

**Inflation Reduction Act (Public Law No. 117-169):
Building Energy Efficiency and Building Material
Decarbonization Provisions**

Inflation Reduction Act Tax Incentives for Building Efficiency

Section 25C Energy Efficient Home Improvement Tax Credit (Section 13301)

Current Law

- 10 percent of eligible expenses up to \$500
- Credit is subject to a taxpayer lifetime limit of \$500
- Credit currently expired

Inflation Reduction Act

- 30 percent of eligible expenses up to \$1200
- Covers both insulation and air sealing systems
- Credit available on a yearly basis to taxpayer
- Current credit restored through 2022; increased credit amount applies beginning 2023
- Credit expires December 31, 2032

Section 45 New Energy Efficient Home Credit (Section 13304)

Current Law

- Builder credit of \$2000 per eligible home
- Must be modeled 50% more efficient than 2006 IECC; 20% of those reductions must be envelope
- Credit currently expired

Inflation Reduction Act

- Builder credit of \$2500 for single family homes that meet Energy Star 3.2. including 2001 IECC prescriptive envelope standards
- Builder credit of \$5,000 for homes that meet DOE Zero Energy Home standard (including 2021 IECC envelope standards)
- Builder credit of \$500/\$1000 for multi-family units
 - credit of \$2500/\$5000 for multi-family units when meeting prevailing wage requirements
- Current credit restored through 2022; increased credit amount applies beginning 2023
- Credits expires December 31, 2032

Inflation Reduction Act Tax Incentives for Building Efficiency

Section 179d Energy Efficient Commercial Buildings Deduction (Section 13303)

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

IRA incentives for building energy efficiency: HUD financing for energy efficient affordable housing (Section 30002)

- \$4 billion in loan authority to fund low-income housing projects that improve energy efficiency, improve air quality, promote low carbon building materials or promote building electrification
- HUD may issue direct loans, grants or convert loans into grants for recipients that agree to an extended period of affordability for the property
- Funding available through September 30, 2028

IRA incentives for building energy efficiency: whole house rebates for performance-based efficiency (Section 50121)

- \$4.3 billion to fund DOE approved state rebate program for performance based whole home efficiency upgrades (HOMES Rebate Program)
- Rebates available to both individual homeowners and aggregators
- For homes achieving 20-35% modeled energy savings – rebate of the lesser of \$2,000 or 50% project cost
- For homes achieving at least 35% modeled energy savings – rebate of the lesser of \$4,000 or 50% project cost
- For homes achieving at least 15% measured energy savings – rebate payment rate per kwh saved, equal to \$2,000 for a 20% reduction, or 50% project cost
- Multifamily rebates capped at \$200,000 per multifamily building for units that model energy savings of 20-35%; \$400,000 for buildings that model savings of more than 35%
- States may increase rebate amounts for low-income housing
- Rebates under this program may not be combined with other federal grant or rebates (but can be combined with the 25C homeowner tax credit)
- Rebate not restricted to recipient primary residence

IRA incentives for building energy efficiency: high-efficiency electric home rebate program (Section 50122)

- \$4.5 billion to fund DOE approved state and tribal rebate program for home electrification upgrades, **including insulation.**
- \$1,600 rebates for insulation, air sealing and ventilation / \$14,000 cap on multiple rebates to an eligible entity
 - 50% of the cost of insulation up to \$1,600 for households with annual incomes 80-150% of area median income
 - 100% of the cost of insulation up to \$1,600 for household with annual incomes less than 80% of area median income
 - Same rebate conditions apply to multifamily units where at least 50% of the residents meet the income requirements
- Electric home rebates may not be combined with any other Federal grant or rebate (but may be used in tandem with the 25C tax credit)
- Government, commercial or non-profit entities that receive the rebate and install insulation in a qualifying low-income home may receive an additional \$500 for installation

The national median household income in 2021 was \$79,900. In this example, a household making \$64,000 or less falls below the 80 percent threshold and are eligible for rebates covering 100 percent of project expenses (up to \$1,600)

IRA incentives for building energy efficiency: Assistance for latest and zero energy code adoption (Section 50131)

- \$330 million in grants to assist states and local governments adopt energy codes that meet or exceed the 2021 IECC / ASHRA 90.1-2019
- \$670 million in grants to states and local government zero energy residential and commercial codes
- Funded programs must include active training and enforcement programs and measurement of compliance rates each year

IRA incentives for building energy efficiency: Enhanced use of Defense Production Act (Section 30001)

- \$500 million in funding available through September 30, 2024, to carry out the Defense Production Act

In June 2022, President invoked the Defense Production Act for five technologies deemed critical to addressing climate change: insulation, solar panels, heat pumps, fuel cells and grid transformers

IRA incentives for manufacturing and product decarbonization: Section 48C advanced energy project credit (Section 13501)

- \$10 billion for DOE to award tax credits to entities that undertake qualifying improvements to lower facility carbon emissions. Of that amount, \$4 billion is dedicated to projects in traditional energy communities (i.e., coal country)
- Eligible applicants include an industrial or manufacturing facility producing energy conservation technologies
- Eligible projects must reequip, expand or establish an industrial or manufacturing facility with equipment designed to reduce greenhouse gas emissions by 20 percent through the installation of (1) low or zero carbon process heat systems, (2) energy efficiency and a reduction in waste from industrial processes, or (3) any other technology designed to reduce greenhouse gas emissions
- Base credit amount is 6%, but is expanded to 30% if prevailing wage and apprenticeship requirements for project construction are met
- Applicants accepting the credit have two years to place the project in service
- Credit takes effect January 1, 2023

IRA incentives for manufacturing and product decarbonization: Advanced industrial facility deployment program (Section 50161)

- \$5.8 billion available for grants through. DOE's Office of Clean Energy Demonstrations
- Grants to manufacturers that install advanced material technologies in existing facilities to achieve GHG emissions reductions
- Priority given to projects that achieve higher levels of GHG emission reductions and benefit surrounding communities
- Eligible facilities include manufacturing engaged in intensive industrial processes
- Qualifying “advanced industrial technology” means equipment designed to accelerate GHG emissions reductions progressing to net-zero at an eligible facility
- Grantees must bear at least 50% of project cost

IRA incentives for manufacturing and product decarbonization: Environmental Product Declaration Assistance (Section 60112)

- \$250 million through September 30, 2031, for EPA to undertake work related to the development, enhanced standardization and transparency, and reporting criteria for environmental product declarations (EPDs)
- EPDs must include GHG measurements associated with all relevant stages of production, use and disposal of a product
- EPA may provide grants and technical assistance to businesses that manufacture construction materials to develop environmental product declarations

IRA incentives for manufacturing and product decarbonization: Low-embodied carbon labeling for construction materials (Section 60116)

- \$100 million through September 30, 2026, for EPA to develop a program to identify and label building materials used in federal buildings and transportation projects that have low carbon emissions
- Evaluation based on EPD's evaluating all stages of manufacture, use and disposal and compared to industry averages of similar products

IRA incentives for manufacturing and product decarbonization: Use of low carbon materials in federal buildings (Section 60503)

- \$2.15 billion through September 30, 2026, for GSA to purchase building materials that have substantially lower levels of embodied carbon compared to industry averages of similar products