

The Hydrogen for Industry Act would support commercial-scale demonstration projects for end-use industrial applications of hydrogen, including in the production of steel, cement, glass, and chemicals.

SUMMARY

The Hydrogen for Industry Act advances innovation to reduce emissions from heavy industry by directing the Secretary of Energy to establish a grant program to demonstrate commercial-scale use cases of hydrogen in industrial applications. The Act also directs the Secretary of Energy, the Secretary of Commerce and the Secretary of Transportation to conduct a study on the feasibility, cost, emissions-reductions potential, and safety considerations of leveraging hydrogen in heavy-industry applications.

HISTORY:

Industrial products, such as steel, cement, and glass, require a continuous supply of high-temperature heat and chemical raw materials. They also release emissions from both fuel combustion and chemical reactions during production. As a result, emissions cannot be easily addressed through electrification alone because emissions from the chemical processes, often a large portion of emissions, still remain. Hydrogen is a versatile substance that can be used as both a zero-carbon fuel and chemical feedstock. It can also be produced when it is needed and can deliver reliable, high-temperature heat. These qualities make it a critical solution to reduce emissions in the industrial sector.

The [Hydrogen for Industry Act](#) was introduced in the Senate as part of the Hydrogen Infrastructure Initiative, a package of four bills that aim to not only support the adoption of hydrogen in energy-intensive industries through targeted direction and support for end-use applications, but also stimulate the build out of the infrastructure required to move, store, and deliver hydrogen. Commercializing hydrogen for industrial use-cases is a priority because industrial emissions account for [30% of US emissions](#), and industrial products – like steel and cement – form the backbone of our infrastructure, society and economy and provide valuable manufacturing jobs.

There were recently several pieces of enacted legislation that have an impact on reducing industrial emissions via hydrogen. The Infrastructure and Investment Jobs Act of 2021 authorized \$8 billion to develop large-scale hydrogen production and utilization programs across the country. The Hydrogen for Industry Act builds on these policies to bolster the development of hydrogen as an emissions reduction solution for the industry.

The act was previously introduced in the 117th Congress in both the Senate and the House ([S.3112](#), [H.R 9000](#)).

SPECIFICS:

The Hydrogen for Industry Act aims to advance the adoption of hydrogen as a technology to reduce emissions from heavy industry. The bill:

- Establishes a commercial-scale demonstration program for hydrogen use-cases in heavy industry

- Directs the Secretary of Energy to offer competitive grants under this program to hydrogen demonstrations in industries such as iron and steel, cement, chemicals, and refining etc.
- Authorizes \$1.2B for the period from FY 2024 to 2028, with the funds to remain available until expended
- Directs the Secretary of Energy, Secretary of Commerce, and Secretary of Transportation to jointly conduct a study on the potential emissions reductions, total cost, safety and handling considerations, and environmental impacts of hydrogen applications for heavy industry

ORIGINAL SPONSORS:

Sen. John Cornyn (R-TX)

Sen. Chris Coons (D-DE)

COSPONSORS:

Senator Bill Cassidy (R-LA), Senator Lisa Murkowski (R-AK), Senator Lindsey Graham (R-SC), Senator Jon Ossoff (D-GA), Senator Ben Ray Lujan (D-NM), Senator John Hickenlooper (D-CO), Senator Martin Heinrich (D-NM)

SUPPORT:

ClearPath Action, RMI, Bipartisan Policy Center (BPC) Action, Clean Air Task Force, Third Way, the University of Delaware, Fuel Cell and Hydrogen Energy Association, Information Technology & Innovation Foundation, Industrial Innovation Initiative, U.S. Chamber of Commerce Global Energy Institute, AltaSea, CALSTART, Citizens for Responsible Energy Solutions, Clean Hydrogen Future Coalition, Cummins, Nikola, LanzaTech, Fortescue Future Industries, Air Products, Linde, Air Liquide, Bloom Energy, Chemours, Hy Stor Energy, PDC Machines, ENGIE, and Baker Hughes

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