

MAKING BUILDINGS BETTER

BUILDING PROVISIONS IN THE BUILD BACK BETTER ACT
(HOUSE VERSION)

SARA BALDWIN, HADLEY TALLACKSON

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BUILDING ELECTRIFICATION AND ENERGY EFFICIENCY INCENTIVES WILL REDUCE CONSUMER COSTS AND SPUR MARKET TRANSFORMATION

In the United States, nearly 90 million residential housing units and 4 million commercial buildings burn fossil fuels for space and water heating and cooking, contributing 13 percent of U.S. greenhouse gas (GHG) emissions. More than half of new homes are built with gas heating or appliances, locking in decades of climate-altering emissions.

But “electrification” – or efforts to eliminate fossil fuels from buildings and switch to clean electricity – can decarbonize the building sector when combined with energy efficiency, putting the U.S. on the path to a stable climate future while removing fossil fuel appliances that harm human health from our buildings.

The House version of the Build Back Better Act (BBBA) includes \$12.5 billion for building electrification and energy efficiency incentives to decarbonize the building sector, improve public health, and reduce consumer bills.

Additional funding for an array of programs, loans, and grants will improve building safety; increase climate resilience; and increase access to affordable, healthy homes and schools in all communities including underserved, tribal, and rural communities.

\$6.25 billion for High Efficiency Electric Home Rebate Program

The BBBA proposes \$2.45 billion for a High Efficiency Electric Home Rebate Program for qualified electrification projects, including \$4 million for community and consumer education and outreach, and an additional \$3.8 billion for projects in low- and middle-income (LMI) homes, multifamily housing, tribal communities, and underserved communities.

Electric Appliances and Equipment*	Rebates for Single-Family Homes (≤ 4 units)	Rebates for LMI Households, Multifamily Buildings, and Projects in Underserved and Tribal Communities
Heat Pump Water Heater	\$1,250	\$1,750
Heat Pump HVAC**	\$1,500 - \$3,000	\$3,000 - \$6,000
Heat Pump HVAC** cold climate criteria	\$2,000 - \$4,000	\$3,500 - \$7,000
Cooktop (including induction), Oven, and Heat Pump Clothes Dryer	\$600	\$840
Electric Load or Service Panel Upgrade	\$3,000	\$4,000
Insulation and Air Sealing	\$800	\$1,600
Maximum Per Home	\$10,000	\$14,000
Additional qualified contractor incentives***	\$100 - \$250	\$200 - \$500

* Rebates are available for replacement of fossil fuel or electric resistance equipment with new electric equipment. Rebates listed are maximum amounts and are also available for new construction. Owners of renter-occupied multifamily housing taking the rebate must provide commensurate benefits of future energy savings to renters.

**Varies based on HVAC BTU per hour rating.

*** Higher amount for contractors that meet union labor and prevailing wage requirements.

\$5.89 billion for Home Owner Managing Energy Savings (HOMES) Rebates

This funding will support grants to states to establish HOMES energy efficiency rebate programs that maximize GHG emissions reductions along with household energy and cost savings. The rebates are available for home energy efficiency retrofit measures designed to achieve a certain percentage of energy saved. They can be transferred to a contractor, and contractors can receive an additional \$200 for each home efficiency retrofit project located in an underserved

community.¹ The HOMES rebate incentives can be combined with the electrification rebates below.

Percentage of Modeled Energy Savings	Rebates for Single-Family Homes (≤ 4 units)	Rebates for Low- and Moderate-Income (LMI) Households	Rebates for Multifamily Buildings (5+ units)
20%	The lesser of \$2,000 or 50% of project costs	The lesser of \$4,000 or 80% of project costs	\$2,000/dwelling unit up to \$200,000 of project costs
35%	The lesser of \$4,000 or 50% of projects costs	The lesser of \$8,000 or 80% of projects costs	\$2,000/dwelling unit up to \$400,000 of project costs

\$360 million for Home Energy Performance-Based Contractor Training Grants

This funding will support grants to states and non-profit organizations that develop and implement accredited programs providing training courses (on-line and in-person) for workers that conduct home energy efficiency upgrade construction services, energy efficiency retrofits, and residential electrification. This funding will be key to overcoming market inertia and growing a highly-qualified workforce for the energy efficient, electrified, and decarbonized building sector.

Creating and Preserving Affordable, Equitable, and Resilient Housing and Communities

The BBBA also provides critical investments to spur more widespread adoption of energy and water efficiency, building safety measures, renewable energy, and electrification for LMI households, schools, and tribal and rural communities. These programs are complementary to the incentive programs listed above and will increase access to affordable housing, energy savings, and improved public health for lower-income and underserved communities, in addition to job creation, taxpayer savings, and greater community resilience. The BBBA provides:

- \$65 billion for public housing upgrades that improve water and energy efficiency and other housing revitalization measures
- \$1.77 billion for direct grants and loans for improvements to affordable housing, including projects that increase water efficiency, improve indoor air quality, reduce emissions, increase climate resilience, and enable electrification

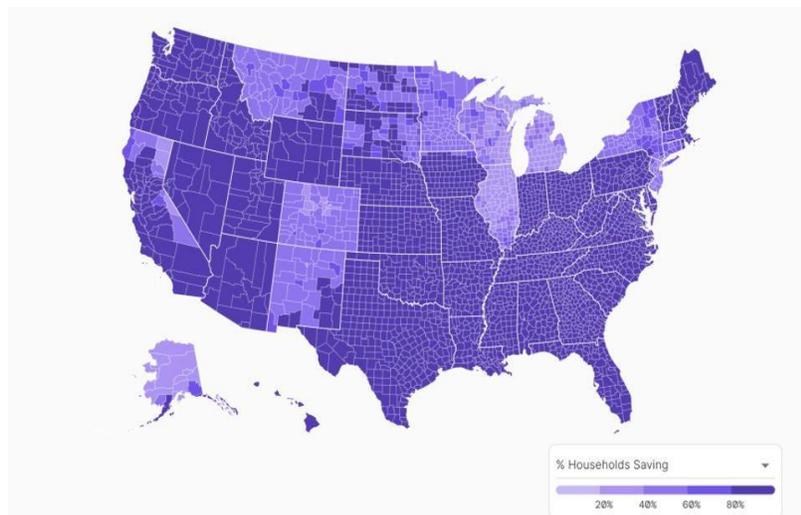
¹ This bill defines an underserved community as a community located in a zip code that includes one or more census tracts identified as a low-income community, a community of racial or ethnic minority concentration, or any other community disproportionately vulnerable to any combination of economic, social, and environmental stressors.

- \$1.8 billion for loans and grants for rural rental housing projects (including new construction) that improve water and energy efficiency, remove health and safety hazards, and preserve affordable housing for low-income residents and farm laborers
- \$500 million for improvements to public or non-profit buildings, including energy efficiency, renewable energy, and other measures that make critical facilities able to withstand and quickly recover from energy supply disruption
- \$300 million for states and local communities to adopt updated energy codes and zero-energy codes for residential and commercial buildings
- \$294 million for home electrification and renewable energy access for tribal communities
- \$37.5 million for school building upgrades plus \$12.5 million for technical assistance to schools located in low-income and disadvantaged communities to improve indoor air quality and reduce air pollution and GHG emissions.

Although more investment and additional policy action is needed to fully decarbonize America’s existing and future building stock and ensure healthy buildings for all people, the BBBA provisions combined with complementary funding in the Infrastructure Investment and Jobs Act, are foundational for longer-term building sector transformation.

THE BUILD BACK BETTER ACT WILL YIELD CONSUMER SAVINGS, HEALTHIER HOMES, INCREASED RESILIENCE TO PRICE VOLATILITY, AND JOBS

Increasing fuel prices make this the time to start transitioning all U.S. homes and buildings from fossil gas appliances to efficient, all-electric alternatives. But this transition must include lower-income individuals and renters, who compose [36 percent](#) of the U.S. housing market, ensuring they can reap the health and savings benefits of efficient electric appliances. In 2020, [37.2 million people were living in poverty](#) and [25 percent of Americans](#) experienced a



Map showing household energy bill savings from switching to efficient electrified furnaces and water heaters instead of current machines. Source: Rewiring America, June 2021.

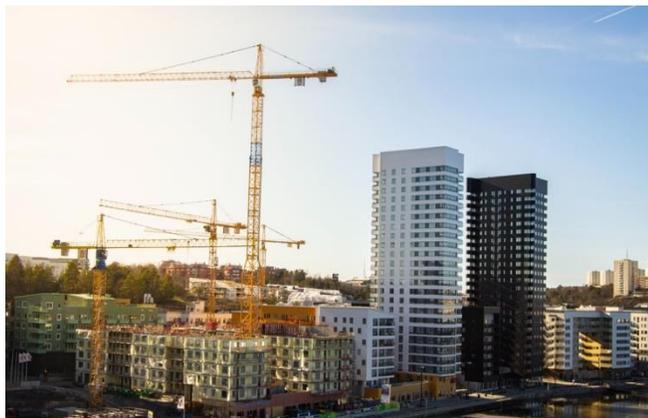
high energy burden, with [Black and Hispanic households](#) facing disproportionately high burdens compared to white households (a trend further exacerbated [by the pandemic](#)).

Well-designed tax incentives have been successful at spurring market transformation and innovation, reducing upfront costs for consumers, and increasing availability of affordable technologies. The combination of incentives for energy efficiency measures and electrification incentives in the BBBA will protect more American households from energy insecurity. [RMI research](#) shows that all-electric new homes *reduce* costs and harmful emissions. For example, an all-electric home in New York City creates \$6,800 in household savings over 15 years compared to a fossil-fueled home. [Rewiring America research](#) found 85 percent of U.S. households would save money on their monthly energy bills if they used modern all-electric equipment, with LMI households saving up to \$493 per year on average.

Beyond energy bill savings and protection from rising and volatile fuel costs, energy efficiency combined with electrification can significantly reduce [toxic air pollution in homes](#) and cut outdoor air pollution [damaging to human health](#)—an additional benefit for all households, especially those most adversely impacted by pollution. Finally, building and retrofitting homes and buildings across the country will require hundreds of thousands of skilled workers. According to one estimate, electrification would create more than 460,000 installation jobs, 80,000 manufacturing jobs, and 800,000 indirect and induced jobs in the U.S.

INVESTMENTS IN MODERN BUILDING CODE ADOPTION WILL REDUCE EMISSIONS, INCREASE COMMUNITY RESILIENCE, AND SAVE TAXPAYER DOLLARS

Smart building codes for new construction are the easiest, most cost-effective way to mitigate GHG emissions and other pollutants from the built environment, while also delivering lasting savings to consumers. The BBBA's dedicated funding for state and local governments working to adopt zero-energy building codes would benefit the 65 percent of counties, cities, and towns across the U.S. today that have yet to adopt updated, climate-relevant building codes. Jurisdictions already leading the way on smart building codes would benefit from additional resources and technical assistance.



Credit: Jocke Wilcan, Unsplash.com

According to the Federal Emergency Management Agency (FEMA), strong building codes are one of the most cost-effective ways to safeguard communities against natural disasters and help people get back on their feet faster in the wake of disasters. FEMA’s research found that cities and counties with modern building codes would avoid at least \$32 billion in losses from natural disasters.

To achieve net-zero GHGs by 2050, all *new* buildings must be all-electric by 2030. Early adoption of zero-energy building codes puts us on track to meet this goal, while also minimizing the problem of slow [capital stock turnover](#). Since buildings endure for decades, [smart building codes](#) that prioritize resiliency, efficiency, climate, and clean air can also avoid the need for higher-cost retrofits down the line.