When it comes to CO2, the situation for vans (also known as light commercial vehicles or LCVs) is completely different to that for passenger cars.

Some technological solutions to reduce CO2 emissions from cars are not applicable to vans, and the lower production volumes of LCVs do not allow for the same economies of scale.

The margin of improvement for LCVs is also lower, both in terms of the longer development and production cycles as well as the limited uptake of alternatively-powered LCVs.

Electrification potential of LCVs is lower than for cars

- Vans are first and foremost business tools, often used by SMEs.
- Unlike cars, their price sensitivity is extremely high, with purchasing and operating costs being the number one decision factor.
- This also explains why consumer acceptance of more expensive hybrid and electrified vans has been poor to date.
- Moreover, customers will only consider purchasing them if their cost and productivity are comparable to those of vans with conventional engines.
- After all, businesses are simply not willing to sacrifice payload for lower fuel consumption.
- Given the limited range of electrically-chargeable vans and their long charging times, such vehicles are generally only used for city centre distribution or other relatively short distances.
- That is why diesel vehicles continue to make up more than 96% of the new van fleet.
- Hence, the 2030 low-emission vehicle benchmark proposed by the European Commission should be lowered to 10% for LCVs, given that their electrification potential is much lower than cars.

More lead-time needed for vans

As the development and production cycles of light commercial vehicles are much longer than those of passenger cars (15 years versus 11 years), LCVs to be sold in 2025 are already being developed now.

A 2025 CO2 target would therefore simply not leave enough time to make the required changes.

That is why it makes more sense to focus on an ambitious, but realistic, 2030 target instead.

Different customers, different behaviour

- For cars the main variable is the number of people to be transported. A light commercial vehicle, however, might be used for very different purposes and at very different degrees of intensity.
• The same van used by a shop owner for delivering flowers to inner-city customers, might be used by another operator for transporting heavy furniture between Madrid and Hamburg.

• So not every powertrain is ideal for all tasks, in each case the most suitable option will differ.

• Similarly, certain LCVs are also used as passenger cars to transport up to nine people (thereby significantly reducing the CO2 emissions per person transported).

**Flexibility needed: Transfer of credits between segments**

• The European Commission’s current proposal for post-2021 targets deals with passenger cars and LCVs without much differentiation.

• Therefore, the transfer of credits between these different vehicle segments, as well as between manufacturers, should be made possible.

• This would help to reduce compliance costs for manufacturers.

• From an environmental point of view, it makes no difference if CO2 is reduced by cars or by vans.

**Flexibility needed: Weight adjustment for battery-electric vans**

• As batteries can take up a lot of space, electrifying LCVs often conflicts with the mission of these vehicles, which requires a maximum payload.

• Moreover, batteries also have a big impact on the curb weight of an LCV.

• That is why vans (ie N1 vehicles) should remain part of their original category, even if their mass exceeds the maximum weight because of an alternative powertrain.

• Especially in the case of Class III vehicles (heavy LCVs), including battery weight almost automatically implies that the N1 definition threshold will be exceeded.

• So, battery weight should be either excluded from the reference mass of a van, or the threshold should be adjusted.

**Flexibility needed: Simplification for multi-stage vehicles**

• Special attention should also be paid to multi-stage vehicles (MSVs), which are completed by a body builder after leaving an LCV manufacturer’s factory.

• The switch to the new WLTP emissions test brought an end to the previous system which enabled automobile manufacturers to predict their CO2 fleet compliance.

• MSVs represent a small share of the LCV segment, with around 10% of total registrations.

• Exempting them from the CO2 monitoring process would therefore have a negligible CO2 impact, but would greatly reduce the administrative burden on SMEs, public authorities and the auto industry.

**POLICY RECOMMENDATIONS**

• Policy makers should pay special attention to the specificities of the light commercial vehicle segment when setting future CO2 targets.

• That is why the CO2 ambition level and low-emission vehicle benchmark for vans should be significantly lower than the post-2021 targets set for passenger cars.