

Net Zero Bus Operations

Facts and stats to help electrify your bus fleet at scale

There are **32,000** buses in the UK



with **4,000** already electric making buses a leading force in fleet electrification.

Fleets account for

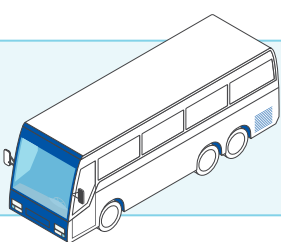


of the UK's total carbon emissions so net zero won't be possible without widespread electrification of bus fleets.

Powering Your Fleet

Energy is the biggest cost of the EV transition and a robust energy strategy will reduce grid demand and costs.

One electric bus can use as much power annually



as 28 typical UK homes

Depot micro-grids

Combine solar power, battery storage and optimised grid tariffs.

Smart charging

Schedule and monitor power sources and tariffs to minimise costs.

Shared hubs

Share infrastructure with third parties to offset costs with new revenue.

Charging Your Fleet

Right-sizing the infrastructure to fit your operations is critical.

We've seen up to **20%** overspend from lack of planning.



Charging schedules

Plan charging times, charger speeds and power - DC - to fit duty cycles & charging windows.

Opportunity charging

Some bus routes are suitable for **powerful pantographs 150-550kW** charge buses en-route to keep buses running without returning to depot.

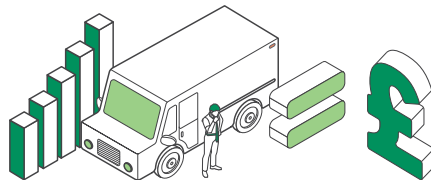
Charger uptime

Real-time monitoring with remote triage and resolution will minimise operational risk

80% of issues can be fixed remotely.

Financing Your Fleet

Upfront capex costs for vehicles need to be calculated as part of a total cost of ownership (TCO) model to deliver net zero emissions for net zero cost increase.



TCO savings

While EVs have higher upfront costs, they save on fuel, taxes, and maintenance, which reduces the total cost of ownership (TCO) compared to diesel.



Subsidy-free

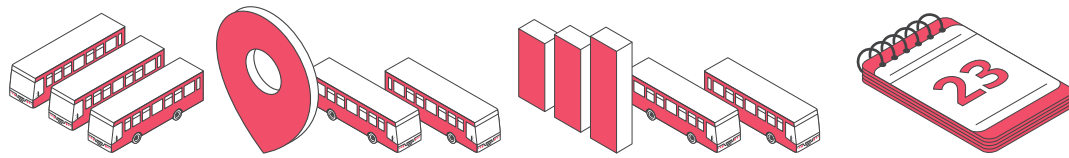
Government funding has kick-started bus electrification, but the economics stack up without subsidies.

New models

'Electrification-as-a-service' shifts the investment from capex to opex through a managed service over a suitable period of time.

Digital EV Fleet Operations

An electric bus fleet essentially runs on data insights - from power to chargers, routes, schedules, shift patterns, seasonality, weather and more.



Data platform

Fleet Managers need a robust control centre that combines and interprets data in real-time - such as telematics, energy and chargers.

Performance

Data analysis will provide the insights to optimise efficiency with marginal gains such as from vehicle usage, charger scheduling, power sources & driver training.

Real-time diagnostics

Connected vehicle technology facilitates remote diagnostics and rapid issue resolution, minimizing downtime and enhancing operational reliability.

About VEV

VEV delivers complete fleet electrification solutions, integrating vehicles, charging infrastructure, and power management to support resilient, scalable EV fleet operations.

For more information, visit VEV.com or contact us at ask@vev.com.



Accelerating to a scaled electric fleet

Key considerations for your transition to a fully electrified bus fleet.

Download the eBook