

HYDROGEN CAPABILITIES

Leveraging our extensive engineering and construction experience in gas processing, liquefaction, pressurized and cryogenic storage of hydrogen, LNG, NGL's, oxygen, nitrogen, and other gases, Matrix is well-positioned and experienced to be your partner in the realization of a carbonless energy source: hydrogen (H₂).

Safety. Integrity. Positive relationships. Stewardship. Delivering the best. These core values have forged our reputation for excellence.



A HIGHER STANDARD IN CLEAN ENERGY



YOUR CLEAN ENERGY PARTNER

Hydrogen, while the simplest of elements, has unique properties: highly combustible and very cold as a liquid, as well as challenges: the smallest molecules to contain. Processing and storing hydrogen requires expertise that few companies have. Matrix has over 40 years of experience in the execution of complex and critical projects comparable to and including hydrogen.

Services

- Conceptual design and feasibility studies
- Front End Engineering and Design (FEED)
- Detailed design
- Engineering, procurement, and construction (EPC)
- General contractor and construction
- Integrator of production, liquefaction, and fueling technologies

Typical Project Scopes

- Liquid hydrogen sphere design, fabrication, and erection
- Hydrogen liquefaction integration
- Construction of steam methane reformers (SMR)
- Electrolysis installation
- Carbon capture installations and retrofits
- Green hydrogen feed conversion or installation for green ammonia production
- Plasma gasification hydrogen production installation

Consumer & Production Facilities

- Refineries (crude to renewable diesel)
- Landfill and biogas conversion to hydrogen
- Steel mills (direct reduced iron (DRI) blast furnace replacements)
- Glass and aluminum manufacturers
- Power generation

