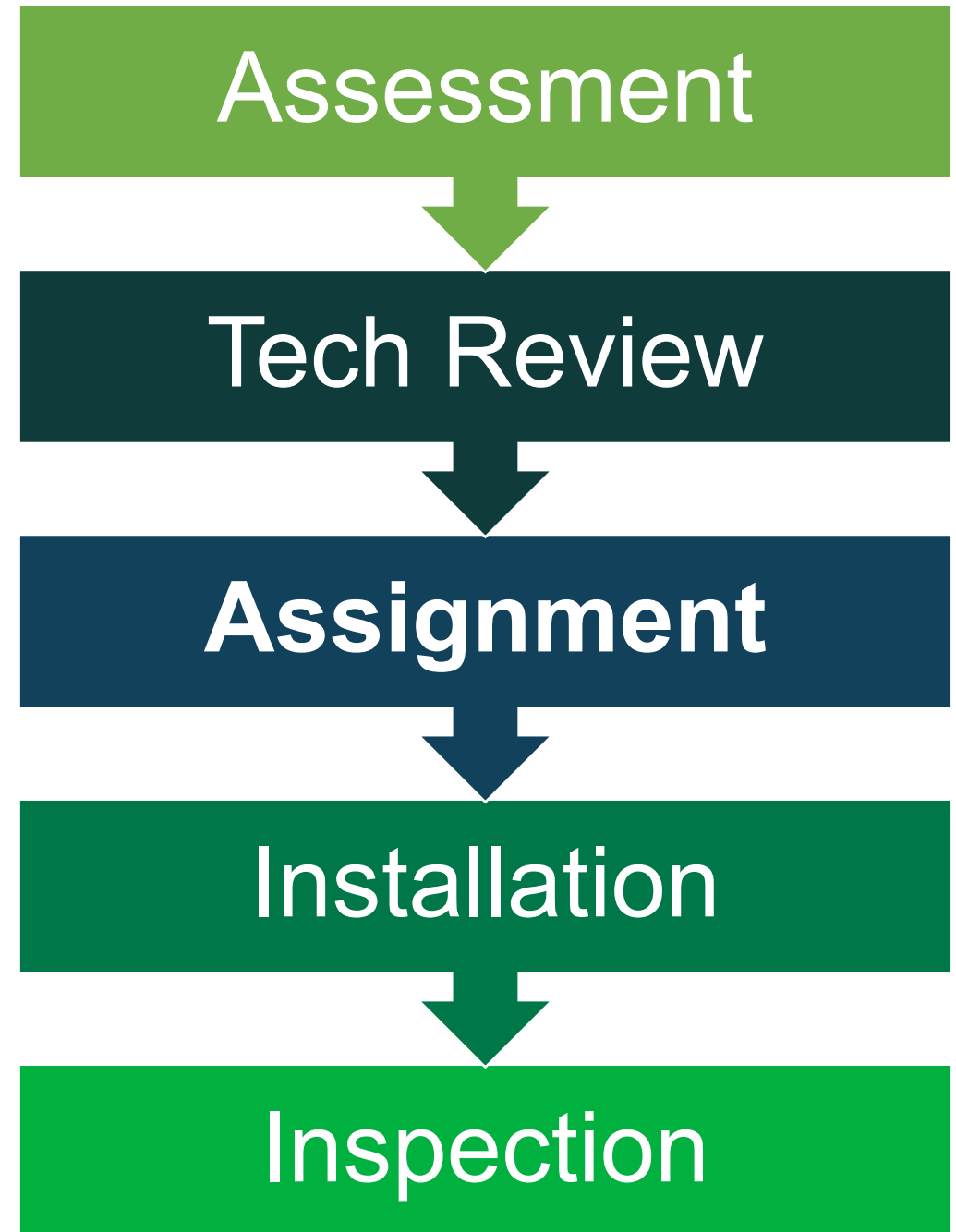
Merit-based Work Allocation

Inspection results generate *Work Quality* score...

- *Work Quality*
- *Customer Service*
- *Documentation*
- *Time-To-Serve*
- *Customer Recruitment*
- *RFQ Pricing Grade*

...each with unique weighting determines overall allocation score

Overall score, work capacity, territory and technical capabilities meter out signed weatherization jobs to participating contractors





EVERSOURCE

Thanks
for listening.



Georgia Power's Home Energy Improvement Program

Amy Freeland

Georgia Power - Program Manager, Residential Energy Efficiency
**Improving the Home Envelope: Good Program Practices &
Successful Examples**



HEIP: Approaches




- 20% electric kWh reduction using approved energy modeling software
- Test in & out required
- Must be in a participating Program Contractor



- For customer that wants to make energy efficiency improvements one-step-at-a-time
- Some measures may be self-installed, while others require a participating Program Contractor
- Preconditions required

HEIP: Attic Insulation

- Program launched in 2010
- 16 participating program contractors (PC)
- Non-air sealing forms of insulation can be installed by customer, non-PC and PC
 - Sprayfoam, dense pack require combustion safety testing
- Attic insulation incentive
 - 50% of cost up to \$250
 - Existing insulation less than R-19
 - Add R-38 or greater
- Rebates paid to customer




STAY COMFORTABLE YEAR-ROUND:
Upgrade your insulation today.

Upgrade your insulation and you could save on your energy bill. Plus, you may be eligible for a \$250 rebate.

Manténgase acogedor durante todo el año:
Mejore su aislamiento hoy mismo.


Actualice su aislamiento y podría ahorrar en su factura de energía. Además, puede ser elegible para un reembolso de \$250.

 Georgia Power

 ENERGY STAR


For full program details visit
georgiapower.com/diy

Para información completa del programa visite
georgiapower.com/diy



HEIP: Target Participants

- Georgia Power residential customers
- Existing homes, typically 10+ years old
- Income level depending on improvement
 - Whole House
 - » Requires Assessment
 - » Greater financial commitment
 - Individual Improvements
 - » DIY or Contractor depending on improvement
- Region of the state
 - Improvement type
 - Program Contractor (PC) Coverage





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HEIP: Program Marketing

- In store signage
- Email marketing
- Owned channels
- Nextdoor
- TV
- Radio
- Social & Search
- Behavioral program
- Web
 - Educational videos
 - Technical articles
- Program contractors
 - Georgia Power Social Media Toolkit

It all starts with a Home Energy Assessment

To lower your monthly power bill and increase year-round comfort in your home, it's important to understand how your home uses energy. Through the Home Energy Improvement Program, Georgia Power customers can schedule a home energy assessment and receive a rebate covering 50% of the cost up to \$150.

Learn More

Georgia Power Sponsored

Prepare for any type of weather in {{city}}! Give your home a checkup

Every so often it can be beneficial to have a check up done to your home in order to see how it is doing. This check-up for your home is called a home energy assessment. Home energy assessments are conducted by trained professionals who evaluate and diagnose opportunities for improvements that make your home more comfortable and save you money. You may also qualify for a rebate on your home energy assessment.

See if you qualify for a rebate of up to \$150

Start here

Georgia Power

Get a bigger rebate when you upgrade

Switch to an efficient heat pump water heater

Get started

Use less energy, save more money.

Score a win for your wallet by replacing your current water heater with an efficient heat pump water heater. You may qualify to receive a rebate of up to \$500 for making the upgrade*.

Start Saving Now

See how you can qualify for a rebate of up to \$500 on your heat pump water heater upgrade**

Find Out How

Upgrading to a heat pump water heater from a conventional electric unit has a lot of benefits.

Here are some of the benefits for a 4-person household***:

- Saves \$350 on hot water annually
- Pays for itself in 2-3 years
- Has an average life span of 10 years

HEIP: Barriers

- Barriers facing our customers
 - Inflation
 - High interest rates
 - Education
 - » Combustion safety?
 - » R-Value?
 - » Why does the utility offer rebates?
- Contractor engagement
 - Rebates are paid to the customer so contractors may not be motivated
- QA/QC
 - Program targets 5-10%
 - Photo QA for some measures
 - Field inspections
 - Remediation

HEIP: Opportunities

- Attic insulation is one of HEIP's most popular improvements
 - 2023 YTD: Paid over 300 attic insulation rebates
- HEIP as a workforce development tool
 - Build skills
 - Drive participation
 - Contractor engagement
- Customer engagement
 - Communicating the value of investing in EE
 - Educating customers on EE improvements
 - » Home Energy Assessment
 - » Duct sealing
 - » Air sealing
 - » Combustion safety



Georgia Power's Home Energy Improvement Program

Amy Freeland

Georgia Power

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IMPROVING THE HOME ENVELOPE

Good Program Practices and Successful Examples

Rebecca Olson

Sr. Director of Residential and Community Energy





MN Home Energy Squad Program Overview

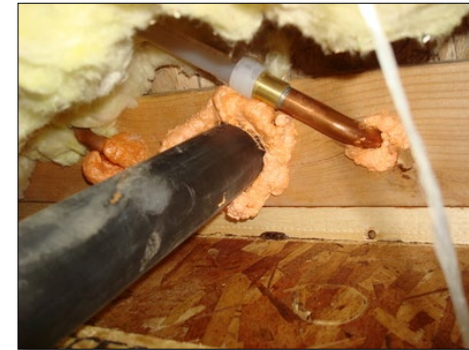
- **Xcel Energy and CenterPoint Energy Sponsored**
 - Delivered by Center for Energy and Environment (CEE)
- **Audit, Direct Installs, and Energy Advising**
- **Started in 2009 in Minnesota**
- **Complete 5K-8K visits/year across MN**
 - Largest audit program in the state
 - Goals are around 15K homes in 2024
- **Includes Low Income visit subsidy**
 - Free visits
 - Direct referral to Low Income programs
- **Customer outreach and marketing split between utilities and CEE**
 - Mass marketing and email/bill notifications done by utilities
 - Community-based outreach done by CEE





Home Energy Squad Program Approach

- **Comprehensive audit and direct install program**
 - Gas and electric measures installed on site
 - Customer friendly report including energy score and pathway options
 - Recommendations emphasize envelope improvements and heating system replacements
- **Reduced barriers to cost effective project completion**
 - Provide supported access to financing and rebates
 - Energy advising service to talk through any issues or questions
- **Engaged and qualified contractor network**
 - **Agreed to negotiated pricing for envelope work**
 - Quality control and assurance practices
 - Credentialed to complete work—rebate eligibility
 - Standards of installation





Prominent Incentives Offered

| Measure | 2023 | 2024-2026 (filed) |
|----------------------------------|-------------|--|
| Attic Insulation and air sealing | \$300-\$500 | \$1000-\$1800 |
| Wall insulation | \$300-\$500 | \$1000-\$1200 |
| Furnace @ 97% AFUE | \$400 | \$400-\$600 |
| ASHPs | NA | \$1,200-\$2000 + \$600 bonus for envelope work when done within 2 years of heat pump |

- Utilities have slightly different incentives in their respective gas territories
- Other rebates exist, but these are the most common
- Efficient fuel switching allowed in 2024
- Energy advisors often braid rebates with various city incentives to increase overall rebates



Home Energy Squad Program Stats

- **Customers served in 2022**
 - 5,642 1-4 unit homes
- **Contractors enrolled in network to date**
 - 8 insulation contractors
 - 3 HVAC contractors engaged on standard pricing
- **HES customers with rebated projects in 2022**
 - 1,111 homes completed one or more substantial projects resulting in rebates
 - Typical conversion rates:
 - 20% of total customers
 - 30% of customers with rebate eligible recommendations
- **Project cost ranges**
 - \$2,500-\$30,000 with an average around \$7,000
- **Project savings**
 - 20%-50% energy savings for typical projects



2019 Case Study: Market Rate Single Family

Projects:

- Furnace Replacement from 70% to 95% AFUE
- Added Attic Insulation from R21 to R50
- 36% air leakage reduction
- Dense packed exterior walls and tuck-under garage ceiling
- Power vented water heater replacement

Total Cost:

- \$8,870—13% of cost covered by utility rebates

Estimated Savings:

- \$1,015
- ~58% savings





2021 Case Study: Affordable Housing Duplex

Projects:

- Attic insulation/Air sealing
 - Increased to R50
 - 2 continuous bath fans installed
- Wall insulation to R11
- 2 Furnace replacements with 96% AFUE/ECM
- 2 natural draft DHW replacements with E-star power vented

Total Cost:

- \$25,520—90% covered by utility and city incentives

Estimated Savings:

- 136 Dth, 1124 kWh
- ~\$980/year
- 23,045 lbs. CO₂





Program Evolution to Address Challenges

- **Combined direct installation with energy audit as an option—now the norm**
- **Energy Advisor Service added**
 - Address customer questions and more comprehensive needs after home visit
 - Connect customers to financing and braid incentives
 - Critical to better conversion rates
- **Preferred contractor network created**
 - Training and credentialing
 - Installation protocol manual
 - QA/QC requirements
 - **Negotiate pricelist**
 - Ability for Energy Advisors to schedule customers for projects
 - Ongoing feedback loop

Thank You!

Rebecca Olson

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Center for Energy and Environment





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Questions?

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