Hydrogen For Ports Act 2023 (S. 647)

The Hydrogen for Ports Act would support the demonstration of hydrogen and ammonia fueled equipment at ports and for shipping applications.

Summary

The Hydrogen for Ports Act advances innovation to reduce maritime emissions by directing the Secretary of Transportation to establish a grant program to support the use of hydrogen or ammonia-fueled equipment at ports. The Act also directs the Secretary of Homeland Security, the Secretary of Transportation, and the Secretary of Energy to conduct a study on the feasibility and safety of hydrogen and ammonia to be used as maritime fuels. The package would reduce costs and first-mover risks, and build out the required infrastructure to catalyze private sector investment and hydrogen adoption.

History:

When produced from low-emissions electricity, hydrogen and its derivatives, such as ammonia, are considered clean fuels. As a result, they can be used to reduce maritime shipping emissions. The maritime sector is challenging to electrify because of the long-ranges of travel and weight limitations of cargo and fuel.

The Hydrogen for Ports Act was introduced in the Senate as part of the Hydrogen Infrastructure Initiative, a package of 4 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. Ports are critical sites to facilitate the adoption of hydrogen use-cases because multiple transport options converge here and can share infrastructure at scale. An EU study found that green hydrogen can reduce EU port-related CO2 emissions by 5 million tons annually by 2050, a reduction that is equivalent to twice the emissions from the three largest US ports.

Several pieces of legislation were recently enacted that impact clean energy use at ports. Within the Infrastructure Investment and Jobs Act, the port infrastructure provision provides up to $2.25 billion through a competitive grant program to projects that reduce emissions and/or improve the reliability and safety of port infrastructure. The Hydrogen for Ports Act would provide further Congressional direction around program implementation. This is especially important because the funding for the grant program has already been appropriated.

The Hydrogen for Ports Act was previously introduced in the 117th Congress in both the Senate and the House (S.3111, H.R 7065).

Specifics:

The Hydrogen for Ports Act aims to demonstrate and assist in the technical and commercial validation of hydrogen and ammonia fuels for maritime applications and logistical operations through the following provisions:

- Establishes a competitive grant program, overseen by the Secretary of Transportation, to design and demonstrate the use of hydrogen and ammonia in port infrastructure and marine vessels, and to train ship crew and port personnel on fuel safety, operations and maintenance.

- Authorizes funding of $100 million for the grant program for each fiscal year from FY 2024 to FY 2028
- Directs a study, conducted by the Secretary of Homeland Security, to consider the safety and handling challenges of hydrogen and ammonia at ports and on vessels (including hydrogen storage) and their associated health and environmental impacts, to assess the cost and value of a potential hydrogen strategic reserve, and to apply lessons learned from private industry in both hydrogen/ammonia and other industries such as chemicals production

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SUPPORT:
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