



December 25 2023

Honda Motor Co., Ltd.
Tokuyama Corporation
Mitsubishi Corporation

Honda, Tokuyama, and Mitsubishi Corporation to Conduct Joint Demonstration of Decarbonizing Data Center Using By-product Hydrogen and Stationary Fuel Cell Power Station designed to Reuse Fuel Cell Systems from FCEVs

TOKYO, Japan, December 25, 2023 – Honda Motor Co., Ltd. (Honda), Tokuyama Corporation (Tokuyama), and Mitsubishi Corporation (MC) (“Project Members”) will conduct a joint demonstration to operate a data center using by-product hydrogen and a stationary fuel cell (FC) power station designed to reuse FC systems from fuel cell electric vehicles (FCEVs). (“Demonstration Project”).

This Demonstration Project was proposed to and adopted by the New Energy and Industrial Technology Development Organization (NEDO) as one of the projects for the “Development of Technologies for Realizing a Hydrogen Society / Development of Technologies for Regional Hydrogen Utilization.”

This Demonstration Project will be conducted in Shunan City, Yamaguchi Prefecture, Japan using by-product hydrogen produced by Tokuyama's salt water electrolysis business to supply electricity to a distributed data center operated by MC from a stationary fuel cell power station that Honda will develop based on the assumption of reusing fuel cells from FCEVs.

Project Members will explore the potential of reusing automotive FC systems in a stationary application. The objective of the Demonstration Project is to reduce the economic burden on customers installing and operating stationary FC systems, which will contribute to the decarbonization of the electric power.

A further increase in power demand for data centers is expected in the long run due to the advancement of technologies that require large-volume data processing, such as generative AI and automated driving. In the face of this market environment, by utilizing by-product hydrogen and FCs to power distributed data centers, the Project Members aim to facilitate the decarbonization of data centers and the digital transformation of municipalities and local businesses.

Based on the knowledge gained from this Demonstration Project, the Project Members will look into the feasibility of the installation and expansion of data centers using clean power in the region, as well as explore further business opportunities both inside and outside Japan.

<Overview of the joint demonstration>

The official title of the Demonstration Project:

Decarbonizing data centers using by-product hydrogen and a stationary FC power station reusing fuel cell systems from vehicle applications

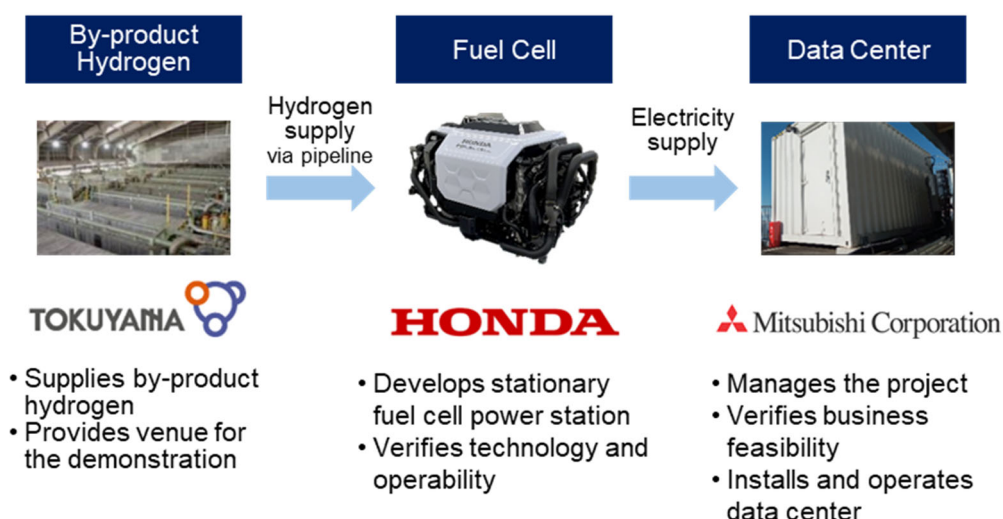
Points of Demonstration:

- Verify the use of fuel cells in 1) primary and backup power sources for data centers; and 2) grid-balancing (Balancing Market)
- Verify the economics and feasibility of integrated hydrogen business models operating fuel cells and supplying hydrogen.

Demonstration period:

From the fiscal year ending March 31, 2024 through the fiscal year ending March 31, 2026.

Business structure:



About Honda Motor Co., Ltd.

Head office address: 2-1-1 Minamiaoyama, Minato-ku, Tokyo, Japan

Business: Production and sales of mobility products (motorcycles, automobiles, power products, etc.)

About Tokuyama Corporation

Head office address: 1-1, Mikage-cho, Shunan-shi, Yamaguchi, Japan

Business: Chemical engineering company conducting business in five segments: Electronic & Advanced Materials, Life Science, Eco Business, Chemicals and Cement

About Mitsubishi Corporation (MC)

Head office address: 2-3-1 Marunouchi, Chiyoda-ku, Tokyo, Japan

Business: MC operates a wide range of businesses spanning multiple industries and overseen by its Industry DX Group, Next-Generation Energy Business Group and ten industry-specific business groups: Natural Gas, Industrial Materials, Petroleum & Chemicals, Mineral Resources, Industrial Infrastructure, Automotive & Mobility, Food Industry, Consumer Industry, Power Solution, and Urban Development.