

BCSE Comments on the Clean Energy for New Federal Buildings and Major Renovations of Federal Buildings

February 20, 2023

Thank you for the opportunity to share perspectives from the Business Council for Sustainable Energy (BCSE) as part of the public comment period on the supplemental notice of proposed rulemaking (SNOPR) to establish revised energy performance standards for the construction of new Federal buildings and the major renovations of existing Federal buildings, Docket ID No. EERE-2010-BT-STD-0031.

The BCSE advocates for energy and environmental policies that promote markets for clean, efficient, and sustainable energy products and services. Since its founding in 1992, BCSE is focused on policy adoption that will increase the deployment of energy efficiency, natural gas, renewable energy, as well as energy storage, sustainable transportation, and emerging decarbonization technologies.

With this SNOPR, the Department of Energy (DOE) is proposing a new federal building energy performance standard for a subset of Federal buildings that would require reductions in Federal agencies' on-site use of fossil fuels (which include coal, petroleum, natural gas, oil shales, bitumens, tar sands, and heavy oils) consistent with the targets established by the Energy Conservation and Protection Act, as amended by the Energy Independence and Security Act of 2007. Qualifying buildings are a certain set of new Federal buildings and Federal buildings undergoing major renovations.

As noted by DOE, this proposal is one of a set of federal building regulations aimed at reducing energy use, increasing energy efficiency and reducing greenhouse gas emissions. The proposal focuses on Scope 1 emissions only and includes renewable fuels such as biomethane (renewable natural gas) and biopropane (renewable propane) and fossil fuel use for emergency backup purposes. BCSE appreciates the Biden Administration's efforts to modernize and improve the environmental performance of Federal buildings. Buildings represent roughly 40 percent of U.S. greenhouse gas emissions, and the federal government has a strong procurement and leadership impact when implementing energy and environmental standards.

BCSE is pleased to share its general views on several aspects of the proposal. For more detailed comments on the questions that DOE raises, BCSE would like to recognize the comments submitted in response to this docket from several of its members, including the Alliance to Save Energy, the American Gas Association, the North American Insulation Manufacturers Association, the Polyisocyanurate Insulation Manufacturers Association and the U.S. Green Building Council. BCSE encourages a thorough review of their detailed comments. As a diverse coalition, not all BCSE members take a position or endorse the issues discussed in this submission.



Adopt a Holistic Approach to Federal Building Decarbonization and Fossil Fuel Reduction

BCSE urges DOE to revise this proposal and adopt a more holistic view in improving building energy and environmental performance and, specifically, adopting a more comprehensive, inclusive and flexible approach to achieving the objectives of the standard. The Federal government should be doing whatever it can to reduce all energy use, including fossil fuel use, regardless of fuel type. There is a broader set of technologies that can achieve the objectives than what is contemplated in the proposal.

Further, adopting a technology-inclusive, whole buildings approach throughout the project lifecycle will reduce costs, deliver significant co-benefits in the areas of energy reliability, energy security and energy resilience – as well as allow for more ambition over time.

Provide Additional Time to Model the Impacts the Proposal

BCSE, joined the Alliance to Save Energy and the U.S. Green Building Council in requesting an extension to the comment period to allow more time for stakeholder feedback on the proposal, as well as to model compliance scenarios and the impact of those scenarios on the fossil fuel consumption of qualifying buildings. Please see the letter [HERE](#).

Require Agencies to Plan and Implement Energy Efficiency Prior to Taking Other Actions to Reduce Fossil Fuel Use

DOE should expand this proposal to require that agencies assess options and undertake energy efficiency measures that go “beyond code” when opportunities arise and prior to undertaking large fuel switching and/or electrification projects.

In November 2022, GSA’s Green Building Advisory Committee (GBAC) made the following recommendation regarding an implementation methodology or tool for building decarbonization, including electrification or fuel switching (see the GBAC’s November Advice Letter [HERE](#)):

“Building systems impact each other. Priority should be given to energy efficiency before fuel switching alternatives are considered for reducing GHG emissions. The first priority should be to reduce the building component’s energy use, no matter its fuel source. Once the building energy performance has been optimized, fuel switching, and on-site/off-site renewable energy generation should be evaluated to accomplish operational carbon neutrality.”

The GBAC letter goes on to explain that:

“Poor sequencing misses the opportunity to combine efforts or does not address interactive building systems holistically. A long-term plan allows for coordinated efforts that will increase the efficiency of implementing a deep energy retrofit.”



Additionally, fuel switching via electrification may not be a feasible option for some larger buildings, at least not in the next decade. New technologies such as building carbon capture that results in emissions reductions can be considered in addition to energy efficiency, onsite solar and other measures to deliver immediate reductions.

Expand the Proposal to Incorporate Scope 2 Emission Reduction Opportunities

There are many technologies available to assist Federal buildings in reducing fossil fuel consumption and reduce greenhouse gas emissions from design to operation and maintenance. BCSE urges DOE to expand this proposal to include Scope 2 emission reduction opportunities for compliance. In making this update, it should be noted that the power sector is decarbonizing and that different regions of the country (and different times of day) have distinct carbon-intensity levels. The carbon-intensity of the electricity grid where the building is located should be assessed when making compliance choices and should be updated overtime. There is much to gain in terms of reduced on-site fossil-fuel use by looking at Scope 2 opportunities, especially in the short-term.

Opportunities to mitigate Scope 2 emissions include:

- Improving a building's efficiency through the use of products like insulation, more efficient lighting, upgraded windows/doors, etcetera (i.e., reduces the import of grid electricity);
- Installing on-site solar, storage, fuel cells and other co-generation options (i.e., reduces import of grid electricity);
- The use of renewable fuels like renewable natural gas, renewable propane, or hydrogen;
- Executing a [Federal Energy Management Program \(FEMP\)](#) energy procurement contract (i.e., substitutes for grid electricity) by either:
 - Enrolling in a utility-sponsored green tariff program (for federal buildings in vertically integrated, non-competitive electricity markets); or
 - Executing the equivalent of a renewables power purchase agreement (PPA) (for federal buildings in deregulated electricity markets).
- Using software to analyze and optimize energy performance during the design phase of the project (i.e., solar analysis, HVAC right-sizing, and passive energy-conservation).

Utilize Widely-Used Metrics to Measure Building Performance and Track Compliance

As stated above, the proposed standard is one of several Federal building regulations and initiatives. Currently, the proposal takes a narrow approach and does not consider that compliance with this rule's energy performance standard will occur as the same building seeks to achieve other objectives. DOE can increase the impact of this proposal – and the ability for a Federal building to achieve other requirements – by adopting a whole building management strategy and incorporating more widely-used energy performance standard metrics to track



compliance. This could help standardize the compliance reporting and therefore increase the rigor of projects and their sustainability outcomes.

BCSE appreciates to share its views as part of Docket ID No. EERE-2010-BT-STD-0031.

Thank you for your consideration.