

March 20, 2024

The Honorable Frank Lucas
U.S. House of Representatives
Committee on Science, Space & Technology
Washington, D.C. 20150

The Honorable Zoe Lofgren
U.S. House of Representatives
Committee on Science, Space & Technology
Washington, D.C. 20150

Dear Chairman Lucas and Ranking Member Lofgren:

I am writing on behalf of the Portland Cement Association (PCA)¹ in support of the Innovative Mitigation Partnerships for Asphalt and Concrete Technologies Act (H.R. 7685, IMPACT Act). This legislation provides the necessary federal focus and resources for decarbonizing the cement and concrete sectors.

PCA's members represent the majority of cement production capacity in the United States and serve nearly every congressional district. The cement and concrete industry contribute over \$100 billion to the U.S. economy and employs over 600,000 people.

Cement – the principal ingredient in concrete – makes civilization possible. The mixture of portland cement, aggregate, and water makes the building material concrete. Concrete is essential to the modern world. It is used in the pipes and facilities that deliver clean water, to build the ports critical to world trade, to construct mass transit systems connecting people, and in the buildings we work and live in.

Our industry has pledged to become carbon neutral across the cement and concrete value chain by 2050.² By way of a brief background, cement manufacturers face a unique chemical fact of life. The chemical process required to convert limestone and other raw materials into clinker, the primary ingredient in cement, generates carbon dioxide (CO₂) as an unavoidable byproduct during pyro-processing. Currently, roughly 60 percent of all emissions from the cement sector come from these manufacturing process emissions, separate and distinct from energy-related emissions. While the industry expects to make great strides in reducing carbon emissions through measures like using carbon-free fuel/heating technologies and low-carbon/carbon-free raw materials, the complete elimination of CO₂ generated from raw materials during pyro-processing is impossible. Given this chemical fact of life, the cement industry requires expansive tools and technologies to achieve deep decarbonization.

The IMPACT Act would utilize the vast resources of the Department of Energy (DOE) for far-reaching and advanced research, development, and demonstration of cement, concrete, and asphalt construction materials. The program at the DOE would utilize cost, performance, and demonstration targets for applying the best scientific resources of the federal government to help manufacturers reduce the emissions of the products essential to our economy and civilization. Emissions reductions will be focused on the entire process and the products themselves.

¹ PCA conducts market development, engineering, research, education, technical assistance, and public affairs programs on behalf of its member companies. Our mission focuses on improving and expanding the quality and uses of cement and concrete, raising the quality of construction, and contributing to a better environment.

² https://www.cement.org/docs/default-source/roadmap1/pca-roadmap-to-carbon-neutrality_final.pdf

The bill's focus on research for alternative fuels is essential to the industry, and it promises significant and immediate carbon reductions once cement facilities are fully permitted to use them. Alternative fuels include plastics, fabrics/fibers, non-recycled paper and cardboard, tires, and other valuable non-hazardous secondary materials that may be utilized as a lower carbon fuel instead of traditional ones. Cement kilns are well-suited for their use because of their high temperatures, but regulatory and technical barriers exist. Since 1990, the industry has reduced its use of traditional fossil fuels by over 15% by using these alternative fuels. The alternative fuels research part of the bill could help reduce kiln CO2 combustion emissions. Lastly, we note that the legislation's manufacturing institutes will facilitate coordination and deployment of the DOE's resources to the cement, concrete, and asphalt manufacturing sectors.

We encourage the Committee to pass this legislation and move it to the full House of Representatives for consideration. This bill will help the cement industry achieve its goal of carbon neutrality across the concrete supply chain by 2050. We look forward to working with you as the Committee considers its next steps. If you have any further questions, please contact me at soneill@cement.org or 202.719.1974.

Sincerely,

A handwritten signature in cursive script that reads "Sean O'Neill".

Sean O'Neill
Senior Vice President, Government Affairs
Portland Cement Association