

Toward Carbon Neutrality International Hydrogen Supply Chain

HENCA Tokyo 2025 – Hydrogen Energy Conference for Action

October 21, 2025

Kawasaki Heavy Industries, Ltd

Yoshinori Kanehana

Chairman of the Board

かわる、
さきへ。

Changing forward

Progress and Scale-up Liquefied Hydrogen Supply Chain

2021

Pilot demonstration



Demonstration

- Hydrogen production
- Long-distance marine transportation (about 1/100 scale of commercial levels)

- 2030

Commercialization demonstration



Demonstration

- Increase equipment size
- Commercialization feasibility

Green Innovation (GI) Fund Project: "Liquefied Hydrogen Supply Chain Commercialization Demonstration Project"

2031 -

Commercial chains



Commercial Supply Chains

- Economic Independence
- Profitable Business

Progress of Commercialization Demonstration

Construction work for the Liquefied Hydrogen Receiving Terminal in Ohgishima, Kawasaki City has started since May 2025.



Fabrication of Large Liquefied Hydrogen Storage Tank



- **Production of tank started** at Harima Works (Kakogun, Hyogo Prefecture) , in August 2025
- **Storage capacity: 50,000 m³**
- Scheduled for installation in the Liquefied Hydrogen Receiving Terminal in Ohgishima
- Passed design review for specific equipment inspection under the High Pressure Gas Safety Act.

Japan-Australia Collaboration on Development Liquefied Hydrogen Supply Chain

- In September 2025, **Woodside Energy, JSE, and Kansai Electric Power signed an MOU** for developing a liquefied hydrogen supply chain between Japan and Australia



Japan-Australia Collaboration on Development Liquefied Hydrogen Supply Chain

- Transport produced liquefied hydrogen at the H2Perth project in Western Australia to Japan using hydrogen carriers
- CCS technology to be used to produce clean hydrogen by capturing and storing CO₂ emissions



Expanding Hydrogen Utilization in the Mobility Sector



H₂
HYDROGEN

Daimler Truck and Kawasaki Heavy Industries signed MOU to jointly study the optimization of liquefied hydrogen supply chains in June 2024

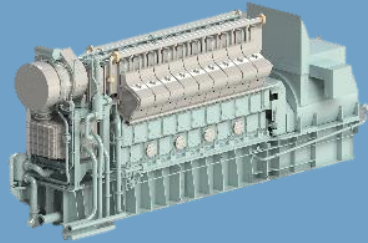
Japan-Germany Cooperation on Hydrogen Supply Chain Development

- In September 2025, **Kawasaki Heavy Industries, Toyota, Kansai Electric Power, Daimler Truck, and Hamburger Hafen und Logistik AG (HHLA)** signed **MOU** for developing a hydrogen supply chain between Japan and Germany in ports and logistics, commercial vehicles, and power generation sectors



Hydrogen-Related Products of KHI

Production



Hydrogen gas turbines for power generation

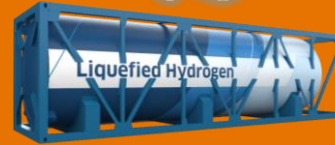


Hydrogen compressor for liquefaction plants

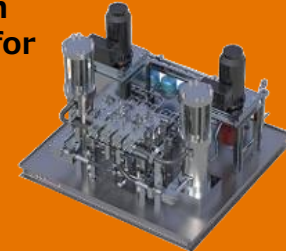
Storage



High-Pressure Hydrogen Regulator for FCVs

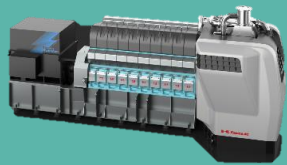


Liquefied hydrogen container



hydrogen compressor for hydrogen stations

Transportation



Hydrogen gas engine for marine use



liquefied hydrogen carrier



MHFS (Marine Hydrogen Fuel System)

Utilization



Hydrogen engine motorcycle



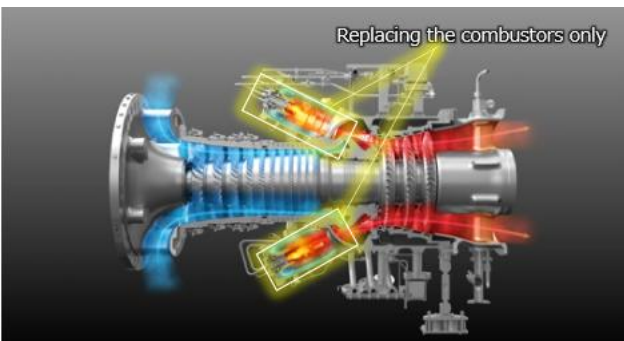
FCV (Hydrogen-powered train)

Transition toward Green Hydrogen

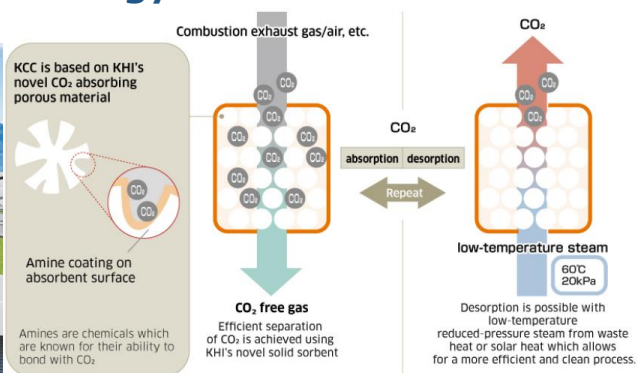
Creating a Pathway for the Introduction of Green Hydrogen

- **Expanding the sales of transition products**, capturing market share in potential hydrogen markets, and **aiming for a smooth transition to a hydrogen society**
- Creating a pathway for the introduction of green hydrogen through transition products that can be used with both LNG and hydrogen, and blue hydrogen + CCS (CO₂ capture and storage technology)

Transition products of KHI



CO₂ capture and storage technology



Demonstration Test of CCS at Thermal Power Plant

Maizuru Power Plant of Kansai Electric Power

CO₂ Capture and Storage (CCS) Demonstration Project



Subsidized by NEDO

Dry Fork Power Plant Wyoming, USA

Environmental Impact Assessment at the Integrated Test Center



Commissioned by the Ministry of Environment

Yokosuka Power Plant of JERA

CO₂ Capture and Storage (CCS) Demonstration Project



MoU signed in June 2025

世界の人々の豊かな生活と地球環境の未来に貢献する
“Global Kawasaki”