



# — An electrifying journey

A step-by-step fleet guide to making  
the electric van transition.



## An electric vision

The race to zero is intensifying and van fleet electrification is gathering pace.

With the sale of new petrol and diesel LCVs under 3.5 tonnes set to be banned from 2030, alongside fossil fuel cars, the countdown for businesses to establish green fleet strategies is underway.

Deployed correctly, electric vans can lead to cheaper fuel plus lower operational and maintenance costs. What's more, electro-mobility will have an important role to play in our fight against climate change, while helping to make our towns and cities better places for pedestrians and cyclists.

When looking to make the electric transition however, it can be difficult for businesses both large and small to know where to start.

With this in mind, we have created the following step-by-step guide to help simplify and demystify the van fleet electrification process – reinforcing our commitment to supporting your green ambitions.

Each stage of the electrification journey has been signposted, with clear explanations throughout on how vehicle data can be used to smooth the transition.

We hope you find the guide informative and helpful.



**Beverley Wise**

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# Connecting your fleet: at a glance

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A feasibility study - taking account of the incumbent fleet, operational needs - will determine just how EV-ready your van fleet is.


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# STEP 1 Planning for an electric future

## The fleet review

Switching to an electric fleet represents an organisational change and calls for careful, systematic planning to ensure business needs are met, cost-savings are optimised and disruption is minimised.

To assist here, increasing levels of advice and guidance – from support and consultancy groups to dedicated forums and events – is now available for those that view the electric transition with varying degrees of uncertainty.

A fleet review and eLCV feasibility assessment is the first step in the planning process. This should establish the vehicle mix, the typical mileage and commutes undertaken by drivers, along with the operational nature of journeys, to determine if these could be performed comfortably by EV equivalents. Software tools, such as the WEBFLEET Fleet Electrification Report, can help simplify this process.

**Drawing upon telematics insights from incumbent vehicles, maximum daily ‘real world’ mileages can be selected by fleet managers within the WEBFLEET Fleet Electrification Report, along with criteria ranging from road types to standstill times, to signpost a fleet’s true EV potential.**

The greater the payload weight requirements, the greater the impact on eLCV range, which can put a question mark over their suitability for some operators for longer journeys. It is worth noting that ‘alternative fuel payload derogation’ allows standard licence holders to drive eLCVs weighing up to 4.25 tonnes.

Is the ability to tow important to the business – for moving civil plant and other equipment for example – and are electric vans available that meet these needs?

Consideration should also be given to charging infrastructure and availability. Limited public availability can be a problem in rural areas, for example, while charging space can also be at a premium at motorway services, compounding range anxiety and complicating journey planning.

Other questions to address include whether or not charging facilities can be located where drivers live. Do on-site charge points need to be installed, and if so, how many and can they be accommodated?

Businesses should note that the EV landscape is fast-evolving, which makes keeping a close eye on developments that can impact deployment timelines imperative.

## STEP 2 Establishing the business case

Faced with government plans to end the sale of new petrol and diesel LCVs, along with the roll-out of clean air initiatives by local authorities, it's a matter of when – not if – your business fleet will need to make the electric transition.

If the time is now, as a fleet decision-maker you may need a strong business case to bring other important stakeholders on board – from sustainability and utility managers to heads of finance, HR, procurement and marketing communications. This should align with wider corporate strategies, including financial, environmental, health and safety, reputational and environmental goals.

Calculating prospective Total Cost of Ownership (TCO) savings can be a compelling starting point.

While some businesses will have traditionally focused on upfront procurements costs, often borne out of restrictive finance targets that measure P&L impact over a 12-month period, when it comes to electric vans, longer-term cost control strategies become more important than ever.

Although the upfront purchase costs of electric vans are generally higher than diesel equivalents, significant savings can be made in everyday running costs. Not only do fleets benefit from a lower cost per mile with an electric powertrain, with fewer moving parts, eLCVs also deliver lower maintenance costs.

This means that the TCO (total cost of ownership) of the latest eLCVs can be lower than their diesel equivalents, when all running costs, including ULEZ charges, are calculated.

The financial incentives from the government should be taken into account, including the plug-in van grant, the Workplace Charging Scheme, Electric Vehicle Homecharge Scheme, Vehicle Excise Duty exemption, the low Advisory Electricity Rate (AER) and the opportunity to write down the purchase price against year one corporation tax.

Wider justifications can include supporting CSR, the PR and reputational benefits and meeting the environmental expectations of customers.





## STEP 3 Devising an electrification strategy

Whether being undertaken on a large or small scale, EV deployment should be regarded as a change management project, which is likely to require coordination and engagement with internal and external stakeholders.

An action plan, setting out clear timescales and covering everything from vehicle procurement and charging installation to operations and maintenance, is a prudent next step.

A project manager should oversee this process and assign responsibilities to ensure successful implementation and avoid unnecessary delays.

Fleet financing models should be carefully reviewed to ensure they dovetail with adoption timelines. In some cases, for example, it may be financially beneficial for ICE vehicle to be replaced with eLCVs earlier than planned.

For leased fleets, eLCV deployment may be best carried out on renewal, which allows the transition to be undertaken incrementally with small groups of drivers. This can make it easier to support and educate at handover as they look to get to grips with the new technology. A time allowance for the vehicle ordering process should, however, be built into the roll-out plans.

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# Preparing for van procurement

Building upon the eLCV feasibility assessment, time should be taken to carefully identify the eLCV models that meet you and your drivers' requirements and preferred specifications.

Manufacturers are bringing an increasing range of electric and hybrid vans to market, so be sure you're fully armed with the most up-to-date information. To help inform your decision, real-world performance data, which can be accurately generated using a telematics solution, should be assessed wherever possible.

The published ranges of EVs, based on dynamometer testing, can often be lower in 'real world' conditions, with load, temperature, terrain and driving behaviour all affecting performance.

Try before you buy schemes are being funded by Highways England, while some leasing providers will allow businesses to test eLCVs before they commit.

A cost-benefit analysis of the different van financing options should also be undertaken.

# Readying your drivers

Driving an electric van will represent a step into the unknown for most employees, and some may be fearful or resistant to change.

By communicating your plans, outlining the benefits of EVs, addressing operational issues and giving drivers the opportunity to ask questions at the earliest opportunity, concerns can be resolved before deployment.

Plans should also be drawn up for a comprehensive driver training programme when vehicles are operational.





## Charging matters

Van drivers will need a straightforward way to charge their vehicles, during the working day and overnight, which poses some important questions:

- ⚡ **Do vans go home with the driver or return to a depot?**
- ⚡ **Can home charging points be installed, and how many will be needed?**
- ⚡ **How many on-site charging stations will be needed?**
- ⚡ **Where should they be located?**
- ⚡ **What is their optimal speed?**
- ⚡ **Can power available at proposed charging sites meet energy requirements?**
- ⚡ **How will drivers pay for charging, how will this be administered and how will drivers be reimbursed?**
- ⚡ **What future-proofing measures should be considered?**

Telematics data can help determine where fleet vans spend most time and their typical dwell time, which will shape the charging strategy. This will be unique to every fleet, and some may need to consider multiple charging options – depot, home and in the field.

For on-site infrastructure, will working and charging patterns allow for standard 7kW chargers or call for the installation of more expensive 50kW rapid chargers?

Consider whether wall surfaces can be used to mount chargers, or whether groundworks are needed. These matters will need to be agreed with the landlords of leased premises.

Early conversations should also be had with utility providers regarding possible electrical upgrade requirements.

Fleet managers should consider the future growth of their business and EV fleet to ensure scalability considerations, including load management systems, are built into their infrastructure plans.

Finally, an EV charging policy – including car park charging practices for all employees (n.b. some organisations are now applying meeting room systems and etiquette to workplace charging) – should be drawn up and clearly communicated to drivers. This will outline charging and payment procedures, and clarify the rules for company charger usage.



# Operational planning and support

Fleet management solutions can support, not only the transition to electric vans, but their on-going management.

An advanced telematics platform, for example, can help businesses tap into an electric van's unique set of metrics – from battery levels to charging data – to make it easier for managers to optimise operations.

Technology should also be spec'd to support the driver, signposting the location of charging points (for example, via their sat nav devices) and helping them drive in the most EV-friendly manner to maximise vehicle range.

Plans should include eLCV training for drivers, beyond the do's and don'ts undertaken at handover. This should cover everything from vehicle charging and preconditioning to driving best practice, equipping drivers with all the

skills they need to drive their van safely and efficiently. Supporting guidance materials, including FAQs, can provide a helpful reference resource.

Processes for reimbursing drivers' charging expenses, either on a per-mile or per-kWh basis, should also be evaluated. This can be simplified by introducing smart, automated systems.

Running electric vans will also require a different mindset when it comes to service, maintenance and repair (SMR) and businesses should ensure their preferred SMR networks are EV-ready.



## STEP 4 Optimising van fleet operations

Having made the switch to electric vans, the focus will now turn to managing their performance and day-to-day operations. What steps should fleet managers take to meet their TCO and wider VOI (value on investment) targets, including sustainability goals?

Fleet suppliers are increasingly working

collaboratively to not only support the transition, but to help businesses deliver on their objectives.

Connected EV data has a pivotal role to play here, with telematics harnessing the intelligence needed to help businesses make the right decisions at the right times and to unleash their electric fleet's true potential.



Optimise van routing to get the most out of their electric miles and reduce en route charging, reducing costs and boosting productivity.



Maximise van utilisation using workflow management tools – including efficient job dispatch and optimised itinerary planning – to realise a swifter return on the upfront EV investment.



Monitor the battery level and remaining driving range of every van in real time to optimise their utilisation and minimise workflow disruption.



Identify vehicles entering Ultra-Low Emission Zones using geo-fence alerts to highlight where EVs could be used more cost-effectively.



Have complete visibility over fleet charging status and remaining charging time to operate the most cost-

effective charging practices. These include charging when tariffs are most favourable and just before vehicles are needed for operation and maintaining charge levels between the optimal 20 and 80 per cent to minimise battery degradation.



Benefit from mapped coverage of charging points, helping drivers find the closest EV charging stations while on the road, via their connected sat nav devices.



Monitor drivers' performance behind the wheel to minimise the impact of harsh driving styles. As with ICE vehicle mpg, EV vehicle range will be improved by drivers taking a smooth, gentle approach to acceleration and braking.



Tap into van diagnostic data and use EV health information for pre-emptive maintenance. Maintenance planning tools can also be used for more effective SMR management to help minimise costly EV downtime.



## Sharing your green success

Sustainable business sits at the heart of CSR and can help boost corporate reputations in the eyes of customers, staff, shareholders and investors.

It also remains a hot topic in the media. Stories that demonstrate how fleets are contributing

to the decarbonisation of transport can lead to valuable press coverage.

Be sure to make your marketing department or PR agency aware of the successful electric van transition and what this means in terms of carbon reduction and bottom line savings.

## Continuing the electric journey

As EV technology advances, the market matures and government policies evolve, electric van fleets should keep a close eye on all emerging opportunities to reduce TCO.

This might mean adapting charging models as public infrastructure develops; upgrading existing business charging stations; revising fleet renewal strategies to capitalise on new eLCV innovations; and/or investing in wider, emerging technologies that lead to even greater cost-efficiency savings.

Continual EV data analysis will also be critical to honing operational efficiency and building the case for further EV adoption.

Mark Twain could have been speaking of EV deployment when he proclaimed that “success is a journey, not a destination,” requiring “constant effort, vigilance and re-evaluation”.

As you embark on your electrifying journey, remember you’re not alone. Be sure to explore and benefit from the wealth of shared knowledge, help and support available to you.



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