

U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON SCIENCE, SPACE, & TECHNOLOGY

Eddie Bernice Johnson, Chairwoman

Building Technologies Research and Development Act

Introduced by Chairwoman Johnson

The Building Technologies Research and Development Act would establish a research, development, demonstration, and commercial application program at the Department of Energy related to building technologies that would improve building efficiency, develop smart grid interactive buildings, and improve advanced building construction and retrofits, among other things.

Buildings contribute about 40% of the total CO2 emissions of the United States¹, and make up 39% percent of the U.S.'s total energy consumption.² Residential and commercial buildings can be difficult to decarbonize given that they are operational for a long time once they are built, and building owners are often slow to make the improvements necessary to reduce energy use and emissions. The Building Technologies Office (BTO) at DOE has a long history of supporting research, development, demonstration, and commercial application initiatives to improve the energy efficiency of residential and commercial buildings. Currently, very little of its work is in statute. This bill codifies some existing activities of BTO and authorizes emerging activities, including:

- the equitable use of building technologies in frontline communities;
- advanced building construction, design, and retrofits;
- research to improve the resilience of buildings to the effects of climate change; and
- the development of grid-interactive buildings that enable smarter buildings, neighborhoods, and communities.

In developing this bill, staff solicited feedback from several organizations including: the American Council for an Energy-Efficient Economy, the American Institute of Architects, the Alliance to Save Energy, the Environmental Defense Fund, the National Association of State Energy Officials, and DOE's national laboratories.

The Building Technologies Research and Development Act authorizes appropriations at \$392 million in FY23 rising to a little over \$476 million in FY27.

¹ https://www.eesi.org/topics/built-infrastructure/description

² https://www.eia.gov/tools/faqs/faq.php?id=86&t=1