Car drivers will be hit by ZEV Mandate changes that rely on flawed hybrid data

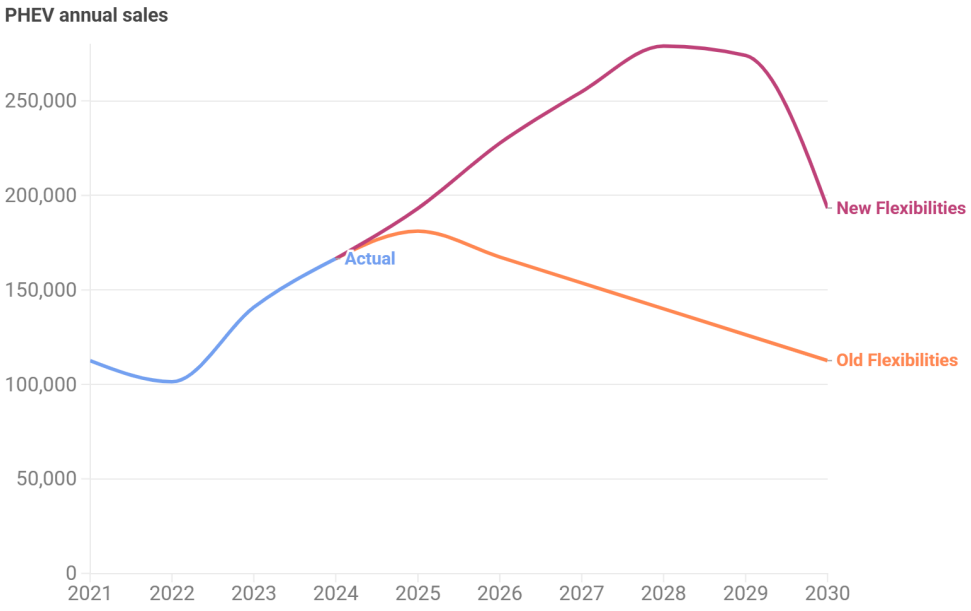
The Government's decision to weaken the Zero Emission Vehicle (ZEV) mandate inherently incentivises the greater sale of plug-in hybrid electric vehicles (PHEVs), despite overwhelming evidence that their real world environmental and economic performance falls far short of expectations. This second briefing from Transport & Environment UK outlines how this policy shift undermines both climate goals and consumer trust.

Jeopardising ZEVsales in favour of hybrids

The recently announced changes allow manufacturers to depend more on credits earned from decreasing CO_2 emissions in internal combustion engine (ICE) vehicles, which includes PHEVs. Previously, carmakers faced a 45% cap in 2025 and a 26% cap in 2026, with a complete phase-out of this flexibility planned for 2027. However, the maximum allowance for this flexibility has been significantly increased to 90% for 2025, gradually decreasing to 50% by 2029.

New flexibilities open the door for much higher PHEV sales

By considering which OEMs offer PHEVs and their likely ramp up rates the analysis shows that several OEM are well placed to exploit this flexibility and sell significantly more PHEVs



Source: T&E analysis of future sales mix per OEM under different ZEV mandate flexibility scenarios

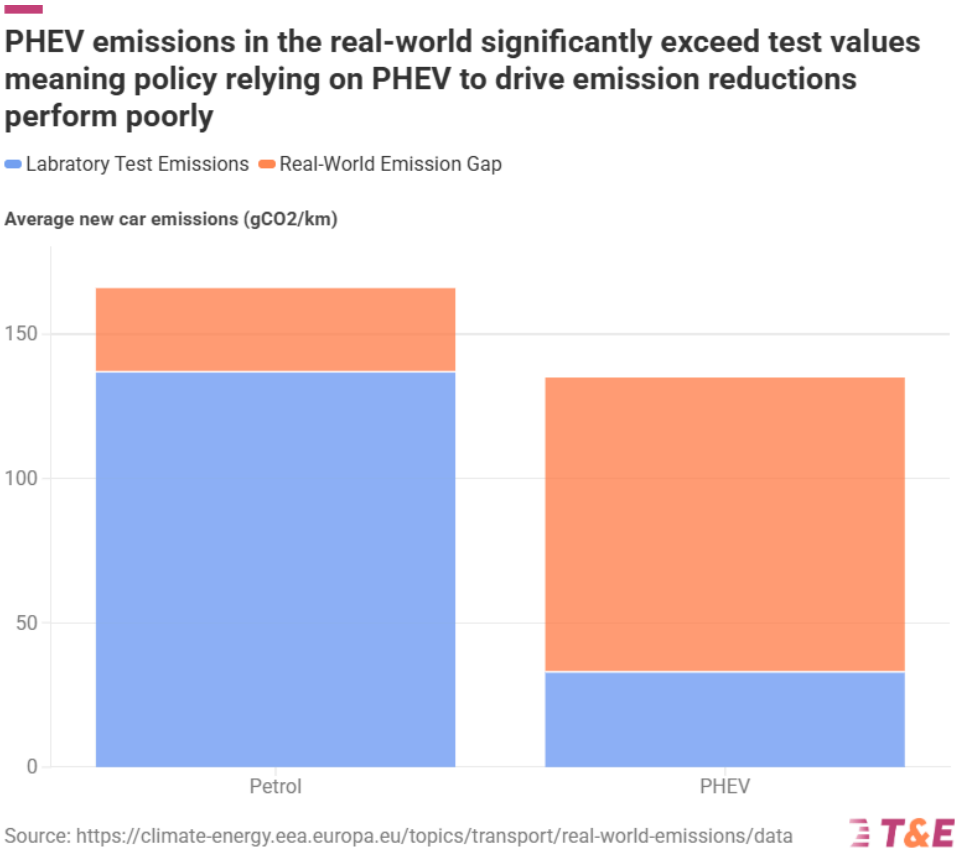
Several OEMs such as Mini and Mercedes are ramping down PHEV sales and driving forward with BEVs. However, others such as Land Rover and VW have accelerated PHEV rollout but slowed down on BEV sales. By considering at an OEM level past sales trajectories by technology the analysis estimates the number of PHEVs which can be reasonably produced and are worth selling under different flexibility scenarios to understand the impact of these policy changes.

By 2030, we could expect there to be as many as 500,000 additional PHEVs on the road as a result of this announcement. In some years the sale of PHEVs almost doubles due to the extension of these flexibilities with PHEV sales expected to peak in 2028 at 280,000 instead of 2025 at 180,000.

Decision driven by flawed data

The decision to extend the use of this flexibility is based on flawed data. The data used to determine the CO_2 emissions of PHEVs is based on outdated assumptions of electric use that **dramatically understate the true emissions of PHEVs** on the road. In real-world performance, it is well documented that they perform significantly worse.

Official figures continue to show PHEVs as low-emission vehicles, with the majority emitting below 50g/km of CO_2, but real-world monitoring reveals a very different picture with average emissions 3.5 times higher in actual driving conditions than in laboratory tests[1]. Instead of the average official emissions of 33gCO_2/km the average PHEV actually emits 135gCO_2/km as shown in the figure below. The gap is much bigger than for petrol cars. By relying on these misleading emissions figures, the Government is permitting the artificial inflating of the environmental value of PHEVs and unjustly rewarding their sale thereby encouraging manufacturers to pursue them at the expense of fully electric vehicles. Due to their real-world emissions gap, increased PHEV sales will make climate targets harder to meet.



[1] EEA (2023) Real-world CO2 emissions from cars and vans

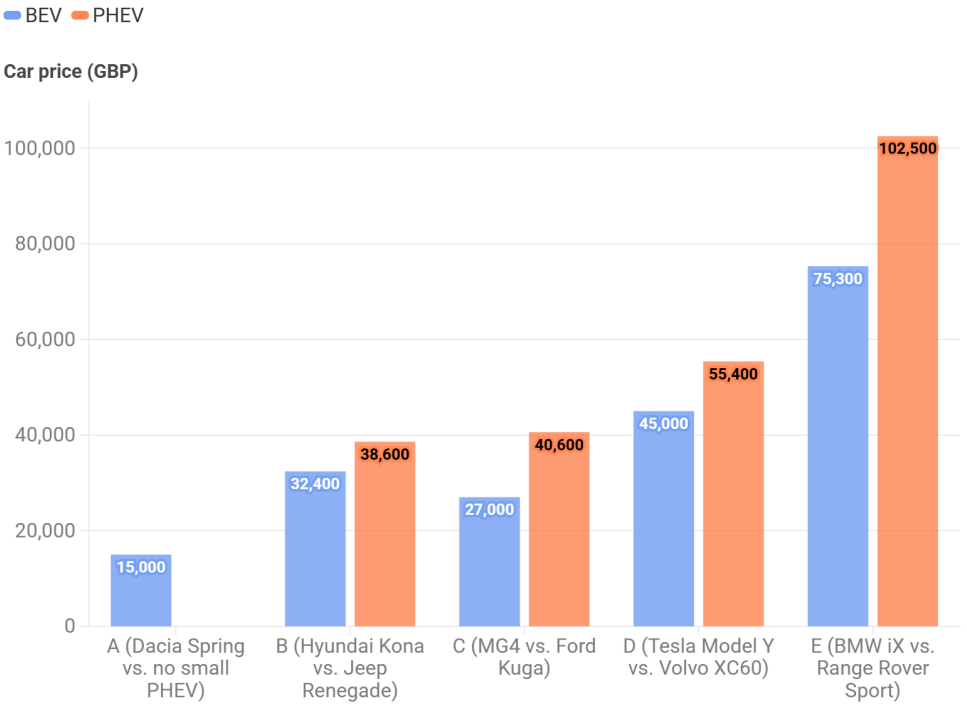
Reliance on PHEV is bad news for consumers

This decision does not just impact emissions targets, it hits consumers directly in their pockets. Recent analysis shows refuelling a PHEV **costs drivers on average £672 more a year** than running a battery electric vehicle (BEV)[2]. Many consumers, misled by the 'low emission' image of PHEVs portrayed by carmakers[3], will be left paying higher fuel costs while unknowingly emitting far more CO_2 than thought.

PHEVs also offer no certainty of improvement for air quality and likely continue to contribute to illegal and harmful levels of nitrogen dioxide (NO_2) in cities[4], a major public health issue across the UK. Without addressing the underlying problem of overestimated PHEV performance, the UK risks repeating the mistakes of past failures such as the 'Dieselgate' scandal - undermining public trust and delaying environmental progress.

Additionally, data shows best selling PHEVs tend to be more expensive than their best selling BEV counterparts in each size segment. Suggesting that car drivers may be penalized by higher purchase costs if BEV supply is limited by carmakers prioritising PHEVs. This is true when comparing the best selling models of both types in all vehicle categories, except for the cheapest segment, where there are no PHEVs and where more than a dozen BEVs are due to reach market in the next two years[5].

Best selling PHEV are significantly more expensive than their BEV counterparts across all car sizes



Source: 2025 prices taken from manufacturers websites for best selling 2024 models (Jeep Renegade was the second best selling B segment PHEV but no price data was available for the best selling Renault Captur as sales stopped in 2024)

[2] ECIU (2024) The real-life costs of refuelling a PHEV
[3] JLR. (2024) JLR's hybrid vehicle retail sales up 29% in H1 FY25 as more clients prepare for electrification.
[4] Transport & Environment (2022) Plug-in hybrids 2.0
[5] Collated by T&E from carmakers' public announcements

Policy recommendation

To ensure that consumers aren't 'duped' by the false official CO_2 emissions of PHEVs, it is essential that the government **updates the type approval of PHEVs to reflect real-world CO_2 figures** before implementing changes to the ZEV mandate. Otherwise there could be a large increase in PHEV sales which fail to deliver the expected CO2 savings on the road damaging the UK's ability to meet climate targets.

The EU has already updated the CO_2 emissions of PHEVs to better reflect real world use since the start of this year, with further changes planned for 2027/2028.[6]

About us

We are the national office of the European clean transport NGO T&E whose aim is to achieve a zero-emission mobility system that is affordable and has minimal impacts on our health, climate and environment and is accessible to all.

https://www.transportenvironment.org/te-united-kingdom

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[6] European Commission (2024) First Commission report on real-world CO2 emissions of cars and vans