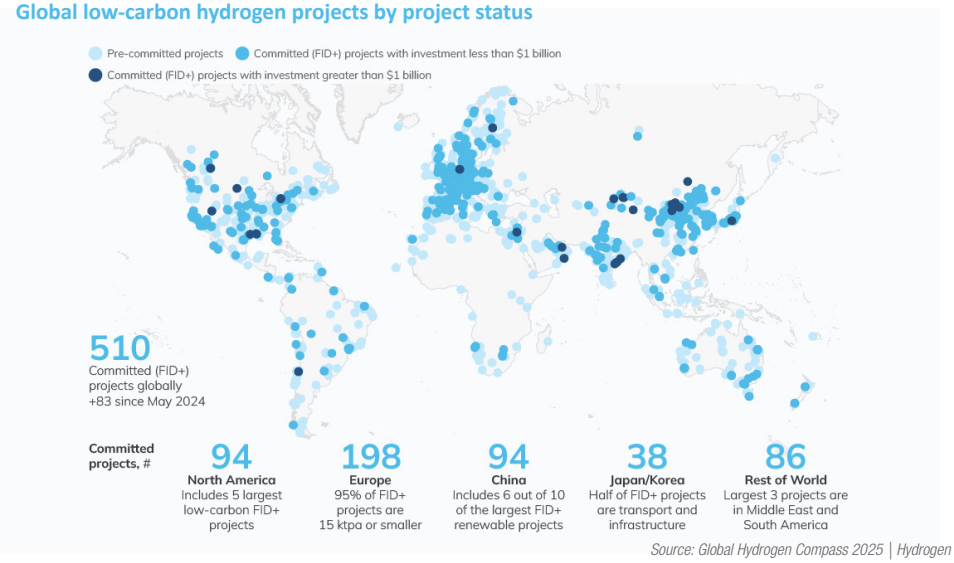
Clean Hydrogen Future Coalition

HYDROGEN FOR AMERICAN COMPETITIVENESS

Why it Matters

U.S. leadership in low carbon hydrogen (LCH) strengthens our competitiveness as global demand for low carbon products continues to grow. In 2025, the Hydrogen Council reported that there is over $110 billion in committed global investments in LCH, a figure that has grown by 50% since 2020. China, the European Union, the Middle East and other countries are building out their hydrogen sectors with government subsidies and policy certainty, for both domestic consumption and to sell in export markets. In order compete, the U.S. government must fully implement existing hydrogen programs and support critical policies such as the 45V hydrogen production tax credit to ensure the roughly $23 billion in committed U.S. investments are able to rapidly move forward.[1]



Source: Global Hydrogen Compass 2025 | Hydrogen Council, McKinsey & Company

U.S. Economic and Industrial Growth

Hydrogen production can lead to expanded use of America's diverse and abundant natural resources. Hydrogen can also be used in several applications across multiple sectors, enabling further expansion opportunities for the United States:

- Oil and gas – producing hydrogen and synthetic fuels with increased supplies of natural gas and expanding oil refining capacity
- Ammonia and chemicals – supporting enhanced domestic manufacturing and exports opportunities
- Transportation – expanding on road and maritime fueling options and alternative fuels production

LCH will provide substantial environmental and economic benefits, improve energy security and resiliency, and position the U.S. to compete in new domestic and international markets.

Hydrogen Jobs

Investment in hydrogen infrastructure will drive economic development through the creation of high-quality, good-paying jobs in energy production, manufacturing, and construction. The National Petroleum Council estimates that by 2030, expanding the U.S. low-carbon hydrogen economy could support:100,000 jobs from new capital investment and construction projects

- 100,000 jobs from new capital investment and construction projects
- 120,000 jobs in operations, maintenance, and related services[2]

[1] Global Hydrogen Compass 2025 | Hydrogen Council, McKinsey & Company

[2] Harnessing Hydrogen: A Key Element of the U.S. Energy Future | National Petroleum Council, 2024

Global Market Competition

CHINA

China's National Energy Administration has stated that scaling its hydrogen sector will be a key component to its five-year energy plan.[3] Between 2026 and 2030, $33 billion has been committed towards hydrogen projects, and many of the projects planned in China are expected to be four to ten times larger in size than planned hydrogen projects in Europe and America.[4] Top-down policy directives, centrally-supported lower cost of capital, and strategic alignment of state-owned enterprises appear to contribute to rapid growth in the sector.

China already leads the world in electrolysis deployment and manufacturing, making up 65% of the market for installed capacity or projects that have reached the final investment decision. China will use LCH for energy production and to supply commercial fuel cell vehicles, while also manufacturing products such as sustainable aviation fuel, methanol and ammonia.

SAUDI ARABIA

Saudi Arabia is providing $10 billion from its Public Investment Fund (PIF) to support the kingdom's ambitions to deliver 15% of the world's LCH supplies and is providing those funds to support several domestic projects. The country's NEOM hydrogen complex is partially supported by the PIF and 80% complete and is expected to produce 1.2 million tons of ammonia annually for export.[5]

EUROPEAN UNION

The EU set a target to produce 10 million metric tons (MMT) of renewable hydrogen and import 10 MMT of LCH by 2030. There are roughly 105 Gigawatts (GW) of announced renewable hydrogen capacity production, with industry feedstock sectors such as oil refining driving the demand.[6]

The EU launched a "Hydrogen Bank" in 2022 which allocated €3 billion to establish a full hydrogen value chain in Europe. The Bank will provide a fixed fee for producing LCH on a €/kg of LCH over 10 a year period – similar to the 45V tax credit. The first auction was held in 2023 and awarded €720 million to seven hydrogen projects which have the potential to produce 1.5 MMT of LCH over 10 years. A second auction in 2025 awarded €992 million to fifteen projects that have the potential to produce 2.2 MMT of LCH over the next 10 years.

[3] China Targets Green Fuels in Energy Policy Shift | Fuel Cells Works, 2025
[4] Global Hydrogen Compass 2025 | Hydrogen Council, McKinsey & Company
[5] NEOM Green Hydrogen Complex | Air Products, 2025
[6] REPowerEU: A plan to rapidly reduce dependence on Russian fossil fuels and fast forward the green transition | European Commission, 2022