

OPmobility presents its technologies to decarbonize mobility at H₂ & FC EXPO in Tokyo



OPmobility and EKPO Fuel Cell Technologies, its joint-venture with ElringKlinger, are exhibiting at H₂ & FC EXPO in Tokyo from February 19 to 21, 2025. The show, a major international event focused on hydrogen, is part of the Smart Energy Week exhibition dedicated to energy. OPmobility will be showcasing its innovative hydrogen and battery electrification solutions designed to accelerate the decarbonization of mobility, including cars, trucks, buses, and commercial vehicles.

Highlights:

First-time in Japan: OPmobility is showcasing four innovative solutions:

- **1.** Integrated offer of compressed hydrogen storage and high-voltage battery solution for Light Commercial Vehicles (LCV).
- 2. 175L and 415L type IV hydrogen vessels for various mobility applications.
- **3. FCM 150kW fuel cell system**, in partnership with **EKPO**, providing powerful solutions for Fuel Cell Electric Vehicles (FCEV).
- **4.** Together with high voltage solutions for fuel cell vehicles, a **48V battery** for mild hybrid vehicles, enhancing performance and reducing CO_2 emissions.



1. Integrated FCEV Solution - A first in Japan



For the first time in Japan, OPmobility is presenting a complete integrated solution for Fuel Cell Electric Vehicles (FCEV). This solution is based on an underfloor compressed hydrogen storage system, supported by a high-voltage battery system. This combined offer, previously showcased at the 2024 Paris Auto Show, underscores OPmobility's commitment to delivering

innovative, sustainable mobility solutions. By integrating **hydrogen storage** and a **20 kWh high-voltage battery technology**, the Group is enabling **more efficient and long-lasting FCEV performance**.

2. a) Compressed Hydrogen storage system for Light Commercial Vehicles



For **Light Commercial Vehicles**, OPmobility offers a flexible hydrogen storage solution consisting of **three** or four type IV high-pressure vessels (700 bar) of 47L each, storing from 5,6kg up to 7,6kg of hydrogen and providing a range of over 500 kilometers. These vessels are placed in the chassis, optimizing the space available in the vehicle.

b) High-Pressure Hydrogen Vessels (HPVs) for Heavy-Duty and Light-Duty Vehicles

For the first time in Japan, OPmobility presents its Type-IV high-pressure hydrogen vessels of 175L and 415L. These vessels, intended respectively for light and heavy-duty Fuel Cell Electric Vehicles, feature a best-inclass weight/performance ratio. They are made of a blow-molded plastic liner and a resin/carbon fiber composite structure using proprietary ComposicaDTM software for filament winding. These vessels offer increased durability, enhanced safety, and high efficiency for various mobility applications.



3. <u>Next-Generation Fuel Cell System for Heavy Trucks</u>



Developed specifically for heavy trucks of 16 tonnes and above, **OPmobility's 150kW¹ Fuel Cell System** is a breakthrough in fuel cell technology. Featuring the advanced **NM12-Twin fuel cell stack** from its joint-venture, **EKPO Fuel Cell Technologies**, this system consists of 160 components that manage essential functions such as thermal control, electric and electronic management, and the supply of air and hydrogen. The system's key innovation lies in its **ultra-compact design**, **efficiency**, **durability and reliability**, enabling the generation

of electricity, from hydrogen and oxygen from air, to power the vehicle's electric motor. Multiple systems can be connected for scalable power, offering up to **450kW**.

¹ net power end-of-life



4. 48V battery - First Public Presentation in Japan



For the **first time in Japan**, OPmobility is showcasing its **48V battery pack**. With **NMC lithium-ion cells**, this high-power 1.2 kWh system helps **reducing CO₂ emissions by up to 15%** by assisting the internal combustion engine, particularly during acceleration, while also recharging during deceleration and braking. This advanced battery is demonstrating OPmobility's growing range of **electrification solutions**, supporting both **hybrid** and **fully electric vehicles**.

- Find **OPmobility** booth at: **E5-38**, Tokyo BIG Sight, Japan.
- Find **EKPO Fuel Cell Technologies** booth at: **E3-18**, Tokyo BIG Sight, Japan.

About OPmobility

OPmobility (formerly Plastic Omnium) is a world leader in sustainable mobility and a worldwide technology partner to actors from every mobility sector. Innovation-driven since its foundation in 1946, OPmobility has complementary Business Groups offering its customers a wide range of solutions: intelligent exterior systems, customized complex modules, lighting systems, energy storage systems, and battery and hydrogen electrification solutions. OPmobility's customers also benefit from OP'nSoft, its inhouse software development specialist. With €11.4 billion economic revenue in 2023 and an international footprint of 152 plants and 40 R&D centers, OPmobility relies on its 40,300 employees to meet the challenges of making mobility more sustainable.

OPmobility is listed on Euronext Paris, compartment A. It is eligible for the Deferred Settlement Service (SRD) and is part of the SBF 120 and CAC Mid 60 indices (ISIN code: F FR0000124570).

Contacts

MEDIA

Ambroise Ecorcheville
media@opmobility.com

INVESTOR RELATIONS

Stéphanie Laval
investor.relations@opmobility.com