# Mobility Blog

#### All you need to know about e-LCV

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### Why take your LCV fleet electric?

Here are seven key reasons why making the shift towards eLCVs within your fleet is a good idea.

- **Zero emissions**: changing your fleet to electric is one of the quickest ways to reduce your carbon footprint.
- With far fewer moving parts, many of the cost elements of an internal-combustion engine vehicle are eliminated, representing a significant cost reduction.
- EVs also reduce downtime the time the vehicle is off the road being serviced or maintained leading to
- further cost savings.
- The introduction of **clean air zones** in various cities across the world is already underway, but with an electric vehicle you're free to drive virtually wherever you want.
- Governments across the world are considering plans to phase out internal combustion engine vehicles (with sales bans on the horizon over a 10-15 year period). Clean air zones are already underway, and governments are incentivising companies to reduce their carbon footprint.
- Electric vehicles offer drivers a more pleasant environment less noise, no gear changes. The more relaxing general driving experience helps **reduce the risk of accidents**.
- And finally, your van is your **biggest marketing tool** one that's visible to all. Being seen to be driving green can only be positive for your image.

### What are the options available today?

With almost a decade of history under its belt, the electric van market has developed significantly in terms of vehicle range, charging capability and refinements in drivetrain. Today, three broad categories of vehicles are available:

- Car-derived vans so called because originally they were comprised of the front-end of a car and the back end of a van. This is probably the most established and developed segment, offering the greatest range today. Manufacturers include Nissan, Renault, Peugeot, Citroën and Maxus. Such vehicles often have a WLTP range of over 200 km on a single charge and are therefore excellent solutions.
- Mid-size panel vans the traditional service engineer van the latest entrants in this sector include eLCVs by Peugeot, Citroën and Opel – with an average range of up to 200 km, but with an option of a larger battery for those needing a +200km range. These vehicles are tailored to meet the needs of service industries.
- **The large vehicle** sector is currently a key embryonic market, involving companies such as Mercedes, VW and Fiat. At present, higher costs and limited ranges point to the need for further development, but this is a fast-growing sector, with new entrants such as Arrival working on longerrange, ground up EV designed vehicles. One to watch in the next 2-3 years.

## What are the impacts on TCO?

In terms of total cost of ownership, bear in mind that unlike electric cars, vans do not necessarily bring personal tax benefits. However, electric does positively impact residual value where the vehicle range is useable, while the cost of electricity represents significant savings of anywhere between 50% and 70% versus traditional fossil fuels. Downtime and service costs also compare extremely favourably. Historically the crossover point between a vehicle's residual value and its maintenance costs has been 4-6 years, resulting in the need for replacements, but the reduced maintenance required by EVs can significantly extend the life cycle of your vehicle. Unlike a car, moreover, when a van is off the road it represents a cost to your business of anything between  $\leq$ 300 and  $\leq$ 3000 per day, as you can no longer deliver the product or service that you're supposed to. Reducing downtime can therefore represent a huge saving. It's also worth considering charging downtime, with the ability to depot charge or charge at an employees home overnight, this will help reduce the time off the road

#### How to plan for change?

#### For most people in the fleet market, the question is not if things will change, but when? So how do you go about introducing change to your fleet?

It's not a case of one-size-fits all. Whilst the journey towards electrification may seem linear, the sequence of individual steps is not set in stone. A number of things have to be done before making the change, but in no specific order. It all depends on what purposes your vans serve, where they need to go, who the drivers are and how they use the vehicles.

However, certain situations are obvious candidates. Where drivers have set routes and can charge at home for example. Given that the key barriers to change are currently cost, infrastructure and product availability, the main considerations are which drivers have short enough journeys and are carrying little enough stock to make the switch without impacting your business.

Another important criterion is charging infrastructure – whether this is done at home, at the depot or using public charging facilities. Some low-mileage companies for example have found a cost-effective structure using nothing but the latter.

Your fleet policy is a further vital element – requiring prior reflection on how the changes will impact your company. What if you've given all your drivers a fuel card, for example, how are you going to reimburse them when it comes to electricity?

Finally, in-house education is critical to a successful – your drivers need to be trained on the tips and tricks of EV use. Did you know for example that you can use an app to preheat your vehicle while it's still charging? That has a huge impact on range – as heating and air conditioning consume power. Then there's the question of not overloading your van, and choosing the equipment you really need for each mission. That too affects payload, range and therefore cost. Excess weight increases electricity consumption and decreases range. Of course that's also true of internal combustion engines, but we tend to forget when it comes to EVs. With a regular van, we can just fill up – not an option if you're not near a charger.

But with a little forethought, all these considerations can be built into your planning. Whatever your set-up, now is the time to plan ahead...

