

Carbon management solutions for a net zero world

Around the world, new ways of producing and consuming energy are emerging with a focus on low-carbon solutions to meet net zero goals. WSP helps clients reduce their carbon footprint through various clean energy strategies, including carbon capture, utilization and storage (CCUS) as well hydrogen production, storage, distribution and utilization. Our work in CCUS and hydrogen is part of our Future Ready® approach, aimed at shaping a sustainable future and advancing environmental, social and governance (ESG) principles.

The research firm Verdantix recently named WSP a market leader for ESG and Sustainability Consulting.

vsp

THE WSP DIFFERENCE

WSP offers experience and expertise across the full hydrogen value chain

Our "Whole Energy System" approach covers the hydrogen economy, with services in major areas including energy infrastructure, hydrogen production and distribution, underground storage, and hydrogen refueling facilities, along with a deep understanding of hydrogen economics.

WSP has long been a CCUS leader, from our early work in designing and drilling Class II acid gas injection wells for carbon dioxide and hydrogen sulfide to our current work on Class VI wells

Our full suite of services includes geologic feasibility studies, UIC Class VI permitting, surface facility design, and environmental and land use studies.

> Download a copy of our Global ESG Report here: https://www.wsp.com/ en-US/investors/reportsand-filings/esg-report

Green Hydrogen
Blue Hydrogen
Grey Hydrogen
100% Hydrogen
Natural Gas
Carbon Capture

U.S. BASED PROJECTS

2016 - Hydrogen Storage Cavern for Air Liquide

WSP supported Air Liquide with selecting the location within the salt dome, prepared a feasibility study, performed cavern and wellbore design, and managed the drilling, completion and solution mining of the storage facility. WSP also managed the conversion from leaching to hydrogen storage configuration.

2019 - Hydrogen Storage Cavern for Phillips 66

WSP provided consultancy services and detailed engineering for the development of a new hydrogen storage cavern in Texas. WSP led the detailed design phase, supported the permitting process, and conducted early procurement and metallurgical analysis of tubulars for hydrogen caverns.

2020-22 - Green Hydrogen Storage Cavern

WSP is leading the design of two large storage cavern wells for ACES in Delta, Utah (a joint venture by Magnum and Mitsubishi). The scope includes designing the underground storage facility, solution mining infrastructure, water and power supply facilities, brine pond design, and assisting with the permitting process.

2020-21 - Decarbonization of Power Supply Source

WSP has conducted several feasibility studies to evaluate H2 storage and supply alternatives requirements to blend H2 with natural gas for power generation.

2020-22 - Green Ammonia Production to Export Renewable Energy

WSP is conducting several feasibility studies to use renewable energy produced at remote locations to generate green ammonia as a solution to export energy.

2020-21 - Storage Asset Evaluation and Optimization Process

WSP conducted feasibility studies to convert existing natural gas caverns to store hydrogen.

INTERNATIONAL PROJECTS

2020 - Modeling and Research of H2 Fuel Cells - Transportation

WSP conducted an analysis evaluating the performance, cost, and space requirements of battery-electric buses and hydrogen fuel cell buses.

2019-22 - Hynet - U.K. Hydrogen Network

This integrated hydrogen and carbon capture, usage and storage project in the North West of England focuses on the supply of hydrogen to industrial gas users, power generation sites, refueling stations, and for blending into the natural gas grid. WSP was responsible for a preconceptual design study covering the modeling of the hydrogen network, definition of above-ground installations, control philosophy and high-level operational and commercial requirements, and was responsible for consenting, environmental impact assessment, and stakeholder and land advisory services.

2019-21 - Scotia Gas Networks and Green Investment Group, U.K. - Feasibility Study: Hydrogen and Carbon Capture Hub

WSP is doing the conceptual design of new infrastructure (H2 production plant, CO2 export facility and new H2 pipeline network), including mapping out potential hydrogen demand profile for the area across sectors and engaging with local stakeholders to understand hydrogen demand and acceptance.

ABOUT WSP

WSP USA is the U.S. operating company of WSP, one of the world's leading engineering and professional services firms. Dedicated to serving local communities, we are engineers, planners, technical experts, strategic advisors and construction management professionals. WSP designs lasting solutions in the buildings, transportation, energy, water and environment markets. With more than 12,000 employees in over 200 offices across the U.S., we partner with our clients to help communities prosper.

vsp

CONTACT US

For more information about how we can help you deliver your next project, contact:

Andres Fernandez, PMP, PfMP Market Sector Lead,

Hydrogen

andres.fernandez@wsp.com +1 832 459 6750



https://www.wsp.com/ en-US/hubs/energy