

BUILDING THE AMERICAN DREAM: EXAMINING AFFORDABILITY, CHOICE, AND SECURITY IN APPLIANCE AND BUILDINGS POLICIES

HEARING BEFORE THE SUBCOMMITTEE ON ENERGY OF THE COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES ONE HUNDRED NINETEENTH CONGRESS FIRST SESSION

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¹The report has been retained in committee files and is included in the Documents for the Record at <https://docs.house.gov/meetings/IF/IF03/20250909/118590/HHRG-119-IF03-20250909-SD018.pdf>.

BUILDING THE AMERICAN DREAM: EXAMINING AFFORDABILITY, CHOICE, AND SECURITY IN APPLIANCE AND BUILDINGS POLICIES

TUESDAY, SEPTEMBER 9, 2025

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 2:18 p.m., in the John D. Dingell Room 2123, Rayburn House Office Building, Hon. Robert E. Latta (chairman of the subcommittee) presiding.

Members present: Representatives Latta, Weber, Palmer, Allen, Balderson, Pfluger, Harshbarger, Miller-Meeks, James, Bentz, Fry, Lee, Langworthy, Rulli, Evans, Goldman, Fedorchak, Guthrie (ex officio), Castor (subcommittee ranking member), Peters, Menendez, Mullin, McClellan, DeGette, Matsui, Tonko, Veasey, Schrier, Fletcher, Ocasio-Cortez, Auchincloss, and Pallone (ex officio).

Staff present: Ansley Boylan, Director of Operations; Christian Calvert, Press Assistant; Clara Cargile, Professional Staff Member, Energy; Andrew Furman, Professional Staff Member, Energy; Sydney Greene, Director of Finance and Logistics; Calvin Huggins, Clerk, Energy; Megan Jackson, Staff Director; AT Johnson, Special Advisor; Sophie Khanahmadi, Deputy Staff Director; Mary Martin, Chief Counsel, Energy; Ben Mullaney, Press Secretary; Jake Riith, Staff Assistant; Jackson Rudden, Clerk, Environment; Chris Sarley, Member Services/Stakeholder Director; Peter Spencer, Senior Professional Staff Member, Energy; Timothy Trimble, Staff Assistant; Jane Vickers, Press Assistant; Keegan Cardman, Minority Staff Assistant; Waverly Gordon, Minority Deputy Staff Director and General Counsel; Kristopher Pittard, Minority Professional Staff Member; Shae Reinberg, Minority Intern; Kylea Rogers, Minority Policy Analyst; Medha Surampudy, Minority Professional Staff Member; and Tuley Wright, Minority Staff Director, Energy.

Mr. LATTA. Good afternoon, and welcome to today's hearing, "Building the American Dream: Examining Affordability, Choice, and Security in Appliances and Building Policies." And thank you to our witnesses for appearing with us today.

The Chair recognizes himself for 5 minutes for an opening statement.

**OPENING STATEMENT OF HON. ROBERT E. LATTA, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO**

Today, we will discuss policies that have raised energy and product prices for American families and business owners, putting America's homeownership out of reach and jeopardize grid reliability. Many of these policies have been implemented in the name of energy efficiency, but the forced electrification from the left does not equate to increased energy efficiency and ignores affordability and consumer choice.

Energy conservation will play an important role in meeting our Nation's growing energy demand. However, consumer choice, affordability, and innovation must be prioritized in the execution of these goals.

Over the last decade, it has become apparent that the statutory process for energy efficiency standards is broken. We must reform the process to restore consumer choice, appliance affordability, and true energy savings as the foundation of DOE's Appliance and Equipment Standards Program.

Everyone here supports true energy efficiency and the benefits it yields to our constituents and consumers. However, over the last several years, the focus has clearly strayed from enhancing efficiencies and realizing cost savings.

This direction has gone well beyond DOE's energy conservation standards. We have also seen a misalignment of priorities in building codes, performance standards, and State and local restrictions on the use of fossil fuels.

Nowhere is that more reflective than the cost of homes. Over the last 15 years, home prices have steadily increased, putting the dream of homeownership out of the reach of millions of Americans. Today, more than 80 percent of adults in the United States say housing affordability is a problem in the city or county in which they live. And homeowners now spend 34 percent more on household appliances than they did in 2010. While there are a variety of factors that have contributed to these rising costs, we can't ignore the impact of misguided policies at hand.

The Biden administration tied Inflation Reduction Act, the IRA, funding to the forced adoption of the 2021 model energy codes, which restricted the use of gas and promoted electrification even if it was not an appropriate choice for the consumer. This was done despite their own data that showed homes with natural gas hook-ups are over three times more affordable than electric options.

But the Biden administration didn't stop there. The DOE issued a rule to eliminate the use of fossil fuels in all-new and modified Federal buildings beginning in 2030. This would have included military installations and houses, some residential buildings, and sites of critical national security importance like the Pentagon. Not only would this compromise our security, but the rule would also have actually increased energy usage and added for the strain to our Nation's electric grid.

We must strike a healthy balance between utilizing affordable energy and implementing commonsense, effective energy conservation measures.

Again, I want to thank our witnesses for their participation here today, and we look forward to hearing their perspectives. And I want to again thank you all.

[The prepared statement of Mr. Latta follows:]

Chairman Robert Latta
Opening Statement—Subcommittee on Energy
“Building the American Dream: Examining Affordability, Choice, and Security in
Appliance and Buildings Policies.”
September 9, 2025
As prepared for delivery

Welcome to today’s hearing, “Building the American Dream: Examining Affordability, Choice, and Security in Appliance and Buildings Policies.” Thank you to our witnesses for your participation.

Today, we will discuss policies that have raised energy and product prices for American families and business owners, put home ownership out of reach, and jeopardized grid reliability.

Many of these policies have been implemented in the name of energy efficiency. But, the forced electrification from the Left does not equate to increased energy efficiency, and it ignores affordability and consumer choice.

Energy conservation will play an important role in meeting our nation’s growing energy demand, however, consumer choice, affordability, and innovation must be prioritized in the execution of those goals.

Over the last decade, it has become apparent that the statutory process for energy efficiency standards is broken. We must reform the process to restore consumer choice, appliance affordability, and true energy savings as the foundation of DOE’s Appliance and Equipment Standards Program.

Everyone here supports true energy efficiency and the benefits it yields for our constituents. However, over the last several years, the focus has clearly strayed from enhancing efficiencies and realizing cost savings.

This misdirection has gone well beyond DOE’s energy conservation standards-- we have also seen a misalignment of priorities in building codes, performance standards, and state local restrictions on the use of fossil fuels.

Nowhere is that more reflected than in the cost of homes. Over the last 15 years, home prices have steadily increased, putting the dream of home ownership out of reach for millions of Americans.

Today, more than 80 percent of adults in the United States say housing affordability is a problem in the city or county where they live, and homeowners now spend 34 percent more on household appliances in 2010. While there are a variety of factors that have contributed to these rising costs, we cannot ignore the impact that misguided policies have had.

The Biden administration tied Inflation Reduction Act (IRA) funding to the forced adoption of the 2021 model energy codes, which restricted the use of gas and promoted electrification even if it was not an appropriate choice for consumers. This was done despite their own data that showed homes with natural gas hookups are over 3 times more affordable than electric options.

But the Biden administration didn't stop there. DOE issued a rule to eliminate the use of fossil fuel in all new and modified federal buildings in 2030. This would have included military installations and housing, some residential buildings, and sites of critical national security importance—like the Pentagon.

Not only would this compromise our security, the rule would also have actually **increased** energy usage and added further strain to our nation's electric grid. We must strike a healthy balance between utilizing affordable energy and implementing commonsense, effective energy conservation measures.

Again, I thank our witnesses for their participation today and look forward to hearing their perspectives.

Thank you, and I yield back.

Mr. LATTA. And I yield back the balance of my time and now recognize the ranking member of the subcommittee, the gentlelady from Florida's 14th District, for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. KATHY CASTOR, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Ms. CASTOR. Well, thank you, Mr. Chairman. Good afternoon, everyone. I have been looking forward to this hearing because it provides us with an opportunity to remind Americans that significant savings and tax credits are available if you need to replace a household appliance, upgrade your AC and heating system, or make other home improvements. These savings were intentionally provided by Democrats in the Inflation Reduction Act that we passed in 2022. The savings were supposed to be available to all Americans for 10 years, but Republicans ended them early to pay for huge tax breaks for billionaires and big corporations in their Big Ugly Bill.

But there is still time. If you need to install a new, energy-efficient appliance or make home improvements by the end of year, you can save a whole bunch of money. In 2023, 3.4 million households saved over \$8 billion from these tax credits. And that doesn't count the reduction in electric bills. Hard-working Americans could really use those savings as electric bills and costs continue to skyrocket.

In Florida, the largest power utility in our State proposed a nearly \$10 billion rate hike earlier this year. That is reported to be the largest hike in American history. And all across the country, customers are grappling with surging electric bills. And I think we have to say now, here we are in September, it is clear that Donald Trump and Republicans have broken their promise to lower costs. And their reckless policies are making life more expensive.

In addition to the harsh impact of the Big Ugly Bill, Trump tariffs are causing pain and creating chaos. And to add insult to injury, Republicans in Congress and the Trump administration have taken a hatchet to energy efficiency standards, which is so silly because energy efficiency saves people money. Appliance standards typically save households more than \$500 on their energy bills each year. Homeowners will save \$15,000 for homes built using the 2021 building codes compared to the old ones.

And my neighbors back in Florida, they know firsthand about the importance of building energy codes. They keep people safe in well-insulated homes amid record heat waves like the one we experienced this summer.

Families and businesses also save money when codes and design standards help their building stand up to strong winds and flooding and increasingly intense hurricanes. Strong building codes provide insurance companies with greater certainty in high-risk areas, allowing them to offer less costly insurance policies and saving taxpayers from becoming the insurer of last resort.

Federal codes and standards are developed collaboratively with local officials, builders, manufacturers, industry, and consumer reps. And neither Congress nor the administration—they don't force it on anyone, they are adopted and enforced by State and

local jurisdictions, not the Federal Government. And when these standards are not updated, it also hurts America's global competitiveness. The modern standards increase incentives to innovate and protect domestic companies against competition from inferior projects.

Now, all of this—so you have the tariffs, you have the Big Ugly Bill, you have got energy—a war on energy efficiency, and then the President wants to eliminate EPA's Energy Star Program. That is what I heard when I was home all summer.

Let's make things more expensive. Let's make our appliances more expensive. Let's take that public information away from people who need it.

No.

Let's be clear: Energy efficiency saves electricity, reduces consumer costs, and increases household comfort, reliability, and resilience. So Republicans can kill consumer savings, they can turn a blind eye to tariffs, they take a hatchet to efficiency. And just last week, Republicans passed their energy and water spending bill, which is another way they are raising costs on American families. Because weatherization of homes is very popular, but you know what they did in their spending bill? Then ratcheted back those important weatherization assistance programs that help families save about \$372 more every year.

So, unfortunately, my Republican colleagues are going in the extreme opposite direction they are proposing to prevent any future regulations on products like dishwashers and washing machines, stoves, or light bulbs. They want to trap Americans with outdated and expensive technologies forever while the rest of the world moves on without us. That is an expensive proposition that we reject.

[The prepared statement of Ms. Castor follows:]

Committee on Energy and Commerce**Opening Statement as Prepared for Delivery
of
Subcommittee on Energy
Ranking Member Kathy Castor*****Hearing on “Building the American Dream: Examining Affordability, Choice, and Security in
Appliance and Building Policies”*****September 9, 2025**

I have been looking forward to this hearing because it provides us with an opportunity to remind Americans that significant savings and tax credits are available if you need to replace a household appliance, AC/heating system or make other home improvements. These savings were intentionally provided in the Inflation Reduction Act that Democrats passed in 2022. The savings were supposed to be available for ten years, but Republicans ended them early to pay for huge tax breaks for billionaires and big corporations in their Big Ugly Bill.

There is still time. If you install a new energy efficient appliance or make home improvements by the end of the year, you could save a whole bunch of money.

In 2023, 3.4 million households saved over \$8 billion from these tax credits. And that doesn't count the reduction in electric bills. Hardworking American families really could use those savings as costs skyrocket.

In Florida, the largest power utility proposed a nearly \$10 billion rate hike, reported to be the highest rate hike request in American history. Across the country, customers are grappling with surging electric bills.

It's clear that Donald Trump and Republicans have broken their promise to lower costs, and their reckless policies are making life more expensive. In addition to cuts in the Big Ugly Bill, Trump Tariffs are causing pain and creating chaos.

And to add insult to injury, Republicans in Congress and the Trump Administration have taken a hatchet to energy efficiency standards. Energy efficiency saves people money. Appliance standards save a household more than \$500 in energy bills each year. Homeowners will save \$15,000 for homes built using the 2021 building codes, compared to old ones.

My neighbors in Florida know firsthand about the importance of building energy codes – they keep people safe in well-insulated houses amid record heat waves, like the one we experienced this summer.

Families and businesses also save money when codes and design standards help their buildings stand up against strong winds and flooding from increasingly intense hurricanes. Strong building codes

September 9, 2025

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provide insurance companies with greater certainty in high-risk communities, allowing them to offer more affordable insurance policies and saving taxpayers from becoming the insurer of last resort.

Federal codes and standards are developed collaboratively with local officials, builders, manufacturers, industry and consumer representatives. Neither Congress nor the Administration force this on anyone - building codes are adopted and enforced by state and local jurisdictions, not the federal government.

When building codes and appliance standards are not updated, it also hurts America's global competitiveness. Modern standards increase incentives to innovate and protect domestic companies against competition from inferior foreign products.

This committee has heard repeatedly about growing electricity demand, driven by AI data centers. The fastest solution is energy efficiency. By 2040, updated appliance standards could reduce U.S. electricity consumption by 5%. But instead of embracing these savings, Republicans are waging a war on energy efficient appliances – so that Americans can use more electricity on outdated technology, pay inflated costs, and cede the AI race to China.

The President wants to eliminate EPA's Energy Star program – a voluntary tool that provides \$230 in household savings for every \$1 in administrative costs. And nine months into the year, the President is still illegally withholding over \$106 billion at EPA and DOE that Congress appropriated for American families and businesses.

Let's be clear – energy efficiency saves electricity, reduces consumer costs, and increases household comfort, reliability, and resilience.

So, Republicans kill consumer savings, turn a blind eye to the cost of tariffs, take a hatchet to efficiency, and just last week, every Republican on this committee voted to pass the Energy & Water spending bill, which would raise costs for American households. This includes cuts to Weatherization Assistance, which helps working families save \$372 or more every year.

When household electricity prices are up 10%, and 3 in 4 Americans are concerned with their utility bills increasing, we should be making policies that lower costs for hardworking families.

Unfortunately, Republicans are going in the extreme opposite direction – they're proposing to prevent any future regulations on products like dishwashers, washing machines, stoves, or light bulbs. They want to trap Americans with outdated and expensive technologies forever, while the rest of the world moves on without us.

The American people deserve better – they deserve serious policymakers who will advance real policies that make their lives better – not simply boost the bottom lines of polluters and billionaires.

I yield back.

Ms. CASTOR. I yield back my time.

Mr. LATTI. The gentlelady yields back.

And the Chair now recognizes the chairman of the full committee, the gentleman from Kentucky, for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. BRETT GUTHRIE, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF KENTUCKY

Mr. GUTHRIE. Thank you. Thank you, Chair Latta. Thank you for holding this hearing, and I thank our witnesses for being here.

Under the Energy and Policy and Conservation Act, DOE must evaluate energy efficiency standards for equipment categories every 6 years. But it may also impose new or amended standards if it finds that such standards are technologically feasible, economically justified, and will result in significant energy savings.

Unfortunately, DOE's Appliance and Equipment Standards Program has strayed far from its original intent and now yields de minimus energy efficiency benefits while imposing sufficient costs on consumers and manufacturers.

Today's homeowners spend about 34 percent on appliances—or more than they did 15 years ago. From 1995 to 2005, the average homeowner replaced appliances every 12 to 13 years. Now that timeline has shrunk from every 8 to 9, and I can tell you that from personal experience. Even more concerning, aspiring homeowners also face record housing prices in part due to the rising costs of compliance with onerous regulations under the guise of energy efficiency.

The Biden-Harris administration's DOE issued nearly 30 energy-efficient regulations, totaling over 60 billion in costs to the economy. Biden's DOE proposed and finalized—President Biden's DOE proposed and finalized new standards to regulate virtually every appliance American consumers use, forcing families to spend more on less reliable options.

Sadly, these costs hit the working families the hardest. In fact, several regulations promulgated by the Biden administration went as far as banning natural gas appliances, a blatant attack on consumers in the market, forcing American families to purchase electric appliances. And the irony is that in doing so, demand on our electric grid, exacerbating reliability issues they are already facing due to another—misguided electric grid policies.

At least 70 local governments in California as well as dozens more in States and Washington, DC, also have active restrictions on gas appliances. New York has a statewide gas ban. And many States have adopted building codes and performance standards that act as de facto gas bans.

As if this wasn't going far enough, the latest administration—the last administration also finalized regulations to enforce a fossil fuels ban on all Federal buildings, including military installations. Residents are housing in sites with highly sensitive functions like NIH and the Pentagon. These building and appliance policies are dangerous, unsustainable, and expensive.

American rate payers are seeing the impact of these misguided policies reflected in their utility bills already. As more strain is

placed on the grid and baseload sources like natural gas are restricted, prices will rise and reliability will plummet.

I look forward to working with Chair Latta and members of this committee to develop policies and make homes and appliances less expensive for consumers, strengthen our electric grid, and allow more families to realize the American Dream. It doesn't make products cheaper to make them more expensive and just subsidize on the back end. What we need to do is make the products that people—allow manufacturers to make products that people want to buy at the price they want to pay for it.

[The prepared statement of Mr. Guthrie follows:]

Chairman Brett Guthrie
Opening Statement—Subcommittee on Energy
“Building the American Dream: Examining Affordability, Choice, and Security in
Appliance and Buildings Policies.”
September 9, 2025
As prepared for delivery

Thank you, Chair Latta, and thank you to our witnesses for being here today.

Under the Energy Policy and Conservation Act, DOE must evaluate energy-efficiency standards for equipment categories every six years, but it may only impose new or amended standards if it finds that such standards are technologically feasible, economically justified, and will result in significant energy savings.

Unfortunately, DOE’s Appliance and Equipment Standards Program has strayed far from its original intent and now yields *de minimis* energy efficiency benefits while imposing significant costs on consumers and manufacturers.

Today, homeowners spend about 34 percent more on appliances than they did 15 years ago. From 1995 to 2005, the average homeowner replaced their appliances every 12 to 13 years. Now, that timeline has shrunk to every 8 to 9 years. Even more concerning, aspiring homeowners are also facing record high housing prices, in part due to the rising costs of compliance with onerous regulations under the guise of “energy efficiency.”

The Biden-Harris Administration’s DOE issued nearly 30 energy efficiency regulations, totaling over \$60 billion in costs to the economy. Biden’s DOE proposed and finalized new standards to regulate virtually every appliance American consumers use, forcing families to spend more for less reliable options. Sadly, these costs hit the hardest for working class families.

In fact, several regulations promulgated by the Biden Administration went as far as banning natural gas appliances, a blatant attack on consumers and the market, forcing American families to purchase electric appliances; and the irony is that doing so increased demand on our electric grid, exacerbating reliability issues that we’re already facing due to other misguided electricity grid policies.

At least 70 local governments in California, as well as dozens more in seven states and Washington, DC, have also enacted restrictions on gas appliances. New York has a state-wide gas ban, and many states have adopted building codes and performance standards that act as *de facto* gas bans.

As if this wasn't going far enough, the latest Administration also finalized new regulations to enforce a fossil fuel ban on all federal buildings, including military installations, residential housing, and sites with highly sensitive functions, like NIH and the Pentagon.

These building and appliance policies are dangerous, unsustainable, and expensive. American ratepayers are seeing the impact of these misguided policies reflected in their utility bills already today – as more strain is placed on the grid, and baseload sources, like natural gas, are restricted, prices will rise, and reliability will plummet.

I look forward to working with Chair Latta and Members of this Committee to develop policies that make homes and appliances less expensive for consumers, strengthen our electric grid, and allow more families to realize the American dream.

Thank you and I yield back.

Mr. GUTHRIE. So I thank you for that, and I yield back.

Mr. LATTA. Thank you. The gentleman yields back.

The Chair now recognizes the gentleman from New Jersey, the ranking member of the full committee, for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Thank you, Mr. Chairman.

Today's hearing continues Republicans' illogical plan to increase monthly energy bills for American families who are already struggling to make ends meet as prices on everyday goods increase thanks to Trump's trade war. The latest jobs report, the worst since the start of the COVID-19 pandemic, proves just how devastating Republican policies are.

In August, job growth came to a crawl, adding just 22,000 jobs. At a time when home energy bills are rising all over the country in large part thanks to the disastrous and malicious policies of the Trump administration and congressional Republicans, House Republicans have chosen to double down on their attacks on the very tools that we have to keep energy bills low.

In my home State of New Jersey, energy prices have already increased thanks to PJM's inability to add new resources to the grid. These increases, coupled with the devastating project funding cuts from the Trump administration, hurt New Jersey families. And now House Republicans seem to have decided rather than helping everyday families with monthly energy bills, they want to make our homes more expensive to heat and cool.

Today, we are likely to hear Republicans misrepresent the facts around energy efficiency, conservation standards, and building codes. And let me set the record straight about some of the misinformation.

Committee Republicans continue to circulate a factually inaccurate claim about the cost of meeting the 2021 International Energy Code. Their numbers result of double counting and including measures not required by the code. The reality is building energy codes have a negligible impact on housing prices, but they save homeowners real money on their monthly energy bill from the moment they move into the house. And Republicans also suggest that energy efficiency standards disproportionately target natural gas products. But in reality, the law prohibits DOE from eliminating products based on their fuel source.

This is all incredibly important at a time of rising energy prices, increased energy demand on the grid, and slow job growth. Republicans' Big Ugly Bill is projected to raise electricity prices by an astonishing 61 percent over the next decade, costing Americans nearly \$300 more each year. And Trump ran on a promise to cut energy costs in half in his first year. The Republicans jammed through this disastrous bill that provides giant tax breaks for their billionaire friends while sending American utility bills through the roof.

Energy efficiency standards are popular. In 2024, American households saved over \$500 on their energy bills thanks to indus-

try-supported appliance standards. And in 2023, energy efficiency jobs employed almost 2.3 million people.

But I am not surprised that we are here debating all of this again. Energy efficiency used to be a bipartisan topic. But over the last few years, Republicans have politicized and polarized these commonsense policies.

Congressional Republican in the Trump administration spent the first 8 months of the year gutting the Department of Energy, targeting efficiency standards for numerous Congressional Review Act resolutions, gutting clean-energy incentives, keeping expensive fossil fuel plants online, and imposing costly tariffs that are supercharging inflation. These actions directly result in rising costs for Americans.

Republicans don't care about lowering costs. All they care about is rewarding their oil and gas friends, punishing clean energy, and keeping President Trump happy. It doesn't matter what the facts are. If Trump doesn't like his showerhead, congressional Republicans will prioritize his needs over the needs of everyday Americans.

And I want to thank the witnesses for being here today. I hope we are able to have a productive conversation centered around facts and the merits of energy efficiency.

[The prepared statement of Mr. Pallone follows:]

Committee on Energy and Commerce

**Opening Statement as Prepared for Delivery
of
Full Committee Ranking Member Frank Pallone, Jr.**

***Hearing on “Building the American Dream: Examining Affordability, Choice, and Security in
Appliance and Buildings Policies”***

September 9, 2025

Today’s hearing continues Republicans’ illogical plan to increase monthly energy bills for American families, who are already struggling to make ends meet as prices on everyday goods increase thanks to Trump’s trade war. The latest jobs report – the worst since the start of the COVID-19 pandemic – proves just how devastating Republican policies are. In August, job growth came to a crawl, adding just 22,000 jobs.

At a time when home energy bills are rising all over the country, in large part thanks to the disastrous and malicious policies of the Trump Administration and Congressional Republicans, House Republicans have chosen to double down on their attacks on the very tools we have to keep energy bills low.

In my home state of New Jersey, energy prices have already increased thanks to PJM’s inability to add new resources to the grid. These increases, coupled with the devastating project financing cuts from the Trump Administration, hurt New Jersey families. And now, House Republicans seem to have decided that rather than helping everyday families with monthly energy bills, they want to make our homes more expensive to heat and cool.

Today, we are likely to hear Republicans misrepresent the facts around energy efficiency, conservation standards, and building codes. Let me set the record straight about some of this misinformation.

Committee Republicans continue to circulate a factually inaccurate claim about the costs of meeting the 2021 international energy code. Their bogus number is the result of double counting and including measures not required by the code. In reality, building energy codes have a negligible impact on housing prices, but they save homeowners real money on their monthly energy bill from the moment they move into the home.

Republicans will also suggest that energy efficiency standards disproportionately target natural gas products, but in reality, the law prohibits DOE from eliminating products based on their fuel source.

This is all incredibly important in a time of rising energy prices, increased energy demand on the grid, and slowed job growth. Republicans’ Big Ugly Bill is projected to raise electricity prices by an astonishing 61 percent over the next decade, costing Americans nearly \$300 more each year. Trump ran on a promise to cut energy costs in half in his first year, but Republicans jammed through this disastrous bill that provides giant tax breaks for their billionaire friends, while sending Americans’ utility bills through the roof.

September 9, 2025

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Energy efficiency standards are popular. In 2024, American households saved over \$500 on their energy bills thanks to industry-supported appliance standards. And in 2023, energy efficiency jobs employed almost 2.3 million people.

But I'm not surprised that we're here debating all of this again. Energy efficiency used to be a bipartisan topic, but over the last few years, Republicans have politicized and polarized these commonsense policies.

Congressional Republicans and the Trump Administration spent the first eight months of the year gutting the Department of Energy, targeting efficiency standards through numerous Congressional Review Act resolutions, gutting clean energy incentives, keeping expensive fossil fuel plants online, and imposing costly tariffs that are supercharging inflation. These actions directly result in rising costs for Americans. Republicans don't care about lowering costs, all they care about is rewarding their oil and gas friends, punishing clean energy, and keeping President Trump happy.

It doesn't matter what the facts are. If Trump doesn't like his shower head, Congressional Republicans will prioritize his needs over the needs of everyday Americans.

Thank you to the witnesses for being here today. I hope we're able to have a productive conversation centered around facts and the merits of energy efficiency. I yield back the balance of my time.

Mr. PALLONE. And with that, I yield back the balance of my time, Mr. Chairman.

Mr. LATTI. Well, thank you very much. The gentleman yields back the balance of his time.

And that now concludes Member opening statements. The Chair reminds Members that, pursuant to committee rules, all Members' opening statements will be made part of the record.

Again, we want to thank our witnesses for being with us today and taking time to testify before the subcommittee. Each witness will have the opportunity to give an opening statement of 5 minutes followed by a round of questions from the Members.

And just some housekeeping. You want to make sure that the mic is pulled up close to you. And turn that mic on when you speak. If you see the light goes red when you are in your statement, that means it is time to sum up.

But our witnesses for today are Mr. Buddy Hughes, the chairman of the board at the National Association of Home Builders; Mr. Ben Lieberman, senior fellow at the Competitive Enterprise Institute; Ms. Kara Saul Rinaldi, chief policy officer at the Building Performance Association; and Mr. Jim Steffes, the senior vice president of Regulatory, Policy, and Advocacy at Washington Gas.

Again, we appreciate all of you being here today.

And, Mr. Hughes, you are recognized for 5 minutes for an opening statement.

STATEMENTS OF BUDDY HUGHES, CHAIRMAN, BOARD OF DIRECTORS, NATIONAL ASSOCIATION OF HOME BUILDERS; BEN LIEBERMAN, SENIOR FELLOW, COMPETITIVE ENTERPRISE INSTITUTE; KARA SAUL RINALDI, CHIEF POLICY OFFICER, BUILDING PERFORMANCE ASSOCIATION; AND JIM STEFFES, SENIOR VICE PRESIDENT OF REGULATORY, POLICY, AND ADVOCACY, WASHINGTON GAS

STATEMENT OF BUDDY HUGHES

Mr. HUGHES. Chairman Latta, Ranking Member Castor, and members of the subcommittee, thank you for this opportunity to testify here today.

My name is Buddy Hughes. I am small builder from Lexington, North Carolina. And for 2025, I am chairman of the board for the National Association of Home Builders.

Our members are on the front lines of an affordability crisis. Seventy-five percent of households can't afford a median-priced new home, and half the renters in this country spend over 30 percent of their income on housing costs. New Washington mandates will only make this crisis worse.

One of the biggest drivers of those costs are restrictions on energy choice, appliance standards, and mandates on energy codes. While often well-intentioned, the reality is they drive up prices, limit choices for families, and take important decisions out of the hands of homeowners.

Energy choice is at the top of our list. More and more States and cities are moving to ban natural gas. New York has already passed a ban that takes effect in 2026, and that means no gas stoves, no gas water heaters, no gas furnaces in new homes.

In cold weather States, meeting those requirements can add more than \$15,000 to the cost of a home. That is just not sustainable in a place where most households are already priced out of the new home.

Families feel it every month in their utility bills. Last winter, households using natural gas spent about 42 percent less and saved over \$125 billion over the last decade.

That is why NHB believes families, not government mandates, should decide what energy and appliances make sense in their own home. Appliance choice is part of that same story. DOE's recent rules on furnaces, water heaters, and stoves phase out natural gas, raise costs, and cut off choices.

Congress can protect families from higher costs by preventing appliance standards from being turned into backdoor gas bans.

Now, let me be clear: When it comes to building energy codes, NHB supports reasonable and most of all cost-effective codes. We have worked with State and local governments for decades to modernize codes. But what we can't support are rigid Federal mandates that force every State and local government into the same costly outcome.

The push to require the 2021 IECC as the national baseline is a prime example. Compliance with this code can add more than \$31,000 to the cost of a new home. And the payback period on that extra cost and upgrades is approaching 90 years. This problem is compounded by Section 50131 of the Inflation Reduction Act, which conditions a billion dollars in Federal funds on adoption of the 2021 IECC. Now tying dollars to a single code, the program eliminates local flexibility, undermines State authority, and pressures communities into costly mandates that hurt affordability.

You don't have to look any further than Kansas City, Missouri. After adopting the 2021 IECC to qualify for these funds, single-family housing permits dropped 22 percent while permits in the surrounding communities jumped 117 percent. The result was fewer homes, fewer jobs, and higher costs for families.

New homes are already highly efficient. The bigger opportunity lies in the 130 million older homes built before modern codes, where retrofits can deliver far greater energy savings than adding cost to the small share of new homes built each year.

NHB supports practical, cost-effective energy policies, but Federal mandates on energy, appliances, or codes that ignore affordability would only make the housing crisis worse.

Thank you, again, for the opportunity to testify here today, and I look forward to your questions.

[The prepared statement of Mr. Hughes follows:]



Testimony of Buddy Hughes

**On Behalf of the
National Association of Home Builders**

**Before the
House Energy and Commerce Committee
Subcommittee on Energy**

**Hearing on
“Building the American Dream: Examining Affordability, Choice, and Security
in Appliance and Buildings Policies”**

September 9, 2025

Chairman Latta, Ranking Member Castor, and members of the Subcommittee, thank you for the opportunity to testify today on behalf of the National Association of Home Builders (NAHB). I am here to share our perspective on why preserving energy choice, ensuring access to a full range of appliances, and maintaining flexibility in building energy codes are critical to keeping housing affordable and attainable for America's families. My name is Buddy Hughes, and I am a home builder and developer from Lexington, North Carolina, with more than 45 years of experience in the industry. I currently serve as Chairman of NAHB's Board of Directors.

NAHB represents more than 140,000 members engaged in building single-family and multifamily housing, remodeling, and other aspects of residential and light commercial construction. Most of our members are small businesses who build 10 or fewer homes per year, yet collectively they construct roughly 80% of all new housing in the United States. As a small business owner in a heavily regulated industry, I understand how burdensome—and costly—it can be to comply with the layers of government regulations that apply to our daily work.

Home builders nationwide are facing mounting regulatory challenges that directly impact housing supply and affordability. Among the most pressing are mandates on energy building codes, appliance standards, and restrictions on fuel choice. While often well-intentioned, these requirements add thousands of dollars to the cost of a home, limit consumer freedom, and take important design and lifestyle decisions out of the hands of American families.

Housing is already the single largest expense for American households, and rising costs are putting the nation in an untenable position. According to NAHB's Priced Out estimates for 2025,

75% of households cannot afford a median-priced new home.¹ Harvard's Joint Center for Housing Studies has found that half of all renters in the United States are cost-burdened, paying more than 30% of their income on housing. These numbers underscore the severity of the affordability crisis.

Safe, decent, and affordable housing is essential to the wellbeing of families, communities, and the nation. Home buyers and renters deserve the freedom to choose housing that meets their needs—whether that means selecting appliances that fit their lifestyle, choosing the fuel source that works best for their family, or living in a community where building codes reflect local priorities and emphasize common-sense, cost-effective solutions. Yet when mandates impose rigid energy codes or restrict appliance choice, they not only raise costs but also strip families of those options.

NAHB strongly believes that increasing the supply of new single-family and multifamily housing is critical to addressing affordability, but policies that drive up costs and limit choice will only make the problem worse. The men and women who keep our communities strong—teachers, first responders, and members of our armed forces—should not be priced out of the communities they serve because of overly burdensome or needlessly problematic regulations.

¹ National Association of Home Builders (NAHB), Nearly 75% of U.S. Households Cannot Afford a Median-Priced New Home in 2025 (Special Study for Housing Economics, February 2025), <https://www.nahb.org/-/media/NAHB/news-and-economics/docs/housing-economics-plus/special-studies/2025/special-study-households-priced-out-of-the-housing-market-march-2025.pdf?rev=557833ecb28e410c983deb86813645a8>

Energy Choice

While NAHB supports efforts to improve energy efficiency, we are deeply concerned about proposals that would mandate full electrification of new or existing homes or restrict access to certain appliances and fuel sources. These “one-size-fits-all” requirements ignore regional differences, reduce consumer choice, and add significant costs for builders and homeowners alike.

New York provides a clear example. In an effort to address climate change and reduce greenhouse gas emissions, the state recently enacted the nation’s first statewide ban on natural gas in most new construction—set to take effect in 2026 for buildings up to seven stories and in 2029 for taller buildings. This law effectively prohibits the installation of gas stoves and other fossil fuel appliances in new homes. NAHB, along with the New York State Builders Association, is challenging this legislation in court, arguing it is preempted by the federal Energy Policy and Conservation Act.

Unfortunately, similar efforts are underway in other parts of the country. Local governments in California, Colorado, and Massachusetts have attempted to pass gas bans. In California, Berkeley’s ordinance was struck down by the Ninth Circuit in 2024, but the city continues to look for new ways to advance restrictions. Montgomery County, Maryland, has adopted a ban that takes effect in 2027, and Washington state enacted one in 2024—though voters attempted to roll it back at the ballot box before the measure was struck down in court.

The practical effects of these mandates are severe. Because of real or perceived performance differences between electric and non-electric appliances, consumers may be reluctant to accept all-electric homes. Further, in colder climates like New York, where cold-climate heat pumps are required for year-round performance, the added expense of a full electrification package can exceed \$15,000—an expense most families simply cannot absorb.² According to NAHB’s analysis, 72% of households in New York are already priced out of the median-priced new home, and an additional burden of this magnitude could push thousands more families out of the market.³

The affordability impacts don’t stop at the front door. According to the U.S. Energy Information Administration’s Winter Heating Outlook, households using natural gas were projected to spend an average of \$602 on heating last winter—about 42% less than the \$1,037 forecast for households relying on electricity.⁴ Over the past decade, the low cost of American natural gas has saved residential customers an estimated \$125 billion in home energy costs. Commercial and industrial consumers have realized even greater benefits, saving nearly half a trillion dollars during that same period.⁵ These savings underscore just how critical it is to preserve access to affordable and reliable energy sources for American families and businesses.

² Home Innovation Research Labs, (2021, February), Cost and other implications of electrification policies on residential construction, <https://www.nahb.org/-/media/NAHB/nahb-community/docs/committees/construction-codes-and-standards-committee/home-innovation-electrification-report-2021.pdf>.

³ NAHB, Nearly 75% of U.S. Households Cannot Afford a Median-Priced New Home in 2025.

⁴ U.S. Energy Information Administration, Winter Fuels Outlook 2024–2025 (presentation, New York Energy Forum, October 10, 2024), <https://www.eia.gov/pressroom/presentations/2024-10-10%20New%20York%20Energy%20Forum%20Presentation.pdf>.

⁵ American Gas Association, *Affordable, 2025 Playbook*, <https://playbook.aga.org/affordable>.

New homes today are already built to modern, efficient codes, and further mandates on new construction would yield only marginal emissions reductions compared to the reductions that could be achieved by retrofitting the existing housing stock. The National Renewable Energy Laboratory estimates that upgrading the 130 million existing homes built before modern codes could cut U.S. electricity consumption by 5.7% annually by 2030—far more than mandating electrification of the small share of new homes built each year.

For these reasons, NAHB strongly supports the Energy Choice Act, and we thank Congressman Nick Langworthy (NY-23) for introducing this important legislation. The bill ensures that families—not government mandates—decide what energy sources and appliances best meet their needs. It preserves access to affordable, reliable energy options, including natural gas, renewable natural gas, hydrogen, liquefied petroleum gas, and electricity, by preventing state and local governments from banning or restricting these sources.

We respectfully urge the Energy and Commerce Committee members to support and advance the Energy Choice Act. Enacting this legislation will help protect housing affordability, strengthen energy reliability, and allow communities to pursue common-sense, cost-effective solutions that balance environmental goals with the economic realities of consumers.

Appliance Choice

Appliance choice is a critical part of housing affordability and consumer freedom. Federal efforts to limit or ban natural gas appliances—whether water heaters, cooktops, or stoves—would not only drive up costs and restrict consumer options, but also serve as a backdoor way of limiting

access to natural gas itself. Such actions undermine the very principle of energy choice by taking away a family's ability to decide which energy sources and appliances work best in their homes.

Earlier this year, NAHB strongly supported a Congressional Review Act resolution to block the Department of Energy's (DOE) Final Rule on gas-fired instantaneous water heaters. That rule would have forced the market toward more expensive condensing models, creating unnecessary challenges for builders and homeowners—particularly for remodeling and replacement projects in older homes. Thanks to the leadership of Rep. Gary Palmer (AL-6), the resolution passed both the House and Senate with bipartisan support and was signed into law by the President. NAHB is grateful for Rep. Palmer's efforts to stand with America's home builders and consumers, ensuring that federal agencies cannot use appliance standards as a backdoor restriction on natural gas—helping to protect affordability, reliability, and consumer choice.

NAHB has also long fought to protect consumer access to gas stoves. Efforts by federal agencies to advance regulations that would amount to a de facto ban on most existing gas stoves and cooktop models have been under consideration for several years. In response, NAHB has consistently made clear that we are committed to defending consumer access to natural gas appliances and ensuring that families retain the option of using natural gas in their homes.

In addition, NAHB has raised strong concerns with DOE's Final Rule Updating Energy Conservation Standards for Residential Furnaces which effectively bans non-condensing gas furnaces after 2028.⁶ Condensing models are more expensive, often require major retrofits, and

⁶ 88 Federal Register 87502 (December 18, 2023); 10 CFR 429; 10 CFR 430

may be impossible to install in some existing homes such as townhouses and apartments. This rule would drive up costs, reduce choice, and disproportionately impact seniors, low-income families, and small businesses.

Similarly, DOE's Final Rule Updating Energy Conservation Standards for Consumer Water Heaters would, beginning in 2029, effectively mandate that most new electric storage water heaters above 35 gallons use heat pump technology.⁷ These products currently make up only a small share of the market and present challenges in many climates and building types. Shifting more than half of the market to heat pumps risks creating supply chain issues, installation delays, and higher costs for consumers.

Together, these debates underscore the urgent need for Congress to protect appliance choice. Proposals to limit the use of natural gas furnaces, water heaters, stoves, or other appliances would raise housing costs, reduce reliability, and take critical decisions out of the hands of consumers. NAHB urges policymakers to pursue energy efficiency goals in a way that respects consumer choice, promotes affordability, and allows builders to continue delivering the diverse housing options America's families need.

Building Energy Codes

Although referencing model building codes in federal legislation and regulatory programs is not new, over the past few years, the breadth of programs and issues for which more stringent building codes are purported to be the answer and the federal government's efforts to impose a

⁷ 88 Federal Register 37778 (May 6, 2024); 10 CFR 430

de-facto universal federal energy code across the entire country are of increasing concern. These approaches unfairly burden and disadvantage new construction and often do little to meet the intended goals. One of the most common approaches to increasing the stringency of energy codes, for example, is to simply require higher insulation levels in walls, floors, and ceilings. Unfortunately, most new homes are long past the point where additional insulation will be cost-effective, resulting in a home that doesn't perform any differently and simply costs more to build.

The recent federal push to require certain new homes to meet the overly stringent energy efficiency requirements of the 2021 International Energy Conservation Code (IECC) is equally problematic and will price many home buyers out of the market. Although the IECC is designed to serve as a model for state and local governments, which can choose to adopt or amend the various provisions based on their localized economies, consumer needs, climates, construction methods, hazards, etc., implementing the IECC as a national energy code, with no consideration for local conditions, outweighs the diminishing returns of marginal energy efficiency improvements and is a misguided effort. Furthermore, a de facto federal energy code conflicts with the processes and cadence established by each state for review and adoption of a comprehensive suite of coordinated and state-specific building codes that cover all attributes of building design and construction, including fire code, structural code, electrical code, mechanical code, among others.

Further, unnecessarily forcing the nationwide use of costly and restrictive new codes will worsen the housing affordability crisis while limiting consumer choice and providing minimal benefit to

homeowners. According to Home Innovation Research Labs, compliance with the 2021 IECC—measured against the 2009 IECC baseline, adds between \$9,600 and \$21,400 to the price of a new home depending on the climate zone, though builders in practice have reported cost increases of over \$31,000 per single family home. To make matters worse, the payback period for these added investments can stretch as long as 90 years, leaving homeowners to shoulder costs they will likely never recover.

In addition to adversely impacting potential home buyers, these increased requirements and higher costs can result in decreased production and longer permitting and construction times, further exacerbating housing affordability challenges. Federal programs restricting access to affordable financing tied to an aggressive national energy code would force consumers to limit their home search to older existing homes and further constrain supply of new homes. In the end, pushing for costly and restrictive energy code requirements at the federal level will result in fewer families achieving the American dream of homeownership.

Section 50131 of the Inflation Reduction Act

Section 50131 of the Inflation Reduction Act (IRA) allocated \$1 billion to incentivize state and local governments to adopt the 2021 IECC and ASHRAE Standard 90.1-2019. While framed as a tool to promote energy efficiency, in practice this program has become a rigid mandate that undermines housing affordability, consumer choice, and the traditional authority of state and local governments in the code adoption process.

To be clear, NAHB supports reasonable and cost-effective energy codes and voluntary federal incentives that help states and localities with transition after the adoption of new codes. In fact, NAHB has supported and assisted our state and local homebuilder associations in pursuing funds through DOE’s Resilient and Efficient Codes Implementation (RECI) program created by the Bipartisan Infrastructure Law. That program provides \$225 million over five years to assist states in adopting any *updated* energy code, such as moving from the 2012 IECC to the 2018 edition. This approach helps jurisdictions modernize without forcing them into a single, costly edition of the code. Unfortunately, the IRA program takes the opposite approach, providing funding to state agencies but tying it exclusively to adoption of the unamended 2021 IECC. By doing so, DOE has effectively eliminated any flexibility and forced jurisdictions into a “one-size-fits-all” outcome.

Kansas City, Missouri, provides a clear case study as to why this program is problematic. In July 2023, the city adopted the 2021 IECC without amendments in hopes of qualifying for IRA funds. Immediately afterward, single-family construction permits in the city dropped by 22% in the first two months of 2024 compared to the prior year, while permits in the surrounding metro area—outside the city—rose by 117%. The sharp decline initially paralyzed Kansas City’s housing market, even as neighboring communities thrived. The ripple effects were clear: fewer homes being built, fewer jobs, higher costs, and a shrinking tax base.

Even the energy savings touted by the 2021 IECC fail to justify the steep costs. One NAHB member in Kansas City built two nearly identical homes—one under an amended 2018 IECC and one under the 2021 IECC. Based on an analysis by a third-party rating organization in the

state, the 2021 IECC home saved \$125 annually in energy costs compared to the older code home, but compliance added more than \$12,000 in upfront costs. For a family with a standard mortgage, that translates into \$102 more per month, or nearly \$33,000 over the life of the loan—making the energy “savings” negligible in the face of the added cost burden.

For these reasons, NAHB has strongly urged DOE to halt further implementation of Section 50131. We were grateful for the leadership of Rep. Randy Weber (TX-14) in spearheading a congressional letter urging DOE to stop this program and restore flexibility to the code adoption process. Building on that effort, we commend Rep. Craig Goldman (TX-12) for championing H.R. 4758, the Homeowner Energy Freedom Act, which would eliminate Section 50131. This bill restores flexibility to the code adoption process and ensures that federal programs support affordability, consumer choice, and state and local decision-making. NAHB urges the Committee to swiftly advance this important legislation. Doing so will protect families from unnecessary cost burdens, preserve the authority of state and local governments, and help keep the American dream of homeownership within reach.

As Congress considers the future of federal energy policy, NAHB also encourages lawmakers to support voluntary programs like ENERGY STAR. ENERGY STAR demonstrates how incentives and consumer choice—not rigid mandates—can drive meaningful energy savings while maintaining affordability. This is a model that works: flexible, market-driven solutions that improve efficiency without pricing families out of homeownership. We do encourage ENERGY STAR to work closely with construction industry stakeholders to continue to refine its programs to make sure that consumers get the best value for their investment.

HUD and USDA's Final Determination of Energy Efficiency Standards for New Construction

Despite the lack of real-world cost savings for homeowners—and the fact that the vast majority of states have not adopted the 2021 IECC—the U.S. Department of Housing and Urban Development (HUD) and the U.S. Department of Agriculture (USDA) under the Biden administration issued a final determination requiring all new single-family housing financed by these agencies to comply with the 2021 IECC. Additionally, HUD-financed multifamily housing must meet either the 2021 IECC or ASHRAE 90.1-2019.

This nationwide codes mandate was rushed through without adequate review or consideration of its impact on home buyers or renters. It will significantly raise housing costs—particularly in the price-sensitive entry-level market for starter homes and affordable rental properties—while doing little to curb overall energy use. Instead of helping the most vulnerable home buyers and renters, HUD and USDA risk pricing them out of the housing market altogether. According to NAHB data, around 100.6 million households already cannot afford the median price of a new home.⁸ Even HUD's modest estimates indicate that compliance with the 2021 IECC would raise new home prices by an average of \$7,200 per single-family home, pricing an additional 724,525 households out of the market.

The rule also conflicts with the current energy codes of 41 states, creating serious implementation challenges in the field, including construction delays, confusion over mortgage product eligibility, inconsistent appraisals, and a lack of qualified inspectors. Rather than

⁸ NAHB, Nearly 75% of U.S. Households Cannot Afford a Median-Priced New Home in 2025.

boosting housing supply, this ill-conceived policy will deter new construction and worsen the affordability crisis.

NAHB is encouraged that the Trump administration has recognized these challenges and issued a six-month delay on implementation of the HUD/USDA rule to allow time for further review. However, more work is needed to ensure that federal housing policy supports affordability and availability rather than imposing costly mandates that limit consumer choice and hinder new construction.

Appraisals

The appraisal process remains one of the biggest barriers to incorporating residential energy efficiency measures that carry high upfront costs and long payback periods. Home builders have long expressed concern that upgrades—including energy efficiency enhancements—are often not fully accounted for in the appraisal process.

This disconnect is particularly problematic when homes are required to comply with costly codes like the 2021 IECC. These mandates do not necessarily reflect current consumer demand and therefore make it difficult for appraisers to assign an accurate market value. The result is that the additional costs of meeting these codes are not reflected in the appraisal, leaving a gap between construction costs and appraised value.

For home buyers, this gap creates a serious affordability challenge. When an appraisal comes in lower than the contract sales price due to unrecognized upgrade costs, the borrower must pay the

difference out of pocket. This means significantly higher down payments, additional out-of-pocket expenses, and in many cases, the loss of the ability to purchase the home altogether. In short, requiring costly energy code compliance without corresponding changes in appraisal practices creates another hurdle for families trying to enter the housing market. It places the burden directly on the buyer, while providing little assurance that the added costs will be recouped through energy savings or reflected in long-term value.

Existing Housing Stock

The American housing stock continues to age, and with housing production lagging in recent years, there is increasing pressure to keep existing homes in service longer—homes that often do not perform as well or as efficiently as newer ones. Out of the nation's 137 million housing units, 130 million were built before modern building codes took effect in 2010.

Compounding the problem, the latest Census statistics show that only about six out of every 1,000 homes built before 1970 are being retired each year. This extremely low rate of replacement means the U.S. housing stock will continue to be dominated by structures that are several decades old for many years to come. Older homes are inherently less energy efficient: they were not built to today's standards, they lose more energy, and they often rely on outdated heating, cooling, and insulation systems.

By contrast, newer homes clearly demonstrate the progress already made in energy efficiency. Modern construction practices and building codes have delivered significant improvements in reducing energy use in new homes. But it is equally clear that the most cost-effective gains in

new construction have already been realized, and additional code requirements will be increasingly expensive while delivering only marginal savings.

This is why focusing solely on new building energy codes is misguided. To meet national energy efficiency goals, improvements must extend beyond new construction and target the existing housing stock. According to the National Renewable Energy Laboratory, retrofitting existing homes could reduce U.S. electricity consumption by 5.7% annually by 2030. Given the scale of our aging housing stock, this represents far greater potential for meaningful energy savings than mandating ever-costlier requirements for new homes.

A wide array of retrofit opportunities exist—from upgrading doors, windows, insulation, lighting, and appliances to replacing heating and cooling equipment, installing energy management systems or heat pumps, or adding solar panels. These types of improvements must become a primary focus if the nation is to achieve measurable progress in energy savings. By emphasizing retrofits and improvements to existing homes, we can strike a better balance: advancing efficiency and environmental goals while keeping housing affordable for families.

Conclusion

Chairman Latta, Ranking Member Castor, and members of the Subcommittee, thank you for the opportunity to testify today. Preserving energy choice is essential to keeping housing affordable and attainable. Federal mandates that dictate fuels, appliances, or building codes strip families of options and drive-up costs at a time when too many are already priced out of the market.

NAHB urges this Subcommittee and Congress to advance policies that protect energy choice, respect state and local decision-making, and focus on solutions that deliver real benefits without sacrificing affordability. We stand ready to work with you to ensure that federal energy policy strengthens housing supply and preserves the ability of American families to achieve the dream of homeownership.

Mr. LATTA. Well, thank you very much for your statement.

And, Mr. Lieberman, you are recognized for 5 minutes for your opening statement.

STATEMENT OF BEN LIEBERMAN

Mr. LIEBERMAN. Chair Latta, Ranking Member Castor, members of the subcommittee, the dedicated staff, thank you for the opportunity to testify today.

My name is Ben Lieberman. I am a senior fellow with the Competitive Enterprise Institute, a nonpartisan public policy organization that concentrates on regulatory issues from a free market perspective. Prior to that, I worked on several of these issues as a staffer on this committee from 2011 to 2018. But I have actually been following these issues all the way back to the 1990s. And over that span, I have seen some of the problems with these regulations only getting worse for consumers.

When I started, most home appliance were subjected to one or at most two rounds of Department of Energy efficiency regulators—regulations. But now, many have been hit with, four or five or even six rounds of successively tighter standards. And the law requires DOE to periodically revisit these standards and consider tightening them but does not allow the agency to make them less stringent or sunset them, even if there is clear evidence that they backfired on consumers.

Now as far back as 1996, there was widespread recognition that there were problems with appliance over regulation, and DOE instituted a number of process reforms to restore balance. I bring this up for two reasons: It demonstrates that some of the problems were already evident almost 30 years ago, and given that these reforms were instituted under President Clinton, it shows that this issue wasn't always as partisan as it is today. But, unfortunately, the 1996 process reforms were not judicially reviewable and have sometimes and quite often been ignored.

Now, all of these standards raise the upfront cost of appliances. And in some cases like the upcoming furnace and water heater regulations, the increase is so steep that homeowners may not earn back the upfront costs in the form of energy saving. The law has a provision that the initial cost increase not be more than that is earned back within 3 years, but this metric is not mandatory and is routinely bypassed.

Other rules compromise product quality. Perhaps most annoying are dishwashers which now take 2 or more hours to do a normal cycle, twice as long as it took before standards were in place. Washing machines have been subjected to regulations in 1994, 2004, 2007, 2015, 2018, and most recently in 2024, and have also caused several performance problems. And refrigerators don't last as long as they used to.

Choices are also being limited, and not just incandescent light bulbs. For example, the option of a noncondensing gas furnace will no longer be available in 2028 when the latest rule takes effect.

Climate change has become a finger on the scale favoring more regulations and has been used to disproportionately target natural-gas-using appliances in favor of electric versions.

Now, H.R. 4626, the Don't Mess With My Home Appliances Act, contains a number of very good ideas and deserves serious consideration. Best of all is the lookback provision, which would allow the agency to fix problems with existing regulations.

I mean, do we really want to keep pretending that Department of Energy appliance regulators have never made mistakes that need correcting? And do we want to keep pretending that there aren't homeowners who aren't happy with the results of some of these regulations? I would note that this commonsense reform was one of the recommendations in the National Academies report on appliance regulation.

The bill also contains provisions to ensure that any new rule saves consumers more money than it costs, which makes so much sense that most people would be surprised that it isn't already standard practice at the agency.

The bill also states that these regulations cannot be used in postclimate policy, and that natural gas appliances cannot be disproportionately targeted.

In addition, H.R. 4758, the Homeowner Energy Efficiency Act, takes the critical re-step of repealing several Inflation Reduction Act programs that pursue this anti-natural-gas agenda. Needless to say, the American people don't want to see our tax dollars being used to take away our energy choices.

I do think these bills could go further. In particular, there are several home appliance that have already been so badly overregulated, they should be exempted from any further rules. I would suggest dishwashers, washing machines, and light bulbs. I also believe that stoves should never have been regulated in the first place and ought to be excluded.

But overall, the less government interference with our clients' choices, the better. If we can't sunset the program entirely, let's at least do some judicious pruning, and these bills are a good start.

Thank you.

[The prepared statement of Mr. Lieberman follows:]

**U.S. House of Representatives
Committee on Energy and Commerce
Subcommittee on Energy**

**Hearing on “Building the American Dream: Examining
Affordability, Choice, and Security in Appliance and Buildings Policies.”
September 9, 2025**

**Written Testimony of Ben Lieberman, Senior Fellow,
Competitive Enterprise Institute**

I. Summary

- The Department of Energy’s appliance efficiency standards program is decades old, and most major home appliances have been subjected to multiple rounds of successively tighter standards.
- Although ostensibly for the benefit of consumers, many standards significantly increase the price of appliances and/or compromise product choice, features, performance, reliability and longevity.
- Many standards have proved more troublesome than anticipated by the agency. Dishwashers, washing machines, and light bulbs are among the most overregulated appliances.
- The appliance standards program is being impermissibly used as a climate policy tool, to the further detriment of consumers.
- Reform legislation should place concrete limits on additional regulation while repealing current regulations not in the best interests of consumers.

Thank you for the opportunity to testify today. My name is Ben Lieberman and I am a Senior Fellow at the Competitive Enterprise Institute (CEI) a non-partisan public policy organization that concentrates on regulatory issues from a free-market perspective. I work in CEI’s Energy and Environment Department where I cover a number of regulatory programs, including Department of Energy (DOE) appliance efficiency standards, and have filed comments with the agency regarding regulations for furnaces, stoves, dishwashers, air conditioners,

washing machines, light bulbs, water heaters, and refrigerators.¹ Prior to joining CEI in 2018, I was a staff member on this Committee where I also worked on DOE appliance regulations as well as related issues.

II. A Brief History of Federal Appliance Regulations

Federal regulation of home appliances dates back to the Energy Policy and Conservation Act of 1975 (EPCA).² Among other things, this statute and subsequent amendments created a program enabling the Department of Energy (DOE) to set energy efficiency requirements for most home appliances. The original statute did not mandate such standards but required the agency to set them upon determining that they were “technologically feasible and economically justified,” and would result in “significant conservation of energy.”³

For the first several years of the program, no standards were finalized. In the early 1980s, the Reagan administration DOE considered but declined to regulate eight major home appliances (central air conditioners, room air conditioners, refrigerators, freezers, furnaces, water heaters, washing machines and dryers) on the grounds that the statutory requirements were not

¹ Comments of Free Market Organizations to the Department of Energy, Energy Conservation Standards for Consumer Furnaces, Notice of Proposed Rulemaking, October 5, 2022, <https://cei.org/wpcontent/uploads/2022/10/FurnaceComment-10-3-2022-final.pdf>; Comments of the Competitive Enterprise Institute to the Department of Energy, Energy Conservation Standards for Conventional Cooking Products, Notice of Proposed Rulemaking and Direct Final Rule, June 3, 2024, <https://cei.org/wpcontent/uploads/2024/06/StovesComment-5-30-2024.pdf>; Comments of Free Market Organizations to the Department of Energy, Energy Conservation Standards for Dishwashers, July 18, 2023, <https://cei.org/wpcontent/uploads/2023/07/dishwashers-7-18-2023.pdf>; Comments of the Competitive Enterprise Institute and Michael Mannino to the Department of Energy, Energy Conservation Standards for Residential Clothes Washers, May 17, 2023, https://cei.org/regulatory_comments/comments-to-thedepartment-of-energy-on-itsproposed-clotheswasherregulation/; Comments of Free Market Organizations to the Department of Energy, Energy Conservation Standards for Consumer Water Heaters, Notice of Proposed Rulemaking, September 26, 2024, <https://cei.org/wpcontent/uploads/2023/09/WaterHeaters-9-2023.pdf>.

² 42 U.S.C. §§ 6291-6317.

³ 42 U.S.C. §§ 6295(o)(2)(A), 6295(o)(3)(B).

met. In effect, the Reagan DOE concluded that there was no market failure justifying federal intervention.

In 1985, these so-called “no standards standards” were successfully challenged in federal court, which remanded the issue back to the agency to either promulgate standards or provide a legally stronger explanation for not doing so.⁴ In response, President Reagan encouraged Congress to legislate an acceptable solution, leading to the National Appliance Energy Conservation Act of 1987 (NAECA).⁵ NAECA statutorily set out initial energy efficiency standards for these appliances, and also required periodic reviews of them every six years. When reviewing existing standards, the statute gives the agency the option of either retaining the standard or tightening it, but does not allow an existing standard to be made less stringent – the so-called anti-backsliding provision.⁶

By the 1990s, it was already evident that appliance overregulation was becoming a problem, and the Clinton administration DOE finalized a series of process reforms in 1996. These included a more thorough analysis of the costs and benefits of each proposed rule, including potentially disproportionate adverse impacts on consumer subgroups such as low-income and senior households.⁷ It also encouraged the consideration of non-regulatory approaches in lieu of regulations. However, these measures were not judicially reviewable and have made little difference.

⁴*Natural Resources Defense Council v. Herrington*, 768 F.2d 1355 (D.C. Cir. 1985), <https://law.justia.com/cases/federal/appellate-courts/F2/768/1355/407798/>.

⁵ National Appliance Energy Conservation Act of 1987, Public Law 100-12, March 17, 1987, <https://www.congress.gov/100/statute/STATUTE-101/STATUTE-101-Pg103.pdf>.

⁶ 42 U.S.C. §6295(o)(1).

⁷ 10 CFR, Part 430, Subpart C, Appendix A, <https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-430/subpart-C/appendix-Appendix%20A%20to%20Subpart%20C%20of%20Part%20430>.

In the decades since, a pattern has emerged where a Republican administration would take a much more methodical approach to appliance regulations (and often face litigation for doing so), followed by a Democratic administration that tried to make up for lost time with a very aggressive regulatory agenda.

This back and forth also included an effort during the first Trump administration to expand upon the Clinton-era DOE process reforms and make them judicially reviewable, as well as measures providing more regulatory flexibility for dishwashers, washing machines light bulbs, and furnaces.⁸ However, these provisions were later reversed by the Biden administration.⁹

By now, most home appliances have been subjected to three, four, five, or even six rounds of successively tighter standards. In addition to the sizable bureaucracy at DOE that works on appliance regulations, there are quite a few activists, consultants, lobbyists, and lawyers who also owe their livelihoods to the program and are pre-disposed to see it continue.

The manufacturers of these appliances typically support federal standards, often arguing that uniform national requirements are preferable to a patchwork of state ones. California is especially aggressive in setting state standards in the absence of federal ones, though the legality of such state action is subject to dispute. Further, once a new appliance standard is in effect and manufacturers have already incurred the transition costs, they have little incentive to go back even if there is consumer dissatisfaction with the result. And in some cases, manufacturers have

⁸ Department of Energy, Office of Energy Efficiency and Renewable Energy, “Energy Conservation Program for Appliance Standards: Procedures for Use in New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Commercial/Industrial Equipment: Final Rule,” 85 Fed. Reg. 8626, February 14, 2020, <https://www.govinfo.gov/content/pkg/FR-2020-02-14/pdf/2020-00023.pdf>.

⁹ Department of Energy, Office of Energy Efficiency and Renewable Energy, “Energy Conservation Program for Appliance Standards: Procedures, Interpretations, and Policies for Consideration in New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Commercial/Industrial Equipment: Final Rule,” 86 Fed. Reg. 70892, December 13, 2021, <https://www.govinfo.gov/content/pkg/FR-2021-12-13/pdf/2021-25725.pdf>.

actively lobbied for standards that give them a captive market for costlier models. Amid the many pro-standards advocates, the interests of consumers have played a relatively minor role in the standards-setting process.

III. The Anti-Consumer Impacts of Appliance Regulations

EPCA contains numerous provisions protecting consumers against overregulation. For example, DOE is required to consider the costs as well as the benefits of proposed rules and is expressly forbidden from setting a standard that compromises any product characteristics valued by consumers.¹⁰

Despite the pro-consumer thrust of EPCA's appliance provisions, many standards harm consumers by adding to net costs and/or impacting appliance choice, features, performance, reliability, and longevity. The consumer protections in the law have been routinely sidestepped, and sensible regulatory stopping points ignored. Some of the worst rules are the recent ones for appliances that had already been regulated multiples times, and several more such rules are scheduled to take effect in the years ahead.

The impact of five rounds of successively tighter standards for dishwashers has been especially annoying. Models today take two or more hours to complete a normal cycle, double the time it took before regulations.¹¹ The agency has admitted that its rules are the cause, stating that “[t]o help compensate for the negative impact on cleaning performance associated with decreasing water use and water temperature, manufacturers will typically increase the cycle

¹⁰ 42 U.S.C. §§6295(o)(2) and (o)(4).

¹¹ Comments of the Competitive Enterprise Institute to the Department of Energy, Energy Conservation Program: Energy Conservation Standards for Dishwashers, Residential Clothes Washers, and Consumer Clothes Washers Notification of Proposed Confirmation of Withdrawal and Request for Comment, December 9, 2024, <https://cei.org/wp-content/uploads/2024/12/Dishwashers-12-5-2024-3.pdf>.

time.”¹² It should be noted that the dishwasher standards are not just bad policy, they likely violate the law as well.¹³ The standards target both energy and water use, though EPCA only allows the former.¹⁴ Fortunately, the Trump DOE has proposed rules that would help address this overreach.¹⁵

Washing machine standards (the subject of successively tighter regulations in 1994, 2004, 2007, 2015, 2018, and 2024) have led to cleaning performance and reliability problems that were never anticipated by the agency and have not been acknowledged since.¹⁶ They have also led to accumulation of foul smelling mold in many machines, necessitating a new market in products designed to eliminate the smell.¹⁷ The need to occasionally wash the washing machine by running it empty with these special cleaners is not only an inconvenience but also undercuts the agency’s claimed energy and water savings.¹⁸ The same is true of the increased need to run loads more than once due to diminished cleaning performance. Fortunately, the Trump administration is also revisiting these standards.¹⁹

¹² Department of Energy, 2016-11-22 Final Rule Technical Support Document, p. 3-28, Nov. 22, 2016, <https://www.regulations.gov/document?D=EERE-2014-BT-STD-0021-0029>. (2016 DOE Technical Support Document).

¹³ *Louisiana v. United States Dept. of Energy*, 90 F.4th 461 (5th Cir. 2024), <https://ago.mo.gov/wpcontent/uploads/Dishwashers-CA5-Opinion.pdf>.

¹⁴ Devin Watkins, Competitive Enterprise Institute, “Trump Executive Order Restores Consumer Choice for Home Appliances,” news release, May 5, 2025, <https://cei.org/news5/releases/trump-executive-order-restores-consumer-choice-for-home-appliances/>.

¹⁵ Department of Energy, Office of Energy Efficiency and Renewable Energy, “Rescinding the Amended Water Use Standards for Residential Dishwashers: Proposed Rule,” 90 Fed. Reg. 20859, May 16, 2025, <https://www.govinfo.gov/content/pkg/FR-2025-05-16/pdf/2025-08591.pdf>.

¹⁶ Art Fraas and Sofie E. Miller, “Measuring Energy Efficiency: Accounting for the Hidden Costs of Product Failure,” *Economics of Energy & Environmental Policy*, Vol. 9, No. 2, pp. 181-198 (2020) (Fraas and Miller).

¹⁷ Comments of the Competitive Enterprise Institute and Michael Mannino to the Department of Energy, Energy Conservation Standards for Residential Clothes Washers, May 17, 2023, <https://cei.org/wp-content/uploads/2023/05/DOE-ClothesWashers-5-18-2023.pdf>.

¹⁸ Popular Mechanics, “How to Clean Your Washing Machine,” Joseph Truini, Nov. 18, 2020.

¹⁹ Department of Energy, Office of Energy Efficiency and Renewable Energy, “Energy Conservation Program: Energy Conservation Standards for Residential Clothes Washers: Proposed Rule,” 90 Fed. Reg. 20890, May 16, 2025, <https://www.govinfo.gov/content/pkg/FR-2025-05-16/pdf/2025-08578.pdf>.

Other appliance regulations are likely to raise the up-front cost more than can be justified by the energy savings. This includes upcoming furnace and water heater regulations promulgated during the Biden administration and scheduled to take effect in 2028 and 2029, respectively. DOE predicts a cost boost for a gas furnace of up to \$867 and an electric water heater increase of \$953, and some in industry believe these may be significant underestimates.²⁰ EPCA contains the very sensible yardstick that standards should not raise the up-front cost any more than is likely to be earned back in energy savings within three years, but this provision is not mandatory and is frequently exceeded by the agency.²¹

New appliance rules are promulgated with little regard for the problems caused by previous ones. Indeed, DOE insists that it has no obligation to do any retrospective reviews, so long as each rule is based on what it considers to be “the best available data at the time.”²²

The costs keep rising with each successive round of regulations. For example, the past regulations that knocked incandescent light bulbs off the market have paved the way for more expensive light-emitting diode (LED) bulbs. And now, the latest Biden DOE rule cracks down hard on LEDs and will further raise their price by an agency-estimated \$2.70, from \$2.98 to \$5.68 per bulb.²³

It all starts to add up to a significant price boost, not just for existing homeowners, but for new homebuyers as well. Indeed, the National Association of Home Builders estimates that

²⁰ Ben Lieberman, “5 Insane Biden-Harris Appliance Regulations Heading Your Way,” Fox News, September 20, 2024, https://cei.org/opeds_articles/5-insane-biden-harris-appliance-regulations-heading-your-way/.

²¹ 42 U.S.C. §6295(o)(2)(B)(iii).

²² See, Department of Energy, Office of Energy Efficiency and Renewable Energy, “Energy Conservation Program: Energy Conservation Standards for Residential Clothes Washers: Proposed Rule,” 88 Fed. Reg. 13520, 13570, March 3, 2023, <https://www.govinfo.gov/content/pkg/FR-2023-03-03/pdf/2023-03862.pdf>.

²³ Ben Lieberman, “Department of Energy is Coming for Our Light Bulbs – Again,” Competitive Enterprise Institute, April 19, 2024, <https://cei.org/blog/department-of-energy-coming-after-our-light-bulbs-again/>.

regulatory costs at all levels of government contribute 25 percent to the costs of housing.²⁴

Appliance regulations are a significant contributor, especially for first-time home buyers. And it will only get worse with the wave of costly Biden DOE regulations that will come into force in the years ahead, several of which cannot be easily reversed by the Trump administration due to the anti-backsliding provision.

Other appliance regulations completely eliminate choices and features valued by some consumers, such as incandescent light bulbs that are no longer available or non-condensing gas furnaces that will disappear in 2028 as a result of the above-mentioned furnace rule. Such provisions quite arguably violate the provisions in EPCA forbidding standards that compromise any appliance characteristics.²⁵ Fortunately, a rule that would have done the same for non-condensing tankless water heaters was recently repealed under the Congressional Review Act (CRA), but many other rules were finalized too early to fall within the CRA window.

There is also evidence of reduced product lifetimes as a result of stringent appliance regulations. This is not surprising given that these rules often necessitate considerably more complicated and less reliable mechanical systems to comply. And when repair costs go up, a point is reached where replacement is the more sensible option. In the case of refrigerators, DOE has reduced its assumption of the average useful life from 19 years to 12 years over the span that it repeatedly regulated them.²⁶ The actual lifetimes may be shorter still. Note that overstated product lifetimes greatly increase the costs to consumers and undercut the claimed energy savings.²⁷

²⁴ National Association of Home Builders, “Eliminating Excessive Regulations Will Ease the Nation’s Housing Affordability Crisis,” April 1, 2025, <https://www.nahb.org/news-and-economics/press-releases/2025/04/eliminating-excessive-regulations-will-ease-the-nations-housing-affordability-crisis>.

²⁵ 42 U.S.C. §6295(o)(4).

²⁶ Fraas and Miller, p. 193.

²⁷ Id.

IV. The Gas Stove Controversy of 2023

In one case, consumer opposition did prevent an onerous appliance regulation. This occurred in 2023 with the regulatory targeting of gas stoves. Although it began with a commissioner on the Consumer Product Safety Commission stating that gas stoves may need to be banned, it expanded to a proposed DOE efficiency standard that was tailor-made to discourage gas stoves in favor of electric versions.²⁸ Only after a surprisingly powerful grassroots backlash against such government meddling did both agencies back off. DOE did finalize a rule impacting gas stoves, but it was much less stringent than the one originally proposed.²⁹ The episode did serve as a useful reminder for the federal government that the American people dislike the idea of being told what they can and cannot have in their homes.

V. Mission Creep and Climate Change

The 2023 controversy over gas stove regulations was also part of an alarming evolution of the appliance standards program into a climate policy tool. This trend began with the Obama administration but accelerated greatly under President Biden. Indeed, the Biden DOE fully embraced the “whole of government” prioritization of climate change concerns.³⁰

EPCA contains provisions prioritizing the interests of consumers in setting appliance standards, and these provisions cannot be superseded by environmental considerations like

²⁸ Coalition Comments to the Department of Energy, Energy Conservation Standards for Conventional Cooking Products, Notice of Proposed Rulemaking,” April 17, 2023, <https://cei.org/wp-content/uploads/2023/04/DOE-Stoves-4-17-2023-1.pdf>.

²⁹ Comments of the Competitive Enterprise Institute to the Department of Energy, Energy Conservation Standards for Conventional Cooking Products, Notice of Proposed Rulemaking and Direct Final Rule, June 3, 2024, <https://cei.org/wp-content/uploads/2024/06/Stoves-Comment-5-30-2024.pdf>.

³⁰ Executive Order 14008, “Tackling the Climate Crisis at Home and Abroad,” January 27, 2021, <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.

climate change. Regardless, the Biden DOE proclaimed that “[a]ddressing the effects of climate change is a top priority of the Energy Department,” and that this new agency-wide agenda includes “working to dramatically increase the efficiency of appliances....”

All of the Biden administration appliance regulations – light bulbs, furnaces, water heaters, air conditioners, stoves, dishwashers, refrigerators, others – included calculations of the claimed climate benefits. These benefits are based on the highly flawed estimates of the social cost of carbon,³¹ which the Trump administration has sensibly ordered all regulatory agencies to stop relying upon.³² Nonetheless, it was used by the Biden DOE as a finger on the scale justifying many appliance rules that are still on the books.

In addition to using climate change as a rationale for new standards, the agency has also used the program to discourage the residential use of natural gas, a fossil fuel. This is done via standards that disproportionately burden the gas versions of appliances in favor of electric versions. While public opposition prevented a DOE appliance standard that disproportionately targeted natural gas stoves, it did not stop a furnace standard which tilts the balance away from gas in favor of electric heat.³³

Anti-natural gas appliance regulations were part of the Biden administration’s broad-based electrification agenda, which coordinated with many well-funded environmental groups

³¹David R. Legates and Marlo Lewis, Competitive Enterprise Institute Comments to the Department of Energy’s “A Critical Review of Impacts of Greenhouse Gas Emissions on the U.S. Climate,” September 2, 2025, pp. 62-74, <https://cei.org/wp-content/uploads/2025/09/CEI-Comments-on-Department-of-Energy-Climate-Science-Report-David-Legates-and-Marlo-Lewis-September-2-2025.pdf>.

³²Office of Management and Budget, “Memorandum for Regulatory Policy Officers at Departments and Agencies and Managing and Executive Directors of Commissions and Boards,” May 5, 2025, <https://www.whitehouse.gov/wp-content/uploads/2025/02/M-25-27-Guidance-Implementing-Section-6-of-Executive-Order-14154-Entitled-Unleashing-American-Energy.pdf>.

³³Comments of Free Market Organizations to the Department of Energy, Energy Conservation Standards for Consumer Furnaces, Notice of Proposed Rulemaking, October 5, 2022, <https://cei.org/wpcontent/uploads/2022/10/FurnaceComment-10-3-2022-final.pdf>.

aggressively pursuing the goal of making electricity the only energy option for homeowners.³⁴ These efforts received a massive funding boost from the Inflation Reduction Act, which included generous federal rebates for electric appliances but not gas versions, as well as funding for advocacy efforts to change state and local building codes to restrict natural gas.³⁵

The use of appliance regulations to discourage gas versions of appliances constrains choices that should be made by the consumer, and it does so even though EPCA contains clear provisions against fuel switching. It also undercuts EPCA's primary purpose of saving people money, as natural gas is three and a half times cheaper than electricity on a per unit energy basis.³⁶

VI. Ideas for Reform

H.R. 4626, the “Don’t Mess With My Home Appliances Act,” contains a number of very good ideas and deserves serious consideration. Best of all is its lookback provision, which would allow the agency to fix problems with existing regulations. As it is now, the anti-backsliding provision in EPCA prevents the agency from revisiting regulations already on the books, no matter how badly they may have turned out. This commonsense reform was recommended in a National Academies of Sciences study and is long overdue.³⁷

³⁴ Robert Bryce, “The Billionaires Behind the Gas Bans,” Substack, January 26, 2023, <https://robertbryce.substack.com/p/the-billionaires-behind-the-gas-bans>.

³⁵ Ben Lieberman, Testimony, U.S. House of Representatives Committee on Oversight and Government Reform Subcommittees on Economic Growth, Energy Policy, and Regulatory Affairs, and Health Care and Financial Services Hearing on “Mandates, Meddling, and Mismanagement: The IRA’s Threat to Energy and Medicine” May 20, 2025, <https://cei.org/wp-content/uploads/2025/05/OGR-Testimony-5-20-2025.pdf>.

³⁶ Department of Energy, “Energy Conservation Program for Consumer Products: Representative Average Unit Costs of Energy,” 89 Fed. Reg. 83672, October 17, 2024, <https://www.federalregister.gov/documents/2024/10/17/2024-23893/energy-conservation-program-for-consumer-products-representative-average-unit-costs-of-energy>.

³⁷ National Academies, “Review of Methods for Setting Building and Equipment Performance Standards,” 2021, <https://nap.nationalacademies.org/read/25992/chapter/1#xj>.

The National Academies also recommended that the agency closely scrutinize each proposed new rule to determine whether it really is justified and would benefit consumers, and the bill contains several measures furthering this goal. This includes a more comprehensive analysis of costs – not just higher equipment costs but also higher installation costs, maintenance costs, reduced products lifetimes as well as other factors often downplayed or ignored by the agency. It also requires more analysis of any disproportionate impacts on low-income households who are hardest hit by these regulations.

In addition, the bill contains provisions explicitly forbidding climate considerations as well as fuel switching away from natural gas. These provisions are essential to preventing mission creep towards an environmental agenda that is at odds with the best interests of consumers. It also quantifies what is considered significant conservation of energy so this requirement cannot be so easily sidestepped, and it makes the 3-year payback period a requirement rather than a suggestion.

However, the bill still leaves a lot to the discretion of the agency, and we have increasingly seen DOE willing to say just about anything in its analysis to get these regulations across the finish line, especially during the last administration. That is why we should take at least some regulatory authority off the table. For example, the appliances that have already been badly overregulated – dishwashers, washing machines, and light bulbs are prime examples – could be exempted from any further rules. And stoves is a category that should have never been regulated in the first place and ought to be excluded from this program. In addition, some of the problematic recent rules that missed the Congressional Review Act window and are still scheduled to take effect in the coming years also should be rescinded. If we can't sunset the

program entirely, we can at least limit the future damage to homeowners by some judicious pruning.

It is important to note that there is no downside to not regulating. Homeowners who want ultra-efficient appliances will still be free to choose them, and manufacturers have demonstrated that they will offer such models for that segment of the market that prefers them. But they will no longer be subject to federal mandates that force particular choices on everyone.

Further, any and all efforts to deprive homeowners the option of natural gas appliances should be blocked. The choice of using natural gas or electricity ought to rest with the homeowner, not the government. The “Don’t Mess With My Home Appliances Act” has provisions designed to preserve fuel choice, as does H.R. 3699, the “Energy Choice Act,” which restricts state and local gas bans. In addition, H.R.4758, the “Homeowner Energy Freedom Act” takes the critical step of ending several Inflation Reduction Act programs providing federal funding to pursue this unwanted agenda - needless to say, the American people don’t want to see our tax dollars spent to take away our energy choices. Note that this bill goes beyond the spending cuts in the One Big Beautiful Bill Act and completely revokes these programs.

In my view, the more we place limits on statutes like EPCA and the Inflation Reduction Act, the better for the American people. A good rule of thumb for appliance regulatory reform is that if you are expanding consumer choice you are doing the right thing, but if you are limiting consumer choice in favor of government restrictions, you are doing the wrong thing. Thank you.

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Mr. LATTA. That you, Mr. Lieberman.

And, Ms. Saul Rinaldi, you are recognized for 5 minutes for your opening statement. Thank you.

STATEMENT OF KARA SAUL RINALDI

Ms. SAUL RINALDI. Subcommittee Chair Latta, Chair Guthrie, Subcommittee Ranking Member Castor, and Ranking Member Pallone, and members of the subcommittee, thank you for the opportunity to testify.

The buildings sector is responsible for nearly 30 percent of U.S. energy consumption, but a significant portion of this energy is wasted. Energy efficiency in buildings and appliances lowers costs for families and businesses. Policies aimed at building homes more efficiently and retrofitting over 120 million existing residential units across the country will not only help homeowners save money but will also improve household comfort, health, safety, and resiliency.

Advancing energy efficiency across the U.S. reduces demand on our energy system while driving local job growth among the small business contractors that I am proud to represent here today.

My name is Kara Saul Rinaldi, and I serve as the chief policy officer for the Building Performance Association. The BPA is a membership-driven association dedicated to advancing the home and building performance industry.

I appreciate the opportunity to represent BPA to share how energy efficiency isn't about doing less. It is about using America's greatest resource to do more, better, and at lower costs.

Last month, the U.S. Department of Energy released its United States Energy and Employment Report, or the USEER. The 2025 USEER affirmed what past reports have repeatedly shown, that the energy efficiency sector is the largest employer across the entire energy sector, employing nearly 2.4 million Americans and more workers than the entire U.S. fuels and electric generation industries combined.

Using data from the USEER BPA release is an annual Energy Efficiency Jobs in America Report featuring district-level data. And I look forward to sending it to each of your offices when the report is ready later this fall.

A home built today is an existing home tomorrow and may be part of our housing infrastructure for a century. If it is not built with adequate insulation, air ceiling, efficient duct work, heating and cooling, and windows, homeowners will be hard pressed to spend the time and money to upgrade their home at a cost significantly more than building the home efficiently in the first place.

Building codes and standards also protect renters. According to the 2023 census data, 35 percent of Americans live in rental properties. Tenants usually pay the electric fuel bills. Because landlords do not receive energy savings benefits when replacing appliances, they have no incentive to invest in more efficient equipment. Building energy codes and appliance and equipment standards provide the minimum efficiency baseline to protect American homeowners and renters.

According to ACEEE, while we continue to see rising energy demand, energy efficiency saves American approximately \$1 billion

annually. By investing in energy efficiency, we have built buildings and appliances that save more, do more, and last longer while using less energy. And we need to continue this innovation if we are to mitigate the cost of bringing new data centers online.

While data centers accounted for roughly 4.4 percent of U.S. electricity use, as of 2023, this figure is projected to rise as much as 12 percent in the next 3 years and will greatly impact the cost of energy for everyday Americans.

We know that capital investments to meet peak energy demands is a primary driver of costs. But if American homes are allowed to invest in dynamic efficiency improvements, we can mitigate billions of dollars of long-term distribution system costs.

Energy efficiency upgrades and utility data access paired with smart devices can reduce peak demand and allow new data centers to join the grid without significant costs to rate payers. Given the time needed to build new transmission, energy efficiency and flexible demand technology are the only solutions that can meet the rapid pace of data center deployment.

Roughly 60 percent of homes were built before 1980 before modern energy codes, leading to unnecessarily high utility bills for many Americans. Over 33 million American households are energy insecure, with nearly 25 million households reducing food or medicine to pay for energy costs.

DOE estimated that while the average household spends \$2,000 on their annual utility bills, between \$200 or \$400 of this is wasted from inefficiency.

In conclusion, despite the incredible strides in energy efficiency building, including the appliances and equipment in them, are among the largest consumers of energy and some of the greatest opportunities to support dynamic change.

With policy and program innovation that brings the pieces I have discussed together to optimize energy usage, we can deliver more reliable and affordable energy, all while making buildings healthier, sturdier, cheaper, and more comfortable places to live and work.

Thanks, and I look forward to your questions.

[The prepared statement of Ms. Saul Rinaldi follows:]

**U.S. House of Representatives
Committee on Energy and Commerce
Subcommittee on Energy**

**Hearing on “Building the American Dream: Examining
Affordability, Choice, and Security in Appliance and Buildings Policies.”
September 9, 2025**

**Written Testimony of
Kara Saul Rinaldi
Chief Policy Officer, Building Performance Association**

Subcommittee Chair Latta, Chair Guthrie, Subcommittee Ranking Member Castor, Ranking Member Pallone, and members of the Committee, thank you for the opportunity to testify before you today and to participate in this important discussion examining affordability, choice and security in appliance and building policies. As you may know, the buildings sector is responsible for nearly 30% of all U.S. end-use energy consumption.¹ Unfortunately, a significant portion of this energy is wasted. By using our energy smarter and leveraging energy efficiency in buildings, we strengthen U.S. energy dominance, lower costs for families, businesses, and factories, and protect our national security. While I am happy to address all the issues before the committee today, I would like to focus my testimony on the buildings we all live in, residential buildings. Nine in ten American single-family detached homes are under-insulated.² Policies aimed at retrofitting the over 120 million homes and dwelling units across the country will not only help homeowners save money on their monthly utility bills, but will also improve household comfort, health, safety, and resiliency. Advancing energy efficiency in buildings across the U.S. reduces

¹ U.S. Energy Information Administration, Energy Consumption by sector, April 2024.
<https://www.eia.gov/tools/faqs/faq.php?id=86&t=1>.

² ICF, “Evaluation of Under Insulated Single-Family Detached Homes in the United States”, October 2024.
<https://insulationinstitute.org/wp-content/uploads/2023/02/Under-Insulated-Single-Family-Detached-Homes-in-the-United-States-Final-20241008.pdf>.

demands on our energy system, while also driving local job growth among the small business contractors that I am proud to represent.

I serve as the Chief Policy Officer for the Building Performance Association (BPA). BPA is a membership-driven 501(c)(6) industry association dedicated to advancing the home and building performance industry by delivering improved energy efficiency, health, safety, and environmental performance of buildings and to advance policies, programs and standards through research, education, training and outreach. BPA's network of over 20,000 individuals includes home performance contractors who perform critical upgrades in all 50 U.S. states and Washington, DC. Contractors are the vital "boots on the ground" for energy efficiency - working locally in homes and buildings to reduce energy waste and support energy affordability and energy abundance. I appreciate the opportunity to represent BPA here today to share how energy efficiency isn't about "doing less" — it's about America doing more, better, and cheaper.

Energy Efficiency Equals Jobs

Last month, the U.S. Department of Energy (DOE) released its annual *United States Energy & Employment Report (USEER)*³, a compilation of survey data taken annually from over 42,000 businesses nationwide that constitutes the most comprehensive study of energy related employment available. The 2025 USEER affirmed what past reports have repeatedly shown: the energy efficiency sector is the largest employer across the entire energy sector, employing nearly 2.4 million Americans, and more than the entire U.S. fuels and electric generation industries

³ U.S. Department of Energy, 2025 United States Energy & Employment Report, August 2025, https://www.energy.gov/sites/default/files/2025-08/National%20USEER_08282025.pdf. The USEER is completed in compliance with 42 U.S.C. § 18841(c)(2)(A).

combined.⁴ Energy efficiency jobs also have the strongest momentum - the sector grew by more than 91,000 from 2023 to 2024,⁵ the fastest of any energy job sector over the same period.⁶

Energy efficiency jobs comprise anyone participating in the energy efficiency supply chain, including designers and developers, manufacturers and distributors, and contractors working on new construction or repair projects.⁷ These workers are everywhere – 99.9% of U.S. counties have energy efficiency jobs and nearly 270,000 Americans in rural areas work in energy efficiency.⁸ Of the more than 390,000 energy efficiency establishments, 75% of them have fewer than 20 employees and are classified as small businesses.⁹ These jobs, particularly for contractors and repair technicians, are inherently local and cannot be exported.

Efficiency jobs also pay relatively well - the median wage of an energy efficiency worker is \$59,390, 20% higher than the national median wage of \$49,500.¹⁰ A significant portion of U.S. energy efficiency jobs are in the residential sector, and approximately 54% of energy efficiency jobs involve construction and repairs.¹¹ These contractors reduce energy waste in U.S. homes and buildings across the country.

Using data from the USEER, BPA releases an annual *Energy Efficiency Jobs in America* Report featuring additional information, including Congressional district-level energy efficiency

⁴ U.S. Department of Energy, 2025 United States Energy & Employment Report, August 2025, p.ii.

⁵ Ibid; U.S. Department of Energy, 2024 United States Energy & Employment Report, October 2024, https://www.energy.gov/sites/default/files/2024-10/USEER%202024_COMPLETE_1002.pdf, p.165.

⁶ Ibid; Ibid, p.xii-xv.

⁷ U.S. Department of Energy, 2025 United States Energy & Employment Report Appendix, August 2025, p. A-93-95, <https://www.energy.gov/sites/default/files/2025-08/USEER%20Appendices%200828%202.0.pdf>.

⁸ E4TheFuture, Energy Efficiency Jobs in America, December 2024, <https://building-performance.org/documents/Energy-Efficiency-Jobs-in-America-2024.pdf>, p.3.

⁹ E4TheFuture, Energy Efficiency Jobs in America, December 2024, p.4.

¹⁰ U.S. Department of Energy, 2025 United States Energy & Employment Report, August 2025, p.ii.

¹¹ Ibid, p.126.

employment data.¹² BPA will release the 2025 edition of the *Energy Efficiency Jobs in America* report this fall.

The energy efficiency industry still has room to grow its workforce. Per the 2025 USEER, 88% of energy efficiency employers performing construction work reported at least some difficulty finding qualified workers - and almost half (48%) reported hiring as “very difficult”.¹³ Qualified often means trained – and training is essential to energy efficiency upgrades to make sure that HVAC equipment is properly sized and correctly installed for example. This training is not just an energy efficiency issue, it is also a health and safety issue.

Building Codes are Critical to America’s Future Infrastructure

A home built today is an existing home tomorrow and possibly part of our housing infrastructure for a century. If it is not built with adequate insulation and air sealing, efficient duct work, heating and cooling systems, and insulated windows, homeowners will be hard-pressed to spend the time and money to upgrade their home at a cost significantly more than building the home efficiently in the first place.

Building codes are important to ensuring all future homeowners have lower energy bills. Investing an additional \$7,229 upfront for energy efficiency improvements to meet the 2021 IECC rather than the 2009 IECC leads to an average annual cost savings of \$963, or over \$80 per month on utility bills.¹⁴

¹² Building Performance Association, “Energy Efficiency Jobs in America.” <https://building-performance.org/2024-energy-efficiency-jobs-in-america-report/>.

¹³ U.S. Department of Energy, 2025 United States Energy & Employment Report, August 2025, p.133.

¹⁴ Final Determination: Adoption of Energy Efficiency Standards for New Construction of HUD- and USDA-Financed Housing. A Notice by the Housing and Urban Development Department and the Agriculture Department on 04/26/2024.

Building codes and standards play an important role in ensuring that Americans live and work in safe, comfortable, and affordable homes. Model building energy codes are developed through a collaborative process involving the building industry and other stakeholders. State and local jurisdictions are then able to adopt or tailor the model codes to meet their local needs (the model codes are also tailored for eight different climate zones). The national model energy codes are also flexible, offering builders and contractors multiple pathways to compliance so that they can choose the solutions that work best for their local markets and their individual buildings.

In addition to supporting an important part of America's energy infrastructure, building codes save lives. According to a November 2020 study by the Federal Emergency Management Agency (FEMA), "over a 20-year period, cities and counties with modern building codes would avoid at least \$32 billion in losses from natural disasters, when compared to jurisdictions without modern building codes."¹⁵

Codes and Standards Protect Consumers and Renters

According to the 2023 census, 35% of Americans live in rental properties.¹⁶ In single-family homes and multi-family properties with individual meters, the tenant usually pays the electric and fuel bills, while the landlord pays for the upkeep of the property. Because the landlord does not receive the benefit of the energy savings from the utility bills when replacing a refrigerator or HVAC unit, or for placing more insulation in the attic to maintain home temperatures, they have no incentive to invest in more efficient equipment. Building energy

<https://www.federalregister.gov/documents/2024/04/26/2024-08793/final-determination-adoption-of-energy-efficiency-standards-for-new-construction-of-hud--and>

¹⁵ "Building Codes Save: A Nationwide Study Losses Avoided as a Result of Adopting Hazard-Resistant Building," U.S. Federal Emergency Management Agency, November 2020,

https://www.fema.gov/sites/default/files/documents/fema_rsl_building-codes-save-study_042025.pdf

¹⁶ U.S. Census Bureau, "Demographic Characteristics for occupied Housing Units," American Community Survey, 2023, <https://data.census.gov/table?q=total+number+of+renters&y=2023>

codes and appliance and equipment standards provide the minimum efficiency baseline to protect consumers. And while the demographics of homeowners vary greatly among states and cities, in 2023, homes built to a strong energy code and common-sense appliance standards ensure everyday, hardworking Americans can pay their utility bills. In fact, according to the Department of Energy, in 2024, “a typical household saved about \$576 per year off their energy and water bill as a result of appliance and equipment standards”.¹⁷

Energy Efficiency Supports Energy Dominance

A 2022 study by ACEEE, the Alliance to Save Energy, and the Business Council for Sustainable Energy documented that energy efficiency is America’s most abundant energy resource. While we continue to see rising energy consumption, without the gains in energy efficiency made since 1980, the 2023 U.S. economy would likely have required two-thirds more energy.¹⁸

In our discussion today about buildings and appliances, it is critical that we acknowledge that energy efficiency policy has been a part of the solution to our past energy challenges – allowing American industry, and the economy generally, to grow faster than energy consumption, thus saving money for needs other than energy. By investing in energy efficiency, we have built buildings and appliances that save more, do more, go faster, and last longer while using less energy. And we need to continue to do this if we are to mitigate electricity price increases due to new data centers and manufacturing plants.

¹⁷ Fact Sheet on Appliance and Equipment Standards Program, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, March 2025, <https://www.energy.gov/sites/default/files/2025-03/Appliance%20Standards%20Fact%20Sheet-02.pdf>

¹⁸ Alliance to Save Energy, American Council for an Energy-Efficient Economy, and Business Council for Sustainable Energy, Energy Efficiency Impact Report, 2022, <https://energyefficiencyimpact.org/>.

While data centers accounted for roughly 4.4% of total U.S. electricity use as of 2023, this figure is projected to rise to between 6.7 and 12% in the next three years¹⁹ and this could greatly impact the cost of energy. A recent study conducted by the Commonwealth of Virginia's Joint Legislative Audit and Review Commission estimated that without policy change, residential customers could see their bills increase by hundreds of dollars a year by 2040 due to spillover effects from data center expansion within the state.²⁰ Others estimate that the price of electricity in data center hot spots may continue to rise - retail rates in those areas could rise 15% to 40% as soon as 2030.²¹

Capital investments in electric infrastructure were the primary driver of cost increases from 2023-2024;²² these capital improvements lead to increased utility bills. But if American homes are allowed to invest in dynamic efficiency improvements and load shifting, we can simultaneously turn down unnecessary power demands for a brief period and save consumers billions of dollars because utilities would not be buying power at "surge" prices and because we could mitigate long-term distribution system costs.

Most households in America have a "smart meter" that measures energy usage every 15 or 60 minutes. If a building reduces energy demand to help stabilize grid constraints, the "smart meter" provides the receipt of this reduction, enabling individuals to be paid for their share of the

¹⁹ DOE Releases New Report Evaluating Increase in Electricity Demand from Data Centers, *U.S. Department of Energy*, December 20, 2024, <https://www.energy.gov/articles/doc-releases-new-report-evaluating-increase-electricity-demand-data-centers>

²⁰ Commonwealth of Virginia, Data Centers in Virginia, December 2024, <https://jlarc.virginia.gov/pdfs/reports/Rpt598.pdf>, p.v.

²¹ Batra, Lalit, Harris, Deb, et. al, Rising current: America's growing electricity demand, ICF, May 2025, https://www.icf.com/-/media/files/icf/reports/2025/energy-demand-report-icf-2025_report.pdf?rev=c87f1111ab97f481a8fe3d3148a372f7f, p.3.

²² "Grid infrastructure investments drive increase in utility spending over last two decades," U.S. Energy Information Administration, November 18, 2024, <https://www.eia.gov/todayinenergy/detail.php?id=63724>

overall reduction and their role in supporting grid reliability. If you save more energy during “surge” hours, you earn more money - but only if the smart meter data is available.

Fifteen years ago, Congress allocated over \$3 billion for the installation of smart meters nationwide; today, over 85% of households have a smart meter, but we are not fully using these capabilities we've already paid for. According to Mission:data Coalition, over 75% of Americans do not have the ability to share their smart meter data electronically.²³ In fact, only 14% of utilities receiving federal funds provide a way for customers to share their historical smart meter data, a prerequisite for mitigating billions of dollars in distribution system spending over the next five years.²⁴ Helping customers easily share their smart meter data with firms who are trying to save them money will help mitigate rising costs in the power sector.

To ensure that America’s electric grid can support new data centers and advanced manufacturing facilities, we will need to deploy energy efficiency upgrades and flexible demand resources at an even faster pace than in the past. Efficiency upgrades, paired with devices like smart thermostats and water heaters, can unlock significant reductions in peak demand that will allow utilities to connect new data centers to the grid without raising costs for ratepayers. Given multi-year timelines for permitting of new power plants and transmission, energy efficiency and flexible demand are the only solutions that can match the rapid pace of data center deployment. The first Trump Administration recognized the potential benefits of deploying these technologies at scale, and launched the Grid-Interactive Efficient Buildings (GEBs) initiative in 2018. Contractors are excited about these technologies as well, as they can reduce costs through virtual troubleshooting and optimization and unlock new revenue streams for homeowners.

²³ Mission:data, Green Button Explorer, <https://explorer.missiondata.io/>

²⁴ Mission:data, “DEACTIVATED / How Electric Utilities Turned Off the Data-Sharing Features of 14 Million Smart Meters” , September, 2022, <https://www.missiondata.io/reports>

Energy Efficiency Supports Energy Affordability and Consumer Choice

Our nation's housing stock is aging, with roughly 60 percent of homes built before 1980.²⁵ Many homes were built before modern energy codes, with limited insulation and old, inefficient appliances leading to unnecessarily high utility bills for many Americans. According to the Energy Information Administration, 33.58 million American households are energy insecure²⁶ with nearly 25 million households reducing or forgoing food or medicine to pay energy costs, and 12.20 million households setting thermostats at an unhealthy temperature to reduce energy bills. Almost five million homes reported being unable to use heating equipment, while 6.35 million reported being unable to use cooling equipment.²⁷ Depending on the weather, this could have disastrous outcomes.

By improving the energy efficiency of homes and buildings, families and property owners save money, month after month, year after year. DOE estimated that while the average household spends \$2,000 on their annual utility bills, between \$200-\$400 of this is going to waste from drafts, air leaks, and outdated heating and cooling systems.²⁸ This is why energy efficiency is so critical to energy affordability. According to ACEEE, using 2023 energy prices, energy efficiency saves Americans approximately \$1.4 billion annually.²⁹ And upgrading the energy efficiency of homes for those living on the edge of poverty is critical to lowering bills.

²⁵ National Association of Home Builders, "Eye on Housing," 2024. https://eyeonhousing.org/2024/02/the-age-of-the-u-s-housing-stock/#_ftn1

²⁶ US Energy Information Administration, "Residential Energy Consumption Survey," 2020. <https://www.eia.gov/consumption/residential/data/2020/hc/pdf/HC%2011.1.pdf>

²⁷ Ibid.

²⁸ "Why Energy Efficiency Matters," U.S. Department of Energy, <https://www.energy.gov/energysaver/why-energy-efficiency-matters>.

²⁹ American Council for an Energy-Efficient Economy (ACEEE), Energy Efficiency Impact Report, 2022, <https://energyefficiencyimpact.org>; ACEEE, Energy Efficiency Impact Report update (unpublished), September 2025.

With lower energy bills, families can increase their usable income for other essentials like food, clothing, medicine, and health care.

Energy efficiency also creates healthier, more comfortable homes. Home performance upgrades not only reduce energy bills but also help resolve drafty rooms and avoid indoor air quality issues such as mold and moisture that exacerbate asthma and other health concerns. These health benefits are yet another reason our contractors are proud to work in this industry, helping families feel comfortable and safe in their homes while also lowering their energy bills. A recent National Association of Home Builders (NAHB) survey affirmed that homebuyers deeply value these benefits - according to NAHB, a majority of prospective homebuyers rated energy-efficient features, such as efficient windows (83%) and above-code insulation (72%), as essential or desirable.³⁰

Weatherization Assistance Program Supports Affordability

The Weatherization Assistance Program (WAP) has focused on helping reduce the energy burden to low-income Americans for almost 50 years. According to the Department of Energy's Office of State and Community Energy Programs, more than 7 million low-income and rural households have received WAP services through state and local agencies, an average of 35,000 homes weatherized each year.³¹ WAP brings energy efficiency to the communities that need it most by serving low-income households particularly susceptible to volatile energy prices

³⁰ "What Home Buyers Really Want - 2024 Edition," National Association of Home Builders, accessed under "Green Features Rated Essential or Desirable," <https://www.nahb.org/blog/2025/06/epa-nahb-meeting>.

³¹ *Weatherization Assistance Program*, Department of Energy, Office of State and Community Energy Programs, <https://www.energy.gov/sites/default/files/2023-08/2023-WAP-Fact-Sheet.pdf>.

and higher utility bills. Furthermore, this work supports 8,500 highly skilled jobs with competitive salaries,³² jobs that are local to each community and cannot be outsourced.

Weatherization's impact extends far beyond the number of homes reached and jobs supported. It can make a life-changing difference in the health and safety of our most vulnerable neighbors, including senior citizens and low-income families. For every \$1 spent on energy and health benefits, weatherization produces a 350 percent return on that investment; households served by the program save an average of \$372 annually.³³ Those living with asthma or other mold-borne illnesses spend less time in the emergency room and have seen their medical bills decrease by an average of \$514 per year.³⁴

Each home participating in WAP receives a site-specific suite of energy efficiency measures to be installed, such as insulation, air sealing, and high efficiency HVAC systems. DOE requires that the suite of measures installed in each home has a Savings to Investment Ratio of 1.0 or greater to ensure the program delivers cost-effective services to eligible households. DOE evaluations have found each dollar that goes to weatherization assistance also yields at least \$2.78 in non-energy benefits to the home and society.³⁵ Additionally, the Oak Ridge National Laboratory found that the total health and household-related benefits for each unit is estimated to be \$14,148.³⁶ By retrofitting homes in need of repair, weatherization also supports a

³² Ibid.

³³ *Weatherization Assistance Program: Driving Energy Efficiency and Security*, NASCSP, <https://nascsp.org/wp-content/uploads/2025/02/250212-Energy-Awareness-Flyer.pdf>.

³⁴ Tonn, Bruce, et. al. "Health and Household-Related Benefits Attributable to the Weatherization Assistance Program." Oak Ridge National Laboratory, September 2014. https://nascsp.org/wp-content/uploads/2017/09/ORNL_TM-2014_345.pdf

³⁵ Department of Energy, "Weatherization Assistance Program Fact Sheet", 2021. https://www.energy.gov/sites/prod/files/2021/01/f82/WAP-fact-sheet_2021_0.pdf

³⁶ Oak Ridge National Lab, "Weatherization Works - Summary of Findings from the Retrospective Evaluation of the U.S. Department of Energy's Weatherization Assistance Program", 2014. https://weatherization.ornl.gov/wp-content/uploads/pdf/WAPRetroEvalFinalReports/ORNL_TM-2014_338.pdf

more affordable housing stock and makes homes more resilient during extreme weather events and disasters.

WAP projects yield benefits for households both immediately and for years to come. In Butler County, KY, one WAP program participant (an elderly widow) saw her winter heating bills fall from \$253 a month to \$150 a month after she received weatherization services - all while making her home warmer and more comfortable. In Columbus, OH, one family saw their utility bills fall from \$341 per month to \$130 per month after WAP - a 60% reduction.³⁷ In Athens, GA, a family receiving WAP services saw their monthly electric bill reduced from \$210 to less than \$70, their gas bill reduced from \$120 to \$70 per month, and their water bills decreased from \$170 to less than \$60 per month. The upgrades also improved the comfort of the home for the family, which they could feel immediately.³⁸

Bipartisan WAP Reauthorization Legislation

The bipartisan Energy Act of 2020, signed by President Trump, authorized WAP through Fiscal Year 2025. In the face of rising energy prices, it is critical to reauthorize WAP and ensure that these energy saving upgrades continue to flow directly to the low-income households who need them most. H.R. 1355, the Weatherization Enhancement and Readiness Act of 2025, introduced by Reps. Tonko (D-NY-20), Lawler (R-NY-17), Kaptur (D-OH-09), Riley (D-NY-19) and Del. Moylan (R-GU-AL), would reauthorize and update the WAP program to ensure the continued support for these households.

³⁷ U.S. DOE, "Weatherization Saves 60% on Client Energy Bills in Ohio,"

<https://www.energy.gov/scep/wap/articles/weatherization-saves-60-client-energy-bills-ohio>.

³⁸ U.S. DOE, "Weatherization Reduces Energy and Water Bills for Georgia Client,"

<https://www.energy.gov/scep/wap/articles/weatherization-reduces-energy-and-water-bills-georgia-client>.

H.R. 1355 would reauthorize WAP at existing levels through 2030. The legislation would also authorize the vital Weatherization Readiness Fund, first funded by Fiscal Year 2022 appropriations, to give state programs the flexibility to reach more low-income homeowners currently ineligible for funding under WAP due to their homes' structural, electrical, or health-related issues. Additionally, the legislation would increase the statutory Average Cost Per Unit limit, allowing state programs to keep up with rising costs of building materials, equipment, and wages while also supporting more improvements per project for maximum energy savings.

Energy efficiency is, by its nature, fuel neutral – no matter the fuel, do more with less.

Efficient technologies and building materials can be used to cut energy waste, no matter the fuel type. BPA member contractors working with households across the country value this versatility: it supports consumer choice, offering households a variety of efficient equipment options to best meet their needs, particularly based on energy prices and weather in their region.

Federal Energy Efficiency Programs are Vital to Jobs, Affordability and Energy

Abundance

Energy efficiency programs, operated by the U.S. Department of Energy, provide cost relief to households, support American-based industry and jobs, ease strain on the energy grid, and reduce reliance on foreign energy. In addition to WAP, there are other key programs I want to recognize – the Building Technologies Office (BTO) and Residential Building's Integration (RBI)– that are leveraged through public-private partnerships and have helped modernize the nation's energy efficiency sector. These DOE programs, and others, deploy energy efficiency to deliver direct cost savings to homeowners, consumers, and businesses.

DOE energy efficiency programs enjoy strong support across the board: a recent letter in support of WAP led by the Alliance to Save Energy received over 70 signatures from groups and companies including the American Gas Association (AGA) and Duke Energy.³⁹ BPA's own stakeholder support letter in support of WAP and RBI received nearly 750 signatures from contractors, organizations, and stakeholders across all 50 states, including 220 home performance contractor owners and energy efficiency companies.⁴⁰

Building Technologies Office and Residential Buildings Integration

The Building Technologies Office (BTO) hosts a variety of programs that research and field test technologies that improve building performance, expand consumer choice, and support affordability. BTO is driven by energy savings potential across a wide range of technologies.

Programs within BTO like the Residential Buildings Integration (RBI) program return benefits and savings to American households and consumers many times greater than the public's investment. Through RBI, DOE collaborates with the residential building industry to improve the energy efficiency of both new and existing homes across the country. Just a few examples of the crucial residential initiatives within RBI include the Buildings Upgrade Prize, a competitive award program open to municipalities and nonprofits aimed at supporting innovative building retrofits and improving energy affordability; Building America, which works with industry stakeholders and DOE national labs to conduct research to advance and deploy innovative technologies and construction practices for building energy efficiency; and HPXML, which helps simplify the methodology for collecting and transferring energy data.

³⁹ Alliance to Save Energy, "Support Adequate Funding for the Department of Energy Weatherization Assistance Program and State Energy Program", August 29, 2025. https://www.ase.org/sites/ase.org/files/final_sep-wap_fy26_appropriations_support_letter_08.29.25.pdf.

⁴⁰ Building Performance Association, "Small Business and Stakeholder Letter of Support for Strong FY26 DOE Energy Efficiency Program Funding". April 29, 2025. <https://building-performance.org/wp-content/uploads/2025/09/FY26-Small-Business-Stakeholder-Energy-Efficiency-Support-Letter.pdf>.

More specifically, RBI's Buildings Upgrade Prize helps communities suffering from high energy costs plan, pilot, and execute building retrofits to reduce energy use, increase resiliency, unlock private investment, and drive economic growth. Rather than fully funding upgrades, Buildings Upgrade Prizes empower localities and community-based nonprofits to craft a roadmap to unlock efficiency upgrades, upgrade aging buildings, and develop local workforces. For example, the Louisville-Jefferson County, Kentucky, metropolitan area is home to upwards of 1.1 million people and represents the largest metropolitan area in Kentucky. The city's Buildings Upgrade Prize project seeks to eliminate severe energy burdens for low-income households and offer supplemental support for building benchmarking, financing, and workforce development while partnering with local nonprofits.⁴¹

BPA recently released a paper⁴² on these unique prize recipients as over one third of awards were granted to communities that had not recently applied for federal funding, assuring that more Americans - particularly in rural areas - can benefit from federal support. In addition to this geographic diversity, all buildings - including churches, schools, single-family homes, commercial buildings, and manufactured homes - are eligible for participation in community plans. Over 300 applicants from 45 states submitted concept papers for Phase 1 of the Buildings Upgrade Prize, but due to limitations in available funding, only 45 teams were awarded initial funds and able to progress to project planning. These awardees plan to leverage future prize funding to build out detailed plans and project pilots to bring their innovative visions for local energy efficiency, resiliency, and economic development into action. Continued support for DOE

⁴¹ "Residential Energy Efficiency Retrofit Projects That Create Jobs: Insights from the Buildings Upgrade Prize," Building Performance Association report, July 2025, p. 2. <https://building-performance.org/wp-content/uploads/2025/07/Buildings-Upgrade-Prize-Insights-to-Residential-Energy-Efficiency-Retrofit-Projects-Whitepaper-Final-v2-7.17.25.pdf>

⁴² Ibid.p.5

energy efficiency programs like the Buildings Upgrade Prize can ensure that more communities can embrace energy efficiency to cut energy bills.

Conclusion

In conclusion, Subcommittee Chair Latta, Chair Guthrie, Subcommittee Ranking Member Castor, Ranking Member Pallone, and esteemed members of the subcommittee, I ask you to consider the buildings you live and work in as a part of the solution to the energy affordability crisis we are discussing today. Despite the incredible strides in energy efficiency, buildings, including the appliances and equipment in them, are among the largest consumers of energy with some of the greatest opportunities to support dynamic change. This energy demand can be modified to support the grid when needed and is a critical part of the solution to our grid constraint concerns. With policy and program innovation that brings all of these pieces together to optimize energy usage, we can reduce some of the need for new power plants and deliver more reliable and affordable energy - all while making buildings healthier, more affordable and more comfortable places to live and work.

Mr. LATTA. Thank you very much for your opening statement.

And, Mr. Steffes, you are recognized for 5 minutes for your opening statement.

STATEMENT OF JAMES STEFFES

Mr. STEFFES. Thank you, Chair Latta, Ranking Member Castor, and members of the subcommittee. Thank you for this opportunity to testify today.

My name is Jim Steffes. I am the senior vice president of Washington Gas Light. Washington was a small town when Washington Gas brought light to its first customer, the U.S. Capitol, in 1848. We have grown with this community ever since and care deeply about the more than 1.2 million customers we serve today across the District of Columbia, Maryland, and Virginia. We deliver affordable energy to heat homes, cook food, and enjoy hot showers.

This safe and reliable energy is easy to take for granted, but it is only available because of the more than 1,000 dedicated employees and our continued capital investment, maintaining a vast network of essential infrastructure.

Every day at Washington Gas, we work to earn our customers' trust and confidence. Our mission is simple: Deliver affordable, reliable, safe, and secure energy to the National Capital Region.

Energy security is critical and inseparable from national security. Our community and our customers, including the Federal Government, depend upon natural gas from Federal offices and military installations to mission-critical research campuses, to hospitals and homes, our gas service allow customers to do what needs to get done affordably and reliably.

Disruptions and challenges to delivering natural gas across the National Capital Region would ripple far beyond the local community, threatening the functioning of Federal agencies and their ability to respond to emergencies and our Nation's needs. That is why Washington Gas continues to make strategic investment in safety and modernization.

Energy delivery in the National Capital Region is not just a utility service, it is an essential underpinning of Federal Government operations. Make no mistake, our region is facing significant energy challenges, especially electricity market challenges.

The National Capital Region has seen a price for a power capacity surge 964 percent since the summer of 2023. Analysts project household electricity rates could rise 30 to 60 percent by 2030.

Eliminating or restricting natural gas at a time of sizable electricity demand growth would further destabilize the grid.

While transmission and power generation projects are underway, they are slow to develop and interconnect. PJM's power capacity price forecast highlights this lengthy process. In the meantime, modernizing our gas pipeline infrastructure is a proven, effective way to keep energy affordable and reliable. That is why we have continued to invest over \$500 million annually, all while creating good-paying jobs.

To continue our infrastructure modernization efforts, we asked to direct PHMSA to reengage actively with State regulatory commissions, as PHMSA did under Secretary Ray LaHood's leadership

through the 2011 call to action. Safety mattered then, and it still matters today.

PHMSA must urge regulators in the District of Columbia, Maryland, and Virginia to continue to authorize accelerated replacement mechanisms with a clear focus on safety. PHMSA engagement with the States is critical to ongoing pipeline replacement programs and derisking our pipeline network.

Energy choice is also under threat. New-use restrictions of the local and State level limit our customers' choice for natural gas. Instead, both the District of Columbia and Montgomery County, Maryland, have passed building performance standards and net-zero building codes that restrict customer energy choice, force electrification, and impose millions if not billions of dollars in compliance costs. At the Federal level, Section 433 of the Energy Independence and Security Act requires new and renovated Federal buildings to eliminate fossil fuel use by 2030.

These local, State, and Federal policies impose new costs onto households, businesses, and the Federal Government. These policies also risk amplifying the crisis in the electricity market.

To overcome these restrictions on energy trades, Congress should do two things to support energy security and energy choice. First, pass the Reliable Infrastructure Act, which repeals Section 433, and allow Federal buildings to take a balanced approach to their understanding future. Second, pass the Energy Choice Act, which prevents State and local gas bans from restricting energy choice in a balkanized and haphazard manner.

Together, these two actions safeguard energy affordability, energy reliability, and energy choice for consumers, including Federal facilities.

Natural gas is indispensable to heating our homes, to powering our families, to delivering energy affordability, to growing our economy, and to ensuring long-term energy security.

Washington Gas is committed to working with you to modernize our infrastructure, protect energy reliability, and preserve energy choice so we can meet the energy needs of today and tomorrow affordably and securely.

Thank you, and I look forward to your questions.

[The prepared statement of Mr. Steffes follows:]

**Testimony of James Steffes
Senior Vice President of Regulatory, Policy, and Advocacy
Washington Gas**

**Submitted to the House Committee on Energy and Commerce, Subcommittee on Energy
September 9, 2025**

Chairman Latta, Ranking Member Castor, and distinguished Members of the Subcommittee, thank you for the opportunity to testify today. My name is Jim Steffes, and I serve as Senior Vice President of Regulatory, Policy, and Advocacy at Washington Gas, which has safely delivered affordable and reliable natural gas service to the National Capital Region for more than 175 years.

This hearing could not be timelier. Our nation is confronting rapidly rising energy demand, driven by new technologies and economic growth, and we must recognize that energy security is inseparable from national security. Without a resilient and diverse energy system, our economy, critical infrastructure, and defense capabilities will be vulnerable. Maintaining an affordable, diverse, reliable, and resilient energy mix, featuring natural gas, is vital for addressing the increasing energy needs of our economy and ensuring energy security.

At the same time, we need to ensure that consumers, whether in the public or private sector, can choose what energy type fits their budget and needs. When customer choice is threatened (for example, through gas bans or opposition to infrastructure improvements), so is their access to affordable, reliable energy. Policies that limit access to certain forms of energy, like unrealistic Building Energy Performance Standards (BEPS), and gas bans, result in a less reliable energy system, increasing costs for consumers, and further straining our nation's electricity grid. And, when we speak of driving up costs for consumers, we are not just talking about the electric bills

themselves, but the high costs to upgrade home electric infrastructure, purchase new appliances and replace gas furnaces in homes. These costs are paid for by American consumers. Some state and local officials succumbed to the notion that eliminating investment in natural gas system modernization will force fuel switching. The reality is this only results in a less safe and less reliable natural gas system, and a less resilient electricity grid. This will not support the economic growth we all want to see.

Congress must take action to reduce rigid government mandates that fail to fully account for safety, reliability, resilience, and affordability for ratepayers, especially in our nation's Capital. Whether it is passing bills currently before this committee that champion energy affordability, consumer choice, and sensible regulation, investing in modernization of our infrastructure, or undoing costly and unwise regulation, Washington Gas stands ready to work with policymakers and stakeholders to meet these challenges, as we always have for the National Capital Region and its residents.

Our mission is simple but essential: to ensure that energy delivery to our customers in the National Capital Region is safe, reliable, and affordable, because energy security is national security.

About Washington Gas

Washington Gas was founded in 1848 through a Congressional charter signed into law by President James K. Polk. The newly chartered company installed gas lights in the House and Senate chambers, the White House, and along Pennsylvania Avenue. Around the dawn of the 20th century—again at the direction of Congress—Washington Gas expanded into Virginia and Maryland.

Today, Washington Gas plays a critical role in supporting the daily lives of over 1.2 million customers across the District of Columbia, Maryland, and Virginia (DMV) region. Everything we do at Washington Gas revolves around our customers. They have told us what matters most: safe, affordable, and reliable energy, and the freedom to choose natural gas for their homes and businesses. From heating homes or offices, to cooking meals for families and customers, natural gas is the affordable and reliable choice.

Among our customers are the Capitol complex, the White House, the Pentagon, and hundreds of other federal agency buildings, operation centers, military installations, embassies, and other critical infrastructure that are central to our nation's security.

Approximately 20 percent of our natural gas delivered serves the federal government. Washington Gas provides natural gas service to federal customers through an Area Wide Public Utility Contract (AWC) managed by the General Services Administration (GSA). The AWC covers natural gas, transportation, energy management, and other services.

Energy Security Is National Security

At Washington Gas, we carry out our mission with the knowledge that the region's energy security is national security. Reliable and resilient energy delivery to the National Capital Region is essential not only to daily life, but to the functioning of the federal government, the defense of our nation, and the safety of our citizens. Interruptions in energy supply within the National Capital Region would have consequences far beyond just the local community, potentially

disrupting federal agency operations, emergency response, and national defense readiness. That is why we continue to make strategic investments in pipeline safety, leak reduction, and modernization programs that support the long-term reliability of our delivery infrastructure.

Energy Demand in our Region is Skyrocketing

This summer, the Pennsylvania-New Jersey-Maryland Interconnection (PJM)—the largest U.S. regional electric grid, which includes the National Capital Region—has seen capacity auction prices surge to ~\$329 per megawatt-day, representing over a 1,000% increase over the past three years. Adding to this spike is the rapidly expanding demand from data centers, particularly those supporting AI workloads. Analysts from the ICF project determined that residential electricity rates across the PJM region could climb by 30% to 60% by 2030, largely due to these elevated capacity costs. In the short term, electricity bills in and around Washington, DC have already risen in the past two years and may rise further. Both generation and transmission and distribution infrastructure investments are driving this increase.

Currently, roughly 40% of PJM’s electricity supply is natural gas-fired generation on an average day. In other words, the region’s grid is already heavily dependent on natural gas to balance supply and meet peak demand. Moving to “electric-only” solutions without sufficient capacity is neither technically feasible, nor reliable in the near- to medium-term, and ignores that we would simply be largely switching from natural gas used directly by our customers to natural gas generation.

Pursuing major new investments to expand electric transmission and distribution and generation projects are costly and will take years to complete. In the meantime, expanding, fortifying, and modernizing the natural gas infrastructure in the National Capital Region is critical. Strengthening

our distribution system and capacity supports a reliable fuel supply to enable natural gas-fired generation. This will directly bolster electric grid resilience, protecting households and critical facilities from the risks of an overstrained electric system, while still enabling economic growth.

Challenges to Natural Gas Infrastructure Modernization

Modernizing our infrastructure is essential to mitigate hazards such as gas leaks and to improve the reliability of the natural gas system. The federal government has a paramount interest in ensuring safe and reliable natural gas system all across the country, but particularly in the National Capital Region to meet current and future energy needs. To meet rising demand, Washington Gas's integrated, interstate natural gas system must be modernized on an accelerated basis. The Company is working to replace aging infrastructure to enhance safety and comply with standards issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA), while also preparing to meet the demands of new data center infrastructure. These efforts support safety and create thousands of jobs.

Since 2014 Washington Gas has replaced more than 425 miles of cast iron pipe and other aging infrastructure in the National Capital Region, approximately 41 miles of which are in DC. We have more than 1000 miles of cast iron and vintage pipe that still must be replaced, nearly 400 miles of which is in DC. That is why we invest \$370 million annually in the region, and nearly \$90 million annually in DC, for infrastructure modernization and upgrades – all the while creating good-paying jobs.

On September 27, 2024, Washington Gas filed its Strategic Accelerated Facilities Enhancement (District SAFE) Plan, which proposes a \$215 million investment over three years to replace high-risk, leak-prone pipes as required by PHMSA. This work mirrors efforts by utilities nationwide and comes at a time when DC remains well behind the rest of the country in cast-iron pipe replacement. District SAFE aligns with the city's climate goals by reducing methane emissions associated with leaks. Fully replacing leak-prone pipes would reduce associated emissions by more than 90% compared to 2014 levels, while also creating thousands of high-skill, good-paying construction and support jobs. Approving District SAFE would align the District with best practices already adopted in 24 states.

Ultimately, infrastructure modernization is more than a local issue—it is a matter of national security across the National Capital Region. A safe, reliable, and resilient energy system in Washington, DC is essential not only for homes and businesses, but for ensuring that the federal government and critical institutions in our capital can operate without disruption.

State and Local Gas Bans and Building Energy Performance Standards (BEPS)

Across the country, state and local governments are adopting building codes banning the use of natural gas in new or substantially renovated buildings and building energy performance standards which will force private property owners to pay millions of dollars for electrification retrofits on existing buildings. Gas bans and similar laws prohibit homeowners and businesses from using efficient gas-powered ranges, furnaces, water heaters, boilers, and other appliances. These measures are being adopted in the National Capital Region and will exacerbate the existing

housing crisis. The impacts are particularly acute given they come at a time when electricity costs have increased dramatically.

For example, the Clean Energy DC Building Code Amendment Act of 2022 mandates the adoption of a net-zero energy building code by the end of 2026 and applies to new construction and substantial improvements of buildings. This law essentially bans natural gas and forces the electrification of qualifying buildings without regard to private property owners' energy preferences, affordability, or prior investments in natural gas equipment.

Maryland has also adopted a state-wide building energy performance standard (BEPS) as of 2024. The Maryland BEPS regulations force covered building owners to incur major costs to replace fossil fuel appliances or face penalties, regardless of whether their appliances are due for replacement or not. The Maryland BEPS does not consider electricity cost increases. Rising electricity costs mean these measures are even less cost-effective. For example, the Maryland Department of the Environment estimates that property owners will spend more than \$5.7 billion on efficiency and electrification measures to achieve \$1.2 billion in energy cost savings without BEPS. Those estimates climb to more than \$15 billion spent on efficiency and electrification measures to provide approximately \$9 billion in energy savings with the addition of BEPS. Maryland's BEPS also does not consider whether the grid can even handle additional load created through electrification.

Within Maryland, Montgomery County has a BEPS regulation. Such that is designed to ban the use of gas appliances in most new construction by the end of 2026. These “all-electric building” standards prohibit buildings from having “combustion equipment,” including those used for space or water heating, cooking, clothes drying, or lighting. This gas ban will increase the cost of new homes and commercial real estate as buildings are forced to comply with expensive all-electric building standards. WGL notes that WGL is not the only entity fighting Montgomery County’s BEPS – Homebuilders and Condo Associations are too.

These measures will strain an already stretched electric grid that is not ready to accommodate the demands widespread electrification would require. They drive up costs while driving down resilience and safety.

Section 433 and the Federal Building Energy Performance Standards Rule

The Biden Administration’s promulgation of federal building energy performance standards issued under Section 433 of the Energy Independence and Security Act of 2007 (codified at 10 CFR, parts 433 and 435), constitutes an enormous threat to the affordability, resilience, and reliability of natural gas service in the National Capital Region. These rules mandate that new and renovated federal buildings slash their on-site fossil fuel-generated energy consumption by 90% by 2025 and achieve a complete 100% reduction by 2030. While framed as an efficiency measure, this is, in effect, a government-driven mandate to electrify federal facilities at tremendous cost to federal taxpayers in the form of both dollars and reliability.

Gas bans and limitations on federal facilities harm the public. They compromise the reliability of our energy system by shifting reliance to a single electric grid. They undermine energy resilience by eliminating options for on-site power generation, including at critical federal facilities. And they contravene the wishes of millions of Washington Gas customers, who choose our service month after month and year after year.

Furthermore, the financial and operational implications of this mandate on the National Capitol Region energy systems are severe. Anti-gas policies discourage investment in critical infrastructure and are thus antithetical to maintaining safety and reliability standards.

Washington Gas' business model relies on a diverse and stable customer base to support the costs of our extensive and highly regulated distribution network. The systematic removal of Federal buildings from our network forces the fixed costs of maintaining the system onto a smaller pool of remaining residential and commercial customers.

How Can the Federal Government Help?

Congressional Action to Repeal Section 433 and Preserve Energy Choice

I commend the members who have put forth a suite of bills that champion energy affordability, consumer choice, and sensible regulation. On behalf of Washington Gas Light, I want to express our strong support for these measures and urge their swift passage.

Representative Rick Allen's (R-GA) "Don't Mess With My Home Appliances Act" (H.R. 4626) is crucial as it would prevent the Department of Energy from imposing overly stringent efficiency standards that effectively ban gas appliances and limit consumer options. Whether it is warming their homes, heating their water, or cooking dinner for their families, natural gas appliances and equipment are at the heart of many of our customers' households. Hospitals, schools, and small businesses alike all rely on natural gas for different aspects of their operations due to its affordability and reliability. Consumers should have the right to choose the energy source they prefer. Natural gas users typically consume less energy, and high-efficiency natural gas appliances and equipment are often the most cost-effective and lowest emissions option for consumers. Maintaining choice helps ensure a resilient, diverse, affordable, and flexible energy future that meets the evolving needs of consumers.

We also strongly support Representative Nick Langworthy's (R-NY) amendment of the Energy Conservation and Production Act (H.R. 4690), the "Reliable Federal Infrastructure Act" which would repeal certain Federal building energy efficiency performance standards under Section 433 and ensure continued safety and reliability of gas delivery to our federal customers for the governments critical functions while protecting rate payers in the National Capital Region from significant rate increases to offset lost revenue from the federal government.

Similarly, Representative Craig Goldman's (R-TX) "Homeowner Energy Freedom Act" (H.R. 4758) and Representative Nick Langworthy's (R-NY) "Energy Choice Act" (H.R. 3699), are vital to protecting the rights of homeowners and local communities by repealing provisions in the Inflation Reduction Act that penalize the use of natural gas and preventing state and local

governments from outright banning our service. By supporting these bills, Congress can ensure that families and businesses retain access to the energy choices and sources that have proven to be reliable and affordable for decades.

Lastly, we support Representative Randy Weber's (R-TX) "Federal Mechanical Insulation Act" (H.R. 3474), which recognizes the critical role of mechanical insulation in improving energy efficiency in federal buildings, promoting a simple, cost-effective way to conserve energy without mandating expensive and disruptive system replacements. Together, these bills represent a balanced and pragmatic approach to energy policy that respects the needs of the American people.

PHMSA Engagement with States and Localities

PHMSA regulations require operators of gas distribution pipelines to implement Distribution Integrity Management Programs (DIMPs), identifying and addressing cast iron pipelines that could pose a risk. Among other factors, pipeline age and material are significant risk indicators. As the United States works to safely achieve its energy and economic goals, it must invest in upgrading its infrastructure, including vintage pipelines.

In 2011, following major natural gas pipeline incidents, DOT and PHMSA issued a Call to Action to accelerate the repair, rehabilitation, and replacement of the highest-risk pipeline infrastructure. Pipelines constructed of cast and wrought iron, as well as bare steel, are among those pipelines that pose the highest risk. As part of the Call to Action, Senior DOT and PHMSA management conducted aggressive outreach with the Federal Energy Regulatory Commission (FERC) and

National Association of Regulatory Utility Commissioners (NARUC), as well as various Public Service Commissions, to support rapid implementation/funding/approval of state Accelerated Pipeline Replacement Programs (APRP) programs like District SAFE.

Washington Gas supports PHMSA re-engaging at the state-level in a Call-to-Action Part 2, to advance APRP program implementation. Pipeline transportation is a safe and cost-effective way to transport natural gas. Pipeline owners invested billions of dollars annually to upgrade and enhance the safety of their critical infrastructure in response to a 2011 Call to Action issued from PHMSA. However, in early 2025 the Maryland General Assembly revised its APRP statute to require consideration of “alternatives to replacement,” a direct challenge to PHMSA’s Call to Action and President Trump’s Executive Order No. 14154, “Unleashing American Energy” and Executive Order No. 14156, “Declaring a National Energy Emergency”. We urge PHMSA to proactively re-engage at the state level to support APRP that prioritize safety and enhancements to the natural gas transportation system.

Federal Funding for Energy Infrastructure Modernization

Since 2013 Washington Gas has invested \$370 million annually in accelerated pipeline replacement in the National Capital Region, and the Company plans to invest \$3.5 billion or more in APRP over the next decade. But, thanks to years of state-level limitations on APRP investment, unfounded challenges to actual infrastructure costs, state and local permitting and paving restrictions, as well as newly emerging attempts to erode the historic prudence test protecting Washington Gas and its customers alike, the Company’s APRP efforts continue to lag behind its energy security obligations. As a chartered agent of Congress, Washington Gas may need to partner

financially with the federal government to assure timely replacement of its aging pipes to maintain safe and reliable service in the National Capital Region. The Company welcomes the opportunity to work with this Committee on what that partnership might entail, including direct financial support, construction and operational coordination with relevant branches and agencies of government, and common-sense guidelines to ensure safety, security, resiliency, and customer choice.

Conclusion

In summary, I urge the committee to adopt two basic principles in considering legislation to maintain and enhance our gas and electrical grids—national security and energy choice. The long-term reliability and safety of our energy infrastructure are under threat from federal, state, and local regulations that undermine our business as well as from hostile actors who seek to disrupt our service. It is a critical imperative that policy at the federal, state, and local levels be aligned to support, not hinder, our efforts to modernize and protect this vital network. By moving toward a collaborative framework that recognizes the essential role of natural gas and supports infrastructure investment, we can ensure the uninterrupted flow of energy crucial to our citizens' daily lives, our government's activities, and our nation's security.

Thank you for the opportunity to testify today, and I look forward to your questions.

Mr. LATTA. Well, thank you very much for your testimony. And that will conclude our witnesses' opening statements. And at this time, we will go to the Members' questions. And I will begin with my questions and for 5 minutes.

U.S. utilities have committed to 116 gigawatts of large capacity additions in the next few years, approximately 15.5 percent of the current peak demand. There is significant need for energy capacity and associated infrastructure, and the market is responding. A leading industrial firm will double gas turbine production capacity within the next 2 years. Distribution transformers are also in high demand.

The previous administration proposed a standard under EPCA for transformers that would have required a complete retooling of the product design and material composition while yielding an efficiency gain of less than one-tenth of a percent. This standard will exacerbate supply chain issues.

Mr. Lieberman, do you know if efficiency gain of less than one-tenth of a percent qualifies as yielding a significant energy savings as required by EPCA?

Mr. LIEBERMAN. Well, clearly, it doesn't. And there is a provision in the underlying law, the Energy Policy Conservation Act, explicitly forbidding DOE from setting a new or an amended standard unless it saves a significant amount of energy. That is in the statute more than once.

Unfortunately, it never quantified "significant conservation of energy." And we have seen over time it has become eye of the beholder, and DOE will set a standard even if the energy conservation seems to be trivial.

Another example of that is the most recent stove standard, which saved gas stove cook top owners about 21 cents a year. That was considered significant.

So I think there is some value, and the Don't Mess With My Home Appliances Act puts numbers and percentages on conservation of energy. So it is not really changing the underlying statute toward provisions, it is just making them easier—or making them harder to get around.

So I think the answer is yes, it was a trivial amount of energy, and that standard should not have—

Mr. LATTA. Well, let me ask you another question. When a product has maximized technologically achievable energy efficiency gain, is it reasonable to allow products to no longer be regulated under EPCA?

Mr. LIEBERMAN. Yes, and some of these appliances have been regulated now four time, five times. Some of them are on to the sixth round of successively tighter standards where we are proving the law of diminishing larger returns or maybe even negative returns. I think it makes perfect sense to have stopping points.

I believe the original statute contemplated that. But we are not seeing that. As somebody once said, birds fly, fish swim, and regulators regulate. So we will just keep seeing more and more regulations over time, even if they don't necessarily make sense.

Mr. LATTA. Well, thank you.

Mr. Steffes, Section 433 of the Energy Independence and Security Act required DOE to phase out fossil-fuel-generated energy consumption in new and remodeled Federal buildings by 2030.

How will this impact energy reliability at sites of high national security importance like the Pentagon and Fort Mead?

Mr. STEFFES. Thank you, Mr. Chairman. You know, the energy network is built upon two distinct networks: the gas network and the electricity grid. They work together. Removing natural gas from facilities—Federal facilities, whatever form they are, office buildings or military installations—will reduce the ability to have redundant energy needs, backup energy needs in the moment of crisis. Clearly that will challenge reliability.

Our system, our natural gas system, is 99.7 percent reliable. We were very proud of that fact, it's an underground network. Removing that removes our reliability. I also think it will challenge affordability by doing that. The Government will have to invest money that it would otherwise not need to invest. And worst of all, you are going to be driving up the demand in a very difficult time for the electricity market. All of those things are coming to bear if we don't repeal 433.

Mr. LATTA. Well, thank you.

Mr. Hughes, in my last about 45 seconds, the previous administration took a whole-of-government approach to develop a mandate, green building policies to end all your use of fossil fuel for heating and cooking. And how are these policies already impacting Americans despite the current administration's efforts to correct course? I have got about 22 seconds.

Mr. HUGHES. And I am sorry, I didn't understand.

Mr. LATTA. Yes, the previous administration took a whole-of-government approach to develop the mandate green building policies to end use of fossil fuel energy for heating and cooking. And the question is, How are these policies already impacting Americans despite the current administration's efforts to correct course.

Unfortunately, I am out of time, and I am going to ask to get that in writing from you. And at this time I yield back.

And I will recognize the gentlelady from Florida, the ranking member of the subcommittee, for 5 minutes for her questions.

Ms. CASTOR. Thank you, Mr. Chairman.

Ms. Saul Rinaldi, this committee has heard repeatedly that we can anticipate unprecedented increases in electricity demands in the coming years. How do appliance standards and energy efficiency and building emergency codes help address the growing load growth requirement?

Ms. SAUL RINALDI. Load growth is going to need to be addressed by energy efficiency. There is no way to actually be able to meet it as rapidly as load growth is without being able to deploy energy efficiency. Codes and standards set a baseline. And then what we really need is to have an additional dynamic efficiency that is using buildings as virtual power plants so that we can meet these additional peak loads.

We have to remember that utilities build power plants to meet their peak needs. And so buildings can be a part of meeting those peak needs by reducing energy use during those peak times.

But building codes and buildings and appliance standards will add additional—will bring additional demand off the grid and further help meet the needs of that load growth.

Ms. CASTOR. And talk about the speed and the timeline of deploying energy efficiency to address load growth or building a new power plant, whether it is renewable or gas.

Mr. STEFFES. To permit and build a power plant can take 5 to 7 years, whereas, depending on whether or not the technologies have already been deployed, deploying energy efficiency by a virtual power plant way—which is connecting all of those buildings and all of those smart systems—can take, you know, 5 to 7 months. So it is significantly faster to deploy energy efficiency. And then, of course, as you move energy efficiency in and give opportunities, whether it is tax credits to buy those more efficient appliances, those are things that can further push the higher-efficiency elements into the marketplace.

Ms. CASTOR. And it seem like just a recipe for higher costs if you denigrate the ability of energy efficiency to help with load growth issue.

I was also really surprised in your testimony that you pointed out the 2025 U.S. Energy and Employment Report. I had no idea that the Energy Efficiency Sector employs 2.5 million, while if you add up petroleum, natural gas, coal combined, it is 866,000 workers. That is surprising to me.

So now that Republicans have repealed tax credits and savings in their Big Ugly Bill, and when you add on the tariffs and you are cutting weatherization, and now obviously they are setting up some bills to come to committee to undermine energy efficiency and savings, what do you project is going to happen to all of those job?

Ms. SAUL RINALDI. It is hard to know because we just had the bill, and it just recently passed. And we still have the tax credits. The 25(C) tax credit, which is the energy efficiency credit for homeowners, they have until the end of the year to take advantage of those tax credits. So contractors are working really hard to make sure that their customers know that if they were thinking about putting in a heat pump, they were thinking about putting more insulation in their home, this is a time to take advantage of that tax credit if they have a tax liability. So we don't know quite yet. We do know that these tax credits passed—the 25(C) tax credit passed in 2005, and it did lead to an increase in jobs.

And so, as we take those opportunities away from homeowners to be able to meet those additional higher technology jobs, which do cost a little bit more, and be able to offset that with a tax credit, it is unclear exactly what that is going to do to jobs where there will be an impact.

Ms. CASTOR. You know, thank you very much, because that is where I started my testimony. Folks have until the end of the year to take advantage of that. And back home in Florida, do you know how important it is as people rebuild from the hurricanes? We are one year out from Helene and Milton. And this is a godsend because those tax credits can go to doors, windows, insulation. You are replacing your AC with a much more efficient heat pump that will save you money.

So let the word go forth: These have to be installed by the end of the year. And the American people deserve these savings. It is just not right for Republicans here in the Trump administration to serve the bottom line of polluters and billionaires rather than hard-working Americans.

Thank you, Mr. Chairman, I yield back.

Mr. LATTA. Thank you. The gentlelady yields back the balance of her time.

The Chair now recognizes the vice chair of the subcommittee, the gentleman from Texas for 5 minutes for questions.

Mr. WEBER. Thank you, Mr. Chairman.

Mr. Hughes, I want to come to you first. As you know, I was an air conditioning contractor for 35 years. So I have been in a small business, and I have watched this whole episode of the SEER ratings moving up on not only air conditioning units, but on a gas AFUE settings as well.

You said a couple of things as a small builder. You said you are concerned about this because this is restrictions on the energy source—and I will come back to you in just a second—then said it was mandates, and then you said it affected appliances. Describe for us what you meant by it was restrictions on energy source.

Mr. HUGHES. Well, it is getting to be more of a concern that we are losing those choices on what energy. And having to change different equipment, different appliances, it is going to add to the cost. In some cases, they are simply not practical. Some of the new codes, for instance, require duct work replaced in heated space, which is not practical on slab homes.

Mr. WEBER. Amen, brother. I have been there. I have been in those homes. I have watched what I would call middle America's—American citizens in Texas. When that—you are familiar with SEERS, Seasonal Energy Efficiency Ratings, on air conditioners. When I got in the business in '81, it was 8—was it—it was 8.0 SEER. Then they went to 9, then 10, then 12, then 14, and 15. And you watched the price of those units to almost double.

So now you had a homeowner who's—working family—my bias of—49 years, was a teacher for 27 years, and I owned my own company but 35 years—we watched working families struggling. They lived in a house that was 15, 20, or 25 years old. For them to get all-new equipment at the higher SEER ratings might take a complete system change up from \$12,000 to \$18,000. And they couldn't well afford the first price much less the next price even though they had tax incentives on it, because they're struggling.

Mr. Lieberman, I am going to come to you. Nonconditioned gas furnace, you said in your comments, would not be available after 2028. We all know that the AF—some of us know that the AFUE rating on those furnaces go up to 92 percent. It also requires the change in the venting. You know this. It requires a grip rake and requires all kinds of stuff that normal furnaces don't require. Especially in Texas, there is no reason why the Department of Energy or anybody else, the EPA, should be mandating that Texans have to have a certain efficiency. You are aware of what AFUE furnaces, I trust.

Mr. LIEBERMAN. Yes.

Mr. WEBER. Go ahead.

Mr. LIEBERMAN. No two homes are alike. No two homeowners are alike. And we all know our own individualized circumstances and preferences better than any one-size-fits-all regulatory process. And so, with the furnace rule that will take effect in 2018, there are a lot of homes that won't get the furnace that makes the most sense for them. And as it turns out, it tends to be older, smaller, space-constrained homes owned by generally lower-income Americans. One size fits all is very much a problem with some of these—

Mr. WEBER. It really is. It affects not just lower income but also no income. I can't tell you how many times I have been in a house that was 20, 25 years old or older, and I said, "Sir, ma'am, there is a crack in your heat exchanger or your old original furnace. It is going to have to be changed. But it is also going to have to be a upper AFUE rated furnace, you need a new evaporator coil, and a new outside unit." And now, instead of a furnace that is usually choosing \$1,800, \$1,900, or whatever it is, you are now looking at about 7, 8 thousand dollars back in the '80s or 9,000, much, much higher than that.

And I have had people look me in the eye and say, "Well, Mr. Weber, you say there is a minor crack in the heater exchanger that puts out carbon monoxide?" "Yes, sir." They said, "How dangerous is that?" And I said, "Well, you know, if you get enough in your bloodstream it can kill you." I said, "You can go to sleep at night, and the next morning you can wake up dead, which is not a bad way to go if you are ready to go." And they literally would look me in the eye and say, "What are the odds, what is the percentage rate that it would actually kill somebody in our family?" And I said, "Well, they are actually pretty low, but when it happens, they are just as dead as they could be."

And families can't always afford these mandates. It is a good idea. I know that we want less pollution, and we want all this stuff that we want to happen. But we have to take into account that American families can't always afford these good ideas.

Ms. Rinaldi, I am going to come to you. Everything you said sounds good about all the energy savings, but I just laid out a scenario for you where Americans can't really afford all this.

So I am just going to end my comments, Mr. Chairman, by saying, it is like the best-laid plans of mice and men, and I yield back.

Mr. LATTA. Thank you very much. The gentleman yields back the remaining balance of his time.

The Chair now recognizes the ranking member of the full committee for 5 minutes of questions.

Mr. PALLONE. Thank you, Mr. Chairman. I have three questions of Ms. Saul Rinaldi. So I am going to try to get through the three.

At a time when Americans are struggling with everyday prices, the Trump administration and congressional Republicans have enacted policies that in my opinion only result in increased energy prices for American families.

So my first question is, with these increased energy costs, can you please talk about the role of energy efficiency in helping households keep monthly energy bills affordable? And what happens if Republicans continue to gut efficiency standards, if you will?

Ms. SAUL RINALDI. Well, without efficiency standards, then homeowners would buy whatever is cheapest in order to put it in

their house. That would likely not include the higher-efficient technologies. And they would be spending more on their monthly utility bills. I think one of the key things is most of the time—we all know when we buy a new appliance is because something broke, it is because our air conditioner broke, or our dishwasher broke.

And what ends up happening is that they don't necessarily have thousands of dollars or even hundreds of dollars burning a hole in their bank account. So that homeowner needs to figure out how they are going to serve the needs of their family in the most cost-effective way possible.

I know they will buy often what is just at standard. And so what building standards do and what appliance standards do is provide that baseline standard so we make sure to protect homeowners from the least efficient appliances and the least efficient codes. So that is why they are just really critical.

Mr. PALLONE. All right. Thanks. And my second question is—I mentioned this, what I said was a factually inaccurate number in my opening statement. I would like to get your take on it.

Republicans claim that meeting the 2021 International Energy Code can add up to \$31,000 to the price of a new home. But based on my review, this number includes several items that are not even required by the code.

So have you seen this number before? And can you confirm that it includes several items that are not required by the code?

Ms. SAUL RINALDI. Yes, about 80 percent of that number is different. There's many different pathways for both prescriptive and performance in the code. And that number is choosing more expensive pathways. I can give you some examples, if you would like.

Mr. PALLONE. You want give us an example?

Ms. SAUL RINALDI. So, for example, there is a number of—on double-wall construction, it leads to \$18,000 in that example of that \$31,000. That \$18,000 can be led to in much cheaper ways through different pathways which include single wall and wrapping the house. There is also \$3,000 for the ventilation energy package, which can often be substituted with a hot water heater. For example, a more efficient hot water heater.

So there is different pathways to get—to meet the model energy code. And that \$31,000 number is more elevated than one would see in the marketplace normally.

Mr. PALLONE. All right. Thank you. Then my third question is about—let me get to it here—is about energy efficiency and this idea that energy standards helps provide clarity and stability to American manufacturers.

Can you elaborate on the collaboration that takes place between DOE and manufacturers as it relates to energy efficiency and energy conservation standards? How do these standards help American manufacturers compete and avoid being undercut by inefficient foreign products, if you will?

Ms. SAUL RINALDI. By—it is, though—remember when I talked about some of those really potentially cheap products that could flood the market, those would likely be foreign products. And American manufacturers work with the Department of Energy. They go through the standards. The standards process takes some time. Not every single appliance that is reviewed has a new stand-

ard. It has to be cost-effective and technologically feasible, and that they work with the manufacturers and other stakeholders to make sure that they are coming up with something that will work for the marketplace.

And then the manufacturers—what that does is it helps strengthen the manufacturers to make sure that the lines of products that they put on the market are from that base standard, and then additional efficiency so that they cannot have to be competing with foreign manufacturers that might have cheaper, less efficient products on the market.

Mr. PALLONE. All right. Thank you so much.

Thank you, Mr. Chairman, I yield back.

Mr. LATTA. Thank you. The gentleman yields back the balance of his time.

The Chair now recognizes the gentleman from Ohio's 12th District for 5 minutes for questions.

Mr. BALDERSON. Thank you, Mr. Chairman. Thank you all for being here today. I appreciate your time.

My first question is to Mr. Steffes. I appreciate you discussing the critical role natural gas plays in maintaining an affordable, reliable, and resilient energy mix. Similar to the service territory of Washington Gas, the district I represent, Ohio's 12th Congressional District, is in the PGM footprint, and we are currently experiencing a massive increase in the development of new data centers across central Ohio.

Mr. Steffes, as we are seeing this historic demand grow due to electrification and the buildout of new data centers to support AI, we are also seeing efforts by local and State officials to ban natural gas use. How do decisions by local officials to phase out natural gas use—which may seem like local, isolated decisions—negatively impact consumers and consumers in other regions or other States?

Mr. STEFFES. Thank you, Congressman.

Straightforward question of supply and demand. For the customers that I serve, a lot of their needs is heating, natural gas heating, hot water, cooking. If you mandate as in our communities no more natural gas will be used, those customers are going to find another way to provide heating. They are not going to go without heat. They will use electric heat. That will add additional demand to the electricity market while it is very difficult to add supply. Additional demand without supply increases prices.

Mr. BALDERSON. Agree.

Mr. Lieberman, I would like to get your thoughts on how natural gas bans can impact reliability and resiliency.

Mr. LIEBERMAN. Well, natural gas takes a good bit of the load that would otherwise have to be carried by electricity for residential use, which is what I have looked at most closely. And there is a reason people choose natural gas. It is 3½ times cheaper on a per-unit energy basis, and that is from the Department of Energy. So there's a lot of good reasons for homeowners to choose a natural gas water heater, natural gas furnace, a natural gas stove. Others who are into cooking swear by the superiority of gas cooking. But from an energy perspective, gas is cheaper, and it takes some of the load off of electricity at a time where we are struggling to keep up with increasing demand.

Mr. BALDERSON. Thank you, Mr. Lieberman.

My next question is directed to Mr. Hughes. In your testimony, you note your concerns with the previous administration's final rule on residential furnaces, which effectively bans noncondensing gas furnaces after 2028. Can you walk us through how this rule would increase costs for consumers and specifically how it would disproportionately impact seniors and low-income families?

Mr. HUGHES. Well, just the added cost of installation in most cases. We are a big proponent, as Ms. Rinaldi is, to upfitting existing homes. But in too many cases, condensing units aren't practical, aren't always practical. So just a—the added installation cost alone and the added equipment cost alone is a huge factor.

Mr. BALDERSON. Thank you. I will do a followup with you, Mr. Hughes. I think many on this committee, myself included, have deep concerns on that the efficiency standards proposed and finalized by the previous administration failed to meet EPCA's requirement that the standard is economically justified.

Do you believe those efficiency standards finalized on home appliances were economically justified or cost effective? Question. And how would some of those appliance standards hurt consumers and new owners?

Mr. HUGHES. In most cases, we found that they are not cost effective. New appliances to these new standards I found personally simply don't last as long. They are more expensive, and they simply don't last as long. So that adds to costs also.

Mr. BALDERSON. Mr. Lieberman and Mr. Steffes, would you like to add anything to that? Mr. Lieberman? You can go first.

Mr. LIEBERMAN. Well, for one thing, the statute has a provision in it that says that the higher upfront costs should be no more than is earned back in the form of energy savings over 3 years. But we see that provision bypassed—it is not a requirement. I think making that a requirement, making certain that consumers save more than it costs, would be—would be very valuable.

I would also say there is no downside to not regulating. Anyone who wants an ultra-efficient appliance is always free to buy one, and there's plenty of models available. Manufacturers have shown that they will make models that go above and beyond. Go to Home Depot, Lowe's. You can find appliances in any category that are much more efficient than the standard.

But the standard doesn't make sense for everyone, and that is why I think we should go to a more—approach with consumer choice rather than Federal mandates.

Mr. BALDERSON. Thank you.

I apologize, Mr. Steffes, but Mr. Chairman, I yield back.

Mr. LATTA. The gentleman yields back.

And the Chair now recognizes the gentlelady from Virginia's 4th District for 5 minutes for questions.

Ms. MCCLELLAN. Thank you, Chairman Latta and Ranking Member Castor, for holding this very timely hearing.

Across the country, one in three households is forced to cut back on basic necessities just to afford their energy bills. In Virginia, families face electricity rate hikes of at least \$10 a month. This is on top of rising grocery prices caused by President Trump's reck-

less tariffs and draconian Medicaid cuts that strip health coverage for millions of low-income Americans.

And rather than addressing these problems, the Trump administration has frozen or canceled funding for clean energy projects even though clean energy consistently delivers cheaper electricity than dirty fossil fuels. And the Republicans' Big Ugly Bill is terminating clean energy tax incentives that were already helping homes and businesses save money through energy upgrades. And Republican leadership used the Congressional Review Act to reverse the Biden-Harris administration's commonsense energy efficiency standards that had broad public support and saved customers money by reducing their individual demand.

In 2024, DOE standards helped the average American household save over \$500 on their utility bills. And in this committee we often discuss how growing energy demand from manufacturing and data centers and the urgent need to bring more generation online. But energy efficiency is one of the quickest and most cost-effective tools we have to reduce peak demand, to reduce individual demand and therefore lower individual customer bills, lower greenhouse gas emissions, and strengthen grid resiliency and energy security.

Now, Virginia is home to more than 600,000 veterans, many of whom face unique challenges transitioning to civilian life and finding good-paying jobs. But energy efficiency jobs have provided important opportunities for veterans who currently make up about 10 percent of the workforce in this sector alone. For many veterans, energy efficiency jobs offer a meaningful way to leverage their leadership and technical skills while continue to—continuing to contribute to our national security.

So Ms. Saul Rinaldi, could you discuss how Federal energy efficiency policies support workforce development and create career opportunities for veterans and other workers?

Ms. SAUL RINALDI. Absolutely.

And I am glad you brought up workforce training. Workforce training is critical right now. In the building sector, every time we talk with contractors, we always are looking for trained workers. And veterans are a big part of where they seek to find and bring in new workers to be a part of their teams.

Workforce training is critical, and unfortunately, the unobligated funds from the workforce training grants were taken out in the last—in the OBBA legislation. But workforce training is critical. We need to have on-the-job training as well as apprenticeship programs. We need to be investing in apprenticeship programs and workforce training so that these contractors can go into the homes and be able to understand how to size appropriately the furnaces, how to—how much insulation is needed, and how to make sure to make the most cost-effective upgrade for that home. Whether that home is fueled by gas or whether it is electric, the contractors need to be trained to make sure that they are making the best decisions for those homeowners.

Ms. MCCLELLAN. Thank you.

And one of the programs under the Bipartisan Infrastructure Law was a \$500 million Renew America's Schools program to help public schools lower energy costs and improve indoor air quality,

creating healthier learning environments for students and teachers across the country.

In the 2024 funding cycle, Richmond Public Schools in my district was one of 16 districts across the country to receive over 15 million to support much-needed upgrades at 22 Title I schools. Many of these schools were over 50 and in some cases over 100 years old. So you can imagine how inefficient energywise they were. But in January, President Trump issued Executive orders illegally freezing funding for the Renew America Schools.

Ms. Saul Rinaldi, how has the uncertainty created by the Trump administration's funding freezes impacted schools and businesses looking to upgrade their facilities?

Ms. SAUL RINALDI. Well, I think any of the funding freezes that we have seen, or cancellations, has created some uncertainty in the marketplace, particularly when it comes to job creation and hiring and for contractors who are unsure whether or not certain programs are going to be there to fund those upgrades. They certainly don't want to promise something and go through all the effort to put together a school redevelopment or a church redevelopment for those nonprofits in that program and then find out that they don't have the funding there to be able to meet that need.

So uncertainty is really hard in general for the marketplace, particularly for the small business contractors.

Ms. MCCLELLAN. Thank you. I yield back.

Mr. LATTI. Thank you very much. The gentlelady's time has expired, yields back. The Chair now recognizes the gentleman from Georgia's 12th District for 5 minutes for questions.

Mr. ALLEN. Thank you, Chair Latta, for holding this important hearing to discuss appliances and—appliance and building policies, and I thank the witnesses for being here today.

During the Biden administration, there was a 4-year assault on consumer choice of appliances from gas stoves, refrigerators, and freezers to washers, dryers, dishwashers, and air conditioners. No household appliance was off limits in their pursuit of a radical rush-to-green agenda. In fact, I tell you, I got more questions in the district this last—it was August work period. I mean, people asked me, "Why is my new air conditioner costing 3 times what I paid for it 10 years ago?" And because of this new gas and this—yes, these—yes, "I thought technology was supposed to lower prices," and that is the comments I got. But it is really—it is a real problem for our consumers.

And, of course, that is why I am proud that I—to introduce the bill Don't Mess With My Home Appliances Act, which implements necessary reforms to the Energy Policy and Conservation, or EPCA, prevent future administration from issuing burdensome standards on household appliances that would drive costs and reduce availability. And like I said, I don't know where we are getting these numbers about all this money we are saving, but like I said, the costs are enormous.

In fact, I had to do something I never thought I would do in my lifetime: stand on the House floor and defend my wife's gas stove. And we won that battle. She got to keep it. So—but again, what is important is to preserve consumer choice and maintain a diverse energy mix.

Mr. Lieberman, you mentioned in your testimony the issues with EPCA and how costly it can be to implement new appliance regulations. You have an average of how much the Biden Department of Energy's rules on some appliances cost consumers?

Mr. LIEBERMAN. Well, you mentioned air conditioners. Central air conditioners are in the very unfortunate position that they are hit with Department of Energy and Environmental Protection Agency regulation, and it is that one-two punch that has really done a number on appliances. A DOE rule that predates the Biden administration but took effect in 2023 raised the cost of home air conditioners. And then a Biden EPA rule that took effect for manufactured equipment after January 1st of this year has really done a number on appliance affordability, especially air conditioners.

And I have talked to air conditioner installers who say that that EPA rule alone added \$1,500 on top of the other regulations. So it is definitely a cumulative effect. And a number of these regulations were from the Biden administration, but a number of them predate the Biden administration as well.

Mr. ALLEN. Well, another problem is some of this stuff doesn't work. I mean, the washing machines, I am told, don't—you got to wash your clothes multiple times. I mean, we had one lady that wrote in here, said she had to put more water in her washing machine to get her clothes clean, had to drag the water hose in there and put it in the—I mean, you can't believe this stuff.

You mentioned my bill, the Don't Mess With My Home Appliances Act, to reform EPCA. How would this bill help with ensuring consumer choice and lower costs of appliances?

Mr. LIEBERMAN. Well, I think it would reinstate some safeguards against excessive future regulations. That is very useful. It would also have this lookback provision so we can—we can revisit past regulations, have a notice in comment rulemaking where those who think the appliance standard was just fine can say so, but those who think there have been problems can say so. And we can—we can revisit some of these past standards, maybe even make them less stringent if it is efficiency that comes at a cost of choice, performance, features, reliability, and longevity.

Mr. ALLEN. It is called common sense or street smarts, whatever you want to—

Mr. LIEBERMAN. Yes, trusting consumers to do the right thing.

Mr. ALLEN. Mr.—“Steff-iss”? Is that correct? Part of my bill, the Don't Mess With My Appliance Act, prohibits the Secretary of Energy from banning products based on their type of fuel source—most notably, natural gas. Natural gas traditionally uses less energy. So can you share how many natural gas appliances and natural gas, such as my wife's gas stove, as a fuel source in building would strain the grid and raise energy cost?

Mr. STEFFES. Thank you, Congressman.

Absolutely. Driving gas out of homes will raise—will increase electricity demand because people will still want to cook. They will still want heat. That will only increase demand in a tight supply market, and the prices are going to go up from there.

Mr. ALLEN. All right. Well, I am out of time. Mr. Hughes, I had a question for you. For the record, I will get that to you. But obviously, we have a huge housing shortage in this country, and afford-

ability is a big issue. We got to solve that problem for the American people.

Thank you, and I yield back, Mr. Chairman.

Mr. LATTA. The gentleman's time has expired, yields back.

The Chair now recognizes the gentleman from California's 15th District for 5 minutes for questions.

Mr. MULLIN. Thank you, Mr. Chair. And thank you to our witnesses for your testimony today.

As we know, affordability is a huge challenge. While the majority has passed One Big Beautiful Bill, their policies have increased energy bills by hundreds of dollars a year for families across America. This is on top of higher costs at the grocery store and diminishing coverage at the doctor's office.

Instead of dealing with this affordability crisis, the President has mandated that outdated coal plants keep running, which will cost billions of dollars a year. Republicans have proposed bill after bill to roll back efficiency standards, which would only lock in higher costs for families.

Americans are being squeezed on many fronts, and for utility bills, they simply have to eat the cost or turn out the lights. For renters, this issue is especially urgent because, while they pay their own energy bills, they don't have control over whether their homes and appliances are energy efficient.

So Ms. Saul Rinaldi, can you explain how strong appliance standards and building codes protect renters and homeowners from higher monthly bills?

Ms. SAUL RINALDI. Absolutely. And you are correct. That split incentive is critical for the third of the country that rents and that—one of the key issues that appliance standards can do is that a typical household has saved \$576 per house per year as a result of appliance and equipment standards.

So once they—once these purchases are made by the landlord for the renter, those energy savings are recouped by the renter. So by setting a standard as the lowest cost that a landlord can put into a home or apartment is critical. And homeowners get the same. They purchase the appliance with some—potentially an upfront cost, potentially not.

I think the costs of appliances aren't necessarily weighed directly against standards. There is also inflation. There is also the cost of the installation. So there's many things that go into the cost of installing a new unit and why those costs might go up.

But the appliance standards and the building standards are just setting a baseline to make sure that we are protecting our homeowners and our renters from appliances that are really wasteful.

Mr. MULLIN. Thank you for that.

I would also like to take a moment to talk about the impact of housing codes on resilience to extreme weather for both buildings and the electric grid. According to a FEMA report from the first Trump administration, communities with modern building codes avoid 32 billion, with a B, in disaster losses over 20 years compared to places without them. That is why I introduced my Weatherization Resilience and Adaptation Program, or WRAP Act, to help low-income families harden their homes against natural hazards.

We also know that more energy-efficient homes and appliances will reduce strain on the grid by lowering demand during heat waves and cold snaps.

So again, Ms. Saul Rinaldi, beyond lowering bills, can you speak to how stronger codes and home-hardening investments work together to reduce our disaster losses?

Ms. SAUL RINALDI. Well, one important piece that you had noted is that when you upgrade the efficiency of a home, it also means that they can—that installation helps that home withstand heat or the loss of—if it is during a heat wave, they can withstand the energy—air conditioning, it can hold in the air conditioning. It can hold in the heat if they have lost power during—if it is cold out. So it makes the home itself act a bit like a cooler rather than a paper bag. So the home itself helps maintain the temperatures within it even if there is a loss of power. So that is—that is one of the key ways that it helps.

There is also—just in general, the homes are built with—sturdier, and those sturdier homes are able to withstand some of the more extreme weather events that we have been seeing.

Mr. MULLIN. Appreciate that answer very much. Thank you all for your testimony.

Mr. Chair, I yield back.

Mr. LATTA. Thank you. The gentleman yields back the balance of his time.

The Chair now recognizes the gentleman from Texas's 11th District for 5 minutes for questions.

Mr. PFLUGER. Thank you, Mr. Chairman.

I want to get to the heart—Mr. Hughes, I will start with you. I want to get to the heart of—efficiency is good, and it is happening. And things—and there's lots of different industries that are making things more efficient. But I don't need, in west Texas, to be hurricane-proof, because we don't have hurricanes in west Texas. And I think the—as we consider different things that are mandated, we want to make sure that we are not overreaching, which is exactly what has happened in the last 4 years. And we are trying to swim out of that, that mess.

Housing prices are obviously—they are very expensive right now. We have lower numbers of first-time home buyers. And I would like to hear your thoughts as you have kind of mentioned already today on the additional Federal appliance code mandates that have impacted the affordability of homes and just broad thoughts on how to tackle it to make sure we do gain efficiency but we don't overreach.

Mr. HUGHES. Absolutely. As has been mentioned several times, it is not a one size fits all. And you are right. You don't have hurricanes in Texas, but we do in North Carolina. It should be left up to individual States and local governments to tailor those codes to those areas.

As far as the cost, the more regulations we pile on, the more it drives that cost up. We feel like the homes that we have built in the last 20 years perform very well. We feel like we have reached a good base, and continuing to pile on is simply not cost effective. You are not going to recover that extra funds. We are a big advo-

cate for upfitting existing homes, and we feel like that is where a lot more good can be done.

Now, as far as how that increases resiliency, unfortunately, that is not quite as easy. But I can assure you in North Carolina, we are constantly looking for ways to be more resilient. And there are a lot of great innovative products out there that increase resiliency. And luckily today, a lot of those products also increase efficiency.

Mr. PFLUGER. Right.

Mr. HUGHES. Unfortunately, they all cost more.

Mr. PFLUGER. We have to be careful about what we mandate and how that affects the one size fits all—I hope—I hope that this committee is listening to that.

Mr. Steffes, I will go to you. You testified that 20 percent—changing subjects completely here—but 20 percent of Washington’s gas service goes to Federal facilities, including buildings at the White House and the Pentagon. And what risks do you see if Section 433—if Section 433 forces those facilities to abandon natural gas in favor of an all-electric mandate?

Mr. STEFFES. A few risks there, Congressman. Thank you for the question.

First, the risk that I see is—because energy security in multiple redundant networks to deliver energy is critical, I see a risk to national security and our ability—the country’s ability to continue to operate when storms come through, when matters that are critical to citizens are dealt with.

I also see a fundamental question and challenge around affordability. As Federal office buildings are mandated to move down one path and only one path, clearly they are going to spend more money when they could otherwise use a different technology and solution.

We trust strongly that the Federal Government—the people that run the buildings, that operate these facilities, will make the right choices for affordability, for reliability, for security, as well as for safety.

Mr. PFLUGER. Mr. Hughes, I will go back to you.

Forced electrification. You testified that the cost can be as much as 40 percent more. So in the same way that we are asking Federal buildings whether they want forced electrification, what is your opinion on that with houses?

Mr. HUGHES. Well, again, it is all about the cost. It is going to drive up costs. We have to change appliances to meet those regulations, the cost of the appliance and the installation. It is all about the cost. And again, the point has been made. The best plan in the world isn’t worth anything if the homeowner—if the home buyer can’t afford it.

Mr. PFLUGER. Finally, Mr. Lieberman, cost question. You note in your testimony that DOE rules could add hundreds of dollars to the cost of furnaces and water heaters. And what kind of effect is that going to create for first-time home buyers?

Mr. LIEBERMAN. It adds to the cost—

Mr. PFLUGER. Push your mic.

Mr. LIEBERMAN. It adds to the cost of that first-time home.

I should say that the water heaters rule, it actually impacts existing homes a little bit more than the new homes because most of

those are built with the condensing furnaces. But again, there is a cost for existing homeowners, but there is also a cost for new homeowners. I think the biggest single appliance affecting new homes is central air conditioners, which have become very, very expensive because of this one-two punch of Department of Energy and Environmental Protection Agency regulations. But almost every room in the house has something that is going up in price, and it adds up.

Mr. PFLUGER. Thank you. I appreciate the testimony. I yield back.

Mr. LATTA. Thank you. The gentleman's time has expired, yields back.

The Chair now recognizes the gentlelady from Colorado's 1st District for 5 minutes for questions.

Ms. DEGETTE. Thank you so much, Mr. Chairman.

Mr. Chairman, I am always happy to talk about overburdensome government regulation because, unbelievably, maybe, to Republicans, I am opposed to that too. I think that government regulation should be lean and mean, and I think it should help consumers. Nonetheless, I was really perplexed because my colleagues on the other side of the aisle seem to think that all of these efficiency standards they are talking about are actually going to hurt consumers rather than save them money in the long run.

And so I was—I was ruminating about what the Republican majority has been doing yesterday to slash things because they don't comport with their drill, baby, drill agenda, which will actually hurt consumers. And I just give a couple of examples from the Big Bad Bill.

One: They slashed the energy-efficient commercial buildings deduction to assist with the installation of energy efficiency appliances and commercial buildings. So this was money that was going to help people install these appliances so they could save money in the long run. Gone.

They terminated the Energy Efficient Home Improvement tax credit. This tax credit helped over 2.3 million Americans make their buildings more resilient and efficient and saved an average of \$130 a year in energy costs. And that is all gone now. Those people, they can't save that money now because we are not helping them.

Just last week, my Republican colleagues voted to cut DOE's Energy Efficiency and Renewable Energy program by half. In my home State of Colorado, that would eliminate our funding for the Weatherization Assistance Program by a third, as just one example.

So in other words, you are making these houses and commercial buildings more efficient so people will save money, but my colleagues don't like that.

So, Ms. Saul Rinaldi, I want to ask you a couple of questions about the impact of cutting energy efficiency standards because, in my opinion, these standards create healthier, more comfortable indoor spaces, and in fact they help with health issues, respiratory issues, and preventing chronic diseases like cancer, lower respiratory diseases, and other things.

So let me ask you. Poor indoor air quality leads to more asthma incidences, causes colds, allergies, headaches, fatigue, and negatively impacts our mental health. Is that what studies show?

Ms. SAUL RINALDI. Yes. That is exactly what studies show.

Ms. DEGETTE. OK. So given that we spend 90 percent of our time indoors, wouldn't it stand to reason that health issues caused by poor indoor air quality would lead to an increase in healthcare costs?

Ms. SAUL RINALDI. Yes. Yes.

Ms. DEGETTE. So Mr. Chairman, I have here a study, and it is from UL Solutions, which concludes that negative health effects triggered by poor indoor environmental quality make up nearly 14 percent of healthcare costs. I ask unanimous consent to put that in the record.

Mr. LATTA. Without objection, so ordered.

[The information appears at the conclusion of the hearing.]

Ms. DEGETTE. Thank you.

Now, Ms. Saul Rinaldi, efficiency standards not only mitigate health risks, but modern building codes protect us during natural disasters by making our buildings more resilient. Is that right?

Ms. SAUL RINALDI. Yes.

Ms. DEGETTE. Now, are you aware of the study that FEMA concluded where they said that every dollar spent on building code adoption saves \$11 in disaster repair and recovery expenses?

Ms. SAUL RINALDI. Yes, I am.

Ms. DEGETTE. So in an area like my home State of Colorado, which is facing our worst fire year since 2020, energy efficiency standards and weatherization programs have reduced energy bills by nearly 25 percent. Are you aware of that?

Ms. SAUL RINALDI. Yes. That makes sense.

Ms. DEGETTE. OK. And so I guess the way I feel is, if you really want to reduce the burdensome effect of the Federal Government's actions, then help people to make their homes and businesses more resilient and also more healthy so that they can save money and so that they can have better health outcomes.

With that, I yield back.

Mr. LATTA. Thank you. The gentlelady yields back the balance of her time.

The Chair now recognizes the gentleman from Kentucky, the chairman of the full committee, for 5 minutes for questions.

Mr. GUTHRIE. Thanks, Mr. Chair. I appreciate this hearing, appreciate being here.

And, Mr. Steffes, some of the argument has been that you put in regulations that drive the price of products, of energy, of housing up, and then you have a bill to subsidize it. You take away the subsidies, you are increasing the price of everything.

Well, the problem really is, is making things affordable in the first place so you don't have to subsidize it, because it seems like we just dismiss—when you subsidize something, somebody is paying for it. And so that is what we need to recognize.

And so, Mr. Steffes, in your testimony, you discuss State-level actions, including Maryland's building energy performance standards, and the lack of consideration given to whether the grid can handle increased demand from electrification. What kind of price increases

can PJM customers expect as performance standards and other gas restrictions take effect?

Mr. STEFFES. Thank you, Chairman.

Yes, as I said in my testimony, we have already seen almost 1,000 percent increase in capacity prices in PJM. If we continually restrict natural gas at the site, in buildings and homes, all that is going to do is to drive electricity. And how do we make electricity in PJM today? Well, if you look at PJM, we make it primarily with natural gas and some coal and nuclear. The idea that we are going to then just push the gas back down the power wire and use it in a less efficient manner than you would use it at home is absolutely going to rise prices.

I will give you another example. In Baltimore, over about 5 years, electricity customers have seen 1,000-dollar-a-year bill increase, sort of that—in our Maryland customers, we have seen \$100. Natural gas is much more affordable than electricity delivered. And we need to be thinking about that as we restrict people's use of natural gas.

Mr. GUTHRIE. So I know our friends in Europe are begging us to export more liquid natural gas. It is national security. If you are pro-Ukraine, you want to ship natural gas to Europe because that is—which I am, and so that—by the fact that they are buying natural gas from Russia funds Russia to go attack Ukraine. I just talked with our Japanese and Korean allies, and they want us to unleash our natural gas out of Alaska, which helps some of their competition with China.

So it is also a strategic thing. But people will say, well, prices—like you are saying in electric, prices are going up in places like Maryland, therefore we need not export natural gas. I have heard that argument, actually.

And the problem with electric prices isn't the existence of natural gas. It is the ability to use it, correct?

Mr. STEFFES. Correct.

Mr. GUTHRIE. So I just want to make sure that—and then also—so Mr. Hughes, in the Inflation Reduction Act, or so-called—if we are going to call it—they are going to use our bill, I will use theirs—so-called Inflation Reduction Act. It included provisions to pressure State localities adopt burdensome building codes and performance standards that negatively impact potential home buyers. Even in California, they paused some of these codes. We have seen some books, the books of abundance or something, come out about how these regulations are—I haven't read that book, but I have heard about it.

So Mr. Hughes, what kind of flexibility do State localities need when implementing building codes?

Mr. HUGHES. As we continue to say, it is not a one size fits all. Every State needs to do their own thing. As was mentioned earlier, not every State has hurricanes. We do. So you have to be—you have to have that flexibility.

And above all, maintaining consumer choice. It comes right down to it. Again, no matter what the plan is, if consumers can't afford it, what good have we done?

Mr. GUTHRIE. So how do we balance? So I think as a Federal Government, a lot of times we have these tragedies, FEMA comes

in and helps. The people want their Federal Government to come and help, and it does. And so there is some Federal interest to making sure people don't build flimsy buildings in an earthquake area or buildings that are—that can't withstand—right on the water in Florida that can't withstand hurricane wind.

And so how do we balance locals making their decisions—let the Federal Government know, a lot of times we foot the bill, we want to make sure—so what I am saying is that all regulations aren't bad. How do we know that we get the right level of regulations between State and Federal?

Mr. HUGHES. Well, we feel like we are there. Again, the houses, the homes that we have built in the last 20 years perform very well. You can ride up some of the valleys, creeks and—

Mr. GUTHRIE. I am about out of time. So what is being added to that—you think you are there. So what is being added to that you think we need to not do?

Mr. HUGHES. Well, you name it. Extra energy requirements and—the resiliency is there. Some places require more. But again, that flexibility. On our coastal areas, we need—you know, we need better windows and doors, but we don't necessarily need it in my Piedmont area. So we have to maintain that flexibility and affordability.

Mr. GUTHRIE. I just want to—before I yield back—that all things aren't bad. They need to be correct, and we need to make sure they are at the right level. So thank you, and I yield back, Mr.—

Mr. LATTA. Thank you. The gentleman yields back.

The Chair now recognizes the gentleman from New Jersey's 8th District for 5 minutes for questions.

Mr. MENENDEZ. Thank you, Chairman.

And I appreciate this—us having this hearing today, you know, and talking about policies. The Republicans have control of this chamber, they have control of the Senate, and they have a Republican President, yet they want to cast the blame, the affordability challenge, on the prior administration instead of taking accountability for their lack of action to drive down the costs that so many of our families are burdened with.

In addition, Republicans like to claim their focus this Congress is on eliminating waste across the Government. This was their justification for taking healthcare away from 15 million Americans and making the largest cut to SNAP in the program's history.

Now, folks on this side of the aisle voted against that. But that was their framing of the conversation, right? "There is waste that we need to go cut out," and their way to do so: taking healthcare away from 15 million people.

As we all know, the opposite of waste is efficiency. This administration set up the Department of Government Efficiency. That sounds like a good idea, right? Most of us would agree in that type of efficiency. What they really did was just fire, RIF, remove, hire back career Government officials who have done so much incredible work for our country, and created no efficiency in the process.

But let me ask all of our witnesses today, as a general matter: Is efficiency good or bad? Give me a thumbs up or thumbs down. Good. OK. I think—that is interesting. We will come back. Good. Good. Great.

But as we have already heard this afternoon, as we have already seen this Congress, Republicans in the Trump administration seem to take issue with efficiency when it comes to energy. This May, Republicans passed and President Trump signed multiple pieces of legislation that repealed Biden-era Department of Energy efficiency standards.

Ms. Saul Rinaldi, with respect to waste, wouldn't inefficient household appliances actually contribute to a waste of energy?

Ms. SAUL RINALDI. Yes. Inefficient appliances do contribute to waste.

Mr. MENENDEZ. Right. Waste bad, efficiency good. Makes sense.

So if more people use energy-efficient products, would that lead to lower energy costs for American families?

Ms. SAUL RINALDI. Yes.

Mr. MENENDEZ. Right? And if more people use energy-efficient products, wouldn't that relieve some of the burden that we are putting on our energy grid?

Ms. SAUL RINALDI. It does.

Mr. MENENDEZ. Seems so simple.

Energy prices are dramatically increasing across the country, and our constituents are footing the bill. In my home State of New Jersey, my constituents' energy bills rose by 20 percent this summer. PJM and others are blaming these price hikes on increased demand due to the rapid deployment of data centers and increased AI adoption, which, as we all know, consumes a significant amount of energy.

Ms. Saul Rinaldi, your testimony points out that data centers account for roughly 4.4 percent of electricity use in 2023, but they are projected to grow to—to account up to 12 percent of energy use over the next 3 years.

Question: Are you aware of any rules or actions being taken by the Trump administration or House Republicans to keep the costs associated with these data centers from being shifted to households?

Ms. SAUL RINALDI. I am not aware of anything specific.

Mr. MENENDEZ. Yes, because I am on this subcommittee, and we have not had—we have had tons of AI hearings but not one about the energy that goes into powering AI, which our consumers—and when I say “consumers,” I mean our constituents—are footing the bill of.

And so it seems to me that is a big challenge that we have to face which we don't actually want to face here. We just want to look backwards to the Biden administration and blame them for their policies instead of taking accountability in the work that remains ahead.

Shifting a little bit, a question for our witnesses: Do we need more energy production? Just yes or no.

Mr. HUGHES. Yes.

Mr. LIEBERMAN. Yes.

Mr. STEFFES. Yes.

Mr. MENENDEZ. Great. I agree.

But instead, President Trump and Republicans in Congress have consistently made policy choices to inhibit our ability to quickly bring new energy sources online in order to prop up fossil fuels, in-

cluding by gutting the Infrastructure Investment and Jobs Act and the Inflation Reduction Act and imposing tariffs that will dramatically increase the costs of equipment necessary to build out energy project.

Just quickly, have tariffs been good for home building or bad for home building?

Mr. HUGHES. Still——

Mr. MENENDEZ. It has not been good so far, has it?

Mr. HUGHES. No.

Mr. MENENDEZ. Yeah. Pretty bad.

So they have completely abandoned renewables such as solar and wind, so much that they refuse in this committee to use the word “renewable” when we are talking about energy. And this administration does not allow administration officials to acknowledge an all-the-above strategy when it comes to energy production.

We have had witnesses here who say we need more energy. We are seeing the increased demand in AI data centers. But we are going to cut off the country’s supply because we don’t believe in offshore wind or solar despite the fact that in Texas, not a blue State, 30 percent of their energy production has come from the word “renewable” energy. And that is why consumers in Texas are paying lower prices for their electricity.

Instead of making that a national profile that we can do, they want to take us an opposite direction. They have failed on accountability. They are failing every single day, and it is a travesty that the American people are literally paying for.

I yield back.

Mr. LATTA. The gentleman’s time has expired. And the Chair now recognizes the gentlelady from Tennessee’s 1st District for 5 minutes for questions.

Mrs. HARSHBARGER. Thank you, Mr. Chairman. Thank you all for being here with your testimony.

And you mentioned how States and localities have used building codes to go around EPCA State preemption and to mandate de facto gas bans and appliance standards. And I guess I will start with you, Mr. Hughes, since I can understand your accent, OK?

I know that all over the country, there has been a housing shortage, especially in places like California and New York, and even in Tennessee. In particular, they struggle to increase their housing supply. If we don’t have enough rooftops, we can’t fill the jobs that we have.

What do your members say is the single largest cost to build a new home?

Mr. HUGHES. And for the record, everyone else has an accent.

Mrs. HARSHBARGER. Yes, totally.

Mr. HUGHES. What is the single biggest cost—addition right now? Is that what you are saying?

Wow. It varies—different areas. On the West Coast, it has got to be impact fees. For us, labor is a big factor. Some areas, it is lots. So the list goes on and on. And it varies from one State and one region to the other.

Mrs. HARSHBARGER. Yes.

Mr. HUGHES. Again, a reason we don’t need a one size fits all.

Mrs. HARSHBARGER. Correct. Thank you, sir.

Mr. Steffes, in Tennessee, homes that use gas for heating save around \$449 annually when compared to an all-electric home. And Tennessee has been a leader when it comes to energy choice and has enacted laws to ensure customers make the decision about what is right for them.

As a regulated utility, can you explain how these gas bans impact the service Washington Gas provides to its customers?

Mr. STEFFES. Thank you, Congresswoman.

I would just say this: Our customers tell us every day—either current customers that want to ensure affordable future and reliable future, or developers and builders who are trying to build in this region—that they want to have the choice of natural gas because they understand, as residents of Tennessee realize, it is a more affordable option.

Mrs. HARSHBARGER. Yes.

Mr. STEFFES. So we are hearing that every day from our customers.

Mrs. HARSHBARGER. Yes. Can you explain why Washington Gas uses demand-side management and utility programs to incentivize energy efficiency and grid resilience?

Mr. STEFFES. One of the things that, you know, Washington Gas does, we do, we believe strongly in energy efficiency. We work with our customers in Virginia and Maryland so that they can bring more efficient products into their homes as they choose to do that because, ultimately, they want—we want them to use the amount of energy they think is appropriate in the way they want to use it.

Mrs. HARSHBARGER. Yes. Yes, sir.

Mr. Lieberman, for American manufacturers that build here, they must make significant investments to comply with EPCA. When we consider EPCA reform, how do we ensure DOE cannot change or reverse standards that would allow foreign manufacturers to flood the market, hurting our domestic industry and putting U.S. jobs at risk?

Mr. LIEBERMAN. Well, I do have to say that my sympathies are more with consumers, homeowners, than with manufacturers, and especially unsympathetic when manufacturers actually lobbied for these standards, as is the case in a few instances, as with air conditioners, for example. This gave air conditioner manufacturers a captive market for more expensive equipment. So I don't have a lot of sympathy there.

I think it is true that, you know, if we revisit any standards, we might want to consider, you know, a glide path, not abruptly ending things, because manufacturers have made the transition, and that is something that should be taken into account if we make changes to these standards.

But again, a lot of my sympathies are with the consumer, not the manufacturer.

Mrs. HARSHBARGER. Whenever DOE decides to make a change to its energy efficiency standards, the ruling must be economically justified. In your opinion, sir—and this is Mr. Lieberman—do you think EPCA's current seven-factor test that guides the DOE's economic justification needs to change? And if you do, why?

Mr. LIEBERMAN. I think there's some factors that just don't get included enough. Some of these new standards—and Mr. Hughes

can attest—have made installation costs higher. And that is something that DOE doesn't usually factor in sufficiently.

We have also heard more and more—every one of these standards comes with a very optimistic analysis when it is finalized by the Department of Energy: high benefits, lost cost. But then reality kicks in, and a few hours—a few years later, I should say, we see that the reality wasn't so rosy. One of the things we see is impacts on product reliability. Also impacts on product lifetime.

So there's some aspects to appliance affordability that aren't fully taken into account. And so I think that we could do—or DOE could do a better job of taking those into account and considering not regulating—there is no—there is no requirement to regulate. In fact, you are required to not regulate if doing so is not economically justified.

Mrs. HARSHBARGER. OK. Thank you, sir. And Mr. Chairman, I yield back.

Mr. LATTA. Thank you. The gentlelady's time has expired. And the Chair now recognizes the gentlelady from California's 7th District for 5 minutes for questions.

Ms. MATSUI. Thank you very much, Mr. Chairman. And I want to thank the witnesses for being here today.

When Donald Trump ran for President, he promised the American people he would cut their energy bills in half. But the reality is very different. Since Donald Trump took office, electricity rates have gone up by 10 percent, and families are feeling it every single day. The latest inflation report makes clear it is not slowing down. Electricity prices are rising twice as fast as the cost of other household goods.

And why? Because President Trump is making deliberate choices that drives costs higher. Trump is slapping new tariffs on energy inputs. He is doing everything he can to wage war on clean energy across the country.

And congressional Republicans just repealed the tax credits that reduce the cost of new energy products—or projects. It is not rocket science. If you reduce the supply of energy, it is going to cost more. And that is what Trump and congressional Republicans are doing right now. And now Republicans are in a crusade to make everything in our lives less efficient. If they have their way, people's energy bills would skyrocket even faster.

Energy efficiency is one of the best ways Americans can lower their electricity bills. Ms. Saul Rinaldi, can you give us a brief breakdown on the energy use in the average American home?

Ms. SAUL RINALDI. Well, homes make up approximately 20 percent of our Nation's energy consumption, and so—but primarily—primary in each house, it is the systems. So that is the heating and cooling makes up the majority of that.

Ms. MATSUI. Mm-hmm. OK. I understand that heating and cooling is probably 50 percent, is that right?

Ms. SAUL RINALDI. At least. It depends on how well insulated the house is.

Ms. MATSUI. Sure. And water about 15 percent?

Ms. SAUL RINALDI. Right.

Ms. MATSUI. OK. So if the average American family wants to reduce their energy use and save money on utility bills, what would you recommend?

Ms. SAUL RINALDI. First, usually recommend an energy audit, having a professional come review the house, make sure that their air conditioner's sized properly, make sure they have the right amount of insulation, and make sure that they are taking advantage of all of the low-hanging fruit for energy efficiency. Then usually, since nine out of ten homes are underinsulated, probably energy-efficient insulation would be what they would need to do. And then after that, make sure that their systems are—are the most efficient possible to make sure that those big system costs are reduced.

Ms. MATSUI. OK.

Now, savings from efficiency can really add up, but some of the Republican witnesses here today have raised concerns about the upfront costs of energy-efficient homes. I find this incredibly cynical. Democrats' Inflation Reduction Act expanded tax credits that reduced the upfront costs of energy efficient homes. But Republicans just repealed those tax credits in the big ugly bill. In fact, just 2 months ago, every Republican on this committee voted to kill those tax credits.

Ms. Saul Rinaldi, can you explain what those tax credits were and how the repeal of those credits will increase costs for Americans?

Ms. SAUL RINALDI. Yes. The 25C Energy Efficient Home Improvement tax credits that were repealed, they are—they are available until the end of this year. But starting in January, homeowners will no longer be able to take credits for gas and electric heat pumps—heat pump, water heaters, insulation, doors, windows. And 2.3 million Americans claim the 25C tax credit, receiving over \$2 billion back in tax credits. And the average tax credit was \$882 per house. So that was pretty significant for many homeowners.

Ms. MATSUI. Yes, it is.

Now, it is really a shame because an energy-efficient home can be life changing. Our public utility in Sacramento, SMUD, helps to retrofit customers' homes with the latest efficient appliances and HVAC systems.

Last fall, I had the privilege to visit with a constituent who had received an energy efficiency makeover. She was absolutely thrilled, because Sacramento summers can get quite hot, sometimes sweltering, but a new HVAC means her home stays cool without breaking the bank. She was really very happy because, you know, she had to pay for food and everything else and try to look to see where she can find savings but, you know, her house is cool, and she didn't have to pay those bills.

The benefits of efficiency extend beyond our homes. This committee has already held five hearings this year on how to meet rising energy demand. Well, energy efficiency is one of the most cost-effective ways to solve this problem.

And I see I am running out of time, so I will follow up with the questions later. Thank you, Mr. Chairman. I yield back.

Mr. LATTA. Thank you very much. The gentlelady yields back. The Chair now recognizes the gentlelady from Iowa's 1st District for 5 minutes for questions.

Mrs. MILLER-MEEKS. Thank you, Mr. Chairman and Ranking Member Castor, for holding this important hearing on building and appliance standards.

Iowans value their freedom to choose, whether that is appliances in their homes, the energy that powers them, or how they build their communities. Today we are addressing fundamental concerns about government overreach threatening consumer choice, energy choice, and affordability. I was proud to sponsor H.R. 7637, the Refrigerator Freedom Act, which passed the House of Congress. I wish I would have sponsored the Washing Machine/Refrigerator Act because this Saturday my washing machine went out, and I am currently shopping for a new one.

Iowa follows 2009 IECC standards with amendments equivalent to the 2012 standards. This balanced approach works for both our environment and citizens' pocketbooks, yet pressure amounts to adopt standards that could add tens of thousands of dollars to home prices, pricing out young families and seniors.

Iowans need freedom to make choices that work for their families, not Washington mandates. They need flexibility to choose reliable, affordable, and abundant energy options that work for their lifestyles.

Mr. STEFFES, I have heard from our colleagues on the other side of the aisle that in their States, their energy prices are going up. And is this because of increasing demand for energy, or is this because policies in the past 6 months that have not even yet gone into effect?

Mr. STEFFES. Energy prices have been going up for some time. As I said, in Baltimore for the last 5 years, we have seen electricity prices go up. American consumers are demanding additional energy——

Mrs. MILLER-MEEKS. Does increasing energy supply, would that help to lower prices?

Mr. STEFFES. Additional supply, all things equal, would lower prices.

Mrs. MILLER-MEEKS. Thank you.

Ms. Rinaldi, I noticed that when the question was asked if whether we need increased power, you were equivocal on whether or not we need increased power, increased energy. So is it your assertion that merely having more energy-efficient appliances, which also cost more money, that that would meet the demand that we need for energy?

Ms. SAUL RINALDI. I was equivocal just because it was related to data centers, which will take more time to build power. It was just more of a time——

Mrs. MILLER-MEEKS. I just want to know: Do you think that more energy-efficient appliances will meet the demands for increased energy that we have? Yes or no.

Ms. SAUL RINALDI. Not only, no.

Mrs. MILLER-MEEKS. No, they will not. Thank you. So I would say yes, we need more energy.

Mr. Hughes, Home Innovation Research Labs found in 2021 IECC compliance costs range from 9,600 to 21,000 above the 2009 baseline. Since Iowa still uses the 2009 standards, given the rising energy demands that we have talked about, could these costs balloon too, and how would this extend payback periods for Iowa families?

Mr. HUGHES. Well, there is no—there is no limit to where it can go if—if we don't check—and again, it is about choice. It is about appliance choice, and I hate to keep saying cost. But regardless of the plan or regardless of the great things that are out there, we still have to keep them affordable. As I said earlier, 75 percent of average homes today still can't afford a new home. So why continue to pile on costs on top of that if—

Mrs. MILLER-MEEKS. Which makes it unaffordable.

Ms. Rinaldi, what is the environmental impact of replacing an appliance, especially a computerized appliance, every 6 to 8 years? As I told you, I am looking for washing machines right now. My current washing machine—front loaded, energy efficient, water efficient—has lasted over 20 years. And as I am shopping, I am told these new energy-efficient appliances that you want mandated—that they are going to last 6 to 8 years. So what is the environmental impact of replacing an appliance and the cost to families replacing it every 6 years instead of every 10 or more years?

Ms. SAUL RINALDI. The environmental impact of recycling the appliance? Is that what the question—

Mrs. MILLER-MEEKS. Of having to replace an appliance in a shorter duration because they are less reliable and they are less durable. Do you think there is an environmental impact, an impact to the landfill, an impact to computerized critical element devices that are in appliances that are being mandated when they last a shorter time?

Ms. SAUL RINALDI. I am afraid I don't have the answer to the impact to the landfill.

Mrs. MILLER-MEEKS. I would—I would suggest that if that is the policy that you want to see, that you want to know the environmental impact if you are doing this in order to have an environmental safety protocol and more energy efficiency.

Mr. Hughes, as a U.S. Army veteran, I am deeply concerned about our military families. The 2023 OMB report documented severe quality issues in military housing: mold, lead paint, structural problems. Section 433 would require massive capital investments to electrify all Federal buildings, including military housing, by 2030.

Given that privatized housing companies have already—are already struggling financially, and military families are dealing with substandard conditions, shouldn't we prioritize fixing existing health and safety hazards before forcing extensive energy transitions that could divert resources from basic maintenance?

Mr. LATTA. The gentlelady's time has expired. Could you answer that yes or no? Or you could also respond to her in writing.

Mr. HUGHES. Well, yes. But we will respond in writing.

Mr. LATTA. Thank you very much.

Mrs. MILLER-MEEKS. Thank you very much. I yield back.

Mr. LATTA. Thank you. The gentlelady's time has expired. The Chair now recognizes the gentleman from Texas's 33rd District for 5 minutes for questions.

Mr. VEASEY. Thank you, Mr. Chairman.

I don't know how we got here. I am really concerned. You think about some of the great appliances that we have. We invented the washing machine in America. We invented the dishwasher in America. We invented the microwave in America. And we are arguing, and it almost sounds like we are ceding the opportunity to be the leaders in innovating and creating new products for the next wave of innovation and technology in America and that we are just going to let—what, are we going to let the Europeans beat us at it? Are we going to let the Chinese Communist Party beat us at it?

Like, I think that this is crazy that we are kind of having these arguments. We know that we want to be the leaders and we want people to buy American appliances and that we want to be the innovators in these new technologies, energy-efficient—energy-efficient technologies, and that we are going to have to find energy as the country continues to grow and more and more of the world gets online.

In the 1970s, in a move towards American energy independence, we passed the Energy Policy and Conservation Act that established a Federal program of tests, procedures, labeling, and energy targets, and we continue to lead. But I don't want to cede in that area. That is one of the reasons why I was proud to be a cosponsor of the Energy Efficiency and Conservation Block Grant Program, because this program provides communities with resources that help people lower bills so we don't have to worry as much as—we are going to have to worry anyway with all the energy that we are going to need to continue to power America. And the EECBG program represents the largest nationwide direct investment in energy efficiency and cleaner energy technologies at the community level in U.S. history.

And so I want to be clear, the Energy Efficiency and Conservation Grant Program was first authorized under the Bush administration—a Texan—under the Bush administration, the Energy and Independence Security Act of 2007. And there were 95 Republicans—and I bet you there were a lot of Texas Republicans—I wasn't in Congress at the time, but I bet you there were a lot of Texas Republicans that supported President Bush on that. And there was a time when reducing costs for consumers and creating regulatory certainty and supporting American innovation was a shared priority because, again, we don't want the Chinese beating us at this stuff. We want to be the leaders in this stuff.

And so I just want to ask Ms. Rinaldi. Energy efficiency already supports 2.3 million jobs nationwide, many of them in small businesses. Can you speak to how stronger efficiency standards and building codes translate into local job creation and economic development, and how we can continue to be the leaders in this area, not the Chinese?

Ms. SAUL RINALDI. Thank you. Yes, and energy efficiency has historically been a bipartisan issue. And, yes, jobs are—your local contractor is not going to be found overseas, nor is there a job going

to be shipped overseas. So local contractors are part of our neighborhoods, they are part of our communities. And when they grow their small businesses, they grow from their communities.

So EECBG and the city energy office funding that funds so much working and training and communities are a part of how we explore additional jobs in our communities, because the—including the Weatherization Assistance Program, which also has significant job creation as a result of upgrading homes.

Mr. VEASEY. Right, right. Exactly. And kind of in that same direction, I am also interested to know Federal local partnership model. How can local governments best use these grants to maximize savings and other benefits for their communities?

Ms. SAUL RINALDI. The local—you mean the local communities working with the Federal agencies?

Mr. VEASEY. Yes.

Ms. SAUL RINALDI. Local communities working with Federal agencies, that is one of the key ways that we can expand. There is, for example, in the energy efficiency EERE has the Buildings Upgrade Prize, which really expanded to a whole lot of rural communities and additional communities that hadn't been served by Federal agencies before.

So there's lots of new opportunities that have come out in recent years to help support local communities using those Federal dollars, and that is big part of job creation with those local communities.

Mr. VEASEY. And also, because I don't have much time left, I know that manufacturers want clear and consistent certification requirements. And so if you could please let me know in writing how gutting the DOE's authority to set these efficiency standards creates confusions and could raise costs for businesses, that would be awesome.

Mr. Chairman, I yield back. Thank you.

Mr. LATTI. Thank you. The gentleman's time is expired, and yields back.

And the Chair now recognizes the gentleman from Michigan's 10th District for 5 minutes for questions.

Mr. JAMES. Thank you, Mr. Chairman and Ranking Member Castor, for holding this very important hearing today.

Across the country, families are struggling to afford a home. In Michigan, the situation is dire. Governor Whitmer is pushing to adopt the 2021 building codes—codes that would add an estimated \$15,000 to the cost of new homes.

Now, let's be clear about what that means. For every \$1,000 increase in price of a home, 3,393 families are priced out of the market. By adding 15,000 in mandated costs, you are talking about tens of thousands of hard-working families losing their shot at home homeownership.

And why? Because the Biden administration's so-called Green New Deal policy and the Whitmer administration's echo of them in Lansing are forcing climate mandates that carry a crushing price tag. Families are being told they must pay more now while any alleged savings from these policies won't be realized for decades, if at all. In the meantime, first-time home buyers are locked out, priced out, and pushed further from the American Dream.

The situation in Michigan is so severe that the Michigan Home Builders Association has taken the extraordinary step of suing the current administration in Lansing over these mandates, because they know what this means for families, builders, and the future of housing affordable in our State.

But the damage doesn't stop there. The rush to green policies isn't just driving up home prices. It is also putting a dangerous strain on our electric grid. MISO, the regional operator for Michigan and much of the Midwest, is already running at dangerously low levels of reserved capacity. At this very moment, energy demand is hitting record highs as America races to power new technologies and compete with China in the AI revolution. These policies are undermining the reliability and affordability of the very system our economy depends on. This is the wrong direction.

Washington and Lansing should be tearing down barriers to homeownership, strengthening our grid, and lowering costs for families. Instead, they are pushing mandates to leave Americans paying more for less.

Mr. Hughes, can you articulate for us what happens to affordability when families are forced into an all-electric home versus being able to choose natural gas or other options?

Mr. HUGHES. Well, for starters, I am not very articulate, but I will try. Again, the added cost of these appliances and overall added codes, whether it is resiliency or efficiency—and I remind the committee, again, we feel like that we are at a very good level already. Our houses that we have built over the last 20 years perform very well from resiliency and energy efficiency.

We were big advocates of updating existing homes, there is no question. Of the 137 million homes in this country, 130 million of them were built before modern codes. So we don't feel like the answer is to continue to pile on costs that homeowners can't already afford. We feel like we are at that level right now. And anything going forward has to be cost effective. We have to reach that balance. If we are going to spend more for it, we have to know that we are going to get a return on that investment.

Mr. JAMES. That is very good stat. Of the 137 million homes, 130 of them were built before those codes. And now we are at a housing crisis because of policymaking and these governments around the Nation. Getting power back to the people is probably a good call.

Mr. Hughes, once again, from your perspective as a homebuilder, why is it so important that we keep affordability—affordability—front and center in these energy policy debates in capital cities across the country?

Mr. HUGHES. Well, it is pretty simple. If home buyers can't afford them, there is no need in us building them to start with. So, I mean, it is just again common sense. We haven't used that word quite enough today, or that term quite enough. We have got to use some common sense.

Mr. JAMES. Well, common sense—

Mr. HUGHES. Excuse me. I am a big advocate of energy-efficient products. There is no question. I have used them for 25 years. You have to have that upfront money to begin with.

We feel like we have reached a good baseline, and there is no need pushing it and requiring it when homebuilders simply can't afford it.

Mr. JAMES. Oh, common sense seems to be in short supply in this town, which is why I am glad that you are bringing perspective from home. Thank you so much.

Mr. LATTA. The gentleman yields back.

And the Chair now recognizes the gentleman from New York's 20th District for 5 minutes of questions.

Mr. TONKO. Thank you, Mr. Chair.

There is no doubt that our constituents are experiencing higher and higher energy bills. We can continue to spend a lot of time talking past each other and playing the blame game, or we can take concrete steps that will actually help make energy more affordable by using proven programs.

DOE's Weatherization Assistance Program is incredibly effective. That is supporting energy-efficient retrofits of low-income homes. Each home receiving weatherization services saves on average \$372 every year on its utility bills, and that doesn't even consider the nonenergy benefits of living in a healthier and more comfortable home.

So, Ms. Saul Rinaldi, at this time of rapidly increasing energy demand and prices, can you give us a sense of why the Weatherization Assistance Program is needed and whether there are some program reforms that can help make the program even more effective?

Ms. SAUL RINALDI. Yes, Congressman. And the Weatherization Assistance Program has weatherized over 7 million homes since 1976, and it continues—and it weatherizes 35,000 homes every year. Those homes are for people who are at 200 percent of the Federal poverty line, and many of them are choosing between paying for medicine or paying for food and paying their utility bill. A lot of them have homes that aren't even able to be upgraded.

So there is weatherization readiness to help them get their homes free of mold or asbestos so they can be sealed and upgraded. And that keeps people in their homes from having them being forced out of their homes for not being inhabitable.

The Weatherization Assistance Program is critical to the most underserved people in our communities, and that is why the Building Performance Association strongly supports the weatherization legislation that you introduced.

Mr. TONKO. Well, thank you. That bill that you just indicated is our bipartisan bill, H.R. 1355, that would reauthorize the program while making modest reforms to allow it to even more effectively serve eligible households. And I don't see any reason why we couldn't come together to work on this effort.

The last time this program was reauthorized, President Trump signed it into law as part of the Energy Act of 2020. So as recently as July 8, DOE issued a press release celebrating \$325 million in weatherization assistance funds and 30 million in weatherization readiness funds being made available to States. A DOE official is quoted as saying, "Thanks to President Trump's leadership, we are able to focus on reducing energy costs for Americans that can least afford high energy prices through the efforts of weatherization."

Mr. Chair, I would like to request unanimous consent that this press release be included in the hearing record.

Mr. LATTA. Without objection, so ordered.

[The information appears at the conclusion of the hearing.]

Mr. TONKO. I thank you for that.

In addition to the administration's acknowledgment of the effectiveness of the program, Ms. Saul Rinaldi, you mentioned in your testimony that nearly 750 contractors and individuals from across all States, all 50 States, have expressed their support for this reauthorization effort.

Can you give us a sense of why BPA, along with many small businesses it represents, believes this program is so important?

Ms. SAUL RINALDI. Weatherization is a job creator, and there is training associated with Weatherization Assistance Program. Across the country, we see more contractors being trained to work in these low-income homes. And the contractors also have a real connection with their customers. They see how it helps change their lives for the better. Our contractors are very supportive of the weatherization program because of that real connection they have with their customers and the training that it provides them.

Mr. TONKO. And I thank you for that.

I would like to request, again, unanimous consent to add a May 8 letter from nearly 750 individuals and contractor businesses to Chair Guthrie, Ranking Member Pallone, and the leadership of the Senate Committee on Energy and Natural Resources in support of H.R. 1355. So I can get approval there, Mr. Chair?

Mr. LATTA. Without objection, so ordered.

[The information appears at the conclusion of the hearing.]

Mr. TONKO. Thank you so much. I certainly want to make sure the contractors carrying out this work are able to continue to provide weatherization services, but unfortunately I have heard reports that those previously announced DOE funds have not yet been received by States, which is partially due to DOE staff reductions leaving insufficient people in place to review and approve these State plans.

So Ms. Saul Rinaldi, can you give us a sense of how these delays are affecting contractors that carry out this work as well as the individuals that are waiting to get their homes weatherized?

Ms. SAUL RINALDI. My understanding is only 6 of 56 States and Territory plans have been approved. Without those plans approved and the funding reaching the States, we are seeing the potential of layoffs. We have talked with contractors from Michigan and Georgia who have also noted that they are very concerned with not having access to these funds and concerned that there might be layoffs as a result.

Mr. TONKO. Well, I appreciate it. It is obvious that weatherization works, and I hope we can get those dollars out the door. With that, I thank you.

And thank you, Mr. Chair. I yield back.

Mr. LATTA. The gentleman's time has expired and yields back.

The Chair now recognizes the gentleman from Oregon's 2nd District for 5 minutes for questions.

Mr. BENTZ. Thank you, Mr. Chair.

Mr. Hughes, I am looking at the LEED, Leadership in Energy and Environmental Design, standards—which, I am from Oregon, and so I am extremely familiar with these, having heard about them for years back in Salem during the 12 years I was in the Oregon legislature.

The list of things that are green—and that is what this hearing is about today—includes location and transportation, sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental equality, innovation and design, and regional priority. These are all important matters. But they add between 10 and 30 percent to the cost of a house.

And so my question to you is how many of those things that I just listed are essential, in your opinion, to a home?

Mr. HUGHES. I guess they are all essential, but it should be—we feel like it should be left up to the homeowner as which are the most essential, which are the most important, which are they willing to pay extra for?

Mr. BENTZ. I wouldn't call them essential if you can choose, but maybe desirable is the word. Location and transportation, who wouldn't want that? Sustainable site. All of these things are things that you would want. But if we are going to impose them upon people, there is the small matter of having to pay for them.

And right now, there are huge groups of people who simply can't afford this kind of—shall we call it a luxury, or what should we call it?

Mr. HUGHES. Yes, probably a luxury. And, unfortunately, too many times those luxuries are what garner the most cost or what people are more willing to pay. Location. It is sad to see as much money spent on location as it is when it could be—I would rather see it spent on the envelope.

Mr. BENTZ. There is zero doubt that we need more housing. Zero doubt of it. And this debate about whether those houses have to be “green,” in quotes, and using the LEED standard is to me something that certain people can afford, but most people cannot.

Mr. HUGHES. Correct.

Mr. BENTZ. And when I first looked at this hearing, I thought we would be talking about building codes. I called one of my—I am a lawyer—I called one of my former clients, a building contractor, and I said, “What is the most important thing about codes?”

You are a builder. What do you think his answer might have been?

Mr. HUGHES. I am sorry, what—

Mr. BENTZ. I asked him what was the biggest problem when it came to building codes? And his answer was the inspector. That is how he answered it. And I agree with that, because of the dramatic variability in who you get as an inspector.

Mr. HUGHES. Oh, sure.

Mr. BENTZ. So I have to say as we are having this debate about codes, I am amazed because there is this underlying assumption that they are all equally applied, and that is simply not true. At least, that has been my experience from a distance. How about yours?

Mr. HUGHES. Absolutely. And the term that I hate to hear the most when I ask an inspector a question sometimes is when then

say “what I like to see.” And I say, “No, I am not interested in what you like to see. What does the code say?” Well, it is very different.

Mr. BENTZ. What I am saying is, if we are going to debate whether it should be green or whether it should not, one has to understand the enormous amount of flexibility—which is a nice word I am going to use—in the application of whatever those standards might be. And I just want to say that, when it comes to affordability on the one hand and a code on the other, who should be making that decision and where should it occur?

Mr. HUGHES. The homeowner.

Mr. BENTZ. The homeowner should make that choice. But when it comes to a code that is a mandate, it seems to me that there is the Federal level of determining that, there is the State level of determining that—

Mr. HUGHES. Right.

Mr. BENTZ [continuing]. There is the local level, and then there is the inspector. So where would you suggest we focus our attention when we are trying to figure out how we are going to apply whatever code we might think is mandatory?

Mr. HUGHES. Personally, I feel like it should be done at a State level. Unfortunately, that varies too. There are some home rule States that leave it up to individual municipalities, counties, and cities, which is a disaster because more times than not it comes down to that inspector.

In North Carolina, we have a uniform code, and it is still a struggle to make sure that everybody gets the same answer.

Mr. BENTZ. It certainly is. Thank you for being here. Thank you for all of your participation.

I yield back.

Mr. LATTA. Thank you. The gentleman yields back the balance of his time.

The Chair now recognizes the lady from Washington’s 8th District for 5 minutes for questions.

Ms. SCHRIER. Thank you, Mr. Chairman. Thank you to the witnesses.

You know, I remember the 1970s. We had a gas crisis, we had gas lines, and that brought us gas-efficient cars, and it brought down prices and our need for gasoline, and it reduced pollution. And it was a win/win/win. And we all learned from that.

Since the 1980s, the Pacific Northwest has embraced energy efficiencies, squeezing every single drop out of each kilowatt from our hydroelectric dams and other sources. And that has resulted in the Pacific Northwest reaping huge efficiency benefits for decades, delivering lower costs and keeping the power on and not—and keeping our grid from getting overloaded.

And so the premise of this whole hearing—it really boggles my mind—I mean, it is really just not that complicated for me or for my constituents. Who wouldn’t want more energy efficiencies with this kind of track record of money savings and reliability?

And I will tell you that in my district, Democrats and Republicans agree on this. We like efficiency. The public utility districts love this. They don’t want to have blackouts. It just feels like a no-

brainer, and I can't imagine why it is not a bipartisan agreed-on issue here.

And I say that because the recently passed, you know, One Big Beautiful Bill stripped away these tax credits that we have been talking about today that were meant to help consumers pay any increased upfront costs on an energy-efficient home. And that is not reducing cost.

Now we have an administration that is set on weakening the Energy Star program. Who doesn't love the Energy Star program when you are buying a new appliance? I mean, we love those programs. We get heat waves now in the Northwest. Most of us don't have homes with air conditioning. So now we are all getting air conditioning for the first time, and we want heat pumps because they are energy efficient, and they will save us money.

And not just that. These incentives send signals to the market so that they build more of these. And there is competition, and prices come down. Like this all just makes common sense.

I also just wanted to touch on building codes because that is really the topic here. For years, the PNNL, the Pacific Northwest National Lab, has provided detailed cost/savings analysis for consensus-based building codes from a panel of experts. And for the most part, these building codes, they are local, and States and communities need good information based on evidence to make those decisions. And yet, even that research is being undermined by this administration. In fact, the program that funds it is being cut by 93 percent.

Mr. Hughes, NAHB was an active participant in deliberating these building codes. Can you just simply agree that decimating funding to assess new building codes takes—and efficiency standards—takes critical information away from developers who are looking at building codes or people buying new appliances? Like, does evidence help them make decisions?

Mr. HUGHES. I would have to say yes.

Ms. SCHRIER. I would say yes too. I mean, I love having data to help me make a decision. We are putting in new appliances right now.

Our national labs employ some of the smartest scientists in this country. And actually because of this same work, we know that on average it takes only 2½ years for households to recuperate any increases in construction costs through these energy efficiency savings based on 2024 data. And every year past that, they are just saving and saving. And most people stay in a home for at least, I believe, 12½ years.

I understand that making these jumps to new standards is not easy. I will also mention that there are programs that train those in construction to build these and to be able to install these. That program was also cut. In fact, Washington State has now not had a \$3 million grant delivered.

So I guess it is not a question so much. I just really want to make this comment. Like, innovation is a good thing. Saving energy is a good thing. We are seeing unprecedented and rising demand with data centers. We talk about this all the time, how we need to modernize grid, and we need to get every kilowatt out of our system. And it just seems like efficiency should be a place we

can agree and also give localities the ability to implement common-sense building standards that will save people money.

With that, I will yield back.

Mr. LATTA. Well, thank you very much. The gentlelady yields back the balance of her time.

And the Chair now recognizes the gentlelady from Florida's 15th District for 5 minutes of questions.

Ms. LEE OF FLORIDA. Thank you, Mr. Chairman, for convening this important hearing. And thank you to our witnesses for joining us here today to share your insights and your testimony.

For many Americans, the American Dream includes homeownership. And we saw during the Biden administration that owning a home became increasingly out of reach in part because his Department of Energy advanced numerous building and appliance regulations that raised costs, constrained consumer choice, and diminished our grid security.

We have worked with President Trump to already reverse some of these policies, including signing into law the CRA resolution to rescind regulations imposed on appliances, including natural gas water heaters, dishwashers, and central AC.

I appreciate our witnesses sharing their insights about the impacts of mandating burdensome building and appliance energy standards and discussing with us today the further steps that we can take to restore the American Dream of homeownership.

Mr. Hughes, I would like to start with you. Your written testimony touches on a point that I think is important to understanding the impact of some of these regulations, and that is that the majority of your members, the majority of the homebuilders, are actually small businesses that build 10 or fewer homes per year. Is that right?

Mr. HUGHES. Correct.

Ms. LEE OF FLORIDA. Would you share with us how an expansive, very imposing regulatory burden affects those small businesses in particular and makes it more difficult for them to do their work?

Mr. HUGHES. That could be—give a couple of answers there. I can speak to how to fix—many of our small builders are small builders because they build customs homes. And there is a wide variety of options in custom homes. So, obviously, there are going to be a lot more increased costs. And at that price point, homeowners can afford more of the things that they want—more expensive appliances, more efficient appliances. But we still feel like that we are at that point—even if it is small businesses, small builders, we are at that point where we are doing things as efficient and as resilient as they can be done. We don't need to continue to pile on.

Ms. LEE OF FLORIDA. Would a typical small homebuilder have an in-house legal department.

Mr. HUGHES. No.

Ms. LEE OF FLORIDA. Would a typical small homebuilder have an in-house compliance department?

Mr. HUGHES. No.

Ms. LEE OF FLORIDA. Now another thing that I hear frequently from—I am from Florida, so one thing I hear frequently back home is the concern about the rising cost of housing. And in your written

testimony, you also mention that energy efficiency enhancements are often not fully accounted for in the appraisal of homes.

Can you explain to us why these enhancements might be difficult to account for?

Mr. HUGHES. Well, I can tell you from experience. As we tried—as I mentioned earlier, I am a big advocate of energy-efficient system, and I have been using them for 25 years. And I can tell you in that 25 years I have had one appraiser to give me any extra credit for an innovative new product. That is also a crisis. I have been sitting around tables for 25 years, and we have gotten nowhere with it. And that makes it difficult, too, as we continue to add regulations. If you are not going to get credit for it and you can't afford to pay for it to begin with, then we have gotten nowhere.

Ms. LEE OF FLORIDA. So, in other words, a home buyer who pays for a more expensive specific alliance to comply with this type of standard might not see that value add in the home later if they were to sell it.

Mr. HUGHES. Absolutely not.

Ms. LEE OF FLORIDA. And tell me what challenges, if there are others, that disconnect between the appraisal value and the actual constructions cost posed for families who are interested in buying a home?

Mr. HUGHES. I am sorry. Can you—

Ms. LEE OF FLORIDA. How does that affect a family in real terms if they are trying to buy a home?

Mr. HUGHES. The appraisal process? Well, sometimes the loan simply won't work. If it won't appraise, you are not going to get the money. And as a rule, especially the further down the chain, they don't have that extra money.

And too many times, young couples, first-time couples, if they can't make that appraisal, they don't have the extra money for a down payment. So in most cases it is a deal breaker if it won't appraise.

Ms. LEE OF FLORIDA. Thank you, Mr. Chairman, I yield back.

Mr. LATTI. Thank you. The gentlelady yields back the balance of her time.

The Chair now recognizes the gentlelady from Texas' 7th District for 5 minutes of questions.

Mrs. FLETCHER. Well, thank you, Chairman Latta, and thanks to you and Ranking Member Castor. And thank you to all of our witnesses for being here today for this timely hearing.

I am going to follow up on some of the questions that my colleague from Florida just asked about, some of these challenges to homeownership, and some of the rising costs. Because I think, you know, we can all agree that as we sit here today, the American Dream is becoming less and less attainable. And that dream of homeownership, one of the building blocks of a good life and of pursuing the American Dream, having that financial security, they are out of reach for too many Americans. And that number is going up and not down.

I know that in my hometown of Houston, which is known to be a place where the housing is plentiful and affordable, purchasing

a home costs almost 5 times the median income, and that is nearly double what it was in Houston just 15 years ago.

Inflation is making necessities more expensive, and, you know, total U.S. household debt hit a record high in the second quarter of this year, so just a couple months ago.

And I think that we have talked in this committee a bit about, you know, permitting delays and red tape and some of the other things that have restricted construction of new homes and created bottlenecks in our energy supply, as well, really driving up cost for folks.

And today, I think most of what I have heard from my colleagues on the other side about focused on their complaints about policies from the Biden administration. But we really haven't heard a word from them about what is driving up these prices right now, and that is President Trump's chaotic economic policy, which favors his inner circle and his billionaire buddies and leaves Americans behind.

And we know, for example, that when it comes to homebuilding, President Trump's tariffs are going to increase the cost of building a home by more than \$10,000. That is the estimate I have seen, Mr. Hughes. There may be others out there. But we know that—I am hearing from contractors in my district that the cost of materials is going up, everything from drywall to carpet to so much more. And appliances can be included in that, but we are focused just on appliances in this hearing. The costs of everything it takes to build a home are going up.

And so, you know, I think it is really important to focus on that and also understand that the policies that this Congress enacted in that Big Ugly Bill are estimated to raise electricity prices by 61 percent. That is just an astonishing number. And so the cost of inputs of building are going up, the costs of the maintaining and living in our homes are going up.

And so one of the things that we know is that these energy efficiency standards have really been important to keeping costs low for Americans. And, of course, maintaining consumer choice and ensuring that these standards are attainable is really important.

We are all consumers. I think we all support and agree with that. But I think what we are seeing is that this Congress giving the Trump administration a blank check to just slash and burn as it pleases is moving us in the wrong direction. And in less than a year, President Trump has attacked nearly every facet of the Federal Government that keeps costs down for Americans in need, and including firing all the civil servants that administer the program to keep energy prices down for our constituents, the LIHEAP Program, Low-Income Home Energy Assistance Program.

So I know that we have limited time here, so I am just going to mention, of course, there are tens of thousands of households in Texas that rely on that LIHEAP Program to keep our costs down. Certainly, with air conditioning in the summer and heating in the winter, we have seen in Texas that, unfortunately, we have extreme weather events at all times of the year.

And I have mentioned before in this committee, but I think it bears repeating with these witnesses as we think about insulation, energy efficiency, building our homes: It was just a couple years

ago, less than 5 years ago, when we had the winter freeze and the winter storm in Texas, and a little boy not far from where I live froze to death inside his own home. So we are talking about life-and-death issues for our constituents here when we talk about the importance of these investments in terms of making energy affordable.

So I am going to run out of time to ask my question. I know I am going to get in trouble from the chairman.

So, Ms. Rinaldi, I am going to ask you a question for the record. If you can in your written testimony respond about what kind of cost savings Americans can expect from weatherization upgrades, especially in States like Texas with increasing hot summers and cold winters. And also how low-income Americans will be impacted by cuts to efficiency standards and assistance programs like LIHEAP.

Thank you very much, Mr. Chairman. I yield back.

Mr. LATTA. Thank you very much. The gentlelady's time has expired, and yields back.

The Chair now recognizes the gentlelady from North Dakota for 5 minutes for questions.

Mrs. FEDORCHAK. Thank you, Mr. Chairman. And thank you to my colleagues for letting me go before them. I appreciate that opportunity.

I am going to kind of simplify my questions today. When I travel around my State, which is North Dakota, I hear from many, many folks in the smaller and the larger towns that one of their biggest problem is access to housing. There's not enough new houses on the market. There is just not enough housing stock on the market.

And then when I talk to our homebuilders association, the North Dakota Home Builders Association, which I met with several times because this is a big issue in my State as we are hearing all over the country, they talk about—the first time I met with them, they talked about the building codes and how inappropriate they are for my State.

The 2021 International Energy Conservation Code, according to the North Dakota Home Builders Association, can add more than \$22,000 to the price of a home in my State. And in practice, the builders have estimated up to \$31,000. Yet, even more troubling, for all of that investment, they tell me that it will take up to 90 years for a homeowner to get the payback for those standards in my State. So, obviously, that doesn't make any sense at all to the ideas here that we don't—this one-size-fits-all solution doesn't work.

So, Mr. Hughes, can you talk about what are some of the alternatives to this?

Mr. HUGHES. Alternative to codes?

Mrs. FEDORCHAK. Yes, to this one-size-fits-all approach.

Mr. HUGHES. Well, throwing it back to States so the States can establish their own codes. And they have that freedom now. And, unfortunately, too many—the code that has been developed as a model code has been presented at unamenable. We have to make it as is.

And we are a strong advocate that each State should take it and tailor it to their location and to their needs. And much more of that needs to take place.

Mrs. FEDORCHAK. Is there anything stopping that? What is stopping that from happening?

Mr. HUGHES. What is stopping it?

Mrs. FEDORCHAK. Yes.

Mr. HUGHES. Maybe education. Just the fact that too many States don't realize that they can do that. Several States are doing very well. Texas, Washington, California, North Carolina, we do our own code. We have resources to do that. We have personnel that work on—we have—in North Carolina, we have a residential code council, and we have full-time employees that lobby that. Too many States don't have those resources.

Mrs. FEDORCHAK. Sure.

Mr. HUGHES. And they are told that they can't make amendments to that code, and that is simply not true.

Mrs. FEDORCHAK. So are there other problems? Like the last several building code updates developed by the ICC have clearly prioritized the green agenda over cost-efficient home construction and the Department of VA, USDA, and—have already adopted those latest ICC energy code standards for the homes they financed, effectively imposing these standards on those federally backed loans. So that probably prevents or prohibits the ability of States to develop their own standards, if some of these big Federal programs are requiring the IECC standards—I would assume, but interested in your thoughts on that.

And then, in your view, what would be the effect on the U.S. housing market if Fannie Mae and Freddie Mac were to adopt these standards?

Mr. HUGHES. Well, that is one of our greatest fears, no question. And in North Carolina, we have gone to a 6-year code. And our legislation actually imposed a pause on any new energy codes until the next cycle. That will take place in 2030.

If the HUD rule stays in place—I think you are talking about that—that eliminates USDA and VA loans, then we simply lose all of those in North Carolina. So talk about a huge limiting factor. It just won't work.

Mrs. FEDORCHAK. Right, excellent. Well, I have more questions but not that much time. And you guys have been here a long time today. So I want to thank you all for your time and your expertise.

And, Mr. Chairman, I yield back.

Mr. LATTA. Thank you. The gentlelady yields back.

The Chair now recognizes the gentleman from Ohio's 6th District for 5 minutes of questions.

Mr. RULLI. Thank you, Chairman.

Mr. Lieberman, ENC has combated Biden overreach, ensuring Americans' home appliances actually work. Other measures like House Joint Resolution 24 saved businesses using refrigeration from billions and increased compliant costs or even closures.

In my own personal experience, the EPA has changed the refrigerant of freon in different grocery stores in the country 3 different times in the last 15 years. What that means is, when you have a compressor, you have to pump down the compressor, you have to

discard all your old gas, you have to flush out the lines, you have to buy the new gas.

Like, in a company that my brothers run, you have anywhere between 60 to 75 compressors. This could be a cost for a very small business of anywhere from 50 to 150 thousand dollars every single time you do that. And this is our businesses that are running on one-and-a-quarter percent net.

Now, if you are a small little mom-and-pop independent, much smaller than my brothers', you are going to go out of business. Now, for the big boys like Kroger, this could cost them 10 to 45 million dollars just to apply this to their stores. And here is the thing: There is no proof in the EPA that the new refrigerants they are using within these systems actually do any better for the environment. So there is actually no proof to back this up.

In fact, one of the different changes in the gases, I believe from, like, it was 2007 to 2013, there was virtually no change in any way, shape, or form. And they actually made you do this. And it was such a tremendous cost to the actual small business owners that a lot of them went out of business.

So I think we have to really look at things sometimes differently. Like, the opposition party, if you look back in history when they were talking about bags in retail, first they said let's get rid of the paper bags to save the trees, then they said we can't use plastic bags anymore, then they said we are going to go to the cloth bags. And the cloth bags were shown to hold all this bacteria within them, and they thought that was bad.

So instead of moving quickly and changing these procedures of what gas we use in our compressors within the retail industry, I think we should slow down and have more testing done to see which actually makes sense.

So, contrary to popular belief, Republicans are conservation. That is what we believe in. When you look at Ducks Unlimited, we are about preserving the land. We want to hunt, we want to fish, we want to love the outdoors. We want to work with the opposition party for a commonsense approach to having a better system where mom-and-pop stores can actually stay in business.

We simply don't want to use tax dollars to push an agenda. We want to look at everything from every possible angle.

So, Mr. Lieberman, my question to you would be, How can we continue to protect the environment while also protecting consumers' choice and protecting small businesses? Thank you.

Mr. LIEBERMAN. Well, you are very much correct that the proliferation of refrigerants is a big requirement. Decades ago, the trademark freon but known as CFC-12 or CFC-22, a host of chemicals, were restricted on the grounds that they were depleting the ozone layer. Years later, the ozone-friendly substitutes were targeted as greenhouse gases. So it is kind of—it is always something. And so this has added greatly to consumer cost, it has added greatly to repair costs.

For example, I know a repair service technician saying he may have to get a bigger truck because of all these different refrigerants, and some of it requires dedicated equipment just for that particular refrigerant. There is a risk of cross-contamination using the wrong refrigerant. There is a lot of costs that are on consumers.

He also mentioned refrigeration users, our supermarkets, and others.

So our refrigeration and air conditioning has very much been hit with an avalanche of regulation. So at the very least, a go-slow approach would be better than this approach where equipment that has years of useful life left suddenly they have to consider maybe making some changes because it is not clear that the refrigerant needed the service that will be available in the years ahead. So there is a lot to be said for a more measured approach rather than constantly changing the requirements.

Mr. RULLI. Very eloquently said. And I do think there is good intentions on the opposition party, and perhaps within the EPA the intentions are good. But perhaps conversations with associations that this is going to affect so they can see the boots on the ground and see how it actually affects the economy, it affects the public—I think those talks would be very helpful to all of us. Even bringing in the research, bringing all three of the parties together.

I thank you for your time. And I yield my time back to the Chair.

Mr. LATTA. Thank you. The gentleman yields back the balance of his time.

The Chair now recognizes the gentleman from South Carolina's 7th District for 5 minutes of questions.

Mr. FRY. Thank you, Mr. Chairman. Thank you to the witnesses for being here.

I am struck—and I am going to go off script a little bit because the Democrats on this committee seem to be operating under a little bit of amnesia. You know, they have highlighted or they talk about the last couple of months that the President has had the White House, but they have completely forgotten the four disastrous years of the Biden Presidency.

Inflation surged, peaking at 9 percent in mid-2022. It remained above the Fed's 2 percent target for 40 months. That is on their watch. That is what they did. Prices rose for the consumer 17 to 20 percent since Biden took office, with essentials like food, rent, and electricity increasing sharply. Real wages fell 4 to 5 percent since January 2021.

So all these things that they are talking about, about the homeownership being unaffordable, these are things that they caused.

And, sir, you talked about a lot of this with the standards that they impose. They don't make any sense. And then they come to this committee, and then they forget what the last 4 years look like. And then they come up with low-energy slogans like Big Ugly Bill. Well, that is just nonsense. If they had voted for this, they would be supporting working families, and the tax hike that would have happened if they did nothing. Which, if they were in power, that is exactly what would have happened.

And so this Presidency and this Congress, are about making things affordable again. It starts with the Working Families Tax Cut that was just passed. It starts with reversing the Biden-level obscene regulations that we have on everything from refrigerators to home appliances.

Like, who would have thought that any of us when we ran for Congress would be talking about gas stoves or shower heads, for God's sake? But nonetheless, I have a bill dealing with shower

heads because of things that happened under the Biden administration. So let's talk about that.

Instead of empowering families, the Federal Government has been telling the people how long that their dishwashers can operate and what kind of stove they can buy, and even how much water that the shower head could use. And so the bill, the one I am talking about, restores some of that common sense. Let's get back to it and its accords about protecting families from bureaucratic overreach. We see this time and time again, where the ivory tower of Washington comes in in their infinite wisdom and tells the rest of everybody how to live.

Mr. Lieberman, can you describe the whiplash regulations between the last few administrations as they relate to, I don't know, shower head water flow?

Mr. LIEBERMAN. Well, actually, the shower head saga has been going on since 1992. It was the Energy Policy Act of 1992. It originally had these shower head provisions. Some people don't like the lower flow. I think it is quite frankly a very silly regulation. If the shower is hitting you with too much water, you turn the damn knob down. I don't know why you ever really needed the Government.

But over time, it is true that shower head makers have made adjustments to the lower flow, and that has improved things a little bit. Also, it is easy to defeat the—don't get any of that from me—but it is easy to defeat the low-flow provision—the flow restrictor, I should say, in the shower head.

Mr. FRY. Yes, contractors do it all the time, right? You don't have to answer that. You can plead the Fifth. But I am sure they do that all the time, right?

Mr. LIEBERMAN. I am not Mr. Hughes.

And one of the issues was whether shower heads with multiple heads, whether each shower head can give you a good flow of water, or perhaps you have to take the cumulative effect into account. And so—

Mr. FRY. But, again, it gets to the point where we are depriving consumers of the ability to make that choice for themselves, right?

Mr. LIEBERMAN. That is really what this is all about, is letting people decide for themselves.

Mr. FRY. The Department of Energy is taking comments on the issue, the center point of a recent Executive order issued by President Trump. Is energy efficiency really being prioritized when you are restricting water usage, though?

Mr. LIEBERMAN. Well, it is the energy used to heat the water. So, if you are taking a cold shower, you are not helping out. But, again, whether we really need Federal intervention on shower flow is, I think, was questionable, but this has been going on for—

Mr. FRY. Questionable, we like that.

Mr. Lieberman, energy efficiency and resilience measures are important to South Carolinians, but not all energy efficiency efforts are created equal. I think it is important that taxpayers get a good deal.

Mr. Lieberman, are marginal energy savings associated with weatherization programs, with the costs?

Mr. LIEBERMAN. Well, there have been some studies that say that the benefits tend to be overstated and the costs tend to be understated. Usually, there's projections that come up with benefits well in excess of cost. But there have been some retrospective analyses that found that it isn't nearly so clear whether this is a program that is worth the cost. I think it is at least worth looking at some of those studies to see if we are getting the bang for the buck with this program.

Mr. FRY. I appreciate your answer to that. I see my time has expired. But I think that goes to his point earlier that the housing costs have gone up 10 to 30 percent based on the regulations.

And with that, Mr. Chairman, I yield back. Thank you.

Mr. LATTA. Thank you. The gentleman's time has expired, and yields back.

And the Chair now recognizes the gentleman from New York's 23rd District for 5 minutes for questions.

Mr. LANGWORTHY. Thank you very much, Mr. Chairman.

In my home State of New York, Albany politicians, they have decided that they know better than the people that they serve. They have moved to rid natural gas out of all new construction in residential homes as of January 1, 2026, and they are marching towards banning it in every new building. It is not just bad policy, it is a direct assault on affordability, reliability, and my constituents' safety.

When government bans natural gas, the cost of everything goes up, especially building a home. It can go up 10, 20, 30 thousand dollars in upgrades. And that is money that my constituents don't have, and it pushes the homeownership dream further out of reach for our youngest generation.

Monthly bills pile up because, in States like New York, heating with natural gas is extremely cheaper than—and more reliable, frankly, than electricity.

In my district, we know what happens when the power goes out during a brutal winter storm. We saw this, I lived this during Winter Storm Elliott in 2022. Families, if they were left with nothing but electric heat, it was a dangerous and deadly situation. We lost 69 people in that storm. People can and will lose their lives when politicians take away their ability to choose the energy source that makes sense for their homes.

Mr. Hughes, how are these natural gas restrictions affecting builders in the housing market today?

Mr. HUGHES. How gas—again, the increased cost of having to go total electric. Because the equipment as a rule is more expensive, and it operates more expensive.

Mr. LANGWORTHY. I met with many homebuilders in the last month in my State, and they have got people literally walking away from the table when they have told them they can't get their building permits registered by New Year's Eve Day, and they will have to fully electrify their homes in New York. I appreciate your answer.

Energy choice gives families the ability to pick the most affordable and reliable way to power their homes. The same principal needs to apply to our Federal Government. Yet current policy has moved in the opposite direction, forcing Federal buildings to elimi-

nate natural gas and rely exclusively on electricity. Natural gas powers backup systems that keeps our veterans' hospitals running, supports energy-intensive work at our national labs and military installations. Removing it reduces flexibility, it increases costs, and it makes critical infrastructure more vulnerable.

The numbers tell the story. Natural gas is more affordable than electricity and will remain so for decades to come. The DOE analysis shows eliminating it could increase energy consumption and emissions, which totally undermine our efficiency goals. These policies risk disrupting operations, jeopardizing national security, and wasting taxpayer dollars. Federal agencies need options so that they can operate effectively and reliably, just as families deserve the same flexibility in their homes.

Mr. STEFFES, what kind of long-term uncertainty do gas bans and fossil fuel phaseouts like Section 433 of the Energy Independent Security Act pose for Washington's gas customers?

Mr. STEFFES. Well, it creates an environment where businesses or the Federal Government, in this instance, is unaware and uncertain about what their next investment is going to be to meet the energy needs. If you restrict natural gas, which is a very affordable, very reliable—again, our reliability to deliver to the Federal buildings is 99.7 percent—you take away the ability for them to find redundant and resilient electricity when they need it through backup generation. But you also then impose an increased obligation by an electricity grid, making that even more strained than it is already today.

Mr. LANGWORTHY. We are seeing this in real time in New York as the Governor has increased—had her Public Service Commission increase utility rates for the second time in a year. My constituents are facing double-digit-percentage increases in their utility bills. We have taken power off of the grid and increased the demand on the grid and are surprised that the cost is rising in a drastic rate. And that is exactly why I have introduced the Energy Choice Act, which hopefully this committee acts on very soon, that would ban the bans, ban the natural gas and propane bans that a lot of our left-leaning States are going toward.

At the end of the day, energy choice is about freedom, it is about affordability and common sense. And families shouldn't be forced into costly one-size-fits-all mandates, and neither should the Federal Government.

Taking away options doesn't save money, it raises bills. It doesn't improve reliability, it weakens our systems, and it puts people's lives at risk. Real leadership means empowering people and agencies to choose the energy source that works best for them. And energy choice is not negotiable, it is essential.

And with that, I yield back, Mr. Chairman.

Mr. LATTA. Thank you. The gentleman yields back the balance of his time.

The Chair now recognizes the gentleman from Colorado's 8th District for 5 minutes for questions.

Mr. EVANS. Thank you, Mr. Chairman—of course, to the ranking member. And thank you to all of our witnesses for coming today to have this conversation.

We all want clean air, clean land, clean water. We all want to be good and responsible stewards of our environment and the energy that we produce from our environment. But we also have to have a commonsense approach to this.

And so my first question will be a yes/no question to everyone on the panel. Do you think that the government should mandate that electric utilities and appliance manufacturers have the ability to reach into a private citizen's house and adjust their thermostat, their water heater, literally the ability to dim lights in the name of energy efficiency?

Mr. Hughes?

Mr. HUGHES. No.

Mr. LIEBERMAN. No.

Ms. SAUL RINALDI. No.

Mr. STEFFES. No.

Mr. EVANS. I am sorry, Ms. Saul Rinaldi?

Mr. HUGHES. I said no. You mean the Federal Government? No.

Mr. EVANS. Thank you. The reason that I ask that question is because of something that has happened in Colorado. The State has adopted the Model Low Energy and Carbon Code, which is a modified version of the 2024 building code, IECC building code.

And it mandates that in 2026, municipalities will have to adopt, as their own baseline when updating building codes, codes that include aggressive incentivization to switch all homes over to electricity only, require homes over a certain square footage to basically become carbon neutral and offset their power by having solar panels either onsite or other methodologies.

And it is one of the first in the Nation to require—and I will read you from the code here, which I actually have pulled up—“demand responsive controls for electric heating and cooling systems shall be provided with demand response controls.”

What is a demand response control for heating, for cooling, and then in other places in the code it talks about lighting and water heaters? Demand response is, it is connected to the utility. The utility can literally reach in and lock you out of your own thermostat, your own water heater, control the lighting in private buildings in response to energy efficiency mandates.

I don't think that that sort of intrusion is something that our consumers want. I don't think that is something that they want to pay for in terms of having to buy appliances that have this demand response capability, to say nothing of the security risks that go along with, as we all know, the Internet of Things and having your water heater, your lighting, your thermostat connected to the utilities, which by government fiat has to have—excuse me—has to have the ability to reach in and control all of those things in the name of energy efficiency.

We know it is expensive, and I don't think that that is good policy. So I am glad to hear you all say that you are somewhat in agreement with me on that.

The next question will be to Mr. Hughes. During the whole rule-making process around adopting this Model Low Energy and Carbon Code in Colorado, the Colorado Association of Home Builders warned that these rules would restrict the housing supply in Colorado, making for more competitive and more expensive markets

than neighboring States, and actually don't do anything to help consumers actually be able to afford homes.

Can you speak a little bit to the affordability component of having this sort of mandate around household appliances?

Mr. HUGHES. I can't see where there would be any affordability. It looks to me like it would reduce affordability.

Mr. EVANS. OK. I appreciate that. We saw in 2021 in Colorado—unfortunately, we had a very tragic fire, the Marshall Fire—and as a result of that Marshall Fire, a lot of homes were actually destroyed. The rebuild cost for those homes on average was about \$20,000 more because of a lot of these green building codes.

I think one of the earlier panelists had mentioned that, if somebody is locked out of their thermostat, they are just going to buy an electric space heater that the utilities don't control to be able to heat their homes. They are going to find other workarounds. But those workarounds come with more expense, more demand on the grid, and ultimately more cost to the consumer.

And so for an actual real-world scenario in Colorado, we saw the answer: It is \$20,000 more in these green energy codes to be able to put that housing back into effect.

Mr. Lieberman, I got 20 seconds here. Can you just talk a little bit about the cost savings when folks are being forced to move away from natural gas towards these types of electrifications. I have got 12 seconds.

Mr. LIEBERMAN. As I mentioned, the Department of Energy says that natural gas is 3½ times cheaper than electricity on a per-unit energy basis. And even besides that, we are always better off when we have choices. I have a natural gas hookup in my home and electricity. I like being able to choose from both.

Mr. EVANS. Thank you so much. I yield back.

Mr. LATTA. The gentleman's time has expired, and yields back.

And the Chair, seeing no other Members wishing to ask questions, I want to thank all of our witnesses for appearing before us today. I know it has been a long afternoon.

Members may have additional written questions for you. I remind Members that they have 10 business days to submit additional questions for the record. And I ask our witnesses to submit responses within 10 business days upon receipt of those questions.

I ask unanimous consent to insert in the record the documents included on the staff hearing documents list. And without objection, so ordered.

[The information appears at the conclusion of the hearing.]

Mr. LATTA. And without objection, the subcommittee is adjourned.

[Whereupon, at 5:16 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

U.S. House Committee on Energy and Commerce
Subcommittee on Energy
Building the American Dream: Examining Affordability, Choice, and Security in Appliance
and Buildings Policies.”
September 9, 2025
Documents for the Record

1. A letter from the American Chemistry Council addressed to Chairman Latta and Ranking Member Castor, submitted by the Majority.
2. A letter from the International Code Council addressed to Chairman Latta and Ranking Member Castor, submitted by the Majority.
3. A letter from GeoExchange addressed to Chairman Latta and Ranking Member Castor, submitted by the Majority.
4. A letter from 8 organizations addressed to Chairman Latta and Ranking Member Castor, submitted by the Majority.
5. A letter from BlackFlare addressed to Chairman Latta and Ranking Member Castor, submitted by the Majority.
6. A letter from the American Cement Association addressed to Chairman Latta and Ranking Member Castor, submitted by the Majority.
7. A letter from the Spray Foam Coalition addressed to Chairman Guthrie, Ranking Member Pallone, Chairman Latta, and Ranking Member Castor, submitted by the Majority.
8. A letter from the National Multifamily Council and the National Apartment Association addressed to Chairman Latta and Ranking Member Castor, submitted by the Majority.
9. A study from the National Bureau of Economic Research entitled, “Do Energy Efficiency Investments Deliver? Evidence from the Weatherization Assistance Program,” submitted by the Majority.¹
10. A report from UL Environment entitled “Effect of Indoor Environmental Quality on Performance and Productivity,” submitted by Rep. DeGette.
11. A press release from the Department of Energy entitled, “Energy Department Announces Over \$400 Million in Funding and Removes Burdensome Policy, Helping Americans Save on Energy Bills,” submitted by Rep. Tonko.
12. A letter from multiple Home Performance Contractors and Energy Efficiency Companies addressed to Chairman Guthrie and Ranking Member Pallone, submitted by Rep. Tonko.

¹ The report has been retained in committee files and is included in the Documents for the Record at <https://docs.house.gov/meetings/IF/IF03/20250909/118590/HHRG-119-IF03-20250909-SD018.pdf>.



September 9, 2025

The Honorable Bob Latta
Chairman
House Committee on Energy and
Commerce Subcommittee on Energy
U.S. House of Representatives
Washington, D.C.

The Honorable Kathy Castor
Ranking Member
House Committee on Energy and
Commerce Subcommittee on Energy
U.S. House of Representatives
Washington, D.C.

RE: Statement for the Record from the American Chemistry Council to the House Committee on Energy and Commerce Subcommittee on Energy hearing “Building the American Dream: Examining Affordability, Choice, and Security in Appliance and Buildings Policies.”

Dear Chair Latta and Ranking Member Castor:

The American Chemistry Council (ACC), acting on behalf of its Plastics Division, is appreciative for the opportunity to provide the following Statement for the Record as part of the Committee on Energy and Commerce’s Subcommittee on Energy hearing titled “Building the American Dream: Examining Affordability, Choice, and Security in Appliance and Buildings Policies.” Highlighting and prioritizing energy efficiency in the built environment will provide significant environmental, economic and cost-saving benefits to American people and businesses.

ACC is a national trade association representing chemicals and plastics manufacturers in the United States. Chemistry is essential to the U.S. economy and plays a vital role in driving innovations that make our world safer, more sustainable, and more productive. Chemistry supports over 25% of the U.S. GDP and 10% of U.S. goods exports – a \$633 billion enterprise. 554,000 skilled American jobs are provided by the business of chemistry and 18% of the total construction spending by the U.S. manufacturing sector involves the business of chemistry.

The chemical industry supplies many products and materials to the building and construction value chain, including those that deliver energy efficiency such as high-performance building insulation and sealants that reduce energy bills and help reduce air leakage, roof membranes and coatings that protect against moisture and help keep roofs cooler in hot weather. ACC’s members are also large users of energy, so the responsible use of energy is important to the industry’s economic health and competitiveness. Energy efficiency is widely seen as the lowest cost option for meeting energy demand. Energy

efficient buildings create economic opportunities for businesses and industry by promoting new energy efficient technologies and reducing energy waste.

Energy efficiency has been shown to lower energy costs for residential and commercial buildings such as multi-family housing, reducing the high burden of utility bills on low-income households, reducing the strain on the electric grid, particularly at peak usage periods, and increasing national energy security.

Urgency of Rising Energy Demand: Peak electricity demand is expected to grow 128 gigawatts in the next four years. Demand is driven by data centers and AI and advanced manufacturing and U.S. electricity demand is projected to surge 8.2% over the next five years—highlighting the critical role of efficiency in managing costs and reliability.

Small Business Success: Energy costs are one of the top three business expenses in more than a third of small businesses, with heating and cooling expenses being the primary energy costs for a third of them, according to the National Federation of Independent Businesses (NFIB).

Housing Affordability: Energy efficiency programs reduce energy costs. Research shows that about two-thirds of low-income households in the United States face a high or severe energy burden. (Drehobl, Ross, and Ayala 2020). According to the U.S. Energy Information Administration, across the United States, high utility bills are costing homeowners a significant portion of their monthly incomes. According to the most recent EIA Residential Energy Consumption Survey,¹ about one in five households reported reducing or forgoing basic necessities like food and medicine to pay energy bills. Stronger energy codes and more widespread code compliance can help families afford the basics and avoid rising energy costs.

Occupant Health: Energy efficiency measures such as improving ventilation, insulation and sealing building envelopes can help to address conditions that contribute to many illnesses. Poorly sealed building envelopes allow pests, moisture, and air pollution to infiltrate. These can harm respiratory health through mold growth and allergens, while leaky windows and poor insulation can lead to cold drafts and extreme temperatures in a home during summer and winter months. (ACEEE Advancing Equity through EER Stds, 2023).

Security: Prioritizing energy efficiency in the building sector will contribute to improved energy security. Enabling individuals and businesses to defray upfront capital costs to improve energy efficiency offers a strong value proposition for federal dollars, helping deliver efficiency and cost-saving returns over time. Improving energy efficiency helps to

¹ See [Residential Energy Consumption Survey \(RECS\) - Energy Information Administration \(eia.gov\)](https://www.eia.gov/energyconsumption/)

insulate Americans from price fluctuations in energy markets due to inflation, rising demand from data centers, and natural disasters.

National model building energy codes are but one policy tool to support implementation of efficiency measures that are cost effective. The 2018 IECC, 2021 IECC, and 2024 IECC were evaluated by the US DOE to reduce both energy use and energy costs, offering a positive payback for homeowners. As a participant in the code development process, ACC is both familiar with and supports the consideration and adoption of the IECC by federal agencies, states, and local jurisdictions.

Energy efficiency in the built environment has a long-standing history of bipartisan support as the benefits of efficiency accrue to individual homeowners, renters, and businesses, as well as to the nation as whole. We strongly encourage the Committee to maintain a strong posture of support for building energy efficiency.

Sincerely,

A handwritten signature in black ink, appearing to read 'Indya Rogers', with a stylized, flowing script.

Indya Rogers
Director, Plastics Building & Construction



September 8, 2025

The Honorable Bob Latta
Chairman, Subcommittee on Energy
Committee on Energy and Commerce
2123 Rayburn House Office Building
Washington, DC 20515

The Honorable Kathy Castor
Ranking Member, Subcommittee on Energy
Committee on Energy and Commerce
2123 Rayburn House Office Building
Washington, DC 20515

Re: Hearing Entitled: Building the American Dream: Examining Affordability, Choice, and Security in Appliance and Building Policies

Dear Chairman Latta and Ranking Member Castor –

The International Code Council (ICC) shares the subcommittee's interest in examining policies impacting housing affordability, energy costs, grid reliability, national security, and consumer choice. As the Subcommittee considers this critical cross-section of policy issues, we appreciate the opportunity to outline how consensus-based energy codes save residents and governments money, preserve wealth, and enhance our nation's resilience to disasters.

Modern, up-to-date building codes and standards are at the core of building innovation, which involves cross-cutting materials and products, adaptation and resilient design, and innovative construction strategies. ICC is a leader in providing such solutions.

ICC is a U.S.-based nonprofit organization of roughly 700 employees, driven by the engagement of its more than 60,000 members, that is dedicated to helping communities and the building industry provide safe, resilient, affordable, and sustainable construction through the development and use of model codes (I-Codes) and standards used in design, construction, and compliance processes. Our founding strategic partners—the American Gas Association, National Multifamily Housing Council, National Association of Home Builders, Building Owners and Managers Association, and the American Institute of Architects—came together to support the Code Council's formation to streamline the development of construction codes and to enable consistency in construction across geographies, which enables economies of scale and faster and more efficient infrastructure development. Today, most U.S. states and communities, federal agencies, and many global markets choose the I-Codes to set the standards for regulating construction and significant renovations, plumbing and sanitation, fire prevention, and energy conservation in the built environment.

Private-Sector Driven, Consensus-Based Energy Codes Preserve Energy Choice

ICC supports efforts to find creative solutions to expand the nation's housing supply and bolster domestic energy resources. ICC's codes and standards, including energy codes, do not derive

from government agencies in Washington, D.C. Rather, they are the final product of a consensus-based process that brings together firefighters, homebuilders, building safety professionals, architects, engineers, and others—individual citizens working together to ensure the safety of the built environment.

Consistent with the robust private sector-led standards development system in the United States, and as recognized and directed by the Office of Management and Budget¹ and Congress,² model energy codes and standards provide federal agencies, states, and localities with a common starting point for their development and adoption processes. This starting point also benefits the construction industry by ensuring code requirements from state to state are generally consistent, supporting manufacturers, designers, and builders in accessing markets across states and localities.

The International Energy Conservation Code (IECC) is identified in federal statute to serve as the basis for state-level energy codes³ as well as the minimum requirements for federal buildings⁴ and building programs.⁵ The IECC is updated on a three-year cycle, with the 2024 IECC being the most updated version currently in use. Several states and localities have adopted or are in the process of adopting the 2024 IECC, including Nevada, Rhode Island, Virginia, Maryland, Idaho, New York, Austin, Nashville, and Phoenix. The 2024 IECC reflects revisions from the 2021 iteration. Every contractor representative on the IECC committee voted in support of its finalization. A National Association of Home Builders (NAHB) blog explained: “[the 2024 IECC] offers home builders more compliance paths and lower building costs compared to the 2021 IECC, according to a cost analysis by Home Innovation Research Labs...and provides for increased design flexibility and improved compliance options.”⁶ DOE has determined that the 2024 IECC reduces energy costs by 6.6% over the 2021 IECC edition.⁷

ICC has demonstrated a commitment to continuously improving its code and standard development processes to promote the strong competitive landscape that its efforts have facilitated. The Code Council has repeatedly made clear that the provisions of the IECC “shall not promote or penalize specific types of equipment or fuel sources.”⁸ As the American Gas Association recently noted, “[a]s a Founding Strategic Partner of the ICC, the AGA has consistently supported the ICC’s mission to enhance energy efficiency in building construction while ensuring that all types of energy are recognized.”⁹ AGA has reiterated its view of the IECC as a fuel neutral efficiency code, stating that “the 2021 IECC [is] fuel neutral and offer[s] various paths forward to

¹ https://www.whitehouse.gov/wp-content/uploads/2020/07/revised_circular_a-119_as_of_1_22.pdf

² <https://www.nist.gov/standardsgov/national-technology-transfer-and-advancement-act-1995>

³ <https://www.govinfo.gov/content/pkg/USCODE-2023-title42/pdf/USCODE-2023-title42-chap81-subchapII-sec6833.pdf>

⁴ <https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-433>, <https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-435>

⁵ <https://www.govinfo.gov/content/pkg/USCODE-2023-title42/pdf/USCODE-2023-title42-chap130-subchapI-sec12709.pdf>

⁶ <https://www.nahb.org/blog/2025/02/2024-iecc-cost-analysis>

⁷ [https://www.energycodes.gov/sites/default/files/2024-12/2024_IECC_Determination_TSD.pdf#page=\[7\]](https://www.energycodes.gov/sites/default/files/2024-12/2024_IECC_Determination_TSD.pdf#page=[7])

⁸ <https://www.iccsafe.org/content/2027-iecc-scope-intent-and-board-commentary-final-public-notice/>.

⁹ American Gas Association, *The ICC’s Board of Directors Made the Right Call*, AGA News: True Blue Blog (Mar. 26, 2024).

meet compliance,” and “do[es] not attempt to eliminate onsite fossil fuel usage.”¹⁰ By the conclusion of the 2024 IECC’s development, AGA heralded its engagement in the IECC’s development as “protect[ing] the integrity of the code as a leading energy efficiency resource for states.”¹¹

A Cost-Saving Mechanism that Enhances Financial Security

Lower-income households spend more than 15% of their income on energy bills.¹² The latest federal data shows that electricity costs are 5.5% higher today than a year ago.¹³ Buildings designed and constructed to the latest IECC edition provide significant opportunities to save energy and money.

The U.S. Department of Energy (DOE) estimates that implementing modern energy codes and standards will save the nation \$182 billion (cumulative 2010-2040).¹⁴ Energy consumption in the U.S. would be around 60 percent higher today without the energy efficiency technologies and improvements adopted since 1980. This corresponds to an estimated savings of approximately 60 quadrillion BTUs of energy per year, equivalent to around \$800 billion in energy costs using today’s prices

Adopting energy codes and standards can also reduce mortgage default rates by roughly one-third, as homeowners with lower utility costs have more money in their pockets each month.¹⁵ Most home buyers (87 percent) finance their purchase through traditional mortgages. This means that to the extent there is an ascertainable increase in initial costs, it is distributed over many years. In contrast, the energy code-generated cost savings on utility bills kick in immediately, creating positive cash flow and enhancing financial stability for the American family. Creating a national stock of housing built to a modern energy code will help reduce poverty nationwide.

In addition to the cost-of-living benefits, studies have repeatedly demonstrated that modern model building codes have no appreciable implications for housing affordability.^{16,17} **No peer-reviewed**

¹⁰ American Gas Association, *Comments on DOE’s Supplemental Notice of Proposed Rulemaking on Clean Energy for New Federal Buildings and Major Renovations* (Feb. 21, 2023) (stating that “Standard 90.1–2019 and the 2021 IECC are fuel neutral and offer various paths forward to meet compliance,” and that the standards “do not attempt to eliminate onsite fossil fuel usage”).

¹¹ American Gas Association, *The ICC’s Board of Directors Made the Right Call*, AGA News: True Blue Blog (Mar. 26, 2024).

¹² <https://www.aceee.org/press-release/2024/09/study-one-four-low-income-households-spend-over-15-income-energy-bills>

¹³ <https://www.bls.gov/news.release/cpi.nr0.htm>

¹⁴ <https://www.energy.gov/eere/buildings/saving-energy-and-money-building-energy-codes-united-states#:~:text=Building%20energy%20codes%20are%20projected,translates%20directly%20to%20increased%20comfort>

¹⁵ [https://imt.org/wp-content/uploads/2018/02/IMT_UNC_HomeEEMortgageRisksfinal.pdf#page\[14\]](https://imt.org/wp-content/uploads/2018/02/IMT_UNC_HomeEEMortgageRisksfinal.pdf#page[14])

¹⁶ 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).

¹⁷ 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).

research has found otherwise. A just-published National Bureau of Economic Research [study](#) found that since 2000 (the same year the International Residential Code was first published), there's been "very little, if any" correlation between construction costs and home prices, with home price increases frequently doubling construction costs.¹⁸ Another study found no significant statistical evidence that California's energy codes affected home construction costs.¹⁹

With each model code or standard update, DOE must analyze it for energy savings compared to the prior edition. The Pacific Northwest National Laboratory (PNNL) conducts this analysis through DOE's Building Energy Codes Program. PNNL's analysis of the 2024 edition of the IECC showed that the average homeowner could save almost \$3,000 for single-family homes.²⁰

Adopting a modern energy code or standard can also decrease construction costs. This is driven by the building of thermal envelopes that allow for smaller (and less costly) HVAC systems to condition the building effectively. Additional savings are realized through high-efficacy lighting and enhanced lighting systems, among other measures.²¹

Overall, codes and standards benefit the American taxpayer. Evidence suggests that adopting modern energy codes serves this purpose: government buildings constructed to modern standards cost the taxpayers less money in utility bills each month. In addition, standards development by private organizations saves taxpayers money and alleviates the administrative burden the government would otherwise face in developing unique federal analogs. The U.S. government's use of ICC energy standards benefits taxpayers, as this public-private partnership leverages the rigorous, consensus-based standards process without replicating it through government bureaucracy, saving taxpayer dollars.

Updated Energy Codes Increase Disaster Resilience

The United States continues to experience increasingly extreme temperatures, destructive weather patterns, and more frequent power outages. Constructing buildings with modern energy codes and standards increases household preparedness for disasters while ensuring individuals' everyday health and safety.

For instance, three U.S. Department of Energy National Laboratories recently found that during prolonged weather-induced power outages coupled with extreme heat or cold, the IECC can reduce deaths due to extreme heat by 80 percent and extreme cold by 30 percent.²² Unfortunately, Texas has twice experienced this tragic combination in recent memory: first, in February, 2021, during a winter storm, which resulted in 161 deaths from extreme cold exposure related deaths due to a lengthy power outage (of 246 total storm-related deaths);²³ second, following Hurricane Beryl this summer, which resulted in at least ten deaths caused by heat exposure due to an extended

¹⁸ <https://www.nber.org/papers/w33958>

¹⁹ California Statewide Utility Codes and Standards Program, [Report – New Home Cost v. Price Study](#) (2015).

²⁰ https://energycodes.gov/sites/default/files/2024-12/2024_IECC_Determination_TSD.pdf.

²¹ https://energycodes.gov/sites/default/files/2025-01/2024_IECC_CostEffectiveness_Residential_Final.pdf

²² https://www.energycodes.gov/sites/default/files/2021-07/Cost-effectiveness_of_ASHRAE_Standard_90-1-2019-Florida.pdf

²³ U.S. Department of Energy (DOE), [Enhancing Resilience in Buildings Through Energy Efficiency](#) (July 2023).

²⁴ Texas Department of State Health Services, February 2021 Winter Storm-Related Deaths – Texas (Dec. 2021)

power outage.²⁴ While several factors contributed to these tragic losses of life, DOE's research demonstrates the important role energy codes can play in life safety.

In general, adopting up-to-date energy codes provides additional household resilience against all hazards: highly efficient windows can reduce the impact of projectiles, some insulation applications can enhance building strength and stiffness, controlled ventilation strategies can reduce the infiltration of outdoor contaminants, and pipe insulation can reduce the need to run water to achieve the desired temperature.

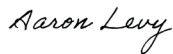
Energy codes and standards also improve indoor environmental quality, reduce mold and mildew incidents, and slow the spread of fire and smoke.

Lastly, energy codes and standards enhance grid resilience and prevent power outages. More efficient buildings that result from building to a modern standard pull less power from the grid, so when there is high demand, like during a winter storm or a heatwave, there is more power to supply critical infrastructure during disaster response and recovery operations. Less energy demand improves grid reliability and keeps the power on. This is particularly important as demands on the grid are expected to grow significantly with the expansion of data centers and other high-demand sectors. Maintaining American competitiveness will require a coordinated energy policy that leverages available opportunities to use our energy resources efficiently and cost-effectively.

Conclusion

Our team would be honored to meet with you or committee staff in the near future to further elaborate on the points outlined in this letter. ICC supports efforts to remove or minimize burdensome federal regulations that drive up housing costs, reduce quality of life, and enhance our dependence on goods, materials, and energy resources from hostile countries. We stand ready to partner with Congress to find innovative solutions to these challenges.

Sincerely,



Aaron H. Levy
Vice President, Federal Relations



Ryan Colker, J.D., CAE
Executive Director, Energy, Resilience
& Innovation

Cc: Members of the U.S. House Energy and Commerce Subcommittee on Energy

²⁴ Houston Public Media, [Two more deaths attributed to Hurricane Beryl](#) as Houston-area death toll rises to 38 (Aug. 27, 2024).



September 8, 2025

The Honorable Bob Latta, Chairman
The Honorable Kathy Castor, Ranking Member
Subcommittee on Energy
House Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

**Re: Geothermal Exchange Organization Statement for the Record; Hearing entitled
“Building the American Dream: Examining Affordability, Choice, and Security
in Appliance and Buildings Policies,” September 9, 2025**

Dear Chairman Latta and Ranking Member Castor:

On behalf of the Geothermal Exchange Organization (GeoExchange), thank you for the opportunity to submit this statement for the record for the September 9, 2025, hearing before the Subcommittee on Energy of the House Committee on Energy and Commerce on the subject of “Examining Affordability, Choice, and Security in Appliance and Building Policies.” It is our understanding that the hearing will in part examine the impact of appliance policies on energy costs, grid reliability, national security, and consumer choice.

As the non-profit trade association promoting the manufacture, design, and installation of geothermal heating and cooling systems, GeoExchange hopes to assist the Subcommittee with the important mission of the hearing. Geothermal heating and cooling delivers unmatched efficiency, strengthens American energy independence, and fortifies the electric grid at a moment when data centers, reshoring industries, and new demands press hard upon it, directly supporting the nation’s economic and security priorities.

There can be little doubt that broader deployment of geothermal systems stands squarely within the Trump Administration’s energy vision: reducing costs, building domestic strength, and ensuring reliable power. Whether offsetting HVAC demand or supplying electricity, geothermal is a proven, American resource.

It is therefore no surprise that the President’s January 20, 2025, National Energy Emergency Declaration recognized the acceleration of geothermal technology as an appropriate response. Moreover, in February, Department of Energy Secretary Chris Wright issued a “Secretarial Order” to advance “American Energy Dominance,” explicitly including geothermal, while DOE

continued funding research, development, and demonstration. As Secretary Wright affirmed, a mature geothermal industry “could better energize our country, improve the quality of life for everyone. It could help enable AI, manufacturing, reshoring and stop the rise of our electricity prices.”

1. Why Geothermal Heating & Cooling Enhances Grid Reliability

Geothermal heating and cooling systems, including district-scale networks, harness the earth’s steady subsurface temperature to provide efficient heating and cooling year-round. Instead of generating heat or exchanging it with volatile outdoor air, these systems move heat to and from the ground, where temperatures remain relatively constant. This stability reduces electricity use during peak summer and winter demand and prevents the sharp spikes that strain the grid during extreme weather. By shifting HVAC load away from those peaks, geothermal heating and cooling reduces stress on the grid, defers costly new infrastructure, and strengthens reliability for homes, businesses, and institutions.

- **Lower infrastructure costs:** Widespread adoption of geothermal heating and cooling systems can reduce the need for new generation plants, transmission lines, and storage, lowering costs for utilities and ratepayers. A recent Oak Ridge National Laboratory (ORNL) study found that large-scale deployment could avoid 24,500 to 43,500 miles of new transmission by 2050—enough to span the country up to 16 times—saving tens of billions and sidestepping permitting delays that often stall energy projects.
- **Improved resilience during outages:** Geothermal systems can be part of a distributed energy solution, and thermal energy networks can continue to function in the event of an electric grid outage if supported by a small amount of on-site generation. According to the ORNL study, during the 2021 Texas winter storm, roughly 38% of anticipated demand went unmet, causing widespread blackouts, but mass geothermal retrofits could have cut that shortfall to 15–21%, substantially reducing the severity of the outage.
- **Thermal energy storage:** Large-scale geothermal heating and cooling networks can serve as thermal energy storage. For example, in summer, a network can use the ground to store excess heat from commercial cooling processes, which can then be drawn upon to help heat buildings in the winter. ORNL found that geothermal deployment could reduce peak demand by up to 28% in some regions, demonstrating the ability of ground loops to store and shift thermal loads across seasons.
- **Workforce development and drilling expertise:** Every geothermal project begins with a borehole, work that cannot be outsourced or automated. The industry draws on the same drilling skills and equipment long relied upon in the oil and gas sector, creating continuity

for American drillers while expanding into new markets. With stable demand supported by incentives, these jobs provide steady employment for crews, strengthen local economies, and ensure that a skilled domestic workforce is available to build out geothermal at scale.

- ***National security and global competitiveness:*** Strengthening the grid with geothermal heating and cooling also strengthens America’s position in the global technology race. ORNL found that widespread deployment could reduce annual U.S. electricity generation needs by up to 585 terawatt-hours by 2050—the equivalent output of more than 60 large nuclear plants. Freeing this scale of capacity shields U.S. utilities from costly overbuilds, ensures reliable power for advanced computing and defense facilities, and keeps America ahead of China, which has already installed tens of gigawatts of low-temperature geothermal capacity at a pace five times faster than the United States.

In short, without relying on federal, state, or local mandates or building codes, market-based approaches can drive deployment of geothermal heating and cooling systems in ways that help grid operators balance rising electricity demand with the demand-side flexibility these systems provide. As more data centers come online, geothermal will become indispensable as a reliable and cost-effective energy offset. The industry also sustains a skilled American workforce—drawing on drillers and trades with deep roots in oil and gas—to deliver projects that cannot be outsourced. In doing so, geothermal strengthens America’s energy independence and ensures that critical industries, from advanced manufacturing to artificial intelligence, have the reliable power they require to thrive.

2. Geothermal as a Market-Viable Solution, Without Mandates

Encouragingly, diverse developments across the United States, from utility-driven district systems to community deployments, demonstrate that geothermal can thrive through market incentives and consumer-friendly models:

- ***Framingham, Massachusetts:*** A utility-led pilot connects 37 homes and businesses to a shared underground geothermal loop. Participants are projected to see average utility bill reductions of about 20 percent, achieved through market-driven deployment rather than regulatory mandates.
- ***Whisper Valley, Texas:*** In this 7,500-home development, geothermal systems are expected to keep average summer utility bills below \$70. Adoption is rooted in efficiency and affordability supported by incentives—not regulatory compulsion.

These cases exemplify how market-based deployment, aided by tax incentives and utility models, can deliver results at scale.

3. Policy Recommendations: Market-Centered, Low-Barrier Advancement

GeoExchange respectfully urges the Subcommittee to pursue the following market-enabling policies:

- ***Clarify and implement tax policy:*** The One Big Beautiful Bill Act (OBBBA) specifically preserved the geothermal investment tax credit in Section 48 of the Internal Revenue Code. Treasury and the IRS should issue a domestic content safe harbor table for low-temperature geothermal systems. This would give taxpayers a clear mechanism for complying with OBBBA's domestic content requirements. Congress preserved the geothermal heating and cooling credit and related domestic content credit because the technology reduces peak demand, lowers energy costs, supports U.S. manufacturing and jobs, and helps meet rising data center and AI demand.
- ***A domestic content safe harbor table is essential:*** Modeled on the safe harbor tables in Notice 2024-41, a draft table for geothermal heating and cooling already exists. It identifies manufactured products and components of a typical low-temperature geothermal system. Most systems fall into two categories: central or distributed. They may also integrate supplemental heat rejection equipment in hybrid systems. With the Subcommittee's support, proceeding to release the table as guidance could be readily facilitated. The industry's supply chain, production, and skilled installation workforce reflect overwhelmingly domestic content.
- ***Support utility-led and third-party models:*** Encourage utilities and private sector actors to pilot district-scale geothermal systems, with mechanisms such as leasing, bulk procurement, or utility financing to drive adoption without imposing technical mandates.
- ***Streamline permitting and workforce support:*** Reduce administrative barriers by aligning permitting processes and supporting workforce development, not through standards, but through enabling frameworks that facilitate cost-effective market entry.
- ***Educate consumers and stakeholders:*** Sponsor outreach and education campaigns showcasing real-world projects that highlight energy savings, reliability gains, and local job creation to build consumer and developer confidence.

4. Conclusion

Geothermal heating and cooling stands as a proven American resource that delivers unmatched efficiency, strengthens energy independence, and fortifies the grid. It provides a durable domestic solution that enhances reliability, supports jobs, and secures resilience as data centers,

manufacturing, and defense place unprecedented demands on the system. The industry also anchors a skilled U.S. workforce, particularly drillers whose expertise from oil and gas translates directly into geothermal deployment, ensuring that these projects create jobs that cannot be outsourced. The full potential of geothermal technologies will be realized not through new regulations or mandates, but through market-based adoption driven by incentives, utility innovation, and consumer awareness.

GeoExchange stands ready to support the Subcommittee with data, testimony, or technical assistance. Thank you for your leadership in ensuring that American energy solutions are effective, affordable, and uniquely domestic.

Respectfully yours,

A handwritten signature in black ink, appearing to read "R. Dougherty", with a stylized, flowing script.

Ryan Dougherty
Executive Director
Geothermal Exchange Organization
312 South 4th Street, Suite 100
Springfield, IL 62701

September 8, 2025

The Honorable Bob Latta
Chair, Energy Subcommittee
Energy and Commerce Committee
House of Representatives
Washington, D.C. 20515

The Honorable Kathy Castor
Ranking Member, Energy Subcommittee
Energy and Commerce Subcommittee
House of Representatives
Washington, D.C. 20515

Dear Chairman Latta and Ranking Member Castor:

As your September 9th hearing on housing affordability is sure to reflect, the United States is in the grip of a housing crisis. The reasons for this crisis are multi-faceted.¹ Escalating land and material costs, permitting and zoning restrictions², and tight labor supply are those factors commonly highlighted as the significant drivers to the escalating cost of new home construction. It is our hope that this hearing will focus on the two sides to housing affordability in America – the cost of new home construction as well as the lifetime operating cost paid by the homeowner related to the heating and cooling of that home. For most homeowners, the utility bill is the largest monthly expense after a mortgage payment.

The National Association of Homebuilders periodically conducts “construction cost surveys” to collect information from builders on the various components that factor into the sales price of a typical newly built single-family home. The survey includes material costs as well as regulatory cost impacts. In its 2024 survey,³ the most significant regulatory cost driver arises from the building permit, impact fees and water and sewage fees that are part of building site preparation. In total, these local regulations together with other site work costs account for about 5 percent of the cost of home construction.

Comparatively, insulation, a component driven in part by state or local energy codes that apply to new home construction as well as the practical need to limit energy waste and improve occupant comfort, accounted for only 1.6 percent of the overall cost of a new home. This comparison demonstrates that local regulations such as site work fees and other development restrictions far outweigh the cost impacts of other policies like building energy codes, which return benefits to homeowners year after year.

Just as the cost of construction has risen, so too has the cost of residential heating and cooling. The rapid expansion of data centers, electric vehicle usage and industrial reshoring is taxing our nation’s existing electric generation and grid capacity. The Energy Information Agency’s 2024 “Annual Energy Outlook” now projects 1.5 percent annual electric demand growth through the early 2030’s with some regional electric utilities projecting 10-15 percent annual demand growth due to concentrated data center and

¹ <https://www.uschamber.com/economy/the-state-of-housing-in-america>

² <https://www.nahb.org/blog/2024/11/zoning-regulation-and-affordable-housing>

³ <https://www.nahb.org/-/media/NAHB/news-and-economics/docs/housing-economics-plus/special-studies/2025/special-study-cost-of-constructing-a-home-2024-january-2025.pdf?rev=00a42a1ce63b4a22a4dba9bda8af954b>

The Honorable Bob Latta
 The Honorable Kathy Castor
 September 3, 2025
 Page 2

industrial demand. This all translates into substantially higher electricity bills for homeowners, which exacerbates the housing affordability crisis.

Building more energy-efficient homes and making energy-efficient improvements to existing building stock is a highly effective hedge to the rising cost of electricity. For example, the Department of Energy projects that a home in Ohio built to the model energy code would save most households over \$260 a year in electric bill savings with the additional cost of meeting that updated code paying for itself in six years.⁴ In Florida, those savings amount to \$225 per year with only 2 years to achieve net savings.⁵

The benefits of model energy codes go beyond these consumer savings. Research from the Pacific Northwest National Laboratory found that building to the efficiency targets of current model energy codes can significantly increase the habitability (or “days of safety”) of homes that experience energy disruptions during extreme weather events.⁶ For example, a home in Atlanta, Georgia, during a heat related event has an estimated 7 days of safety when constructed to current energy codes versus only 3 days for the existing building stock. At a macro level, residential homes account for approximately 20 percent of the U.S. total primary energy consumption. Reducing or capping this demand through cost-effective policies like model energy codes can positively impact U.S. energy security and global competitiveness.

Two federal tax incentives – the Section 45L Builders New Energy Efficient Home Credit and the 25C Energy Efficient Home Improvement Tax Credit – were significant federal policies in driving both the construction of energy-efficient new homes and improving the energy efficiency of existing homes. Unfortunately, both credits are prematurely terminated under the provisions of Public Law 119-21. It is our hope that this Committee will work with industry to identify the next generation of federal policies that will promote a U.S. housing stock that is affordable to both purchase and operate. We look forward to working with you toward that result.

Sincerely,

American Chemistry Council
 Building Performance Association
 Business Coalition for Building Efficiency
 Cellulose Insulation Manufacturers Association
 Insulation Contractors Association of American
 North American Insulation Manufacturers Association
 Polyisocyanurate Insulation Manufacturers Association
 Spray Polyurethane Foam Alliance

⁴ https://www.energycodes.gov/sites/default/files/2021-07/EED_1365_BROCH_StateEnergyCodes_states_OHIO.pdf

⁵ https://www.energycodes.gov/sites/default/files/2021-07/EED_1365_BROCH_StateEnergyCodes_states_FLORIDA.pdf

⁶ https://www.energycodes.gov/sites/default/files/2023-07/Efficiency_for_Building_Resilience_PNNL-32727_Rev1.pdf

September 9, 2025

The Honorable Bob Latta
Chairman, Subcommittee on Energy
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

The Honorable Kathy Castor
Ranking Member, Subcommittee on Energy
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Latta, Ranking Member Castor, and Members of the Subcommittee:

BlackFlare converts stranded flare gas into on-site power for AI computing infrastructure, **reducing grid strain** while targeting **high methane-destruction efficiency** with measured slip and MRV logs. Our modular data centers, powered by **oil-free, variable-fuel linear engines** (water-miscible graphite lubrication) achieving **~40 percent prototype thermal efficiency**, provide a practical solution to America's dual challenge of wasted energy and stressed electric infrastructure.

The Grid Reliability Crisis

Data centers currently consume approximately **4–5 percent** of U.S. electricity and could reach **10–13 percent by 2030** depending on AI deployment rates. Northern Virginia hosts the world's largest concentration of data centers, with facilities requiring **50–200 MW** each; utilities report multi-year backlogs for new connections. Meanwhile, EIA data show the U.S. vents and flares **hundreds of billions of cubic feet** of natural gas annually—capturing even a portion would materially impact supply.

Our solution: deploy computing where the energy already exists. Each **5–6 MW** BlackFlare pod operates completely off-grid, preserving transmission capacity for homes and businesses while creating distributed computing infrastructure resilient to cyber and physical threats.

Proven Technology Stack

We are partnering with **Dell Technologies** on modular data-center engineering rated for **~5–6 MW per 40-foot container**, scalable to **50+ MW per site**. Our design **aligns with NVIDIA reference architectures** for both training and inference. **Intelline Power Systems** provides linear engines with real-time combustion control adapting to gas composition changes cycle by cycle, avoiding failures that plague conventional gensets in flare fields.

BlackFlare's **fuel-aware control system** integrates with Intelline's ECU to enable predictive load management. When gas flow varies, compute workloads automatically scale, maintaining stable power output **without large-scale batteries or capacitor banks** that add cost and maintenance burden.

Economic Impact

Traditional data centers face significant electricity and infrastructure costs. BlackFlare generates power using otherwise-wasted gas at **low, site-dependent LCOE**, with **zero transmission upgrade costs**. For a **20 MW** deployment:

- substantial annual energy savings through avoided grid purchases
- eliminated transmission infrastructure upgrades
- **significant CO₂-equivalent reductions** (site-dependent)
- creation of high-skill technical positions at competitive salaries

Regulatory Barriers

Despite compelling economics and environmental benefits, outdated regulations block deployment:

1. **DOE efficiency standards** assume all generated power feeds the grid. Integrated **compute-power systems** need metrics recognizing productive use at the source.
2. **Permitting processes** often treat behind-the-fence installations like large grid plants, requiring extensive studies **even when not exporting power**.
3. **Tax-credit ambiguity** leaves unclear whether **IRA §48C** covers flare-to-compute despite meeting advanced-energy property intent.

Specific Recommendations

Congress should direct agencies to:

1. Establish efficiency standards for integrated energy-compute systems within 180 days.
2. Create expedited permitting for **off-grid, non-exporting** computing infrastructure under **50 MW**.
3. Clarify that productive use of stranded gas qualifies for clean-energy incentives.
4. Include **flare-to-power** explicitly in DOE Fossil Energy & Carbon Management funding opportunities.

Urgency

Global competitors are moving quickly on methane utilization and distributed compute. Every month of delay cedes technological and economic advantage while American resources remain underused and grid constraints tighten with AI demand.

BlackFlare can **phase toward 500 MW within ~24 months** with partners and identified sites, subject to regulatory clarity—capturing significant emissions while strengthening America's AI leadership.

Respectfully submitted,

Thomas McLaughlin
Founder & CEO, BlackFlare, Inc.
105 Grandview Road
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tmclaughlin@blkfla.re



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Washington D.C., 20001
202.408.9494
www.cement.org

September 9, 2025

The Honorable Bob Latta
Chair
Committee on Energy and Commerce
Subcommittee on Energy
U.S. House of Representatives
Washington, D.C. 20150

The Honorable Kathy Castor
Ranking Member
Committee on Energy and Commerce
Subcommittee on Energy
U.S. House of Representatives
Washington, D.C. 20150

Dear Chairman Latta and Ranking Member Castor:

On behalf of the American Cement Association (ACA), I write in support of your hearing, *Building the American Dream: Examining Affordability, Choice, and Security in Appliance and Buildings Policies*. Our industry is supportive of modern building codes that balance affordability, energy efficiency, and resiliency, as cement & concrete is part of the solution to the issues likely to be discussed at this hearing.

Cement is essential to building and maintaining the nation's infrastructure – from highways and bridges to airports, mass transit systems, and water facilities. Our products enhance energy efficiency in buildings, improve fuel efficiency on roads, and contribute to the resilience of critical infrastructure. Cement and concrete manufacturing support over 600,000 American jobs and contribute more than \$100 billion to the U.S. economy annually.

ACA supports the adoption of updated building codes that balance energy efficiency, affordability, and above all, life-safety through disaster resilience. According to the National Oceanic and Atmospheric Administration (NOAA), the number of billion-dollar disaster events in the United States is increasing, and the associated costs are also rising.

Improving building codes is an effective strategy that policymakers and the building design and construction industry must employ to reduce the impacts of disaster events, including loss of life, property damage, and displacement of families and businesses. There are numerous benefits to revising building codes to meet today's needs and be robust. The first tool for communities to have proper building codes is to set minimum standards for construction that improve the chances that homes, schools, businesses, and utilities can survive major catastrophes. Buildings and infrastructure that survive get people back to normalcy, which is better for quality of life and economic growth.

Further, there are economic benefits for communities that adopt strong building codes through measurable performance. These benefits include promoting cost-effective construction by providing for economies of scale in the production of building materials. Building codes are developed by engineers, architects, product manufacturers, contractors, and public officials and are grounded in sound engineering principles that have been thoroughly tested. In its study entitled "Natural Hazard Mitigation Saves," the National Institute of Building Sciences found that adopting the latest building code requirements is affordable and saves \$11 per \$1 invested. Additionally, building the above code can save \$ 4 for every \$1 invested.

We appreciate the Committee's efforts to examine this issue and offer our assistance as the Committee considers next steps to address building codes and housing. Thank you for your consideration of this letter. If you have any questions, please contact me at soneill@cement.org or (202)719-1974.

Sincerely,

A handwritten signature in cursive script, appearing to read "S. O'Neill".

Sean O'Neill
Senior Vice President, Government Affairs
American Cement Association



September 9, 2025

The Honorable Brett Guthrie
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

The Honorable Bob Latta
Chairman
Subcommittee on Energy
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

The Honorable Frank Pallone
Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

The Honorable Kathy Castor
Ranking Member
Subcommittee on Energy
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

RE: Building the American Dream: Examining Affordability, Choice, and Security in Appliance and Buildings Policies

Dear Chairman Guthrie, Ranking Member Pallone, Chairman Latta, and Ranking Member Castor:

Thank you for the opportunity to provide this statement for the record and for your commitment to addressing housing affordability. This issue is central to the prosperity of millions of Americans and continues to worsen under current conditions.

It is imperative for building and energy codes to strike a reasonable balance between safety, energy consumption and cost. The Spray Foam Coalition (SFC) recommends the following options to reduce the cost of new construction:

1. Promoting the IECC Performance Paths, which creates options and flexibility for builders.
2. Maintaining the IECC's scope on *conservation* and eliminating the International Code Council (ICC) goals for the International Energy Conservation Code (IECC) that prioritize achieving zero-energy buildings, electrification, and decarbonization.
3. Ensuring efforts to reduce energy use and building emissions are not limited to new construction.

These suggestions are intentionally broad as we recognize that multiple entities (standard development organizations, Congress, and State Legislatures) have a role in the development and implementation of building and energy codes.

The Spray Foam Coalition fully supports energy efficiency and the development of cost-effective energy *conservation* codes. The Coalition is concerned that the current path of the IECC's goals around "zero-energy" buildings, electrification, and a desire to arbitrarily increase energy efficiency based mainly on increasing R-values for the building envelope every three years is increasing costs and not helping consumers use less energy to heat and cool their homes.

With energy demand on the rise due to new demands from data centers, restoring the focus of the IECC to energy conservation is a key solution to ensure grid reliability over the coming years. The SFC believes it is crucial to identify opportunities for enhanced energy efficiency wherever it can be found, freeing up electrons for efforts that are key to U.S. economic and national security, a goal shared by the Congress and the Trump administration.

Promoting the IECC Performance Path

Spray foam insulation is unique. The product is applied on-site and bonds to the surface to which it is applied. The product, in addition to providing best in class R-values, is air impermeable. Traditional insulation products are permeable and need secondary products to match this increased performance.

Insulating homes is only one piece of the building envelope energy efficiency puzzle. Installing an air barrier assembly to seal the building envelope helps ensure the most energy efficient building. Gaps, holes, and air leaks can make energy bills unnecessarily high and let valuable resources (i.e. conditioned air) go to waste. The potential energy savings from air sealing a home can be as high as 30% per year.¹

The SFC believes that energy conservation can be achieved through better building envelopes using spray foam insulation. Homes with spray foam insulation can match the energy efficiency of homes with traditional insulation with less R-value in the wall because homes with spray foam insulation are generally more airtight.

In addition to installing the right amount of insulation in the walls, roofs, and floors, superior building envelopes allow for right sizing of HVAC equipment, often at lower costs, and reduce long term electrical consumption and costs to the homeowner.

This concept is essentially the IECC Performance Path. Recognizing there are many pathways to achieve energy efficiency, the IECC created Performance Paths to provide builders with optionality and flexibility, while leaving the Prescriptive Path intact as an easy solution for builders that choose that option.

However, the IECC currently emphasizes outcomes that prioritize building homes via the Prescriptive Path. Experts developing the IECC have arbitrarily chosen to require homes

¹ <https://www.energy.gov/eere/wh-energy-efficiency-upgrades>

built via Performance Paths to be more energy efficient than homes built via the Prescriptive Path. This decision arbitrarily limits options for builders. The Performance Paths and the Prescriptive Path should be equivalent solutions.

The prevailing logic assumes that these homes must prove they are more efficient than prescriptive-path homes as a “precaution.” This creates an uneven playing field between the two compliance options built into the IECC.

The Performance Path was designed to empower builders to achieve energy goals through innovative, project-specific strategies. Prioritizing the Prescriptive Path limits this flexibility and may stifle more efficient solutions.

The energy efficiency targets in the current IECC Prescriptive Path have increased significantly over the past two decades, often through higher R-value requirements locked in through backstops. However, these changes are not always accompanied by a rigorous cost-benefit analysis and may unintentionally crowd out alternative solutions. Simply increasing insulation R-value instead of considering other energy efficiency solutions (e.g. better mechanical systems, improved air tightness, etc.) limits realistic competition.

The seemingly minor technical differences between the Prescriptive and Performance Path of the IECC limit competition, driving costs up, not down. The SFC believes that creating truly equivalent energy targets for the Prescriptive and Performance Path will drive better outcomes from the IECC, while reducing costs for builders.

Maintaining the IECC's scope on conservation

In recent cycles of review and revision, the ICC has suggested the IECC should include targets or requirements around the following topics:

- Electric vehicle chargers,
- Electrification of homes,
- “Zero energy” homes,
- Decarbonization, and
- Low embodied carbon building materials.

These suggestions are outlined in the ICC’s [*LEADING THE WAY TO ENERGY EFFICIENCY: A Path Forward on Energy and Sustainability to Confront a Changing Climate*](#).

The potential expansion of the scope of the IECC will increase the cost of new construction without a reduction in energy consumption – the primary intent of the IECC.

Requiring residential properties to include electric vehicle charging infrastructure or other electrification options imposes additional costs that may not be utilized by every homeowner. In contrast, investing in an improved building envelope delivers immediate

enhancements in energy efficiency, resulting in reduced homeowner expenses from the outset. Spray foam insulation, when used as part of the performance path of the building code, enables builders to achieve superior levels of efficiency and comfort that not only meet, but can exceed prescriptive code requirements, providing a practical solution for reducing energy consumption and optimizing long-term savings for homeowners.

While efforts to expand the scope of the IECC have generally not been included in more recent revisions, several states have adopted electrification and decarbonization requirements. These requirements are increasing costs for builders.

Existing Buildings vs New Construction

The energy efficiency requirements for new construction have been steadily increasing for several decades. New homes built via the Energy Rating Index (ERI) path of the 2024 IECC are required to be between 46% and 49% more efficient than the 2006 IECC (depending on climate zone).

Building homes that have increased energy efficiency by 50% in less than 20 years should be viewed as a successful outcome. However, the drive towards “zero-energy,” and decarbonization forces the IECC to suggest that this outcome is not sufficient.

The reality is simple. If the goal is to reduce emissions and “fight climate change,” the country cannot build its way to a green economy. A recent [study](#) by Stanford University has suggested that a 5% increase in energy efficiency in existing homes is equivalent to 10 years of building “zero-energy” homes in California.

Spray foam insulation is an ideal solution for creating unvented attics – in new construction *and* retrofitting existing homes. Unvented attics allow all the HVAC mechanical equipment and duct work to operate inside the building envelope. Building unvented attics is like putting a hat on your home. Unvented attics were named as a [Top Innovation](#) by the U.S. Department of Energy.

Conclusion

The Spray Foam Coalition stands ready to work with Congress, federal agencies, and standards organizations to advance building energy codes that are logical, responsible, and economically feasible for American families.

Sincerely,



Stephen Wieroniey
President



September 9, 2025

The Honorable Bob Latta, Chairman
Subcommittee on Energy
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

The Honorable Kathy Castor, Ranking Member
Subcommittee on Energy
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Latta and Ranking Member Castor:

On behalf of the members of the National Multifamily Housing Council (NMHC) and the National Apartment Association (NAA), we thank the Subcommittee for exploring the impacts of new building and energy efficiency standards on the availability and affordability of America's housing. We are committed to delivering high-performing and quality homes nationwide and support efforts that help us improve the energy and environmental profile of our buildings. However, recent changes to energy efficiency and environmental policies have failed to balance the nation's housing affordability and supply needs and risk undermining efforts to address America's acute housing challenges.

The House Energy and Commerce Committee serves an important role in ensuring that federal policies support America's housing goals. As the Subcommittee on Energy holds a hearing on "Building the American Dream: Examining Affordability, Choice, and Security in Appliance and Buildings Policies," we urge you to consider the obstacles facing housing providers in containing rising costs and delivering much-needed supply.

One-third of all Americans rent their housing, and we represent the \$3.9 trillion apartment industry and its more than 40 million residents. Our industry plays a critical role in meeting the nation's housing needs and we caution against policies that create barriers to new housing production and renovation of existing properties. In particular, we urge review of recent Department of Energy (DOE) appliance efficiency standards and federal efforts to mandate one-size-fits-all national energy codes, which can create serious, and sometimes cost-prohibitive, challenges for housing providers.

The Nation's Critical Housing Shortage

Today's Subcommittee action rightly acknowledges the acute housing affordability and availability needs facing the nation. **The U.S. needs to build 4.3 million new apartment homes by the year 2035 to meet the demand for rental housing.**¹ This underproduction of housing has translated into higher housing costs – resulting in a consequential loss of affordable housing units (those with rents less than \$1,000 per month), with a decline of 4.7 million affordable apartments from 2015-2020. In fact, the total share of cost-burdened apartment households (those paying more than 30% of their income on housing) has

¹ "Estimating the Total U.S. Demand for Rental Housing by 2035," Hoyt Advisory Services (2022), <https://www.wearapartments.org/>.

increased steadily over several decades and reached 57.6% in 2021.² During this same period, the total share of *severely* cost-burdened apartment households (those paying more than half their income on housing) increased from 20.9 to 31.0%.³

Costly regulations exacerbate these conditions. This harms the millions of Americans who depend on rental housing, and deters the rapid investment, innovation and development critical to the growth and success of the rental housing industry. Indeed, recent empirical research confirms that **regulation accounts for an average of 40.6 percent of multifamily development costs**, adding significantly to the costs of operating multifamily rental housing, negatively impacting all aspects of the industry, including rental housing affordability for millions of Americans.⁴

Impacts of New Appliance Efficiency Standards in Multifamily Housing

Our organizations have long been engaged in the rulemaking process for DOE appliance efficiency standards, ensuring that the unique needs of the apartment industry and America's renters are recognized. Apartment providers are bulk purchasers of consumer appliances and are responsible for ensuring our residents' homes are well-equipped with safe, effective and affordable products that meet their performance expectations and consumer preferences. At the same time, higher appliance costs, design complications and installation barriers in multifamily buildings and operational changes driven by new appliance efficiency requirements have a direct impact on the cost of housing.

The last Administration pursued an aggressive series of rulemakings, seeking to change performance standards for essential residential appliances and equipment that prompted concern from the housing industry. We offered formal comments to DOE on a broad range of these and other proposals including water heaters,⁵ clothes washers,⁶ refrigerators and freezers,⁷ conventional cooking products,⁸ distribution transformers,⁹ and furnaces,¹⁰ explaining that these new regulatory burdens will inevitably raise housing

² "NMHC tabulations of 1985 American Housing Survey Microdata," American Housing Survey, U.S. Census Bureau (2021).

³ *Id.*

⁴ "NMHC-NAHB Cost of Regulations Report," NMHC and National Association of Home Builders (June 2022), <https://www.nmhc.org/research-insight/research-report/nmhc-nahb-cost-of-regulations-report/>. See also "Behind the High Cost of Rent: How Local Rules and Regulations are Increasing Expenses for Multifamily Operators," Daniel Shoag and Issi Romem, MetroSight (Feb. 2025), www.metroinsight.com/articles/behind-the-high-cost-of-rent.

⁵ Energy Conservation Program: Energy Conservation Standards for Consumer Water Heaters, 88 FR 49058 (<https://www.regulations.gov/comment/EERE-2017-BT-STD-0019-0996>).

⁶ Energy Conservation Program: Energy Conservation Standards for Residential Clothes Washers, 88 FR 13520 (<https://www.regulations.gov/document/EERE-2017-BT-STD-0014-0060>).

⁷ Energy Conservation Program: Energy Conservation Standards for Refrigerators, Refrigerator-Freezers, and Freezers, 88 FR 12452, (<https://www.regulations.gov/comment/EERE-2017-BT-STD-0003-0061>).

⁸ Energy Conservation Program: Energy Conservation Standards for Consumer Conventional Cooking Products, 88 FR 6818, (<https://www.regulations.gov/comment/EERE-2014-BT-STD-0005-2265>).

⁹ Energy Conservation Program: Energy Conservation Standards for Distribution Transformers, 88 FR 1722, (<https://www.regulations.gov/comment/EERE-2010-BT-STD-0018-0097>).

¹⁰ Energy Conservation Program for Appliance Standards: Energy Conservation Standards for Residential Furnaces and Commercial

costs. Specifically, we stressed that these rules could frustrate housing production and affordability, highlighted unique compliance considerations in apartment properties, detailed technical barriers to implementation and cautioned against overly burdensome regulations.

Subsequently, we have broadly supported the Trump Administration's deregulatory efforts and submitted comments in support of the Administration's action to improve the DOE Process Rule, which establishes the general framework for DOE to develop energy conservation standards and test procedures for both consumer products and commercial equipment pursuant to the Energy Policy and Conservation Act (EPCA).¹¹

Our comments raise several common concerns across many of these rulemakings. Foremost, DOE's analysis on the necessity and justification of new standards fails to balance the value of new requirements with the impacts on the nation's housing conditions. It is critically important that new regulations support the development of housing at all price points, which is essential to address the nation's critical housing challenges and ensure economic stability for American households.

We therefore urge this Subcommittee to support changes to EPCA or other legislative action that promotes the inclusion of an analytical framework for the development of appliance efficiency standards formalizing consideration of housing sector impacts to both the single- and multifamily industry and takes unique multifamily and rental housing conditions into account.

In addition, we encourage the Subcommittee to recognize the importance of preserving product choice and ensuring there's flexibility to select those appliances that reflect the unique characteristics and wide array of housing and residential construction types. We specifically caution against efficiency standards that may significantly reduce our product options based on a particular fuel source. While DOE has oft stated that its intention is not to preclude the use of gas-fueled products, several of these rulemakings nevertheless promote building electrification, potentially heavily steer buyers towards electric equipment options and have the practical effect of restricting the use of gas appliances in favor of electric versions in certain applications.

Moreover, we have urged DOE to consider the collective impacts of these rulemakings and recognize that the effect of even relatively modest, individual pricing increases are magnified when housing providers are forced to manage cost escalations across multiple product classes at once. Importantly, essential residential appliances are already highly energy efficient, and the multifamily buildings they service have made significant energy performance gains in recent years, with many properties achieving EPA EnergyStar certification or other recognition of their distinguished efficiency. Efforts that result in only marginal efficiency increases should be balanced against the costs and burdens of equipment changes, appliance performance differences and production or supply chain disruption. Such challenges can result in undue delays or cancellation of construction and renovation efforts that would result in broader building performance improvements.

As this Subcommittee considers the impacts of new appliance efficiency standards, we urge you to address the analytical deficiencies that jeopardize the affordability and availability of housing. In particular, recent

Water Heaters 84 FR 33011 (<https://www.regulations.gov/comment/ERE-2018-BT-STD-0018-0080>).

¹¹ Energy Conservation Program: Procedures, Interpretations, and Policies for Consideration of New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Certain Commercial/Industrial Equipment 90 FR 16093 (<https://www.regulations.gov/comment/ERE-2025-BT-STD-0001-0029>).

rulemakings lacked sufficient attention to the distinct nature of multifamily construction and operations including:

- **Fails to Address the Diversity of Multifamily Building Types.** The supporting information provided by DOE in their appliance rulemaking analysis has lacked important perspective on the diversity of multifamily housing and is inadequate to properly analyze the proposed rules' implications on apartments. DOE's analysis has not accounted for the breadth of multifamily building configurations, construction types and materials and equipment use and does not well-address distinctions within the multifamily landscape including high-rise versus low-rise buildings, historic structures and adaptive reuse projects (i.e. commercial to residential conversions). Such features can significantly influence appliance installation, operations and consumer satisfaction, and DOE's impact analysis would benefit from a broader consideration of the multifamily marketplace.
- **Ignores the Unique Characteristics of Multifamily Design.** DOE's appliance rulemakings often pose unique challenges for multifamily dwellings given small unit size, typical design considerations and the dense construction inherent in multifamily construction. Recent policy changes fail to address obstacles in appliance relocation or reconfiguration of supporting infrastructure in small or interconnected dwelling units. DOE failed to properly consider material impacts on rentable square footage or undesirable impacts on multifamily unit design where appliances will need to be placed in different areas than normally expected or relocated in the case of equipment replacement or unit renovation.
- **Underestimates or Overlooks Impacts on Existing Buildings.** DOE's analysis has not properly distinguished the needs of the existing building market, as the existing apartment stock is a key source of affordable and work force housing nationwide. DOE's cost-effectiveness analysis routinely fails to adequately address retrofit challenges that make certain product choices untenable, force product switching and/or necessitate expansive reconstruction efforts in multifamily buildings.
- **Lacks Housing Impact Analysis for All Income Levels.** It is essential that we build and renovate housing at all price points to address the nation's housing needs. DOE's existing analysis affords consideration of new standards' impacts on "low-income households," but Americans at all income levels are facing out-of-reach housing costs. A recent report shows that renters nationwide need to earn more than \$80,000 to comfortably afford the typical rent, up from \$60,000 needed just five years ago, and those earnings need to rise to six figures in eight major metro areas.¹²
- **Misjudges Requisite Product Switching and Cascading Equipment Replacement in Multifamily.** Although new appliance efficiency standards do not compel retrofitting of existing equipment, DOE's analysis often fails to consider the multifamily design and operational conditions that can nonetheless force housing providers to replace equipment that has not yet reached the end of its useful life. Multifamily properties commonly use venting, piping, shafts and other building systems that serve multiple dwelling units. We have detailed how compliance with new efficiency standards can necessitate changes to these features that force a cascade of system or equipment replacements to accommodate these shared-use situations. We have also identified circumstances where product switching is probable in multifamily construction, usually driven by space limitations or unit configurations in existing buildings. Moreover, we have identified scenarios where retrofit costs associated with new appliance efficiency standards in multifamily properties will not only promote product switching, but incentivize replacement with lower efficiency appliances. In these

¹² "Renters Need to Earn \$100K in Twice as Many Markets Than in 2020 (April Rent Report)," Zillow (April 2025), <https://www.zillow.com/research/april-2025-rent-report-35152/>.

instances, DOE has failed to examine the breadth of product switching costs and real-world installation expenses that face apartment housing providers.

- **Underestimates Impacts of Increased Electrification.** Where product switching is required as discussed above, it is predictable that recent appliance efficiency proposals would result in the greater use of electric products. We specifically cautioned against moving forward with new efficiency standards that may significantly reduce our product options based on a particular fuel source, with more onerous requirements or compliance demands being imputed on products using fossil fuels. Increased building electrification requires more interconnectivity, changes to power systems and upgraded electrical infrastructure that poses significant cost and constructability barriers for the existing apartment stock that was unaddressed in DOE's analysis.

Building Codes are a Significant Driver of Regulatory Burdens and Costs in Housing

Building codes and standards are an essential component of housing construction. However, onerous code requirements are a major barrier to new housing development and renovation. In fact, in our previously cited research on the cost of regulation in housing development, **the highest average regulatory cost in multifamily development is the result of changes to building codes over the past 10 years** (11.1 percent of total development costs).¹³ In a separate survey, 89% of respondents agreed or strongly agreed that building code requirements in general impact the cost and viability of construction projects.¹⁴

While we support cost-effective and technically-feasible codes and standards, building codes have increasingly been used to advance policy goals unrelated to building safety or basic building performance requirements. In particular, the previous Administration sought a more expansive federal role in the use of building energy codes, principally as a tool to advance climate change goals. This included an aggressive push for the adoption of specific building energy codes and standards, including “zero energy” codes that would generally prohibit the use of fossil fuels in buildings.

In a recent survey, nearly 70 percent of respondents (66%) agreed or strongly agreed that compliance with energy performance and efficiency requirements caused significant challenges for their business and 63% of respondents indicated challenges with electrification or net-zero emissions-related provisions.¹⁵ About half of respondents (49%) specifically indicated that their business would be less likely to develop, build or invest in a project where the latest energy code edition was required.

There has been a push to use federal policy efforts and significant federal funding opportunities to enforce specific codes through federal program participation or induce jurisdictional adoption of particular energy codes and standards. In fact, the previous Administration's use of grants and other funding to impose specific energy codes was an expensive endeavor, with the DOE spending hundreds of millions of dollars to promote codes that mandate expensive construction requirements, restrict or otherwise influence fuel

¹³ *Id.* at 4.

¹⁴ “NMHC Pulse Survey: Analyzing the Impact of Building Codes on Rental Housing Development & Affordability,” NMHC (May 2024) <https://www.nmhc.org/research-insight/survey/nmhc-pulse-survey-analyzing-the-impact-of-building-codes-on-rental-housing-development-affordability/>.

¹⁵ *Id.*

choices and force property owners to fund electrification, electric vehicle charging and other features that may not be compatible with the actual market conditions of a project or area. This included \$225 million in funding from the Infrastructure Investment and Jobs Act to implement updated building energy codes,¹⁶ and \$530 million in funding from the Inflation Reduction Act to for states, territories and local governments to adopt the latest model energy codes, zero energy codes or innovative codes.¹⁷

We encourage a reexamination of these policies, programs and grant opportunities and urge changes to measures that establish one-size-fits-all energy code requirements or incentivize jurisdictions to adopt specific energy code editions or those that compel use of particular fuel sources or unduly burden housing costs.

Conclusion

The apartment industry supports building and appliance efficiency goals. At the same time, improving housing affordability and availability are key national priorities. We are committed to working with policymakers to further energy efficiency goals while supporting the creation of more housing, preserving affordability and ensuring that every American has a safe, quality place to call home.

Sincerely,

National Multifamily Housing Council
National Apartment Association

C.C. Chairman Brett Guthrie
Ranking Member Frank Pallone, Jr.
Members of Subcommittee on Energy, House Committee on Energy and Commerce

¹⁶ Resilient and Efficient Codes Implementation, Dep't of Energy, Office of Energy Efficiency and Renewable Energy, <https://www.energycodes.gov/RECI>.

¹⁷ "Biden-Harris Administration Announces \$530 Million for Building Energy Efficiency and Resilience to Cut Consumer Costs," (Dec. 2023), <https://web.archive.org/web/20250123021053/https://www.energy.gov/articles/biden-harris-administration-announces-530-million-building-energy-efficiency-and->

UL ENVIRONMENT
TECHNICAL BRIEF

**EFFECTS OF INDOOR
ENVIRONMENTAL
QUALITY ON
PERFORMANCE AND
PRODUCTIVITY**





Effects of Indoor Environmental Quality on Performance and Productivity

Introduction

In the developed world, humans spend about 90% of their time indoors.(EPA, 1989) That time is spent sleeping, working, attending school, cooking, eating, and all related tasks. In the last 150 years, the indoor environment has changed dramatically, from soot and dust filled rooms lit by candles and heated by wood or coal to the modern office and residential spaces with state of the art materials and invisible systems to provide heat, cooling, humidity control, and particle filtration. Since we spend so much time indoors, it is in our best interest that the environments we create for working and learning are designed to maximize productivity and performance, or at the very least, minimize the negative effects these spaces may incur on the inhabitant.

Over the past 50 years, there has been a growing body of research surrounding optimal indoor conditions. This research has been conducted from several fronts: architects and designers tweaking indoor plans to make spaces aesthetically pleasing, mechanical engineers modifying designs of heating, ventilation, and air conditioning (HVAC) equipment to make spaces more comfortable, and environmental health practitioners performing studies of different indoor environment pollutants and their effects on occupants.

Today, 14 percent of healthcare costs are driven by conditions related to Indoor Environmental Quality (IEQ), including asthma and allergies; headaches; respiratory disease; eye, nose and throat irritation; reproductive and developmental defects; neurological disease; cardiovascular disease; and some forms of cancer. Poor IEQ in commercial buildings can lower worker productivity, while conversely improving IEQ can significantly reduce absenteeism and improve productivity. (Underwriters Laboratories, 2014)

This report is an attempt to summarize the main tenets linking IEQ and human performance and productivity.



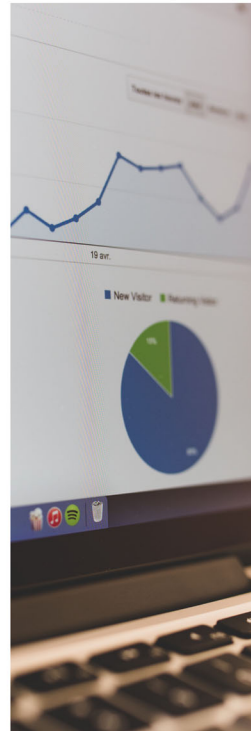


Both the exposure (IEQ) and outcome (performance/productivity) are defined differently depending on the source. According to the National Institute for Occupational Safety and Health (NIOSH), "Indoor environmental quality (IEQ) refers to the quality of a building's environment in relation to the health and wellbeing of those who occupy space within it. IEQ is determined by many factors, including lighting, air quality, and damp conditions." (NIOSH, 2015) The complexity of environmental parameters is also complex, as "building occupants may be exposed to a variety of contaminants (in the form of gases and particles) from office machines, cleaning products, construction activities, carpets and furnishings, perfumes, cigarette smoke, water-damaged building materials, microbial growth (fungal, mold, and bacterial), insects, and outdoor pollutants. Other factors such as indoor temperatures, relative humidity, and ventilation levels can also affect how individuals respond to the indoor environment." (NIOSH, 2015) Performance is also not an exact variable, as it may be calculated via speed of work, quality of work, presence or lack of respiratory symptoms, or absenteeism. Also, evaluating work performance is useful because the monetary costs can be extrapolated from increased productivity of occupants. (Seppanen, Fisk, & Lei, 2006) In addition, it seems like in the last several years, there has been a coalescing of thought around how to measure performance objectively, in an attempt to control for different indoor environment variables.

In this brief, we focus mostly on research into performance metrics related to IEQ in office environments. We will discuss different components of Indoor Environments that have been studied, and introduce recent research that appears to be a major breakthrough in the field related to Carbon Dioxide (CO₂) levels.

How do you measure performance?

The available literature suggests that performance can be measured in a variety of ways, depending on the subject population and the type of study being conducted. For instance, several studies used the concept of Disability Adjusted Life Years (or DALYs) which are defined by the World Health Organization as "years of healthy life lost". (Allen et al., 2015; Chan, Parthasarathy, Fisk, & McKone, 2015; Logue, Price, Sherman, & Singer, 2012) DALYs are calculated by summing the Years of Life Lost (which depends on both the number of early mortalities and lost life expectancy attributable to the early mortalities) and Years of Life Disabled (which depends on the number of incident cases of disability, length of the case and its disability weight). Other studies have evaluated speed of task completion (with metrics such as calls answered per hour in a call center, or typing speed), symptoms of Sick Building Syndrome (headaches and respiratory irritation) and absenteeism.





Several studies have also examined the relationship between outdoor pollution and worker/student productivity, measuring work output or cognitive ability in the presence of ambient air pollutants like ozone, NO_x, and radiation. (Almond, Almond, & Edlund, 2007; Lavy, Ebenstein, & Roth, 2012; Zivin & Neidell, 2011) Subjects are also often asked to provide subjective assessments of their performance, however this has been shown to not be a reliable source of data. (Wyon, 2004)

Based on the current literature, using an objective measurement of performance is ideal for assessing performance, so that limited bias is introduced. Several studies used the Strategic Management Simulation (SMS) software tool, which asks participants to respond to several situations with strategic thinking, scoring them in several different cognitive factors such as Information Seeking, Strategy, and Task Orientation. The SMS tool has been proven effective in a variety of exposure scenarios, such as caffeine, antihistamines, alcohol, marijuana, and tranquilizers. (Satish, Cleckner, & Vasselli, 2013)

Which components of the Indoor Environment affect Performance?

The most studied components of the Indoor Environment related to occupant performance are Ventilation, Temperature, VOCs, and CO₂. In the following pages, I will break out each of these parameters and its function on performance.

Ventilation Rates and Performance

One of the more obvious metrics of IEQ and performance is ventilation rates. Ventilation is typically measured in Liters per second per person (L/s-person). Most studies have shown a positive direct relationship between increased ventilation and productivity of occupants. Specifically, greater percentages of fresh, outdoor air are critical for this relationship to hold.

A meta-analysis performed in 2005 found that there was a 1-3% improvement in productivity for each additional 10 L/s-person of ventilation, from approximately 6.5 L/s-person up to 65 L/s-person. (Seppanen et al., 2006) Ventilation rates as a function of performance with a baseline of 6.5 L/s-person are plotted in Figure 1 below.

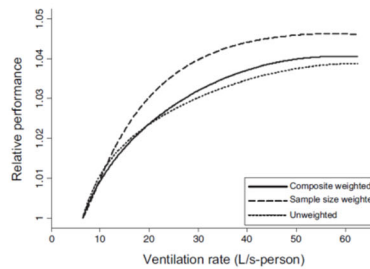


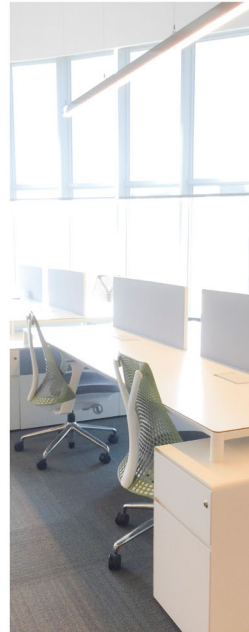
Figure 1: Relative performance in relation to the reference value 6.5 L/s-person versus average ventilation rate (Seppanen et al., 2006)



In 2013, Chan et al. provided a risk assessment for chronic exposure to volatile organic compounds (VOCs) and particulate matter (PM_{2.5}) as a function of ventilation rates. They modeled results from previous studies connecting ventilation and concentrations of these two pollutants at 0.5x and 2x ventilation rates. They then compared the results to regulatory agency data on chronic health risks. The results of the modeling are rather intuitive: doubling ventilation rates significantly reduced the VOC concentrations and resulting modeled chronic health effects, but higher ventilation rates also increased the amounts of PM_{2.5} exposure (since much of PM_{2.5} matter is generated from outdoor air). In addition, it appears that filtration is the best solution for PM_{2.5} loads, independent of the ventilation rates. (Chan et al., 2015)

The American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) first published ASHRAE Standard 62 in 1973. ASHRAE Standard 62 has been modified in the decades since, but it remains among the most prominent and most cited documents on ventilation. The standard lists minimum ventilation requirements for a variety of indoor spaces. The first version of Standard 62 included the purpose statement “minimum and recommended air quantities for the preservation of occupants’ health, safety, and well-being”. This statement was controversial within ASHRAE almost immediately, as many members felt that as an engineering society, ASHRAE should not be involved in occupant health. (Persily, 2015) The statement evolved over the subsequent years, and the board of directors ultimately approved a rule that IEQ and ventilation standards “shall not make any claims or guarantees that compliance will provide health, comfort or occupant acceptability, but shall strive for those objectives ...” and that “ASHRAE standards shall consider health impacts where appropriate.” (ASHRAE, 2014; Persily, 2015) The evolution of Standard 62 demonstrates the changing understanding of the relationship between ventilation rates and indoor environmental quality. (Allen et al., 2015)

Ventilation is one of the more discussed issues related to building mechanical system operation, as increased outdoor air ventilation comes with higher energy loads and therefore higher costs, and it has been shown that increased ventilation often leads to positive health outcomes for occupants.





Temperature and Performance

Indoor air temperature is one of the most noticeable aspects of any workplace or other building. Studies on the relationship between temperature and worker performance have been conducted since at least the 1920's. Early studies found a marked relationship between temperature and manual work (i.e. factories, mills, etc.). However, the correlation between temperature and mental work is more complex. A summary conducted in 1997 found that for some types of mental work, such as complex and creative tasks, optimal performance coincides when the occupants are at optimal thermal comfort. However, other types of mental work are best completed under slightly cooler temperatures. The conclusion was that performance may be increased by giving occupants individual control of local temperature settings. (William J. Fisk & Rosenfeld, 1997)

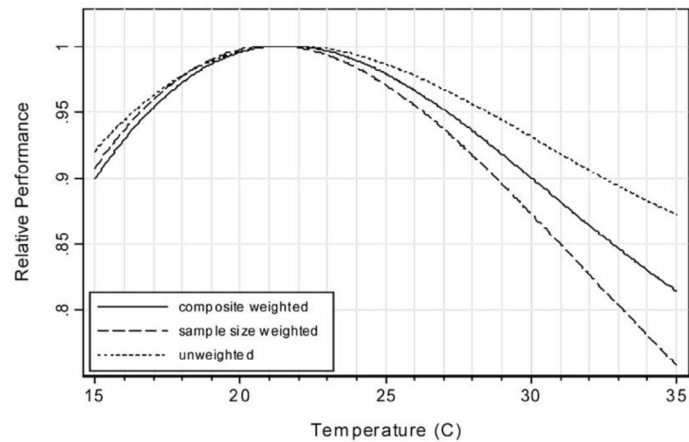


Figure 2: Relative performance versus Temperature (maximum performance is set to 1) (Seppanen et al., 2006)



VOCs and Performance

A consequence of spending so much time indoors is that the majority (more than 70%) of chemical exposures happen there. (Gokhale, Kohajda, & Schlink, 2008) Volatile Organic Compounds (VOCs) are emitted gases from certain solids or liquids. They emit from many different sources commonly found within homes and offices, including paints, aerosol sprays, cleaners, air fresheners, fuels, dry cleaned clothing, pesticides, building materials/furnishing, and office equipment such as copiers, glues, and markers. (EPA, 2015)

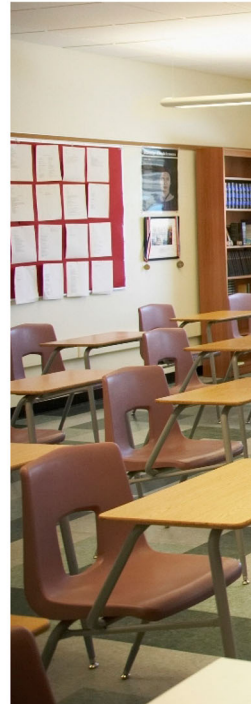
Studies have been conducted on exposure to VOCs emitting from paints, building materials, and other sources, showing a correlation between higher concentrations of VOCs and lower performance. A 2013 study even showed that a freshly painted room impaired the cognitive ability of occupants in a similar way to alcohol. (Satish et al., 2013) Recent research also shows that at lower levels, VOC concentration may effect decision making as well. It is not clear which VOCs are the most detrimental to performance; researchers believe that there are different VOC combinations that affect individuals uniquely, but more study on this topic is needed. (Stromberg, 2014)

In an office environment, the majority of the VOC load comes from building materials and cleaning products. Low VOC variations of these products are a significant part of high performance building systems such as the LEED standard, Living Building Challenge, and WELL, which have all recognized the need to reduce VOC exposure in general to improve occupant health and performance.

Carbon Dioxide and Performance

One of the most widely used metrics for measuring ventilation is CO_2 concentration in the space. Scientists have used CO_2 as a representative gas, and correlate that level to higher levels of VOCs, microbial contaminants, and allergens. However, recent research questions whether CO_2 itself is leading to occupant performance reduction.

The current Standard 62 guideline for CO_2 is 1,000 ppm above outdoor levels. But as discussed above, Standard 62 is first and foremost an engineering standard, rather than a health based one. As Persily pointed out, "CO₂ limits in ventilation standards are related to recommended ventilation rates for body odor control under idealized, steady-state conditions, not to the health or comfort impacts of the CO₂". (Persily, 2015)





William Fisk of Lawrence Berkeley National Laboratory stated, "We've known for a long time that higher carbon dioxide levels were statistically correlated with reduced performance, but we assumed it was a proxy for other pollutants that varied with ventilation rates. That's basically been the dogma." (Stromberg, 2014) We also know that high levels of CO₂ can be detrimental to humans: acute exposure to 50,000 ppm leads to signs of intoxication, 100,000 ppm can cause unconsciousness, and exposure to 250,000 ppm can cause death. (Lipsett, Shusterman, & Beard, 1994) But until 2012, research was not being done on CO₂ concentrations that were conceivable in crowded rooms like elementary school classrooms. (2,500-3,000ppm)

Three studies since 2012 have started a shift in how the scientific community views CO₂ in relation to performance. The first was conducted in 2012 by a group from Budapest University of Technology and Economics, which found that spending a few hours in a chamber with CO₂ levels of 3,000 ppm made it difficult to concentrate. (Kajtár & Herczeg, 2012)

Lawrence Berkeley National Laboratory (LBNL) and SUNY Upstate Medical University performed a study in 2012, in which participants were subjected to different levels of CO₂ for 2.5 hour intervals in an attempt to see how the different concentrations affected decision making skills. 22 participants were exposed to CO₂ at 600, 1000, and 2500 ppm, and at the end of each period took a test (the SMS test discussed earlier) measuring decision making performance, health symptoms, and perceived air quality. This study found that relative to the 600 ppm level, performance on 6 of 9 scales was reduced moderately at 1000 ppm, and performance on 7 of 9 scales was greatly reduced at 2500 ppm. While concentrations approaching 2500 ppm are rarely seen in most office environments, a study of elementary schools in Texas showed that a substantial number exhibited concentrations above 2000 ppm. (Corsi, Torres, Sanders, & Kinney, 2002)

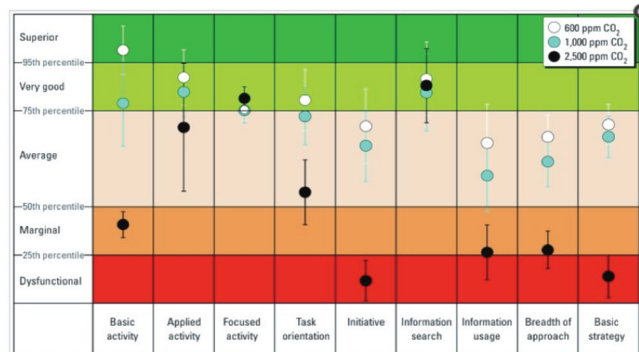


Figure 2: Impact of CO₂ on human decision making performance. Error bars indicate 1 SD.
(Satish, et al. 2012, Environmental Health Perspectives, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3548274/>)



In 2015, researchers from the Harvard School of Public Health, SUNY Upstate Medical School, and Syracuse University authored a paper examining the association between CO₂, Ventilation, and VOC exposure and cognitive function scores. This study was designed to build off the findings from the LBNL study to include different building types (high performance and typical), longer exposure times, and blinded participants, among other changes. In the study, 24 participants worked for 6 days in a mocked up office, where minimum ventilation standards as defined by ASHRAE were implemented. On each of the 6 days, the rates of ventilation, Total VOC, and CO₂ levels were set in different combinations, to which the participants were blinded. Building types were divided between "Conventional", "Green" (low VOC) and "Green +" ("Green" with higher ventilation rates). On two of the study days, the authors also changed the amount of CO₂ in the space, holding all other variables (ventilation and VOC concentration) constant. CO₂ concentrations varied from 550 ppm to 1400 ppm.

Each day, participants completed the SMS test, which computed scores for 9 cognitive factors. On average, cognitive scores for were 61% higher on "Green" days and 101% higher on "Green +" days.

Three areas showed the largest improvements: crisis response, information usage, and strategy. Crisis responses were 97% higher in the "Green" environment and 131% higher in the "Green +" environment compared to conventional buildings. Information usage scores were 172% and 299% higher, respectively. Scores "Green" and "Green +" buildings were 183% and 288% higher than the conventional building scenario.

Costs/Benefits

Buildings account for more than 40% of US energy consumption, with nearly half of that coming from commercial buildings. In office buildings, more than half of the energy costs are attributable to heating, ventilating, and cooling. (EIA, 2008, 2015) Therefore, building managers are incentivized to reduce energy wherever possible, which is often accomplished by reducing ventilation rates.

In the 1970s, increasing energy prices led to a change in the way buildings were constructed and operated in the United States. Buildings were built to be more air tight and energy efficient, and ventilation requirements were relaxed to conserve energy in the 1980s. Around the same time, building related illnesses and Sick Building Syndrome (SBS) were first reported. (Riesenberg & Arehart-Treichel, 1986)

While it is helpful to have scientific literature on the indoor environment's influence on occupant performance, the costs and benefits must be weighed before these changes are implemented in the real world. As Fisk et al found in a study from 2011, "estimates [of benefits], particularly the monetary estimates, also facilitate the communication of the importance of IEQ to policy makers, building professionals, and the broader public." (W. J. Fisk, Black, & Brunner, 2011)

Studies have consistently shown that increased productivity does outweigh the costs of increased energy usage in a building.

Table 1: Estimated potential productivity gains from improvements to indoor environments (Fisk & Rosenfeld, 1997)

Sources of Productivity Gain	Strength of Evidence	Potential U.S Annual Savings or Productivity Gain (1993 \$U.S)
Reduce respiratory disease	Strong	\$6-\$19 billion
Reduce allergies and asthma	Moderate	\$1-\$4 billion
Reduce sick building syndrome symptoms	Moderate to Strong	\$10-\$20 billion
Improve worker performance: From changes in thermal environment From changes in lighting	Strong Moderate	\$12-\$125 billion



In 2015, the authors of the Harvard study also evaluated the results of their previous study in cost/benefit terms. They found that doubling the ventilation rate would cost less than \$40 per person per year in all climate zones investigated, and would improve the performance of workers by 8%. This was equated with a \$6,500 increase in employee productivity per year. (MacNaughton et al., 2015) They also updated the numbers presented in table 1, approximating the annual savings of \$125 billion in 1993 dollars is roughly \$186 billion in 2015 dollars. They also estimated that even with conservative estimates, the increased productivity of an employee is more than 150 times higher than the energy costs associated with increasing ventilation. (MacNaughton et al., 2015)

Conclusion

Based on the body of current research, it is clear that the productivity of workers is becoming more easy to measure, and the benefits of improved IEQ are becoming more obvious to policy makers, building managers, and companies occupying those buildings. It is important to note that as building envelopes become tighter, the energy required to ventilate the space effectively will be reduced. This allows for a future of buildings that are more energy efficient and healthier for the workers that occupy them. In the same way that Total Worker Health programs are moving away from merely preventing accidents to providing healthy spaces for employees, building managers and engineers should heed the research of the last 10 years showing a clear need to optimize indoor environmental conditions for occupants.

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ENERGY DEPARTMENT ANNOUNCES OVER \$400 MILLION IN FUNDING AND REMOVES BURDENSOME POLICY, HELPING AMERICANS SAVE ON ENERGY BILLS

WASHINGTON —The U.S. Department of Energy (DOE) today announced the disbursement of over \$400 million for energy saving programs designed to help American families save money on their energy bills.

[Office of State and Community Energy Programs](#)

July 8, 2025

 3 min

WASHINGTON —The U.S. Department of Energy (DOE) today announced the disbursement of over **\$400 million** for energy saving programs designed to help American families save money on their energy bills. This funding helps to advance President Trump's Executive Orders on [Delivering Emergency Price Relief for American Families and Defeating the Cost-of-Living Crisis](#) and [Unleashing American Energy](#), which terminates expensive and unnecessary New Green Deal mandates and returns the agency's focus on delivering cost savings directly to the American people.

The Department is allocating **\$325 million** in Weatherization Assistance Program (WAP) funds and **\$30 million** in Weatherization Readiness Funds (WRF) to 56 Grantees including all 50 states, the District of Columbia, and five U.S. Territories. These investments advance the Administration's policies and priorities to reduce energy costs for American households and generate employment opportunities for American workers by driving down energy costs for low-income families through residential energy efficiency and improved health and safety.

"Thanks to President Trump's leadership, we are able to focus on reducing energy costs for Americans that can least afford high energy prices through the efforts of Weatherization," said **Eric Mahroum, Director of the DOE Office of State and Community Energy Programs**. "Every day, President Trump empowers consumer choices while reinvigorating America's energy industry and the economy. With a commitment to reduce energy costs for all Americans, while simultaneously modernizing and reinvigorating energy dominance across all sectors, President Trump is fulfilling his promises to the American people."

In addition to the Weatherization funding, DOE is today releasing **\$64 million** in State Energy Program (SEP) funds to the same 56 grantees to pursue programming that ensures energy reliability, availability, security,

9/8/25, 1:47 PM ENERGY DEPARTMENT ANNOUNCES OVER \$400 MILLION IN FUNDING AND REMOVES BURDENSOME POLICY, HELPING A...

and cost savings for businesses and residents. State governments are a critical partner in achieving the President's vision of American Energy Dominance and SEP will continue to advance this critical mission.

Effective immediately, the department is also rescinding the Weatherization Program Notice 22-10 policy considering social cost of carbon and other non-energy impacts within WAP. Removing the provision reduces steps in the energy audit process and improves efficiency for states when using Federal resources. For more information on timelines related to this policy change, contact WAPTA@hq.doe.gov.

Since 1976, WAP has served over seven million households and delivers an average annual energy savings of \$372 while reducing the Nation's dependence on imported energy supplies and cutting out-of-pocket medical expenses by an average of \$514 per household. WAP's statutory requirement for cost effectiveness ensures that for every Federal dollar invested there is at a minimum one-dollar payback in energy savings while also stimulating economic growth through increased opportunities for energy and local trade jobs.

Since 1976, SEP has ensured that State Governments are enjoined in the effort to reduce America's dependence on foreign sources of energy, strengthen energy security, and perform transmission and distribution planning support activities, yielding savings and reliability for American homes and businesses.

May 8, 2025

The Honorable Mike Lee
Chairman
Energy and Natural Resources Committee
United States Senate
Washington, DC 20510

The Honorable Martin Heinrich
Ranking Member
Energy and Natural Resources Committee
United States Senate
Washington, DC 20510

The Honorable Brett Guthrie
Chairman
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

The Honorable Frank Pallone
Ranking Member
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

RE: Grassroots Support Letter for the Bipartisan Weatherization Enhancement and Readiness Act of 2025 (H.R. 1355)

Dear Chairman Lee, Chairman Guthrie, Ranking Member Heinrich, and Ranking Member Pallone,

We, the undersigned coalition of nearly **750** contractors and weatherization stakeholders, write to urge you to support the **bipartisan Weatherization Enhancement and Readiness Act of 2025 (H.R. 1355)**, sponsored by Reps. Tonko (D-NY-20), Lawler (R-NY-17), Kaptur (D-OH-09), Riley (D-NY-19) and Del. Moylan (R-GU-AL). This legislation would reauthorize the Department of Energy's Weatherization Assistance Program (WAP) through 2030 – authorization currently set to expire at the end of this fiscal year. The legislation would also give states and local agencies flexibility to reach more low-income homeowners currently ineligible for funding under WAP due to their homes' structural, electrical, or health related issues. We urge you to support the Weatherization Enhancement and Readiness Act to ensure that eligible homeowners can access WAP funds to make their households safer, healthier, and more energy efficient.

Since its creation in 1976, WAP has helped improve the lives of over 7.2 million low-income and rural Americans - individuals particularly susceptible to high energy burdens.¹ Congress has consistently shown strong bipartisan support for this program, which enables upgrades that save households an average of \$372 or more every year.² The bipartisan Energy Act of 2020, signed by President Trump, reauthorized the program until fiscal year 2025.³ In the face of rising energy prices, the program's reauthorization will ensure that these benefits continue to flow directly to consumers.

In addition to reducing energy costs, WAP supports local jobs for the organizations and contractors providing weatherization services to households across the country. According to the Department of Energy, the annual funds provided by WAP support 8,500 jobs every year.¹ Much of WAP's work is on the ground—performing in-home installations or maintenance—and these jobs support local economies and cannot be outsourced.

¹ Department of Energy, Weatherization Assistance Program, <https://www.energy.gov/scep/wap/weatherization-assistance-program>.

² Ibid.

³ Energy Act of 2020, SEC. 1011. Weatherization Assistance Program.

The Weatherization Enhancement and Readiness Act of 2025 would also increase access to the program, ensuring program dollars go further. The legislation would authorize the Weatherization Readiness Program to address issues such as structural deficiencies, neglected repairs, outdated wiring, or health issues such as mold and asbestos, allowing more homes to qualify for WAP. The legislation would also raise the limit on how much assistance households can receive under WAP to \$12,000, allowing the program keep up with rising costs of building materials, equipment, and wages while also supporting more improvements per project for maximum energy savings.

We strongly urge your support for the Weatherization Enhancement and Readiness Act of 2025 (H.R.1355) to reauthorize and strengthen this crucial program. Please contact Skip Wiltshire-Gordon (skip@anndyl.com) with any questions.

Sincerely,

220 Home Performance Contractors and Energy Efficiency Companies:

Arctic Technical Services	Fairbanks	AK
Keen Living LLC	Fairhope	AL
Balanced Temp	Birmingham	AL
Comfort Air Quality	Huntsville	AL
Home Rebate Group	Birmingham	AL
Sun Plans Inc.	Mobile	AL
AirCycler	Rector	AR
Ecoviabl LLC	North Little Rock	AR
SunCrop Solar & Energy Solutions	Helena	AR
Arizona Energy Management	Phoenix	AZ
CozyHome	Flagstaff	AZ
Luxury Electrical Services LLC	Tucson	AZ
Recon Restoration	Phoenix	AZ
1-888-HEAT-PUMPS	Berkeley	CA
Action Air Conditioning Heating & Plumbing	Fresno	CA
AIM Associates	Petaluma	CA
CARES	Eureka	CA
Eco Performance Builders	Walnut Creek	CA
Efficiency Now	San Rafael	CA
Energy Conservation Consultants	Orangevale	CA
Environmental Home Improvement	Los Angeles	CA
HomeBoost	San Rafael	CA
Liberty Mechanical, Inc.	El Cajon	CA
BrightSense LLC	Boulder	CO
Green Renewables	Fort Collins	CO
HumaNature Architecture LLC	Boulder	CO
Maiven Energy, Inc.	Boulder	CO
ReVireo	Denver	CO
Thrive Energy	Longmont	CO

Timberline Insulation Inc	Fort Collins	CO
Abstract Home Konsult	Mystic	CT
Energy Services Group Inc.	East Hartford	CT
Homeworks	Hartford	CT
Klein Properties LLC	Madison	CT
NexGen Energy, LLC	Rocky Hill	CT
Haram Restoration, Inc.	Washington	DC
Comfort & Energy Solutions	Middletown	DE
Seaside Crawl Space	Bridgeville	DE
Farrell Holdings, Inc.	Tampa	FL
Gast International	Seminole	FL
GreenCales for Sustainable Building LLC	Pensacola	FL
K. O. Energy Design	West Palm Beach	FL
Martin R Robert Construction	Quincy	FL
John Anderson Service Company	Calhoun	GA
Cornerstone Contracting LLC	Cleveland	GA
Energy Consulting Services	Atlanta	GA
Greenhome South	Cedartown	GA
Gwinnett Housing Corporation	Lawrenceville	GA
Ray & Son Htg & A/C Inc	Nashville	GA
Thermal Shield Insulation, LLC	Locust Grove	GA
Home Star Iowa	Cedar Rapids	IA
G&G Insulation	Meridian	ID
Sapp Enterprises	Decatur	IL
Bae Refrigeration	Rochester	IL
Cyclone Energy Group	Chicago	IL
Got Dumped Inc.	Summit-Argo	IL
Greenlink Energy Services, Inc.	Rockford	IL
Hometown HVAC	Paxton	IL
Insight Building Performance Training	Wheaton	IL
MNBE	Elizabethtown	IL
CEDA	Hammond	IN
Livable Housing, Inc.	Indianapolis	IN
Tuttle Heating and AC	Solsberry	IN
Brooks Heating and Air, Inc.	Caneyville	KY
Cumberland Energy Consultants	Somerset	KY
Home Energy Services	Cold Spring	KY
LKLP-CAC	Hazard	KY
SGP Consulting, LLC	Mount Sterling	KY
Solstice Home Performance	Fort Mitchell	KY
Weatherization HVAC	West Liberty	KY

Zembrodt Energy Audits LLC	Latonia	KY
ABC Builder Plus Inc	Abbeville	LA
Tangi Energy Conservation LLC	Ponchatoula	LA
Old Harbor HERS Raters	North Chatham	MA
Alternative Weatherization, Inc.	Fall River	MA
B. Alpha Construction	Chicopee	MA
HomeWorks Energy, Inc.	Medford	MA
Mass Save	New Bedford	MA
Rate It Green, LLC	Weston	MA
RVA	West Yarmouth	MA
Tamarack	West Wareham	MA
Comfort Kings	Chesapeake Beach	MD
DeVere Insulation Home Performance	Pasadena	MD
EDGE Energy	Beltsville	MD
Efficient Home LLC	Bethesda	MD
Elysian Energy	Silver Spring	MD
EnergyScore, Inc	Towson	MD
FLC Energy	Salisbury	MD
Hometrust Remodeling	Laurel	MD
MarketEdge	Kensington	MD
Total Home Performance, LLC	Easton	MD
Wicomico Heating & Air, Inc	Salisbury	MD
Residential Energy Dynamics, LLC	Bethel	ME
Amplify Energy	Cumberland Center	ME
Energy Circle	Portland	ME
Evergreen Home Performance LLC	Rockland	ME
New England Smart Energy	Albion	ME
OptiMiser, LLC	Kennebunk	ME
RS Insulation Inc	Bucksport	ME
Ampro Construction LLC	Hamtramck	MI
Decibel Energy	Ann Arbor	MI
Eco-Environmental Solutions	Detroit	MI
Green Projects Group	Grand Rapids	MI
Heiss Consulting Services LLC	Detroit	MI
Home Services	Kalamazoo	MI
HVAC U, LLC	Southfield	MI
Mid Michigan Spray Foam	Owosso	MI
Seal Tech Insulating Inc	Belleville	MI
Three-Ply Construction & Consulting, LLC	Detroit	MI
WMGB Home Improvement	Rockford	MI
Your Home Solution Experts	Canton	MI
Energy Design Consultants	Circle Pines	MN

Environmental Energy Consultants, LLC.	Park Hills	MO
Dickens and Associates	Carthage	MS
Green Door Energy, LLC	Greensboro	NC
John Tooley, LLC	Siler City	NC
Bailey Heating and A/C	Meadowlark	NE
National Property Inspections, Inc	Omaha	NE
Sunlight Energy Technology	Omaha	NE
Horizon RES NH LLC	Concord	NH
Comeback Farm Organic Produce	Asbury	NJ
Dalmar Energy Solutions LLC	Plainfield	NJ
MaGrann Associates	Mount Laurel	NJ
Utility Advantage, LLC	Woodstown	NJ
Vanguard Building Solutions, LLC	Voorhees	NJ
William G. Severino, Architect, LLC	Little Ferry	NJ
Yadkin Valley Economic Development District, Inc.	River Rd	NJ
ConservFirst	Raton	NM
EnergyWorks	Las Cruces	NM
EverGreen Building Solutions	Chimayo	NM
Action Energy Consultants	Greenwood Lake	NY
Adirondack Efficiency	Adirondack	NY
Airtight Services, Inc.	Marion	NY
Beneficial Insulation and Exteriors	New York	NY
Bright Power	New York	NY
CMC Energy Services	Piermont	NY
DickKornbluth, LLC	Syracuse	NY
Eash Blower Door	New York	NY
Energy Conservation Services, Inc	Port Ewen	NY
Energy Evolution Inc	Spring Valley	NY
Energy Savers Inc	East Syracuse	NY
Gaia Sharbel Energy	Poughkeepsie	NY
GEO Environmental Co., Inc.	Yorktown Heights	NY
Green Building Specialists	Pine Bush	NY
Green Home Logic	Ridgewood	NY
Green Pathway Consultants	Kerhonkson	NY
GreenStar Home Services	Buffalo	NY
Halco Home Solutions	Phelps	NY
Koala Insulation of Northern Westchester	Briarcliff Manor	NY
M&D Energy Audits / Weatherization Contractor	New York	NY
NYS Energy Solutions Inc	Bethpage	NY
SunComfort Solutions	New York	NY
Three Peaks Energy	Syracuse	NY
U.S. Light Energy	Latham	NY

Wise Home Energy LLC	Rochester	NY
Scaled	Fairport	NY
Apex Lead Inspections	Youngstown	OH
COAD/OWTC	Little Hocking	OH
Frangella's Energy Services	Galion	OH
Green Building Consulting	Cincinnati	OH
My Great Escape, LLC	Toledo	OH
Summit County HWAP	Akron	OH
TruTech Tools, LTD	Mogadore	OH
Cotton Electric Cooperative	Walters	OK
Retro Tec Insulation LLC	Bixby	OK
Aladdin Heating and Air Conditioning	Gresham	OR
All Phase Weatherization	Prineville	OR
Alpha Energy Savers Inc	Clackamas	OR
Good Energy Retrofit	Portland	OR
Multnomah County Weatherization	Portland	OR
Neil Kelly Design/Build	Portland	OR
Pat Elston Construction (retired)	Ashland	OR
Resilient Retrofits	Portland	OR
Advanced Efficiency Worx	York	PA
Bruce Wilson Contracting	Coopersburg	PA
Building Performance Architecture	Pittsburgh	PA
C. Driscoll Positive Energy Consulting	Connellsville	PA
Celentano Energy Services	Glenside	PA
DMI Companies	Charleroi	PA
Earth Forward Group	Belleville	PA
Energy Efficiency Empowerment	Pittsburgh	PA
MT Building Services	Harrisburg	PA
Solaire Energy	Canton	PA
TTR General Contractors	York	PA
Tallento Corp	Chapin	SC
Total Comfort Heating & Air Conditioning, Inc.	Rapid City	SD
Energy Home Basics	Lenoir City	TN
Building Performance Consultants	Cedar Park	TX
Knauf Insulation North America	Mc Kinney	TX
Kuehne HVAC	Florence	TX
Larson Energy Research	Dallas	TX
OGM Remodel & Rehab	San Antonio	TX
Greencat Utaha	Orem	UT
Home Energy Medics	Arlington	VA
Air Resolutions	Glen Allen	VA
Beel Group, LLC	Onemo	VA

Better Building Works LLC	Roanoke	VA
Building Performance Strategies	Louisa	VA
CvS Consulting, LLC	Arlington	VA
DMI	Arlington	VA
Hancock Software	Alexandria	VA
Home Energy Assessors	Henry	VA
Home Performance Consulting	Montross	VA
Home Performance Services	Richmond	VA
ICF	Reston	VA
3E Thermal	Peru	VT
Bruce Harley Energy Consulting LLC	Readsboro	VT
jwtGroup, PC	Chittenden	VT
Energy Savers, Inc	Seattle	WA
Green Built Insulation	Edmonds	WA
KW Energy LLC	Chewelah	WA
Mighty House Construction	Seattle	WA
PTU Construction	Vancouver	WA
SynerGreen	Spokane	WA
FWC Architects	Racine	WI
Norman Bair Consulting	Madison	WI
Ultimate Insulation	La Crosse	WI
Weatherization Service LLC	Milwaukee	WI
Franklin Energy	Washington	WI
EnergySmart LLC	Afton	WY
133 Residential Energy Efficiency Organizations:		
National Association for State Community Services Programs	Atlanta	GA
Habitat for Humanity	Irons	MI
Montana Weatherization Training Center	Bozeman	MT
Community Action Agency of Northeast Alabama, Inc	Rainsville	AL
Community Service Programs of West Alabama	Vestavia Hills	AL
C-SCDC	Fort Smith	AR
A New Leaf	Mesa	AZ
Community Action Human Resources Agency- CAHRA	Eloy	AZ
Foundation for Senior Living	Phoenix	AZ
FSL Home Improvements	Phoenix	AZ
Rebuilding Together	Mesa	AZ
SEACAP	Safford	AZ
WACOG	Yuma	AZ
Central Coast Energy Services	Watsonville	CA
Efficiency First California	Sonoma	CA

Electric & Gas Industries Association	Sacramento	CA
Energy Resource Center - Berthoud	Pacifica	CA
Greater Bergen Community Action, Inc.	San Francisco	CA
MAAC PROJECT	Chula Vista	CA
North Coast Energy Services, Inc.	Ukiah	CA
Project GO, Inc.	Roseville	CA
Rebuilding Together Silicon Valley	San Jose	CA
American Solar Energy Society	Boulder	CO
Energy Resource Center	Colorado Springs	CO
Energy Resource Center - Denver	Denver	CO
Energy Resource Center - Sterling	Sterling	CO
Energy Smart Colorado	Frisco	CO
Housing Resources of Western Colorado	Grand Junction	CO
Northwest Colorado Council of Governments	Silverthorne	CO
Open Arms Community Center	Olympia Heights	FL
Center for Independent Living	Orlando	FL
Centro Campesino Farmworker Center Inc	Florida City	FL
Menominee Delta Schoolcraft Community Action Agency	St. Petersburg	FL
Coastal Plain Area E.O.A., Inc.	Valdosta	GA
Southwest Georgia Regional Commission	Camilla	GA
Hawaii County Economic Opportunity Council	Hilo	HI
ICRT	Champaign	IL
Illinois Association for Community Action Agencies	Springfield	IL
Western Illinois Regional Council	Macomb	IL
Brightpoint	Fort Wayne	IN
Area IV Agency on Aging and Community Action Programs, Inc.	Winamac	IN
Community Action of Greater Indianapolis, Inc.	Indianapolis	IN
Indiana Community Action Association	Indianapolis	IN
Ohio Valley Opportunities, Inc. (OVO)	Madison	IN
East Central Kansas Economic Opportunity Corporation	Ottawa	KS
Bell-Whitley Community Action Agency	Pineville	KY
West Kentucky Allied Services Inc	Mayfield	KY
Evangeline Community Action	Broussard	LA
Quad Area Community Action Agency	Hammond	LA
Citizens for Citizens	Fall River	MA
Preservation of Affordable Housing	Somerville	MA
Weatherization	Taunton	MA
Garrett County Community Action Committee	Oakland	MD
National Center for Healthy Housing	Columbia	MD
Build Green Maine	Brooks	ME
Community Concepts Inc	Lewiston	ME

E4 the Future	Scarborough	ME
Kennebec Valley Community Action	Vienna	ME
Kennebec Valley Community Action Program	Waterville	ME
York County Community Action	Sanford	ME
Community Action of Allegan County	Allegan	MI
8 Cap	Lakeview	MI
Michigan Energy Efficiency Contractors Association	East Lansing	MI
Mid-Michigan Community Action Agency	Clare	MI
Washtenaw County Community & Economic Development	Milan	MI
Community Action Partnership of Ramsey and Washington Counties	Saint Paul	MN
Center for Energy and Environment	Minneapolis	MN
Just Housing SBC	Duluth	MN
Community Action Agency of Greater Kansas City	Kansas City	MO
Mission: St. Louis	St. Louis	MO
Delta Design Build Workshop	Greenwood	MS
Warren-Washington-Issaquena-Sharkey Community Action Agency, Inc.	Greenville	MS
Western Piedmont Council of Governments	Hickory	NC
Central Nebraska Community Action Partnership	Loup City	NE
Blue Valley Community Action	Wymore	NE
Healthy Housing Omaha	Bellevue	NE
Gateway Community Action Partnership	Bridgeton	NJ
HomeWise, Inc.	Cherry Hill	NJ
Isles, Inc.	Trenton	NJ
Rural Nevada Development Corp	Ely	NV
Rural Nevada Development Corporation	Ely	NV
Washtenaw County	Kenmore	NY
Association for Energy Affordability, Inc	Bronx	NY
Building Performance Contractors Association of NYS	Sackets Harbor	NY
Building Performance Institute	Saratoga Springs	NY
Chautauqua Opportunities	Jamestown	NY
Green Energy Times	East Berne	NY
Hanac Weatherization	Astoria	NY
Home HeadQuarters	Syracuse	NY
Joint Council for Economic Opportunity of Clinton and Franklin Counties	Plattsburgh	NY
LifeWorks Community Action	Ballston Spa	NY
New York Energy Assessments	White Plains	NY
SEVCA	Gordon Heights	NY
Sunset Park Redevelopment Committee	Brooklyn	NY
Supportive Services Corporation	Lancaster	NY

Sustainable Westchester	Mount Kisco	NY
Tioga Opportunities	Owego	NY
	Washington Court	
Community Action Commission of Fayette County	House	OH
Community Resources Weatherization Department	Beverly	OH
North Central Community Action Program, Inc.	Portsmouth	OH
Ohio Heartland CAC	Marion	OH
Community Energy Project	Portland	OR
Multnomah County	Portland	OR
Philadelphia Solar Energy Association	Wyndmoor	PA
Central Pennsylvania Community Action, Inc.	Clearfield	PA
Agency for Community EmPOWERment of NEPA	Lake Ariel	PA
Building Performance Association	Pittsburgh	PA
Central PA Community Action	Philipsburg	PA
Pittsburgh Gateways Corp	Pittsburgh	PA
Tableland Services, Inc.	Stoystown	PA
Trehab	Montrose	PA
Keystone Energy Efficiency Alliance	Philadelphia	PA
Blackstone Valley Community Action	Pawtucket	RI
Aiken/Barnwell Counties Community Action Agency	North Augusta	SC
Waccamaw Economic Opportunity Council Weatherization	Conway	SC
Wateree Community Actions	Sumter	SC
BakerRipley	Cypress	TX
Community Action Corporation of South Texas	Alamo	TX
Community Council of South Central Texas	Seguin	TX
Economic Opportunities Advancement Corporation	Waco	TX
Panhandle Community Services	Amarillo	TX
South Plains Community Action Agency	Levelland	TX
Southface Institute	Abilene	TX
Greenbound	Richmond	VA
Benton Franklin CAC	Pasco	WA
OIC of Washington	Yakima	WA
La Casa De Esperanza	Waukesha	WI
RKCAA	Racine	WI
CHANGE, INC	Weirton	WV
Community Resources Inc	Parkersburg	WV
Community Resources Inc.	Parkersburg	WV
Energy Efficient WV	Charleston	WV
Nicholas Community Action Partnership, Inc.	Summersville	WV

394 Individual Home Performance Contractors and Stakeholders:

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Keith Hall	Anchorage	AK
Amy Calhoun	Montgomery	AL
David Hannah	Bryant	AR
Melissa Alumbaugh	Benton	AR
Elena Chrimat	Tempe	AZ
Joshua Manuel	Ajo	AZ
Shaun Smiley Scott	Phoenix	AZ
Carrie Nawrocki	Globe	AZ
Manuela perez	Mesa	AZ
Eva Felix	Mesa	AZ
Jessica Magee	Flagstaff	AZ
Katie Martin	Chandler	AZ
Marysol Rivera	Mesa	AZ
Michael Martinez	Mesa	AZ
Christina Camargo	San Fernando	CA
David Leanos	Bell	CA
David Parker	Aromas	CA
Derek Ryder	Los Angeles	CA
Halla Dontje Lindell	Los Angeles	CA
Joy Sledge	Oakland	CA
Ruby Ranoa	Santa Cruz	CA
Susana Apeles	Los Angeles	CA
Sydney Hannum	Camarillo	CA
Tom White	Antioch	CA
Robert Sykes	Monrovia	CA
Chandra Apperson	Sonoma	CA
Daniela Grismich	Berkeley	CA
Jason Kempen	San Francisco	CA
Keith O'Hara	Walnut Creek	CA
Leslie Koenig	Grand Junction	CO
Michelle Warren	Fort Collins	CO
Will Clagett	Fort Collins	CO
Cody Kumar	Avon	CO
Anna Ballweber	Colorado Springs	CO
David Malouff	Alamosa	CO
Dylan Townsend	Berthoud	CO
John Whetzal	Colorado Springs	CO
Jonathan Judd	Berthoud	CO
Lindsee Vidaurri	Berthoud	CO

Marcus Redden	Colorado Springs	CO
Matthew Harris	Denver	CO
Michael Mitchell III	Loveland	CO
Michelle Butler	Edgewater	CO
Sawyer Manus	Loveland	CO
William Froehlich	Berthoud	CO
Michael Frownfelter	Bridgeport	CT
Patrick McCafferty	Birmingham	CT
Frank Wilsey	Hamden	CT
Alex Aquino	Tarpon Springs	FL
Ann Huskey	Miccosukee Cpo	FL
Shawn Angell	Hollywood	FL
Bram McKinley	Bradenton	FL
Daniela Archbold	DeLand	FL
James McKinley	Bradenton	FL
Scott Patrick	Yulee	FL
Amy Shyers	Decatur	GA
Emilio Carlos	Loganville	GA
Mike Barcik	Decatur	GA
Quenton Talley	Duluth	GA
Tomorrow Bowen	Lithonia	GA
Diane Chojnowski	Fairfield	IA
Teresa Tague	Marshalltown	IA
Claude Papesh	Newhall	IA
Toby Noller	Urbana	IL
Abigail Antoniazzi	Willow Springs	IL
Alex Arellano	Chicago	IL
Bethany Ragains	Champaign	IL
Bradley Wiesneth	Westmont	IL
Carlin Witte	Peoria	IL
Cynthia Mitchell	Urbana	IL
Dan Maksymiw	Chicago	IL
Daniel Alvarez	Chicago	IL
David E Hawk	Bushnell	IL
Kristopher Chapman	Champaign	IL
Lori Shupe	Champaign	IL
Marcy Mulholland-Chandler	South Holland	IL
Matthew Canvin	Oak Forest	IL
Pete Kutcher	Chicago	IL
Krystal Rose Luie	Kankakee	IL
Alan Duden	Gifford	IL

Antonio Williams	Blue Island	IL
Donovan Herman	Chicago	IL
Ebony Buchanan	Dolton	IL
Jan Dickson	South Holland	IL
Jeanine Otte	Chicago	IL
Justin Arnold	Champaign	IL
Micheal Edwards	Kewanee	IL
Mike Berkowitz	Chicago	IL
Nathaniel Strink	Fisher	IL
Sharon Moore	Chicago	IL
Yigang Sun	Champaign	IL
Alyson Alde	Bloomington	IN
Lisa Zakowski	South Bend	IN
Rosa Tomas	South Bend	IN
Jeff Rowlett	Madison	IN
Micah Curry	Madison	IN
Robert Simms	Ottawa	KS
Linda Wood	Ottawa	KS
Nicholas Pfeifer	Lawrence	KS
Shondi Larios	Ottawa	KS
Rocky Fulcher	Vine Grove	KY
Shelby Reed	Paducah	KY
Stephanie Plumb	Mount Sterling	KY
Kent Dodd	Mayfield	KY
Wesley Melson	Columbia	KY
Michelle Hughes	Mansfield	LA
Mercedes Amador	Folsom	LA
Jeffrey Eccles	Madisonville	LA
Keith Swartz	Monroe	LA
Pam Lewandowski	Baton Rouge	LA
Debra Cassisa	Hammond	LA
Kevin Ring	Methuen	MA
Kristopher Pieper	Springfield	MA
Abbie Phillip	Westfield	MA
Abigail Chouinard	Amherst	MA
Alexander Mocerri	Mattapoissett	MA
Derek Lanotte	West Boylston	MA
Emylee Patenaude	Boston	MA
Francis Cummings	Concord	MA
Joseph Panzera	Worcester	MA
Kevin Lightfield	Tewksbury	MA

Kobe Billington	Medford	MA
Michael Hathaway	Palmer	MA
Samantha Magnan	Medford	MA
Scott DeFlaminis	Medford	MA
Steven Antonini	Marlborough	MA
Stuart Zimmerman	Natick	MA
Suzanne Smith	Hyannis	MA
Zadek Burstein	Woburn	MA
Audrey Pacious	Brookline	MA
Allison Jolley	Waban	MA
Abby Kessler	Medford	MA
Alyssa Webster	Newton	MA
Bartman Wilson	Plymouth	MA
Ben Cressy	Boston	MA
Brian Foss	Sandisfield	MA
Christina Michaud	Medford	MA
Christopher Ryan	Oxford	MA
Frank Armentano	Brighton	MA
Helene Scott	Salem	MA
Jane Tekin	North Adams	MA
Jessica Levarity	Billerica	MA
Jim Brown	Waltham	MA
Kenneth Strout	Monson	MA
Kevin Cho	Medford	MA
Martijn Fleuren	Medford	MA
Natasha Lyman	Medford	MA
Rachel Surette	Medford	MA
Scott Dinsmore	Medford	MA
Amparo Rodriguez	Dundalk	MD
Anisha Carr	Silver Spring	MD
Dodie Foster	Easton	MD
Larry Price	Easton	MD
Madison Hammon	Easton	MD
Sunita Pathik	Baltimore	MD
Tara Jenkins	Williamsport	MD
Bryan Koerber	Pasadena	MD
Robert Relyea	Easton	MD
Al Schwartz	Baltimore	MD
Alex Dumont	Avenue	MD
G Andrew Bauer	Baltimore	MD
Guthrie Matthews	Easton	MD

Hunter Arthur	Easton	MD
Lluis M. Vaca Soto	Rockville	MD
Logan Smith	Easton	MD
Mark Holden	Easton	MD
Megan Murray	Laurel	MD
Robert Mullikin	Easton	MD
Shelby Vogel	Easton	MD
Tylor Deeds	Chesapeake Beach	MD
Zach Thomas	Queenstown	MD
Michelle Eaton	Winterport	ME
Sierra Powers	Waterville	ME
Brian Robinson	Rockland	ME
Ben Dueweke	Detroit	MI
Cheryl Laban	Mio	MI
Christopher Nagy	Holland	MI
Craig Levi	Clare	MI
David Anderson	Detroit	MI
Glen Butt	Harrison Township	MI
Guy Taylor	Livonia	MI
Jacob West	Allegan	MI
Jake Fryer	Harrison	MI
Jesse Heath	Clare	MI
Joe Manzella	Clinton Township	MI
Jolie Trombley Williams	Okemos	MI
Koby Grider	Stanton	MI
Krista McPhall	Clare	MI
Morgan Wykoff	Clare	MI
Rachel Lenardon	South Lyon	MI
Robert Riley	Mason	MI
Sean Metivier	Detroit	MI
Timothy Cotter	Springfield	MI
Tom Tishler	Kalamazoo	MI
Carlee Knott	Lansing	MI
Patricia Sousley	Allegan	MI
Rhonda Sweat	Burton	MI
Walter Gayeski	Traverse City	MI
Spenser Christensen	Marshall	MN
Anna Wiebe	Minneapolis	MN
Brian Fisher	Saint Paul	MN
Carl Knetsch	Minneapolis	MN
Curtis Bird	Minneapolis	MN

Elliott Cudak	Saint Paul	MN
Emily Beltt	Saint Paul	MN
Jeff Theis	Minneapolis	MN
Patrick Keiser	Bemidji	MN
Paul Cole	Minneapolis	MN
Sarah Northrup	Saint Paul	MN
Tony Beres	Saint Paul	MN
Angeline Quilt	Minneapolis	MN
Matthew Douglas-May	Minneapolis	MN
Raymond Dickson	Saint Paul	MN
Darryl Irvin	St. Louis	MO
Jason Pletz	Jefferson City	MO
John Krull	Kansas City	MO
Lake Graham	Drexel	MO
Martha Crites	Farmington	MO
Beatrice Parks	Saint Louis	MO
Frederick love	Arcola	MS
James Davis	Jackson	MS
Charity Thomas	Flowood	MS
Christopher Williams	Hattiesburg	MS
Byron Pederson	Butte	MT
Tony Mullen	Boyd	MT
Jake Perrin	Bozeman	MT
Jacob Stephens	Candor	NC
Paul Swenson	Greensboro	NC
Seth Little	Asheville	NC
Carlos Rendon	Charlotte	NC
Jayden Erdmann	Bismarck	ND
Skylar Quast	Bismarck	ND
Daryll Lawson	Bismarck	ND
Douglas Hoffman	Bismarck	ND
Katie Schultis	Fremont	NE
Tim Kruger	Loup City	NE
Shari Weber	Fairbury	NE
Craig Yergeau	Manchester	NH
Jennifer Butzgy	Phillipsburg	NJ
Katie Consales	Princeton Junction	NJ
Kevin Schwartzbach	Princeton	NJ
Matthew Mahon	Camden	NJ
Michael Tooher	Riverton	NJ
Miriam Genovesi	Elizabeth	NJ

Siegel Frederic	East Orange	NJ
Annette Coggins	Bridgeton	NJ
Martin Kushler	Farmington	NM
Anthony Natale	Reno	NV
Meg Rhoades	Ely	NV
August Ruckdeschel	Patchogue	NY
Christopher Johnson	Brooklyn	NY
John bisgrove	Auburn	NY
LeAnne Harvey	Brooklyn	NY
Mark DeChiro	Albany	NY
Mark Froloff	New York	NY
Matt Oyer	Rochester	NY
Ronald Gill	Red Creek	NY
Sage Ray	Brooklyn	NY
Thomas Platten	Canaan	NY
Will Tompkins	Falconer	NY
Zach Merrin	Schenectady	NY
Darlene Welch	Saratoga Springs	NY
Mason Donovan	Niagara Falls	NY
Becca Bostwick	New York	NY
Chelsea Jagdat	Queens	NY
Elena Ribota	New York	NY
Jake Greenbaum	Batavia	NY
Laura Natalzia	Buffalo	NY
Liston Freeman	Woodstock	NY
Lynn Franz	Saratoga Springs	NY
Michele Calabrese	Islip	NY
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Carmillia Zion	Lima	OH
Devon Cooper	Athens	OH
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Jonathan Harrington	Columbus	OH
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Jared Kennedy	Eugene	OR
Wesley Shorack	Eugene	OR
Francisco J. Venegas	Klamath Falls	OR
Andy Ortiz	Salem	OR
James Richmond	Portland	OR

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Cory Merrbach	Everett	PA
James Bingley	Hatfield	PA
Jennifer Saks	Pittsburgh	PA
Kerri Weitzel	Williamsport	PA
Kristel Shearer	York	PA
Nicholas Skari	Philadelphia	PA
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Beth Somishka	Bethlehem	PA
Mark Rich	Manchester	PA
Molly Miller	Somerset	PA
Nick Richardson	Hamburg	PA
Richard Jones	Red Lion	PA
Scott Hudach	New Castle	PA
Ted Adameroovich	Latrobe	PA
David Mello	Cranston	RI
Elija Hernandez	Pawtucket	RI
Emerson Gomez	Warwick	RI
Eric Anderson	Columbia	SC
Aaron Walker	Nashville	TN
Andrew Swallow	Blountville	TN
Felisha Nichols	Nashville	TN
Keith Canfield	Mount Juliet	TN
Matthew Kolb	Carthage	TN
Rebecca Eckman	Oak Ridge	TN
Tuesday Hampton	Antioch	TN
Nicole Feild	Memphis	TN
Vicky Campbell	Johnson City	TN
Alicia Avila-Penalver	San Antonio	TX
Carol Delgado	Seguin	TX
Doug Misenheimer	Manor	TX
Leonel Rangel	Austin	TX
Lohany Smith	Houston	TX
Manuel Peguero	Houston	TX
Mario Tamez	San Antonio	TX
Yancey Turner	Dallas	TX
Yeimy Gil	Houston	TX
Jhoanna Cardozo	Houston	TX
Andre Fuhrman	Converse	TX
Ariel Kaufman	Spring	TX

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 Brian Nickisch
 Jabrone Laktzian
 Kari Kuiper
 Karla Ojeda
 Larry Wallace
 Nicholas LeRoy
 Selam Aklog
 Stephanie Patrick
 Osvaldo Saldana
 Steven Libardi
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 Miritza Thorpe
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 Autumn Strom
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 Keelin Banks
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 Darrell Oakley
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 Vincent Feltes
 Doug Elflne
 Andrew Ramirez
 Frank Martinez
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 Matt Shirer
 Michael Johnson
 Brendon Shoemaker
 Hung Yang
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 Les Schmidt
 Lisa Fischer

Amarillo TX
 Shavano Park TX
 San Antonio TX
 Lufkin TX
 San Antonio TX
 Rowlett TX
 Irving TX
 Richardson TX
 Houston TX
 Vineyard UT
 Pleasant Grove UT
 Springfield VA
 Roanoke VA
 Stafford VA
 Woodlawn VA
 Marion VA
 Winooski VT
 Colchester VT
 Groton VT
 Groton VT
 Waterbury VT
 Concrete WA
 Tekoa WA
 Tukwila WA
 Bellingham WA
 Kenmore WA
 Tekoa WA
 Spokane Valley WA
 Seattle WA
 Yakima WA
 Yakima WA
 Yakima WA
 Long Beach WA
 Tacoma WA
 Madison WI
 Milwaukee WI
 Waukesha WI
 Appleton WI
 Appleton WI
 Lancaster WI
 Madison WI

Marc Loeffler	Waukesha	WI
Michelle McGee	Racine	WI
Nat Peplinski	Hudson	WI
Nate Loniello	Waukesha	WI
Patrick Larkin	Waukesha	WI
Christine Wales	Neenah	WI
Alex Arcos	Greenfield	WI
Andrew Munoz	Milwaukee	WI
Dave Herlitzke	La Crosse	WI
Devin Hawthorne	Milwaukee	WI
Edwin Marquez	South Milwaukee	WI
Francisco Munoz	Milwaukee	WI
Rachel Pontius	Kaukauna	WI
Samuel Moran	Milwaukee	WI
Steve Williams	Neenah	WI
Travis Rutter	Appleton	WI
William Ureña	Milwaukee	WI
Cody Conway	Charleston	WV
Dustin Dillon	Kistler	WV
Angela Williams	Summersville	WV
Ben Shannon	Charleston	WV
Charles Chamberlain	Charleston	WV
Cindy Foster	Summersville	WV
Kevin Wynn	Charleston	WV
William Balderson	Parkersburg	WV
Diana Hedlund	Crowheart	WY

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Questions for the Record: Buddy Hughes
 National Association of Home Builders
 House Energy and Commerce Committee
 Subcommittee on Energy
 Hearing on “Building the American Dream: Examining Affordability, Choice, and Security in
 Appliance and Buildings Policies”

The Honorable Robert Latta (R-OH)

1. **The previous administration took a “whole of government” approach to develop and mandate green building policies to end use of fossil energy for heating and cooking. For example, the Biden DOE used a billion-dollar grant program to strong-arm states into adopting controversial “net-zero” building energy codes; the Biden DOE actively encouraged the use of stretch codes that banned natural gas but mandated the installation of EV chargers; and the Biden HUD announced new federal home efficiency mandates for government backed mortgages.**

a. How these policies have already impacted Americans

The previous administration’s “whole-of-government” approach to advancing climate and energy efficiency goals has led to significant changes in federal housing and energy policy. Programs such as DOE’s billion-dollar building energy code grant initiative, HUD and USDA’s new efficiency standards, and updated appliance regulations have already influenced housing costs, energy options, and market dynamics across the country.

DOE’s billion-dollar code program has distorted local housing markets.

Section 50131 of the Inflation Reduction Act directed \$1 billion to incentivize adoption of the unamended 2021 International Energy Conservation Code (IECC) and its zero net energy appendices. While presented as an efficiency initiative, DOE’s implementation left jurisdictions little choice but to adopt a burdensome and expensive unamended edition of the IECC to be eligible to receive funds. In Kansas City, Missouri, adoption of the 2021 IECC without amendments led to a 22 percent decline in single-family permits in just two months, while neighboring communities that kept more flexible codes saw a 117 percent increase. The result: fewer homes built, higher prices, and a shrinking tax base.

Builders also report steep compliance costs—\$9,600 to \$21,400 per home, sometimes exceeding \$31,000 depending on climate zone. One Kansas City builder found the code added more than \$12,000 upfront but yielded only about \$125 a year in energy savings. For a typical family mortgage, that’s roughly \$102 more per month, erasing any long-term savings and pricing out thousands of potential buyers.

HUD and USDA’s national energy-code mandate threatens affordability for low- and moderate-income buyers.

HUD and USDA finalized a rule requiring all new homes they finance to meet the 2021 IECC (and ASHRAE 90.1-2019 for multifamily), despite most states having not yet adopted these standards. Even by HUD’s modest estimates, the rule adds on average \$7,200 per home, pricing out roughly

724,000 households, and exceeding the requirements of the codes adopted in 41 states, creating confusion, construction delays, and appraisal problems. Although President Trump has paused implementation for further review, builders, lenders, and home buyers are already facing uncertainty and project delays due to the rushed rollout.

DOE's electrification push and appliance rules are limiting consumer choice and driving up energy costs.

Beyond building codes, the previous administration advanced appliance standards and other incentives that push households toward all-electric homes. DOE's recent rules will effectively ban non-condensing gas furnaces after 2028 and require most electric water heaters above 35 gallons to use heat-pump technology beginning in 2029. These mandates increase installation costs, create supply-chain challenges, and eliminate lower-cost options for consumers.

At the same time, state policies have encouraged natural gas bans in new construction from New York to Washington State. In cold climates, fully electric packages can add \$15,000 or more to the cost of a home, costs most families cannot absorb. The average household relying on electricity already pays about 42 percent more for heating than those using natural gas, and over the past decade, affordable U.S. gas supplies have saved residential customers \$125 billion.

Mandates focus on new construction instead of real efficiency opportunities.

Modern homes already meet rigorous energy-efficiency standards. According to the National Renewable Energy Laboratory, upgrading the nation's 130 million existing homes built before modern codes could cut electricity use by 5.7 percent annually, far greater savings than forcing new homes into costly code cycles. Yet federal policy has prioritized new-home mandates over retrofitting the aging housing stock, missing the most cost-effective path to genuine energy gains.

Together, these policies have made housing less attainable and energy less affordable. Builders are constructing fewer homes, families are paying more for both mortgages and monthly utility bills, and consumers are losing the ability to decide what energy sources and appliances best meet their needs. Until flexibility and energy choice are restored, Americans will continue to bear the costs of this misguided, one-size-fits-all federal approach.

2. The National Association of Home Builders estimates that compliance with the 2021 International Energy Conservation Code (IECC) could add up to \$31,000 in additional construction costs for some builders. Can you provide details on how that estimate was developed?

NAHB's cost estimates for the 2021 IECC are based on detailed analysis by Home Innovation Research Labs (HIRL), NAHB's independent research affiliate. Using RSMeans¹ and other publicly available material and labor cost data, HIRL calculated the incremental construction costs for an average 2,400-square-foot single-family home required to comply with the 2021 IECC. These costs were benchmarked against both the 2009 and 2018 editions of the code.

¹ RSMeans, Construction Cost Estimating Software, <https://www.rsmeans.com/>

HIRL's analysis found that costs vary depending on climate zone, local construction practices, and the compliance pathway chosen, ranging from roughly \$9,600 to \$21,400 compared to the 2009 IECC baseline. In Climate Zone 4, which includes markets like Kansas City, the estimated increase was up to \$21,400. Importantly, HIRL's estimates assume a lower-cost compliance path and therefore represent a conservative baseline rather than the upper range of possible costs. The analysis uses transparent, traceable cost documentation and is aligned with the same RSMMeans data sources relied upon by the ASHRAE 90.1 development committee.

In practice, however, builders in Kansas City have experienced substantially higher costs, around \$31,000, to comply with the unamended 2021 IECC. These real-world figures come from the Home Builders Association of Greater Kansas City, which collected input from local builders to calculate the price impact based on regional construction practices and local market conditions.

Several factors explain why these numbers exceed HIRL's estimates, but most notably, many Kansas City builders rely on a "double-wall" construction method to achieve the 2021 IECC's insulation and air sealing requirements. This approach is more expensive than HIRL's modeled compliance path but is preferred by local builders because it better accommodates regional building practices, trades, and climatic conditions. The double-wall design provides a reliable way to meet insulation targets without the durability and moisture-management risks sometimes associated with continuous exterior foam insulation. High-performance builders recognized under programs like ENERGY STAR and DOE's Zero Energy Ready Homes have used this design for years because it integrates well with other systems and minimizes long-term maintenance risks.

The Department of Energy's cost estimates are significantly lower than those produced by HIRL because they are based on a 15-year-old study that does not reflect current material and labor costs. DOE's underlying data are not transparent or publicly traceable, making them difficult to verify or replicate. In addition, DOE's methodology omits key business expenses—such as contractor overhead, profit, and other indirect costs, that are included in HIRL's accounting to reflect the true price impact on consumers. Even more telling, a more recent DOE-sponsored analysis by the Pacific Northwest National Laboratory (PNNL) found higher exterior insulation costs than those reported in DOE's own code evaluations, further confirming that DOE's assumptions understate the real-world costs of compliance.

HIRL's estimate of \$21,400 represents a data-driven calculation of the typical costs to comply with the 2021 IECC, while the Kansas City builders' \$31,000 estimate reflects local market realities and practical design choices, such as the use of double-wall assemblies. By contrast, DOE's lower cost figures are derived from outdated and incomplete data that fail to capture the full range of real-world construction expenses. Together, these findings demonstrate the clear difference between modeled assumptions and field experience, underscoring how the 2021 IECC can significantly affect housing affordability across different markets.

The Honorable Randy Weber (R-TX)**1. How important are cost-effective, fuel-neutral energy codes?**

Cost-effective, fuel-neutral energy codes are essential to maintaining housing affordability and protecting consumer choice at a time when most Americans are already priced out of a new home. According to NAHB's 2025 *Priced-Out* study, nearly 75% of U.S. households, about 100.6 million families, cannot afford a median-priced new home, which now exceeds \$459,000. Even a modest \$1,000 increase in the price of a home would push an additional 115,000 households beyond their ability to qualify for a mortgage. When housing affordability is this fragile, energy policies that unnecessarily raise construction or operating costs can have widespread, real-world consequences. Fuel-neutral codes—those that do not favor one energy source over another—help ensure that energy efficiency goals are achieved without limiting consumer options or increasing costs.

Mandates that restrict or ban the use of natural gas in new homes, for example, eliminate a cost-effective and reliable energy source for many families. In colder climates, requiring full electrification can add more than \$15,000 to the cost of a new home due to the need for specialized cold-climate heat pumps and upgraded electrical systems. Families also face higher utility bills; households relying on electricity for heating spend, on average, about 40% more than those using natural gas.

Cost-effective, fuel-neutral codes also preserve flexibility for state and local governments. Climate zones, housing markets, and construction methods vary dramatically across the country, and local officials are best positioned to determine what code provisions make sense for their residents. When federal policies or grant programs require adoption of a single, unamended energy code, such as the 2021 IECC, they remove this flexibility, drive up costs, and make it harder for jurisdictions to adopt energy standards that balance efficiency and affordability.

Finally, ensuring energy codes remain cost-effective is vital to addressing the broader affordability crisis. A 2021 IECC compliance cost of even \$10,000 can price more than 1.1 million households out of a new home, according to NAHB's priced-out model. In contrast, codes that allow multiple compliance paths and energy choices enable builders to design homes that meet local needs and family budgets while still achieving meaningful energy savings.

2. How do energy codes impact housing affordability?

Energy codes have a direct and measurable impact on housing affordability because they influence cost of construction. When energy codes are written or implemented without regard to cost-effectiveness, they can add tens of thousands of dollars to the price of a new home—costs that are immediately passed on to buyers.

For example, analysis by Home Innovation Research Labs shows that compliance with the 2021 International Energy Conservation Code (IECC) adds between \$9,600 and \$21,400 to the cost of a typical new home, depending on the climate zone, and can exceed \$31,000 in certain markets such as Kansas City. These higher costs result from new insulation, air-sealing, and mechanical system requirements that offer only marginal efficiency gains for already efficient new homes. For many

households, the energy savings do not offset the higher monthly mortgage payment—one Kansas City analysis found an additional \$12,000 in construction costs yielded only about \$125 a year in energy savings.

NAHB's 2025 *Priced-Out* study underscores how even modest cost increases have significant ripple effects on affordability. A \$1,000 increase in the price of a new home prices out roughly 115,000 households nationwide from being able to qualify for a mortgage. With nearly 75% of households already unable to afford a median-priced new home, every added dollar—especially from regulatory mandates—matters.

Energy codes that are fuel-neutral and cost-effective help strike the right balance by improving efficiency without pricing families out of homeownership. However, when codes or related policies push for fuel-specific outcomes, such as natural gas bans or electrification mandates, the affordability impacts intensify. In colder climates, switching to all-electric systems can add \$15,000 or more to the cost of a new home and lead to higher monthly utility bills, since electric heating can cost up to 40% more than natural gas.

Ultimately, housing affordability depends on the ability to meet energy and environmental goals through flexibility and choice, not through prescriptive one-size-fits-all mandates. Allowing builders to select the most cost-effective compliance paths and energy systems ensures that energy codes advance efficiency while keeping homes within financial reach for American families.

If construction costs continue to rise, the dream of homeownership will move further out of reach for millions of families. Every additional requirement, fee, and mandate pushes more Americans into the ranks of those who can no longer afford to buy a home. Homeownership plays an important role in building wealth, stability, and community for working families across the country. Policies that drive up housing costs risk denying these opportunities to an entire generation of potential homeowners.

3. Why is it important for homeowners to have access to mixed-fuel homes?

Allowing homeowners to have access to mixed-fuel homes is critical for maintaining affordability, reliability, and consumer choice. Mixed-fuel homes, which use both electricity and natural gas, give families and builders the flexibility to design energy systems that best fit their local climate, available infrastructure, and budget.

From a cost standpoint, natural gas remains one of the most affordable and reliable energy sources for heating, cooking, and water heating. According to federal data, households using natural gas for heating spend about 42 percent less than those relying solely on electricity. Over the past decade, affordable American natural gas has saved residential consumers an estimated \$125 billion in energy costs. When local governments restrict or ban natural gas in new construction, families lose access to these savings and are forced to rely entirely on electricity, which can be significantly more expensive.

In colder climates, this issue is even more pronounced. Full electrification can add \$15,000 or more to the cost of a new home because of the need for specialized cold-climate heat pumps and upgraded electrical systems. These systems are not only more expensive to install but can also increase monthly utility bills since electric heating generally costs more to operate in cold weather. For families already struggling to afford a new home, those added expenses can make homeownership impossible.

Mixed-fuel homes also improve energy reliability. During severe weather events or grid disruptions, the ability to use multiple energy sources ensures that families can maintain heat, cooking, and other essential functions. This flexibility is especially important in regions where electric infrastructure is limited or where extreme temperatures strain the power grid.

Preserving access to mixed-fuel homes protects affordability, ensures reliability, and upholds consumer choice. It allows homeowners to use the most practical and cost-effective energy sources for their region, achieving efficiency goals without imposing unnecessary costs or limiting access to affordable energy.

The Honorable Rick Allen (R-GA)

- 1. Housing affordability is an issue for too many Americans, and we must focus on policies that expand housing accessibility. Do policy objectives included in recent International Energy Conservation Codes, like fuel switching, EV chargers, and forced electrification, help expand or restrict access to housing?**

Policies that mandate fuel switching, require electric vehicle chargers, or promote forced electrification do not expand access to housing. Instead, they make new homes more expensive to build, create additional regulatory hurdles, and restrict the ability of families to choose the features that best fit their needs. These policies add layers of red tape that slow down housing production, increase compliance costs, and divert resources away from efforts that would meaningfully improve affordability. Beyond cost, these mandates impose new layers of complexity and permitting delays. Builders must navigate additional design, inspection, and equipment requirements, all of which slow down the pace of construction.

Electrification requirements also restrict consumer choice. Families deserve the freedom to decide which appliances, heating systems, and features best serve their household. For many, that includes having access to mixed-fuel homes that provide flexibility, reliability, and lower energy costs. Policies that remove these options not only raise costs but also limit the ability of homeowners to design homes that meet their family's needs.

Energy code provisions that prioritize policy objectives like electrification or EV mandates over cost-effectiveness and flexibility ultimately restrict access to housing. To expand housing affordability, energy codes must remain focused on achievable, cost-effective efficiency improvements that enhance comfort and performance without increasing regulatory barriers or removing consumer choice.

The Honorable Julie Fedorchak (R-ND)

1. The last several building code updates developed by the International Code Council (ICC) have clearly prioritized a “green” agenda over cost-efficient home construction. The Department of Veterans Affairs (VA) and the U.S. Department of Agriculture (USDA) have already adopted these latest ICC energy code standards for the homes they finance, effectively imposing the 2021 International Energy Conservation Code (IECC) on those federally backed loans.

- a. In your view, what would be the effect on the U.S. housing market if Fannie Mae and Freddie Mac were to adopt these standards?**

If Fannie Mae and Freddie Mac were to adopt the 2021 International Energy Conservation Code (IECC) as a condition for financing for new construction housing, it would effectively create a national energy code for housing. Because Fannie Mae, Freddie Mac, HUD, and USDA collectively back or insure the vast majority of mortgages for new single-family construction, builders and buyers would have little choice but to comply. This would have major implications for housing affordability, production, and consumer choice.

The 2021 IECC adds between \$9,600 and \$21,400 to the cost of constructing a typical new home, and in some markets, such as Kansas City, the additional cost can exceed \$31,000. If these standards were applied across all federally backed mortgages, millions of potential buyers would be priced out of the market. According to NAHB's *Priced-Out* study, every \$1,000 increase in the price of a new home prevents about 115,000 households from qualifying for a mortgage. Even modest cost increases from federal energy mandates would therefore have an outsized impact on access to homeownership.

Beyond the direct price increases, a national mandate would create new layers of federal red tape that slow down the pace of housing production. Builders would likely face additional inspection, documentation, and certification requirements, increasing both administrative and compliance costs. These barriers would make it harder to deliver homes efficiently at a time when the nation already faces a severe housing supply shortage.

Overall, having Fannie Mae and Freddie Mac adopt these standards would extend the reach of the 2021 IECC nationwide, raising home prices, reducing supply, and limiting options for consumers. This approach would make it harder, not easier, for Americans to achieve affordable homeownership.

- 2. You pointed out that in colder climates like New York—and North Dakota is much colder than New York—a full electrification mandate for new homes could add over \$15,000 in upfront costs. At today's rates, that would add \$95 to your mortgage payment and \$34,000 in life-cycle costs.**

- a. With home ownership becoming a distant possibility for younger generations, is it reasonable for government to impose such costly electrification on every homebuyer?**

It is not reasonable for government to impose costly electrification mandates on every new homebuyer, especially when data show how quickly even modest cost increases push families out of

the market. According to NAHB's 2025 *Priced-Out Study*, nearly 75% of U.S. households cannot afford a median-priced new home, and every \$1,000 increase in home price disqualifies about 115,000 additional households from qualifying for a mortgage. Electrification mandates that add more in upfront costs—especially in colder climates where costly cold-climate heat pumps and electrical upgrades are required—would prevent thousands of households from buying a new home.

These added costs also limit consumer choice. Families should have the freedom to choose the energy systems and appliances that best serve their needs. Natural gas remains one of the most reliable and affordable energy sources for home heating, cooking, and water heating, providing critical resilience during winter storms when electricity reliability can falter. Removing access to gas not only increases monthly energy bills but also puts homeowners at greater risk during power outages.

For many Americans, the choice of energy source can be the difference between owning or renting. Policies that force all-electric construction ignore regional climates and market conditions, restrict consumer options, and worsen the affordability crisis. Keeping energy codes fuel-neutral ensures that families can select the most practical, reliable, and affordable energy solutions for their homes, helping preserve both housing accessibility and energy security.

In your testimony, you gave an example of a builder in Kansas City who found that complying with the 2021 IECC energy code added over \$12,000 in construction cost but only saved about \$125 per year in energy bills.

a. How do regulators justify disparities like this?

Regulators often justify these disparities by focusing on long-term, theoretical energy savings rather than the real-world costs that builders and homebuyers face upfront. Many federal analyses assume energy savings will accrue over decades and eventually offset higher construction costs, but those projections are based on outdated or incomplete cost data that underestimate today's labor, material, and compliance expenses. This approach overlooks a fundamental reality of the housing market: it does not matter if families might save money over time if they cannot afford to buy the home in the first place. When upfront costs rise beyond what a family can finance, those long-term savings become meaningless because the opportunity to become a homeowner is lost entirely.

In the Kansas City example, builders reported an additional \$12,000 in construction costs to comply with the unamended 2021 IECC but only about \$125 in annual energy savings. Those numbers highlight the disconnect between federal assumptions and on-the-ground experience. Regulators often overlook the fact that most homeowners will move long before they ever recoup those costs, meaning the investment rarely pays off for the family buying the home.

b. Does this approach risk harming housing affordability more than it helps the environment?

Yes. When code requirements and federal policies add significant upfront costs for only marginal energy savings, they do far more harm to housing affordability than good for the environment. The

2021 IECC represents diminishing returns, targeting new homes that are already built to modern, efficient standards. The greatest potential for improving energy performance lies in the existing housing stock, more than 130 million homes built before modern energy codes took effect, not in burdening the small share of new homes built each year with costly new mandates.

c. From your perspective as a home builder, why is it so important that we keep affordability front and center in energy policy debates?

From a builder's standpoint, affordability has to come first in any energy policy, because the benefits of efficiency mean little if families are unable to afford the home. When policies prioritize prescriptive energy goals over cost-effectiveness, they push millions of families out of the market and deepen the nation's housing crisis. Builders across the country are already contending with rising material costs, labor shortages, and regulatory delays. Adding expensive, one-size-fits-all energy mandates compounds those challenges and limits the industry's ability to meet growing housing demand.

Keeping affordability front and center ensures that energy policy remains balanced, practical, and fair. Cost-effective, fuel-neutral energy codes allow builders to incorporate meaningful efficiency measures while still delivering homes that are within financial reach. By focusing on affordability, flexibility, and consumer choice, policymakers can promote both environmental progress and access to the American dream of homeownership.

Additional Questions for the Record and Responses From Ben Lieberman

The Honorable Brett Guthrie (R-KY)

1. In Kentucky, homeowners using gas for heating save \$610 annually as compared to all-electric alternatives, and the state has protected energy choice in statute. What happens to costs, whether reflected in utility bills or appliance prices, when a consumer's energy choice is prioritized?

According to the Department of Energy, natural gas is 3.5 times cheaper than electricity on a per unit energy basis, so eliminating this choice for homeowners would undoubtedly raise energy bills. These rules usually raise appliance prices, and it is not clear if consumers will ever recoup these higher costs in energy savings. Further, the choice between gas and electric appliances should always rest with the homeowner, and not be decided through government policy.

The Honorable Randy Weber (R-TX)

1. How important is it to consider a consumer's return on investment when developing appliance energy efficiency standards?

Energy efficiency is something that can get taken to a foolish extreme, and that is what we often get with federal regulatory mandates. Appliance rules that raise the up-front cost more than is likely to be earned back in energy savings are net losers for consumers and must be avoided. Not only do these rules raise appliance prices, but they also reduce reliability and product lifetimes, adding to repair and replacement costs. It is critical to take all costs into account and refrain from regulations that cost consumers on net.

2. What EPCA reforms are needed to ensure that future standards are technologically feasible and economically justified?

One critical reform is to allow the agency to revisit past standards that have proven costlier than anticipated, and either change or repeal them.

3. What are your thoughts on revising certain definitions to base them on full fuel cycle calculations rather than site-based energy?

The definitions must not favor one fuel source over another. For example, the losses between an electric utility and the end user should not be ignored in order to favor electricity over natural gas.

The Honorable Julie Fedorchak (R-ND)

1. You observed that DOE is effectively using appliance regulations to discourage natural gas use at home; for instance, proposing standards that hit gas stoves harder in favor of electric versions. This is despite EPCA's clear prohibition on forced fuel switching.

a. How do such anti-gas regulatory moves impact consumer utility bills and choice?

Gas is cheaper than electricity on a per unit energy basis, so disfavoring it via regulation adds to consumer utility bills. Doing so also takes away consumer choice. The homeowner, not the government, should always be the one deciding whether to have a gas or electric stove, furnace, water heater, etc.

b. In your opinion, should Congress step in to reinforce fuel neutrality, making sure the choice between gas or electric appliances rests with homeowners and the marketplace, not with bureaucrats pursuing climate agendas?

The law already requires fuel neutrality, but Congress could strengthen these provisions so they cannot be sidestepped as we have seen in the previous administration.

2. You highlighted how multiple rounds of federal efficiency rules have compromised appliance performance, noting for example that modern dishwashers now take “two or more hours to complete a normal cycle, double the time it took before regulations.”

a. What does it say about regulatory overreach when Americans must endure appliances that are slower or less effective in the name of efficiency, and how should Congress address rules that reduce people's standard of living?

The appliance standards program now hurts the very consumers it was supposed to be helping. Appliances that don't work as well, are unreliable, and do not last as long as they once did are not what the American people want or need.

**U.S. House of Representatives
Committee on Energy and Commerce
Subcommittee on Energy**

**Hearing on “Building the American Dream: Examining
Affordability, Choice, and Security in Appliance and Buildings Policies.”
Questions for the Record
October 17, 2025**

**Responses From
Kara Saul Rinaldi
Chief Policy Officer, Building Performance Association**

The Honorable Lizzie Fletcher (D-TX)

1. What kind of cost-savings can Americans expect to see from weatherization upgrades? Especially in states like Texas with increasingly hot Summers and more frequent extreme weather events.

According to the U.S. Department of Energy (DOE), the national average energy cost savings for weatherized households is **\$372 per year**.¹ Cost savings in warmer states with longer cooling seasons like Texas can often exceed these national figures. According to the Texas Department of Housing and Community Affairs (TDHCA), Texas’ Weatherization Assistance Program (WAP) is available to eligible low-income households in all 254 counties of the state, and the program weatherized 719 units statewide in the past year. Per TDHCA, these projects achieved total energy savings of 21,067 MBtus at an average savings of 29 MBtus per unit. These estimated energy savings would yield roughly 34% to 39% energy savings per weatherized unit for the average single-family detached Texas home.²

Moreover, measures installed via WAP programs in both Texas and across the country save households thousands of dollars over the lifetime of the upgrades. Eligible measures included in WAP projects - like insulation, air sealing, doors, windows, and HVAC repair and replacement - help keep families cool during hot summers. These energy efficiency upgrades also help reduce demands on the electric grid during extreme weather events.

WAP’s cost-saving benefits are not confined to energy and utility bill savings. Families receiving WAP services enjoy homes that are safer, healthier, and more livable, resulting in fewer missed

¹ U.S. Department of Energy, Weatherization Assistance Program. https://www.energy.gov/sites/default/files/2022-06/wap-fact-sheet_0622.pdf.

² Estimated savings based on Baseline Average Total Energy Consumption for Single-Family Detached homes in Texas, from National Renewable Energy Laboratory, “Baseline Annual Energy Consumption.” (<https://public.tableau.com/app/profile/nrel/buildingstock/viz/StateLevelResidentialBuildingStockandEnergyEfficiencyElectrificationPackagesAnalysis/Introduction>) and U.S. Department of Energy, <https://www.energy.gov/sceps/lsc/home-energy-rebates-program/articles/homes-measured-path-incentive-payment-calculator>.

days of work caused by sick days and doctor visits. According to DOE, WAP services result in decreased out-of-pocket medical expenses by an estimated average of \$514 per household per year.³ Overall, for every \$1 Congress invests in Weatherization, \$4.50 are generated in returned energy benefits and non-energy benefits.⁴ It is vital that Congress funds and reauthorizes operation of the Weatherization Assistance Program so that low-income Americans can continue to benefit from these important cost-saving benefits.

2. How will low-income Americans be impacted by cuts to efficiency standards and assistance programs like the Low-Income Home Energy Assistance Program (LIHEAP)?

Building energy codes and appliance and equipment standards provide a minimum efficiency baseline to protect consumers. And while the demographics of homeowners vary greatly among states and cities, homes built to a strong energy code and common-sense appliance standards help ensure every day, hardworking Americans can pay their utility bills. In fact, according to the Department of Energy, in 2024, “a typical household saved about \$576 per year off their energy and water bill as a result of appliance and equipment standards”.⁵ The rollback or elimination of these vital standards will disproportionately harm low-income Americans, who spend a larger share of their income on energy bills - typically spending 13.9% of total annual income versus 3.0% for other households.⁶

Importantly, appliance and equipment standards protect Americans and American businesses who rent where they live and work. According to 2023 census data, 35% of Americans live in rental properties.⁷ In single-family homes, multi-family properties, and commercial buildings with individual meters, the tenant usually pays the electric and fuel bills, while the landlord pays for the upkeep of the property. Because the landlord does not receive the benefit of the energy savings from the utility bills when replacing a refrigerator or HVAC unit, or for placing more insulation in the attic or upgrading the windows to maintain home or office temperatures, they have no incentive to invest in more efficient equipment. Low-income Americans and small businesses are particularly impacted by rising energy prices with little opportunity to mitigate the impact through more efficient investments. Appliance and equipment standards protect those Americans.

LIHEAP is a critically important program providing utility bill relief to approximately 6.7 million low-income Americans struggling to pay their utility bills.⁸ These funds keep the lights

³ Ibid; Oak Ridge National Laboratory, “Health and Household-Related Benefits Attributable to the Weatherization Assistance Program,” p.56. https://weatherization.ornl.gov/wp-content/uploads/pdf/WAPRetroEvalFinalReports/ORNLT_M-2014_345.pdf.

⁴ Ibid.

⁵ U.S. Department of Energy, Fact Sheet on Appliance and Equipment Standards Program, March 2025, <https://www.energy.gov/sites/default/files/2025-03/Appliance%20Standards%20Fact%20Sheet-02.pdf>

⁶ U.S. Department of Energy, Weatherization Assistance Program. https://www.energy.gov/sites/default/files/2022-06/wap-fact-sheet_0622.pdf.

⁷ U.S. Census Bureau, “Demographic Characteristics for occupied Housing Units,” American Community Survey, 2023, <https://data.census.gov/table?q=total+number+of+renters&y=2023>

⁸ LIHEAP.org, “The Low-Income Home Energy Assistance Program: 40 Years of Smart, Targeted Energy Aid.” https://cdn.prod.website-files.com/625088a41425d19695c01ba8/683d7f574bd4e690bf3511cf_6a21d55a2054c3c464d0630e5aa3e0f8_LIHEAPWhitePaper_2025.pdf.

on and maintain life-saving heating and cooling assistance during extreme weather. Across the country, utility bills have increased more than twice as fast as the overall cost of living.⁹ This funding prevents utility shut offs and provides a reprieve for energy-insecure Americans.

In addition to direct utility bill support, a state may use up to 15% of LIHEAP funding to support their state's Weatherization Assistance Program (WAP). This support allows states to address underlying energy waste by fixing home needs that plague low-income residents, including leaky home envelopes and inefficient equipment. By addressing the root causes of elevated energy usage, these upgrades cut utility bills for low-income Americans year after year. Nearly all states and territories (55 of 56) transfer state LIHEAP funding to state WAP programs, at a national average of 11 percent.¹⁰ For many state WAP offices, these transferred dollars are their largest source of funding.

As a result, any cuts to LIHEAP would, in addition to harming bill assistance programs, also negatively impact states' ability to offer comprehensive energy efficiency retrofits and health and safety improvements via state WAP programs. The Building Performance Association is grateful for the overwhelming bipartisan support LIHEAP has received in both the House and Senate proposed Fiscal Year 2026 Labor, Health and Human Services packages and, as energy costs rise, we urge Congress to increase funding for LIHEAP.

⁹ U.S. Bureau of Labor Statistics, [Consumer Price Index Summary - 2025 M08 Results](https://www.bls.gov/news.release/cpi.nr0.htm).
<https://www.bls.gov/news.release/cpi.nr0.htm>.

¹⁰ National Association For State Community Services Programs, "Low Income Home Energy Assistance Program (LIHEAP) Weatherization Info & Resources." <https://nascsp.org/liheap-weatherization-info-resources/>.

Subcommittee on Energy hearing entitled “Building the American Dream: Examining Affordability, Choice, and Security in Appliance and Building Policies.” Additional Questions for the Record for James Steffes, Washington Gas Light

The Honorable Randy Weber (R-TX)

1. How important is it that the International Energy Conservation Code (the “Code”) be inclusive of natural gas appliances and related infrastructure?

- A. It is critically important that the International Energy Conservation Code remain inclusive of natural gas appliances and related infrastructure. Energy efficiency and conservation are best achieved with flexibility and choice—allowing families, schools, hospitals, and businesses to select the most efficient and affordable technologies that meet their needs.

Natural gas appliances such as furnaces, water heaters, and cooking equipment are among the most cost-effective and energy-efficient options available. Excluding them from the Code would effectively eliminate a proven, affordable solution for consumers—at a time when electric demand is already surging due to widespread data center development and electrification mandates.

Maintaining a Code inclusive of natural gas appliances and natural gas infrastructure ensures we have a reliable and resilient energy mix, one that allows consumers to leverage their choice to mitigate rising costs and prevents overreliance on a single network – the electricity grid – that is already under significant strain.

2. Please speak to the critical role that natural gas plays in the states and the nation’s energy portfolio.

- A. Natural gas is a cornerstone of the American energy portfolio—and for good reason. It provides nearly one-quarter of all U.S. energy, offering affordable, reliable, and dependable service to homes, schools, hospitals, restaurants, and businesses across the country. Natural gas is also critical to national security through powering key federal and state facilities, as well as military operations and sites across the country.

For consumers, it remains three times more affordable than electricity, saving the average household over \$1,100 each year. That affordability keeps energy within reach for working families and small businesses, freeing resources for other essential needs.

Natural gas has helped drive the nation’s emissions reductions, including in the power generation sector. In addition, emissions from distribution systems have fallen 70 percent since 1990, even as demand has grown. And Washington Gas continues to modernize its network and prepare to deliver lower-carbon fuels, including renewable natural gas, supporting new innovations for customers and our communities.

Subcommittee on Energy hearing entitled “Building the American Dream: Examining Affordability, Choice, and Security in Appliance and Building Policies.” Additional Questions for the Record for James Steffes, Washington Gas Light

By preserving a balanced portfolio that includes natural gas, we ensure that our communities have energy that is affordable, reliable, and secure—a combination our customers expect.

3. Why is natural gas so important in maintaining a resilient electrical grid?

- A. Natural gas is the backbone of electricity grid resilience and a key piece of today’s energy reliability. It supports the electricity grid in three ways:

First, natural gas fuels affordable and reliable power production, supporting economic growth and meeting the needs of homes and businesses across the nation.

Second, natural gas provides a complementary supply portfolio to allow grid operators to integrate additional wind and solar energy. Natural gas fueled generation provides the quick-ramping capacity to our electricity grid to keep the lights on during peak demand or sudden weather events.

Third, natural gas provides energy continuity during outages. Unlike most of today’s electricity grid, which can be disrupted by storms due to its above-ground nature, natural-gas pipelines have more protection given their underground facilities and can therefore deliver energy reliably in all conditions. Washington Gas provides better than 99 percent reliability to its customers. Moreover, reliability is continuing to be improved as Washington Gas continues to invest hundreds of millions of dollars annually to modernize its network. That investment ensures the natural gas network, and the broader energy system remain strong, especially as electricity demand continues to grow.

By sustaining a robust natural-gas system, we strengthen—not undermine—the reliability, resiliency and security of our region’s overall energy capability.

