



Hydrogen is one of the most common elements in the universe. Hydrogen can be produced from a variety of sources and processes, such as reforming natural gas or splitting water using electricity from wind and solar sources. Hydrogen applications range from power, heavy duty vehicles, marine, rail, and industrial sectors.

- A clean hydrogen economy in Texas could potentially create 180,000 new and re-purposed jobs by 2050.
- A clean hydrogen economy could generate an additional \$100 billion or 6% in State GDP by 2050.
- By 2050, 21 million tons of clean hydrogen will be produced in Texas.

Source: McKinsey "Unlocking clean hydrogen in the US Gulf Coast: the here and now."



Why Hydrogen in Texas Now!

Gulf Coast's Energy Assets		Production capacity	Transportation and storage
Broad base of industrial energy customers across multiple demand segments	Welcoming environment for infrastructure development	Largest renewable energy market in the nation (36 GW wind, 15 GW solar)	1000+ miles of hydrogen pipeline – largest networks in the nation
33% of U.S. hydrogen production capacity	Highly skilled energy workforce (11% of U.S. energy jobs)	2.4 billion tons of CO ₂ storage capacity (10,000x Houston's current CO ₂ emissions)	3 of the 6 hydrogen storage caverns in the world
Large concentration of academic and industry-driven energy innovation: major research universities and a new innovation campus	Largest energy manufacturing cluster (7000+ establishments)	Access to abundant low-cost natural gas (11.2 Tcf natural gas produced in 2022)	

Source: McKinsey, [Houston as the Epicenter of a Global Clean Hydrogen Hub](#)

Did You Know?

- ✓ Hydrogen fuel cell vehicles range from cars, buses, and trucks producing zero emissions.
- ✓ Hydrogen derivatives are powering ships.
- ✓ Hydrogen powered aircrafts are being developed to reduce aviation emissions.
- ✓ Hydrogen can be used to decarbonize the cement, glass, and steel industries.
- ✓ Hydrogen can be used for flexible power generation, back up and off grid power supplies.
- ✓ By 2050, 10 million tons of clean hydrogen will be exported from Texas.

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For more information, visit: www.texashydrogenalliance.org



The Texas Hydrogen Alliance is member driven trade alliance focused on growing the Texas Hydrogen industry. Our members span the entire hydrogen ecosystem. The Texas Hydrogen Alliance crafts strategic relationships with policy decision makers and regulators. Utilizing our members' expertise, network, and assets, the Texas Hydrogen Alliance is leading Texas's energy expansion by bridging today's energy with tomorrow's opportunities.