Hydrogen Factory

Now Is the Time to Stand Together

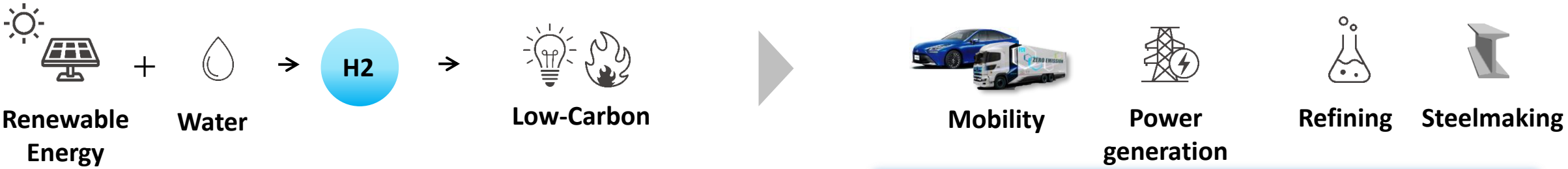



Toyota Motor Corporation
Hydrogen Factory President

Mitsumasa Yamagata

March 17, 2026

Advancing Toward a Hydrogen Society

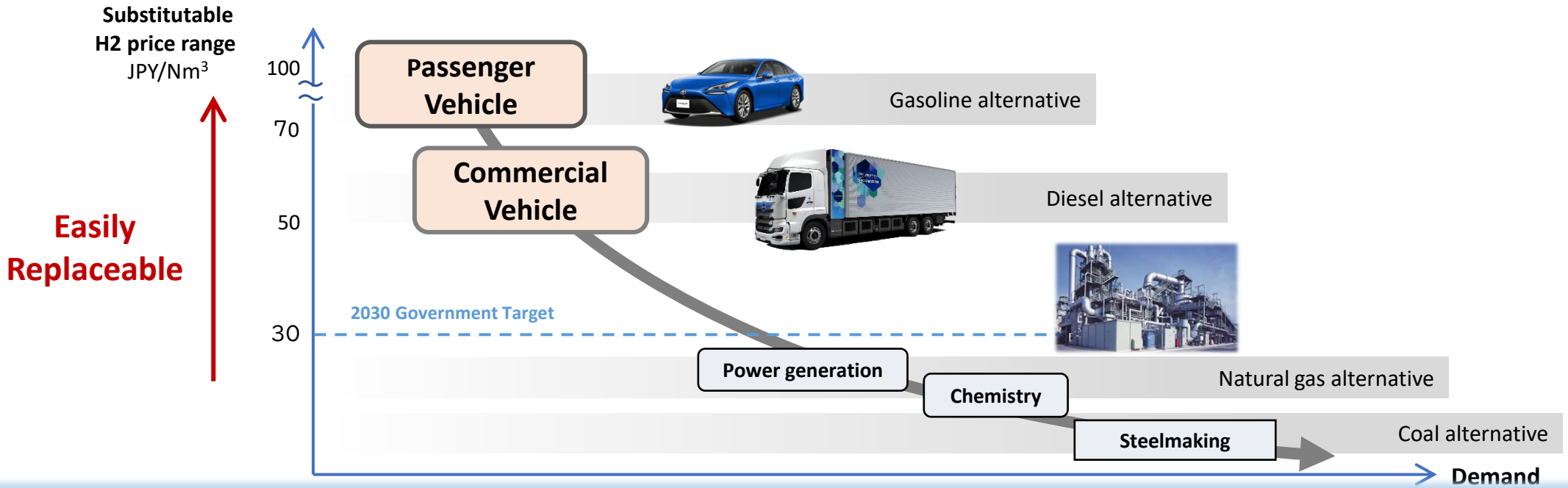


Wide range of applications

Cost Remains the Key Challenge

Cost Comparison: Conventional Fuels vs. Hydrogen

Source: Kyushu University, Professor Sasaki



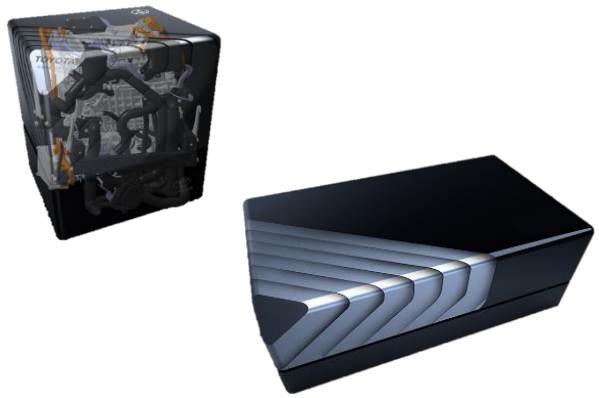
Lead hydrogen adoption through commercialized mobility.

Mobility Deployment to Date

Grand totals

28,700 vehicles

(Cumulative global production)



FC Module

3,500 units

（Adopted by over 100 companies）

200 vehicles

Across Japan:
Miyagi, Fukushima, Tokyo,
Aichi, Hyogo, Fukuoka

Both product evolution and ecosystem development — from hydrogen supply to demand creation — are essential.

Product Evolution

Customer Feedback (Commercial Trucks)

Customer Feedback

- Smooth acceleration, **less fatigue!**
- Minimal vibration **keeps cargo intact!**
- **Hydrogen fueling is quick and convenient!**
- **Maintenance is a concern.**

FC products are well-received,
but further product development to meet commercial needs is required.

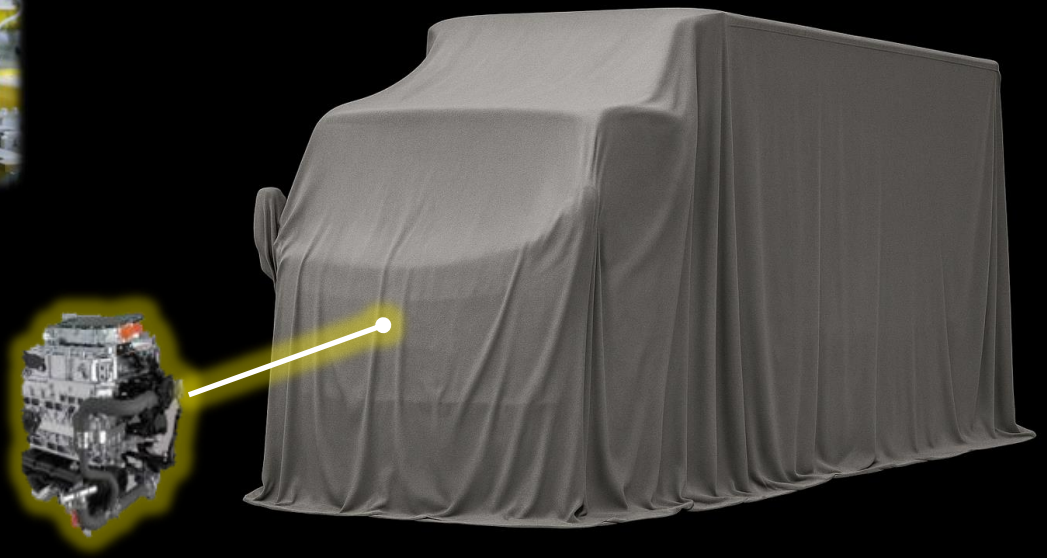
■ 2x output at the same size
Improved Power Efficiency

■ 1.2x better fuel efficiency 〔Compared to our previous model〕
Lower hydrogen consumption and extended range

■ 2x durability 〔Compared to our previous model〕
Delivers maintenance-free operation with diesel-equivalent performance

■ Significant cost reduction
Cost reduction achieved through design and manufacturing innovation

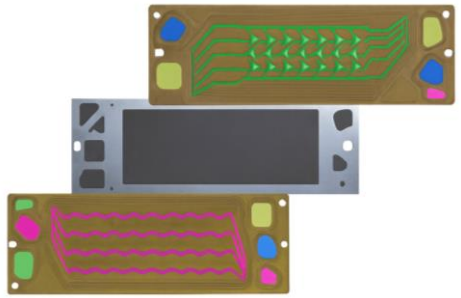
The 3rd-Generation FC system was developed with commercial use in mind.

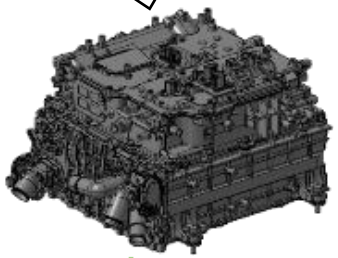


Development of the 3rd-Generation FC System continues to advance steadily. We are currently in discussions with Japanese OEM partners on its deployment in light-duty trucks.

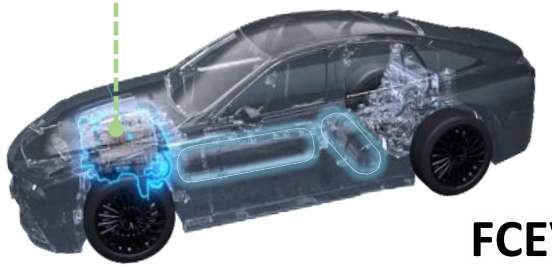
FC Core Technologies Supported by Partners

Our core strength is **Cells**



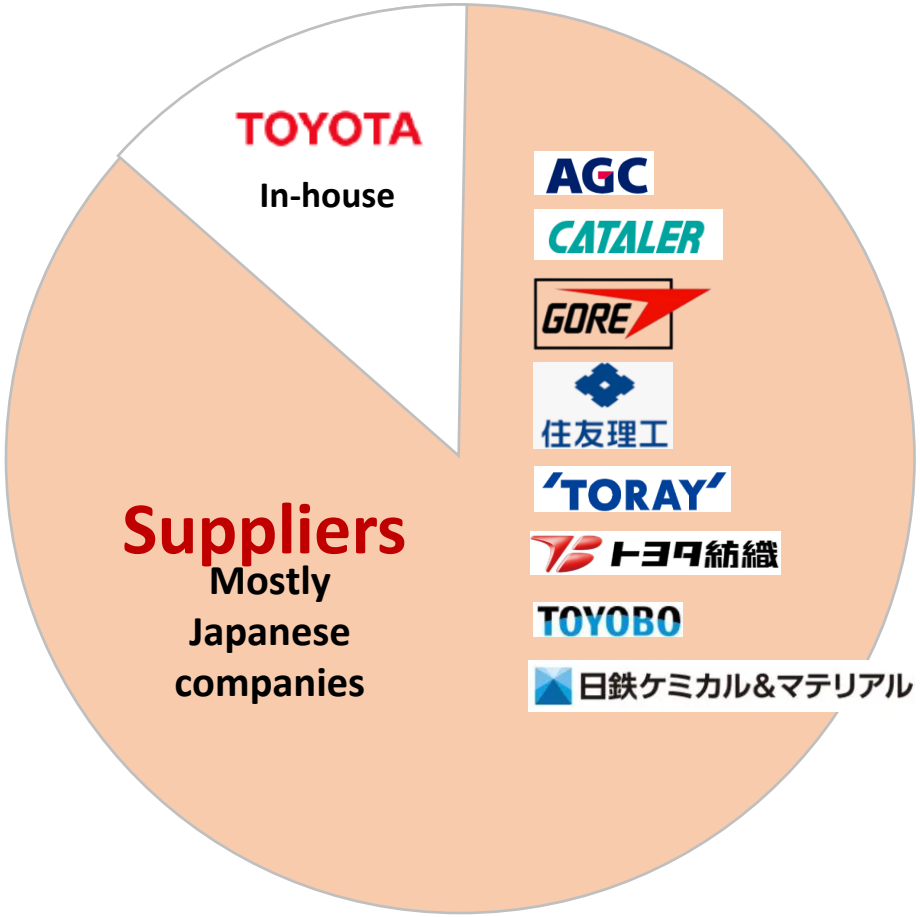


FC System



FCEV Components

FC Cell Cost Breakdown



Cell technology developed through Japan's collective R&D is central to FC systems.

Building a Hydrogen Ecosystem
Expanding Hydrogen Infrastructure
Driving Large-scale Hydrogen Demand

Creating Demand (Commercial Trucks)

Sustainable Business Model

Example: Hydrogen Station in Heiwajima, Tokyo

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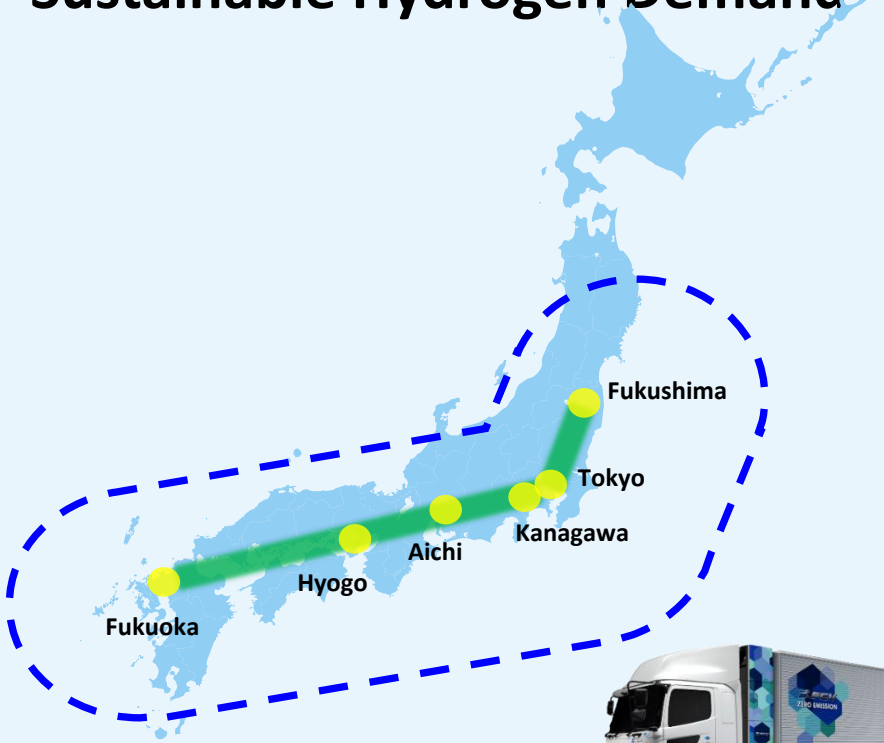
出典：岩谷コスモ水素ステーション平和島

Projected deployment: approx. 80 vehicles; hydrogen demand of 250 tons/year

With public subsidies,

hydrogen prices are expected to become comparable to existing fuels.

Connecting Key Areas via Major Arterial Routes to Build Sustainable Hydrogen Demand



Connecting key regions via major arterial routes will create sustainable hydrogen demand and help overcome the chicken-and-egg dilemma.

Creating Demand (FCEV Taxis)

Accelerating Hydrogen Adoption Initiatives in Tokyo

Public-Private Partnership Project “TOKYO H2” Launched

Securing Stable Demand

Expanding from Tokyo to Aichi

FC Taxi Purchase Support Launches in Aichi Prefecture (April 2026)

Customer Feedback

- ✓Extremely quiet, helping you forget the hustle and bustle of the city
- ✓Low vibration reduces driver fatigue
- ✓It offers the refined comfort expected of a premium sedan and is ideal for VIP transportation.

Crown FCEV taxi operations begin in Tokyo → expanding to Aichi.

Co-Creating with Partners

Passenger Vehicles

Commercial Vehicles

Government Hydrogen Corridor Initiative

Next-Generation FC System Collaboration

VDL

Fuel Cell Supply Network

hyliko

Steadily advancing in Europe with major OEM partners to shape the market.

Co-Creating with Partners

Hydrogen highway development for heavy trucks is accelerating through public-private partnerships and cross-industry collaboration.

Sichuan (FC Plant)

蜀道丰田氢能科技 (四川) 有限公司

蜀道投資集団有限責任会社
四川蜀道装備科技株式有限会社

Total fleet mileage: 26 million km

Beijing (FC Plant)

华丰燃料电池有限公司

亿华通 SinoHytec

Promoting the Adoption of FC on Major Logistics Routes

GLP

Strengthening partnerships and product capabilities in the largest FC market, and feeding those learnings back into Japan.

Building a Hydrogen Ecosystem
Developing User-Friendly Hydrogen Stations

Reducing Hydrogen Station Downtime

根本通商株式会社

In-House Mandatory Inspections

Internalizing Equipment Inspection and Maintenance

With expert support, we are gradually shifting inspection and maintenance in-house. Enhanced on-site response capabilities allow minor issues to be resolved internally.

Compressor Maintenance

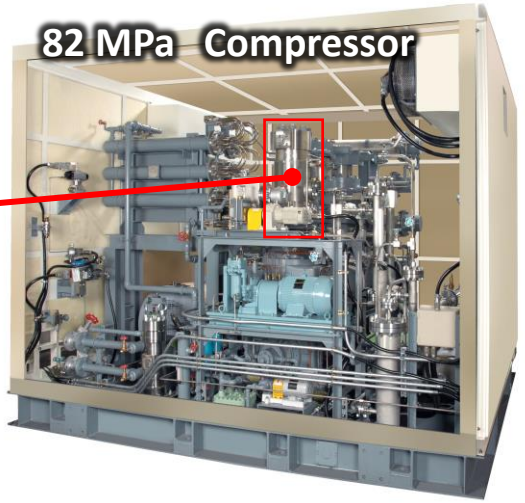
Annual Mandatory Inspections

株式会社 加地テック NSK

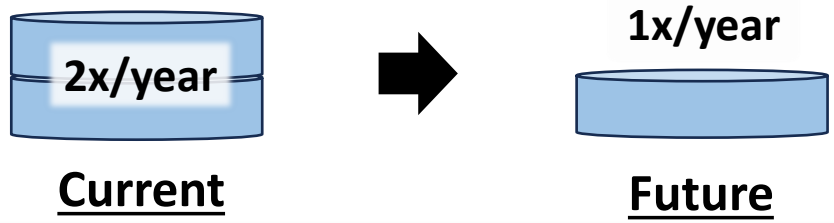
Compressor Life Extension

Extending Compressor Lifespan

Field testing and root-cause analysis have led to improved sliding components.

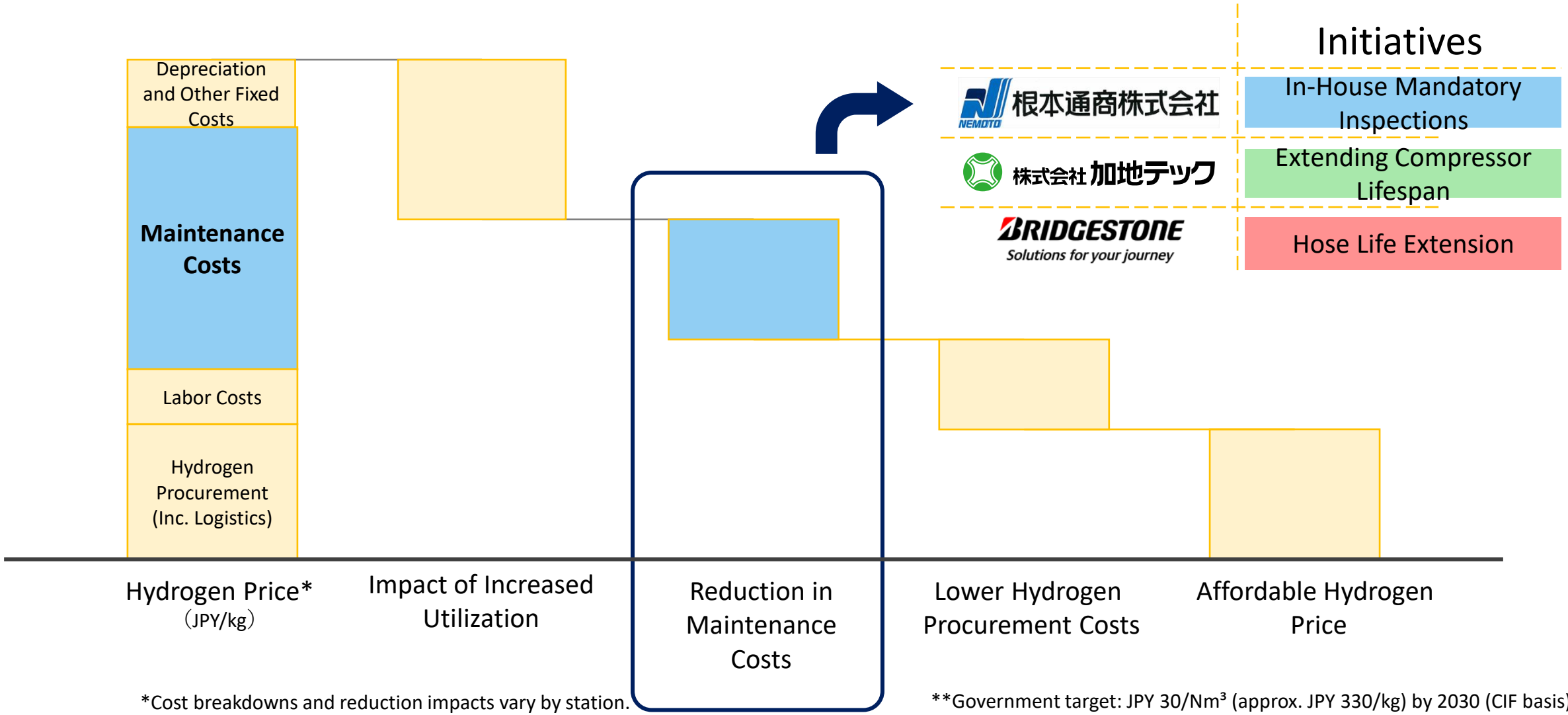


Compressor Maintenance Frequency



Working with partners to reduce downtime at hydrogen refueling stations.

Reducing Hydrogen Station Operating Costs



*Cost breakdowns and reduction impacts vary by station.

**Government target: JPY 30/Nm³ (approx. JPY 330/kg) by 2030 (CIF basis)

Reducing maintenance costs helps lower hydrogen prices.

Building a Hydrogen Ecosystem
Enhancing Hydrogen Production Efficiency

Enhancing Hydrogen Production Efficiency

Joint development of water electrolysis systems with Chiyoda Corporation.
Mass Production to Commence in 2029.

<Domestic>

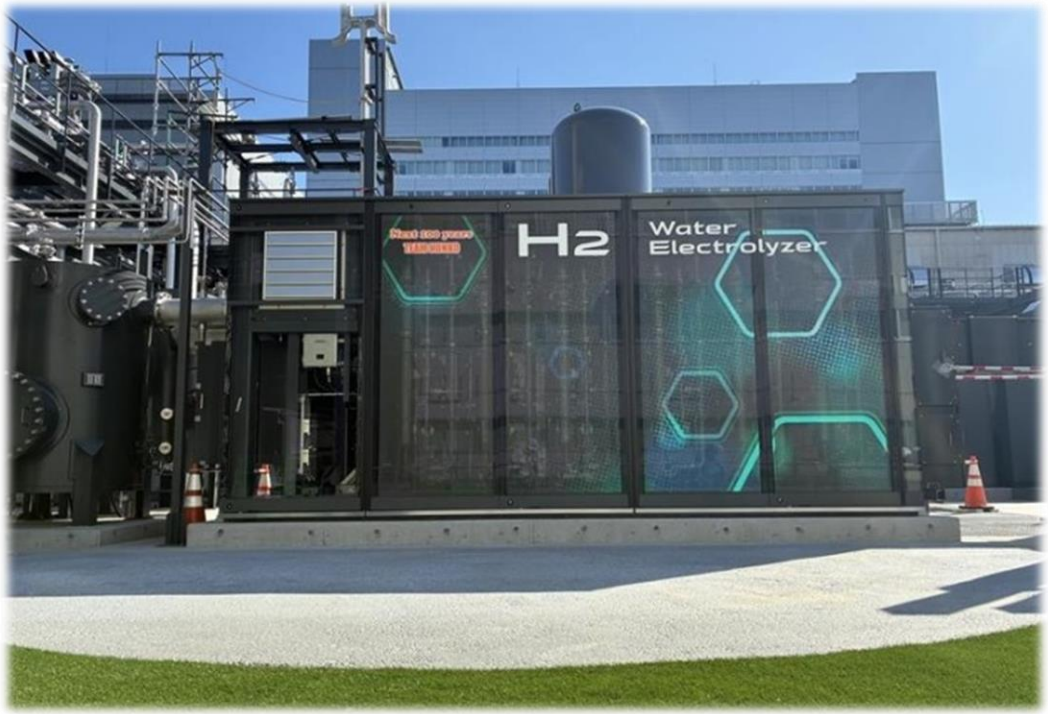
Medium-scale capacity: 5 MW

(H2 production capacity: 100 kg/hour)

<Overseas>

Large-scale capacity: 20 MW

(H2 production capacity: 400 kg/hour)



Enhance hydrogen production capabilities in Japan and expand deployment overseas.

Hydrogen Factory

Let’s change the future with hydrogen.