

REPORT

Era of electrification: Vehicle taxation roadmap

Reforming private car taxation to incentivise the electric vehicle transition

Report published: 24 September 2025

Lead author: Eloise Sacares, Vehicles Policy Senior Researcher

eloise.sacares@transportenvironment.org

Analysts: Jordane Faizant, Richard Riley, Julian Ponirakis, Arnau Oliver Anitch

Table of contents

Table of contents	2
Executive summary	4
—	4
Policy recommendations	5
Section 1	7
Key data points	7
1.1 The vehicle tax system today	7
1.2 The tax system must support the EV transition at a pivotal moment	8
1.3 The government is set to lose billions of pounds unless the system is reformed	9
1.3.1 The Treasury will lose £8 billion from 1st-year VED revenue by 2035	9
1.3.2 The Treasury is set to lose a further £50 billion in fuel duty by 2035	10
Section 2	12
Key data points	12
2.1 Private individuals lack a strong tax incentive to go electric - and this is set to get worse from 2028	12
2.1.1 The introduction of eVED leaves the UK with a negative upfront tax differential	13
How and when will e-VED be paid?	14
2.1.2 The introduction of eVED puts the UK last in Europe for the tax differential between an ICE and a BEV	15
2.1.3 The government must ensure the tax differential between ICE and BEV is maintained when introducing eVED	16
2.2 PHEVs are grossly undertaxed for the pollution they create	16
2.3.1 The current 1st-year VED system creates a loophole for PHEVs based on inaccurate emissions data	17
2.3.2 PHEVs (both corporate and private) are given a further discount in the new eVED policy	18
2.4. Vehicle weight is not taken into consideration by any tax policy	19
Section 3	21
3.1 PHEVs should be taxed fairly and in line with their real-world emissions in 1st-year VED	21
3.1.1 The government should reform 1st-year VED to reflect PHEVs' real-world emissions	21
3.2 A 1st-year VED escalator would gradually increase acquisition tax for all cars with combustion engines to reduce purchase incentives	22
3.2.1 A 1st-year VED escalator would strengthen tax incentives to go electric in the first year	24
3.2.2 A 1st-year VED escalator would slow revenue loss while incentivising the transition	24
3.3 Introduce a Large Vehicle Levy	25
3.4 Reverse the 5p cut and introduce a fuel duty escalator	26

3.4.1 Fuel duty rises would mostly impact the wealthiest and could fund lower-income households to access EVs	28
3.5 Reforms to the eVED policy	28
3.5.1 Increase PHEV rates to higher than BEV rates in eVED	28
3.5.2 Cut eVED rates for small BEVs	29
Section 4	31
Recommendations	33
Acknowledgements	35

The UK's vehicle taxation system is no longer fit for purpose.

The electric vehicle transition is responsible for the single biggest carbon reduction across the whole economy, and it is essential that the tax system works to support this. But currently the UK places 25th in Europe for our incentives for a private individual to go from an internal combustion engine (ICE) car to a battery electric vehicle (BEV). After the introduction of eVED in 2028, the UK will be in last place.

In 2028, a driver buying a new petrol car will pay on average £1,000 less in upfront taxes over 10 years than if they were to buy a BEV - a perverse outcome that does not support the government's climate goals or the UK automotive industry's electric transition. The UK's upfront tax differential between battery BEVs and ICE cars over 10 years will be £22,695 lower than Iceland, which has a similar pay-per-mile tax. This demonstrates that it is possible to put in place a pay-per-mile policy to ensure that EV drivers contribute, while still ensuring there are clear incentives for buyers to switch from petrol and diesel cars to BEVs.

Simultaneously, vehicle tax revenues are expected to decline over the next 8 years. Income from 1st-year VED is expected to decline by £8 billion by 2035, while fuel duty revenues are set to decline by £32bn. If fuel duty continues to be frozen (as has been the case for the last 15 years), the government is set to lose another £18 billion, taking the total loss to £50bn. To ensure stable revenue for road maintenance and public services, it is time for a reset.

A new tax roadmap for a new era

T&E's roadmap ensures that the greatest burden falls on those with the broadest shoulders, while ensuring vehicles are fairly taxed for their impact on CO₂ emissions, air pollution, and other negative externalities. It also continues this approach beyond the combustion engine phase-out - ensuring taxation then takes into account the negative externalities stemming from oversized vehicles.

Reforming the vehicle tax system with the UK tax roadmap policies could raise the Treasury an additional £64 billion by 2035, ensuring the long-term viability of the vehicle tax system. Simultaneously, it would help to accelerate the electric vehicle transition by strengthening tax incentives for consumers to switch to battery electric vehicles.

The government will gain an additional £64 billion by 2035 by implementing the tax roadmap

Total tax revenue from 2027 to 2035 (billions of £)

eVED 1st year VED Large Vehicle Levy Fuel duty



Source: T&E UK (2026)



Policy recommendations

01

Ensure that PHEVs are taxed according to their real-world emissions in 1st-year VED by 2027. This would close the current loophole whereby PHEVs are taxed based on test emissions that are 6 times lower than what these cars actually emit in the real world. It would save the government £1.4 billion by 2035.

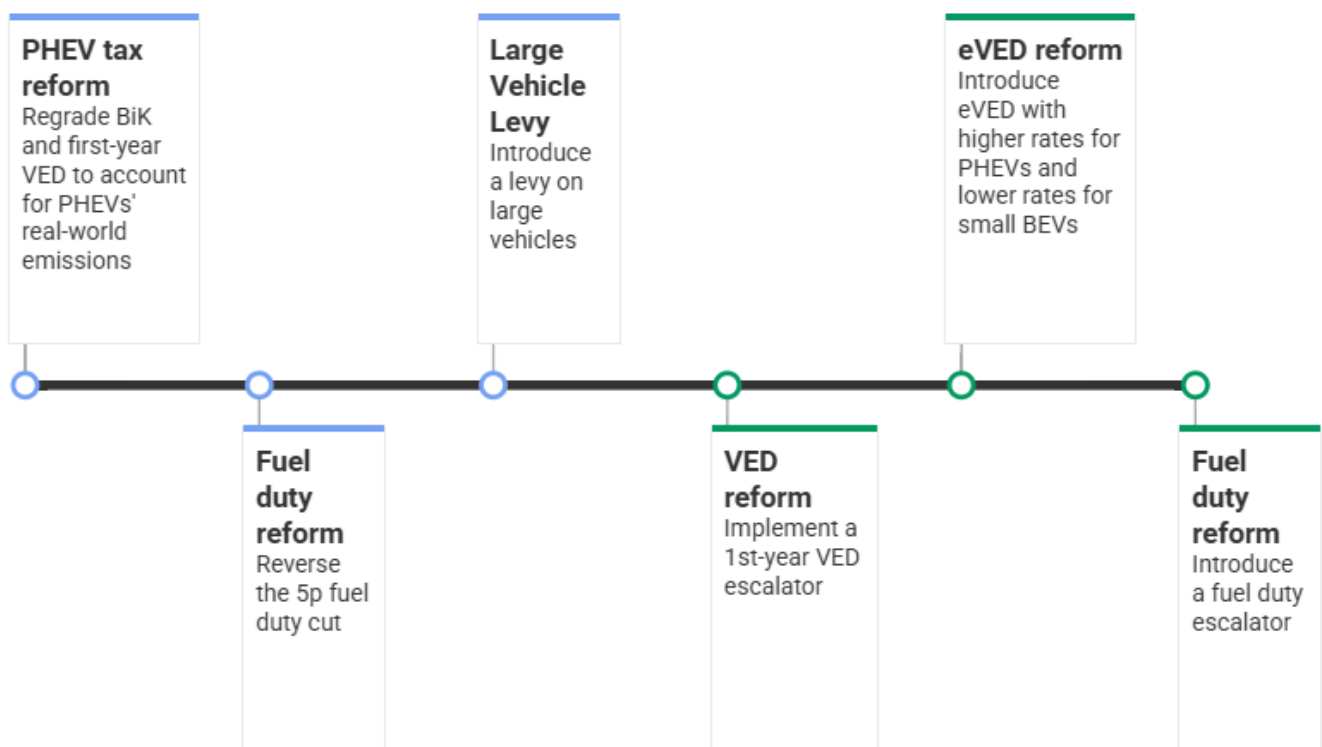
02

Introduce a 10% 1st-year VED escalator by 2028. This would strengthen tax differentials between BEVs and cars with combustion engines and raise the government an additional £741 million by 2035, bringing the total additional revenue from VED changes to £2.2bn.

- 03 Introduce a Large Vehicle Levy from 2027.** A Large Vehicle Levy (LVL) would fairly tax oversized SUVs to raise almost £2 billion every year to 2035, ensuring sustainable revenues throughout the EV transition. The government should use this income to implement a social leasing scheme to make EVs more accessible to lower-income households.
- 04 Reverse the 5p cut to fuel duty in 2027 and introduce a 5% fuel duty escalator from 2028.** This would raise the government an additional £44 billion by 2035. The greatest impact would be felt by the highest earners, as they are likely to have higher average fuel consumption.
- 05 Reform eVED ahead of its 2028 introduction so that PHEVs pay more than BEVs and small BEVs (A or B segment) are given a discount.** The government should increase the rate for PHEVs to 5p/mile and reduce the rate for small BEVs (A or B segment) to 1.5p/mile. This reform would reflect the polluting impact of PHEVs, while strengthening incentives for consumers to switch to a small affordable BEV. It would raise the government an additional £1.4 billion by 2035.

A vehicle tax roadmap for the UK

Implementation year: ● 2027 ● 2028



Source: T&E proposals and analysis.

T&E

In an era of electrification, the vehicle taxation system is no longer fit for purpose

Key data points

£50 billion

The government is set to lose £50 billion in fuel duty by 2035 if rates remain frozen.

£8 billion

The government is set to lose £8 billion in first year VED by 2035 under business as usual.

1.1 The vehicle tax system today

The UK vehicle taxation system is made up of several components. Both private individuals and corporations pay 1st-year VED (paid on purchase, akin to an acquisition tax), and 2nd-year onwards VED (akin to an ownership tax). They may also benefit from purchase subsidies from the Electric Car Grant if purchasing an eligible electric model. Vehicles using petrol and diesel vehicles will also pay fuel duty on the fuel they purchase on a rolling basis; however, as this is not paid as an upfront vehicle tax, it is not included in T&E's Good Tax Guide in any European country.

In addition, corporations purchasing vehicles for their employees pay benefit-in-kind (both on the part of the employer and employee). They also benefit from VAT deductions and depreciation savings on these vehicles.

From 2028, both private and corporate-owned vehicles will pay eVED, a pay-per-mile tax which is paid upfront with VED by users estimating their mileage for the year ahead (see section 2.1.1) This only applies to electric vehicles and plug-in hybrids, with petrol and diesel vehicles as well as mild hybrids being exempt.

United Kingdom vehicle taxation

PASSENGER CAR		
	PRIVATELY OWNED	COMPANY OWNED
SUBSIDIES	Purchase subsidies Grants paid by the government to companies or individuals for buying a low-emission car. The Electric Car Grant provides at least £1,500 off eligible electric cars.	Purchase subsidies Grants paid by the government to companies or individuals for buying a low-emission car. The Electric Car Grant provides at least £1,500 off eligible electric cars.
	1st-year VED (Acquisition tax) The amount paid is determined by the vehicle's carbon emissions.	1st-year VED (Acquisition tax) The amount paid is determined by the vehicle's carbon emissions.
TAXES PAID UPFRONT	2nd-year onwards VED (Ownership tax) A flat rate of £200 a year for all cars. Exception: if the car has a list price of over £40k (£50k for EVs), it will pay £440 a year for the first five years.	2nd-year onwards VED (Ownership tax) A flat rate of £200 a year for all cars. Exception: if the car has a list price of over £40k (£50k for EVs), it will pay £440 a year for the first five years.
	eVED (from 2028) A pay-per-mile tax of 3p/mile for EVs and 1.5p/mile for PHEVs. Paid upfront at the start of the year with VED by users estimating their mileage (with an option to pay in monthly installments)	eVED (from 2028) A pay-per-mile tax of 3p/mile for EVs and 1.5p/mile for PHEVs. Paid upfront at the start of the year with VED by users estimating their mileage (with an option to pay in monthly installments)
RUNNING TAXES	Fuel duty Paid on the purchase of fuel at the pump. Paid at a rate of 52.95 pence per litre, equivalent to 5.4p/mile for a typical C segment car such as the Nissan Qashqai.	Fuel duty Paid on the purchase of fuel at the pump. Paid at a rate of 52.95 pence per litre, equivalent to 5.4p/mile for a typical C segment car such as the Nissan Qashqai.
		Benefit-in-kind Additional tax paid on income for using a company car for private purposes. The Good tax Guide looks at the tax paid by employee as well as employer.
BENEFITS		VAT deduction Allowing companies to (partly) claim back the VAT they paid for purchasing a car. In the UK it is no VAT deduction available for company cars.
		Depreciation write-offs Allowing companies to (partly) subtract the costs of their car from their taxable income.

1.2 The tax system must support the EV transition at a pivotal moment

The EV transition is well underway. It is clear that consumers want EVs. [Almost one in three cars sold](#) in the UK in August 2026 was battery electric, with sales having increased 30% year on year. Consumer interest in EVs has rapidly surged following the [US-Iran war and subsequent oil crisis](#), and BEVs now attract more consumer enquiries on [Autotrader](#) than any other new car type. This increase in demand is underpinned by the ZEV mandate, which ensures the consistent supply of electric vehicles by requiring manufacturers to meet an increasing proportion of BEV sales every year until 2035, after which all new cars sold must be zero-emission.

We are now at a pivotal moment where BEV sales must continue to rapidly accelerate to meet the UK's climate targets, [secure billions of pounds of green investment](#), and ensure the future of UK automotive manufacturing and jobs.

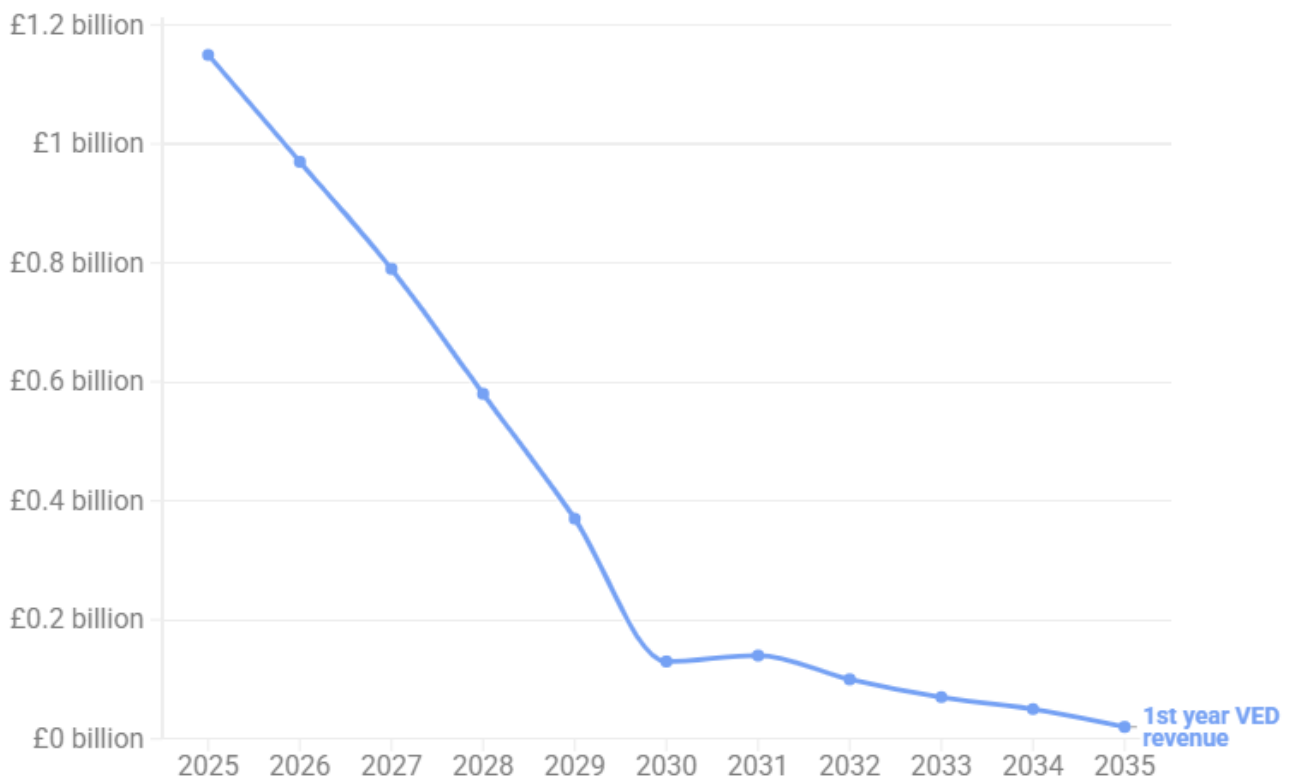
The current tax system risks undermining the progress made towards rapid electrification of the car parc. Vehicle taxation does not offer a sufficiently strong incentive for individuals to choose a battery electric vehicle over one with a combustion engine (see section 2 for more detail). With [upfront cost remaining one of the most common barriers](#) to petrol and diesel drivers switching to an EV, this must change in order to accelerate the transition.

1.3 The government is set to lose billions of pounds unless the system is reformed

1.3.1 The Treasury will lose £8 billion from 1st-year VED revenue by 2035

Under current sales projections, the government is set to continue to lose an increasing proportion of revenue from VED each year, totalling a combined loss of £8.3 billion over the next nine years (compared to a 2025 baseline). Even as soon as 2030, revenues will be over eight times less than they were in 2025.

The Treasury will lose over £8 billion from 1st year VED by 2035 under the current policy



Source: T&E projections of car sales by CO2 band based on DataForce and DfT historical car sales data



The VED system as it stands will be unfit for an electric future - with sharply declining revenues from this year and very minimal revenues post-2030. It will need to be reformed and replaced quickly to avoid a black hole in government funding for road transport.

This provides us with a rare opportunity to reshape the tax system, in a way that advances social and environmental objectives while recouping lost revenues.

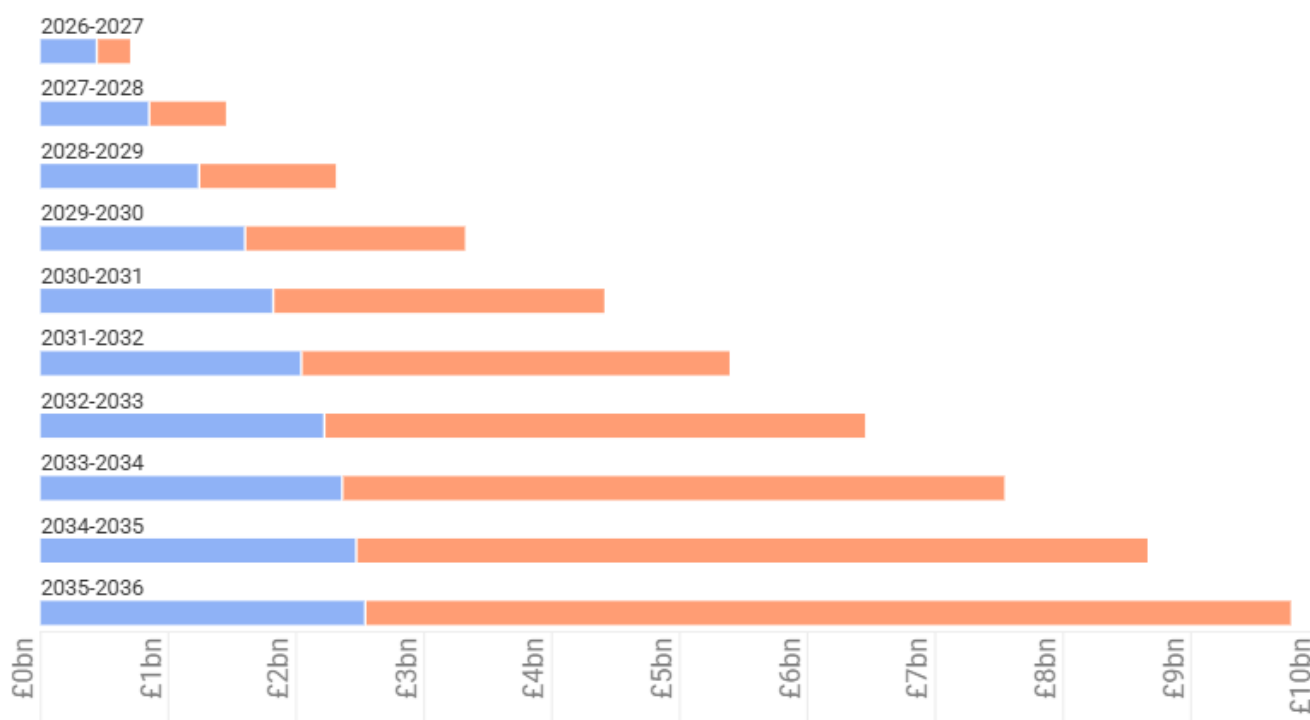
1.3.2 The Treasury is set to lose a further £50 billion in fuel duty by 2035

Fuel duty is a vitally important source of income for the UK government - [raising as much as inheritance tax, tobacco duties, and vehicle excise duty combined](#). However, fuel duty has been frozen since 2011 and was further cut by 5p in 2022 following the Russian invasion of Ukraine. The Starmer government pledged to reverse this cut by slowly increasing the rate, but this was postponed until 1st January 2027 after the US-Iran war impacted the cost of imported oil. This means that fuel duty has been cut in real terms year-on-year since 2011, [costing the government £120 billion](#) in total.

Now, the government is set to lose a further £18 billion in fuel duty by 2035-2036 if the rate remains frozen. They will also lose an additional £32 billion from fuel duty revenues as a result of the necessary transition to electric vehicles, bringing the total loss to £50 billion. While the new eVED policy is intended to replace part of this lost revenue from 2028, there will still be substantial revenue losses if the government does not take action on fuel duty and reform the broader vehicle taxation system for a new era of electrification.

The government will lose £50 billion in fuel duty revenue by 2035/36

■ Loss from freeze ■ Loss from electrification



Source: T&E analysis using ONS data of RPI, T&E projections of fuel consumption based on HMRC data



Section 2

Gaps in the current taxation system

Key data points

£1000 more

From 2028, private buyers will pay £1000 more in upfront taxes to own a BEV than an ICE car over 10 years.

£22,695 lower

The UK's tax differential between a BEV and ICE car is £22,695 lower than in Iceland, which has a similar pay-per-mile tax.

6 times

PHEVs' real world emissions are 6 times higher than the test emissions used to determine 1st-year VED rates, creating a tax loophole.

2.1 Private individuals lack a strong tax incentive to go electric - and this is set to get worse from 2028

Currently, there are clear tax incentives to go electric in the corporate market, but these are much less clear for private buyers. Switching from an ICE to a BEV car will save a corporation £1,730 per year on average. However, a private individual would only save £140 each year by switching from an ICE car to a BEV.

This is because the corporate system has generous tax incentives for BEVs through benefit-in-kind, which do not exist in the private taxation system. While BEVs do get a significant discount in acquisition tax (1st-year VED), because this is only paid in the first year, it does not have as great an impact on the average yearly tax differential, as cars are typically owned over multiple years. The result of this is relatively weak incentives for private buyers to switch to electric and crucially, a failure to provide a clear tax signal to second-hand buyers to switch.

The tax incentive to go electric is 12 times lower for a private individual than a corporation

Yearly average net fiscal tax difference between owning a BEV and an ICE vehicle for multiple years

Corporate



Private



Source: GTG analysis (2026). • Ownership period is 4 years for corporate and ten years for private

Note: Average compact SUV models used as fiscal references.



2.1.1 The introduction of eVED leaves the UK with a negative upfront tax differential

The introduction of eVED from 2028 will significantly impact the upfront tax differential between BEV and ICE cars, which is likely to significantly impact purchasing decisions for private individuals. While [the government intends](#) for eVED to act as a replacement for fuel duty, there is a key difference between the two. eVED is not paid on the go as the cost of running the vehicle, as is the case with fuel duty, but is paid upfront at the start of each year with VED.

This is important because, when making purchase decisions, private individuals do not behave like fleets and so do not often consider the total cost of ownership of the vehicle, such as the cost and tax burden of the fuel used to power the vehicle.

Instead, the upfront tax burden, particularly in the first year, is very important in guiding purchase decisions for consumers. This is because this is the cost that consumers will see when they look to purchase the vehicle, influencing how they perceive the upfront cost of the vehicle and how much they will have to pay to keep it in future years.

This means that eVED, as it is paid upfront at the start of the year with VED, is much more likely to influence which vehicle powertrain consumers choose to purchase than fuel duty, which is paid on the go as a running cost.

How and when will e-VED be paid?

Based on current Government announcements the amount motorists will pay in e-VED over the next year is decided at the start of the year - before a motorist drives the miles they'll be paying for. Motorists will estimate their mileage for the year ahead and then have the option to pay the eVED tax for these miles in full at the start of the year, or to spread their payment across the year. At the end of the year, the estimated mileage will be checked against a user-supplied reading of actual mileage for the year.

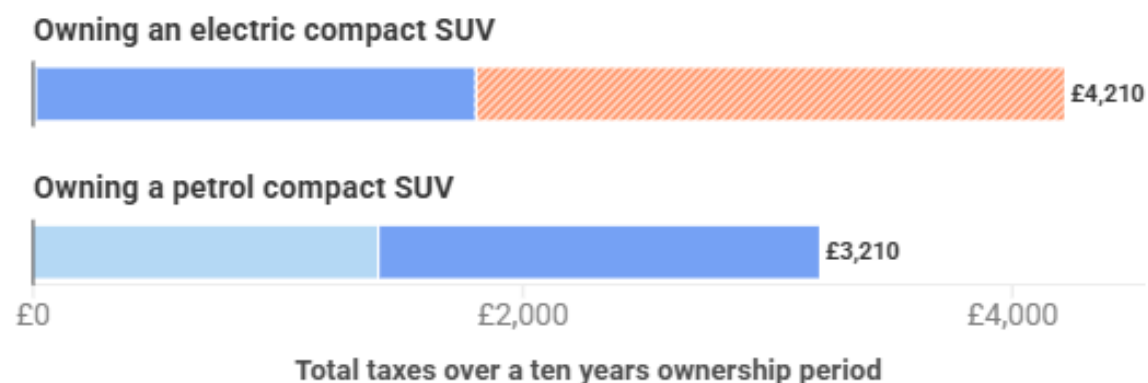
For motorists who have underestimated their mileage, DVLA intends to provide a facility to make a single balancing payment or to adjust payments in the following year to spread the liability across a longer time period. For motorists who have overestimated their mileage, DVLA have stated that they intend to provide a credit which can be carried forward to the following year.

The introduction of eVED from 2028 leaves the UK with a negative tax differential of £1,000 between an average C-segment BEV and petrol car over a period of 10 years. This means BEV drivers will pay £1,000 more in upfront yearly costs over 10 years than petrol drivers will. This is a very poor outcome at a time when it is increasingly essential that consumers choose BEVs over cars with a combustion engine.

eVED makes electric cars less attractive than petrol cars

Private individuals pay £1,000 more upfront taxes to own a BEV compared to an ICE.

1st-year VED 2nd-year onwards VED eVED (2028)



Source: GTG analysis as of September 2026.

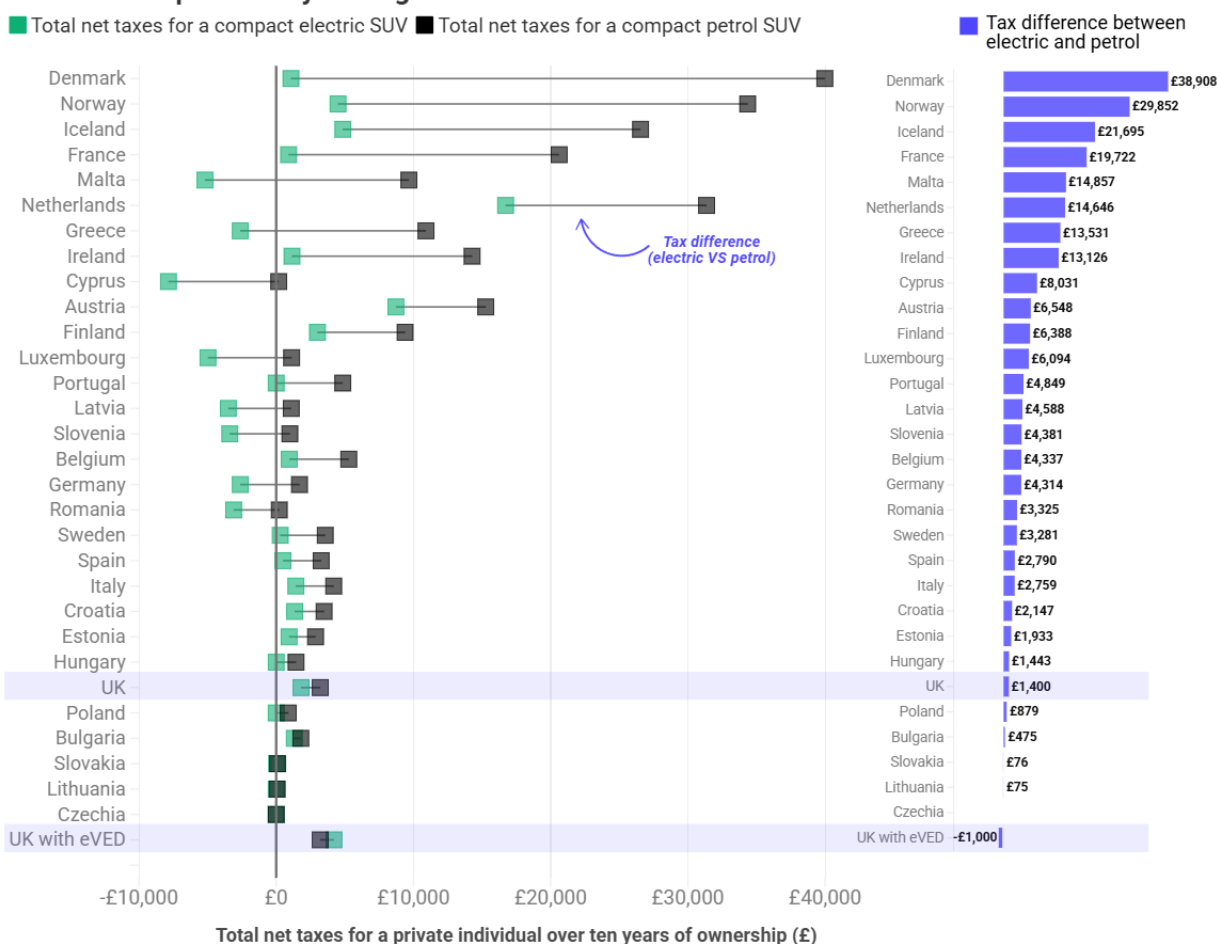


2.1.2 The introduction of eVED puts the UK last in Europe for the tax differential between an ICE and a BEV

The UK currently ranks 25th out of 30 European countries for the tax differential between a petrol C SUV and a BEV C SUV over ten years of ownership. This is 28 times less than in Denmark and 14 times less than in France. With the introduction of eVED, the UK is now set to rank last of all 30 European countries - with a negative tax differential of £1,000, meaning BEVs actually pay more than ICE cars in upfront taxes.

Our tax differential is £22,695 lower than Iceland, which also has a pay-per-mile tax. This demonstrates that it is possible to put in place a pay-per-mile policy which raises revenue from EVs, while still ensuring there are clear incentives for buyers to switch to electric vehicles.

The current eVED policy design would set the UK as the European country with the lowest tax incentive for private buyers to go electric



Source : Good Tax Guide analysis (2026)

Note: The tax burden includes the following: Acquisition tax, Ownership tax, Purchase subsidies and Pay-Per-Mile tax.



2.1.3 The government must ensure the tax differential between ICE and BEV is maintained when introducing eVED

While T&E supports the introduction of eVED, it is crucial that steps are taken to maintain a clear upfront tax differential between ICE and BEV cars to continue to give a clear fiscal signal to car buyers to go electric. This should be done by increasing rates in 1st-year VED for cars with combustion engines (ICE and PHEVs), which could be implemented via an annual 1st-year VED escalator. See section 3.2 for more detail on this policy.

2.2 PHEVs are grossly undertaxed for the pollution they create

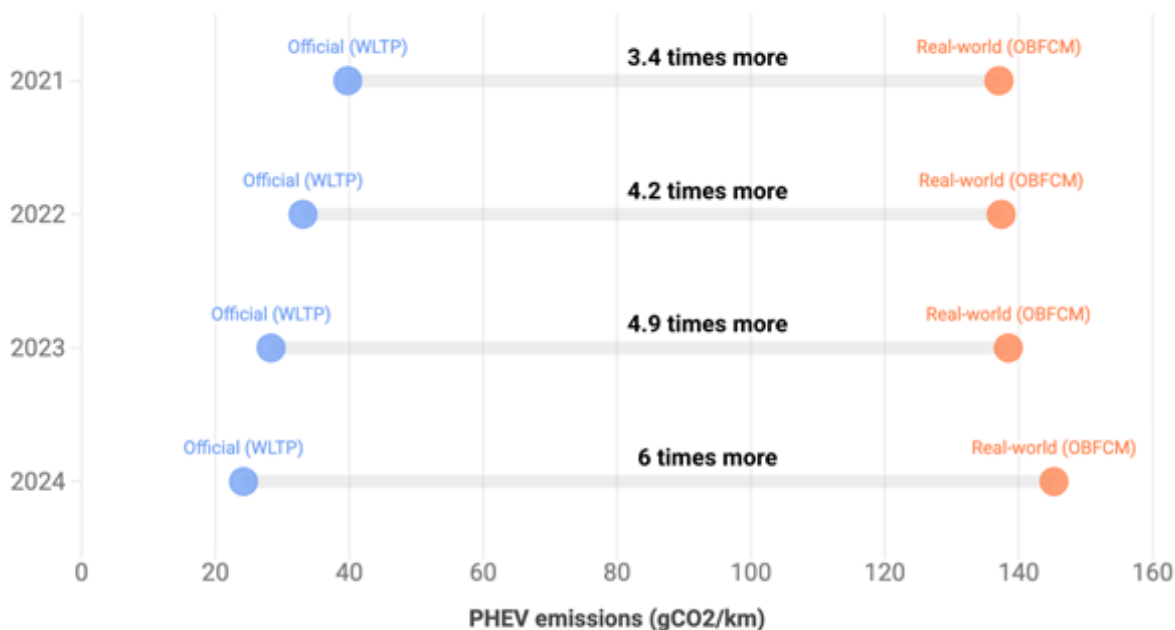
T&E analysis has shown that PHEVs emit far more CO₂ than manufacturers claim. [EU data](#) based on fuel monitors from 850,000 PHEVs on the road has found that CO₂ emissions from these cars are now almost six times what official tests show. Vehicle taxation, particularly in the first year, must reflect this.

Real-world PHEV emissions are six times higher than official estimates

The car industry demands that the EU scrap rules that would better reflect PHEV pollution, but new data for 2024 shows the gap between official and real emissions keeps widening

Emission type ● Real-world (OBFCM) ● Official (WLTP)

Registration year



Source: European Environment Agency (reporting year 2024)

T&E

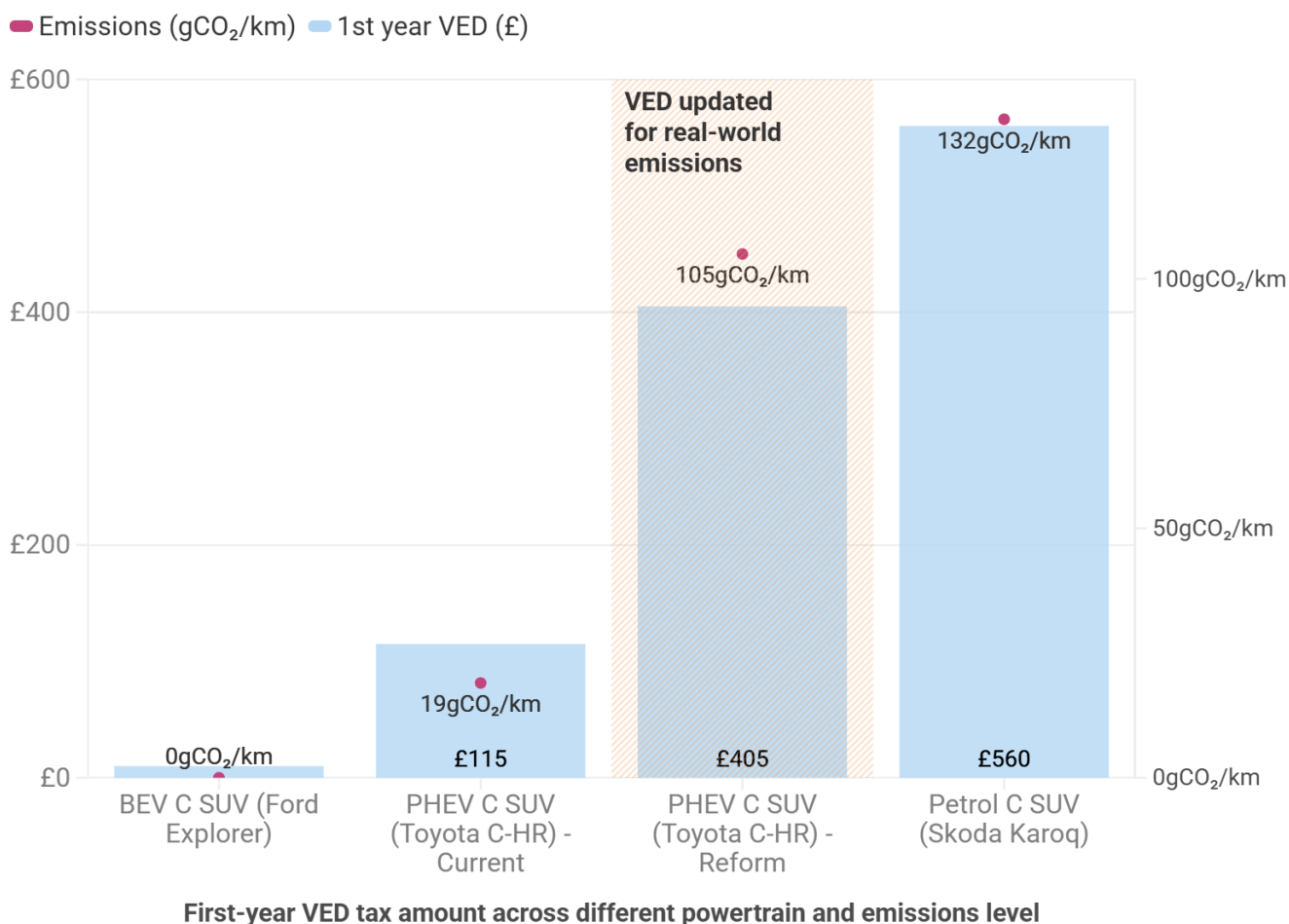
2.3.1 The current 1st-year VED system creates a loophole for PHEVs based on inaccurate emissions data

1st year VED rates (acquisition tax) are based on CO₂ emissions provided by manufacturers' tests - not real-world emissions. This means that PHEVs end up paying rates far lower than they would if real-world emissions were used. This provides a clear loophole for carmakers to continue to sell these highly polluting cars with minimal taxation. Fixing this loophole is particularly important because the upfront tax burden in the first year is most important to how consumers make purchasing decisions (see section 2.2.2 for more information).

For example, comparing a bestselling PHEV (Toyota C-HR) to a bestselling ICE petrol car (Skoda Koraq), the PHEV model emits 105 CO₂/km, when real-world emissions are taken into account, compared to 132gCO₂/km for the ICE car - a difference of less than 30gCO₂/km. However, the PHEV car currently would pay almost five times less tax in the first-year VED than the ICE car - despite only having 1.3 times less emissions.

PHEVs should pay more in the first-year VED to account for their high emissions in the real world. By using real-world emissions data for the first-year VED instead of test (WLTP) emissions, the PHEV C-HR would now pay £405 in first-year VED tax. This creates a clearer differential between the PHEV and the electric car, which only pays £10 in first-year VED, encouraging consumers to go fully electric instead of opting for cars which still produce significant tailpipe emissions.

Petrol cars pay significantly more first-year VED than PHEVs, despite having similar emissions



Source: Good Tax Guide analysis (2026), and VCA data

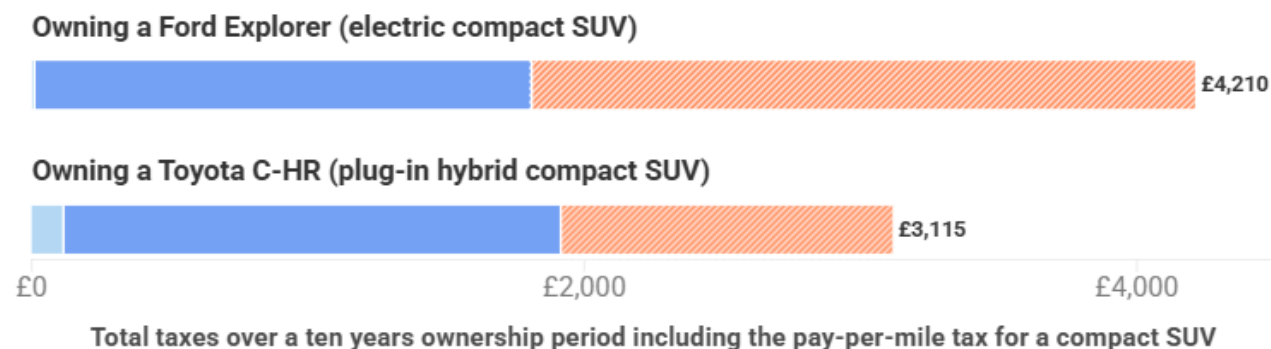


2.3.2 PHEVs (both corporate and private) are given a further discount in the new eVED policy

From 2028, under the new eVED policy, PHEVs will only pay 1.5p/mile while BEVs pay 3p per mile. This, combined with the loophole in the 1st-year VED policy, means that PHEVs are getting generous discounts in upfront taxation, limiting tax incentives for buyers to go electric. Comparing two compact SUVs (Ford Explorer BEV and Toyota C-HR PHEV), we find that the PHEV pays £1,095 less in total upfront taxes than a BEV (based on an average mileage of 8,000 miles per year).

A private individual would pay more upfront taxes owning an electric car than a polluting PHEV

1st-year VED 2nd-year onwards VED eVED



Source: GTG analysis as of September 2026.



It is important to note that some other PHEV models may pay more in total upfront taxes. However, this is not on the basis of emissions, but instead because these cars tend to be more expensive and so may fall into the threshold for the expensive car supplement (see section 1). The system should instead ensure emissions are taxed directly, by removing the loopholes for PHEVs in VED, BiK and eVED (see section 3 for more detail on how this can be done).

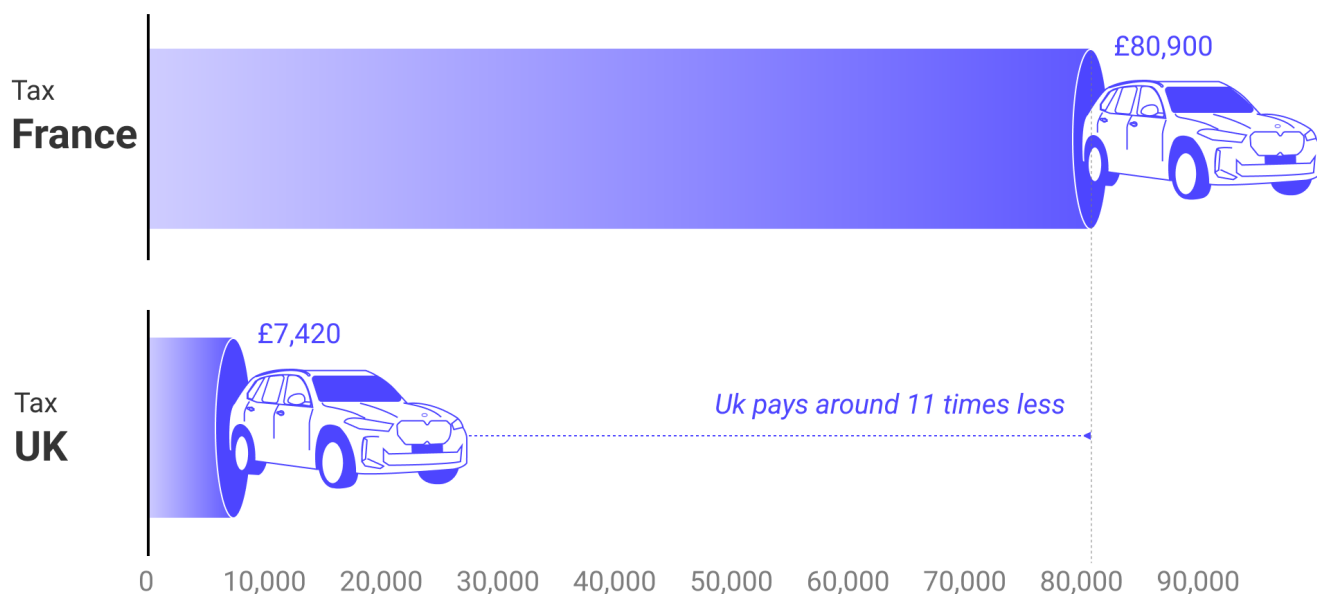
2.4. Vehicle weight is not taken into consideration by any tax policy

The trend of ever-increasing vehicle size and weight has significant negative externalities for people and the planet. A two-tonne SUV causes [16 times more road damage](#) than a one-tonne car, directly costing the taxpayer by increasing the cost of filling potholes and general road maintenance. The tallest cars pose a direct safety risk to children - with [analysis](#) finding that drivers in the tallest cars could not see children as old as nine when they were in front of the vehicle.

No tax policy in the UK currently takes vehicle size or weight into consideration, so there are weak incentives to buy a smaller car instead of a larger one. The UK ranks 19th in Europe for the average tax paid for a petrol BMW X5 (Large E-segment). In the UK, for owning a petrol E-segment SUV, a private individual would pay £7,420 over ten years of ownership. In France, a similar buyer would pay £80,900 - eleven times as much. This is because France has a [weight malus](#) on newly registered passenger vehicles which requires owners to pay an increasing fee for every kilogram above particular weight thresholds (e.g. 10 euros between 1,600 and 1,799kg, 15 euros between 1,800 and 1,899, etc.).

UK buyers still pay up to 11 times less tax for the biggest models than in other European nations

A **BMW X5** of £85,000



Source: 2026 GTG Analysis



Section 3

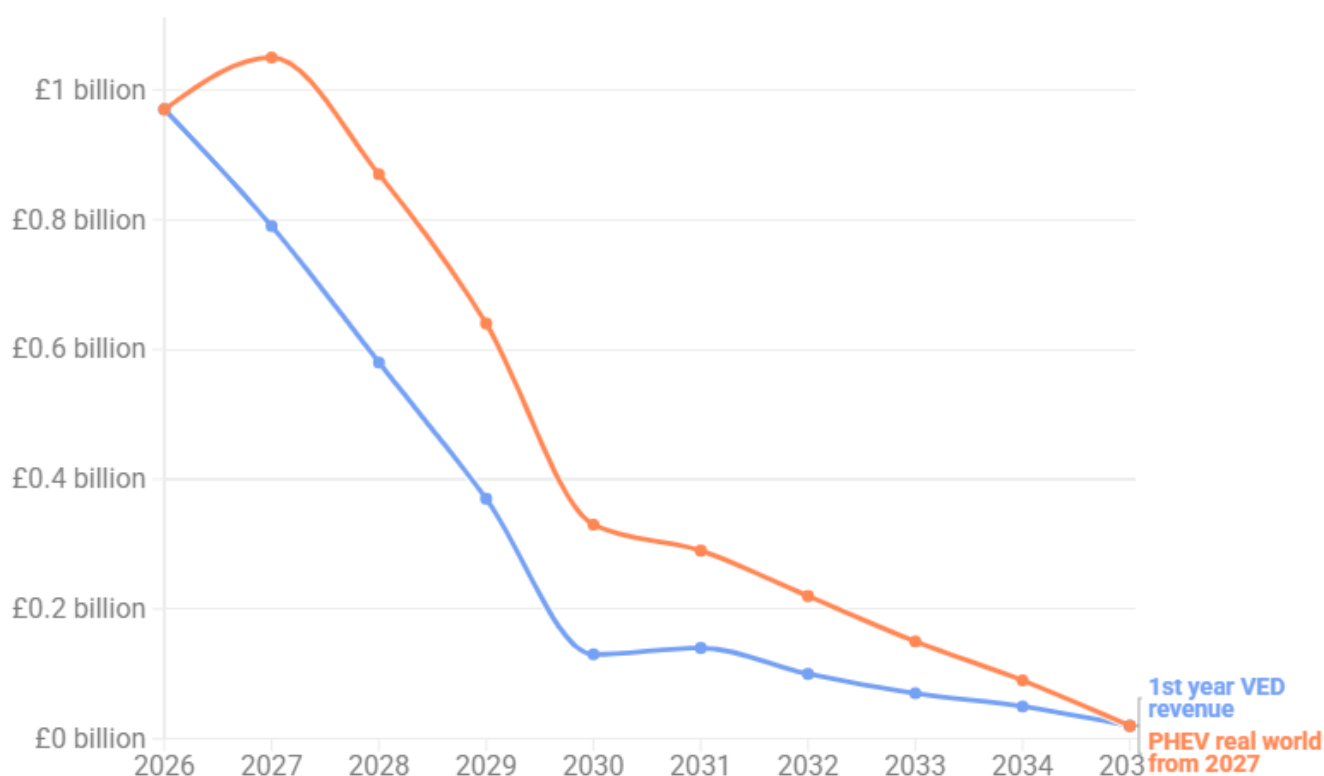
Policy recommendations

3.1 PHEVs should be taxed fairly and in line with their real-world emissions in 1st-year VED

3.1.1 The government should reform 1st-year VED to reflect PHEVs' real-world emissions

The government could save £1.4 billion by 2035 by changing the 1st-year VED bands to account for real-world emissions for PHEVs from 2027. This is an easy win which could be achieved relatively quickly and easily through secondary legislation.

The Treasury would save £1.4 billion by 2035 if 1st year VED rates for PHEVs were based on real world emissions from 2027



Source: T&E projections of car sales by CO2 band based on DataForce and DfT historical car sales data

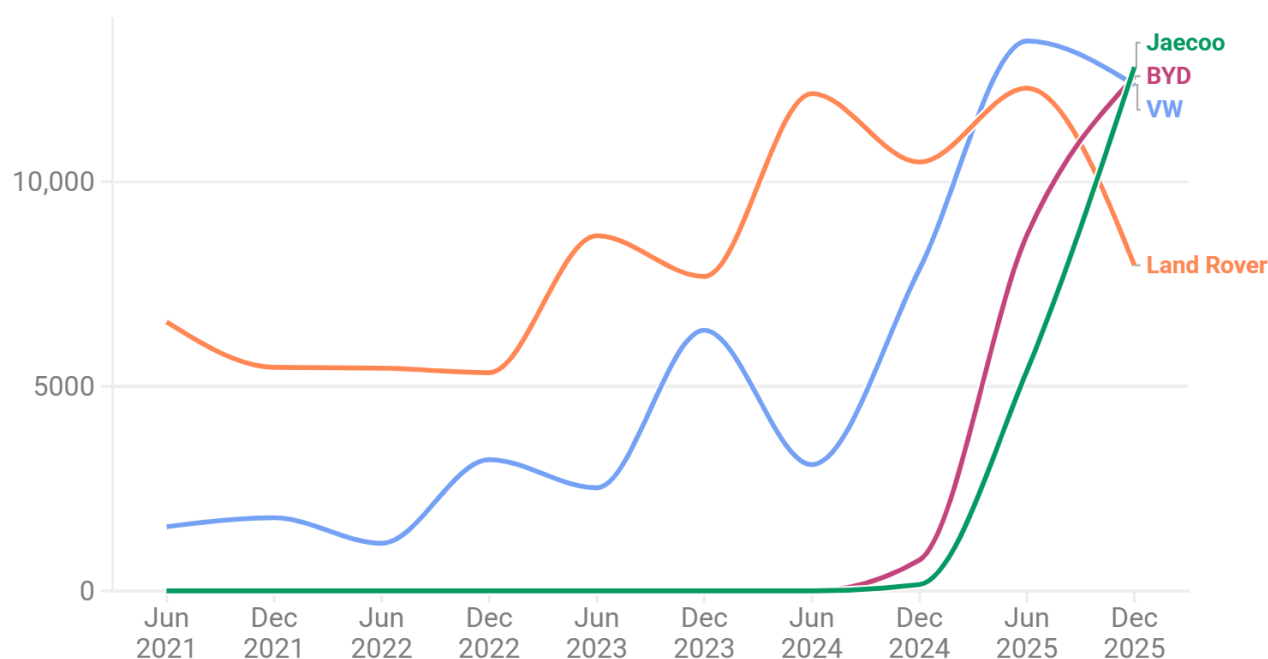


Taxing PHEVs more would support the UK's industrial transition and would not impact most drivers. This policy change would also only impact a small number of people. PHEVs made up one in ten vehicle sales in 2025, and are generally more expensive on average than other powertrains. This means they are more likely to be bought by those in the highest income brackets, who are more likely to be able to absorb the cost of a tax increase.

This could also support the UK's industrial transition. The top-selling brands in the UK, BYD and Jaecoo, are both China-made. Despite having had zero presence in 2024, they have now overtaken established brands such as Land Rover and are on track to overtake VW. Addressing the current tax imbalance would therefore largely fall on importing competitors whose products do not support British manufacturing.

Chinese manufacturers are rapidly moving ahead of the best-selling legacy carmakers in PHEV sales

6 monthly PHEV car sales



Source: T&E analysis of Dataforce sales data



3.2 A 1st-year VED escalator would gradually increase acquisition tax for all cars with combustion engines to reduce purchase incentives

The most effective way for the government to slow the trajectory of revenue loss while increasing the tax differential between BEVs and ICE / PHEV cars would be to introduce a yearly ‘escalator’ within 1st-year VED. This is where the taxation rate for each VED emissions band automatically increases each year by a set percentage (e.g. 10%) on the previous year. The compounding effect of the escalator would fairly place the highest tax increase on the biggest polluters. It is important to remember that this is only on the sale of new cars - so people who buy secondhand or already own cars in these CO2 bands would not have to pay these higher rates, meaning it is likely to affect those with higher disposable income.

Under a 10% escalator scenario from 2028 (with PHEV rates using real-world emissions from 2027, as recommended in section 3.1), the rate for a typical C-segment PHEV would increase from £115 in 2026 to £711 in 2034. The rate for a typical C-segment ICE car would increase from £560 in 2026 to £678 in 2029. ICE car sales are banned under the ZEV mandate after 2030, so the petrol Skoda Karoq would not be sold past this point, and therefore wouldn’t pay 1st-year VED. Meanwhile, EVs would continue to pay £10 per year. This is because the introduction of eVED will greatly increase upfront taxes on EVs, so it is essential to keep 1st-year VED low to ensure a clear tax differential between EVs and cars with combustion engines.



Under a 10% escalator scenario, there is a stronger tax differential in first year VED between BEVs and cars with combustion engines (ICE and PHEV)

	2026	2027	2028 (VED introduction)	2029 (last year of ICE sales)	2034 (last year of PHEV sales)
BEV (Ford Explorer)	10	10	10	10	10
PHEV (Toyota C-HR)	115	405	446	490	789
ICE (Skoda Karoq)	560	560	616	678	

Source: T&E projections of 1st year VED on comparable C-Segment models under 10% escalator scenario. Emissions data from the Vehicle Certification Agency.



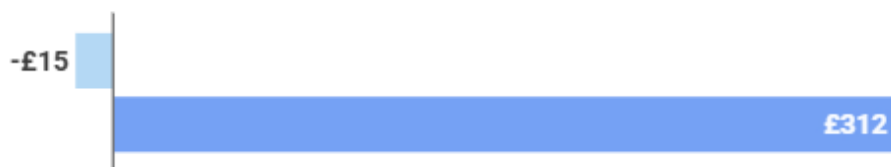
3.2.1 A 1st-year VED escalator would strengthen tax incentives to go electric in the first year

A 1st-year VED escalator of 10% would strengthen the tax differential between BEV and PHEV or ICE cars in the first year. As mentioned in section 2.1, this is particularly important as these are the taxes users will be paying upon purchase, so they are likely to significantly influence purchasing decisions. Instead of paying £15 more in tax to buy a BEV instead of a PHEV, BEV buyers would now pay £360 less than a PHEV, as a result of the escalator and using real-world emissions from 2027. An ICE car would pay £428 more than a BEV in the first year, compared to £310 today - an increase of more than a third.

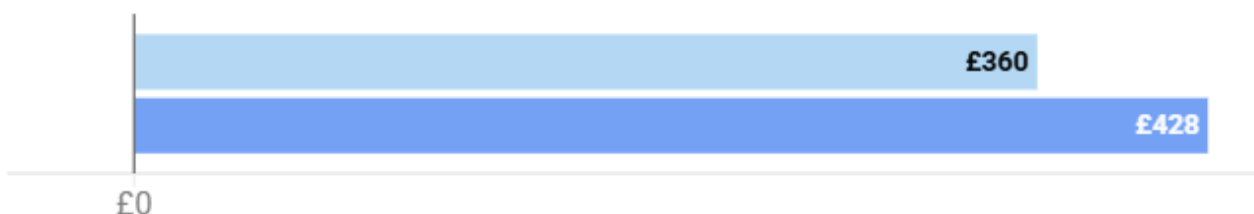
A 10% VED escalator strengthens tax differentials in the first year, incentivising private buyers to go electric

2026 2029 (under VED escalator)

Tax differential - BEV/PHEV



Tax differential - BEV/ICE



Total upfront taxes in the first year (1st year VED + eVED)

Source: GTG analysis as of September 2026. T&E projections of 1st year VED on comparable C-Segment models under 10% escalator scenario. Emissions data from the Vehicle Certification Agency.

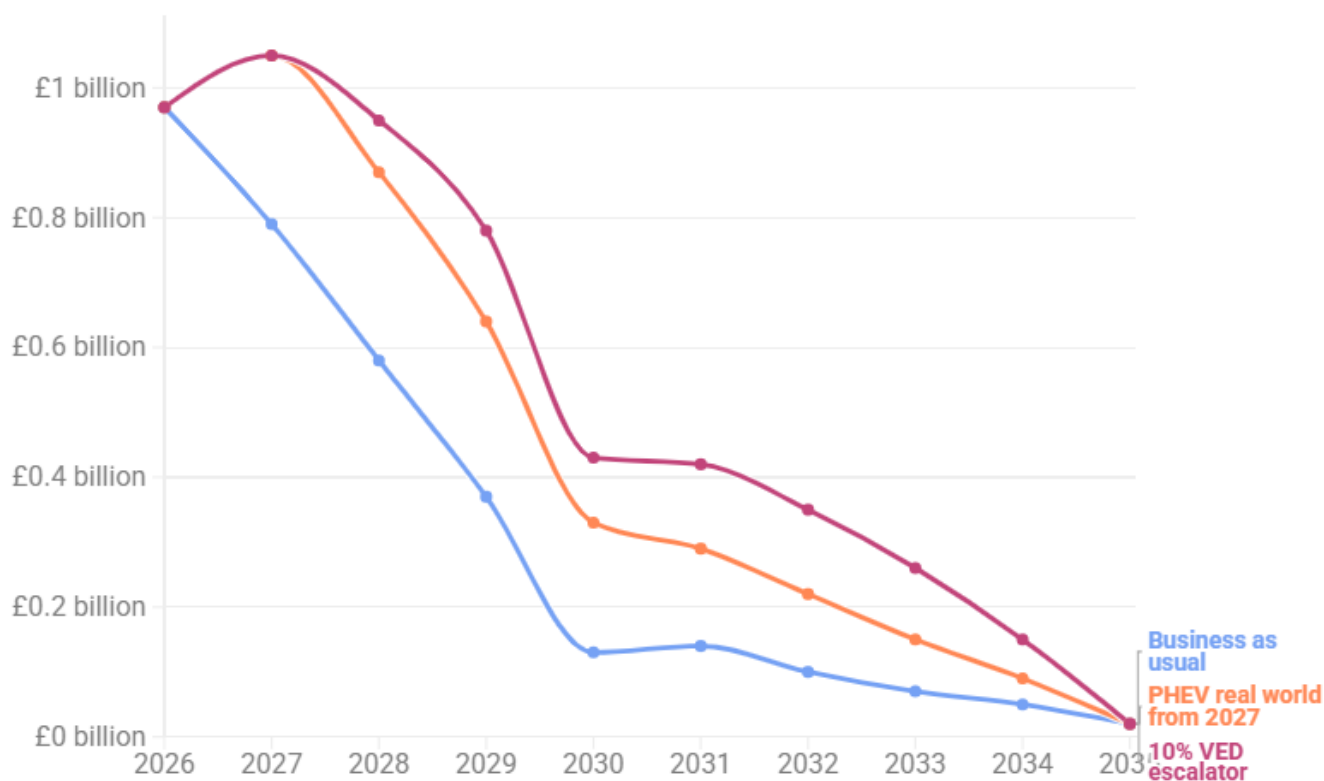


3.2.2 A 1st-year VED escalator would slow revenue loss while incentivising the transition

Implementing a 10% escalator scenario from 2028, on top of using real-world emissions for PHEVs from 2028, would raise the government an additional £741 million by 2035. This brings the total additional revenue raised from changes to 1st-year VED to £2.2bn, reducing the total expected loss from VED from £8.3bn to £6.1bn. If these changes were combined with the other

policies in the roadmap, the government could offset the entire expected loss and consistently maintain revenues significantly above the 2025 baseline (see section 4 for more detail).

By implementing a 10% VED escalator and using real-world emissions for PHEVs, the Treasury could save £2.2 billion



Source: T&E projections of car sales by CO2 band based on DataForce and DfT historical car sales data



This policy would place the highest tax burden on the biggest polluters. Because the tax burden would only apply to those buying new cars, and [the most expensive new ICE cars are generally the most polluting](#), we would expect it to tax the wealthiest most.

3.3 Introduce a Large Vehicle Levy

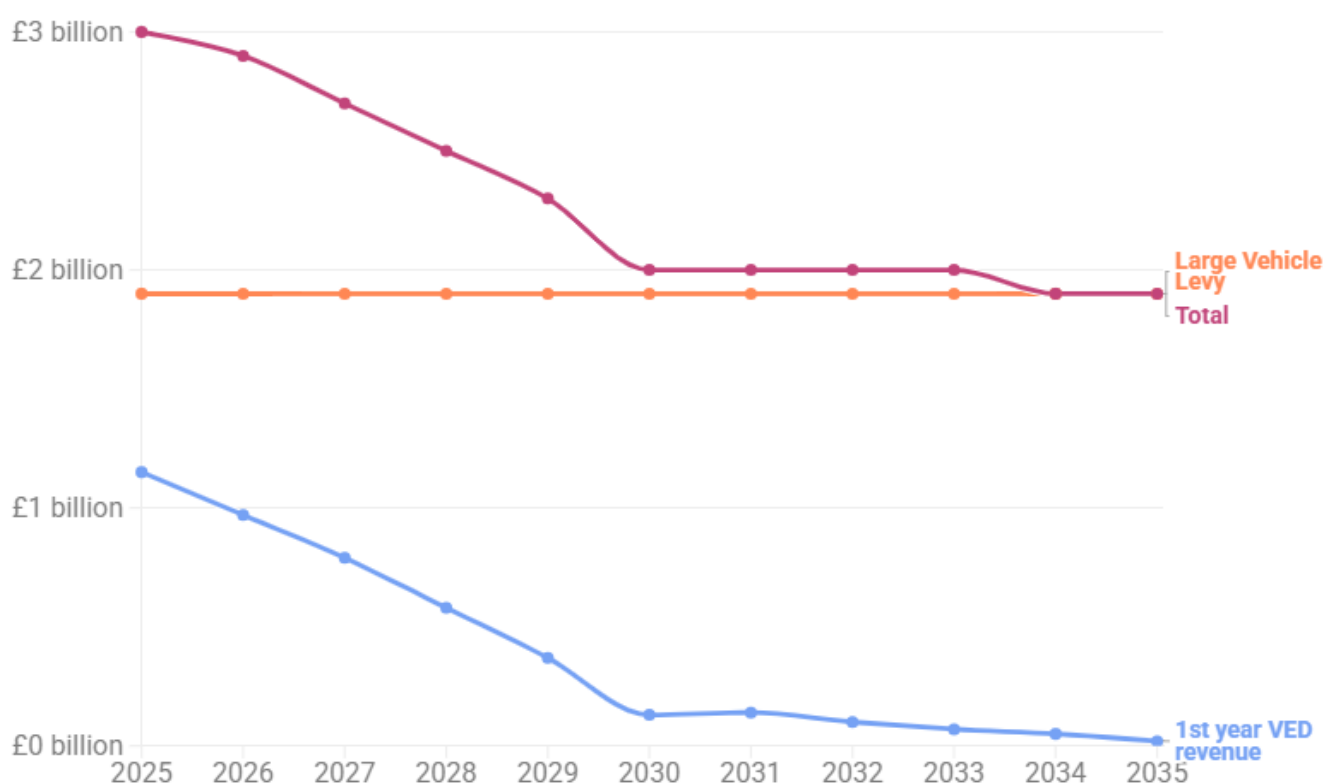
[A Large Vehicle Levy](#) would place a charge of £10 per kilogram on 1st-year VED for every kilogram above 1,600kg. There should be a 400kg allowance for BEVs to reflect the current additional weight of batteries for same-sized models.

If this policy had been implemented in 2024, it would have already raised £3.6 billion for the Exchequer - £1.7 billion in 2024 and £1.9 billion in 2025. Assuming the weights of vehicles sold remain similar in future years (a conservative estimate given we know [vehicle size is increasing](#)), a Large Vehicle Levy would raise £17 billion in total by 2035 if implemented in 2027. This is

enough to both negate the total expected loss in VED over that period, but also raise the government a net £9 billion. This additional revenue could be spent on [social leasing](#) of electric vehicles for 1.1 million lower-income households.

This policy would also have a significant impact on carbon emissions. If the revenue from implementing a Large Vehicle Levy is used to fund 179,000 social leases annually, [10,000kT of CO2 would be saved by 2035](#). This is equivalent to 9% of annual domestic transport emissions (based on 2023 data - the most recent at the time of analysis).

A Large Vehicle Levy would raise almost £2 billion annually, entirely offsetting the expected VED loss and providing additional revenues



Source: Source T&E projections of car sales by CO2 band based on DataForce and DfT historical car sales data, weight data from Dataforce 2025



3.4 Reverse the 5p cut and introduce a fuel duty escalator

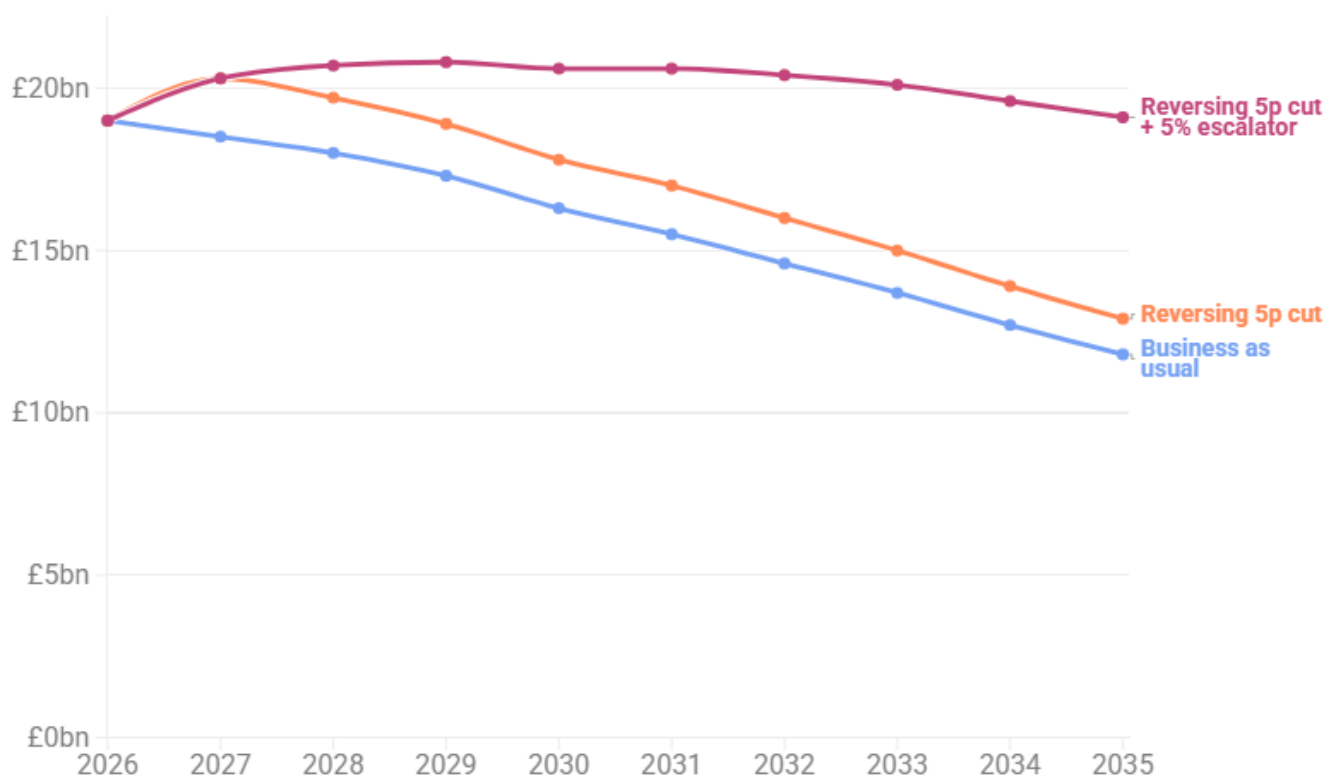
In the Autumn 2025 Budget, the government pledged to reverse the 5p cut to fuel duty that was introduced in 2022 following the Russian invasion of Ukraine in September 2026. However, following the outbreak of the US-Iran war in April 2026, this was delayed to January 2026. It is critical that this goes ahead as planned. Fuel duty has not increased since 2011, costing the

government significant revenue and increasing UK CO2 [emissions by up to 7%](#) compared to if fuel duties increased in line with inflation.

If fuel duty were increased by 5p from January 2027, it would save the government a total of £13 billion by 2035. To further reduce revenue loss over the period to 2035 and beyond, while incentivising the move away from petrol and diesel vehicles, the government should introduce a fuel duty escalator from 2028, similar to the VED escalator shown previously.

An escalator of 5% should be implemented. This, combined with the 5p cut, would save the government an additional £44 billion compared to a business-as-usual scenario. The escalator would increase fuel duty from 52.95p/l today to 67p/l in 2030 and 86p/l by 2035. This is not a radical policy - the increase remains lower than if fuel duty had simply increased by inflation since April 2011, which would have led the rate to be [106p-107p/l today](#).

By reversing the 5p cut and introducing a 5% annual fuel duty escalator, the government could maintain revenue stability to 2035



Source: T&E projections of fuel duty loss assuming rate remains at 53p/l under business as usual scenario



3.4.1 Fuel duty rises would mostly impact the wealthiest and could fund lower-income households to access EVs

Fuel duty raises disproportionately impact higher earners, who tend to own larger and more expensive cars. Research shows [large cars consume around 20% more fuel](#) than medium-sized family cars and that wealthier households [tend to drive further distances](#), meaning they gain the most from fuel duty cuts.

Further, freezing fuel duty doesn't have a significant impact on most drivers - [only saving the median driver £13 a month](#). This pales in comparison to the savings a driver could get from an [electric vehicle social leasing scheme](#). These can be as high as £1,350 per year on running costs, plus £132 a year on the vehicle lease itself. The income generated from reversing the 5p cut could [fund social leasing](#) for 1.4 million households by 2035. Alternatively, reversing this and introducing a 5% escalator could fund social leasing for 4.6 million households by 2035.

If the government wants to take further steps to mitigate any cost increases for lower and middle earners, it could simultaneously introduce a [social leasing or scrappage-for-leasing](#) scheme (as has already been introduced in France and is soon to be introduced in Italy), to ensure these demographics have the opportunity to switch to an EV and gain the full cost benefits these vehicles offer.

3.5 Reforms to the eVED policy

eVED will be introduced in the UK from 2028. The government intends this to be a policy that continues for at least the next 25 years, setting out how they expect it to [replace fuel duty revenues](#) until 2050. This means it will be a reliable source of income that continues to generate revenues for decades to come. While T&E supports the introduction of eVED, the current policy does not sufficiently incentivise consumers to switch to zero-emission vehicles in the near future. It is critical that this is changed to maintain and increase tax differentials between BEVs and cars with combustion engines at a pivotal moment in the transition.

3.5.1 Increase PHEV rates to higher than BEV rates in eVED

Under the current eVED policy, PHEVs will only pay 1.5p/mile while BEVs pay 3p per mile. Giving PHEVs a half rate in this major taxation change, despite their emissions being almost as great as ICE cars, sends the wrong message to consumers and industry.

The government's [rationale](#) for this is that PHEVs will also pay fuel duty on the miles they drive using petrol or diesel. However, this means that a popular PHEV (e.g. Ford Kuga) still driving 29% of its miles on petrol would pay less in eVED and fuel duty combined than a BEV, which does not

pay any fuel duty. This creates perverse incentives for consumers who think they may be mainly driving electric, to choose a PHEV which still emits significant CO₂, over a zero-emission BEV.

Increasing the rate for PHEVs to 5p per mile, just 2p per mile above the current BEV rate, would generate an additional £405 million in eVED revenue in 2028. By 2035, it will have generated total additional revenue of £3.4bn. This policy change would also ensure that the new eVED policy aligns with the polluter-pays principle, and encourages buyers to go fully electric instead of buying a PHEV.

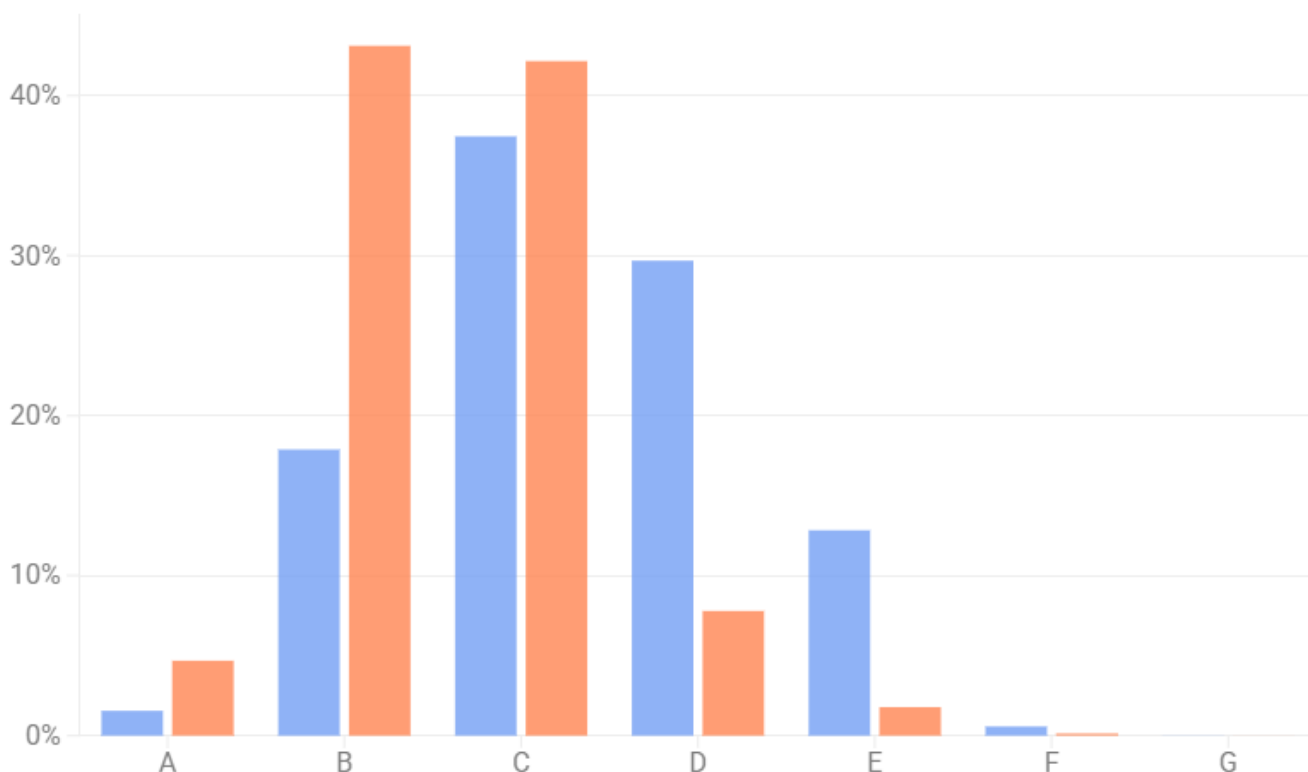
3.5.2 Cut eVED rates for small BEVs

Despite being safer and less damaging to our roads than SUVs, there is currently a market failure for affordable small BEVs. Only 19% of BEVs sold in 2025 were A or B segment vehicles (smaller, more affordable cars) compared to 48% of petrol vehicles.¹ This is likely as a result of manufacturers pursuing larger models with higher profit margins, not a lack of consumer demand - as small, affordable BEV models are [consistently selling out](#).

¹ T&E UK analysis of Dataforce (2025)

Less than 20% of BEVs sold in 2025 were A or B segment, compared to 48% of petrol cars

BEV Petrol



Source: T&E analysis of Dataforce 2025



Reducing taxation on small BEVs would not only benefit consumers who intend to purchase new vehicles, but would also feed through to the second-hand market. Smaller BEVs tend to have the most stable residual values, so greater production and sales of these vehicles would help those who cannot afford to buy new to have better and more reliable second-hand BEV options in the coming years.

Reducing eVED rates for small BEVs would encourage both consumers and manufacturers to choose these models. Reducing eVED for small BEVs down to 1.5p per mile would cost just £98m in 2028 - only around 8% of total policy revenue expected from eVED in 2028/29. If PHEV rates were increased simultaneously, the government would still raise a net additional £307m in 2028 and £1.4 billion by 2035.

Impact of the tax roadmap

4.1 Implementing the tax roadmap would raise £64 billion for the Treasury by 2035

Implementing the tax roadmap would not only entirely offset the expected loss from VED and fuel duty, but would substantially increase private vehicle taxation income. These additional revenues could be used for road maintenance, public service funding, and supporting the electric vehicle transition through charging investment and social leasing schemes for lower-income households. Implementing the tax roadmap would increase government revenues from private vehicle taxation by £64 billion in total by 2035 compared to a business-as-usual scenario (unadjusted for inflation). This is an increase of 40% on expected revenues under a business-as-usual scenario.

The government will gain an additional £64 billion by 2035 by implementing the tax roadmap

Total tax revenue from 2027 to 2035 (billions of £)

eVED 1st year VED Large Vehicle Levy Fuel duty

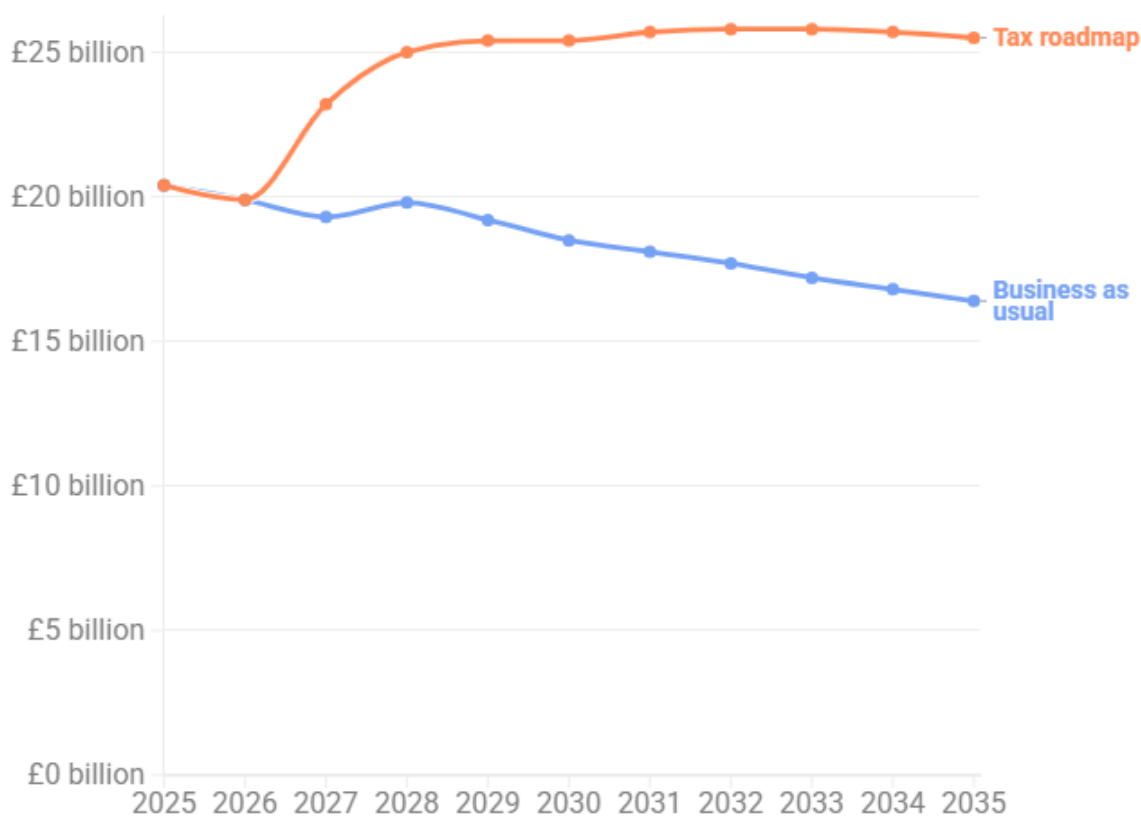


Source: T&E UK (2026)



The tax roadmap would ensure that revenues consistently remain above those generated in 2026, instead of revenues steadily declining until 2035. This provides the government with certainty of income to continue to fund road maintenance and public services, as well as further investment in accelerating the electric vehicle transition.

Implementing the tax roadmap would significantly increase private vehicle taxation revenues, providing vital income for public services



 **T&E**

Recommendations

To both accelerate the electric vehicle transition and reduce the expected revenue loss from vehicle and fuel taxation over the coming decades, the government should introduce a tax roadmap consisting of the following policies:

01

Ensure that PHEVs are taxed according to their real-world emissions in 1st-year VED by 2027. This would close the current loophole whereby PHEVs are taxed based on test emissions that are 6 times lower than what these cars actually emit in the real world. It would save the government £1.4 billion by 2035.

02

Introduce a 10% 1st-year VED escalator by 2028. This would strengthen tax differentials between BEVs and cars with combustion engines and raise the government an additional £741 million by 2035, bringing the total additional revenue from VED changes to £2.2bn.

03

Reverse the 5p cut to fuel duty in 2027 and introduce a 5% fuel duty escalator from 2028. This would raise the government an additional £44 billion by 2035. The greatest impact would be felt by the highest earners, as they are likely to have higher average fuel consumption.

04

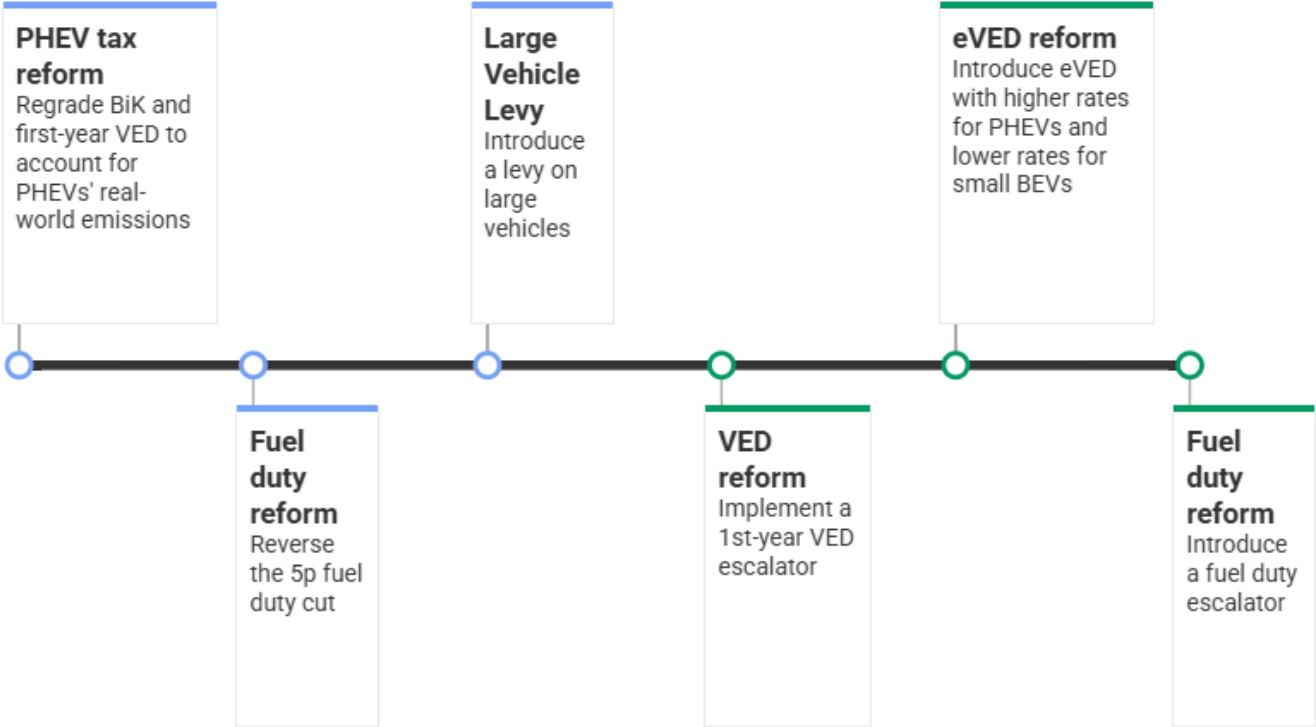
Introduce a Large Vehicle Levy from 2027. A Large Vehicle Levy (LVL) would fairly tax oversized SUVs to raise almost £2 billion every year to 2035, ensuring sustainable revenues throughout the EV transition. The government should use this income to implement a social leasing scheme to make EVs more accessible to lower-income households.

05

Reform eVED ahead of its 2028 introduction so that PHEVs pay more than BEVs and small BEVs (A or B segment) are given a discount. The government should increase the rate for PHEVs to 5p/mile and reduce the rate for small BEVs (A or B segment) to 1.5p/mile. This reform would reflect the polluting impact of PHEVs, while strengthening incentives for consumers to switch to a small affordable BEV. It would raise the government an additional £1.4 billion by 2035.

A vehicle tax roadmap for the UK

Implementation year: ● 2027 ● 2028



Source: T&E proposals and analysis.



Acknowledgements

Report published: September 2026

Author: Eloise Sacares

Modelling: Jordane Faizant, Richard Riley

Contributors: Julian Ponirakis, Arnau Oliver Anitch

Editeur responsable: William Todts, Executive Director

© 2025 European Federation for Transport and Environment AISBL

To cite this report

T&E (2026). Era of electrification: Vehicle taxation roadmap - Reforming private car taxation to incentivise the electric vehicle transition.

Acknowledgements

The findings and views put forward in this publication are the sole responsibility of the authors listed above.

Further information

Eloise Sacares

Senior Vehicles Policy Researcher

eloise.sacares@transportenvironment.org

www.transportenvironment.org | [BlueSky](#) | [LinkedIn](#)
