May 22, 2024

The Honorable Jeff Duncan
Chairman
Subcommittee on Energy, Climate, and Grid Security
U.S. House of Representatives
Washington, D.C. 20515

The Honorable Diana DeGette
Ranking Member
Subcommittee on Energy, Climate, and Grid Security
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Duncan and Ranking Member DeGette:

As the Subcommittee on Energy, Climate, and Grid Security considers the value of sustainable building policies, we write to call your attention to the well-documented return on investment that the adoption and effective implementation of building energy codes provides.

Three National Laboratories recently found that during prolonged weather-induced power outages, coupled with extreme heat or cold, modern energy codes can reduce deaths due to extreme heat by 80% and extreme cold by 30%.[1] Benefit-cost ratios for these resilience benefits ranged from 2:1 to 6:1. These benefits are additive to the energy bill savings energy efficiency and energy codes provide and will only increase in impact with extreme heat events expected to more than double this century.[2] More than two-thirds of all Americans were under heat alerts in 2023.[3]

Contemporary research continues to find that modern health- and safety-focused building codes do not negatively impact housing affordability[4,5,6]—in fact, no peer-reviewed research has found otherwise.[7] Although in theory additive code requirements could increase costs, in practice other price signals, including interest rates and land costs, have proven determinative.[8] To illustrate, despite extensive code advancements since 2000 and a 67% increase in new home square footage since the 1960s, the median sales prices of new homes and existing homes were separated by less than 1.7% last summer.[9]

Energy codes have been shown to promote housing affordability. In updating its code requirements for federally assisted housing, the U.S. Department of Housing and Urban Development and U.S. Department of Agriculture found that current energy codes for single-family homes create a positive

[1] DOE, Enhancing Resilience in Buildings Through Energy Efficiency (July 2023).
[2] U.S. Global Change Research Program, *Fifth National Climate Assessment* (2023).
[3] Centers for Disease Control and Prevention, *Press Release: Heat Protection Measures to Prevent Heat-Related Illnesses* (Apr. 22, 2024).
[4] Simmons, K. & Kovacs, P., *Real Estate Market Response to Enhanced Building Codes in Moore, OK*, Investigative Journal of Risk Reduction (Mar. 2018) (stronger building code had no effect on the price per square foot or home sales).
[5] NEHRP Consultants Joint Venture, *Cost Analyses and Benefit Studies for Earthquake-Resistant Construction in Memphis, Tennessee*, NIST GCR 14-917-26 (2013) (adopting stronger codes would add less than 1-percent to the construction while reducing annualized loss—in terms of repair cost, collapse probability, and fatalities—by approximately 50-percent).
[6] Porter, K., *Resilience-related building-code changes don't affect affordability*, SPA Risk LLC Working Paper Series 2019-01 (2019) (over the nearly 30-year period studied, codes only increased a home's purchase price by around a half a percentage point in earthquake country or in an area affected by riverine flood).
[7] Claims that codes have higher upfront costs and more gradual payback periods are commonly rooted in non-scientific surveys lacking standardized methodology, response verification, representative and robust respondent pools, or statistical rigor.
[8] Gyourko, J. & Molloy, R., *Regulation and Housing Supply*, Handbook of Regional and Urban Economics, Volume 5B Chapter 19 (2015) (Finding land use regulations, not codes, to be a significant contributor to home costs, as construction costs – including labor and materials – were flat from 1980 to 2013, a period during which building codes were widely adopted and updated).
[9] Matt Phillips, *Median selling price of U.S. single-family homes*, Axios (July 21, 2023).

cash flow in less than two years, with net savings for households reaching nearly $400 dollars annually and more than $15,000 dollars over the span of a typical mortgage.[10]

The U.S. Department of Energy is currently providing grants to support the adoption and implementation of current energy codes to interested communities following enactment of the Inflation Reduction Act of 2022.[11] Like similar investments Congress has made on a bipartisan basis,[12] Congress directed the Department to make grants available given the benefits energy codes provide for housing affordability and community resilience, and because the lack of resources is a key impediment to code updates and implementation for state and local governments. Built into the model energy codes these grants support, are maps that adjust code provisions to account for regional variations, as well as prescriptive and performance pathways that provide flexibility in code compliance.

We welcome the Subcommittee's review of sustainable construction investments and encourage continued bipartisan support for the development, adoption, and effective implementation of building energy codes and standards.

Sincerely,

AEC Science & Technology, LLC
Alliance to Save Energy
American Council for an Energy-Efficient Economy
American Institute of Architects
American Society of Civil Engineers
American Society of Interior Designers
Americans for Financial Reform Education Fund
ASHRAE
Building Performance Association
California Efficiency + Demand Management Council
Coalition for Sustainable Roofing
Concrete Foundations Association
Copper Development Association
E4theFuture
Earth Advantage
EPDM Roofing Association
Housing Assistance Council
Institute for Market Transformation
International Code Council
International Institute of Building Enclosure Consultants
Midwest Energy Efficiency Alliance
National Association of Electrical Distributors
National Association of Energy Service Companies
National Environmental Health Association
National Insulation Association
National Electrical Manufacturers Association
National Society of Professional Engineers
NEEEC
New Buildings Institute
Polyisocyanurate Insulation Manufacturers Association
Rewiring America
Sheet Metal and Air Conditioning Contractors National Association
Single Ply Roofing Industry
Southeast Energy Efficiency Alliance
Structural Insulated Panel Association
U.S. Green Building Council
UL Solutions
Union of Concerned Scientists

[10] U.S. Dept. of Housing and Urban Development and U.S. Dept. of Agriculture, *Final Determination: Adoption of Energy Efficiency Standards for New Construction of HUD- and USDA-Financed Housing*, 89 Fed. Reg. 33,112 (Apr. 26, 2024).
[11] *See* Pub. Law. 117-169 (2022).
[12] *See* Pub. Law 117-58 (2021).