



BUHLE POWER

Bidirectional charging of mobile energy storage containers for airports





Overview

Flightpath 2050, the European Commission's vision for aviation, requires that the aviation industry achieves a 75 % reduction in CO2 emissions per passenger mile and airports become emission-free by 2050.

Why is bidirectional wireless charging important?

This is because bidirectional wireless charging allows energy to be transferred between the vehicle and the grid, enabling the vehicle to serve as a mobile energy storage system. This feature can help to balance the power grid and provide additional flexibility and resilience in managing the electric power system. Fig. 8.

Can bidirectional wireless charging be implemented in commercial airport?

In this paper, the bidirectional wireless charging facilities are considered to be implemented in the airfield of the commercial airport for recharging the electric shuttle buses. The proposed system will combine the airport ground-side transport network with the power grid network towards a sustainable aviation target.

Can bidirectional electric vehicles be used as mobile battery storage?

Bidirectional electric vehicles (EV) employed as mobile battery storage can add resilience benefits and demand-response capabilities to a site's building infrastructure.

Why should we invest in bidirectional charging systems?

Investing in bidirectional charging systems, intelligent control and sustainable building integration will help to make mobility fit for the future and adapt the electricity grid to the growing number of electric vehicles. Refines texts, makes connections and is always looking for new topics. Bidirectional charging makes it possible!



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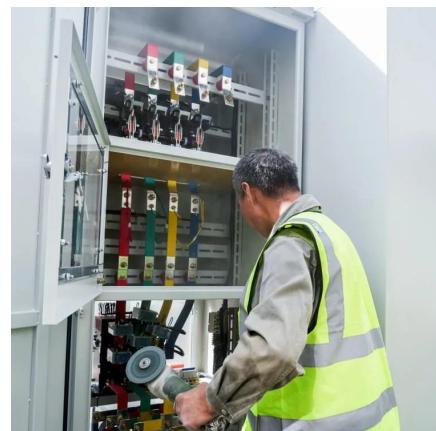


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