

December 22, 2023

Isuzu Motors Limited
Honda Motor Co., Ltd.

Isuzu and Honda Begin Demonstration Testing Today of Fuel Cell-Powered Heavy-duty Truck on Public Roads in Japan

TOKYO, Japan, December 22, 2023 – Isuzu Motors Limited and Honda Motor Co., Ltd. today began demonstration testing on public roads in Japan of the **GIGA FUEL CELL**, a fuel cell (FC)-powered heavy-duty truck currently being co-developed by the two companies. Through this demonstration testing, scheduled to run through September 2024, the two companies will continue making progress in collecting data, amassing knowledge and identifying technical issues in preparation for a 2027 market introduction. The prototype model being used for this demonstration testing is the same type as the one exhibited at the Isuzu Group booth at the JAPAN MOBILITY SHOW 2023.



GIGA FUEL CELL being driven on a closed test course prior to the start of public road testing

1. Purpose:

With the cooperation of Isuzu Logistics Co., Ltd. and Honda Logistics Inc., the logistics companies of Isuzu Group and Honda Group, respectively, demonstration testing of the GIGA FUEL CELL will be conducted on public roads in Japan to verify the potential of the utilization of hydrogen fuel and the practicality of FC trucks.

2. Background:

Isuzu and Honda believe that FC technology, utilizing hydrogen as fuel resulting in no CO₂ emissions, will be effective to achieve carbon neutrality of heavy-duty trucks which are required to achieve high-efficiency transportation (with the capability for long-distance driving, large load capacity, quick refueling). Since the signing of an agreement in January 2020 to conduct joint research on FC-powered heavy-duty trucks, the two companies have been working on the verification of the compatibility of the FC system and heavy-duty trucks and the establishment of a foundation for basic technologies such as vehicle control technologies. The two companies are planning to introduce the production model to market in 2027 by fully leveraging the technology, experience and knowledge gained through the joint research.

3. Outline of the demonstration driving

- Period (plan): From December 2023 through September 2024
- Location (plan): Kanto area (Tochigi, Saitama, Tokyo and Kanagawa prefectures)
- Responsible companies: Isuzu Logistics and Honda Logistics
- The number of the test vehicle to be used: 1

4. Key points for verification:

<Practicality>

- The practicality of the vehicle (a heavy-duty FC truck) in cargo handling and public road driving
- Vehicle operation management including hydrogen refueling

<Vehicle development>

- Market compatibility of heavy-duty trucks

■ About the GIGA FUEL CELL

Vehicle	Base vehicle	CYJ77C-WX Low deck 8x4 rigid truck
	Total length/width/height	11,980mm / 2,490mm / 3,770mm
	Total vehicle weight	25t
FC Stack	Type	Solid polymer (Honda FC Stack)
	Output	103kW×4
High-pressure hydrogen system	Filling pressure	70MPa
	Hydrogen capacity	56kg
Motor	Type	AC synchronous electric motor
	Rated output	320kW
High-voltage battery	Type	Lithium-ion battery
Range		More than 800km/500 miles (Isuzu validation mode)
Other features	External Power Output Port	2 ports (CHAdeMO connector) Maximum power supply: 530kWh

About Isuzu Logistics Co., Ltd.

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Business: Overall Logistics Management

About Honda Logistics Inc.

Head office address: Ichibancho Square 4F,
6 Ichibancho, Chiyoda-ku, Tokyo, 102-0082, JAPAN
Business: Land and marine transportation (finished vehicles and parts), packing, storage, and parts delivery business, motorcycle/automobile SUB-ASSY operations, development and sales of logistics equipment products, system development, air cargo agency, customs clearance, moving, etc.