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Biden Administration Sets Roadmap for Building Decarbonization



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The U.S. Department of Energy recently released the first federal blueprint to decarbonize the building sector, which accounts for over a third of the nation's planet-warming greenhouse gas emissions. This plan, developed by the DOE, the Department of Housing and Urban Development, the Environmental Protection Agency and other federal agencies, lays out actions the government can take to meet the goal of net-zero emissions by 2050.

This plan, announced on April 2, 2024, is not surprising given that the European Union targets to reduce greenhouse emissions by 55% by 2030 and to achieve climate neutrality by 2050. "As part of a whole-of-government approach, DOE is outlining for the first time ever a comprehensive federal plan to reduce energy in our homes, schools, and workplaces-lowering utility bills and creating healthier communities while combating the climate crises," U.S. Secretary of Energy Jennifer Granholm said in the news release.

The plan sets forth the following general targets:

- Reducing onsite energy use intensity in buildings 35% by 2035 and 50% by 2050, compared to 2005 levels;
- Reducing onsite greenhouse gas emissions from buildings 25% by 2035 and 75% by 2050, compared to 2005 levels;
- Tripling the potential of demand flexibility, which is the capacity of energy users to change their electricity consumption patterns by 2050; and
- Reducing embodied emissions from building materials and construction 90% by 2050 compared to 2005 levels.

According to the DOE, nearly 130 million buildings exist in the United States, and between now and 2050, the agency expects 40 million new homes and 60 billion square feet of commercial space to be constructed. Although the plan's objectives attempt to address future climate issues associated with the anticipated future building growth, it also calls for states, local governments and tribes to help with funding, policy reform, and setting codes and standards to lower the collective carbon footprint and increase clean energy use. Additionally, the federal government also anticipates offering technical assistance and financing programs, as well as facilitating information-sharing between communities and participating in a model code development process aimed at further achieving these objectives.

These objectives are not intended only for environmental benefit. Reducing the building sector's greenhouse gas emissions would save consumers more than \$100 billion in annual energy costs and avoid \$17 billion in annual health costs, it is estimated. The objectives would also help efforts to fortify communities against power outages and climate change-fueled extreme weather events with solutions like insulation and air sealing to reduce overall energy demand.

However, despite these economic and climatic benefits, building decarbonization continues to generate pushback from the fossil fuel and building industries, and it faces challenges like upfront cost concerns and the vast amount of buildings that cannot currently handle clean energy practices and requirements.

Due to the continuing threat climate change presents, these issues will undoubtedly require bipartisan efforts to strike the balance between addressing green construction and supporting current infrastructure. If this legislation progresses, it will certainly result in owners and developers changing their building approach. As energy efficiency and green building trends continue to become more prevalent, even without specific requirements currently, it is crucial for owners and developers to review building methods and materials, as they will not only have an impact on their bottom line but also on how buildings can be constructed, not to mention any environmental benefits.

For more information on energy efficiency best practices, alternative building materials or to discuss any of these topics, please contact a member of [Gould & Ratner's Construction Practice](#).