

Hydrogen Infrastructure Initiative

Senators Chris Coons (D-DE) and John Cornyn (R-TX)

Supporting adoption of hydrogen technologies in energy-intensive sectors

Background

Hydrogen's versatility as an energy carrier and feedstock and its lack of greenhouse gas emissions at the point of use makes it an attractive fuel source, particularly for applications where other clean energy alternatives present technical challenges. Unlocking the full potential demand for hydrogen will require strong efforts over the next decade in end-use applications where hydrogen is positioned to play a fundamental role – particularly in heavy industry, heavy transport, and shipping – to ensure they are ready to deliver emissions reductions at scale as soon as possible.

The Coons-Cornyn Hydrogen Infrastructure Initiative is a package of four bills to support the adoption of hydrogen technologies in high-impact end-use applications and the buildout of the requisite infrastructure needed to transport, store, and deliver hydrogen. The legislation would stimulate critical end-use demand as the United States continues to build its hydrogen economy.

Bill Summaries

- **Maritime.** The *Hydrogen for Ports Act* would support the demonstration of hydrogen- and ammonia-fueled equipment at ports and in shipping applications. Ports are well-suited to be early adopters of hydrogen fuel, with multi-modal transportation applications converging on a single location that can share hydrogen infrastructure at scale.
- **Heavy Industry.** 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. Industrial processes have specific technical requirements that limit the options for substituting heat sources. Hydrogen can supply reliable, high temperature heat, offering favorable characteristics for reducing emissions in the industrial sector. Hydrogen can also serve as a feedstock for production of ammonia, methanol, or other bulk chemicals.
- Heavy-Duty Trucks. The *Hydrogen for Trucks Act* would support the demonstration of heavy-duty fuel cell vehicles and hydrogen fueling stations while collecting critical data to inform future investments in hydrogen trucking infrastructure. The legislation would lower cost barriers and reduce risk for fleet operators interested in adopting hydrogen fuel cell vehicles by providing data and benchmarks, thereby incentivizing private investment and accelerating demonstration and deployment. In addition, the parallel adoption of vehicles and fueling stations will ensure their immediate utilization in the hydrogen economy.
- **Supporting Infrastructure.** The *Hydrogen Infrastructure Finance and Innovation Act* (HIFIA) would create a pilot financing program to provide grants and flexible, low-interest loans for retrofitted or new hydrogen transport infrastructure, storage projects, and refueling stations. The program is modeled after the highly successful TIFIA and WIFIA programs for highway and water infrastructure and builds on similar goals as the CIFIA program for CO₂ infrastructure. The bill also requires a study to address outstanding questions related to transport and storage of hydrogen and an assessment of jurisdiction over siting, construction, safety, and regulation of hydrogen transport infrastructure.