



# Hydrogen Refuelling Station (HRS) Solutions

Your station, your way



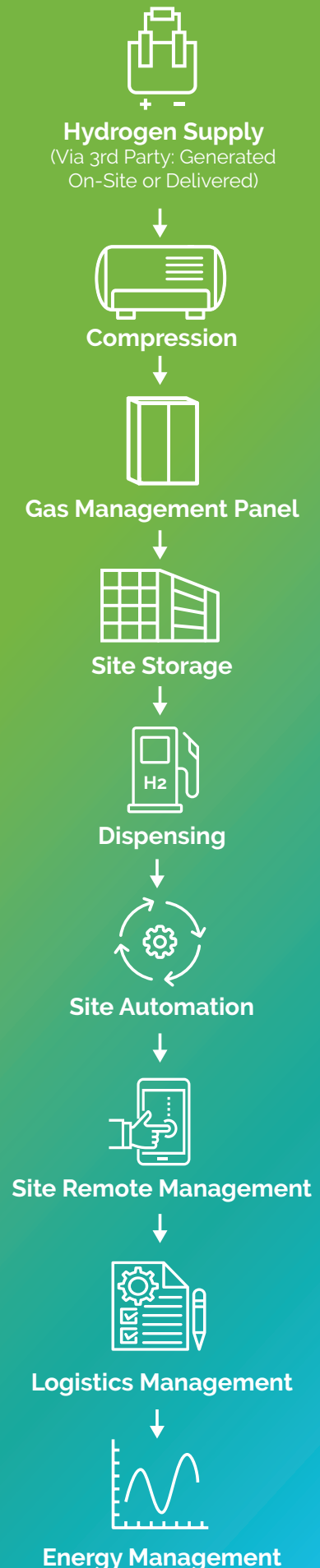
Modular | Scalable | Reliable

# State-of-the-art solutions to meet your zero emissions goals

Our refuelling stations are designed with safety, security, connectivity, and modularity in mind – and are ready to scale up and evolve with your business over time.

- **Consultative approach** to station design. Our Hydrogen Specialists work with you to design your station according to your current and future needs.
- **Modular, containerised** solutions for plug and play deployment, even where space is limited.
- **Flexible** around different hydrogen production or supply models.
- **Configurable** to serve a wide range of applications and volumes, from passenger vehicles to heavy duty fleets.
- Designed with **high serviceability** and **uptime** in mind, backed by our extensive service & maintenance network.
- **Expertise and proven reliability** from Gilbarco Veeder-Root's 150+ years of expertise in retail fueling and technologies complemented by ANGI's 40+ years of expertly engineered compressed gas solutions.
- **Cloud connectivity** via central site controller for remote monitoring, reporting, energy management and preventative maintenance.
- **Compliant** with SAE J2601 and SAE J2601-2 fuelling protocols.
- Ready to meet to meet all applicable **regulatory and industry certifications** by region.

## OUR FULL SITE SOLUTIONS



HARDWARE

SOFTWARE

SERVICES



# GET H<sub>2</sub> READY

Hydrogen has a pivotal role to play in the transition to a more sustainable and secure future energy mix. It is one of the most abundant elements on earth, and offers one of the lowest carbon alternatives to traditional fuels.

For the transportation sector, hydrogen carries the distinct advantage of zero tailpipe emissions (only water vapour), furthermore becoming a truly green fuel with a zero-carbon footprint if generated using renewable energy to split water (electrolysis). Unlike pure battery electric, hydrogen also offers similar refuelling times to conventional fuels, making it an ideal alternative for heavy and high use vehicles such as trucks, buses and taxis.

It is estimated that hydrogen could power 10-15 million vehicles and around 20% of trucks by 2030. The race is on to deploy the refuelling infrastructure necessary to secure a hydrogen powered future.

## Your partner for the journey



### EXPERIENCE

Founded over 150 years ago, we have considerable expertise in designing, manufacturing, installing, and servicing refuelling infrastructure around the world. Our dedicated compressed gases division additionally counts more than 40+ years' experience in the design and manufacture of full-site solutions for compressed gases, including CNG, RNG, and hydrogen.



### AMBITION

Backed by our parent company Vontier, we have a sharp focus on smarter and greener mobility. We are committed to innovating and investing across the hydrogen value chain to continue to meet evolving customer demands.



### TRUSTED

A single, reliable partner who can deliver all aspects of your project, from development, to deployment, to aftermarket services and software solutions to help you maximise your investment.



### FUTURE PROOF

Every aspect of our station design is modular and ready to expand when your business scales. From the compression system, to storage, to dispensing, we have designed the station with growth in mind.

GILBARCO  
VEEDER-ROOT

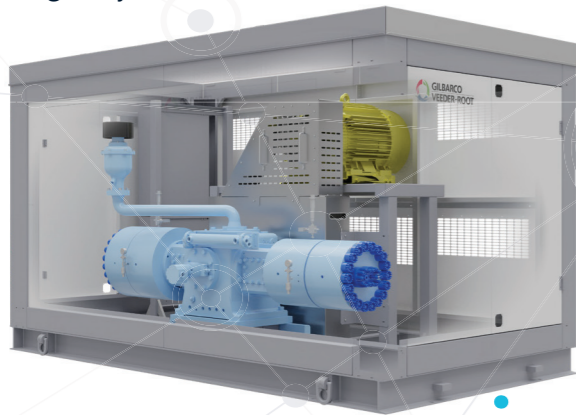


# HYDROGEN REFUELLING STATION INFRASTRUCTURE

A Hydrogen Refuelling Station (HRS) is a specially designed system for refilling hydrogen powered vehicles with pressurised hydrogen gas. For drivers, the hydrogen refuelling experience is similar to that of conventional petrol or diesel vehicles, with refuelling times around 3-5 minutes for cars and 10-15 minutes for heavy duty vehicles.

## Containerised Compression System

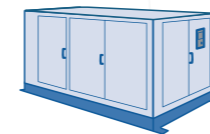
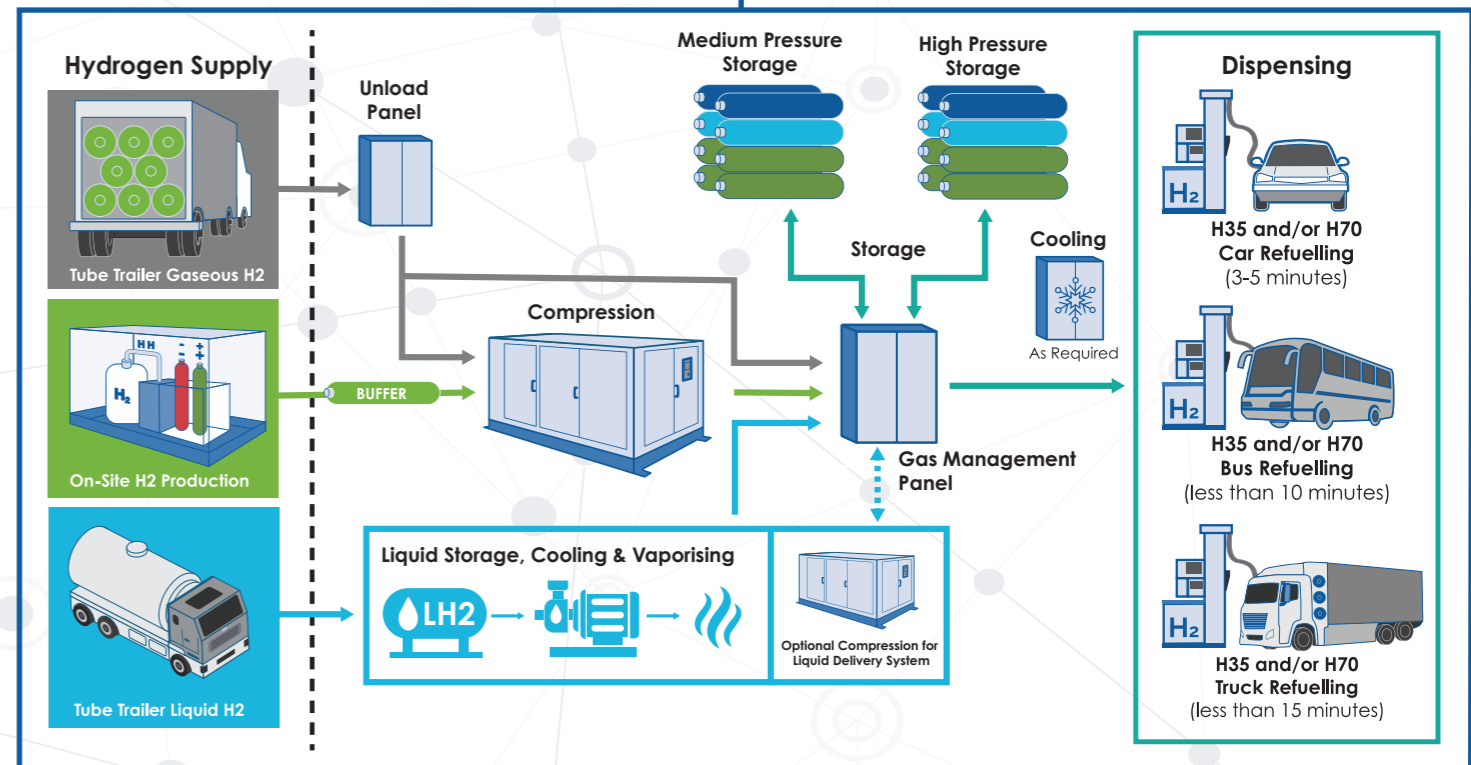
Triple diaphragm compression technology, available in single or dual phase. Ready to serve different station throughputs and inlet/outlet pressures. Capable of volumes in excess of 2500 kg/day.



## Hydrogen Dispensing System

All-in-one compact dispenser design, based on our industry leading SK700-II dispensing technology.

# OUR SYSTEM COMPONENTS FOR THE H2 VALUE CHAIN



**Compression**  
Increases the pressure of hydrogen for storage and dispensing.



**Gas Management Panel**  
The interface between system components which controls the flow of gas on the station.



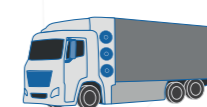
**Storage**  
Above ground high pressure storage cylinders. Available in 500 bar or 1000 bar, and in multiples depending on site throughput.



**Cooling**  
Chills gas warmed during the compression cycle(s) ready for storage and dispensing.



**Dispensing**  
Delivers hydrogen fuel to vehicles at either 350 bar or 700 bar. User friendly interface for a familiar refuelling experience.



**Hydrogen Powered Vehicle**  
Hydrogen is dispensed into hydrogen tanks on the vehicle powered by either ICE (Internal Combustion Engine) or FCEV (Fuel Cell Electric Vehicle).





# AT THE FOREFRONT OF THE ENERGY TRANSITION

Our mission is to build cleaner, more sustainable mobility of the future. Our commitment is to supply the world with the infrastructure needed to accelerate the transition to a zero-carbon future.

Our turnkey hydrogen refuelling stations are built on our legacy of industry leading refuelling solutions for commercial and retail applications. A product of the quality engineering that is our signature, and trusted by thousands of clients worldwide, our hydrogen refuelling systems are designed to provide a 'comfortably new' hydrogen refuelling experience for drivers, by combining familiar design, with the latest modern technology for the best end-user experience.

## Driving a decarbonised future for our industry

At Gilbarco Veeder-Root, we support the **United Nation's 2030 Agenda for Sustainable Development**. As a business we follow the ESG (Environment, Social and Governance) framework for sustainability, where we apply our robust policies, processes and procedures to scale solutions aimed at alleviating some of our industry's and the planet's major sustainability challenges.

Through our dedicated **alternative fuelling platform**, we strive to build a low carbon, sustainable future for our customers and communities. Our integrated solutions across **hydrogen, CNG, RNG** and **e-Mobility** have been carefully curated to offer a seamless and responsible transition to alternative refuelling.

H<sub>2</sub>   



Ready to join the H<sub>2</sub> revolution?

Speak to our dedicated hydrogen solution specialists

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We support  
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