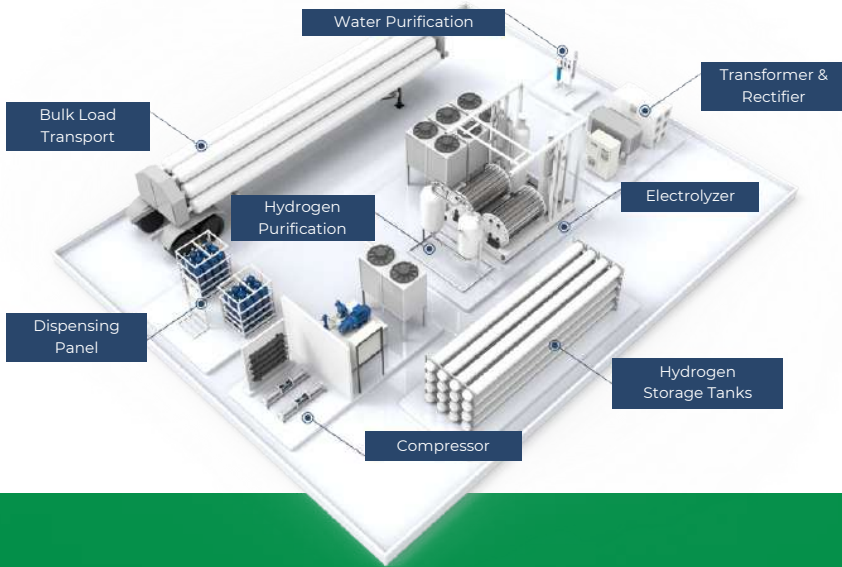


SCALABLE HYDROGEN ENERGY PLATFORM

Meet SHEP™

Scalable Hydrogen Energy Platform

SHEP is a scalable hydrogen production platform built on a 1.25MW alkaline electrolyzer that produces up to 500kg per day of compressed hydrogen from water.



📍 Localized green/clean hydrogen production

📐 Scalable and modular

🔋 Up to 500 kg/day per electrolyzer

⚡ Green or grid power

How It Works

SHEP can be powered by the grid or renewable sources, utilizing a 1.25MW electrolyzer to efficiently split water into hydrogen and oxygen. The oxygen is released into the atmosphere and the hydrogen is compressed, stored, and dispensed for off-take. While a single 1.25MW electrolyzer can produce up to 500 kg of hydrogen per day, it can be paired with other electrolyzers to produce even more. SHEP can also be integrated seamlessly with an optional refueling add-on for fuel cell electric vehicles (FCEVs) and hydrogen internal combustion engine vehicles (HICEVs).

Key Features

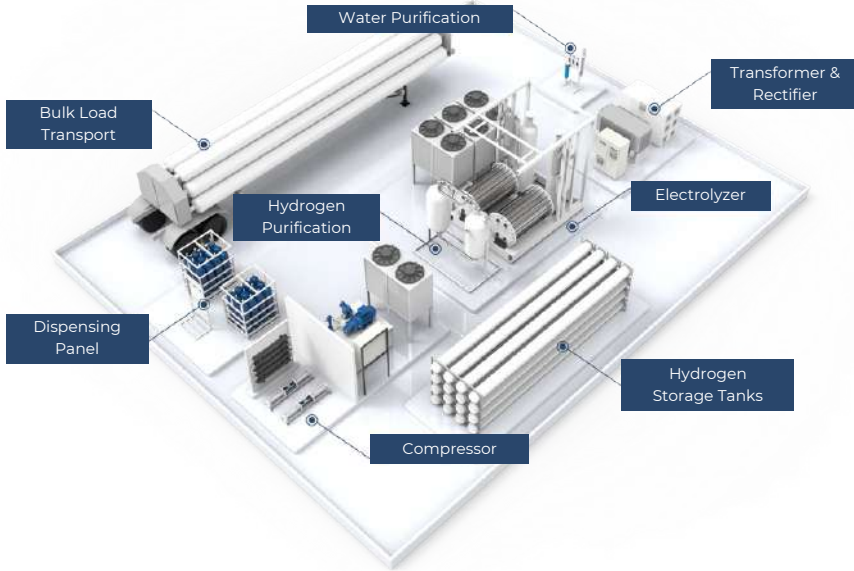
SHEP is a cost-effective, sustainable solution for building green and clean hydrogen infrastructure.

- 1.25MW electrolyzer
- Water purifier
- Compressor
- Storage
- Dispenser
- Refueling add-on (optional)
- Remote monitoring
- USA-based supply



Aerial view render of SHEP's components.

Site Requirements



Input

- 1.6MW, full plant

Output

- Up to 500 kg/day green hydrogen (20kg per hour) per electrolyzer
- 99.999% purity (grade D)

Resources

- Water: 200L/hr
- Space: < 3,000 sqft

Extra features

- Made in USA

Building Hydrogen Infrastructure

Local, Regional Approach

SHEP's localized, scalable design allows for incremental growth and easy integration into existing infrastructure. Strategically deployed units can be expanded based on demand, reducing financial risks and allowing for quicker deployment in various locations.



Timely and Cost-Effective

By developing SHEP at a fraction of the cost and timeline of our competitors, we offer more accessible solutions for communities, industries, and enterprises. This allows us to set a new industry standard for accessibility and affordability in green and clean hydrogen production and technology.

Building Hydrogen Infrastructure

USA-Made

HNOI partners with USA-based suppliers and manufacturers to establish a robust, domestic supply chain and foster economic growth within the USA. This not only bolsters the economy and job opportunities, but it also ensures greater reliability in lead times and sustainability in the overall industry.



Diverse Markets

Due to SHEP's flexible design, we are able to cater to a target-rich market spanning refueling infrastructure for zero-emission:

- Heavy duty transport
- Bus and truck fleets
- Passenger vehicles
- Material handling equipment
- Data center back-up power
- And much more

The Green Hydrogen Transition



1

Faster than our competitors

Most green and clean hydrogen facilities take billions in financing and years to complete. HNOI builds at a rapid and cost-effective pace compared to our competitors, offering a timely, accessible solution for communities, industries, and enterprises.



2

Made in the USA

With HNOI, you are choosing to support domestic suppliers and laborers, build a resilient supply chain, and promote internal economic growth. This enhances the economy and guarantees reliability and sustainability within the emerging industry.



3

Better for the environment

Choosing green hydrogen reduces emissions, fostering a healthier environment, combating climate change, and aligning with sustainability goals. It meets the increasing demand for environmentally conscious energy solutions and encourages innovation.

Our Company

Who We Are

HNO International is a green hydrogen product development company. Our mission is to provide cost-effective, modular, scalable systems that produce, store, and dispense green hydrogen on a regional, local scale.

Highlights:

- 15+ years in hydrogen R&D exp.
- 19 US patents
- Strong partnerships in industry



Donald Owens

Founder and Chairman

Don, our visionary and leader for 15+ years, combines engineering, patent law, and entrepreneurship, driving our hydrogen technology success.



Paul Mueller

President and CEO

Paul leverages 30+ years in Aviation, Aerospace, and Defense. P&L leader since 2007, he transforms our green hydrogen business with strategic organization.



Greg Heller

CTO

Greg brings strategic insight to our technical development, collaborating with engineers to innovate and optimize our hydrogen systems.



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