

# Maxus partners with Ambibox to test bidirectional charging for electric commercial vehicles

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## **Bidirectional charging technology allows EVs to return energy to buildings or grids, enhancing economic and practical benefits**

Maxus, in partnership with Ambibox GmbH, successfully tested bidirectional charging technology for its electric commercial vehicles, including the eDELIVER 5, the eDELIVER 7 all-wheel drive (AWD) and the AWD pickup eTERRON 9. This advancement moves away from the traditional unidirectional charging, allowing electric vehicles not only to charge from a station but also to return energy to a building or the public electricity grid. This technology, known as bidirectional charging, requires compatible vehicles and charging stations to enable its operation.



*Source: Getty Images/ baona*

The technology has several practical applications, such as vehicle-to-home (V2H) or vehicle-to-building (V2B), where the vehicle battery can store excess energy from a photovoltaic system to supply power when demand exceeds supply. Additionally, vehicle-to-grid (V2G) allows vehicles to store energy when supply is low and feed it back into the grid during high demand, which is particularly useful for fleet operations.

Bidirectional charging is supported by limited charging stations using CCS connectors in Europe, but Ambibox provides a compatible DC charger with a capacity of up to 22 kW.

Maxus is focusing on sustainable innovation, emphasizing practical benefits for customers. Bidirectional charging offers economic advantages by reducing reliance on-grid power, particularly beneficial for private customers with passenger vehicle systems and fleet operators near distribution centers. The technology is also beneficial for smart grid load management, allowing vehicle batteries to smooth out peak grid consumption. This can lower the total cost of ownership by generating revenue through energy fed back into the grid.

The company is preparing to introduce these charging solutions to the European market, aiming to provide customers with sustainable, flexible and economically beneficial technologies. Its goal is to implement these innovations in everyday life to maximize their practical impact.

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