



Higher van CO₂ reduction targets needed to deliver e-vans in the 2020s

T&E recommendations to revise the EU van CO₂ standards

December 2021

Summary

Linked to the surge in home deliveries, vans are the EU's fastest growing source of road transport emissions. Unlike for cars, the EU's van CO₂ standards have failed to put electric vans on the market in any real numbers. **Only 2% of van sales were electric in 2020, compared to 10.5% for cars** (5.4% battery electric vehicle, 5.1% plug-in hybrids). The Commission's *Fit for 55* proposal that all new vans must be zero emission from 2035 is welcome. But the proposal falls short in terms of what's needed between now and 2035.

Unlike carmakers, none of Europe's major vanmakers have come forward with serious electrification plans, which strongly suggests that cleaning up vans has been neglected by decision-makers to date. As well as failing on e-vans, the van CO₂ target for 2020 was so weak it delivered no real CO₂ decrease since 2017.

Unless the Commission's proposal is enhanced, **e-vans could remain below 10% of new sales as late as 2029**, with the weak targets achieved almost exclusively through conventional engine fuel efficiency improvements. Such meagre ambition is even more stark when you contrast such low levels of e-van supply in the 2020s with the potential for e-van sales assessed by BloombergNEF: 17% in 2025, 36% in 2027 and 73% in 2030.

Crucially, the BloombergNEF analysis highlights the importance of scaling up the production of electric vehicles early (in the 2020s) to generate the cost reductions necessary to reach purchase price parity in 2025–2026, and put the van sector on a cost-effective trajectory for 100% zero emission sales in 2035. What's missing from the e-van picture is an EU regulation that unlocks this techno-economic potential.

Enhancing the regulation also has an important role to play in protecting European employment. As noted by BNEF, if vanmakers fail to move fast enough in the 2020s to fulfil Europe's e-van demand,

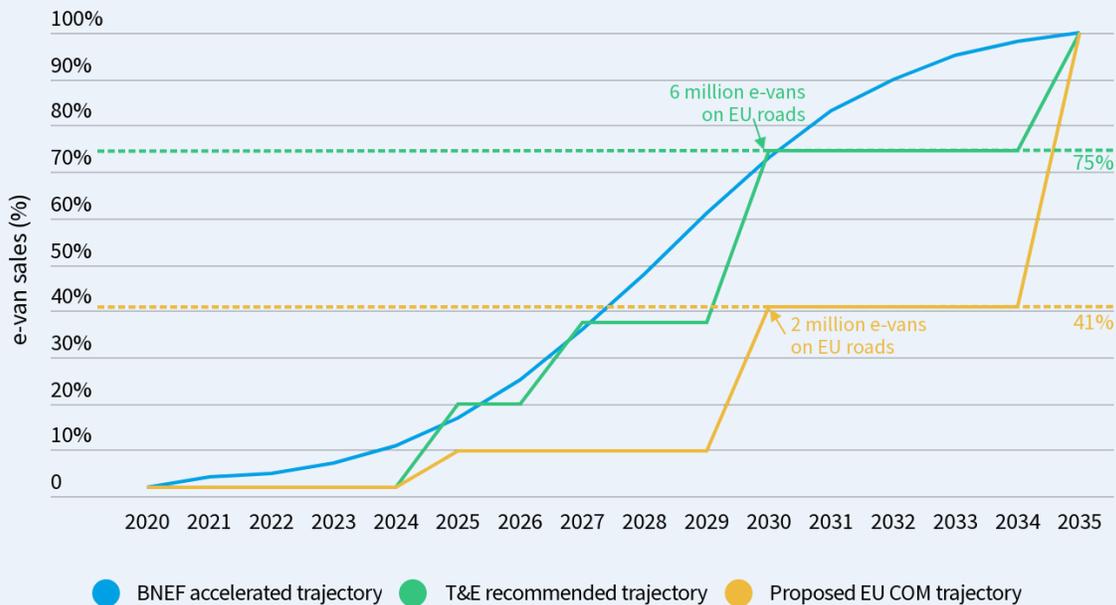
European jobs are on the line. The lack of commitment by vanmakers to serious electrification underlines the point.

Based on BloombergNEF's work, T&E calls on the co-legislators to **significantly raise the ambition level of the proposed targets:**

- Early build up of e-van volumes is essential for Europe to be able to go to **100% zero emission by 2035**. Raising the 2030 target alone will not suffice as it will only spur investments towards the very end of the decade and from 2030 onwards. To ensure an optimal supply of e-vans, the **emissions reduction target for 2025 needs to be raised to -25% (up from -15%), and a new 2027 target of -45%** is required to ensure momentum in the second half of the decade.
- For Europe to be on a feasible path to zero emissions in 2035, **the 2030 target needs to be raised to -80%** (compared to the -50% target proposed by the Commission for 2030).

The projected outcomes under the Commission proposal contrast sharply with the pathway advocated by T&E (see figure below). There are close to 30 million vans on EU roads today, but only 2 million would be electric by 2030 under the Commission's proposal. Compare this to 6 million e-vans under the T&E-recommended scenario. Regarding emissions, the more ambitious proposal saves a further 42 MtCO₂ across the EU between 2025 and 2030 - including 13 Mt in 2030 alone. For context, 42 MtCO₂ corresponds to the annual emissions of all vans in France, Germany and Italy, while 13 Mt is more than the CO₂ emitted by all vans in Germany alone.

Vans: new proposal leaves the EU short of 4 million e-vans in 2030



Notes: A 50% CO₂ reduction by 2030 was proposed by the Commission as part of the Fit for 55 package. T&E recommends -80% for 2030, complemented by cuts of 25% for 2025 and 45% for 2027. E-van sales are estimated from the different CO₂ targets, assuming ICE improvement, mass adjustment, eco-innovation credits and WLTP-NEDC uplift.

Source: T&E modelling of the van CO₂ standards regulation, and Bloomberg NEF forecasts from *Hitting the EV inflection point*, 2021

With regard to regulatory modalities, legislators must ensure the regulation does not boost plug-in hybrid (PHEV) vans, noting the problems PHEVs have caused in the car regulation (where CO₂ emissions from PHEV cars are on average two to four times higher on the road compared to official lab results). It's welcome that the proposal signals the removal of the benchmark for Zero and Low Emission Vehicles (ZLEV) vans from 2030, but important further reforms will be to only count ZEVs, to raise the level of the benchmark to 20 - 25%, and to remove the benchmark as soon as the market average reaches 25% ZEV sales. These are the most effective steps decision-makers can take to boost ZEVs, while avoiding incentivising PHEVs.

Vans continue to get heavier (and also bigger) partly because the heavier a van is, the more CO₂ it can emit under the EU 'mass adjustment' rule. Around 2 out of every 3 newly-sold vans are now heavy (i.e. Class III, weighing more than 1.76 tonnes), up from 55% in 2014. While the Commission proposes some changes on this issue, the perverse incentive to make vans heavier is not effectively tackled. To address this, T&E proposes splitting new vans into two categories, above and below 1.76t, **removing the mass adjustment factor**, and applying the van standards within each of these two categories

separately. Such a reform will incentivise van-makers to make lighter vans within both categories and stop ever-heavier vans from continuing to weaken the targets.

Finally, the extra weight allowance for zero emission vans starting from 2025 is a welcome measure to facilitate their adoption. However, to avoid the risk of creating market distortion in favour of very heavy vans which out-compete light trucks in the 2030s, this measure should be phased out in the period 2030 to 2035.

1. Current situation

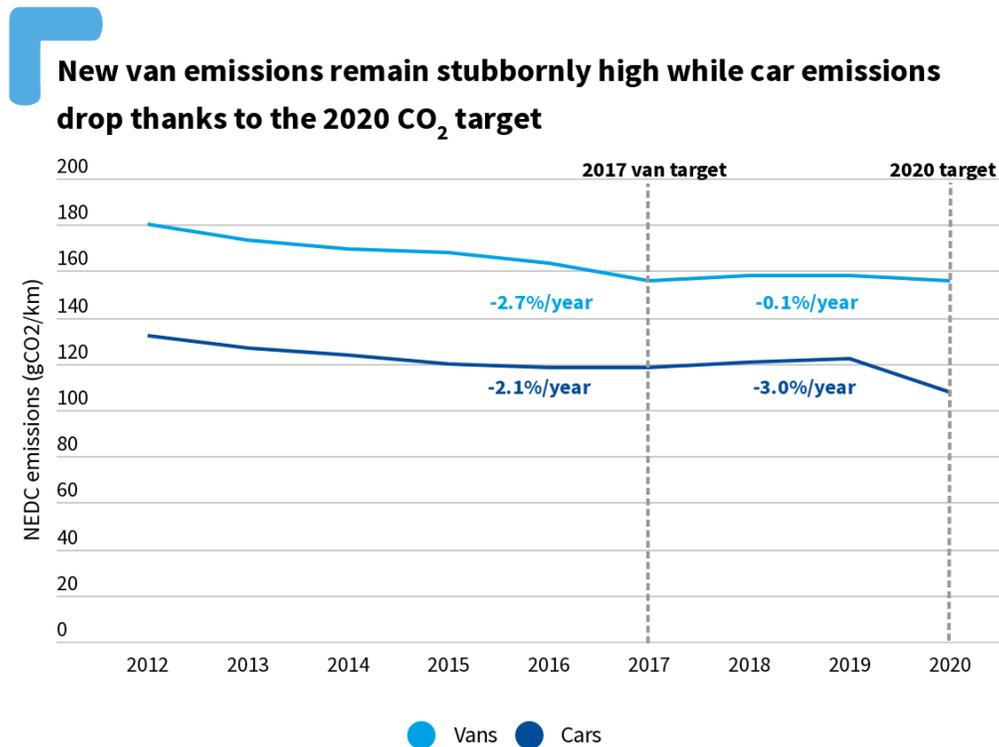
Regulation has failed to reduce CO₂ emissions

Van CO₂ emissions have risen 63% since 1990, compared to increases of 23% for car emissions and 29% for truck emissions over the same period. The lack of progress on vans threatens to undermine the emissions reductions in new cars, and the European Green Deal commitment that transport comes “drastically less polluting, especially in cities”¹. Already van emissions have grown to make up 11% of road transport CO₂, up from 9% in 1990.² The recent boom in home deliveries is playing a major role, with annual van sales growing quickly, up 57% between 2012 and 2019.

CO₂ emissions from new vans haven’t decreased over the past three years after taking regulatory flexibilities into account (see **Figure 1** below). The 2020 van target of 147 gCO₂/km was weak in the first place - and met only on paper. New vans emitted 156 gCO₂/km on the road in 2020 - the same as in 2017. The provision allowing heavier vans to emit more CO₂ (‘mass adjustment’, explained further below) is the main reason the real-world average was 9 g/km (6%) above the target.

¹ European Commission. (2021). Communication Global Approach to Research and Innovation Europe’s strategy for international cooperation in a changing world. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2021:252:FIN>.

² In absolute values, CO₂ emissions from vans in the EU27 were 87.7 Mt in 2019 (vs. 53.8 Mt in 1990) and 80.6 Mt in 2014 (lowest post-financial crisis point). This is a 9% increase in CO₂ emissions in five years.



Source: EEA (2021) Monitoring of emissions from new passenger cars and vans.

Figure 1: Van CO₂ emissions have not decreased since 2017

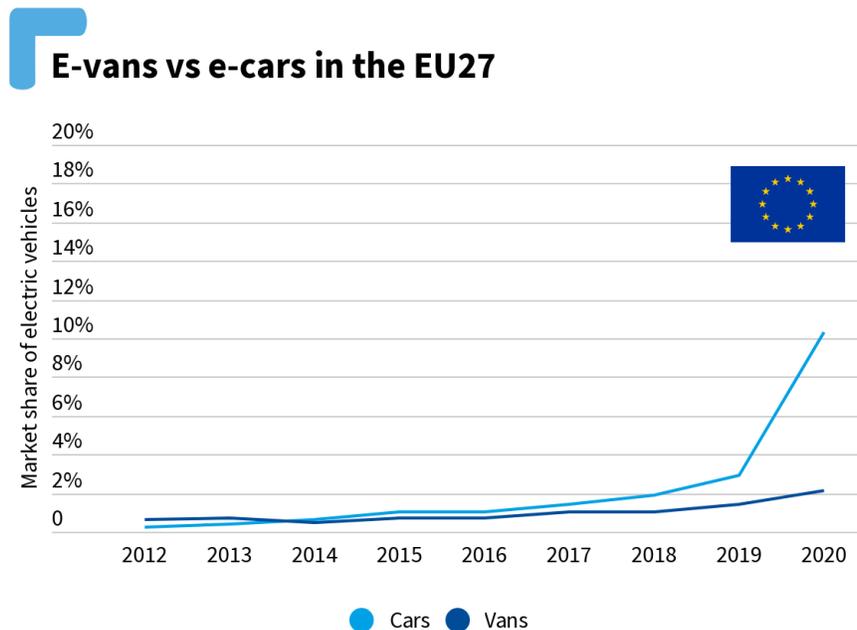
Regulation has failed to deliver e-vans

The combination of the weak target and indulgent flexibilities gave vanmakers a free ride and meant they didn't actually need to put electric vans on the market to reach the 2020 target. As the dark blue line in the graph below shows, the supply of electric vans in 2020 was not much different than it was in 2017 - or indeed back in 2012.

E-vans only made up 2% of new sales in 2020. The contrast with cars is stark, where the 2020/21 standard kicked in to both cut emissions and bring e-cars to the market in 2020 in real numbers, with 10.5% of new sales (5.4% battery electric, and 5.1% plug-in hybrid). This trend has continued in 2021 with e-cars making up 16% of new sales for the first half of the year (7.5% battery electric, 8.5% plug-in hybrid) based on provisional data.

According to the database maintained by the Transport Decarbonisation Alliance, customers are waiting to buy more than 208,000 zero emission vans, but cannot make these purchases until supply

increases.³ A webinar in May 2021 hosted by T&E heard directly from leading delivery companies, DP-DHL and DPD, on the ongoing shortages in e-van supply.⁴



Source: EEA (2021) Monitoring of emissions from new cars and vans. Electric vehicles include both battery-electrics and plug-in hybrids.

Figure 2: E-vans are way behind e-cars due to lax targets

Regulation has not delivered electrification plans from vanmakers

On top of failing to reduce CO₂ and deliver e-vans, the **standards currently in place have failed to prompt any major vanmaker to announce serious electrification strategies**. Across this sub-sector, there remains **little evidence of real climate ambition** among major van-makers; as yet none have committed to reaching 100% zero emission in new sales.

By contrast, carmakers such as the Volkswagen brand have pledged that 70% of its sales will be zero emission by 2030 and 100% in 2035, while commitments made by truckmakers such as Scania, Daimler and Volvo indicate that 50% or more of new truck sales will be zero emission by 2030.

The absence of comparable pledges by van-makers is a **deafening silence which only suggests that vanmakers hope to continue selling as many polluting diesel vans as possible** for as long as

³ TDA (2021). Retrieved from <https://tda-mobility.org/zero-emission-freight-vehicles/>. For an example of a direct corporate appeal for more e-van supply see:

<https://theenergyst.com/dpd-takes-100-more-e-vans-urges-manufacturers-to-get-a-move-on/>

⁴ “Vans: why is going electric taking so long?”, hosted on 27 May by T&E recorded here:

<https://www.transportenvironment.org/vans-why-is-going-electric-taking-so-long-webinar/>

possible. By doing this, vanmakers aim to maximise their profits on previous generations of combustion engine and vehicles instead of making future- and climate-proof investments in emobility. Only robust regulatory action by law-makers will put electric vans on Europe's streets.

Regulatory failure on vans harms cities and towns in particular

Some 3 out of 4 people in the EU live in cities or towns. Earlier this year 27 cities wrote to the Commission and, drawing attention to data which indicates that the average van emits almost twice the nitrogen oxides of the average car, they asked for the vans proposal to deliver a rapid increase in e-van supply.⁵

The reality is that cities alone do not have the power to shift van-maker strategies and the type of vehicles they supply in volumes: van makers will simply not invest in large-scale e-van production because some cities want them to. The supply-side momentum delivered by CO₂ standards is required.

The revision of the van CO₂ standards is a once in a decade opportunity to reverse the problem and ensure enough electric vans come to market in the 2020s to allow cities and users to meet their zero emission plans. EU law-makers can and should ensure cities and businesses reap the benefits of clean affordable emobility.

Will the regulatory neglect of vans be continued?

Vans have long been an area of regulatory neglect. Repeatedly, vans have slipped through a gap between passenger cars on the one hand, and heavy duty vehicles on the other, with partial exemptions from EU safety rules such as driving and rest times for example, and environmental policy such as tolling legislation. Such regulatory neglect has inflated van purchases and, combined with the surging demand for e-commerce and other services, explains why their sales and emissions are growing.⁶

The important question here is whether law-makers allow this situation to persist in respect of vans' climate emissions, or take the opportunity to turn the tide on van under-regulation in the CO₂ regulation revision?

⁵ Transport & Environment. (2021). Cities call for clean vans. Retrieved from <https://www.transportenvironment.org/discover/cities-call-clean-vans/>

⁶ As noted in section 1, the percentage rise in CO₂ from vans has been more than double that of trucks since 1990: 63% for vans, compared to 29% for truck emissions, mirroring a similar pattern in sales growth over the same period.

2. Targets that match the demand and potential of the market

Current targets fail to match demand

Faced with the ultra-low supply of electric vans, major logistics companies such as Deutsche Post-DHL and DPD group have asked vanmakers to bring more e-vans to the market. For DP-DHL, the largest post and parcel delivery company in Europe and globally⁷, the current e-van offer in the critically important 3.5t segment doesn't meet its needs - and the earliest this could change would be 2024 according to the discussions DP-DHL has had with van-makers.⁸ E-van range also needs to be increased by vanmakers, according to DP-DHL. The DPD group has also highlighted the e-van shortage, particularly in key market segments, including 3.5t⁹.

Current targets fail to match the market potential

The market potential of e-vans was examined as part of a major study by Bloomberg NEF (BNEF) for T&E published in May this year¹⁰. BNEF found that a scale up in production would mean that the upfront purchase price (without subsidies) of light e-vans would fall below diesel in 2025, with heavy e-vans becoming cheaper than diesel one year later.

Critically, this **scaled up production to deliver purchase price parity requires effective regulation** - which is missing today.

Without effective regulation, van-makers would delay investment, and the market could stagnate with e-vans remaining below 10% of new sales as late as 2029.

The **key risk identified by BNEF - particularly for employment in Europe - is that vanmakers fail to move fast enough in the 2020s**, in turn leaving their suppliers behind. And by failing to meet Europe's demand for e-vans, and develop the mobility value chain, European jobs are lost. The failure of all major European vanmakers to publish effective electrification strategies underlines the high risk in terms of wider public policy, particularly employment.

Already, the transition to electric vans is already far behind the market and looks **set to be very significantly delayed** beyond its techno-economic potential. But **regulation can solve this puzzle**.

⁷ Ecommerce logistics companies Europe. (n.d.). Ecommerce news. Retrieved from <https://ecommercenews.eu/ecommerce-logistics-companies-europe/>

⁸ For DP-DHL, the current e-van offer falls short for both cargo capacity and ergonomic reasons, according to Dr. Jörg Salomon, Vice President GoGreen & Automotive Engineering at DP-DHL who spoke at "Vans: why is going electric taking so long?", a webinar hosted on 27 May by T&E. Recording available here: <https://www.transportenvironment.org/vans-why-is-going-electric-taking-so-long-webinar/>

⁹ DPD takes 100 more e-vans, urges manufacturers to get a move on. (n.d.). The Energyst. Retrieved from <https://theenergyst.com/dpd-takes-100-more-e-vans-urges-manufacturers-to-get-a-move-on> and see also the webinar recording (referenced just above).

¹⁰ Bloomberg, N. E. F. (2021). Hitting the EV inflection Point. Retrieved from <https://www.transportenvironment.org/publications/hitting-ev-inflection-point>

And because van production is smaller in scale to cars, the transition to electric vans can happen much more rapidly once it is underway. The **per-vehicle costs of making e-vans fall sharply** when dedicated electric vehicle manufacturing platforms are put in place, together with optimised vehicle architecture and higher e-van production volumes.

T&E recommendations: enhanced CO₂ targets required for 2025, 2027 and 2030

A major change of pace is needed in e-van production during the 2020s. This is necessary to make up for the weak 2020 target (explained above), and the ability of van-makers to achieve a very low 2021 baseline (explained under modalities below). **Figure 3** below plots the trajectory recommended by T&E against that proposed by the Commission and shows that more ambition would deliver 4 million additional e-vans on EU roads by 2030.

Maintain 2035 target at -100%

The 100% CO₂ reduction target proposed for 2035 by the Commission needs to be maintained in the final co-decision text. It's also important that progressive Member States and/or regions that wish to restrict imports of ICE vehicles from 2030 are not prevented from doing so.¹¹

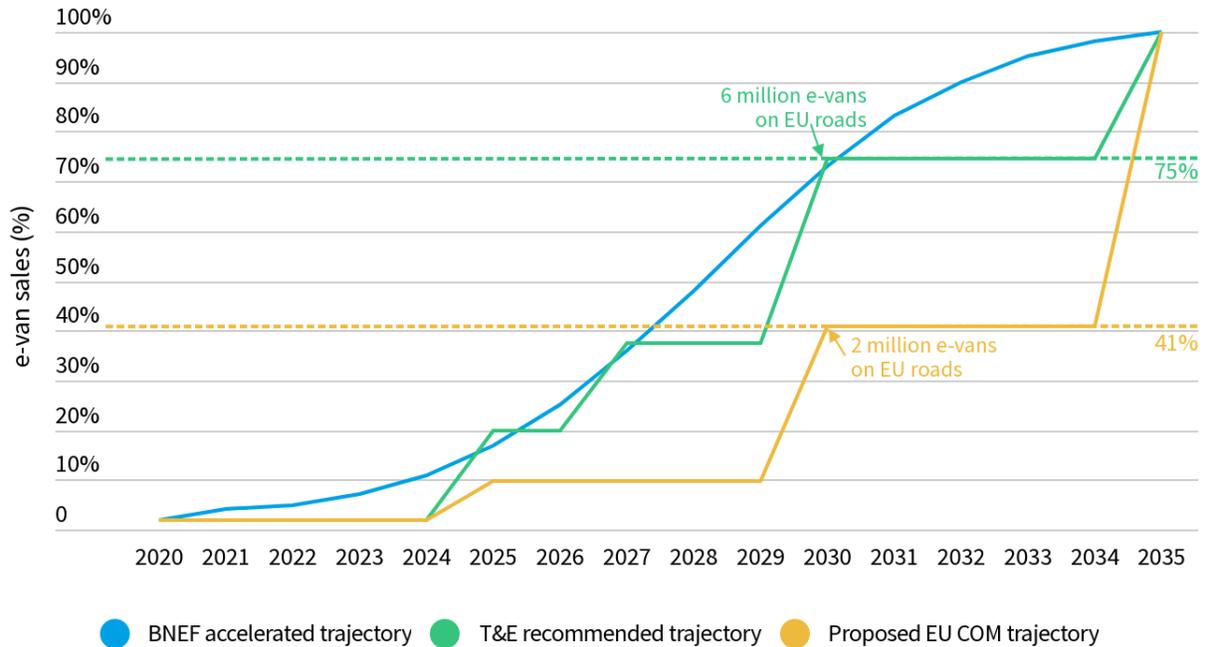
Increase 2030 CO₂ target to -80%

Based on T&E calculations, an **80% CO₂ reduction target is needed for 2030 in order to bring e-vans close to 75% of new sales** by that date. A -80% target for 2030 ensures the EU can reach 100% ZEV sales by 2035. A target less than 80% leaves too much to be done in too short a time, i.e. it would result in too little investment and change management in the 2020s.

¹¹ Under the subsidiarity and environmental law provisions of EU treaties, Member States can set environmental performance standards for new products as long as such standards are non-discriminatory and proportionate to the aim to be achieved. Given the mounting scale of the climate emergency, restricting the sale of new ICE cars and vans is entirely proportionate.



Vans: new proposal leaves the EU short of 4 million e-vans in 2030



Notes: A 50% CO₂ reduction by 2030 was proposed by the Commission as part of the Fit for 55 package. T&E recommends -80% for 2030, complemented by cuts of 25% for 2025 and 45% for 2027. E-van sales are estimated from the different CO₂ targets, assuming ICE improvement, mass adjustment, eco-innovation credits and WLTP-NEDC uplift.

Source: T&E modelling of the van CO₂ standards regulation, and Bloomberg NEF forecasts from *Hitting the EV inflection point*, 2021

Figure 3: Higher van CO₂ targets deliver a 3-fold increase in e-van stock by 2030

Spur the e-van market in the 2020s (2025 and 2027 targets)

It's vital to drive the e-van market faster in the 2020s: without revised targets for 2025 and 2027 e-van supply could remain as low as 10% up until 2029 (depending on how regulatory flexibilities are used). The BNEF study shows **it is possible to drive the electric van market faster in the 2020s, and it is crucial to do so with higher intermediate CO₂ targets**: regulation needs to push the market, not follow it.

Increase 2025 CO₂ target to -25%

The 2025 target should be increased to -25% (from -15%). Strengthening the 2025 target will both redress the very weak 2021 baseline (discussed under modalities below) and boost the sale of e-vans.

To be clear on what would be lost if nothing is done on the 2025 target: the -15% CO₂ target currently set for 2025 can be achieved by only selling around 10% BEVs, whereas a -25% reduction target will push this to 20% BEV sales¹².

2027 CO₂ target of -45%

To ensure the step-wise ramp up of e-van sales, an intermediate target is needed between -25% CO₂ in 2025 and -80% in 2030. T&E recommends -45% for 2027, bringing zero emission new van sales to almost two out of five (38%) by the same date.

Benefits of the T&E trajectory in terms of e-vans and emissions

The commercial and environmental outcomes of the Commission proposal can be contrasted with the enhanced pathway advocated by T&E. There are more than 28 million vans on EU roads today,¹³ but only 2 million would be electric by 2030 under the Commission's proposal. Compare this to 6 million e-vans under T&E's proposed targets, meeting the market potential identified by BNEF. Regarding emissions, the more ambitious proposal saves an additional 42 MtCO₂ over the period 2025 to 2030 inclusive. There is a ramp-up in emission-saving over this period, starting with 1 Mt in additional savings in 2025, 3 Mt in 2026, rising steadily year by year to reach 13 Mt in 2030. For context, 42 MtCO₂ corresponds to the emissions of all vans in France, Germany and Italy in 2019, while 13 MtCO₂ exceeds the emissions from all vans in Germany in 2019.¹⁴

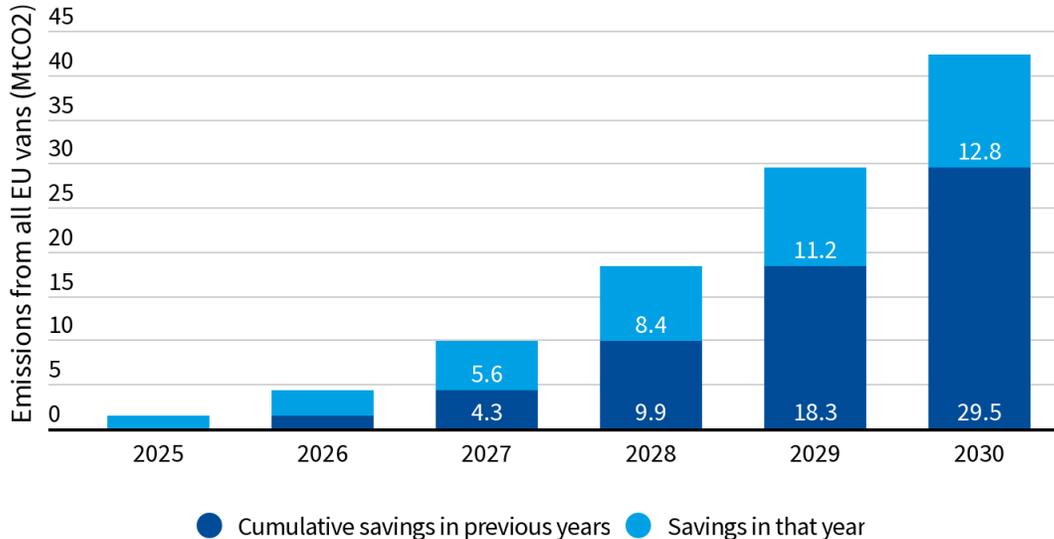
¹² Transport & Environment. (2021). *European van market unplugged: how weak regulation is failing electrification*. Retrieved from

<https://www.transportenvironment.org/discover/how-regulation-is-failing-to-electrify-europes-van-market/>

¹³ ACEA (2021). Fact sheet: Vans. Retrieved from <https://www.acea.auto/fact/fact-sheet-vans/>.

¹⁴ T&E' proposal saves 42.2 MtCO₂ from 2025–2030 compared to the EC proposal, including 12.8 MtCO₂ in 2030 alone. According to the UNFCCC, vans in 2019 emitted 21.0 MtCO₂ in France, 11.9 MtCO₂ in Germany, and 9.8 MtCO₂ in Italy.

T&E's proposal saves 42 MtCO₂ more in 2025–2030 than the EC proposal



Source: T&E (2021) EU Transport Roadmap Model

Figure 4: Higher ambition saves an additional 42 Mt CO₂ in 2025 - 2030

3. Modalities

Avoid the hybrid loophole for vans

While plug-in hybrid vehicles (or PHEVs) make up just over half of plug-in sales for passenger cars, PHEV van sales are virtually non-existent at present. One of the key reasons for this is that PHEV vans (or battery electric vans) did not benefit from super-credits. Also, PHEV vans are not given the additional multiplier (0.7) added for PHEV cars towards reaching the ZLEV benchmark in the period 2025 - 2030 (discussed further below). As noted by BloombergNEF, plug-in hybrid cars are used primarily as a compliance tool to reach CO₂ targets, while T&E and others have already highlighted the questionable benefits on the road (PHEV passenger car emissions are on average 2 - 4 times higher in the real world than in official laboratory tests¹⁵).

¹⁵ ICCT (2020). Retrieved from <https://theicct.org/news/press-release-PHEV-usage-sept2020>

PHEV vans are not expected to play a substantial role in the van market during the 2020s, **projected at only 2.5% of van production in 2030 (56,000 units)**.¹⁶ The reason here is chiefly economic. According to BNEF, plug-in hybrids do not benefit from the same cost reductions as battery electric vehicles because PHEVs can't be produced on optimised BEV dedicated platforms and incur higher relative battery costs (due to the smaller battery volumes used). BNEF says it does "not see PHEVs as an attractive drivetrain technology in the long term, since there is no route for them to become cheaper on an up-front price basis than BEVs".

Plug-in hybrid vans are already treated generously in the laboratory tests used for regulatory compliance. Lobbying to **weaken the van regulation to favour PHEV vans**¹⁷ **needs to be resisted in light of the problems it has caused** passenger car CO₂ regulation.

The super-credit mechanism is a non-binding provision (i.e. optional for both car and van-makers) agreed under the 2019 reform intended to boost the sale of ZLEVs (zero- and low-emission vehicles) until 2025. In 2025 it is to be replaced by a different incentive mechanism known as the ZLEV benchmark.

Under the ZLEV benchmark (which is also non-binding / optional), a vanmaker can relax its specific emissions target if its share of ZLEV sales exceeds a benchmark of 15% from 2025 to 2029. Exceeding the ZLEV benchmark by one percentage point increases the manufacturer's CO₂ target (in g/km) by one percent, making it easier to comply with. Target weakening is capped at 5%, so vehicle makers benefit from the full bonus by selling at least 20% ZLEV. The share of ZLEV sales is weighted according to a system which counts zero-emission vehicles as one, and PHEVs as less than one depending on their emissions.

In its July 2021 package, the Commission proposes ending the benchmark in 2029: ZLEV incentivisation is entirely unnecessary from 2030 given that all new sales must be zero emission from 2035. However, a number of further reforms are needed to govern the operation of the benchmark from 2025 to 2029. First, only ZEVs should be counted (to avoid incentivising PHEVs for the reasons outlined above). Second, the level should be raised to 20% - 25% (up from 15%) so that van-makers exceed 20% - 25% ZEV sales before their CO₂ target is weakened. And third, a safeguard is needed to disapply the benchmark once the market average reaches 25% ZEV sales. These are the most effective steps decision-makers can take to boost ZEVs, while avoiding incentivising PHEVs.

¹⁶ Transport & Environment (2021). European van market unplugged: how weak regulation is failing electrification. Retrieved from https://www.transportenvironment.org/wp-content/uploads/2021/08/202105_van_CO2_report_final_compressed-1.pdf

¹⁷ ACEA (2021). ACEA has asked for the PHEV threshold to be raised from 50g/km to 80g/km: ACEA Position Paper - Review of the CO₂ Regulation for cars and vans, p.8. Retrieved from https://www.acea.auto/uploads/publications/ACEA_Position_Paper-Review_of_the_CO2_Regulation_for_cars_and_vans.pdf#page=5

A further strand of reform must focus on accurately capturing PHEV emissions in official tests. This means revising the way PHEV emissions are calculated by amending the WLTP regulation using real world fuel consumption data (which is being collected as standard for all new vehicles as of 2021 from on-board fuel consumption meters). This will incentivise vehicle makers to improve their PHEV offer, as well as promote driver awareness programmes to encourage regular charging.

The Commission has started the process, but progress has been very slow with no meaningful changes expected until 2030, leaving the risk of new polluting PHEV vans growing their market share. EU and national policy-makers should therefore revise the legislation to ensure the Commission solves this problem sooner.

To recap, regulation is best focused on the solution - BEVs, and steer away from mechanisms that would only push the market to PHEVs. Three key changes to the benchmark are set out above to deliver this. To ensure PHEV emissions are accurately reflected requires amendment of the WLTP test.

Replacing ‘mass-adjustment’

Under the current regulation, there is a damaging design flaw in the form of the mass-adjusted target as it disincentivises lightweighting, and drives the market towards heavier vans given that OEMs have less stringent targets when they sell heavier vans. Because of the increasing average mass trend, average mass-adjusted emissions in 2020 were 6% above the official target (156 gCO₂/km vs 147 gCO₂/km).

Solution: two separate categories with no mass-adjustment

The sales of vans should be divided into two categories: Category 1 including small and medium vans (equivalent to category N1 Classes I and II), and Category 2 including large vans (Class III). CO₂ targets should then be applied to each of the two categories separately, working from a category-specific baseline in 2021; as proposed here -25% in 2025, -45% in 2027, and -80% in 2030, and -100% in 2035.

The absence of mass adjustment within the two above-described categories would incentivise OEMs to make lighter vans *within both categories* and prevent any ongoing increasing mass trends contributing to weakening the targets, as described above. This design ensures a more harmonised CO₂ reduction across van output, small/medium and large. It will require that the European Commission distinguishes the two category-specific baselines used for the targets from 2025.

Reform of the zero emission weight allowance (2030 - 2035)

From 1 January 2025, article 2(1)(b) of Regulation 2019/631 provides that the maximum weight of zero-emission vans will be increased above applicable limits “if the excess reference mass is due only

to the mass of the energy storage system” (e.g. the battery).¹⁸ Work to bring this reform into European and national implementing legislation is ongoing.¹⁹ The measure goes in the right direction: a weight allowance for ZE vans avoids penalising zero emission technology due to extra battery weight and thus makes these vehicles more competitive. This is an important enabling measure to facilitate the adoption of zero emission vans in the short and medium term. However, the additional weight allowance (starting in 2025) is currently unlimited in weight and time.

In 2035 – when all new vans are zero emission - the weight allowance should be fully phased out to avoid any long term distortions in the road freight market. From 2030 an ever-increasing portion of new sales will be zero emission, and there should be a limit from then (2030) on the extra mass (of the energy storage system) that can be subtracted. If the weight allowance is not fully phased out by 2035, there will be an unintended and generalised *de facto* weight increase of vans (larger and heavier zero emission vans), leading to wider market distortion where vans could out-compete²⁰ and displace light trucks.

T&E recommends that primary law, i.e. the co-decision, should include a provision to phase out the weight allowance over the period 2030 - 2035. Secondary legislation (a delegated/implementing act), informed by the pace of technological development, can subsequently set the exact trajectory of the phase-out.

¹⁸ Regulation (EU) 2019/631 of 17 April 2019 setting CO₂ emission performance standards for new passenger cars and for new light commercial vehicles; retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R0631>.

¹⁹ Commission (DG Clima) presentation and note of Oct 2021 on the implementation of Article 2(1)(b) of Regulation 2019/631 – zero-emission vehicles of category N; retrieved from <https://circabc.europa.eu/sd/a/db9aa770-6dbf-45cf-b37d-dce1c24ee6ea/Zero-emission%20vans.pdf> and [https://circabc.europa.eu/sd/a/56c3b228-8a88-47e7-8a5d-3d0efac5a662/Note%20on%20zero-emission%20vans%20%26%20Article%202\(1\)\(b\).pdf](https://circabc.europa.eu/sd/a/56c3b228-8a88-47e7-8a5d-3d0efac5a662/Note%20on%20zero-emission%20vans%20%26%20Article%202(1)(b).pdf) respectively.

²⁰ Vans already have certain competitive advantages (as noted in section 1), including partial exemptions from EU safety rules such as driving and rest times, and environmental policy such as tolling legislation, acting to increase their sales and emissions. An indefinite weight allowance would contribute further.

How the risk of WLTP uplift underlines need for higher targets

During 2020 van-makers regrettably had an incentive to inflate the WLTP-NEDC gap, i.e. artificially increase WLTP test values while achieving the NEDC targets, as the difference between the two tests in 2020 is used in calculating the 2021 WLTP baseline used for post-2020 targets.

The 2020 NEDC-WLTP 'uplift' for is higher for vans than cars (26% versus 21%²¹), highlighting the great risk on the van side. In other words, the 2021 van baseline may start off inflated, with a proportion of improvements in subsequent years coming from stripping out higher emissions recorded under the WLTP test in 2020. The issue underlines the need for closer monitoring of real world emission of vans as well as higher emission reduction targets for the 2020s and 2030.

Further information

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²¹ Transport & Environment (2021). *European van market unplugged: how weak regulation is failing Electrification*, p. 48, retrieved from https://www.transportenvironment.org/wp-content/uploads/2021/08/202105_van_CO2_report_final_compressed-1.pdf