

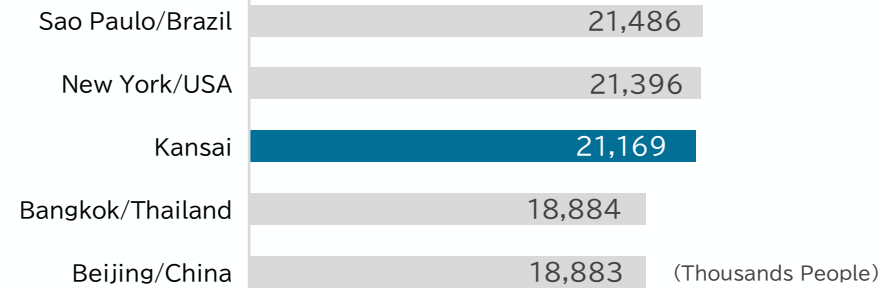
Hydrogen Promotion Projects in Kansai

Carbon Neutrality Promotion Office
METI-KANSAI

The Large Kansai Economy



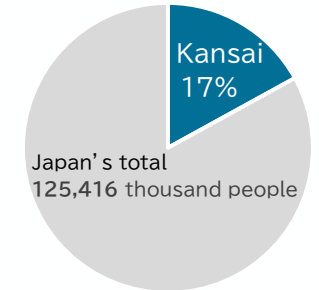
Comparison of population with major urban areas of the world



※Figures for major world cities other than Kansai include the population of surrounding cities.

(Source)
Kansai: "Population based on the Basic Resident Register (as of January 1, 2023)", Calculated from the Ministry of Internal Affairs and Communications
World: "Demographia World Urban Areas 19th Annual Edition:202308", Demographia

Kansai's population as a percentage of Japan's total



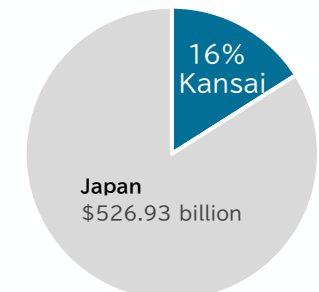
GDP comparison with countries around the world



(Source)
Kansai: "Report on Prefectural Accounts (FY2020)", Cabinet Office
Calculated from the gross prefectural domestic product (nominal) (conversion rate: ¥106.04 per USD)
World: "World Economic Outlook Database, April 2022" (2020), IMF

(US\$ billion)

Kansai's GDP as a percentage of Japan's total



Kansai has industrial bases for energy technologies

Harima coastal area



Candidate site for a hydrogen power generation demonstration project

Kobe coastal area



Liquid hydrogen carrier and cargo handling base



Osaka coastal area



Hydrogen/Ammonia Supply Chain construction



Large-scale domestic Production of e-methane using captured CO₂ from exhaust gas and green hydrogen

METI-Kansai works on project of promoting hydrogen utilization

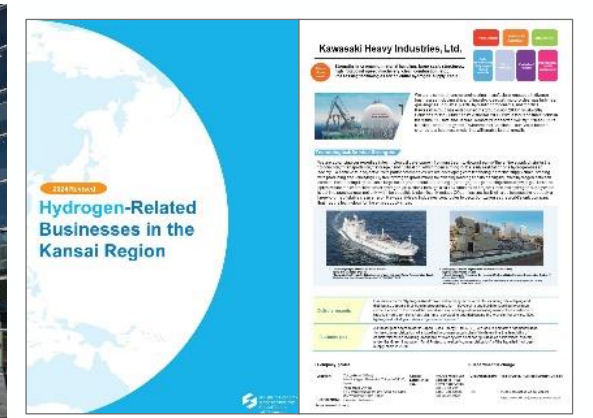
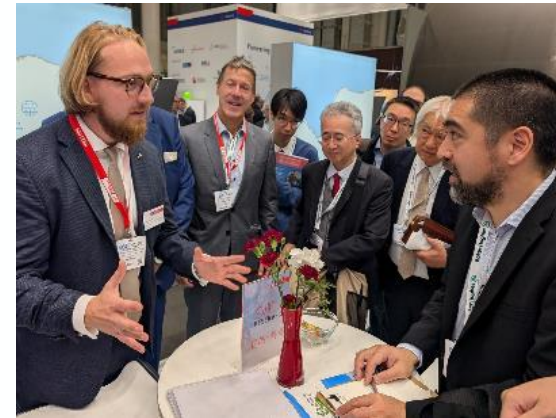
Domestic

◆ Support for entry into the hydrogen-related industry

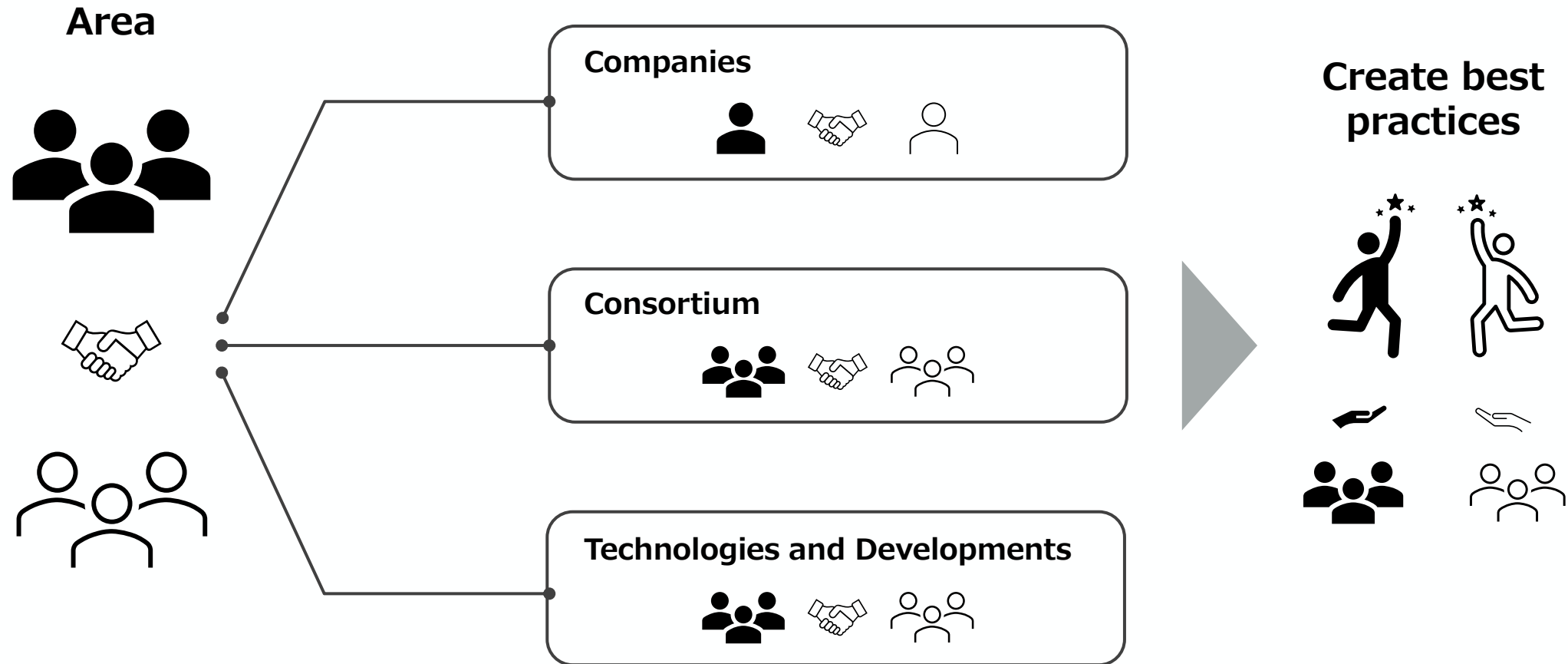


Overseas

◆ Building relationships between Kansai and overseas regions

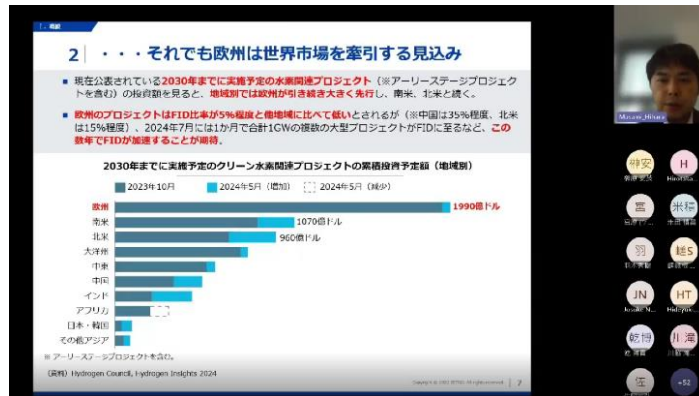


Efforts towards the expansion of the hydrogen industry in Kansai and overseas

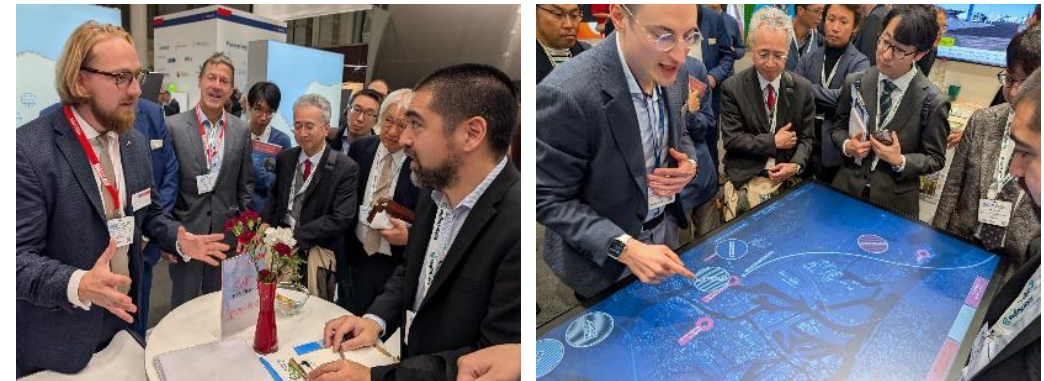


Efforts to support overseas expansion(ex. with German)

Hydrogen Business Developments in Europe and Germany -Seminar



Hamburg Exhibition Booth Tour



Japan-Germany Hydrogen Symposium 2025 Osaka

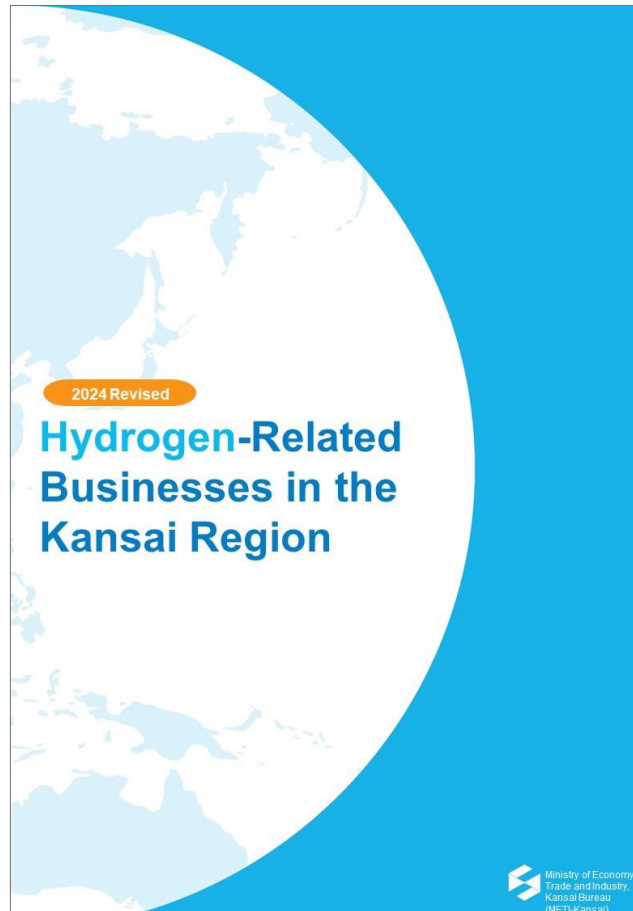


Japan-Germany Hydrogen workshop Hydrogen Infrastructure and Port Areas



Hydrogen-Related Businesses in the Kansai Region

- METI-Kansai has created and published *Hydrogen-Related Businesses in the Kansai Region*, which introduces an overview of companies based in the Kansai region that are active in the hydrogen sector, as well as the strengths of their technologies and services.



Kawasaki Heavy Industries, Ltd.

Take a closer look

Strengths in cryogenic material handling, large-scale structures, high rotational speed machinery, clean combustion, etc.
Possessing technologies for an entire hydrogen supply chain

Production Transport/Storage Utilization

R&D Development of hydrogen-based products

Value Realization

Evaluation/Analysis

Construction/Facility Management

We are a comprehensive engineering manufacturer engaged in diverse businesses including ships, rolling stock, aircraft, motorcycles, gas turbines, gas engines, industrial plants, hydraulic components, and robotics. Kawasaki Group has established the group vision 2030 "Trustworthy Solutions for the Future" as its vision for 2030. With a focus on three fields in the future: "A Safe and Secure Remotely Connected Society," "Near-Future Mobility," and "Energy and Environmental Solutions," our Group looks to change to a business model that will enable further growth.

Technological/Service Strengths

We are advancing our expertise in technological development from upstream to downstream of the entire supply chain for the "production," "transportation," "storage," and "utilization" of hydrogen aiming for the early realization of a hydrogen-based society. To achieve this objective, with partner companies, we are developing core technologies for the supply chain, starting with producing and liquefying CO₂-free hydrogen (production), followed by loading and unloading liquefied hydrogen between carriers, transporting it by sea on a large scale (transportation), storing it (storage), and generating electricity with gas turbines optimized for the characteristics of hydrogen (utilization), through a NEDO-subsidized project. Once this hydrogen supply chain is put into practical use, not only will it be possible to significantly reduce CO₂ emissions, but it will also be possible to supply a large volume of stable clean energy. Kawasaki Heavy Industries contributes to decarbonization as the world's only company that has the technology for the entire supply chain.

A. Liquefied hydrogen carrier "BUBU PRIDE"
NEDO demonstration project
"Demonstration Project for Establishment of Mass Hydrogen Marine Transportation System"
Ship Derived from Liquefied Ethanol Carrier (P) 2018 to FY2020

A. Hydrogen gas turbine cogeneration system (Hase Port Island)
NEDO demonstration project
"Smart Community Technology Development Project Utilizing Hydrogen Cogeneration Systems"
FY 2018 to FY 2020
"Development and Demonstration Project for On-Low-NOx Hydrogen-Fueled Gas Turbine Technology" (FY 2019 and FY 2020)

Delivery records

Our initiatives for "hydrogen road" have led to many achievements, including "developing and distributing Japan's first-ever hydrogen liquefier," "developing and building liquefied hydrogen carriers ahead of the rest of the world and succeeding in demonstrating marine transportation of liquefied hydrogen from Australia," and "developing and distributing the world's first dry low-NOx hydrogen-fueled gas turbine cogeneration system."

Business plan

As the largest shareholder in Japan Suiko Energy, Ltd. (JSE), we look to perform a "demonstration for the commercialization of a liquefied hydrogen supply chain" (to determine the feasibility of commercialization including economic efficiency with plant configuration as a minimized system) under the Green Innovation Fund Project to realize "commercialization" of the liquefied hydrogen supply chain in 2030.

Company profile

Location: (Tokyo Head Office)
1-14-2 Kaigan, Minato-ku, Tokyo 105-8315, Japan
(Kobe Head Office)
1-1-3 Higashikuwajima-cho, Chujo-ku, Kobe-shi, Hyogo 650-8602, Japan
Representative: Yasuhiko Hashimoto
<https://www.khi.co.jp>

Capital: 104,484 million yen
Established: October 15, 1896
TEL: Tokyo Head Office: +81-3-3435-2111
Kobe Head Office: +81-78-371-5630

Department in charge

Department name: Project Group, Hydrogen Strategy Division
URL: <https://www.khi.co.jp/corporate/contacts/>
Please contact us via our website.





METI

Kansai Bureau of Economy, Trade and Industry

【Contact Information】

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