

Innovative Mitigation Partnerships for Asphalt and Concrete Technologies Act (H.R. 1534)

The Innovative Mitigation Partnerships for Asphalt and Concrete Technologies Act (IMPACT) strengthens the competitiveness of American manufacturing by starting a dedicated Department of Energy program to drive RD&D for cement, concrete and asphalt emissions reductions.

SUMMARY

The industrial sector is slated to be the largest emitting sector of the U.S. economy by 2033, surpassing the energy and transportation sectors. The key to reducing industrial emissions is to clean up emissions from the cement, concrete, and asphalt sectors, which are a necessity in people's daily lives worldwide for roads, highways, buildings, and more. Changing how we produce these essential materials is no easy task and will require policy support to discover, demonstrate, and scale innovative production methods and materials.

Technological innovation is key to strengthening America's domestic manufacturing competitiveness for cement, concrete and asphalt to take advantage of the global construction boom and reduce foreign imports. The IMPACT Act establishes the Department of Energy's (DOE) first research, development and demonstration (RD&D) program focused on low-emissions cement, concrete and asphalt production. IMPACT will strengthen American manufacturing, increase supply chain resilience, lower dependence on foreign countries, and position America to export low-emissions technologies to capitalize on the rising global demand for cleaner industrial materials. These efforts include applying RD&D to new production methods and public-private partnerships to commercialize new low-emissions technologies.

The U.S. needs continued innovation to keep pace and ensure we are researching and deploying cutting-edge, innovative technologies to maintain a competitive advantage. Furthermore, multiple private companies are committing to decarbonizing their production, and buyers are interested in purchasing lower-emissions cement, concrete and asphalt. Targeted public and private sector support for emerging technologies will be necessary to help these companies achieve these ambitious goals.

HISTORY:

Recently enacted legislation, including the Infrastructure Investment and Jobs Act (IIJA) of 2021 and the CHIPS and Science Act of 2022, provide resources to the DOE for industrial demonstration programs within the Office of Clean Energy Demonstration and direction for steel innovation (RD&D). However, direction for cement, concrete, and asphalt was not included, and additional RD&D at the DOE and coordination with other government entities is needed. Supporting industry by providing RD&D support for innovators working on these groundbreaking technologies will allow America to continue to lead in the cement, concrete and asphalt industrial subsector.

SPECIFICS:

The Innovative Mitigation Partnerships for Asphalt and Concrete Technologies Act establishes a new program at DOE, including:

- **Dedicated RD&D Program**: Establishes DOE's first crosscutting RD&D program for advanced, low-emission cement, concrete, and asphalt technologies. Requires DOE to establish long-term cost, performance, and demonstration targets for different types of low-emission cement, concrete, and asphalt manufacturing.
- **Strategic Plan:** Directs DOE to develop a 5-year strategic plan to support RD&D activities, establish technological and programmatic goals, and set timelines to accomplish goals developed under the plan.
- Low-Carbon Manufacturing Institutes: Authorizes DOE to consider leveraging an existing Manufacturing USA Institute or establishing a new institute for low-carbon cement, concrete and asphalt. This institute will develop partnerships with private sector partners to trial later-stage R&D and boost workforce development and job creation in domestic cement, concrete, and asphalt sectors.

ORIGINAL SPONSORS:

Rep. Max Miller (R-OH) Rep. Valerie Foushee (D-NC)

SUPPORT:

Center for Climate and Energy Solutions (C2ES) ClearPath Action

Congress.gov Link: H.R. 1534