



**International Code Council**  
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Public Buildings Service Central Office  
General Services Administration  
451 7th Street SW, Room 10276  
Washington, DC 20410-0500

*Via regulations.gov*

**Re: Comments of the International Code Council on the Federal Buy Clean Request for Information: Construction Materials with Substantially Lower Embodied Carbon, Docket No.**

The International Code Council (ICC) is a nonprofit organization of roughly 600 employees, driven by the engagement of its more than 63,000 members, that is dedicated to helping communities and the building industry provide safe, resilient, and sustainable construction through the development and use of model codes (I-Codes) and standards used in design, construction, and compliance processes. Most U.S. states and communities, federal agencies, and many global markets choose the International Codes (I-Codes) to set the standards for regulating construction and major renovations, plumbing and sanitation, fire prevention, and energy conservation in the built environment. The General Services Administration (GSA) relies on the I-Codes including the International Green Construction Code (IgCC) as the basis for its P100.

We applaud GSA's efforts to address the impacts of the buildings it constructs and leases. The Code Council is dedicated to providing the building industry with the tools necessary to realize safety, sustainability, and resilience goals. This includes achieving decarbonization goals through the effective use of materials with low embodied carbon.

Recognizing the need for a coordinated and deliberate approach, in September, the Code Council Board of Directors approved [Decarbonization of The Built Environment: Solutions from the International Code Council](#), which recognizes the significant impact of buildings on the environment and the need for a coordinated set of solutions to support the achievement of energy and greenhouse gas (GHG) reduction goals set by governments. The report also calls for expanded activities that support a coordinated approach across the I-Codes, standards and other solutions. This highlights the Code Council's ongoing commitment to deliver the tools that communities need to realize their climate-related goals.

While we recognize this RFI is focused specifically on the availability of low carbon products, we wanted to provide GSA with information that can support the effective selection of such materials.

The IgCC provides a holistic approach to addressing sustainability—including through materials and energy efficiency and water conservation. The IgCC already includes measures in Chapter 9 on the carbon impacts of materials and the use of environmental product declarations (EPDs) and life cycle analysis. We commend GSA for its recognition of the IgCC as a valuable tool in advancing sustainability and encourage the agency to leverage the provisions in Chapter 9 as it sets its materials related policies.



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The Code Council has also begun the development process for an American National Standard to assess carbon emissions across the entire building life cycle. ASHRAE/ICC Standard 240P – *Evaluating Greenhouse Gas (GHG) and Carbon Emissions in Building Design, Construction and Operation*, will provide a whole life carbon approach to support emissions reductions in buildings. The proposed standard establishes how to measure and verify the greenhouse gas (GHG) and carbon emissions of a building, or group of buildings, over the entire life cycle. The goal is to provide consistent procedures and data to be referenced by policies, codes, and other standards that address new and existing building performance. The Code Council is engaging organizations both in the U.S. and internationally to assure the standards are broadly applicable and can support a global approach. Work will get underway later this year for a target completion in 2025.

Like other performance requirements, the expected levels of performance and the methods for verifying such performance should rely on a robust set of standards or protocols. Additionally, they should be easily verified by those responsible for enforcing the codes. The environmental performance requirements should also be considered in the context of the existing performance requirements in the codes and in a manner that is consistent across materials providing similar function. Environmental Product Declarations (EPDs) have been identified as a primary tool for transparency communication of the environmental impacts of products/materials. However, EPDs have not been generated for all materials and products used in construction. The ICC Evaluation Service (ICC-ES) is an accredited EPD Program Operator, providing the tools necessary for development of product category rules (PCRs) and verification of EPDs and stands ready to assist manufacturers in expanding the availability of EPDs.

EPD Program Operators demonstrate expertise, capability, capacity, and impartiality through accreditation to ISO 14020 (*Environmental labels and declarations — General principles*), 14025 (*Environmental labels and declarations — Type III environmental declarations — Principles and procedures*), 21930 (*Sustainability in building construction — Environmental declaration of building products*), and 17065 (*Conformity assessment — Requirements for bodies certifying products, processes and services*). To ensure the soundness of product EPDs, GSA should require that any acceptable EPDs be verified by a Program Operator that is accredited to the above ISO standards.

Additionally, one concern often expressed is whether materials with lower environmental impact than traditional versions of the material deliver a similar level of performance. In addition to being an EPD Program Operator, ICC-ES evaluates products for their compliance with building codes or relevant industry standards. ICC-ES recently developed an Acceptance Criteria on the performance of low-carbon alternative cements for use in concrete (AC529). ICC-ES recently signed a Memorandum of Understanding with the American Concrete Institute to help advance the achievement of carbon neutrality in cement. Marrying EPDs with product evaluations can be a valuable tool to address multiple performance requirements. To ensure both environmental and traditional (physical, mechanical, thermal, chemical, etc.) performance properties are achieved for GSA's building materials, GSA should ensure materials and products demonstrate both an acceptable EPD as well as an acceptable report or listing that demonstrates the material/product meets the traditional performance requirements the I-Codes adopted within the P100 require. The Code Council recommends GSA require conformity



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assessment bodies conducting these evaluations be accredited, in this instance to ISO 17065, to ensure requisite expertise, capability, capacity, and independence.

The Code Council strongly encourages GSA to consider these outlined solutions as mechanisms while allocating the \$2.15 billion available for the “Use of Low-Carbon Materials” program.

We look forward to continued work with GSA to improve the performance of the federal building stock.

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Thank you for the opportunity to provide comments. If you have any questions concerning these recommendations, please do not hesitate to contact us.

Sincerely,

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