

# Seven auto manufacturers collaborate on harmonized electric vehicle fast charging solution

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Recognizing the importance of a single international approach for DC fast charging, Audi, BMW, Daimler, Ford, General Motors, Porsche and Volkswagen have agreed on the combined charging system as an international standardized approach to charge electric vehicles (EV) in Europe and the United States.

The system is a combined charging approach integrating all charging scenarios into one vehicle inlet/charging connector and uses identical ways for the vehicle to communicate with the [charging station](#). This allows electric vehicles from Audi, BMW, [Daimler](#), Ford, General Motors, Porsche and Volkswagen can share the same fast charging stations.

The seven auto manufacturers believe the development of a common charging approach is good for customers, the industry and charging infrastructure providers. Standardization will reduce build complexity for manufacturers, accelerate the installation of common systems internationally and most importantly, improve the ownership experience for EV drivers.

The endorsement of the combined [charging system](#) was based on reviews and analysis of existing charging strategies, the [ergonomics](#) of the connector and the preferences of customers in both the United States and Europe. The harmonized approach – across both continents and all

manufacturers - will provide a framework for future infrastructure planning as well as a communication protocol to assist in the integration of electric vehicles into the smart grids.

The seven [auto manufacturers](#) also agreed to use HomePlug Green Phy as the communication protocol. This approach will also facilitate integration of the electric vehicle into future smart grid applications.

Automakers point to the success of Level 1 and Level 2 (for 220V charging in the U.S.) as an example of how standardization will increase the adoption of [electric vehicles](#) and increase customer satisfaction. The harmonized electric vehicle charging solution is backward compatible with the J1772 connector standard in the U.S. Backward compatibility also has been achieved in Europe where the system is based on the IEC 62196 Type 2. The approval of the J1772 standard has given electric vehicle owners the comfort of knowing they can charge at all Level 2 charging stations. Prior to standardization an EV owner had no way of knowing if the charge port they were pulling up to was compatible with their vehicle.

Provided by Ford Motor Company

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