

Empowering States for Emission-Free Communities: Unleashing IRA's Building Initiatives

As building demand and construction continues to grow across the United States, critical changes must be made to the building sector to address the current and future building stock. The two central strategies for curbing greenhouse gas emissions in the buildings sector are energy efficiency and electrification. While electrifying the electricity sector is critical for long-term emissions reductions, reducing the current energy demand of buildings and ensuring they are energy efficient is still an integral reduction strategy. At the same time, involving and prioritizing underserved communities and making retrofits and upgrades affordable for all, is vital for achieving justice and practicing equity.

Electrifying end-use technologies like home heating, cooling, and water heating is vital to reducing the carbon footprint of buildings. States must recognize that building energy efficiency and decarbonization needs to occur for new and existing residential, commercial, governmental, and other buildings. Throughout this transition, ensuring an equitable distribution of IRA funds within the state is necessary, especially as new technologies can be inaccessible and expensive for low- to moderate-income (LMI) communities.

Altogether, these policies amounting to over \$11 billion, could drive emissions down by 20% - 38% by 2030 from 2005 levels (Emissions and energy impacts of the Inflation Reduction Act). This funding estimate excludes cross-cutting measures such as the Greenhouse Gas Reduction Fund (GGRF).

Highlights

▶ Through education and engagement, states can help homeowners take advantage of grants to improve energy efficiency and electrification of homes

▶ Contractors will need to educate and work with homeowners to utilize the tax credits available for specific technologies (i.e. heat pumps, others) up to 30% the cost of the improvement

▶ States can help promote all-electric and highly efficient home construction codes to builders of more electrified homes that are eligible for specific tax credits

Implementation Opportunities in the Inflation Reduction Act

1. By drawing funding from multiple avenues (new buildings credits, direct to homeowners tax credits, state rebate programs), state and local governments can drive building decarbonization through increasing demand
2. Educating contractors and builders on high efficiency and all-electric technologies will be important for turning over inefficient appliances and improving energy efficiency
3. Designing simple, fast, effective rebate programs for energy efficiency improvements and appliance rebates will be critical as residents seek to be part of the building decarbonization solution (Ex: Clean Heating & Cooling Incentives | Rhode Island Office of Energy Resources)
4. States and counties should consider what role building codes have in driving demand for electric appliances and building energy efficiency improvements (Ex. Energy Code Board | Colorado Energy Office)
5. Builders, government officials, and contractors all have a role in promoting energy efficiency and electrification of homes and educating residents on the many economic and health benefits of such upgrades
6. States can help deliver cost-savings to both homeowners and renters, especially for the latter, who may not know the rebates available to them through IRA's home electrification and appliance rebates
8. Considering the factors that affect heat pump adoption, specifically for LMI communities is critical for program design (Shen, 2023)
7. States and municipalities can support worker training programs as many contractors and tradespeople will be needed for decarbonizing buildings, aided by contractor training grants through Section 50123 of the IRA

Key Provisions of the Inflation Reduction Act

Provision

Challenges

Opportunities



Energy Efficiency Home Improvement Tax Credit (25C)

Homeowners should get direct access to funds for energy efficiency upgrades

States, local officials, and utilities can educate residents of this tax credit which covers 30% of the cost of improvements, energy audits, and high-efficiency appliances



Home Energy Performance-Based Whole House Rebates (sec. 50121)

Appropriate home improvements for energy efficiency are expensive and dependent on local conditions

States can develop rebate programs tailored to the needs of local communities. States can make insulation updates, HVAC upgrades, and other energy saving measures affordable and accessible to all - increasing rebates for low income communities could help those who lack funding with inefficient homes



High-Efficiency Electric Home Rebate (sec. 50122)

Electrified appliances can be unaffordable for many, and states have a role in driving demand

With funding for technical assistance and administration, states can focus on designing programs that drive demand for electric appliances and provide financial assistance needed for adoption of these electrified technologies



New Energy Efficient Homes Credit (45L)

Builders need incentives to construct single and multifamily housing that is highly efficient

Government officials can educate builders on this tax credit which offers up to \$5000 for new homes and \$1000 per unit for multifamily homes which meet specific requirements for energy efficiency



Energy Efficient Commercial Buildings Deduction (sec. 13303)

Commercial buildings must be upgraded faster than normal retrofit timelines

States and local officials can prioritize improved labor standards by meeting wage and apprenticeship requirements for this tax deduction which increases 5x for meeting such requirements



Affordable Housing Provisions for Climate Resilience, Water and Energy Efficiency (sec. 30002)

Affordable housing owners may not be financially incentivized to improve energy and water efficiency

States, local governments, and nonprofits should engage affordable housing owners and residents about improving air quality, water efficiency, and energy efficiency as direct loans and competitive grants are available from HUD (nearly \$1 billion)

Authors: Bradley Phelps, Sarah Dodds, Shannon Kennedy, Camryn Dahl, Jocelyn Lewis-Johnson

Additional Information

Building A Clean Energy Economy. The White House. January 2023, Version 2. Accessed 08/2023. [Inflation-Reduction-Act-Guidebook.pdf \(whitehouse.gov\)](#).

A User Guide to the Inflation Reduction Act. BlueGreen Alliance. Accessed 08/2023. [BGA-IRA-User-Guide-Print-FINAL-Web.pdf \(bluegreenalliance.org\)](#).

Inflation Reduction Act of 2022. [Text - H.R.5376 - 117th Congress \(2021-2022\); Inflation Reduction Act of 2022 | Congress.gov | Library of Congress](#)

Bistline, John, et al. "Emissions and energy impacts of the Inflation Reduction Act." *Science* 380.6652 (2023): 1324-1327. [Emissions and energy impacts of the Inflation Reduction Act | Science](#)

Sources of Greenhouse Gas Emissions. EPA. 2023. [Sources of Greenhouse Gas Emissions | US EPA](#)

Shen, Xingchi, What matters for the racial disparity in clean heating technology adoption? Evidence from U.S. heat pumps (August 2, 2023). USAEE Working Paper No. 23-597, Available at SSRN: <https://ssrn.com/abstract=4530147> or <http://dx.doi.org/10.2139/ssrn.4530147>

Glassman, J. et al. Breaking Down the Inflation Reduction Act. Rocky Mountain Institute. Updated July 2023. [Breaking Down the Inflation Reduction Act. Program by Program. Incentive by Incentive. - RMI](#)