The Green Hydrogen Hub Vietnam

A Public Private Partnership under H2-Uppp

The Challenge

Vietnam approved its National Hydrogen Development Strategy in February 2024, targeting 100,000 -500,000 tonnes of hydrogen by 2030 and 10 -20 million tonnes by 2050 (5 - 10% of projected energy demand). The strategy develops the full hydrogen value chain for domestic use and export. It prioritises green hydrogen to support coal phase-out, energy security, and net-zero emissions by 2050. Priority sectors include steel, chemicals, refining, heavy transport, and power generation, with hydrogen and ammonia co-firing as transitional solutions under Vietnam Power Development Plant VIII (PDP8). Achieving these goals requires greater awareness, demonstration projects, viable business models, and stronger financing support to build a green hydrogen market in Vietnam.

The Solution

Opening in October 2025, the Green Hydrogen Hub Vietnam – a dynamic and physical platform based at the Vietnamese-German University (VGU) campus in Binh Duong – is established with the view to unlock Vietnam's green hydrogen potential. It is a public-private partnership (PPP) under the International Hydrogen Ramp-up Programme (H2-Uppp), with GIZ and the VGU as the public partners and a consortium of recognised industry players in green hydrogen technology and consulting services such as Enertrag, Bosch, Siemens, TÜV SÜD, Messer, Indefol, and Neuman & Esser.

This Hub serves as:

- A central platform for meetings, workshops, and cutting-edge technological showcases.
- A collaborative space to drive innovation and adoption of green hydrogen in Vietnam.

By bringing together industry, academia, and government, the Hub is set to transform Vietnam into a green hydrogen powerhouse.

Key Objectives

The Hub has three core objectives to unlock Vietnam's green hydrogen potential:

1. **A Centre of Excellence:** The Hub will build a skilled workforce through specialised training and education programs tailored to green hydrogen technologies. This ensures Vietnam has the talent to lead the industry.

2. **A Demonstration Platform:** The Hub showcases real-world green hydrogen technologies such as Green Hydrogen Value Chain model, Electrolyer, Green Hydrogen Burner, and Compressor model, giving stakeholders hands-on experience with solutions that can decarbonise industries like transport, manufacturing, and energy.

3. **A Business Consortium:** The Hub connect stakeholders across the entire hydrogen value chain, from production to application, fostering partnerships that drive innovation and growth.

How it will be done

VGU hosts the hub, provides a 1,500 m² showroom and exhibition space, supports training and research on demonstrators and use cases, facilitates high-level visits, and connects the project with German universities.

GIZ designs, implements and oversees the hub operations, develops the Hub's key activities, and creates new green hydrogen curricula.

The private consortium, led by Enertrag defines the hub's long-term strategy and communication, delivers expert trainings and workshops, supplies the technology demonstration plant, exhibits the green hydrogen value-chain model.

Together, the Hub combines academic infrastructure, public funding and expertise, and private-sector technology to accelerate Vietnam's green hydrogen ecosystem.

Expected impacts

The Green Hydrogen Hub Vietnam is poised to become the decisive catalyst for Vietnam's transition from pilot-scale experiments to a commercially competitive green hydrogen powerhouse. Combining cutting-edge demonstration facilities and a ready-made consortium of leading German technology providers with a strong focus on workforce training and certification, the Hub directly resolves current bottlenecks like skills shortages and perceived technical risk. Should the Vietnamese government implement technical standards, a national certification scheme, and targeted incentives (subsidies, tax breaks, or carbon pricing) by 2028, the Hub will unlock billions in private investment. Employing this GIZ-proven public-private partnership model, the Hub can accelerate the creation of a complete, bankable, and export-ready green hydrogen value chain, positioning Vietnam as Southeast Asia's leading green hydrogen player by the early 2030s.

Round table discussion among Hub consortium members, Feb 2026

The project at a glance	
Duration	2025 - 2026
Country	Vietnam
Objectives	Unlock Green Hydrogen Potential in Vietnam through the establishment of Green Hydrogen Hub
Partners	Enertrag (lead partner), Bosch, Siemens, TÜV SÜD, Messer, Indefol, and Neuman and Esser Vietnames-German University (VGU) as a public partner and support by AHK Vietnam (German Chambers of Commerce Abroad)
Outputs	• Hub strategy defining governance, operations, and long-term sustainability. • Demonstration platform for green hydrogen technologies in Vietnam. • Business consortium connecting stakeholders across the hydrogen value chain. • Training series for students and professionals on green hydrogen topics.

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