ENERGY & COMMERCE
CHAIR RODGERS

MEMORANDUM May 20, 2024

TO: Members of the Subcommittee on Energy, Climate, and Grid Security

FROM: Committee Majority Staff

RE: Hearing entitled "Green Building Policies: Jeopardizing the American Dream of Homeownership"

I. INTRODUCTION

On Wednesday, May 22, 2024, at 2:00 p.m. (ET) in 2123 Rayburn House Office Building, the Subcommittee on Energy, Climate, and Grid Security will hold a hearing titled "Green Building Policies: Jeopardizing the American Dream of Homeownership." The hearing will examine the impact of green building policies on housing affordability, including building energy codes, performance standards, and fossil fuel-use restrictions.

II. WITNESSES

- **Mr. Phil Bonnell**, President, PABCO Building Products;
- **Mr. Shawn Woods**, President, Ashlar Homes LLC, (on behalf of National Association of Home Builders);
- **Mr. Mike Casper,** President and CEO, Jo-Carroll Energy Inc.(on behalf of American Public Gas Association); and,
- **Mr. Rob Howard,** President of Howard Building Science.

III. BACKGROUND

Throughout the United States, both residential and commercial buildings are subject to a wide range of laws and regulations for their design, construction, materials, and energy use. These requirements may take the form of building codes, building performance standards, efficiency requirements, and fuel-use requirements. Generally, building codes are adopted and enforced by state and local jurisdictions. The federal government is responsible for the adoption and enforcement of building codes for federal buildings, military buildings, and manufactured housing.[1] The federal government encourages the adoption of building polices and building energy codes by state and local jurisdictions in several ways, including through the development of prototype building codes and building policies, by leveraging federal grants and technical assistance, and by mandating energy efficiency standards for federally financed housing.

---

[1] *See CRS Reports and Analysis,* Building Codes, Standards, and Regulations: Frequently Asked Questions (November 22, 2023) for additional background and considerations for Congress.

Commercial and Residential Building Energy Codes

The most widely adopted building energy codes are developed by standards setting organizations through a consensus-based process before they are considered by state and local jurisdictions. The International Code Council (ICC) and the American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) are private-sector standards developing organizations that develop model energy codes for residential and commercial buildings. These organizations receive funding through membership dues, publications sales, and certification services.

While the federal government and some states participate in the code setting process, both ICC and ASHRAE maintain autonomy to develop and update model building codes. The International Energy Conservation Code (IECC) is a widely adopted building code created by ICC in 2000 to establish minimum design and construction requirements for residential and commercial buildings. The IECC code is updated every three years, with the most recent code update published in 2021. The ASHRAE 90.1 code is a widely adopted building code for larger multifamily buildings. The most recent version is ASHRAE 90.1-2022, published in January 2023.[2]

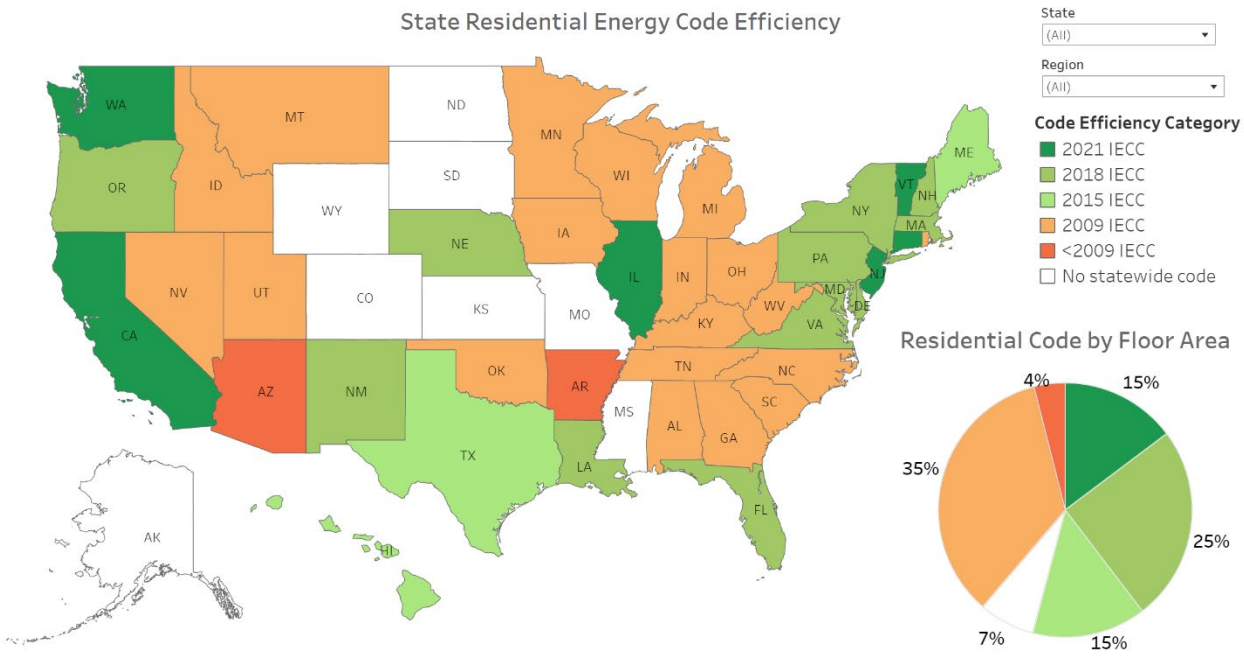
Building Policy Adoption by States and Local Jurisdictions

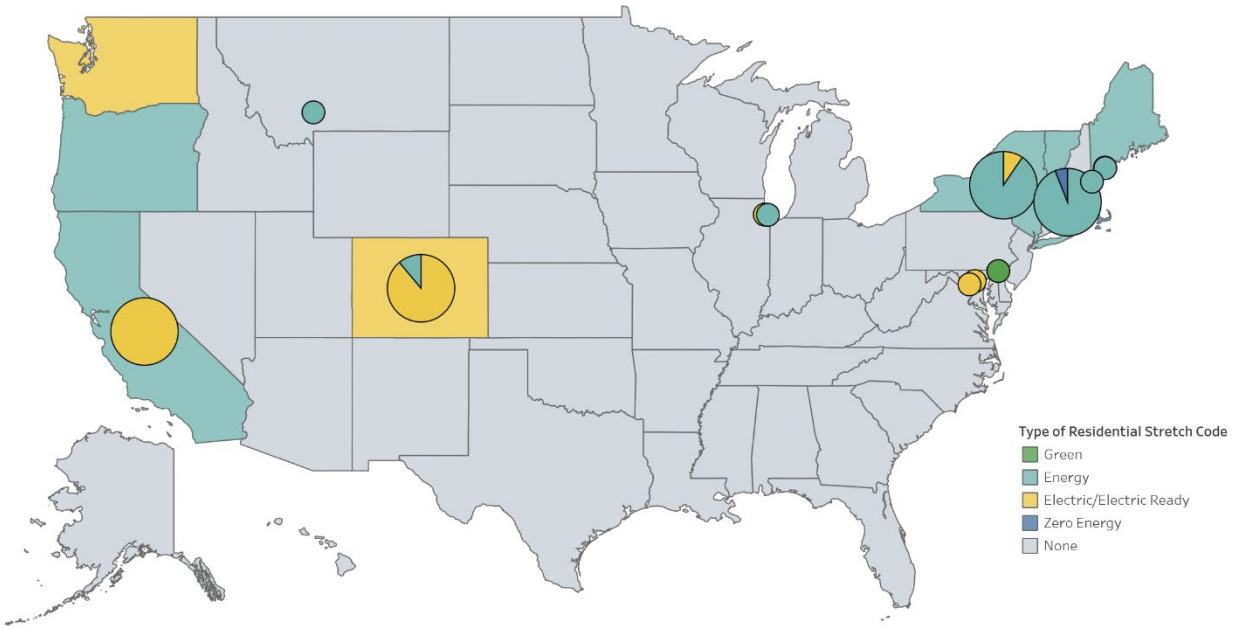
State and local jurisdictions maintain primary authority to regulate commercial and residential construction relating to building codes and performance standards. The adoption of energy codes varies across the nation, with various factors including climate, geography, and the value of energy savings playing a role in code adoption. The Department of Energy (DOE) maintains a database to track and analyze data related to the adoption, compliance, and implementation of energy codes.

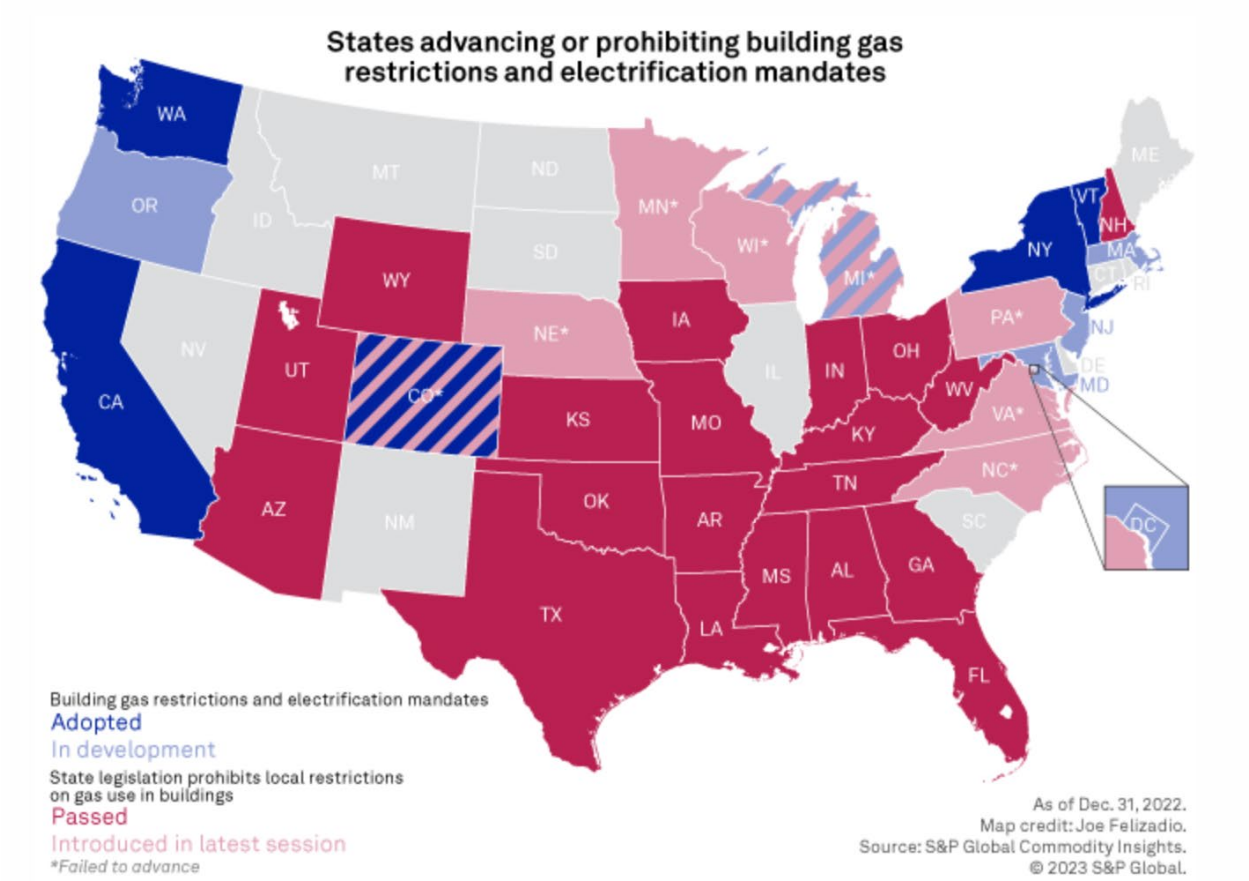
According to DOE data, 15 percent of states have adopted the latest 2021 IECC residential code, 25 percent have adopted the 2018 IECC code, 15 percent have adopted the 2015 IECC code, and 35 percent have adopted the 2099 IECC code. Four percent of states have adopted a pre-2009 IECC code, and 7 percent have no statewide code requirement.[3] Thirteen states and the District of Columbia maintain "stretch" code requirements that exceed the IECC base code requirements by including provisions to address building material life cycle, water use, more stringent efficiency requirements, electric charging connections, and fossil fuel restrictions.[4] At least 70 local jurisdictions within California, and dozens of local governments in seven states and the District of Columbia have enacted restrictions on natural gas use, including one state-wide ban in New York.[5]

---

[2] https://www.energycodes.gov/commercial-and-residential-building-energy-codes
[3] https://public.tableau.com/app/profile/doebecp/viz/BECPStatusofStateEnergyCodeAdoption/ResidentialDashboard
[4] https://public.tableau.com/app/profile/doebecp/viz/StretchCode/ResidentialStretchCode
[5] https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/gas-ban-monitor-all-electric-building-mandates-catch-on-in-socal-colorado-73936338#:~:text=Gas%20bans%20gather%20momentum%20in%20Colorado&text=2%2C%202022%2C%20to%20require%20all,by%20the%20International%20Construction%20Council.


State Residential Energy Code Efficiency
State
(All)
Region
(All)
Code Efficiency Category
2021 IECC
2018 IECC
2015 IECC
2009 IECC
<2009 IECC
No statewide code
WA
OR
CA
NV
ID
MT
WY
UT
AZ
CO
NM
ND
SD
NE
KS
OK
TX
MN
IA
MO
AR
LA
WI
IL
MS
MI
IN
KY
TN
AL
OH
WV
GA
FL
SC
NC
VA
PA
NY
MD
DE
NJ
CT
RI
MA
VT
NH
ME
AK
HI
Residential Code by Floor Area
4%
15%
35%
25%
7%
15%


Type of Residential Stretch Code
Green
Energy
Electric/Electric Ready
Zero Energy
None



Fossil Fuel Ban in Federal Buildings

Section 433 of the Energy Independence and Security Act of 2007 (EISA) authorized DOE to establish regulations to phase out fossil fuel-generated energy consumption by 2030. The statute established December 19, 2008, as the deadline for DOE to establish standards; however, the DOE declined to act on Section 433 until recently. On May 1, 2024, the DOE published a final rule establishing energy performance standards for the new construction and major renovation of Federal buildings.[6] This rule is designed to eliminate the use of fossil fuels in federal buildings, including the use of natural gas furnaces, hot water heaters, and cooking systems. Section 433 applies to a wide range of federal buildings, including military installations and housing, commercial buildings, multi-family high rise residential buildings, and low-rise residential buildings.

Federal Role in the Adoption of Energy Codes and Performance Standards

Several federal agencies have a role in the adoption and enforcement of building energy codes and performance standards. Under the Biden administration, the federal government has taken a more forceful role in the adoption and enforcement of building codes and standards

[6] 89 FR 35, 384

relating to energy efficiency and fossil-fuel use.[7] The DOE and the Pacific Northwest National Laboratory (PNNL) have developed a series of technical briefs and "model" building codes supporting national, state, and local initiatives to update building energy codes.[8] Under the Biden administration, the DOE and PNNL are encouraging the adoption of building codes and standards that require "net-zero" emissions requirements, electric vehicle charging, electric appliances and furnaces, and rooftop solar panels.

The Inflation Reduction Act (IRA) authorizes approximately $1 billion in grants to states and local governments with authority to adopt building codes and standards. On December 18, 2023, the DOE announced a new spending program to provide up to $530 million in grants for "the adoption and implementation of the latest model energy codes, zero energy codes, building performance standards, and innovative codes that achieve equivalent energy savings to the latest model and zero energy codes."[9] This announcement followed a September 19, 2023, DOE announcement to provide $400 million in funding for "adopting and implementing building energy codes that reduce utility bills, increase efficiency, lower greenhouse gas emissions that fuel the climate crisis, and make buildings more resilient to climate disasters."[10] On March 27, 2024, the Committee sent a letter to DOE requesting information regarding DOE's funding announcements, raising concern that the DOE's building codes grant programs will exacerbate the current housing affordability crisis and limit energy choices for the American people by encouraging the adoption of one-size-fits-all building codes that are not appropriate or cost-effective for all income levels and regions of the country.[11]

Minimum Energy Standards for Federally Financed Housing

On April 26, 2024, the U.S. Department of Housing and Urban Development (HUD) published new regulations that increase the stringency of energy codes for the construction of new homes insured by HUD, the Federal Housing Administration (FHA), and the U.S. Department of Agriculture (USDA).[12] Under current law, homebuilders constructing new, single-family and multi-family, housing using federal government financing must conform to the 2009 edition of the IECC code and the 2007 edition of the ASHRAE 90.1 code for multifamily buildings. The recently finalized rules will require builders to leapfrog several code iterations and adopt the 2021 edition of the IECC code and the 2019 edition of the ASHRAE 90.1 code. Home builders, including the National Association of Home Builders, have warned that these proposed changes will raise housing costs and reduce the availability of homes, especially in states that have chosen not to adopt the most recent code updates.

---

[7] https://www.whitehouse.gov/briefing-room/statements-releases/2022/06/01/fact-sheet-biden-harris-administration-launches-initiative-to-modernize-building-codes-improve-climate-resilience-and-reduce-energy-costs/

[8] https://www.energycodes.gov/prototype-building-models

[9] https://www.energy.gov/articles/biden-harris-administration-announces-530-million-building-energy-efficiency-and

[10] https://www.energy.gov/articles/biden-harris-administration-announces-400-million-states-improve-building-energy

[11] https://d1dth6e84htgma.cloudfront.net/03_27_24_Letter_to_Secretary_Granholm_effb6fa4e7.pdf

[12] https://www.hud.gov/program_offices/comm_planning/environment_energy/mes_notice

Housing Affordability

For many Americans, owning a home conveys numerous economic benefits, including the ability to accumulate wealth and to save money over the costs of renting. According to data published by the Federal Reserve Bank of St. Louis, the homeownership rate in the U.S. is currently 65.6 percent, a decline from the recent peak of 67.8 percent in 2020.[13] Last month, it was reported that the cost of buying a home hit an all-time high with the median home price hitting a record $383,725 for the period ending in mid-April.[14] The homeownership rate in the U.S. is affected by many factors, including demographic and economic factors, housing market conditions, and government polices that affect housing affordability.

Building policies have a direct impact on housing affordability by increasing construction costs. For example, building energy codes often include prescriptive requirements for lighting, insulation, window installation, and ventilation. More aggressive building policies adopted by some states and local jurisdictions require the installation of electrical vehicle charging, rooftop solar panels, and electric appliances, all of which add incremental costs to construction. For example, studies have shown that building to the 2021 IECC can add up to $31,000 to the price of a new home and take up to 90 years for a home buyer to realize the payback.[15,16]

IV. ISSUES

The following issues may be examined at the hearing:

- The impact of green building polices on housing affordability, including energy codes, performance standards, and fuel-use restrictions;
- Recent federal government actions, including EISA Section 433 and HUD building energy code mandates; and,
- State and local government building policies and stretch codes.

V. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Brandon Mooney, Elise Krekorian, Kaitlyn Peterson, or Mary Martin of the Committee staff.

---

[13] https://fred.stlouisfed.org/series/RHORUSQ156N

[14] https://thehill.com/business/4620542-the-costs-of-buying-a-home-has-hit-an-all-time-high-report/?email=edb26b246b6a79d93aba1d3905e3e5234c4c499f&emaila=6878dce7195ae8745ef4cddeb950c1ca&emailb=1715cf4bd900eafb9000c85af9d29c48ff494bd7b3bfeb982309476fc43ce44a&utm_source=Sailthru&utm_medium=email&utm_campaign=04.25.24%20RNS%20News%20Alert%20-%20homebuyers

[15] https://kchba.org/wp-content/uploads/2022/07/KCHBA-2021-IECC-Consumer-Impact_KCMO_Updated-DS.pdf

[16] https://www.nahb.org/-/media/NAHB/advocacy/docs/top-priorities/codes/code-adoption/2021-iecc-cost-effectiveness-analysis-hirl.pdf?rev=7a1bd7900732483885f80d483f21aa36&hash=707DE5D2CE419E81506D7D87832ADBE9