

Federal Policies Promoting Increased Building Envelope Energy Efficiency

Curt Rich
President and CEO
North American Insulation
Manufacturers Association
crich@naima.org

Jay Murdoch
Director, Industry Affairs
Owens Corning
jay.murdoch@owencorning.com



THE USA

Historic levels of federal investments in activities to support building energy efficiency

\$4 billion in HUD financing for energy efficient affordable housing

\$500 million in grant funding for school energy efficiency upgrades

Robust tax credits for new residential and retrofit residential and commercial energy efficiency

\$3.5 billion increase in DOE Weatherization Program Funding

\$27 billion in state grants to support activities reducing greenhouse gas emissions

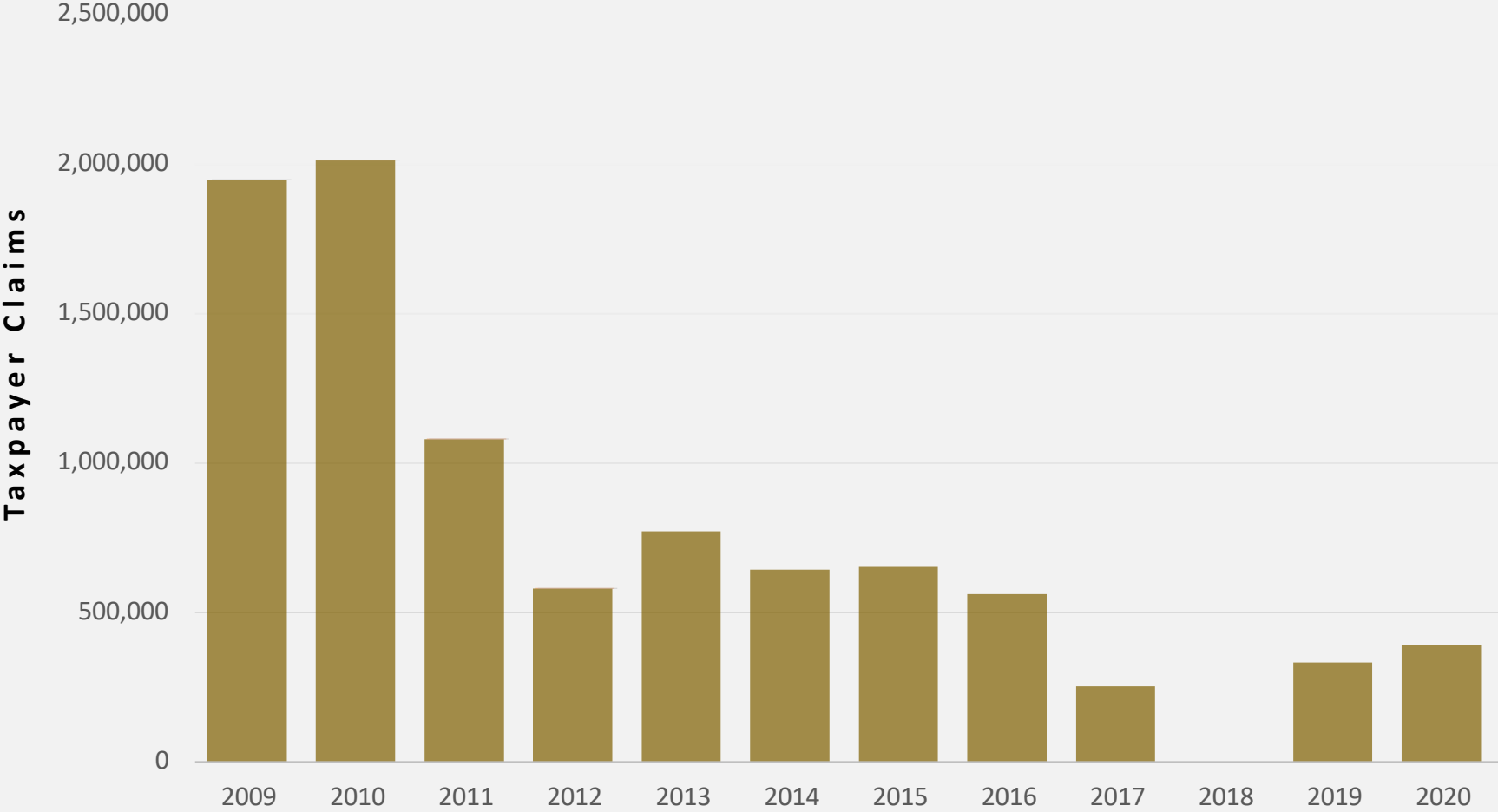
\$1.25 billion in state grant funding to promote updated building energy codes

\$9.4 billion in rebates for residential electrification and energy efficiency improvements

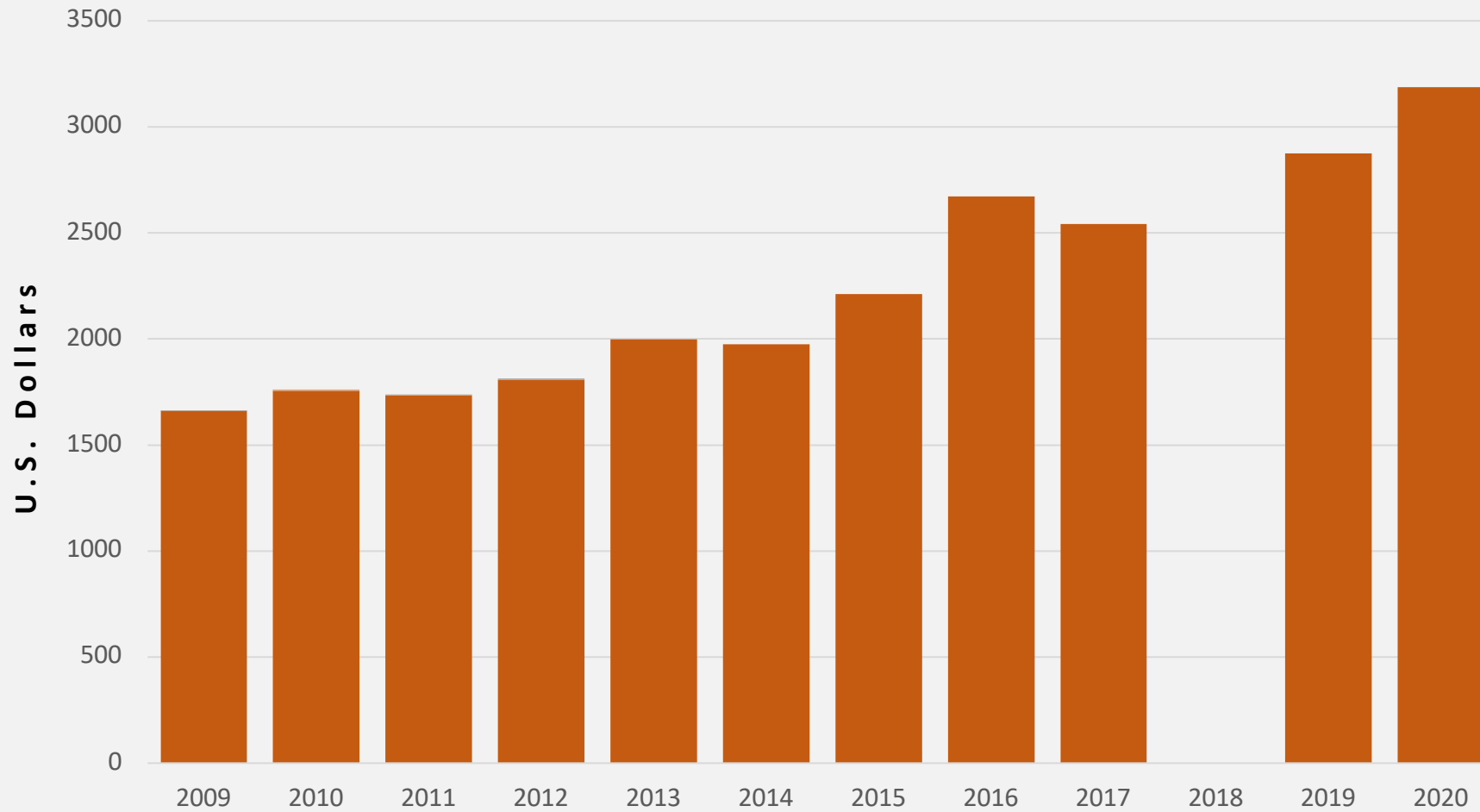
\$150 million for grants to small manufacturers for energy efficiency improvements

\$250 million for no interest loans for residential and commercial energy efficiency retrofits

25C FEDERAL TAX CREDIT: NUMBER OF CLAIMS
FILED FOR INSULATION IMPROVEMENTS



25C FEDERAL TAX CREDIT: AVERAGE INSULATION IMPROVEMENT EXPENDITURE CLAIMED BY TAXPAYER



Residential Retrofit Incentives

SECTION 25C ENERGY EFFICIENT HOME IMPROVEMENT TAX CREDIT**Previous Law**

- 10 percent of eligible expenses up to \$500
- Credit is subject to a taxpayer lifetime limit of \$500
- Existed on a year-to-year basis

Inflation Reduction Act

- 30 percent of eligible expenses up to \$1200
- Tax credits reduce tax amount owed to the IRS
- Covers both insulation and air sealing systems
- Must meet 2021 IECC prescriptive insulation requirements
- Labor to install is not an eligible expense
- Credit available on a yearly basis to taxpayer
- Credit expires December 31, 2032

25C Energy Efficient Home Improvement Tax Credit: Frequently Asked Questions

Do you need to owe taxes to take advantage of the 25C tax credit?

Yes

Are the credits available for a second home or an investment property?

No

Can a taxpayer claim the credits for expenditures incurred for a newly constructed home?

No

If labor is not an eligible expense under the 25C credit, what is considered an eligible expense?

Labor has never been an eligible expense under the 25C tax credit. The contractor should make a reasonable estimate of the qualifying cost of the insulation materials and the nonqualifying labor cost of the project.

What does it mean to meet the 2021 IECC for credit eligibility?

The IECC sets requirements for new construction. Best efforts should be made to meet the insulation levels set by the 2021 IECC for each area of the home being upgraded. The credit does not require air leakage testing or third-party certification of compliance.

Can I claim the credit for multiple improvements in the same tax year?

\$1,200 yearly tax credit maximum for insulation and air sealing. Qualifying water heaters, heat pumps, biomass stoves and boilers have a separate yearly credit limit of \$2,000. Taxpayers may claim up to \$3,200 in tax credits for combined upgrades in insulation and qualifying heating and cooling systems.

Is a certificate of insulation product purchase required?

While there are product identification number reporting requirements for certain 25C eligible products beginning in 2024, there are no such requirements imposed on insulation or air sealing materials.

HOMES Rebate Program*available to homeowners and landlords of all income levels (or aggregators)*

	Modeled Savings	Modeled Savings <80% Average Median Income	Measured Savings
Energy Savings Requirement			
Minimum Energy Savings	20%	Same	15%
Energy Metric	Calibrated using BPI 2400 standard	Same	Weather-normalized – use open-source software
Maximum Rebate Amount			
% of project cost	50%	80%	Same
Minimum savings level	\$2,000/home for 20% savings, up to \$200,000/building	\$4,000/home for 20% savings	Per kWh equivalent – based on 20% savings amount for average home
Higher savings	\$4,000/home for 35% savings, up to \$400,000/building	\$8,000/home for 35% savings	No cap
Contractor Rebate	\$200 for each home in a disadvantaged community		

Residential New Construction

Section 45L New Energy Efficient Home Tax Credit

	EPA ENERGY STAR	EPA ENERGY STAR (meeting prevailing wage requirements)	DOE Zero Energy Ready Homes (ZERH) Program	DOE Zero Energy Ready Homes Program (ZERH) (meeting prevailing wage requirements)
Single Family	\$2,500	N/A	\$5,000	N/A
Manufactured Housing	\$2,500	N/A	\$5,000	N/A
Multi Family	\$500/unit	\$2,500/unit	\$1,000/unit	\$5,000/unit

- 45L federal tax credit is available to builders of qualified new energy efficient homes
- Qualifying homes must meet ENERGY STAR 3.1* prior to 2025. Beginning January 1, 2025, qualifying homes must meet ENERGY STAR 3.2*
- Manufactured homes must meet Energy Star Manufactured Home National program requirements as in effect on the latter of January 1, 2023, or January 1 of two calendar years prior to credit claim
- Credit expires December 31, 2032
- Multifamily program adoption will take time; implication for insulation contractors is TBD
- (*) EPA is awaiting guidance from the IRS on the state/regional versions and multifamily

45L Tax Credit: Insulation Requirements

	Present – December 31, 2024	January 1, 2025 – December 31, 2032
EPA ENERGY STAR (\$2500)	ENERGY STAR Version 3.1 <ul style="list-style-type: none"> • Mandatory 2009 IECC insulation requirements • Grade I installation • Infiltration rates modeled at: <ul style="list-style-type: none"> • 4 ACH50 in CZs 1,2 • 3 ACH50 in CZs 3-8 	ENERGY STAR Version 3.2 <ul style="list-style-type: none"> • Mandatory 2021 IECC insulation requirements • Grade I installation • Infiltration rate modeled at 3 ACH50
DOE Zero Energy Ready Home (ZERH) Program (\$5000)	ZERH Version 1, Revision 08 <ul style="list-style-type: none"> • ENERGY STAR is a prerequisite • Mandatory 2015 IECC insulation requirements • Grade I installation • Infiltration: <ul style="list-style-type: none"> • 3.0 ACH50 in CZs 1-2 • 2.5 ACH50 in CZs 3-4 • 2 ACH50 in CZs 5-7 • 1.5 ACH50 in CZ 8 	ZERH Version 2.0 <ul style="list-style-type: none"> • ENERGY STAR Version 3.2 standards • Mandatory 2021 IECC insulation requirements • Grade I installation per RESNET / ICC 301 • Infiltration: <ul style="list-style-type: none"> • 3.0 ACH50 in CZs 1-2 • 2.5 ACH50 in CZs 3-4 • 2 ACH50 in CZs 5-7 • 1.5 ACH50 in CZ 8

Prevailing Wage Requirements

Applies to:

- Section 45L New Energy Efficient Home Credit for multi-family housing (elevated credit amount)
- Section 179D Energy Efficient Commercial Buildings Deduction (elevated credit amount)

Requirement:

- To meet the prevailing wage requirement laborers and mechanics employed by the taxpayer must be paid wages at rates not less than the prevailing rates for construction of a similar character in the locality where the facility is located as most recently determined by the Secretary of Labor.
- Updated locality prevailing wage found at www.sam.gov

Effective Date:

- Applies to construction beginning on or after January 30, 2023

Impact?

- Dallas, Texas prevailing wage:
 - Insulators – \$13.00/hour
 - Carpenters – \$17.13/hour

Commercial Energy Efficiency Incentives

Section 179d Energy Efficient Commercial Buildings Deduction

Current Law






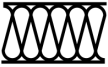
- Scaled incentive up to \$1.88 per square foot for owners of new or existing buildings who install (1) interior lighting; (2) building envelope improvements; and (3) heating, cooling or ventilation that reduces power usage up to 50% over ASHRAE 90.1-2019.
- Permanent tax credit

Inflation Reduction Act

- Applies to property placed in service after 12/31/2022
- Scaled incentive ranging from \$.50 per square foot for 25% efficiency improvements over ASHRAE 90.1-2019 to \$1.00 per square foot for 50 percent improvements
- Incentives quintupled to \$2.50 / \$5.00 per square foot for improvements made in compliance with prevailing wage and apprenticeship requirements
- Qualified retrofits must be for buildings that are least 5 years old and must achieve efficiency improvements of at least 25%
- Applies to commercial and large multi-family buildings
- Prevailing wage requirements apply

Low Income Residential Retrofit Incentives

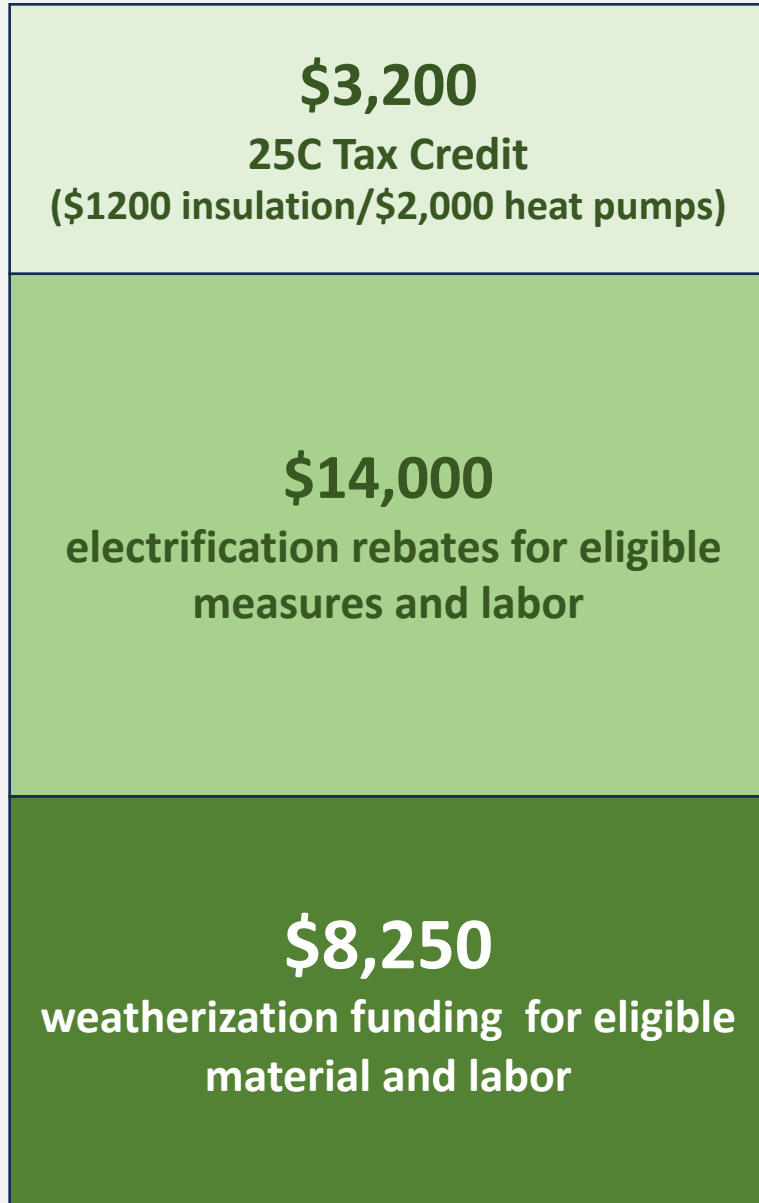
High Efficiency Electric Home Rebate Program

Appliance	Rebate Amount
 Heat Pump (for space heating and cooling)	\$8,000
 Electric stove, cooktop, oven, or clothes dryer	\$840
 Heat pump water heater	\$1,750
 Electric wiring	\$2,500
 Electric load service center (breaker box)	\$4,000
 Insulation, air sealing and ventilation	\$1,600

How Does it Work?

- \$4.5 billion in grants to states to establish High Efficiency Electric Home Rebate Program (HERO rebates)
- Available to individuals and aggregators for upgrades of single and multi-family residences whose occupants meet income requirements
- Program based on income eligibility
 - 80-150% area medium income: 50% qualified measure covered
 - Less than 80% area medium income: 100% covered
- Eligible households qualified for up to \$14,00 in rebates
- Purchase is carried out as part of:
 - New construction (appliances)
 - Replacement of non-electric appliances
 - First time purchases
- May not combine with HOME rebate or Weatherization
- May combine with Section 25C tax credit

“Stacking” residential energy efficiency incentives



No income qualification

Medium Income: 80 percent of eligible expenses for families making less than than \$144,300 area median income

Low Income: 100 percent of eligible expenses for families making less than than \$76,800 AMI

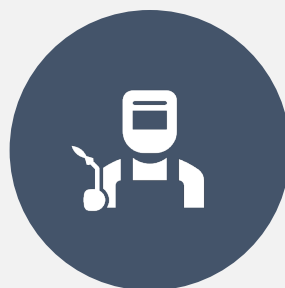
Low Income: For a family of 4 making under \$60,000 a year

Final Thoughts . . .

160 Insulation Contractors Surveyed on Retrofit Insulation Incentives: Top Takeaways



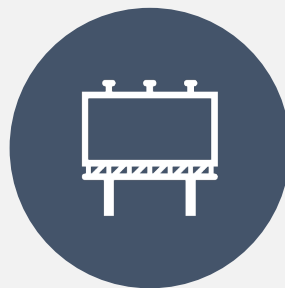
86% of contractor websites have no incentives information, **58%** of contractors are not marketing incentives, showing room for education



Only **35%** of contractors report having a strategic relationship with an HVAC contractor, underscoring an untapped potential for cross-marketing

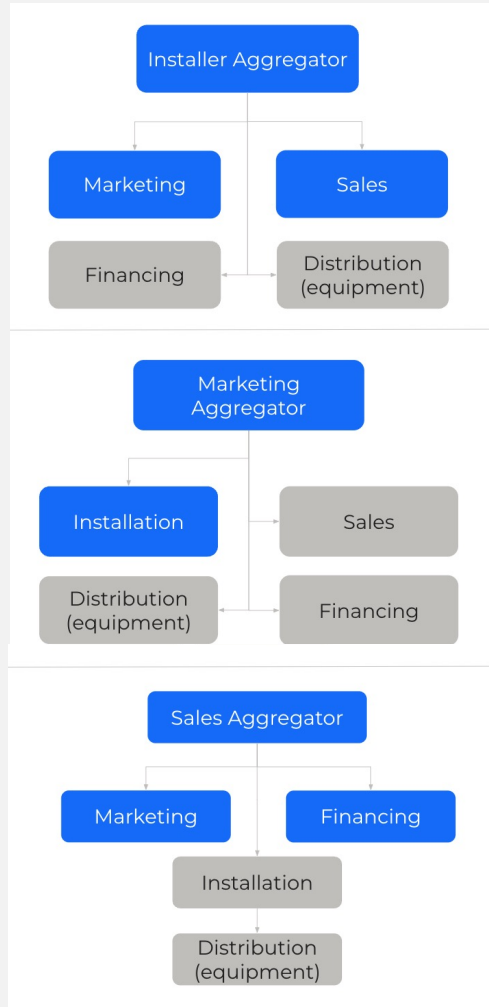


63% of respondents use search engine marketing, only **51%** are using social media advertising, less than **25%** are using traditional ads, revealing a marketing gap



37% want informational pamphlets, **28%** want a website, **15%** unbranded collateral, and many want all, communicating a need for materials

Likely role of aggregators in rebate programs



- Aggregator handling internally
- Aggregator handling via partners

Contractor Example journey



Contractor signs-up with aggregator



Contractor submits project information including scope of work, home characteristics, photos, etc.



Contractor submits documentation certifying completion of project



Contractor receives upfront payment from aggregator



Contractor uses payments to drive consumer adoption (e.g., rebates to consumers, hiring more workers)

EXISTING HOMES RETROFIT

How do you take advantage of these new incentives?

- **Make all eligible incentives easy to understand for customers**
- **Train up at least one crew that can focus on high quality retrofit installs**
- **Strategic partnerships with HVAC contractors**
- **Engage with state agencies & their consultants, utilities and aggregators**
- **Explore low-income retrofit opportunities, including federal weatherization**
- **Sell the benefits of improving a home's building envelope**
 - **Lower utility bills**
 - **Improved comfort and air quality**
 - **More resilient in extreme weather**
 - **Optimal performance of heating and cooling systems**

NEW HOMES & MULTIFAMILY (45L Tax Credit)

Suggested Actions

New Homes

- **HERS Raters:** get to know strategic Raters; have them inspect your work & train your crew; they are lead generation!
- **Home Builders:** Purchasing and Ops leads; mine EPA's Energy Star www for builders in your market
- **Train Crews:** Grade I installs, thermal by-passes, air sealing packages critical; blower door each house
- **Utility & IRA Workforce Training:** seek out trainings offered by utilities and agencies with IRA \$\$

Multifamily

- **HERS Raters:** those specializing in multifamily; train your crews
- **GC, Framing Sub, Owners Rep:**
- **Utility Program Consultant:**

Resources . . .

YOUR
LOGO
HERE



CLAIM YOUR INSULATION TAX CREDIT

\$1,200 could be yours!

WHAT IS THE TAX CREDIT?
IF YOU HAVE INSULATION
INSTALLED IN 2023, YOU
MIGHT BE ELIGIBLE FOR A
RESIDENTIAL ENERGY
EFFICIENCY TAX CREDIT OF
UP TO \$1,200.

HOW YOU CAN CLAIM IT!
APPLY FOR YOUR TAX
CREDIT OF UP TO \$1,200 BY
FILLING OUT IRS FORM 5695
WHEN YOU FILE YOUR 2023
FEDERAL TAX RETURN.

Check irs.gov for eligibility, and consult your tax professional for further information.



**SAVE UP TO \$1,200
WHEN INSULATING YOUR HOME**



ELIGIBLE FOR A TAX CREDIT?

Thinking about adding insulation or air sealing to your home and trying to save money too? The good news is that you can do both. You may be eligible for a tax credit when you make qualifying energy efficient home improvements under the Energy Efficient Home Improvement Credit.

What types of energy efficient home improvements count toward the tax credit? Adding insulation and air sealing qualify for the tax credit. Certain specifications for each must be met. Generally, your attic R-value should be upgraded to at least R-49. Your insulation contractor can tell you more.

When can I claim the tax credit? The tax credit is claimed after the qualifying energy efficient home improvement is installed. So if you insulate in 2023, you claim the credit on your 2023 taxes.

Does the tax credit apply to existing homes or new homes? This tax credit applies to existing homes.

Who is eligible for the tax credit?
Renters? Second-home owners?
The tax credit is only available for taxpayers using the property as their primary residence, whether or not they rent.

How much of a tax credit will I receive, and how is it calculated?
30% of cost up to \$1,200. Onsite labor cost is excluded from the cost. More info at www.insulate.org.

How did this come about?
The Inflation Reduction Act of 2022 permits an annual tax credit of up to \$1,200 for qualified energy efficiency home improvements under Section 25C of the Internal Revenue Code.




INSULATE
to Save
\$1,200
tax credit
when we insulate
your home.

www.insulate.org



On January 1, 2023, an increased tax credit became available to homeowners who upgrade their insulation and add air sealing in their homes, per Section 25C of the Internal Revenue Code as part of the Inflation Reduction Act of 2022. Below are some basic FAQs regarding this increased credit and how homeowners can apply.

Have more questions? Call ICAA at 703-739-0356 or visit www.insulate.org.



What is the Energy Efficient Home Improvement Credit?

Adding insulation and air sealing to your home will lower energy costs and contribute to a clean energy future. To sweeten the deal to upgrade your insulation, the federal government is offering a significant tax credit which can shave as much as \$1,200 off your tax bill. A tax credit is an amount of money that taxpayers can subtract from the income taxes they owe.

The tax credit is equal to 30% (up to \$1,200) of the amount paid by the taxpaying homeowner for qualified energy efficiency improvements installed during the year. These improvements include insulation and air sealing materials. The credit does not apply to labor/installation costs.

How do I conserve energy and reduce greenhouse gas emissions?

No other energy conservation system is quicker to install, less costly, or more certain to succeed than air sealing and insulation. Insulation is a cost-effective, energy-saving measure that increases building comfort while reducing greenhouse gas emissions and contributing to a green environment.

How did this come about?

This tax incentive to make your home more energy efficient is part of the new climate and tax law, the Inflation Reduction Act of 2022, under Section 25C of the Internal Revenue Code, and applies to insulation upgrades made on or after January 1, 2023.

Who is eligible for this federal government incentive (in the form of a tax credit)?

All taxpaying homeowners are eligible. The home must be owned and used by the taxpayer as their principal residence. The tax credit is not applicable to a newly constructed home. Homeowners who have no tax liability are not eligible for the tax credit.

How much money will I get back if I am eligible and apply for the tax credit?

For homeowners who improve their insulation levels, the maximum amount of money returned to the homeowner through the tax credit is \$1,200.

What do I need to do to get the tax credit?

1. Have insulation materials installed during the year. Installing to the prescriptive insulation requirements of the 2021 International Energy Conservation Code will qualify. Generally, this means increasing your insulation to R-49 or R-60 in the attic space, depending on your climate zone.
2. You can also choose to air seal, which is a cost-effective way to improve energy efficiency, increase comfort, and cut heating and cooling costs.
3. It's a good idea to keep proper documentation of the work including the installation contract or receipt.
4. File [IRS Form 5695](#) along with your Form 1040.

An ICAA member insulation contractor can help you figure out how to qualify for the tax credit.



Representing Professional Residential and Commercial Insulation Contractors

[Home](#) [Join ICAA](#) [ICAA Convention](#) [For Contractors](#) [For Homeowners](#) [Careers in Insulation](#) [Member Site](#) [Q](#)

How much money will you save with the insulation tax credit?

If you're deciding to make a home more energy efficient, use this calculator to figure out how much money a homeowner can save by adding insulation/air sealing under the Inflation Reduction Act of 2022.

Scroll down for Frequently Asked Questions

Enter Estimated Project Cost
(excluding installation cost)

\$

Select your State

CALCULATE!

[RESET CALCULATOR](#)

Potential Savings Amount

Net Project Cost (after tax savings)

FAQs

► [What is the 2023 Energy Efficient Home Improvement Credit?](#)

► [How do I conserve energy and reduce greenhouse gas emissions?](#)

► [How did this come about?](#)

► [Who is eligible for this federal government incentive \(in the form of a tax credit\)?](#)

**More information on
federal incentives:
www.insulationincentives.org**