

Japan's Policies on Hydrogen and Ammonia

July 2026

**Agency for Natural Resources and Energy
Ministry of Economy, Trade and Industry**

Hydrogen as a Pillar of Energy Security

- Growing global energy uncertainty is reinforcing the importance of energy security.
- Hydrogen and ammonia are important for both decarbonization and energy security through diversification of energy sources.
- Resilient supply chains and stable policies are essential to provide investment certainty in the early-stage hydrogen market.

Political Responses to the Middle East Crisis incl. the blockade of the Strait of Hormuz



"Now, when the country is working in areas like green hydrogen and green ammonia, Gujarat's role will also be very significant. "

"This ongoing global crisis shows how important self-reliance is in the matter of energy."

— Indian Prime Minister Narendra Modi in Surat, Gujarat, 5th June 2026



In the context of clean energy cooperation with the Republic of Korea,

"We see strong potential in the areas of hydrogen and offshore wind"

"We discussed that intensively today. This will help strengthen our energy security at a critical time and enhance our competitiveness over the long term. "

— European Commission President Ursula von der Leyen, Statement following the EU–Republic of Korea Summit, 10th June 2026

A Decade of Progress: From Strategy to Implementation

- Japan was the first country to formulate a national hydrogen strategy, in 2017, which was then revised in 2023.
- Establishment of the Green Innovation Fund of approximately ¥2 trillion (\$ 13 billion) in 2021.
- Enacted and enforced the Hydrogen Society Promotion Act in 2024.

Milestones

2017
• Basic
Hydrogen
Strategy

2020
• 2050 CN
Declaration
• Green Growth
Strategy

2021
• Green Innovation
Fund
• Revised Strategic
Energy Plan

2023
• GX Promotion Act
• Revision of Basic
Hydrogen
Strategy

2024
• Hydrogen
Society
Promotion Act

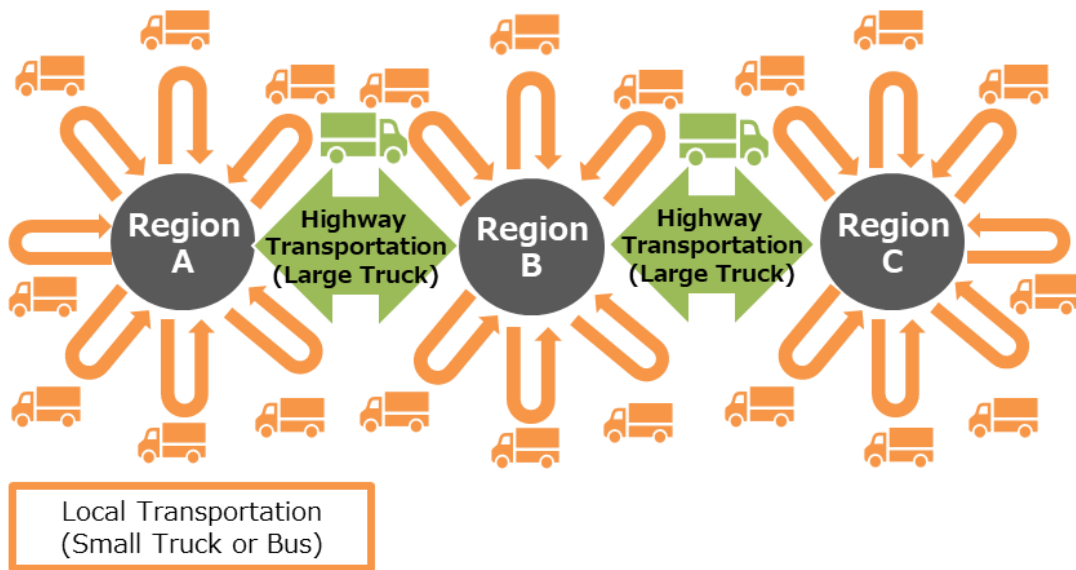
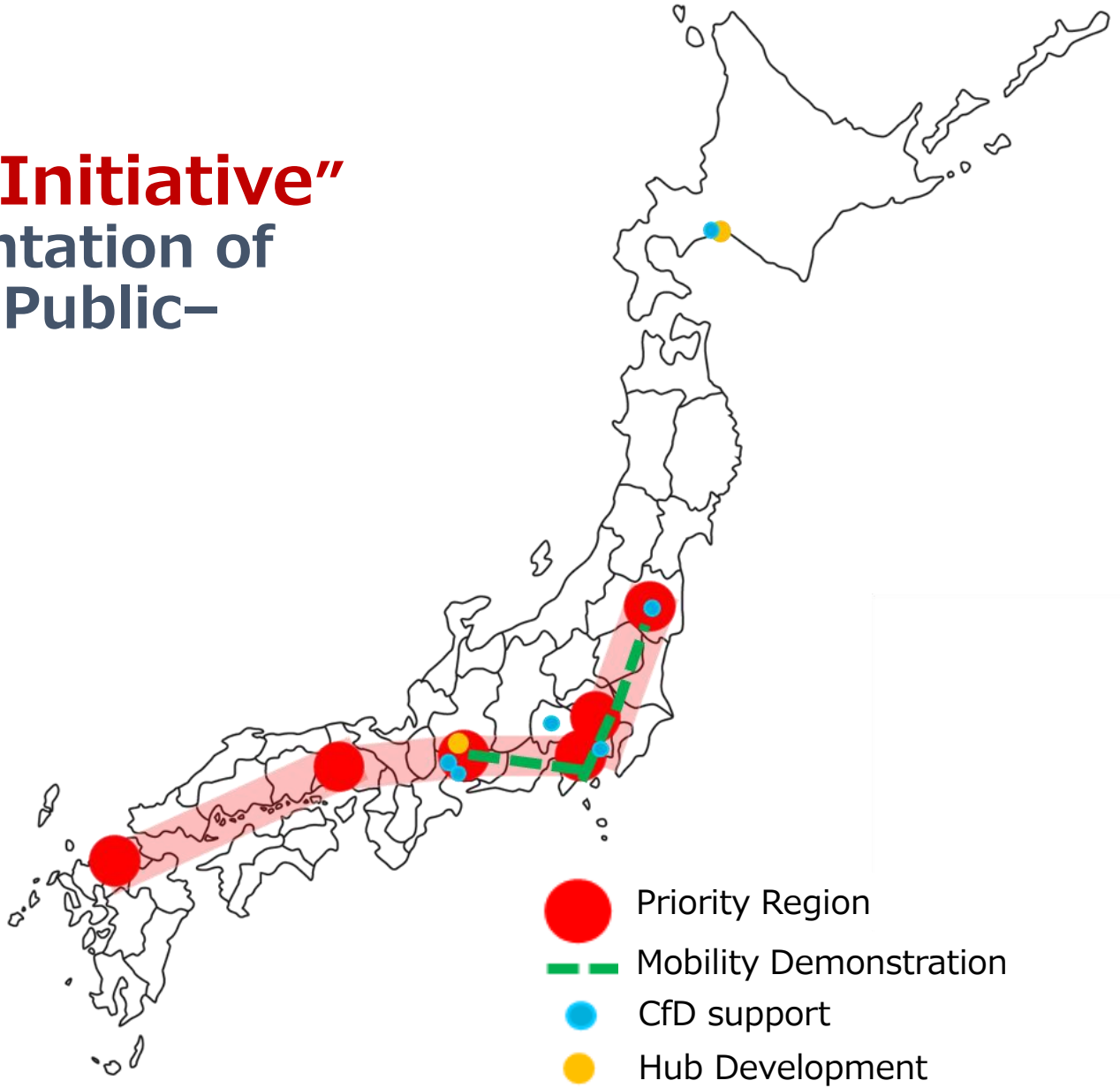
Targets

□ Supply & Demand volume:

Current (Approx. **2Mt**) → 2030 (Approx. **3Mt**) → 2040 (Approx. **12Mt**) → 2050 (Approx. **20Mt**)

Driving Stronger Momentum through New Initiatives

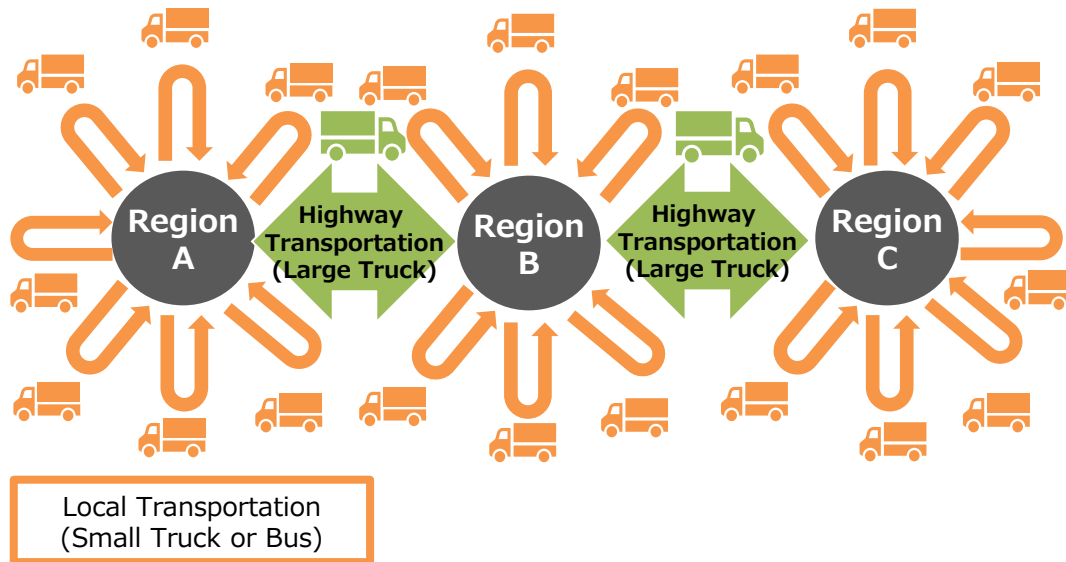
Advancing the
“Japan Hydrogen Backbone Initiative”
Accelerating the Social Implementation of
Hydrogen through Concentrated Public–
Private Investment



Efforts for Hydrogen Utilization in Mobility

- Since the world's first commercial launch of FCVs (MIRAI) in 2014, Japan has deployed approximately 9,000 vehicles, mainly passenger cars. At the same time, the advantages of FCVs—longer driving range and shorter refueling time compared with EVs—are especially valuable in commercial vehicle applications.
- Towards the social implementation of FC commercial vehicles, local governments are expected to lead discussions among FCV users, manufacturers and hydrogen refueling station (HRS) operators, and to develop integrated plans for the introduction of FC commercial vehicles and HRS.
- The Japanese government plans to select priority regions and to provide intensive financial support to these regions for introduction of FC commercial vehicles.
- After review by a committee of experts, five regions including Tokyo were selected on May 19, 2025.

Concept of priority regions



Key requirements for priority regions

High potential FCV demand

- ◆ Many commercial vehicles registered in the region
- ◆ Many commercial vehicles traveling through the region

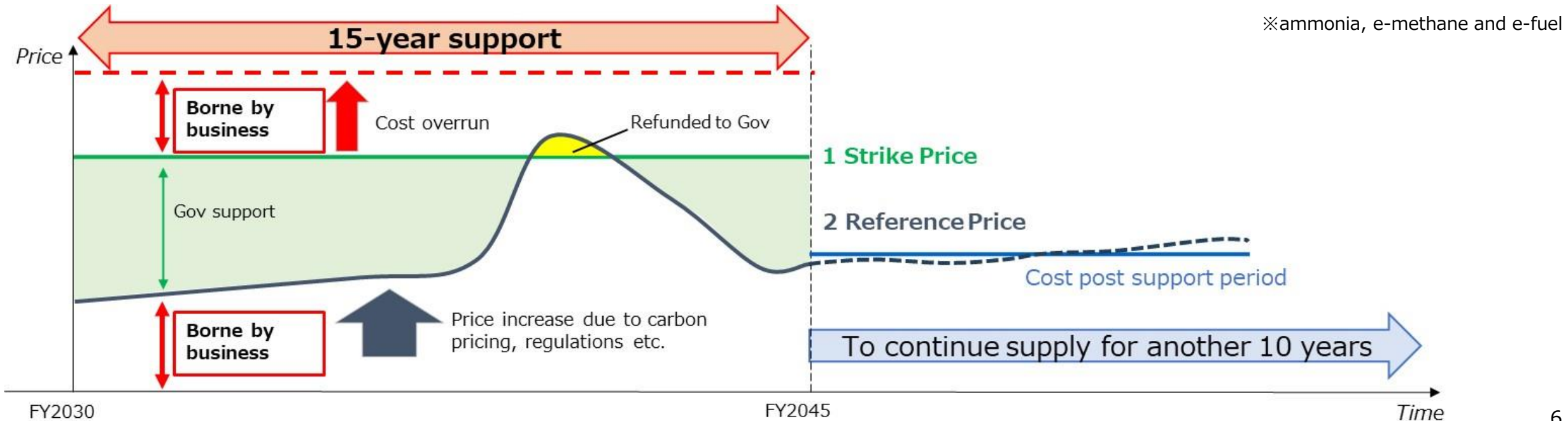
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Commitment by the local government

- ◆ To set goals for introduction of FCV & HRS by 2030
- ◆ To provide financial support for introduction of FCV & HRS

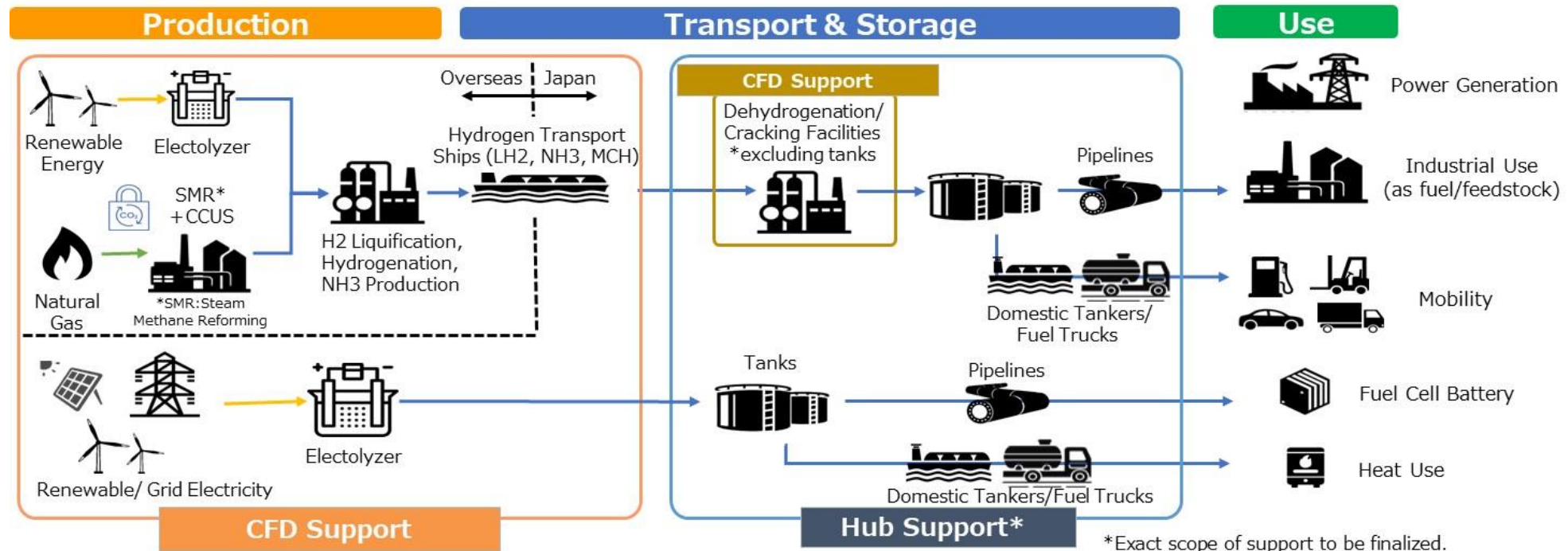
Driving Long-Term Supply through Strong Support (CFD type support)

- The government plans to provide a 15-year support to suppliers who aim to develop a commercial-scale supply chain of low-carbon hydrogen and its derivatives※ which meets Japan's primary energy policy and GX policy. (i.e. S+3E: Safety + Energy Security, Economic Efficiency, Environment)
- Up to the deadline of March 31, 2025, a total of 27 project applications were submitted for support focusing on the price gap under the Hydrogen Society Promotion Act.
- Projects are to be selected on a rolling basis. 7 projects were selected as of July 2026.



Support measure-2: Hub Development Program

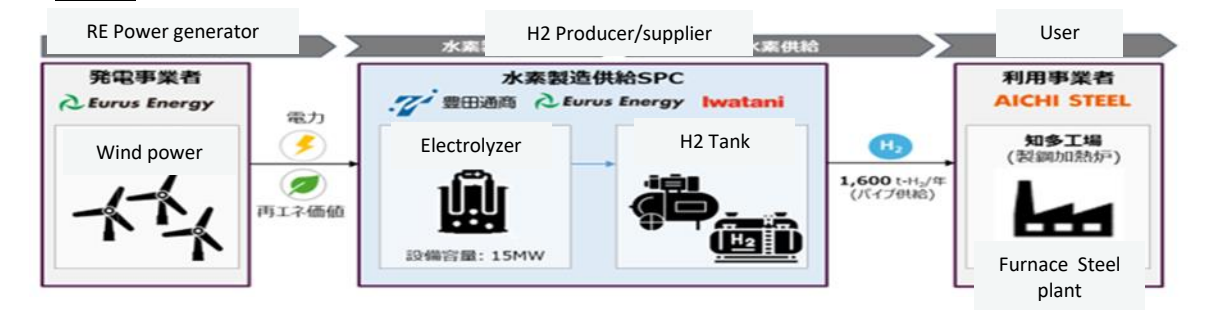
- The Hub Development Program supports the establishment of infrastructure which leads to large-scale expansion of the use of low-carbon hydrogen and its derivatives and widely benefits a variety of companies, with an aim to stimulate demand creation and the efficient buildout of hydrogen supply chains.
- The Program will subsidize a portion of the CAPEX for developing “facilities necessary to transport low-carbon hydrogen from the receiving terminal to the point of actual use by consumers and used by multiple companies (e.g. shared pipelines and tanks)”
- The application was closed at the end of June 2025.



Building Local Ecosystems for H2 Production and Consumption

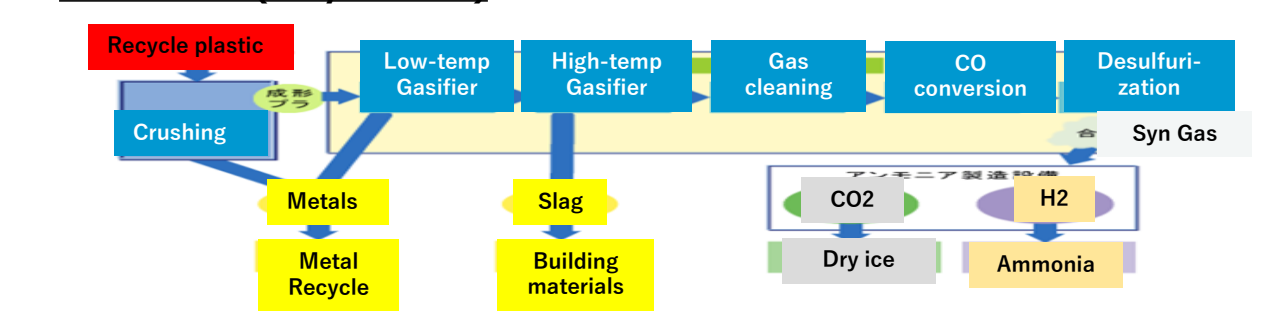
Toyota Tsusho: Green Hydrogen Project

- Using electricity from onshore wind power for **water electrolysis system by Toyota Motor·Chiyoda Corporation** at Aichi Steel's Chita plant to produce hydrogen. (Approximately 1,600 t /year)
- Aichi Steel will use the hydrogen in **the heating furnaces for steel and iron materials** and produce **the electric furnace industry's first green steel**.



Resonac: Hydrogen·Ammonia Project

- Resonac will **gasify waste plastics etc.** to produce hydrogen (using **technology from Ebara and UBE, licensed by JGC**), which will be used as **feedstock to produce low-carbon ammonia**. (Approximately 20,000t-NH3/year)
- Resonac will also be the primary user, **producing and selling raw material for textiles (acrylonitrile)**.



YHC, Suntory: Green Hydrogen Project

- Yamanashi Hydrogen Company (YHC) and Suntory** to produce **low-carbon hydrogen through water electrolysis**. (Approximately 1,607 t /year)
- The hydrogen will be used primarily **as a heat source in the sterilization process for natural water** manufactured by Suntory.



<Suntory Minami Alps Hakushu Water plant>

YHC, Himeji Rika: Green Hydrogen Project

- YHC and Himeji Rika** to produce **low-carbon hydrogen through water electrolysis** at the Himeji Rika Tamura Plant and the Fukushima Hydrogen Energy Research Field (FH2R). (Approximately 1,177 t /year)
- The hydrogen will be used mainly **as a heat source in the processing of quartz glass** manufactured by Himeji Rika.



Photo source: Company website

Building a Large-Scale Cross-Border H2 Supply Chain

JERA: Blue Ammonia/Mitsui & Co: Blue Ammonia

Supplier	CF Industries: 40%, JERA: 35%, Mitsui & Co: 25%	
User	①	JERA, Toyota Industries Corporation etc.
	②	Hokkaido Electric Power, Mitsubishi UBE Cement Corporation, Tosoh Corporation
Place	Louisiana, USA (Approximately 770,000 t-NH ₃ /year) →①Hekinan, Aichi Prefecture etc. (JERA) →②Tomakomai, Hokkaido etc. (Mitsui & Co)	

- Contributes to Japan’s decarbonization and energy security at the Hekinan Thermal Power Station, Japan’s largest coal-fired power plant. IHI’s co-firing boiler to be used commercially.
- Contributes to the creation of regional industrial clusters in Japan, including the Chubu region, generating diverse high-value-added products markets such as auto parts, cement and semiconductor-related chemicals.

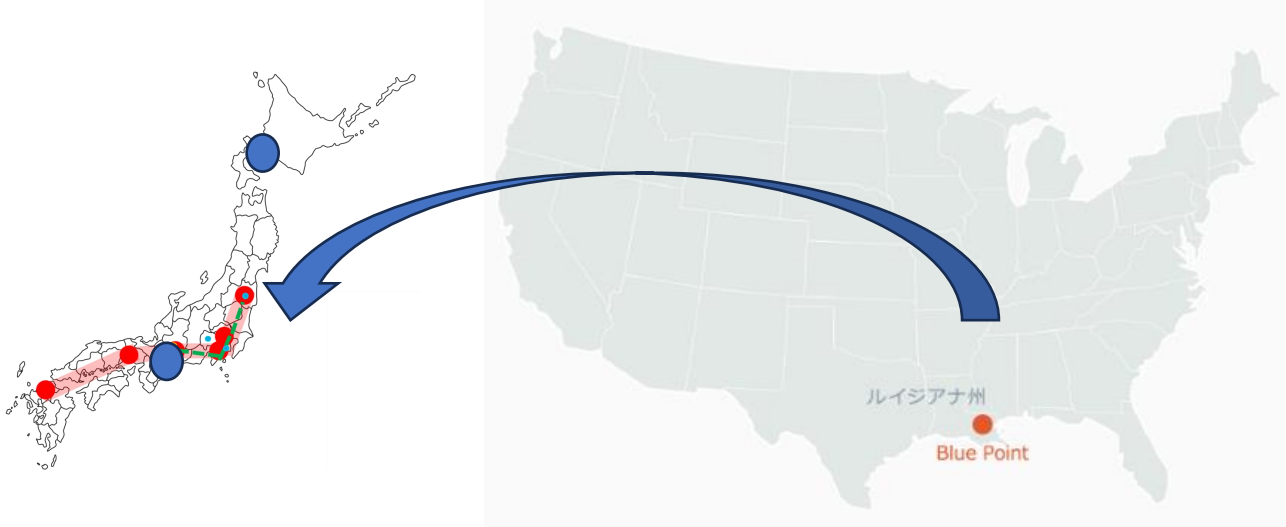


Photo source: Company website

Building a Large-Scale Cross-Border H2 Supply Chain

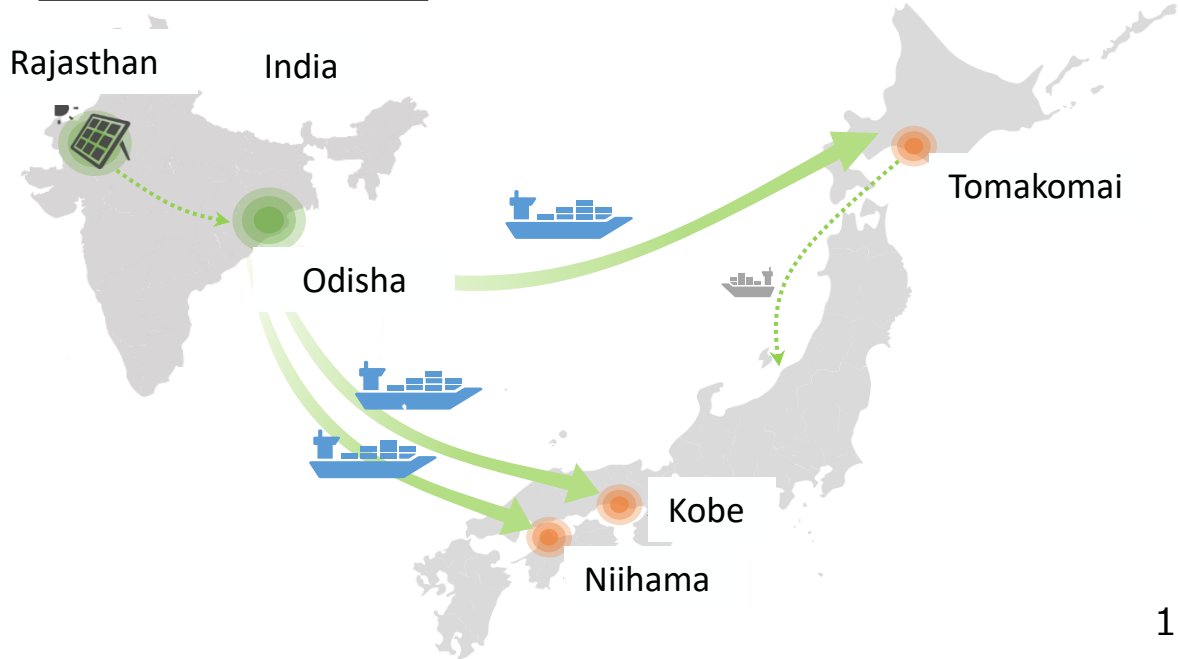
IHI: Green Ammonia

Supplier	IHI, ACME (Major Indian Renewable Energy Developer)
Amount	Approximately 400,000t-NH3/year
User	Kobe Steel, Hokkaido Electric Power, Mitsubishi Gas Chemical, Sumitomo Chemical etc.
Place	Odisha, India→ Kobe, Hyogo Prefecture, Tomakomai, Hokkaido, Niihama, Ehime Prefecture etc.

- IHI plans to produce green ammonia at scale in India using renewable-powered electrolysis and supply it to Japan.
- The project will deploy Japanese electrolyzers to expand its presence in the Indian market and explore the use of Japanese-built vessels.
- The green ammonia will be used for coal co-firing at the Kobe and Tomatoh-Atsuma power plants, as well as chemical feedstock.



Photo source: Group company website



Public-Private Collaboration for Realizing a Hydrogen Society

- Under the full commitment of industry, the government and private sector are jointly advancing the “Japan Hydrogen Backbone Initiative”, which aims to create demand and reduce costs.
- JH2A and the Parliamentary League for the Promotion of a Hydrogen Society and 11 local governments, including Tokyo, Aichi, and Fukushima, submitted each proposal to the Prime Minister.
- PM Sanae Takaichi said “Investments in hydrogen and energy are strategic investments that Enhance Resilience against Potential Crises and expanding them overseas represents a major growth opportunity.”

JH2A and the Parliamentary League for the Promotion of a Hydrogen Society



11 local governments

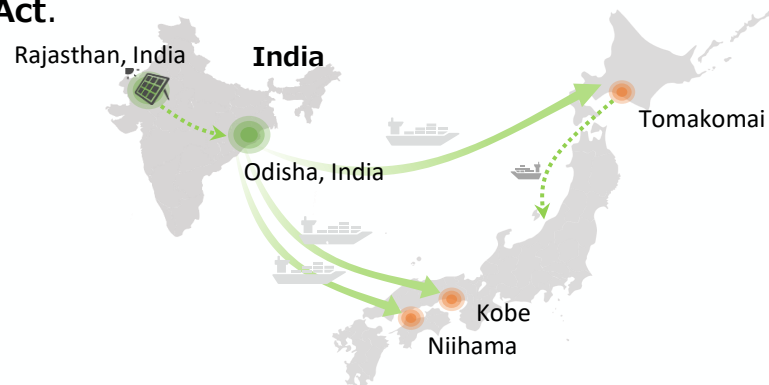


Japan-India Leaders' Meeting

- Prime Minister Sanae Takaichi visited Delhi, India, from 1 to 3 July 2026 and held a leaders' meeting with Prime Minister Narendra Modi.
- The two leaders issued the Japan-India Joint Declaration on Economic Security Cooperation, outlining the way forward for cooperation in five priority areas, including clean energy.
- On 30 June 2026, Japan approved the seventh project under the Support focusing on the price gap of the Hydrogen Society Promotion Act—IHI's green ammonia production project in India.

Japan-India Joint Declaration on Economic Security Cooperation

- Five priority areas: **Semiconductors, Critical Minerals, ICT, Clean Energy, and Pharmaceuticals**
- The declaration includes promotion of the **Green Ammonia Production Project** certified under the **Hydrogen Society Promotion Act**.



Japan-India Joint Economic Forum (Hosted by JETRO)

- Over 150 Japanese companies and over 80 Indian companies participated.
- 129 cooperation projects were announced, including MoUs between IHI and the ACME Group and between ITOCHU and L&T Energy GreenTech Limited.



Thank you



Ministry of Economy, Trade and Industry