

FIRING UP CLEAN HYDROGEN IN TEXAS (FACTSHEET)



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This June, C2ES convened a roundtable discussion in Houston, Texas, in partnership with the Center for Houston's Future, to explore the potential economic opportunities represented by the development, distribution, and utilization of clean hydrogen in the state and for export, along with potential challenges and community considerations. Participants included regional stakeholders from business, government, non-profit, labor, environmental justice, and academic communities.

As a global energy leader and the ninth-largest economy in the world, Texas is well positioned to play a leading role in hydrogen market development in the United States and globally. Texas has unique local characteristics that may enhance the state's ability to build out a robust hydrogen ecosystem, including existing infrastructure that can be utilized for transport and storage, a cluster of localized demand from industrial facilities, access to large port capacity for trade, a highly-skilled energy workforce, expertise throughout the hydrogen supply chain, and a supportive regulatory and investment environment. Additionally, the Gulf Coast Hydrogen Hub will be centered in Houston, due to their existing hydrogen production infrastructure and skilled energy workforce.

With unprecedented levels of federal funding from the Bipartisan Infrastructure Law and the Inflation Reduction Act, Texas has an opportunity to leverage its expertise and industrial capabilities to become a global leader in hydrogen. This fact sheet provides high-level insights and policy recommendations from the roundtable discussion.

KEY TAKEAWAYS AND POLICY RECOMMENDATIONS

LOCALIZE POSITIVE IMPACTS FOR COMMUNITIES AND THE WORKFORCE

- Congress should establish a funding program through DOE and EPA that facilitates engagement between developers of hydrogen infrastructure and communities—especially environmental justice communities, tribal communities, and energy communities. Congress should also expand Department of Education resources for career and technical education that can support recent graduates and mid-career workers in skilled trades to acquire expertise relevant to the clean hydrogen industry.
- CEQ and other federal agencies should provide clear, transparent guidance on Justice40. They can do so by indicating, for example, how benefits are quantified and in what geographic radius the “communities” are defined.
- The Texas legislature should create a funding program to support paid local apprenticeship programs focused on clean hydrogen, covering curriculum development and coordination with community colleges, labor and trade associations, and private training programs relating to the energy transition.

MAXIMIZE THE CLIMATE BENEFIT OF SHIFTING TO HYDROGEN

- Congress should expand the 45X advanced manufacturing production credit to include electrolyzers, treatment, processing, and hydrogen-powered compression equipment production.
- Congress should establish a performance standard through the EPA for energy intensive industries to reduce industrial emissions. This performance standard should be designed to encourage industrial hydrogen users to shift to lower-carbon intensity hydrogen, especially in the petroleum and chemical refining and fertilizer production.
- The Texas legislature should pass additional legislation to integrate the production, distribution, and storage of hydrogen, including hydrogen produced via an electrolyzer, into regulations that apply to natural gas and other fuels, such as the Public Utility Regulatory Act or other relevant sections of the administrative code.

FACILITATE THE TRANSPORT AND DISTRIBUTION OF CLEAN HYDROGEN

- Congress should clarify that the Federal Energy Regulatory Commission (FERC) has jurisdiction to regulate the siting of interstate hydrogen infrastructure (e.g., pipelines, compressor stations, and storage facilities), inclusive of 100 percent hydrogen, as well as interstate hydrogen commerce. This jurisdiction should exclude intrastate hydrogen pipeline infrastructure (e.g., pipelines, compressor stations, and storage facilities) not part of the interstate project which initiates the FERC permitting review.
- FERC should provide guidance to states to facilitate the development of transparent, consistent regulations for new hydrogen pipeline construction and interconnection, such as developing a model rule that states could use to facilitate the development of their own regulations.

ACCELERATE CLEAN HYDROGEN DEMAND

- Congress should provide additional funding through the Department of Energy (DOE), distinct from the regional clean hydrogen hubs program, to support projects that demonstrate end-use industrial applications of hydrogen, including in the production of steel, glass, and chemicals, as well as projects in the transportation sector.
- EPA should increase the stringency of greenhouse gas emissions regulations for the power sector. The regulations should be inclusive of the deployment of hydrogen. However, EPA should consider in these that strict, highly prescriptive rules on an early stage developing industry like clean hydrogen could prevent it from developing at the necessary pace and scale.
- Houston, along with surrounding cities, should create a matching program to connect clean hydrogen producers with potential customers who are willing to pay a premium for low-emissions hydrogen. This program could be modeled on DOE's H₂ Matchmaker program.

You can read the full brief *Firing Up Clean Hydrogen in Texas*—which contains background on hydrogen production and utilization, key themes from the roundtable, and the full set of policy recommendations—on the C2ES website.



The Center for Climate and Energy Solutions (C2ES) is an independent, nonpartisan, nonprofit organization working to secure a safe and stable climate by accelerating the global transition to net-zero greenhouse gas emissions and a thriving, just, and resilient economy.