

April 8, 2024

The Honorable Adrienne Todman  
Acting Secretary  
Department of Housing and Urban Development  
451 7th Street, SW  
Washington, DC 20410

The Honorable Thomas Vilsack  
Secretary  
United States Department of Agriculture  
140 Independence Ave SW  
Washington, DC 20250

Dear Acting Secretary Todman, Secretary Vilsack,

We write in strong support of finalizing the HUD-USDA determination regarding energy efficiency building codes, and to clarify the record on some substantive issues that have been raised by parties opposing the adoption of the relevant codes. It is well documented that the modern, up-to-date building codes currently being considered by your agencies - IECC 2021 and ASHRAE 90.1 2019 - will lower housing costs for homebuyers. The Preliminary Determination projects that the proposed updates will save residents of single-family homes \$752 every year in energy costs, resulting in lifetime net savings ranging from \$7,536 to \$46,836, depending on the region. **A typical single-family borrower will see positive cash flow within the second year of owning a home built to those standards.**

Conservative, independent estimates of the initial cost of the efficiency measures are under \$7,000 for all climate zones and home types. Not only will any construction and financing costs be recouped quickly, but those initial costs are much lower than the long-term costs of repairs and retrofits that will be necessary over the next few decades if those standards are not met. In addition, increased home resiliency from meeting those codes reduces energy poverty and provides benefits to many parties during and following disasters. New funding made available from the Inflation Reduction Act of 2022 (IRA) also may contribute to further decreasing up-front costs.

According to the U.S. Energy Information Administration, over one quarter of U.S. households struggle to meet their energy needs, underscoring the urgent need for action.<sup>1</sup> The risk of utility service termination exacerbates housing instability, particularly for low-income families.<sup>2</sup> Neglecting to address high energy costs will perpetuate a cycle of financial strain that forces families to make impossible choices between basic necessities like food, medicine, and maintaining a habitable living environment. According to the Department of Energy, low-income

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<sup>1</sup> U.S. Energy Information Administration, <https://www.eia.gov/todayinenergy/detail.php?id=51979>

<sup>2</sup> U.S. Energy Information Administration, <https://www.eia.gov/todayinenergy/detail.php?id=51979>

families spend a substantial portion of their annual income—8.6 percent—on electricity and heating, compared to just 3 percent for higher-income households.<sup>3</sup> This disparity is exacerbated by racial inequalities, with 52 percent of Black households and 47 percent of Latino households reporting instances of energy insecurity, compared to 23 percent of white households.<sup>4</sup>

By reducing energy costs, the proposed updates increase housing affordability. Homes built to higher energy efficiency standards require less expenditure on utilities, making them more affordable to own and operate over their lifespan. This is particularly beneficial for low-income households, who spend a disproportionate amount of their income on energy bills. Furthermore, delaying energy efficiency upgrades will only lead to higher retrofit costs in the future.<sup>5</sup> It is unfair to expect lower-income homeowners and renters to bear these costs.

Opponents of the Determination allege, based on anecdotal information, that the Department of Energy's Pacific Northwest National Laboratory (PNNL) has underestimated the initial costs of meeting those standards. However, robust analytical evidence, including that done by PNNL for your agencies, refutes the anecdotal claims with data-based analysis. The PNNL analysis found added costs of \$2,813-\$6,796 for single family houses and \$1,686-\$3,647 for low-rise multifamily units for the 2009 IECC to 2021 IECC, and much less for high-rise units. **A third party report that examined the methodology and costs cited by opponents found that the weighted national average incremental cost of the latest code changes from 2018 to 2021 ranges from \$2,516 to \$4,261,<sup>6</sup> in line with the findings of PNNL.** Further, in climate zones 2 and 3, where the majority of residential new construction is taking place, cost increases may be as low as \$1,534 to \$2,236. These estimates are for the "prescriptive" pathway to meeting the code; builders often can further lower costs by using the great flexibility offered in other pathways.

Importantly, any up-front costs for building to updated energy efficiency codes are counterbalanced by the considerable long-term savings for homeowners and tenants. Studies have consistently shown that investments in energy-efficient measures yield substantial returns over the lifespan of a building.<sup>7</sup> For new single-family homeowners, based on the median housing price, the slight increase in the upfront loan cost (\$423) —is a small price to pay for the more significant annual savings and enhanced long-term affordability and climate resiliency that energy-efficient homes offer.

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<sup>3</sup> U.S. Department of Energy, <https://www.energy.gov/scep/slsc/low-income-community-energy-solutions>

<sup>4</sup> Center on Global Energy Policy at Columbia University, School of International and Public Affairs, <https://www.energypolicy.columbia.edu/publications/energy-insecurity-in-the-united-states/#:~:text=Compared%20to%2023%20percent%20of,percent%20of%20non%2DHispanic%20households.&text=Housing%20Characteristics.,-Renters%20were%20twice>

<sup>5</sup> American Council for an Energy-Efficient Economy, <https://www.aceee.org/blog/2019/05/existing-homes-energy-efficiency>

<sup>6</sup> Institute for Market Transformation, [Cost Effectiveness of the Residential Provisions of the 2021 IECC \(imt.org\)](https://www.imt.org/Cost-Effectiveness-of-the-Residential-Provisions-of-the-2021-IECC)

<sup>7</sup> U.S. Department of Energy, <https://www.energy.gov/energysaver/why-energy-efficiency-upgrades>

The Regulatory Impact Analysis (table below) shows that the time to positive cash flow is just over one year; in other words, households are saving money almost immediately.<sup>8</sup> In the case of larger multifamily housing, that positive cash flow is essentially immediately.

**Figure 17. Cash Flow Analysis for IECC Updates**  
**Single Family Home**  
**(Combining IECC Energy Reduction and Cost Estimates with FHA Loan Parameters)**

	2009 – 2021 IECC Update		2018 – 2021 IECC Update	
	3%	7%	3%	7%
Price	5,555	5,555	2,372	2,372
Loan	5,277	5,277	2,253	2,253
Upfront Loan Cost	423	423	181	181
Mortgage Payment	261	261	112	112
First Year Periodic Cost	387	387	165	165
First Year Periodic Benefit	752	752	210	210
PV Benefits 30 Years	15,182	9,985	4,240	2,788
PV Costs 30 years	7,944	5,414	3,392	2,312
<b>Cash Flow of Mortgagor</b>				
First Year Cash Flow	-58	-58	-136	-136
Second Year Cash Flow	366	342	45	45

In addition, new federal funding may lower upfront costs. The Preliminary Determination’s analysis does not incorporate sizable new tax credits and home efficiency rebates for builders and residents made available through the IRA<sup>9</sup> that may substantially reduce the estimated upfront costs to meet and surpass the proposed efficiency requirements. Furthermore, any consideration of the impact on home affordability must also account for the increased resale value and consumer utility of an efficient home.<sup>10</sup> By sharing construction cost claims over housing affordability and environmental benefits, opponents of the determination risk perpetuating long-term energy insecurity and financial strain for homeowners and tenants alike.

These codes are designed to cost-effectively provide a minimum level of energy efficiency consistent with technological progress in building science. Additionally, the continuing adoption of IECC 2021 in numerous states, including Connecticut, Virginia, New Jersey, and Illinois, demonstrates the achievability of meeting the new requirements and the widespread support for sustainable building practices.<sup>11</sup> Seven other states, Massachusetts, Nevada, Minnesota, Maine, Michigan, New Mexico, and Pennsylvania, are in the process of adopting a version of the 2021 IECC.<sup>12</sup> The HUD-USDA determination would ensure that prospective homeowners across all states have the opportunity to invest in energy efficient homes that they can afford to live in for many years to come.

<sup>8</sup> U.S. Department of Housing and Urban Development, [6271-N-01-HUD-USDA-Energy-Codes-Preliminary-Determination-RIA-2023-03-24.pdf](https://www.hud.gov/sites/dfiles/docs/energy/6271-N-01-HUD-USDA-Energy-Codes-Preliminary-Determination-RIA-2023-03-24.pdf)

<sup>9</sup> U.S. Congress, <https://www.congress.gov/bills/117/congress/house/bills/5376>

<sup>10</sup> ENERGY STAR, U.S. Environmental Protection Agency, <https://www.energystar.gov/newhomes/features-benefits/better-resale-value#:~:text=Over%20the%20past%20decade%2C%20a,including%20ENERGY%20STAR%20certified%20homes.>

<sup>11</sup> International Code Council, <https://www.iccsafe.org/advocacy/iecc-adoption/>

<sup>12</sup> Institute for Market Transformation, <https://imt.org/news/energy-codes-forecast-2024-money-politics-and-a-new-model-code/>

**We urge HUD and USDA to prioritize finalizing the proposed updates to building energy codes.** By prioritizing the well-being of marginalized communities, promoting long-term affordability, and fostering sustainable housing practices, we can create a more just, equitable, and energy-efficient housing landscape.

Thank you for your attention to this important matter. We look forward to your favorable consideration.

Sincerely,

Alliance to Save Energy  
American Council for an Energy-Efficient Economy  
Americans for Financial Reform Education Fund  
ASHRAE  
Building Potential (formerly NEEC)  
Center for Responsible Lending  
Consumer Action  
Dandelion Energy  
Environmental and Energy Study Institute  
GeoExchange  
Housing Assistance Council  
Institute for Market Transformation  
Lincoln Institute of Land Policy  
Long Island Housing Services, Inc.  
National Association of Energy Service Companies  
National Community Stabilization Trust (NCST)  
National Consumer Law Center (on behalf of its low-income clients))  
National Electrical Manufacturers Association  
Natural Resources Defense Council  
New Buildings Institute  
North American Insulation Manufacturers Association  
Northeast Energy Efficiency and Electrification Council  
NY-GEO  
RMI  
Sierra Club  
The Natural Resources Defense Council  
U.S. Green Building Council  
Wooley Energy & Environment  
ZeroCarbonMA