

As of April 2026



Tokyo Metropolitan Government's Efforts to Expand and Promote the Use of Hydrogen Energy



Bureau of Industrial and Labor Affairs
Tokyo Metropolitan Government (TMG)

Expanding the Use of Hydrogen and New Energy

With the aim of expanding hydrogen demand, advancing its social implementation, and achieving large-scale utilization of Green Hydrogen, the Tokyo Metropolitan Government (TMG) supports and promotes the use of hydrogen across a wide range of fields, as well as the broader adoption of Green Hydrogen.

In addition, TMG encourages technological development and other initiatives related to new energy sources that contribute to Tokyo's decarbonization.

Hydrogen Characteristics and Applications

Characteristics

Clean

- Hydrogen does not emit CO₂ when used and is expected to be an effective tool in combating global warming.

Produced from Various Resources

- Hydrogen can be produced not only through water electrolysis, but also from petroleum, natural gas, biomass, and sewage sludge, helping to strengthen energy security and ensure a stable energy supply.

Energy Storage Capability

- Hydrogen can be stored in large quantities over extended periods.

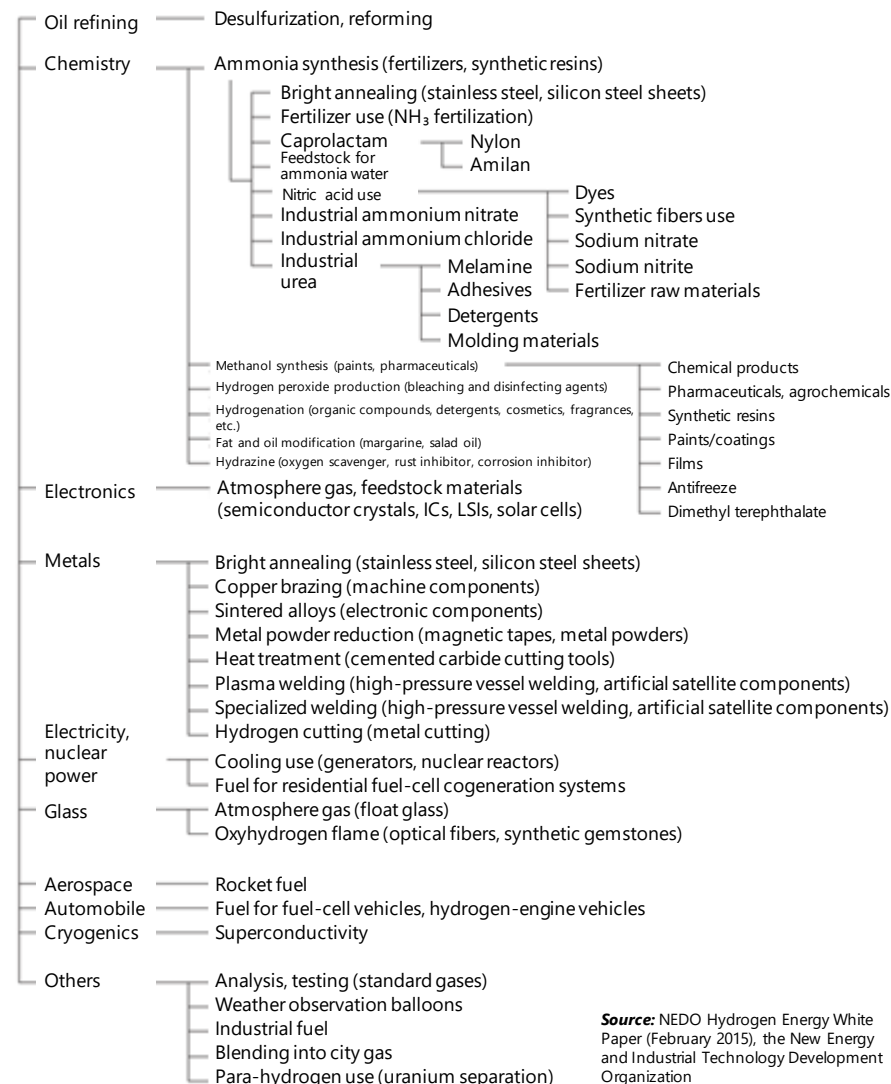
Versatile Applications

- Hydrogen has diverse applications, serving as a fuel for rockets and fuel cell vehicles as well as a key feedstock in industries such as fertilizer production, chemical manufacturing, desulfurization in oil refining, and metal processing.

Other Characteristics

- It is colorless, odorless, and non-toxic.
- It has the lowest density and is the lightest among all elements, whether in gaseous or liquid form.
- It has the highest diffusion rate among gases, enabling rapid dispersion.
- It liquefies at the extremely low temperature of -253°C.
- Its flame temperature can reach as high as 2,000°C.

Applications



Characteristics and Uses of Hydrogen

The “Color” of Hydrogen

Does hydrogen have a color?

Hydrogen has the advantage that it can be produced from a variety of resources on Earth. Hydrogen itself is colorless and transparent, but it may be expressed in different colors, green, blue, or gray, for example, due to differences in the production process.

Green Hydrogen (from renewable energy)

Produced by electrolyzing water using electricity derived from renewable energy

Blue Hydrogen

Made from fossil fuel but does not release CO₂ into the air as CO₂ generated during the production process is captured and stored (CCS*)

Gray Hydrogen

Made from fossil fuels, such as natural gas and petroleum

Visions for 2050 and Actions toward 2030

Visions for 2050

● **Green Hydrogen**

Green Hydrogen will be **fully used** to support the **massive introduction and supply of renewable energy**.



Facility utilizing Green Hydrogen
© Toshiba Energy Systems & Solutions Corporation

● **Transport field**

Green Hydrogen will be **used as transportation fuel** for large vehicles, ships, aircraft, etc.



Image of a hydrogen aircraft
© Kawasaki Heavy Industries, Ltd.

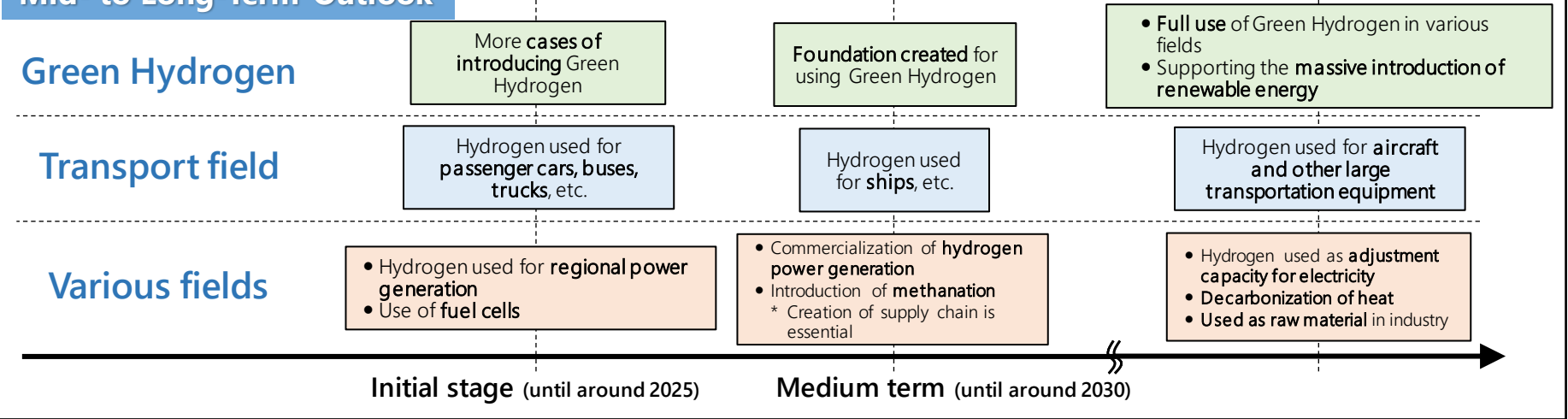
● **Various fields** (power generation, industrial, commercial, and residential fields)

Green Hydrogen will be used as a **raw material** for **hydrogen power generation, heat demand**, including methanation, and industrial use.



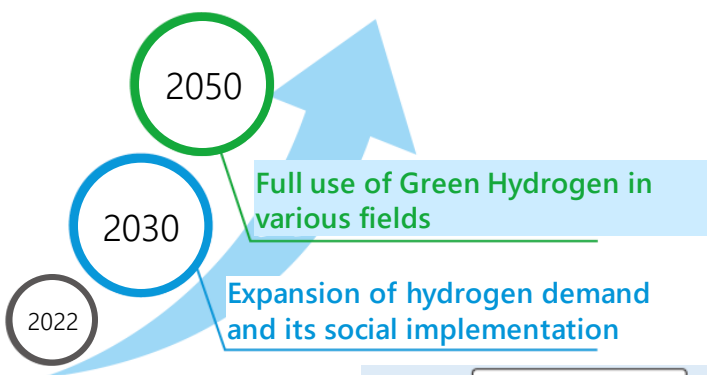
Image of verification equipment for hydrogen production/storage/power generation © Mitsubishi Heavy Industries, Ltd.

Mid- to Long-Term Outlook



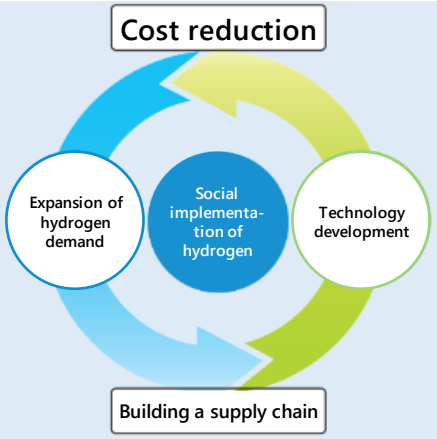
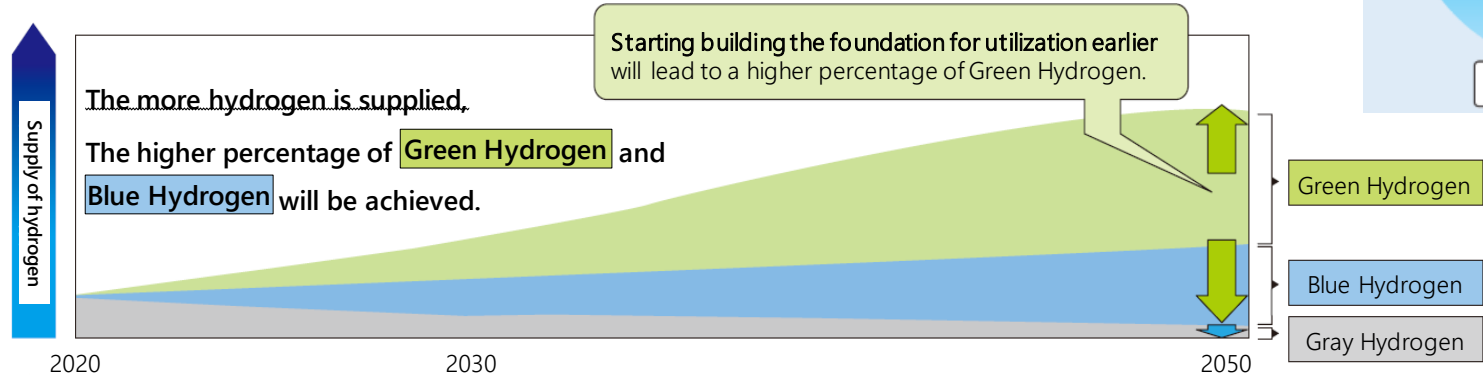
Visions for 2050 and Actions toward 2030

- In the decarbonized society of **2050**, **Green Hydrogen** is expected to be **fully used** in various fields and contribute to decarbonization in transport and other fields.
- **Toward 2030**, it is **essential to** lay the foundation for the full use of Green Hydrogen and **accelerate the expansion of hydrogen demand and its social implementation.**



Technological Development, Cost Reduction, Construction of a Supply Chain for a Virtuous Cycle

■ Image of Green Hydrogen expansion

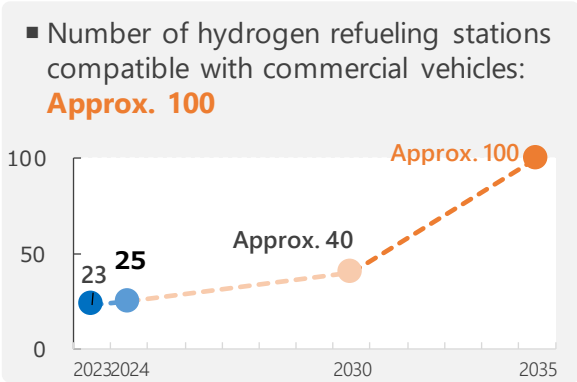
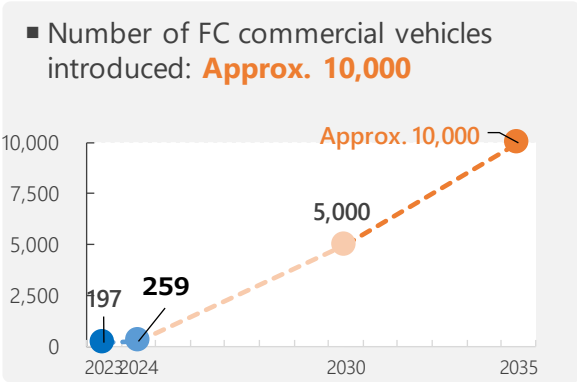


Source: Global Hydrogen Review 2021, IEA

Tokyo 2050 Strategy (Development toward 2035)

Policy goals

- Establishing a Green Hydrogen supply system
Start of supply from other prefectures (status quo)
Increase in supply from other prefectures in addition to **production in Tokyo** (2030)
Establishing a supply system at home & abroad (2035)



Outline of the three-year action plan

Specific initiatives	End of FY 2024 (estimate)	Annual plans		
		FY 2025	FY 2026	FY 2027
Production and supply centers installed by TMG	Installing production and supply centers	Installing production and supply centers Starting partial operation	Installing production and supply centers	Full-scale operation (tentative)
Promoting the industrial use of Green Hydrogen	—	Promoting use in cosmetics, fertilizers, and other fields		
Initiatives for launching a Green Hydrogen exchange	Designing the hydrogen exchange system and conducting trial transactions	Refining system design, expanding trial transactions		
Promoting the introduction of FC commercial mobility	Supporting the introduction of FC buses and trucks	Supporting the introduction of FC buses, taxis, and trucks (subsidy, etc.)		
Promoting the installation of hydrogen refueling stations	—	Promoting support for expanded installations, exploring further support initiatives		
Comprehensive support for hydrogen mobility and stations	—	Comprehensive support including generating mobility demand and matching it with station operators		

Development toward 2035

- Procuring hydrogen in Tokyo, including Green Hydrogen production in Keihinjima
- Establishing a hydrogen supply system from other prefectures and overseas
- Expanding hydrogen use in FC commercial mobility to increase hydrogen demand
- Encouraging the installation of hydrogen refueling stations compatible with commercial vehicles by expanding subsidies for hydrogen refueling stations and enhancing matching between hydrogen mobility demand and hydrogen refueling station operators
- Further expanding the trial transactions of Green Hydrogen to establish a hydrogen exchange

Overview of FY 2026 Budget

Social implementation of hydrogen energy 16.5 billion yen (FY2026) (16 billion yen (FY2025))

⇒ Invest in Produce, Carry, and Use in order to realize a society where hydrogen is used everywhere

	Key issues	Direction	Main efforts in FY 2028
Produce	✓ Building momentum and providing support for Green Hydrogen production	➤ Take the lead in producing and using Green Hydrogen ➤ Effectively use Green Hydrogen outside of Tokyo as well ➤ Provide support for Green Hydrogen production	✓ Green Hydrogen production and utilization projects ✓ Green Hydrogen production and utilization projects at the Central Breakwater Landfill Site ✓ Project to promote the introduction of equipment etc. for the social implementation of Green Hydrogen
Carry	✓ Building an international supply chain to use overseas Green Hydrogen etc. ✓ Promoting technological development by the private sector to accelerate hydrogen use	➤ Strengthen collaboration with overseas jurisdictions ➤ Consider and build a supply system, including pipelines, for hydrogen from overseas ➤ Cooperate with the private sector to develop technology for hydrogen transportation and storage	✓ International collaboration promoting project for social implementation of hydrogen ✓ Project to create a hydrogen supply system including pipelines ✓ Project to promote technological development to solve issues associated with hydrogen implementation in Tokyo
Use	✓ Expansion of supply destinations that accept Green Hydrogen ✓ Improvement of the refueling infrastructure to promote the switch to FCVs ✓ Further development and mass production of hydrogen-based mobility	➤ Provide incentives to businesses utilizing Green Hydrogen ➤ improve the hydrogen refueling infrastructure by encouraging hydrogen refueling station installation from every angle ➤ Make various forms of mobility hydrogen compatible and develop them into hydrogen use in the port area	✓ Project to promote the industrial use of Green Hydrogen ✓ Project to assess the environmental value of Green Hydrogen and promote its utilization ✓ Comprehensive support project for accelerating the widespread adoption of hydrogen mobility and refueling stations ✓ Project to support the implementation of fuel cell trucks ✓ Project to support the early implementation of FC mobility at airports etc.

⇒ TMG is also considering the launch of a hydrogen exchange, a mechanism to connect “Produce,” “Carry,” and “Use,” to stimulate the supply and demand of Green Hydrogen and revitalize its trading.

Producing Green Hydrogen

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Keihinjima Green Hydrogen Plant



Image of the Green Hydrogen production facility at the Central Breakwater Landfill Site



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Promotion of the Effective Use of Green Hydrogen etc.

Green Hydrogen production on TMG-owned land (1)

- Construct Tokyo's first full-fledged hydrogen production facility on TMG-owned land in **Keihinjima, Ota Ward**, as a joint project with **Yamanashi Prefecture (Enterprise Bureau)** with which a **Basic Agreement** on Promoting the Use of **Green Hydrogen** has been concluded
- Start operating one of three water electrolyzers in October 2025, and operate **all of them** by FY 2027



Keihinjima Green Hydrogen Plant website



Project overview	In FY 2025, one of three water electrolyzers started operation In FY 2027, all three water electrolyzers will have started operation
Production capacity per water electrolyzer	120 Nm ³ (approximately 11 kg) of hydrogen per hour (Annual production volume will be approximately 20 tonnes with operation for eight hours per weekday) * Production capacity is planned to be expanded to approximately three times the current level by FY 2027.
Other features	Site area: 2,246 m ²

Promotion of the Effective Use of Green Hydrogen etc.

Green Hydrogen production on TMG-owned land (2)

- To achieve a decarbonized society by 2050, it is essential to **expand the supply of Green Hydrogen produced using renewable energy.**
- At the **Central Breakwater Landfill Site** in Tokyo Bay, a **large-scale hydrogen production** project powered **exclusively by on-site solar-generated electricity** will be implemented as the **first initiative of its kind in Japan.**



Image of the Green Hydrogen production facility

© 2025 Tokyo Electric Power Company Holdings, Inc.

Source: Geospatial Information Authority of Japan

Project overview	In FY 2026, detailed design and land development works are being carried out In FY 2028, the Green Hydrogen production facility will start operation
Production capacity	240 Nm ³ (approximately 22 kg) of hydrogen per hour (Annual production volume will be approximately 40 tonnes with operation for eight hours per weekday)

Promotion of the Effective Use of Green Hydrogen etc.

Support for businesses introducing equipment producing or using hydrogen

Project outline

● Project to promote the introduction of equipment etc. for the social implementation of Green Hydrogen [From FY 2025]

To advance the **social implementation of Green Hydrogen**, TMG will encourage broader hydrogen use by stimulating demand through subsidies for facilities and equipment used in the **production, transportation, storage, and utilization of Green Hydrogen**.

Subsidized equipment	Eligible costs	Subsidy rates	Maximum subsidies
(1) Green Hydrogen production equipment	Design costs Equipment costs Construction costs Miscellaneous expenses	2/3 or 1/2 for mixed combustion equipment	300M yen or 225M yen for mixed combustion equipment (for each facility (1) to (5))
(2) Green Hydrogen storage equipment			
(3) Green Hydrogen transportation equipment			
(4) Pure hydrogen fuel cell, commercial and industrial fuel cells [New in 2026]			
(5) Other equipment using hydrogen (unmixed/mixed combustion)			

For (1) to (3) above, if the equipment is installed outside Tokyo (within the TEPCO service area), the supply of Green Hydrogen to Tokyo must be at least 1/2.

- (5) Other equipment using hydrogen includes:
- Hydrogen fuel boilers
 - Hot water generators
 - Hydrogen burners
 - Hydrogen fuel engines
- (The subsidy also covers equipment that uses both hydrogen and existing fuels through mixed combustion and other techniques)

Transporting Hydrogen



Promotion of the Effective Use of Green Hydrogen etc.

Project to create a hydrogen supply system including pipelines

- To expand the hydrogen supply in Tokyo in the future, it will also be important to procure **hydrogen from overseas**.
- The **coastal area of Kawasaki City**, near Tokyo, is expected to serve as a **key hub** for hydrogen imports **in future years**.
- To **create a hydrogen supply system** for the **airport coastal area** including the airport and its surroundings, the **Council for the Study of Establishing a Hydrogen Supply System in Tokyo, Including Pipelines** has been set up and the secretariat has been working on building consensus among stakeholders.
- The Council publicly solicits private businesses interested in large-scale hydrogen use or supply and conducts feasibility studies and other related investigations in collaboration with TMG.

Webpage introducing the Council for the Study of Establishing a Hydrogen Supply System in Tokyo, Including Pipelines



Partnership agreement signed by Kawasaki City, Ota Ward, and TMG

On June 1, 2023, an agreement was concluded to enable the three parties to work together and expand the use of hydrogen, which is an effective means of maintaining and strengthening industrial competitiveness, stabilizing the supply of energy, and realizing carbon neutrality.



Mayor of Kawasaki City,
Governor of Tokyo,
Mayor of Ota Ward



Image of the expanded use of hydrogen through three-party collaboration

Council for the Study of Establishing a Hydrogen Supply System in Tokyo, Including Pipelines

The Council was established on April 24, 2024, and has held a total of five meetings through FY 2025. It serves as a forum for lively discussions by building consensus with many stakeholders and allowing information sharing among them.



Concept image for 2050



First general meeting on April 24, 2024

Promotion of the Effective Use of Green Hydrogen etc.

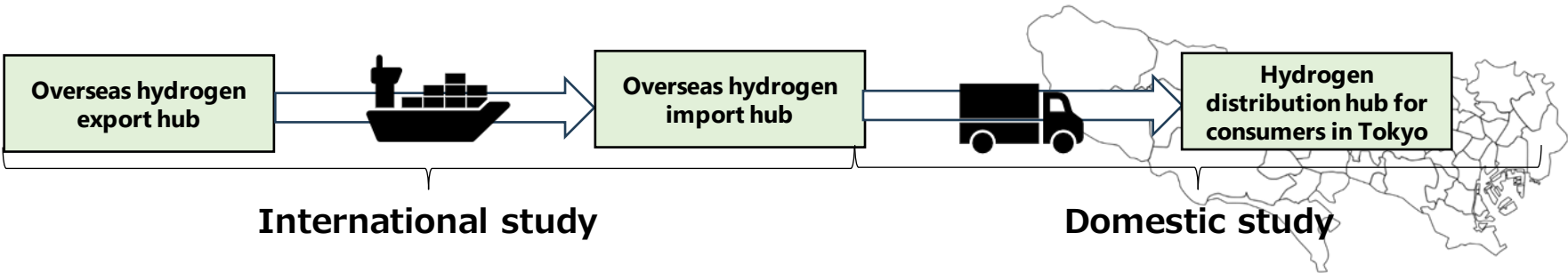
Joint study for establishing an international hydrogen supply chain

To meet the growing hydrogen demand expected in Tokyo, TMG, in collaboration with private-sector companies, is conducting studies on mechanisms for delivering Green Hydrogen etc. produced overseas to consumers in Tokyo.



The studies comprise an international study covering a route from export hubs for overseas Green Hydrogen etc. to import hubs in Japan, and a domestic study covering a pathway from import hubs to consumers in Tokyo.

International study involving 2 businesses	Studying overseas production projects for Green Hydrogen etc., maritime transportation conditions, and domestic receiving hubs
Domestic study involving 1 business	Estimating hydrogen demand associated with fuel switching by consumers in Tokyo and examining hydrogen storage and distribution methods in line with that demand



Technology Development by TMG and Private Companies and Other Organizations

Technology development support project for new energy promotion

Eligible applicants: Groups working in partnership with a large company with a head or branch office located in Tokyo

* Including at least one small or medium-sized enterprise in Tokyo during the project period

Support periods: Up to 5 years

Maximum subsidies: Up to 3B yen per project

Subsidy rates: 2/3 of eligible costs

Project to promote technological development to solve issues associated with hydrogen implementation in Tokyo

Eligible applicants: Private companies, universities, research institutions, and other organizations located in Tokyo

Project periods: Up to 3 fiscal years

Project costs: Up to 100M yen per project

Implementation: TMG and participating organizations enter into an agreement and jointly conduct technology development, demonstration projects, and other activities aimed at social implementation.

Using Hydrogen



Fuel cell bus



Fuel cell truck



Fuel cell taxi



Fuel cell garbage truck



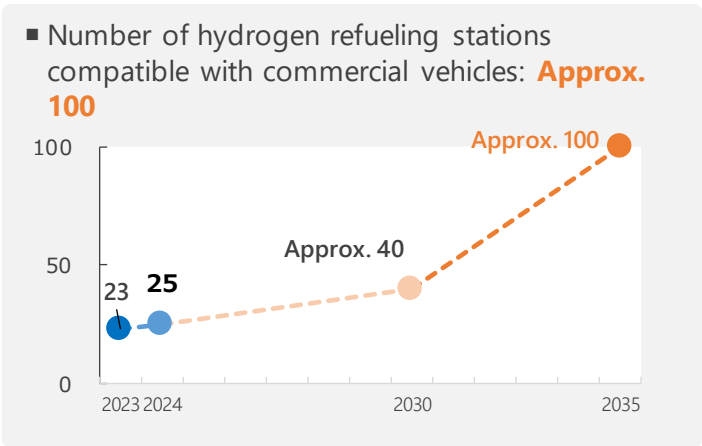
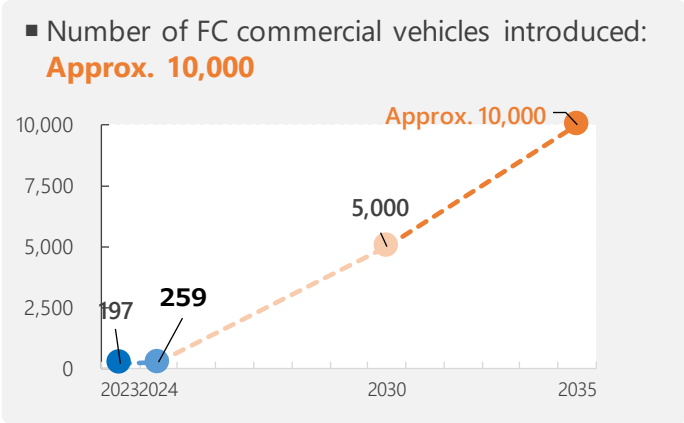
Ground support equipment



Hydrogen refueling station

Promotion of Hydrogen Use in the Transport Field

Targets for the introduction of fuel cell (FC) commercial vehicles etc. in Tokyo



Interim targets for fuel cell commercial vehicles by vehicle type

Fuel cell commercial vehicles	FY 2028	FY 2030
Small trucks	Approx. 2,000	Approx. 3,600
Large trucks	Approx. 250	Approx. 500
Buses	Approx. 200	Approx. 300
Taxis	Approx. 450	Approx. 600
Total	Approx. 2,900	Approx. 5,000

In May 2025, Tokyo was selected as one of **the Priority Areas for the Intensive Deployment of Fuel Cell Commercial Vehicles**.

Promotion of Hydrogen Use in the Transport Field

Overview of subsidies for fuel cell commercial mobility

- (1) **Basic subsidies** for FC buses, FC taxis, FC/hydrogen engine trucks, and FC forklifts
- Subsidies are provided so that, when combined with national subsidies and other incentives, fuel cell vehicles can be **introduced at a cost equivalent to that of comparable diesel (or LPG or gasoline) vehicles**. For the conversion of trucks to FC/hydrogen engine trucks, 2/3 of the conversion cost remaining after deduction of national subsidies is covered.
- (2) **Additional subsidies**
- Additional subsidies** are available for **FC buses, FC taxis, and FC/hydrogen engine trucks** if either of the following conditions, ① or ②, is met. For **FC forklifts**, the additional subsidy is available **only if ②** is met.
- ① Submission of a plan to **increase** the number of FC commercial vehicles **by at least the specified number** over a **five-year period**
- ② **Development of, or arrangement for,** a commercially operated **hydrogen refueling station** at the applicant’s sales offices etc. in Tokyo
- (3) **Fuel cost subsidies** for FC buses, FC taxis, and FC trucks only
- Subsidies are provided to cover the **difference between hydrogen fuel costs and the equivalent cost of diesel oil (or LPG)**.

Maximum subsidies and minimum fleet requirements for additional subsidies

	① Basic subsidies		② Additional subsidies		
	Large enterprises	SMEs	Large enterprises & SMEs	Minimum fleet requirements	
FC buses	30M yen		20M yen	5	*1 The maximum additional subsidies for small and large FC trucks include the basic subsidies.
FC taxis	3.7M yen		2.4M yen	5 for large enterprises 3 for SMEs	
Small FC trucks	13M yen	26M yen	34M yen*1	5 or 10 for large enterprises*2	*2 5 or more if an introduction plan includes large FC trucks and 10 or more if it does not.
Large FC trucks	56M yen	96M yen	115M yen*1		
FC/hydrogen engine trucks (conversion cost)	11M yen		11M yen	3 for SMEs	
FC forklifts	6.7M yen		3.5M yen	(Available only when a hydrogen refueling station is installed)	

Promotion of Hydrogen Use in the Transport Field

Achievements to date: FC commercial vehicle introduction

Approx. 150 FC buses



Approx. 140 small FC trucks



Approx. 150 FC taxis

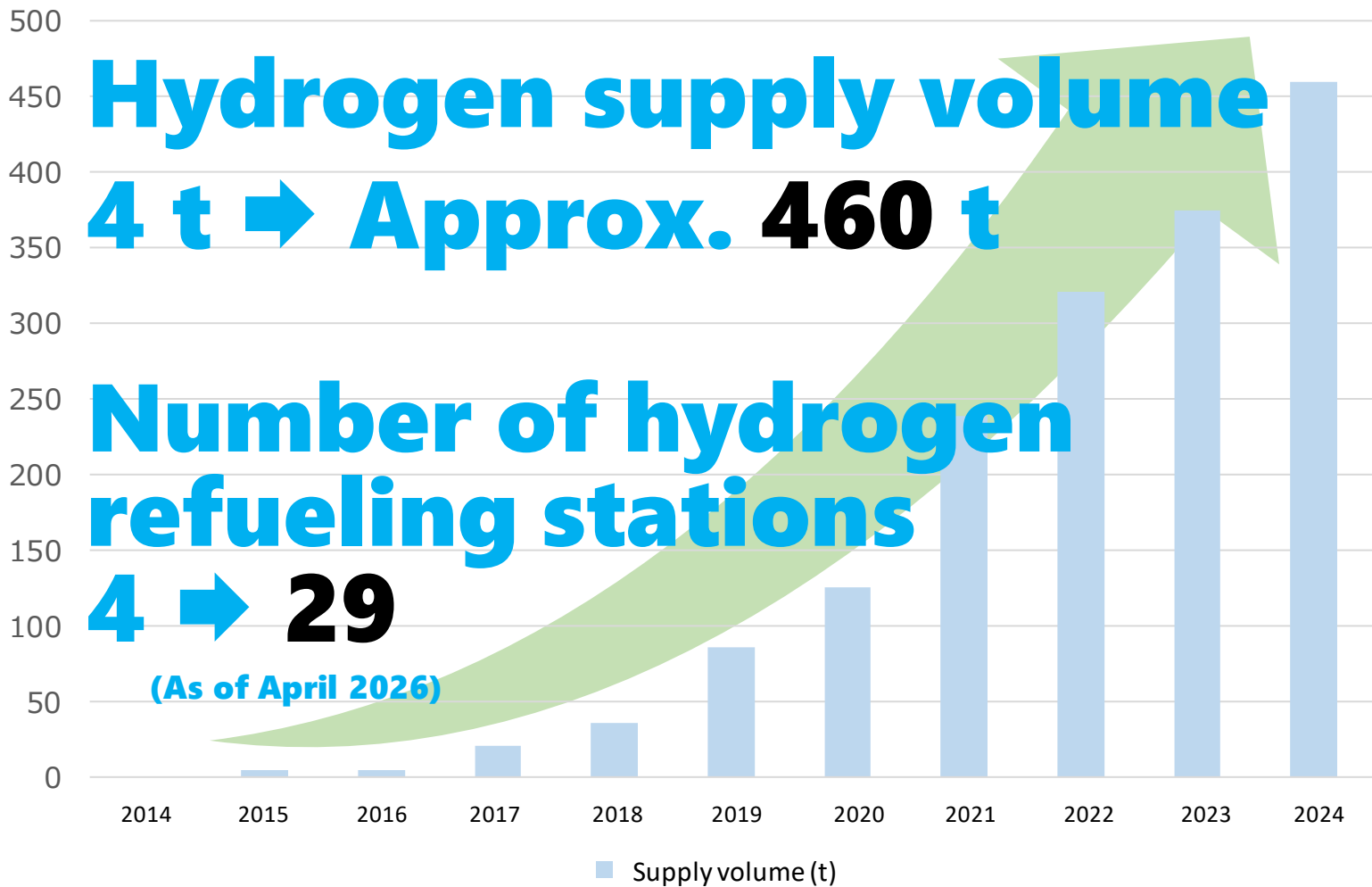


■ Number of FC buses in operation

Over **500** FC commercial vehicles expected to operate in Tokyo

Promotion of Hydrogen Use in the Transport Field

Achievements to date: Hydrogen supply volume etc.



Promotion of Hydrogen Use in the Transport Field

Promoting the introduction of fuel cell buses

Outcomes

- **Approximately 150 fuel cell buses at the end of FY 2025**
* **Goal: Approximately 300 buses by the end of FY 2030**

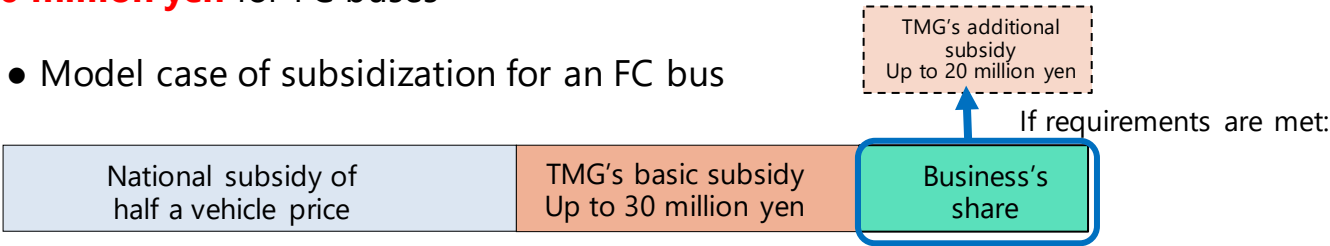


Fuel cell bus (Bureau of Transportation, TMG)

Subsidization

- **Subsidizing introduction costs**
Basic subsidies combined with national subsidies allow introduction at the same prices as those of conventional vehicles (diesel buses).
 - **Up to 30 million yen** for FC buses including bodywork costs**Additional subsidies** apply to (1) Introduction plans of five or more vehicles* within five years, or (2) The case where a hydrogen refueling station is installed at sales offices etc.
 - **Up to 20 million yen** for FC buses

- Model case of subsidization for an FC bus



- **Subsidizing fuel costs:** Subsidies are provided to cover the difference between hydrogen fuel costs and the equivalent cost of diesel oil.

Promotion of Hydrogen Use in the Transport Field

Promoting the introduction of fuel cell taxis

Outcomes

- **Approximately 160 fuel cell taxis at the end of FY 2025**
 - * **Goal: Approximately 600 taxis by the end of FY 2030**
 - * **The nation's first large-scale introduction of fuel cell taxis began in September 2025.**



Fuel cell taxi (image)

Subsidization

●Subsidizing introduction costs

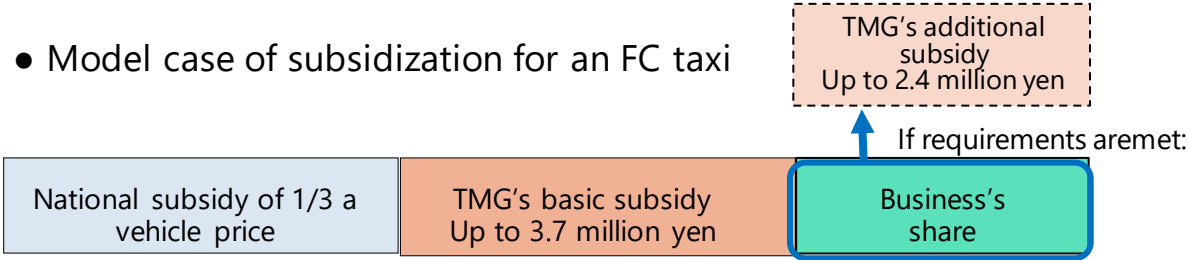
Basic subsidies combined with national subsidies allow introduction at the same prices as those of conventional vehicles (LPG taxis).

- **Up to 3.7 million yen** for FC taxis including bodywork costs

Additional subsidies apply to (1) Introduction plans of five or more vehicles* within five years, or (2) The case where a hydrogen refueling station is installed at sales offices etc.

- **Up to 2.4 million yen** for FC taxis * Three or more FC taxis for SMEs

- Model case of subsidization for an FC taxi



- **Subsidizing fuel costs:** Subsidies are provided to cover the **difference** between hydrogen fuel costs **and the equivalent cost of LPG.**

Promotion of Hydrogen Use in the Transport Field

Promoting the introduction of fuel cell trucks

- Outcomes
- **Approx. 140** small fuel cell trucks **at the end of FY 2025**
 - **Large** fuel cell trucks to be introduced in the near future

Subsidization

- **Subsidizing introduction costs**
Basic subsidies help ensure that vehicle prices (vehicle lease prices for SMEs) are the same as those of equivalent diesel trucks.
 - **Up to 13 million yen (26 million yen for SMEs)** for small FC trucks
 - **Up to 56 million yen (96 million yen for SMEs)** for large FC trucks
Additional subsidies apply to (1) Introduction plans of at least the specified number of vehicles within five years, or (2) The case where a hydrogen refueling station is installed at sales offices etc.
 - **34 million yen** combined with basic subsidies for small FC trucks
 - **115 million yen** combined with basic subsidies for large FC trucks
- **Model case of subsidization for a small fuel cell truck at SMEs**

Before subsidization	Vehicle lease cost (Vehicle price + Maintenance costs)		
After subsidization	Business's share	TMG's basic subsidy Up to 26 million yen	National subsidy etc.
	Lease cost of an equivalent diesel truck		
After subsidization (with an additional subsidy)	TMG's subsidy (subject to meeting the requirements) Up to 34 million yen		National subsidy etc.
- **Subsidizing fuel costs:** Subsidies are provided to cover the **difference** between hydrogen fuel costs **and the equivalent cost of diesel oil.**



Small FC trucks



Large FC trucks

Promotion of Hydrogen Use in the Transport Field

Expanded use of fuel cell vehicles

Goal

Phasing out the sale of new gasoline-only passenger cars in Tokyo: 100% by 2030

* **1,477 fuel cell vehicles (FCVs) were owned as of the end of March 2025.**

Source: Statistics of Automobile Inspection & Registration Information Association

Subsidy projects

● Project to expand the use of fuel cell vehicles

○ Targets: Fuel cell vehicles

○ Subsidy: **Up to 2.25 million yen**

Breakdown:

- Manufacturer-specific subsidy:
Up to 1.9 million yen

* The basic subsidy varies depending on manufacturers' efforts toward GX and sales performance.

- **Additional 100,000 yen** for businesses introducing V2B
- **Additional 250,000 yen** if 100% renewable electricity contract is concluded or solar power generation equipment (2 kW) is installed

● Project to introduce ZEVs to car sharing and rental services

○ Targets: Fuel cell vehicles introduced for car sharing or rental services

○ Basic subsidy: **2.15 million yen**

* **Additional 100,000 yen** for businesses introducing V2B



Fuel cell vehicle
© Toyota Motor Corporation

Promotion of Hydrogen Use in the Transport Field

Implementation support for fuel cell garbage trucks

- Provide support to municipalities that want to use FC garbage trucks on a trial basis or aim at their intensive introduction

Trial use

- Introduce **five trucks** in **five wards/cities** and then introduce them in **another five wards/cities** to have **each truck used in each ward/city for about a year and a half**

Participants in the first part: **Chiyoda Ward, Machida City, Tama City, Higashikurume City, Kiyose City** (1.5 years between FY 2023 and 2026)

Participants in the second part: **Taito Ward, Katsushika Ward, Nerima Ward, Hachioji City, Higashimurayama City** (1.5 years between FY 2025 and 2027)



Fuel cell garbage truck

Intensive introduction

- Cover the vehicle introduction costs of FC garbage trucks delivered to municipalities planning their intensive introduction (Provide additional subsidies if hydrogen refueling stations are also invited)

Introduction completed in **Koto Ward**

Introduction scheduled in **Higashikurume City, Kiyose City, Nishitokyo City**

Promotion of Hydrogen Use in the Transport Field

Utilizing hydrogen for commercial and industrial vehicles

Fuel cell forklifts (FCFLs)

Basic subsidies up to **6.7 million yen** combined with national subsidies allow introduction at the same prices as those of equivalent engine-powered FLs

Additional subsidies up to **3.5 million yen** are provided to businesses that install a commercial hydrogen refueling station at their sales offices etc.

Ground support equipment (GSE vehicles)

- Subsidize the cost of converting existing GSE vehicles to FC vehicles and conducting their test operation to promote the conversion at airports and other places

Targets: Aircraft towing vehicles

Developments to date: Vehicle conversion in FY 2024, trial operation and verification of the effects in FY 2025



Fuel cell forklift



Fuel cell aircraft towing vehicle

Development of hydrogen refueling stations

29 stations installed as of April 2026



- A **Green Hydrogen-based** station will be installed using TMG-owned land in Nishi-Shinjuku 4-chome.
- A **station compatible with large fuel cell trucks** will be installed using TMG-owned land in Shinsuna 3-chome, Koto Ward.

Promotion of Hydrogen Use in the Transport Field

Promoting the installation of hydrogen refueling stations

Main subsidy details

Installation costs		Subsidization targets		Subsidy rates	Upper limits
	National govt. & TMG	Large hydrogen refueling station with supply capacity of 500 Nm ³ /h or more		Full subsidies	1B yen
		Medium-sized hydrogen refueling station	With supply capacity of 300 Nm ³ /h or more and less than 500 Nm ³ /h	4/5 for large enterprises, 5/5 for SMEs	500M yen
			With supply capacity of 50 Nm ³ /h or more and less than 300 Nm ³ /h		360M yen
		Small hydrogen refueling station with supply capacity of less than 50 Nm ³ /h		4/5 for large enterprises, 5/5 for SMEs	200M yen
	TMG	Extension/retrofits for commercial vehicles [Expanded]		4/5 for large enterprises, 5/5 for SMEs	400M yen
		Installation of barrier walls		4/5 for large enterprises, 5/5 for SMEs	30M yen
		Removal/relocation of existing equipment		4/5 for large enterprises, 5/5 for SMEs	30M yen
		Land development		4/5 for large enterprises, 5/5 for SMEs	200M yen
		Construction etc.	Including next-generation canopies	4/5 for large enterprises, 5/5 for SMEs	100M yen
					200M yen
		Hydrogen refueling stations for other fuel cell mobility		4/5 for large enterprises, 5/5 for SMEs	300M yen
		Laying of hydrogen pipelines		4/5 for large enterprises, 5/5 for SMEs	1B yen
		FS/schematic design fee not eligible for the national government subsidies		5/5 for SMEs only	10M yen
		Installation of solar power generation equipment		4/5 for large enterprises, 5/5 for SMEs	200M yen
		Installation of water electrolyzers		4/5 for large enterprises, 5/5 for SMEs	1B yen
		Installation of hydrogen EMS [New]		4/5 for large enterprises, 5/5 for SMEs	300M yen
		Subsidies for addition or retrofits [Expanded]		Full subsidies for SMEs only	Lost revenue*

* Providing subsidies to cover lost revenue during temporary closures associated with addition or retrofits

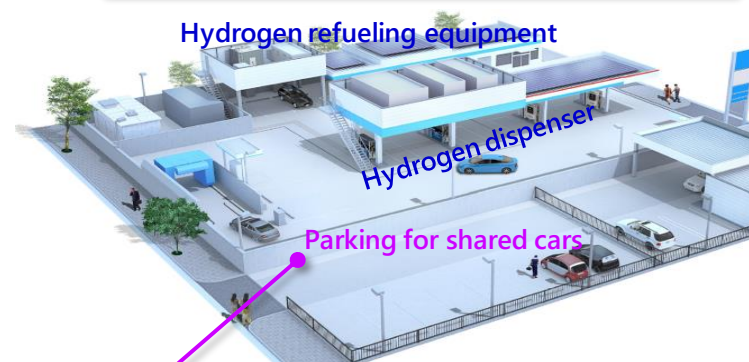
Equipment owning & operating costs	Subsidization targets		Upper limits
	Equipment o&o costs for passenger cars		5M yen for large enterprises, 10M yen for SMEs
	Equipment o&o costs for one commercial-vehicle line [Expanded]		10M yen for large enterprises, 20M yen for SMEs
	Equipment o&o costs for two commercial-vehicle lines [Expanded]		20M yen for large enterprises, 40M yen for SMEs
	Equipment o&o costs (additional subsidies due to extended business hours)		2,000 yen/h for large enterprises, 4,000 yen/h for SMEs if they operate between 8 p.m. and 9 a.m. Further increased (1.25-fold) subsidies between 10 p.m. and 5 a.m.
	Equipment spare parts purchase costs		5M yen for SMEs only
	Unexpected equipment repair costs		10M yen for SMEs only
	Green power purchase costs		Price difference between green power and regular electricity for SMEs only
	Water electrolyzer o&o costs [New]		4/5 for large enterprises, 5/5 for SMEs, 15M yen
	Hydrogen transportation equipment installation costs [New]		4/5 for large enterprises, 5/5 for SMEs, 50M yen
	Land rent for stations installed in and after 2022		Subsidy rates: 4/5 for large enterprises, 5/5 for SMEs

Fuel costs	Subsidization targets	Upper limits
	Hydrogen fuel costs	Price difference between hydrogen and diesel oil
	Administrative costs	Hydrogen fuel costs multiplied by 0.05 for large enterprises and by 0.1 for SMEs

(Subsidies for fuel costs for fuel cell buses are provided via hydrogen refueling stations)

Supports for SMEs to introduce hydrogen refueling stations

- (1) Station opening and operation help desk "Sui Sui Support"
- (2) Support for acquiring qualifications and practical experience
- (3) Seminars, etc.



Hydrogen refueling station (image)

Packaged subsidies for 35 MPa hydrogen refueling stations and car sharing etc. (by TMG)

- Station installation costs: Up to 500M yen. Subsidy rate: 4/5 (5/5 for SMEs)
- Station operation costs: Up to 5M yen (up to 10M yen for SMEs)
- Purchase cost of FCVs for car sharing etc.: Up to 3M yen
- Cost of starting-up car sharing business etc.: Up to 5M yen. Subsidy rate: 1/2

Promotion of Hydrogen Use in the Transport Field

Comprehensive support project for accelerating the widespread adoption of hydrogen mobility and refueling stations

Status quo and challenges

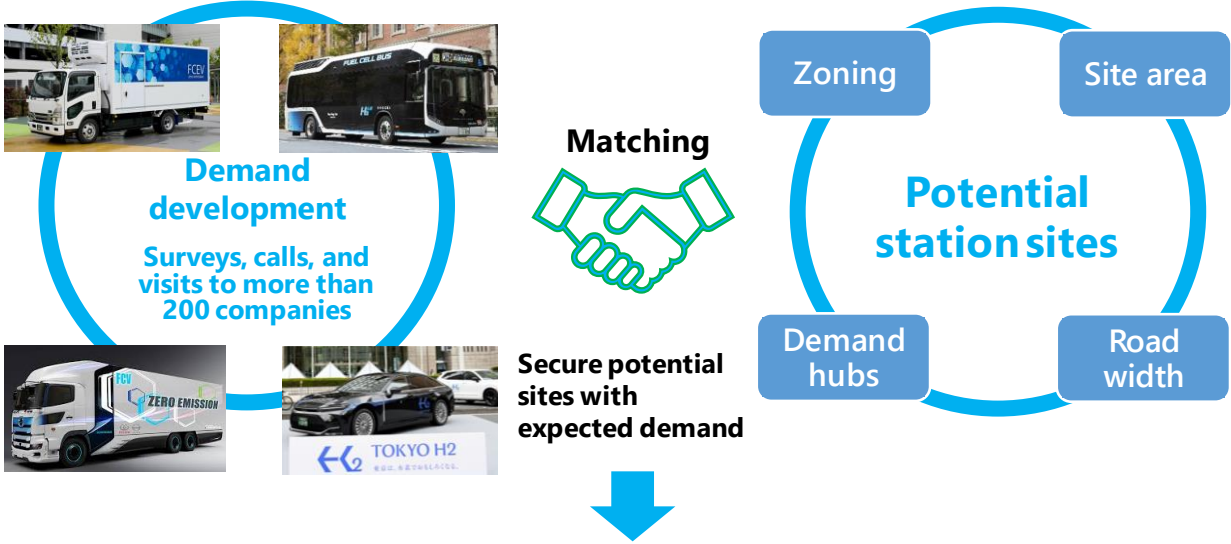
The lack of a critical mass of demand makes it difficult to formulate investment plans for hydrogen refueling stations

Securing sites for hydrogen refueling stations in Tokyo is challenging

➡ Aggregate demand

➡ Research potential sites

Matching demand with potential station sites



Promote demand-driven hydrogen refueling station development



Promotion of Hydrogen Use in the Transport Field

Project to promote the introduction of hydrogen refueling stations for local production for local consumption (New project for FY 2026)

- To **address challenges** such as **hydrogen procurement** and **transportation costs**, and to **promote the effective use of energy**, it is necessary to introduce hydrogen refueling stations for local production for local consumption that produce hydrogen on-site.
- TMG will conduct **feasibility studies in collaboration with private companies**, and based on the results, develop a **new business model** for **hydrogen refueling stations for commercial vehicles**, thereby **promoting their installation**.
- Key considerations: Hydrogen refueling stations for commercial vehicles are a prerequisite.
 - **Cost-effective and stable hydrogen production** under a local production for local consumption model
 - **Optimization of supply and demand (Hydrogen EMS)**
 - **Business viability** toward self-sustaining operations
 - Future initiatives to improve environmental performance
- The study began in April, and the **business model is scheduled to be published around the end of October**.



A hydrogen refueling station for local production and consumption in Germany that is the largest in Europe

Promotion of Hydrogen Use in the Transport Field

TOKYO H2 Project

- TMG has **launched a new public-private partnership project, TOKYO H2, to accelerate actions using hydrogen** in conjunction with the start of the massive introduction of fuel cell taxis in Tokyo, the first of its kind in Japan.
- Aiming to position **Tokyo as a global leader in the social implementation of hydrogen**, TMG and companies and organizations related to hydrogen energy will promote various initiatives centered on hydrogen and encourage **efforts to expand the network of partners who actively use hydrogen across a variety of fields.**

Project Launch Event in September 2025



Announcement of the project by Governor Koike



Fuel cell taxi launch ceremony

Project logo



JMS Talk Show in November 2025



Speaker photo session

TOKYO H2 Project website



Promotion of Hydrogen Use in the Transport Field

Hydrogen fuel cell ship utilization project

- In October 2025, a **basic agreement** was signed with Iwatani Corporation regarding a **project to utilize a hydrogen fuel cell ship** to promote the social implementation of hydrogen energy.
- Under this project, the hydrogen fuel cell ship "Mahoroba" will **operate in the Port of Tokyo, providing opportunities** for many people **to experience the ship firsthand**. The project will also **widely communicate** the **benefits of hydrogen fuel and hydrogen fuel cell ships**, as well as the **role of the Port of Tokyo** as an international logistics hub that supports industry and daily life in the Tokyo metropolitan area.



Hydrogen fuel cell ship "Mahoroba"



Basic agreement signing ceremony

Promotion of the Effective Use of Green Hydrogen etc.

Certification system for businesses using Green Hydrogen

Project outline

- Green Hydrogen Active User Certification System since FY 2024**

Businesses using **Green Hydrogen** in Tokyo are certified as **Green Hydrogen Active Users**. For each of the following certification category, certification is given according to the amount of use over the previous fiscal year, and **financial incentives** are provided. A **logo for the certification system** has been created for certified businesses to use it.

System outline and requirements

Certification category	Description	Requirements		Financial Incentives (Unit: 300 yen/Nm ³)
		Continuity	Consumption	
On-site type (local production for local consumption)	Businesses generate renewable electricity by themselves and use Green Hydrogen produced by equipment at their facilities in Tokyo	Using Green Hydrogen for 2 months or more per year in the past	Using 100 Nm ³ or more of Green Hydrogen per year in the past	2/3 of the unit x Consumption
On-site type	Businesses are supplied renewable electricity by others and use Green Hydrogen produced by equipment at their facilities in Tokyo			3/5 of the unit x Consumption
Off-site type	Businesses use Green Hydrogen produced in Japan at their facilities in Tokyo * Hydrogen must be transported by ZEVs (EVs or FCVs) in principle. * For any other method of transportation, greenhouse gas emissions must be offset.		Using 500 Nm ³ or more of Green Hydrogen per year in the past	1/2 of the unit x Consumption
[New] Small amount users	Businesses use Green Hydrogen produced by themselves or in Japan at their facilities in Tokyo	Using Green Hydrogen for 1 month or more per year in the past	—	—

Certification system logo



Promotion of the Effective Use of Green Hydrogen etc.

Using Tokyo-produced Green Hydrogen in various fields (1): Industrial use

Efforts for **industrial** use

- Undertake efforts to **transition hydrogen** used across a wide range of **industrial fields** to **Green Hydrogen**
- (1) **Cosmetics**: Hydrogen is used as a raw material, e.g., for oil hydrogenation, deodorization, and quality stabilization.
 - In collaboration with private companies, **pilot cosmetic products** have been manufactured using **Tokyo-produced Green Hydrogen** as a raw material.
- (2) **Fertilizers**: Hydrogen is used as a feedstock for ammonia used for fertilizer production.
 - In collaboration with private companies, **nitrogen-based fertilizers** have been produced using **ammonia derived from Tokyo-produced Green Hydrogen**.



Developing a lip balm using ingredients produced with Tokyo-produced Green Hydrogen



Chemical fertilizer (ammonium sulfate)



Mixed compost

Promotion of the Effective Use of Green Hydrogen etc.

Using Tokyo-produced Green Hydrogen in various fields (2): Methanation

Trial production of green methane

* Methanation: A technology that synthesizes methane by reacting hydrogen with carbon dioxide

- As an effort utilizing Green Hydrogen, a **trial project** is conducted **to produce green methane** (e-methane) by reacting hydrogen (H_2) with carbon dioxide (CO_2).
- * Even when green methane is used, the total amount of carbon dioxide in the air does not increase because the carbon dioxide used in its production is recycled.
- The hydrogen (H_2) is sourced from **Tokyo-produced Green Hydrogen** generated on Keihinjima Island, and the carbon dioxide (CO_2) from biomass-derived CO_2 captured at the **Morigasaki Water Reclamation Center**.

Keihinjima Green Hydrogen Plant

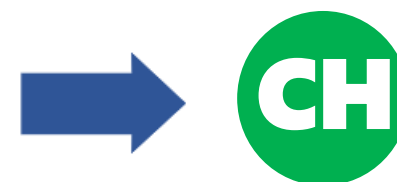


Tokyo-produced Green Hydrogen

Morigasaki Water Reclamation Center



Carbon dioxide from biomass



Green methane (e-methane)

Promotion of the Effective Use of Green Hydrogen etc.

Initiatives for launching a hydrogen exchange

- At **COP28**, TMG announced the idea of launching a **hydrogen exchange** in collaboration with **Germany's H2Global Foundation**, known as **one of the world's leading organizations** promoting hydrogen.
- TMG is studying the **system design** for launching a **Green Hydrogen Exchange** and has conducted **trial transactions** using **domestic Green Hydrogen** to **reflect the findings** in the study.

Collaboration Agreement with H2Global Foundation*

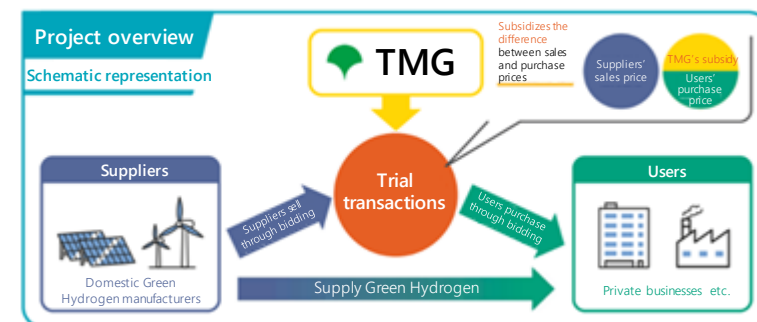
- * Established in 2021 with its activities supported by more than **60 companies** since then. Funded by the **German Federal Government** and other sources, it compensates for the **difference** between supply and demand prices, promoting the launch of an effective **market**.
- Agreement was concluded on February 2, 2024.
- Collaboration aims for information sharing and opinion exchange related to transactions and logistics, research and study on technology trends, and establishment of exchanges and other institutions together.



Basic Agreement signing event on February 2, 2024

Tokyo Green Hydrogen trial transactions

Green Hydrogen trial transactions, a new trial of market-based **hydrogen transactions**, have been conducted through a **double auction system**, where **sales and purchase prices of Green Hydrogen** are determined by **bidding**.



Promotion of the Effective Use of Green Hydrogen etc.

Using Green Hydrogen at TMG facilities

- Fuel cells installed at TMG facilities allow TMG to demonstrate the advantages of using Green Hydrogen. PR for visitors has also been arranged.

Tokyo Big Site since May 2023



Odaiba Seaside Park since April 2025



Sea Forest Waterway since March 2025



Promotion of the Effective Use of Green Hydrogen etc.

Building the foundation for the effective use of Green Hydrogen

Collaboration with Yamanashi Prefecture

- Conclusion of a Basic Agreement on Promoting the Use of Green Hydrogen with Yamanashi Prefecture
- Collaboration in **promoting the use of Green Hydrogen from Yamanashi Prefecture in Tokyo**, and **encouraging the development of technologies covering the production of Green Hydrogen through its use**



Basic Agreement signing event on
October 28, 2022

Collaboration with Fukushima Prefecture

- In February 2025, TMG signed a Collaboration Agreement for the Realization of a Hydrogen Powered Society with Fukushima Prefecture.
- Toward the realization of a hydrogen powered society, both prefectures will **work together** to promote the widespread adoption of hydrogen in the **mobility field**, encourage the use of **Green Hydrogen**, and support hydrogen-related industries.



Collaboration Agreement signing event on February 17, 2025

Promotion of the Effective Use of Green Hydrogen etc.

Holding of the Hydrogen Energy Conference for Action, "HENCA Tokyo"

- An international conference on hydrogen, "**HENCA Tokyo**," hosted by TMG, has been held to foster **technological development** and **international hydrogen supply chain** creation.

* HENCA is an abbreviation for Hydrogen Energy Conference for Action.

Overview of the FY 2025 conference:

- Date: Tuesday, October 21, 2025
- Theme: **Social Implementation of Green Hydrogen**

— Progress in Hydrogen Projects and the Emergence of Hydrogen Businesses —

▪ Speakers

				
Ms. Yuriko Koike Governor of Tokyo, Japan	Mr. Noé van Hulst Vice-Chair, International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE)	Mr. Anthony Lean Secretary of the Department of Climate Change, Energy, the Environment and Water, New South Wales Government, Australia	Ms. Nancy Sutley Deputy Mayor, Energy and Sustainability, City of Los Angeles	
				
Dr. Carolina Kawakubo Representative Director & President, NRW, Global Business Japan	Mr. Stéphane Beaudet Mayor of Evry-Courcouronnes, Vice-President of Île-de-France Regional Council	Mr. Waleid Gamal Eldien Chairman, Suez Canal Economic Zone	Mr. Shohan Seneviratne Chief Executive Officer, Murchison Hydrogen Renewables	Dr. Fiona Simon CEO of the Australian Hydrogen Council (AHC)
				
Mr. Driss Berraho Executive Vice-President, Business Development Green Hydrogen ACWA Power	Dr. Masami Takenaka Lead Executive Officer, Senior General Manager, Green Solution Project, Asahi Kasei Corporation	Mr. Yoshinori Kanehara Chairman of the Board, Kawasaki Heavy Industries, Ltd.	Dr. Daishu Hara Senior Director, New Energy and Industrial Technology Development Organization Hydrogen and Ammonia Department	

The view of the conference was distributed through archive:
[HENCA Tokyo 2025 – Hydrogen Energy Conference for Action](#)



Presentation by Tokyo Governor Koike Yuriko



Panel discussion

- After the conference, a **joint message** was issued toward accelerating the **social implementation of Green Hydrogen**.



Promotion of the Effective Use of Green Hydrogen etc.

Participation in international hydrogen exhibitions

- In November 2025, TMG participated in an **international hydrogen exhibition** held in Sydney, **New South Wales (NSW), Australia**, a city that has concluded a cooperation agreement with Tokyo on hydrogen initiatives. TMG exhibited alongside **three Tokyo-based small and medium-sized enterprises possessing advanced hydrogen-related technologies and services**. In addition to **showcasing** its policies on the **international stage**, TMG facilitated business **matching** between Tokyo-based companies and overseas businesses and organizations.



Promotion of the Effective Use of Green Hydrogen etc.

Holding of the Tokyo Green Hydrogen Roundtable

- **Examples and opinions were shared** in the discussions between **companies and organizations** making **advanced efforts** for expanding the use of **Green Hydrogen** etc.

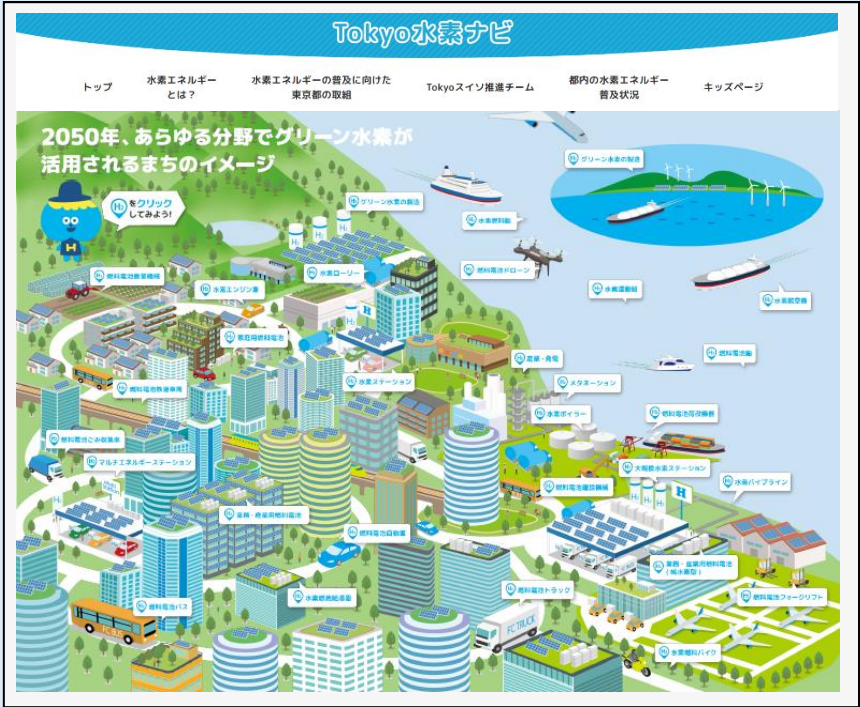


	Month/year	Themes	Participants
1	August 2022	Establishment of an international hydrogen supply chain and the expansion of Green Hydrogen etc.	Iwatani Corporation, ENEOS, Kawasaki Heavy Industries, Shimizu Corporation, Sumitomo Corporation, Toshiba Energy Systems, Marubeni Corporation, Miura Industries
2	November 2022	Establishment of a hydrogen supply system including pipelines and the broader use of hydrogen	Iwatani Corporation, ENEOS, Tokyo Gas, Toyota Motor Corporation, Ota Ward (observer)
3	February 2023	Hydrogen supply network (Green Hydrogen production and hydrogen transportation method)	Asahi Kasei, ENEOS, Obayashi Corporation, Tokyo Gas, Toray, NEDO
4	February 2023	Hydrogen supply network in the airport coastal area	Kawasaki City, Ota Ward
5	May 2023	Revision of the Basic Hydrogen Strategy of the national government and the formulation of the Hydrogen Industry Strategy and Hydrogen Safety Strategy	Asahi Kasei, ENEOS, Kawasaki Heavy Industries, Chiyoda Corporation, Panasonic Holdings, Hitachi Zosen, Mitsui & Co., Ltd, Hydrogen Value Chain Promotion Council, High Pressure Gas Safety Institute
6	December 2023	Exchange of opinions on hydrogen supply systems including pipelines etc.	JFE Steel, Tokyo Gas, Tokyo Gas Network, Nishimura & Asahi, High Pressure Gas Safety Institute, Tokyo Energy Issues Advisory Board committee members
7	October 2024	Initiatives on the demand side, efforts for creating a hydrogen supply chain, and initiatives related to the national government's Hydrogen Society Promotion Act	Iwatani Corporation, NTT Anode Energy Corporation, ENEOS, Toyota Motor Corporation, East Japan Railway Company
8	July 2025	Accelerating the social implementation of Green Hydrogen toward 2050	ITOCHU Corporation, Obayashi Corporation, Kawasaki Heavy Industries, Toyota Motor Corporation, JGC Holdings Corporation

Fostering Momentum

Creating a website featuring hydrogen energy: Tokyo Hydrogen Navigator

- Opening the **Tokyo Hydrogen Navigator** website that aggregates information on hydrogen energy
- Aiming to provide an opportunity for Tokyo residents to become more familiar with hydrogen and for businesses to consider participating in the hydrogen business
- Creating an **English website** in FY 2025 to **strengthen the dissemination of information overseas**



Main content
The latest information on hydrogen energy
Efforts and support measures of TMG, including subsidy information
Activities of the Tokyo Hydrogen Promotion Team
Expansion of hydrogen energy in Tokyo
Introduction of pages for kids, videos, and learning facilities

<https://www.tokyo-h2-navi.metro.tokyo.lg.jp/>

