Is Europe's LCV sector ripe for electrification?

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When it comes to Light Vehicle electrification, Personal Vehicles (PVs) have dominated the headlines, while Light Commercial Vehicles (LCVs) have barely stepped into the limelight.

In Europe, new sales of xEV (all types of electrified vehicle) LCVs totalled 25,000 units in 2018 – roughly 1% of all LCVs sold. Putting this into context, there were about a million xEVs sold in Europe last year – around 5% of the market.

That the sector is trailing behind is, arguably, unsurprising as LCVs have longer production cycles and comparatively lower economies of scale – not forgetting that the ‘total cost of ownership’ is a key factor in the buying decision process.

While electrified LCV sales remain low, we can reasonably expect growth over the forecast horizon, but by how much is still up for debate and will hinge on several factors.

Political/Environmental

On the supply side, WLTP, RDE and emissions standards are making compliance ever costlier. For example, from 2020, the average emissions target for LCVs in Europe is set at 147g CO2/km, and will be progressively tightened in 2025 and 2030 [1]. Failure to meet the standard would mean paying an excess emissions premium. The 2020 target looks attainable, but manufacturers may struggle to meet the 2025 and 2030 objectives – at least with their current line-ups. We therefore expect to see LCV manufacturers embark on a xEV product development offensive over the coming years.

On the demand front, policy makers are gradually rolling out additional measures to encourage the uptake of electrified LCVs, including subsidies, tax cuts, infrastructure investment schemes, scrappage incentives, low- and zero-emission zones, and future bans on internal combustion engines, among others.

Commercial/Economic

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The economic argument for and against electrified LCVs has been widely cited. On the plus side, electrified LCVs are seen as cheaper to run and maintain, while conveying a positive corporate image. Conversely, they are considered more expensive, with a faster rate of depreciation and a more limited range. The lack of charging points is another deterrent for buyers. In short, the cons appear to outweigh the pros – for the time being at least.

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Some observers, however, question whether these disadvantages have been overstated and no longer hold true. Take range anxiety, for example. According to Mercedes-Benz, most Van drivers cover fewer than 60 miles per day [2], which, if true, eliminates any issues of range anxiety for the majority, particularly as virtually every battery electric model on the market today delivers a range of more than 60 miles. In other words, range anxiety is a modern day myth rather than a genuine concern and is more likely to be a psychological barrier. That said, the other obvious drawbacks of electrified LCV adoption still apply.

Technological

There have been significant advancements in battery technology of late, most notably in the Car segment. One key consideration for LCVs is payload capacity, which the battery eats into. Weight, meanwhile, is the nemesis of range. Greater battery capacity is needed to offset the decreased range, which further increases the weight and cost, which then eats into the payload capacity, thus creating a vicious circle. Electrified vehicles are still, however, more economical to run, despite the higher fuel energy density of diesel vehicles.

As xEVs become more mainstream over the coming years, we are likely to see the market tip in favour of electrified LCVs. Our base-case forecast is for electrified LCVs to account for roughly one-third of sales, surpassing one million units per year in Europe by 2030.
