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Electrification & Power

Hitachi ZeroCarbon

The Future of Electric Fleet Management with Hitachi's Battery Charging and Management Services

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Operating an electric bus fleet is an entirely different proposition to operating a conventional bus fleet.

It requires whole system change within the business and impacts fleet managers in particular. Managing this change and ensuring your fleet continues to perform its operational requirements is crucial to the success of your transition to EVs.

Hitachi ZeroCarbon's battery charging and management services provide fleet operators with the

tools to manage reliable and efficient electric fleets without the added complexity. Instead of treating charging operations and battery health as distinct components, this solution takes a comprehensive approach to the entire EV system to ensure your vehicles are always charged for effective operations. At the core of our solution is a technology platform that ingests and integrates data from both the charger and vehicle battery to enable enhanced fleet management, providing the right balance between ensuring vehicles are always charged to meet daily operations and leveraging battery data to optimise battery performance and extend battery life.



This Unique Solution Combines Digital Technology, Operational Expertise and Innovative Financing Models

Digital Technology

- The battery charging and management services employ smart charging technology, ensuring operational continuity for your fleets at lowest cost.
- We provide interoperability testing and integration across different battery OEMs, vehicle OEMs, charge point hardware and software. This allows fleet operators to decide what equipment to procure based on their operational needs. Going one step beyond this, the platform monitors the battery health of each vehicle and adjusts charging regimes to protect the battery assets and minimise maintenance costs.
- By bringing together the technology from our ZeroCarbon Charge and ZeroCarbon Battery products, our electric fleet optimisation solution unlocks greater value for your business.

Operational Support Services

- Our unified solution is more than just a technology platform; it provides hands-on operational support from our EV and operations experts.
- We proactively manage risks and offer 24/7 support to ensure operational continuity, allowing you to

focus on delivering exceptional service to your customers.

- We take on operational risk with state-of-charge SLAs and service credit regimes.

Innovative Financing Models

- Through innovative battery co-ownership models, we enter into long-term value-sharing partnerships. This means that fleet operators benefit from an extended battery lifetime and enhanced residual value, without responsibility for the ongoing management.
- This financing approach also lowers the costs to electrification since batteries are the most expensive component of electric vehicles today.
- Since we enter into battery co-ownership, rather than purely leasing the batteries, we share the benefits of the residual value of the battery and operational revenues from innovation energy management.

Optimising Electric Vehicle Fleet Management through Long-Term Partnerships

Navigating the complexities of an electric fleet does not have a one-size-fits-all approach. We focus on building long-term, collaborative partnerships with fleet operators to build the right solutions. Our approach to battery-charging and management





Learn about our partnership with FirstGroup



services is founded on collaboration, maximising long-term asset value, being hardware agnostic and enabling interoperability with existing software, strategic advice and a holistic approach to the EV ecosystem.

- **Increased sustainability:** Decarbonising your fleet is critical to improving your business’s environmental impact, and we provide a breakdown of just how much CO2 you prevent through electrifying fleet operations.

What Are the Benefits of a Battery Charging and Management Service?

- **Operational continuity:** The most important element of our solution is delivering reliable charging for your entire fleet, enabling seamless fleet operations and reducing downtime.
- **Enhanced battery value:** By combining smart charging management and battery analytics, we protect your battery health to secure an increased battery residual value and avoid replacement costs.
- **Accelerated electrification:** Our charging technology means that we maximise the use of available energy so that you can get more chargers and buses in your depots even within energy constraints.
- **Reduced costs:** We adjust charging based on when energy demand is lower, so you can benefit from lower electricity bills.
- **New revenue streams:** Utilise your battery assets by participating in flexibility markets and providing charging services to unlock new revenue, all facilitated and managed by our technology platform.
- **Improved decision-making:** Gain access to live insights on your charging operations and battery assets, alongside detailed monthly reports to improve efficiency and support investment planning.

How Does this Work in Practice?

Electrifying your fleet can be a long and complex process. Hitachi ZeroCarbon offers the expertise, technology and support to navigate the transformation required, wherever you are in your electrification journey.

We deploy our solutions gradually, ensuring success of core ZeroCarbon Charge and ZeroCarbon Battery product features before introducing the advanced fleet optimisation functionality of battery charging and management services. This enables you to accelerate electrification efforts without compromising on your daily operations.

For more information on Hitachi ZeroCarbon’s battery charging and management services please visit hitachizeroarbon.com or email zerocarbon@hitachi-eu.com

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