

Future of Powertrain Mix 2035: Electric Vehicles, BEV, PHEV, Clean ICE & Innovation in Batteries and Hydrogen Fuel Cells

A plethora of technological innovations in EV batteries, fuel cells, battery 2nd life and recyclability will be crucial for the shift from to zero-emissions.

LONDON, UNITED KINGDOM, February 27, 2025 /EINPresswire.com/ -- The new report "[Future of Electric Vehicles, Batteries, Hydrogen & Clean ICE by 2035](#)",



Electric vehicles are reaching mainstream adoption, but the powertrain mix will still require ICE. Learn about the innovations and trigger points in batteries fueling next-gen EVs."

Auto2x

analyses the technological innovations in batteries, hydrogen and fuel cells to help innovators stay ahead of the technological curve.

- Learn about innovative research to tackle technological challenges of cost, energy density, storage and infrastructure;
- Understand the development of regulation and policy which could remove the barrier of developing infrastructure;

- Assess the strategies of players to build strong position in future mobility.

KEY FINDINGS

1) Electric vehicles are reaching mainstream adoption, but the powertrain mix will still require ICE.

The adoption of Electric cars, BEV (Battery Electric Vehicles), Plug-in Hybrids (PHEV) or Fuel-Cell Vehicles (FC) is increasing in core car markets, like China, Europe and the US. However, key questions about the evolution of the powertrain mix remain, such as the impact of the removal of government subsidies in EV penetration, the evolution of battery supply chain and the fierce competition among carmakers.

2) The race to replace lithium-ion batteries is on to solve range anxiety, fast-charging and affordability.

Researchers in the US, Japan, China and the EU are focused on several alternatives which may

not be available for more than a decade.

Tesla, Ford and VW see lithium-iron-phosphate (LFP) batteries as a cheaper alternative to cobalt as most of the world's cobalt reserves are located in the Congo, where the mining sector is associated with human rights violations. LFPs already play a dominant role in China's battery EV market which makes them the primary choice in the energy storage sector until at least 2030.

CATL unveiled its first-generation sodium-ion battery. Sodium is abundant, less expensive and the batteries are non-flammable, so CATL plans to ramp up production.

Carmakers are integrating solid-state batteries. BYD will start mass installation of all-solid-state batteries around 2027, company CTO says. Mercedes-Benz announced in February 2025 that SSB is now on the road in a Mercedes-Benz prototype. Once commercialised around 2027, these batteries can lead to: Up to 25% more range at the same battery weight and size; Over 1,000 km (620 miles) range on a single charge, Higher energy density, increased safety, and passive cooling.

3) New battery and hydrogen hotspots emerge.

Even though China dominates battery manufacturing, Europe, the US and Korea are competing to develop stronger domestic capabilities and limit their dependence on China.

Mariola Skoczynska
Auto2x LTD
gs@auto2xtech.com

This press release can be viewed online at: <https://www.einpresswire.com/article/789741144>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.