Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington, DC 20515

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June 6, 2019

SUMMARY OF SUBJECT MATTER

TO: Members, Subcommittee on Economic Development, Public Buildings, and Emergency Management

FROM: Staff, Subcommittee on Economic Development, Public Buildings, and Emergency Management

RE: Hearing on "Efficiency and Resiliency in Federal Building Design and Construction."

PURPOSE

The Subcommittee on Economic Development, Public Buildings, and Emergency Management will meet on Tuesday, June 11, 2019, at 10:00 a.m. in 2167 Rayburn House Office Building to hold a hearing titled, "Efficiency and Resiliency in Federal Building Design and Construction." At the hearing, Members will receive testimony from the General Services Administration's (GSA) Office of Federal High-Performance Buildings and representatives of organizations with equities in the green building space.

BACKGROUND

GSA manages an extensive real estate portfolio on behalf of the Federal Government. The agency owns and leases over 376.9 million square feet of space in approximately 9,600 buildings throughout the country.[1] Construction and operation of such a large portfolio of buildings requires a significant amount of energy consumption. Federal buildings, generally, consume approximately $6.5 billion in utilities each year.[2] As a result, GSA's property management practices and agency compliance with statutory energy efficiency requirements have a direct impact on the environment.

[1] "Inventory of Owned and Leased Properties." *GSA.gov.* (Accessed May 29, 2019).
[2] Ewing, Mark. "GSA Building Energy Strategy." 2014. Available at https://www.energy.gov/sites/prod/files/2014/05/f15/fupwg_may2014_gsa_update.pdf.

GSA's Office of Federal High-Performance Buildings within the Office of Government-wide Policy was established in 2007 to develop guidance and best practices in the planning, design, and operation of Federal buildings. GSA utilizes legislative targets and third-party certification programs such as LEED, ENERGY STAR, and Green Globes to meet its energy efficiency and sustainability goals.

GSA's Office of Federal High-Performance Buildings

Section 436 of the Energy Independence and Security Act of 2007(EISA, P.L.110-140) established the Office of Federal High-Performance Buildings within GSA to develop guidance and best practices in the planning, design, and operation of Federal buildings. Subsection (h) requires GSA to evaluate high-performance building certification systems and submit the findings to the Secretary of Energy who, in consultation with the Department of Defense and GSA, identifies the system(s) to be implemented across the Federal Government. GSA completed its most recent 5-year review in March 2019. The review consisted of an initial market analysis screening of building-related certification systems, followed by a formal review of the systems that pass the initial market analysis screening. The findings report includes an analysis of the alignment of five building certification systems (LEED, Green Globes, Living Building Challenge, BOMA BEST, and BREEAM) with Federal high-performance building requirements.[3] In 2012, two certification systems were identified as meeting federal criteria – LEED and Green Globes.[4] The March 2019 review will inform DOE's determination of what systems are recommended over the next 5 years.

Section 494 of EISA created the Green Building Advisory Committee. The committee is composed of Federal and private stakeholders who provide policy advice to the Office of Federal High-Performance Buildings. In October 2017, the Green Building Advisory Committee submitted a number of recommendations to the Office of Federal High-Performance Buildings, enumerating recommendations on maximizing the sustainability and efficiency in Federal buildings. The Advisory Committee recommended the use of long-term, clean energy power purchasing agreements to lock in stable energy costs and save money.[5] In a separate letter from 2017, the Advisory Committee proposed recommendations to double the annual rate of high-performance retrofitting of Federal buildings.[6] These recommendations provided a narrower focus for methods to increase building efficiency and provided clarity in choosing the most cost-effective methods to do so.

The Subcommittee on Economic Development, Public Buildings, and Emergency Management is responsible for overseeing GSA's role in ensuring the statutory standards promoting sustainability are continually updated and implemented in the construction and operation of federal buildings. It has been almost a decade since the Subcommittee conducted oversight activities related to energy efficiency and resilience in federal buildings.

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[3] General Services Administration "High-Performance Building Certification System Review." Available at https://www.gsa.gov/about-us/organization/office-of-governmentwide-policy/office-of-federal-highperformance-buildings/policy/highperformance-building-certification-system-review.

[4] While both LEED and Green Globes were recommended certification systems, GSA recognizes both for its leased space but only LEED for its owned space. GSA's Facilities Standards (P100) establishes design standards and criteria for new owned buildings, repairs, renovations, modernizations and alterations for GSA buildings. The P100 requires all new construction projects and substantial renovations to achieve, at a minimum, a Gold rating through LEED.

[5] Advisory Committee PPA Advice Letter. October 24, 2017. Available at https://www.gsa.gov/cdnstatic/Adv%20Comm%20PPA%20Advice%20Letter%2012-15-17.pdf.

[6] Advisory Committee HPBA Advice Letter. October 24, 2017. Available at https://www.gsa.gov/cdnstatic/Adv%20Comm%20HPBA%20Advice%20Ltr%2012-15-17.pdf.

Related Statutes and Legislation

Improving the efficiency of federal buildings and reducing costs has generally been a bipartisan concern across both Democratic and Republican administrations. The laws below detail the evolution of building efficiency requirements.

The Energy Policy Act of 1992 (PL 102-486) directed the Secretary of Energy to establish federal building energy standards to require energy efficiency measures that were "technologically feasible and economically justified."[7]

The Energy Policy Act of 2005 (PL 109-58) required the development of energy and water conservation programs for congressional buildings; required a 20% reduction in energy consumption for existing Federal buildings by 2015; set an energy consumption target of 30% below 2005 standards for new Federal buildings; required the application of sustainable design principles to the siting, design, and construction of new and replacement buildings; established Energy Star as a joint program of the Department of Energy (DOE) and the Environmental Protection Agency (EPA) and required agencies to purchase products that have either an Energy Star label or are designated as energy-efficient by the DOE.

The Energy Independence and Security Act of 2007(EISA, P.L.110-140) established energy use intensity (EUI) targets to reduce agency energy usage by 30% by 2015; required federal agencies to designate an energy manager to reduce facility energy use; required GSA's Office of Federal High-Performance Green Buildings to report every five years on certification systems that are comprehensive and environmentally-sound in the certification of green buildings. Specifically, in identifying certification systems, the Secretary of DOE should take into account a number of criteria including the ability of the applicable certification organization to collect and reflect public comment and the ability of the standard to be developed and revised through a consensus-based process. The Office of Federal High-Performance Buildings published three reports in 2006, 2012, and 2019.

The Energy Efficiency Improvement Act (PL 114-11) directs GSA to develop model leasing provisions to encourage the implementation of energy and water efficiency measures by tenants in commercial buildings. GSA may also use such provisions for leases involving Federal agencies.

The act also amended EISA to add provisions to improve energy efficiency in tenant spaces. These include a DOE study to determine the feasibility of improving energy efficiency in commercial buildings through the implementation of energy-efficiency measures in discrete spaces within those buildings; directing DOE's Energy Information Administration to collect additional occupant energy-use information as part of its Commercial Buildings Energy Consumption Surveys; and directing EPA to develop a Tenant Star recognition label as a part of the Energy Star program.

Executive Orders

On March 19, 2015, President Obama signed Executive Order (EO) 13693 revoking EOs 13423 and 13514.[8] EO 13693 set specific targets for Federal agencies to achieve by FY 2025. Targets included requiring each agency to reduce building energy intensity by 2.5% annually relative to FY

[7] *Quoting (in part)* P.L. 102-486.

[8] EO 13423, "Strengthening Federal Environmental, Energy, and Transportation Management," signed by President George W. Bush, January 24, 2007; EO 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," Signed by President Barack Obama, October 5, 2009.

2015, reducing potable water consumption by 36% relative to FY 2007, producing at minimum 25% of total building electric and thermal energy from clean sources, and ensuring that all new buildings with more than 5,000 gross square feet of floorspace are designed to achieve net-zero energy, and, if possible, net-zero water or waste by FY 2030. Executive Order 13693 also called for the inclusion of climate-resilient design elements in federal buildings and directed the Chair of the Council on Environmental Quality (CEQ) to issue a revised set of "Guiding Principles."

On May 17, 2018, President Trump signed EO 13834, which revoked the specific reduction targets of EO 13693 and replaced them with the requirement that agencies meet goals established in statute. The EO provides broad direction to "achieve and maintain annual reductions in building energy use and implement efficiency measures that reduce costs" and

> "ensure that new construction and major renovations conform to applicable building energy efficiency requirements and sustainable design principles; consider building efficiency when renewing or entering into leases; implement space utilization and optimization practices; and annually assess and report on building conformance to sustainability metrics."[9]

The Implementing Instructions for EO 13834 do not set new reduction targets beyond those already in statute. They re-establish EISA's 30% EUI reduction requirements and extend indefinitely the deadline for agencies to achieve those targets.

CONCLUSION

The hearing will focus on the progress made on improving the efficiency of federal buildings and reducing costs and GSA's role in meeting the efficiency goals for public buildings government-wide.

[9] *Quoting (in part)* "Executive Order Regarding Efficient Federal Operations." Available at https://www.whitehouse.gov/presidential-actions/executive-order-regarding-efficient-federal-operations.

WITNESS LIST

Panel I

Mr. Kevin Kampschroer
Director
Office of Federal High-Performance Green Buildings
U.S. General Services Administration

Panel II

Dr. Kevin Van Den Wymelenberg
Director
Energy Studies in Buildings Laboratory
University of Oregon

Ms. Elizabeth Beardsley
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