Policy Brief: Climate Change and Energy Efficiency

Recent reports, including the Fourth National Climate Assessment released by the Trump administration, highlight the economic costs and environmental consequences of climate change. Momentum is growing for addressing this challenge in a way that strengthens U.S. economic productivity and competitiveness.

Energy efficiency is the most effective tool we have for addressing this threat while also boosting economic growth, improving energy security, and advancing U.S. global competitiveness. Congress should look first to policies that optimize the energy efficiency of our residential, commercial and industrial buildings.

The benefits of energy efficiency are clear and compelling:

- Increasing energy efficiency is the most practical strategy for reducing carbon emissions. The International Energy Agency reports that efficiency can capture more than 40 percent of the emission reductions needed to meet global targets.
- Energy efficiency is the largest sector in the clean energy industry, supporting 2.25 million jobs, with the insulation industry’s workforce exceeding 500,000.
- Efficiency gains save consumers billions of dollars in energy costs annually – money that consumers can direct back into the economy.

Carbon reduction strategies considered by Congress should focus on the built environment to capture the massive emission reductions available.

- **Residential Buildings:** In 2018, the U.S. built more than 800,000 homes. Federal policy should ensure that new home construction meets current model building energy code standards and spur net zero energy ready new home construction. The U.S. should also capture the massive carbon reduction potential in the more than 100 million existing homes in America through a national home energy efficiency retrofit initiative.
- **Commercial buildings:** Existing commercial buildings consume 18% of all energy in the U.S. – a massive opportunity to cut emissions through energy-efficient retrofits. The U.S. should support policies that update energy codes and incentivize private investment. Policies that address new construction are also critical because commercial floor space is expected to reach 126.1 billion square feet by 2050 – a 39% increase over 2017 levels.
- **Industrial facilities:** The Department of Energy estimates that increased maintenance in small and large industrial facilities would deliver $3 billion in energy savings and 37 million metric tons in emission reductions. While Federal policy has focused on promoting residential and commercial efficiency, future policies should unlock the potential energy savings found in industrial plants.
Policy Brief: Resilient Infrastructure and Energy Efficient Buildings

The building envelope offers protection to occupants when severe weather strikes. An energy efficient building envelope can extend that protection post-disaster or during prolonged events like heat waves or extreme cold. High-performance buildings aid human comfort and increase survivability in the event of lost electricity, and their mechanical and physical characteristics can maintain the integrity of the overall structure.

Today we have the means and knowledge to cost-effectively deliver this protection against tomorrow’s threats and save energy while doing so. For example, designing buildings to the 2018 I-Codes delivers a national benefit of $11 for every $1 invested.\(^1\) Additionally, implementing current best practices and technology will dramatically reduce building energy use – a sector that accounts for 40 percent of total energy use in the United States.

Losses of $317 billion from 2017 natural disasters jump-started discussions on creating more resilient buildings and communities. Many of these actions were highlighted by the passage of the Disaster Recovery Reform Act of 2018 (DRRA). The law includes major changes to the programs and grant funding managed primarily by the Federal Emergency Management Agency (FEMA).\(^2\)

The Federal response to preparing our buildings and communities against future threats must give primary consideration to guaranteeing a robust and efficient building envelope. This can be accomplished by pursuing the following priorities:

- **Oversight of DRRA Implementation.** FEMA will lead the implementation of reforms under DRRA. Congress should ensure that new rules for disaster preparedness and response properly recognize the value of investments in building energy efficiency.

- **Support Investments in Research.** The Federal government has tremendous research capabilities that have long been leveraged to further the study of building sciences. Congress should support continued funding for building research programs operated by FEMA, Department of Energy, National Institute of Standards and Technology, and National Institute of Building Sciences.

- **Recognize Buildings as Infrastructure.** Congress should recognize that buildings represent a significant portion of our Nation’s infrastructure, including critical structures such as hospitals and schools.

Moreover, energy-efficient buildings can improve the operability of traditional elements of infrastructure like the electric grid.

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Policy Brief: Immigration & The Recovery of the U.S. Construction Industry

The U.S. construction industry faces daunting challenges in hiring and retaining qualified workers. The reasons for this include lingering effects from the contraction of the construction industry workforce following the 2008 economic crisis, less interest in “blue collar” employment among U.S. workers, and an aging workforce. Texas estimates that the average age for electricians is 53 years old and 51 for plumbers. Since construction is not an area where work can be outsourced, the industry relies on foreign-born workers.

Skills gaps in residential, commercial, and industrial construction also prevent certain trades from finding workers to meet growing demand. In 2015-2016, major contractors in all building segments reported serious worksite delays directly related to the lack of skilled trades workers. One builder in Ohio stopped selling homes for a period because they could not guarantee delivery within the typical 180-day period.

Foreign-born workers account for, on average, 24 percent of the construction industry workforce nationwide, with some states seeing much higher percentages.

A strong housing construction market is linked to a healthy, growing economy. For that to happen, federal policy must allow a legal path for foreign-born workers to participate in the U.S. construction industry.

We Ask Your Support for These Common Sense Immigration Policy Reforms for the Construction Industry

➤ A Workable Visa System for Entry into the U.S. to Work Construction: No current visa program allows foreign workers entry into the U.S. to work in construction on a year-round basis. The seasonal H-2B visa allows industries (resorts and seasonal employers) in the US to share a mere 66,000 visas per year. While proposals have been introduced over the years to create a new construction sector visa program, there has been little interest on either side of the aisle for moving a program forward even in the face of obvious demographic changes in the U.S. that make the need dire.

➤ Fair and Efficient Employee Verification System that Works for Small and Large Employers: The E-Verify employment verification system is plagued with problems and will not by itself fix the issue of illegal immigration. Legislation addressing U.S. immigration policy and the E-Verify system should provide additional employer safeguards; prompt government notification to employers when a worker is cleared for employment; and set liability limits for contractors and subcontractors who use the system.

➤ Practical Assessment Mechanism for Existing Immigrants: Federal policy should assess those illegal immigrants who are already in the US and establish reasonable conditions that will allow workers to obtain a valid work authorization. The immediate deportation of all illegal immigrants will likely shock the industry workforce and hurt the U.S. economy.