



BRIEFING - September 2025

The Large Vehicle Levy

A new weight based charge for oversized cars that would raise £1.72 billion annually in revenue

Summary

The UK's current vehicle tax system undertaxes large, high-emission SUVs. **These supersized cars now account for nearly 60% of new car registrations**¹, with the UK leading Europe in sales of the largest models. This growth is driven not by practical necessity but by car makers following styling trends, with most SUVs registered in urban areas where their size brings little pragmatic benefit².

The rapid shift towards heavier, larger vehicles carries significant societal costs, including:

- **Increased danger to other road users:** A 10 cm increase in car bonnet height raises the risk of pedestrian and cyclist fatalities by 30%.³
- **Squeeze public space:** Around 1.2 million cars sold each year are larger than the average UK parking space.⁴
- **Increased climate impacts:** 77% of UK SUV registrations are petrol, diesel, hybrid, or plug-in hybrid, locking in higher CO₂ emissions for the next 10-15 years.⁵
- **Impact on road wear:** A two-tonne SUV causes 16 times more road damage than a one-tonne car.⁶

Despite this, under the existing Vehicle Excise Duty (VED) framework, SUVs remain severely undertaxed, with **luxury models paying up to 20 times less than their European counterparts**.

A weight-based vehicle levy would ensure that the heaviest, most space-intensive SUVs, pay their fair share for the greater damage they cause to roads, safety, and the environment. With the Autumn Budget approaching, this simple, transparent reform would close the UK's undertaxation of big cars and raise vital revenue without penalising typical family cars.

Policy Recommendation:

In the upcoming Autumn Budget, introduce a **Large Vehicle Levy** of £10 per kilogram above 1,600kg for new vehicles to adjust the UK's car tax system to fairly tax large SUVs. There should be a 400kg allowance for BEVs to reflect current additional weight for the same sized models. This simple, transparent measure would apply fairly across all powertrains, protect smaller cars from additional costs, and provide a sustainable revenue stream to contribute to the £51 billion fiscal deficit that the UK government is currently facing.

Analysis shows such a levy would raise **£1.72 billion annually**, with the greatest costs falling on high-end SUVs and minimal impact on typical family cars.

¹ T&E UK (2024) [UK SUV sales have increased by more than a fifth in one year](#)

² RAC Foundation (2021) [Majority of SUVs registered to urban homes](#)

³ VIAS Institute (2023). [Des voitures plus lourdes, plus hautes et plus puissantes pour une sécurité routière à deux vitesses?](#)

⁴ Clean Cities Campaign (2025) [Rise of Carspreading](#)

⁵ T&E UK (2024) [UK SUV sales have increased by more than a fifth in one year](#)

⁶ [Road Damage Calculator](#) (2025)

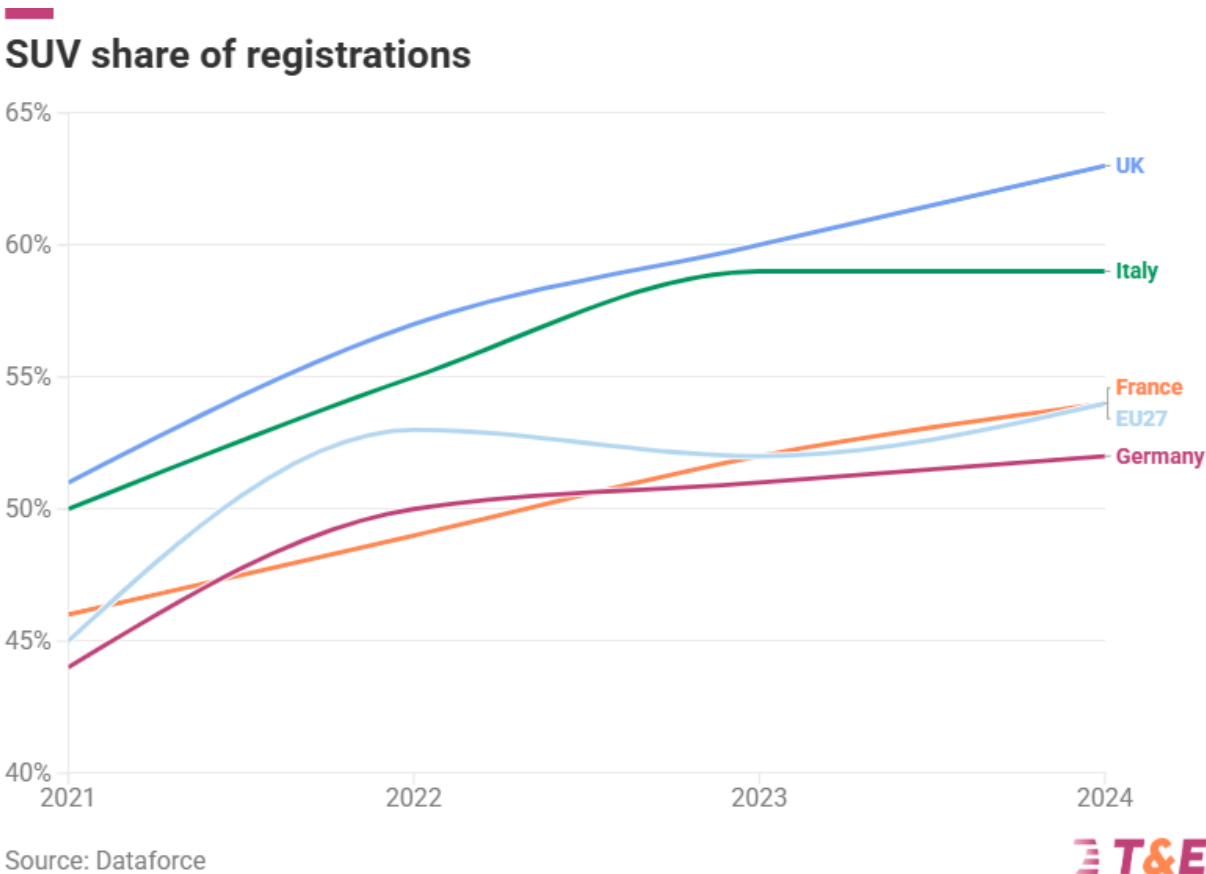
1. The size of cars in the UK are continuing to rise

Cars on the road are getting bigger. Vehicles are growing and the tendency to purchase larger vehicles is increasing. SUVs, models that are traditionally intended for off roading and rugged use, are now the most popular cars in the UK.

1.1 Growing in popularity

The UK disproportionately leads in sales of larger vehicles in Europe. In 2024, The UK accounted for 39% of all sales of SUVs with bonnets more than 1 metre high, despite accounting for just 15% of total new car sales in Europe⁷. For context, the bonnets of pick-up trucks average 106 cm, vehicles which are linked to greater collision severity and reduced vision. In comparison, a VW Golf has a bonnet height of 75cm.

SUVs have rapidly shifted from a niche category to the mainstream choice for British buyers. In 2021, they represented 50% of all new car registrations. By 2022, this had climbed to 57%, and in 2023 reached 60%, with growth recorded across all vehicle segments but most pronounced in luxury models. If this trajectory continues, projections suggest that by 2027 as many as three-quarters of all new cars sold in the UK could be SUVs⁸.



⁷ T&E UK (2025) [Ever-higher: the rise of bonnet height, and the case to cap it](#)

⁸ T&E UK (2024) [UK SUV sales have increased by more than a fifth in one year](#)

The surge is driven by the marketing and product portfolio strategies of manufacturers, who have invested heavily in expanding SUV line-ups at the expense of traditional hatchbacks and saloons such as the Ford Fiesta and VW Beetle as these large vehicles carry the largest profit margins. Driven by increased profit margins, larger vehicles increasingly set the design standard. Data has previously suggested that the vast majority of these vehicles are being driven in towns and cities, where the designs bring little to no practical use. Analysis has indicated that up to three quarters of SUVs were registered to urban homes⁹. According to the YouGov polling, 61% of UK passenger car owners agree that “SUVs take up too much space”, while only 19% disagree.¹⁰

This growing preference for bigger cars is reshaping the UK’s vehicle fleet profile more rapidly than in most European countries, concentrating the market in higher, heavier, and more imposing models at a pace that brings with it a number of negative consequences.

This growth is supported by the severe undertaxation of big cars. In the UK, 4 times more large D and E segment polluting SUVs are sold to private buyers than in France where larger vehicles are taxed more, in line with their societal and climate impacts.¹¹ Further to this, SUVs are increasingly the car of choice amongst corporate fleets which account for more than half of UK car sales. DVLA data from 2024 shows that 64% of all SUVs sold in the UK that year were purchased by businesses rather than private individuals.

1.2 Expanding in size

Cars being sold across the full market range in the UK are substantially increasing in size, with SUVs at the centre of this transformation. On average, cars are growing in width 1 cm every two years¹², in addition to bonnet heights also increasing by 1 cm each year over the past decade.¹³ This acceleration is largely driven by the increasing share of large SUVs on UK roads as well as SUV design features that have now become fashionable across most segments.

What is an SUV?

“A Sports Utility Vehicle ... is a type of car that sits high up, off the ground, and often has four-wheel drive ... [It] is also typically tall with lots of interior space and is generally built with mechanical parts that are specially designed for rugged use.”¹⁴

Autotrader

⁹ RAC Foundation (2021) [Majority of SUVs registered to urban homes](#)

¹⁰ CCC (2025) [1 million cars sold every year too big to park](#)

¹¹ Source: Dataforce

¹² T&E UK (2024) [Cars are getting too big for British roads](#)

¹³ T&E UK (2025) [Car bonnets becoming half centimetre higher every year, driving road danger fears](#)

¹⁴ Autotrader (2021) [What is an SUV?](#)

Legally, new cars in the UK can be up to 255 cm wide, the same maximum width as buses and trucks. With this trend in growth showing no sign of slowing and around 1.2 million cars sold each year being larger than the average UK parking space, unless action is taken large SUVs and pick-ups will continue to expand to the cap meant for 40 tonnes trucks and double decker buses.

The growth is stark among large and high-end models: the Land Rover Defender expanded by 20.6 cm in width in six years, the BMW X5 by 6 cm, and Volvo's new EX90 launched in 2023 with a 4.1 cm. This size inflation is not confined to just the luxury tier, with these stylings filtering down to midsize cars, pushing up widths and bonnet heights across the market..

1.3 The consequences of bigger vehicles

The rapid shift towards larger, heavier vehicles has measurable consequences for the UK's roads, public spaces and climate objectives. These vehicles impose wider costs on society through their physical footprint, safety risks, and environmental impact.

1.3.1 Increased danger to other road users

Crash data show that a 10 cm increase in vehicle front height increases the risk of pedestrian and cyclist fatalities by around 30%¹⁵. Higher bonnets worsen forward visibility, creating larger blind spots directly in front of vehicles, disproportionately endangering children crossing the road. Reviews of police reported crash data shows that being hit by an SUV increased the odds of fatality by 77% for children aged 0-18 years, and by 209% for children aged 0-9 years. There are also worse outcomes for adults and cyclists involved in SUV collisions¹⁶.

1.3.2 Disproportionate use of public space

The growth in average vehicle width is reducing the road space available for other vehicles and for cyclists who are given less room to cycle and maneuver on the roads. This squeeze effect is particularly acute on the UK's older, narrower streets, where lane widths and cycle infrastructure were never designed to accommodate vehicles approaching the width of buses and trucks as shown in the image below. This further reduces safety for other road users and discourages uptake of active mobility. Parked cars are also increasingly encroaching onto pavements, narrowing pedestrian routes. Around 1.2 million cars sold each year are larger than the average

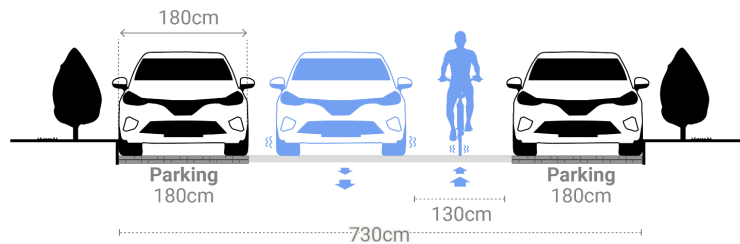
¹⁵ VIAS Institute (2023). [*Des voitures plus lourdes, plus hautes et plus puissantes pour une sécurité routière à deux vitesses?*](#)

¹⁶ Goodman, Edwards, Lavery (2025) Do Sports Utility Vehicles (SUVs) [Cause More Severe Injuries to Pedestrians and Cyclists than Passenger Cars, in the Case of a Crash?](#)

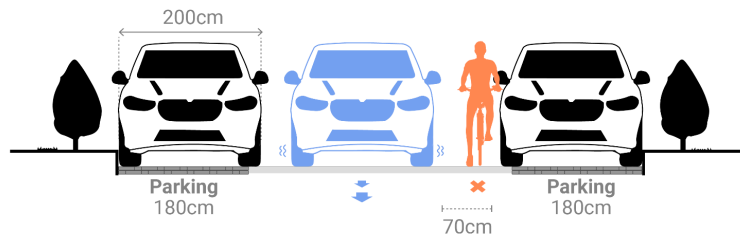
UK parking space¹⁷, making it harder to fit within existing infrastructure and intensifying congestion in urban areas.

Mega SUVs leave too little space for other road users

Average new car width: 180cm (200cm with mirrors)



Mega SUV width: 200cm (220cm with mirrors)



Source: T&E 2024. Notes: Image shows a residential street with cycling in both directions, one way for all other traffic, and parking for vehicles on both sides. A 730 cm width is frequently used for such streets in Europe.

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1.3.3 Increased Climate Impacts

SUV sales are dominated by high-emission models: 77% of UK SUV registrations are petrol, diesel, hybrid, or plug-in hybrid vehicles, which will remain in the fleet for the next 10-15 years¹⁸. On average, SUVs consume around 20% more oil than an average medium-size non-SUV car¹⁹. This entrenches higher average CO₂ emissions in the vehicle stock, making it harder to meet the UK's carbon budgets and limiting the impact made by progress towards electrification.

1.3.4 Impact on road wear

Studies suggest that vehicle mass has a direct and accumulative effect on road wear with larger vehicles having a greater impact on road abrasion. The European Environmental Agency estimating that a large car causes around 15% more road abrasion than a small vehicles²⁰. A two-tonne SUV causes 16 times more road damage than a one-tonne car, according the 'fourth power rule'²¹. Increased road abrasion accelerates the deterioration of road surfaces, increasing maintenance needs and associated costs. It has been estimated that the cost of bringing pothole-plagued local roads in England and Wales up to scratch is around £16.3bn.²²

¹⁷ Clean Cities Campaign (2025) [Rise of Carspreading](#)

¹⁸ T&E UK (2024) [UK SUV sales have increased by more than a fifth in one year](#)

¹⁹ IEA (2023) [As their sales continue to rise, SUVs' global CO2 emissions are nearing 1 billion tonnes](#)

²⁰ EEA (2024) [Road, tyre and brake wear](#)

²¹ [Road Damage Calculator](#) (2025)

²² Logistics UK (2024) [£16 billion pothole repair bill for England and Wales](#)

2. The UK is currently a tax haven for large SUVs

Cars in the UK are primarily taxed through Vehicle Excise Duty (VED), which has two components:

- A first-year rate (acquisition tax) payable when a new vehicle is registered
- An annual rate (ownership tax) payable from the second year onwards

The acquisition tax is currently based on a vehicle's official CO₂ emissions in grams per kilometer, measured under the official WLTP²³ test. As of April 2025, BEVs pay £10 in first-year VED, while PHEVs typically pay around £110. Even a large PHEV such as the Land Rover Discovery incurs only £130 in its first year.

PHEVs are the biggest tax loophole

PHEVs benefit disproportionately from this tax structure due to misleading official CO₂ figures. Official test data assumes high levels of electric driving that are rarely achieved in real-world use, leading to significant under-taxation. Data gathered by the European Commission of almost 3 million cars driving across Europe shows that real-world PHEV emissions are, on average, 3.5 times higher than official test values.²⁴

This emissions gap undermines climate targets, distorts the tax signal to consumers and means millions of loss revenue for the exchequer. For example, the BMW X5 PHEV officially emits 30g CO₂/km, but its real world emissions are 175 CO₂/km, a 486% increase.

2.1 Under taxed as well as oversold

Despite the increased economic burden that SUVs have on infrastructure and society, at present, large cars are severely undertaxed.

A UK driver buying a big polluting SUV like the BMW X5, costing around £85,000, pays just £3,200 in VED (3.8% of the cost of the car) compared to a driver in France paying £66,600 (78.2%). The majority of countries in Europe charge drivers more tax for these cars than the UK, according to recent T&E analysis as shown in the graph below. Low taxes on big cars explains why 4 times more large D and E segment polluting SUVs are sold to private buyers in the UK than in France²⁵.

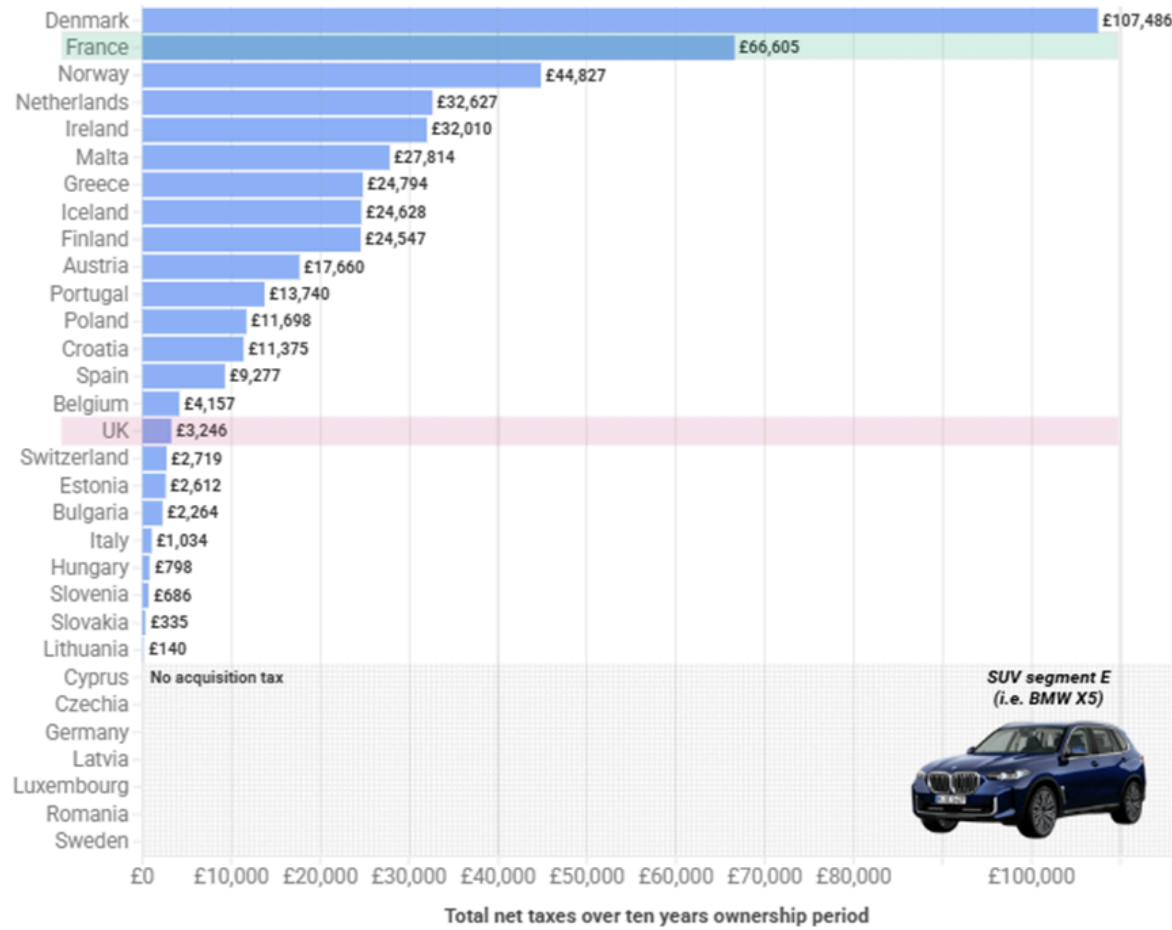
²³ Worldwide Harmonised Light Vehicles Test Procedure

²⁴ EEA (2023) [Real-world CO₂ emissions from cars and vans](#)

²⁵ Dataforce 2024

Honing in on the BMW X5 as an example, the tax paid on this model in the UK ranks 16th among European countries, and even doubling the current rate would move the UK up by just one position.

The UK VED tax is twenty times lower than in France for the purchase of a big SUV



Source: T&E analysis based on national fiscal sources as of April 2025.
Note: Figures have been converted from euros to pounds using exchange rates from the European Central Bank.

T&E

3. Tackling the undertaxation of large cars could raise almost £2 billion annually

3.1 Why tax weight?

Weight is an objective metric that is already declared by manufacturers at registration and that captures a vehicle's physical size, including width and length, and fairly targets the most oversized models.²⁶

The changes to VED that came into effect from April 2025, raising rates for higher-emission vehicles and widening the gap between zero-emission and ICE models, were welcome steps to support EV uptake. But VED remains a blunt tool for tackling the surge in large SUVs. Its CO₂ based structure misses many of the wider societal costs of heavy vehicles, particularly from PHEVs and BEVs, whose real-world emissions or infrastructure impacts are not fully priced in.

A weight-based levy would directly address these issues, fairly taxing the purchase of large SUVs that are more dangerous to other road users, more polluting, more resource-intensive, more damaging to roads, and more space-intensive. It would also apply fairly across all powertrains, ensuring large, luxurious electric SUVs contribute in line with their impact, while protecting smaller, everyday cars.

With the 2025 Autumn Budget approaching, a weight-based system offers a simple, transparent way to close the UK's severe undertaxation of large cars and generate a sustainable revenue stream to help plug the public finances gap.

3.2 The Large Vehicle Levy

T&E proposes the introduction of a Large Vehicle Levy as a supplement to VED on new vehicles.

The levy would impose a £10 per kilogram charge on all new vehicles exceeding the 1,600 kg weight threshold upon registration.²⁷

This threshold means the levy would not affect small and most medium-sized vehicles, instead focusing on the heaviest and most space-intensive models, particularly those in the luxury SUV segment. By setting the bar at 1,600 kg, the policy targets vehicles whose size and weight exceed most typical family cars, ensuring that the charge is proportionate and progressive.

²⁶ T&E UK (2025) [Ever-higher: the rise of bonnet height, and the case to cap it](#)

²⁷ Measured by kerb weight from vehicle Certificate of Conformity

The average weight of segment C ICE model types sold in the UK is just over 1,500 kg. This category typically covers 'medium family cars' and includes some of the most popular and recognisable models, such as the VW Golf and Ford Focus. Setting the threshold at 1,600 kg, is a fair way to ensure that mid-size non SUV models are largely unimpacted, but still captures those with over-sized SUV designs. This threshold is also the minimum used in France's weight tax which was introduced in 2023.

This flat rate offers a simple and transparent structure, making it easy for both consumers and industry to understand and factor into purchase decisions. It would be calculated using the manufacturer's officially declared kerb weight, a figure already reported and verified as part of the process for registering new vehicles in the UK. This avoids the need for new testing regimes and keeps administrative costs low while ensuring accurate and consistent application of the charge.

Introducing the levy would raise £1.72 billion annually.²⁸

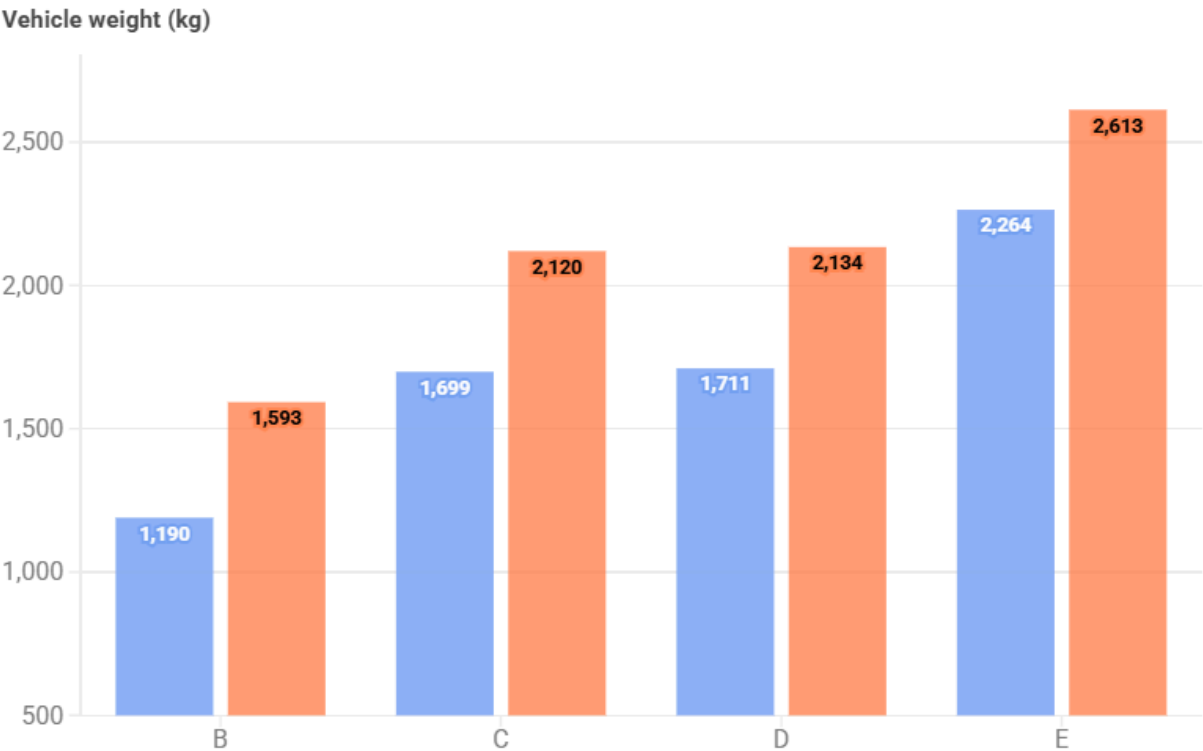
3.3 EV Allowance

For new BEVs, we recommend a 400 kg weight allowance to reflect the typical additional mass from battery packs compared to equivalent petrol or diesel models, setting the threshold for BEVs at 2,000 kg.

²⁸ When applied to 2024 registrations (DVLA)

Analysing comparable ICE and BEV models in the same vehicle segment shows a consistent 400kg or more weight differential

ICE model weight BEV equivalent weight



Vehicles used for each segment: B - Ford Fiesta - Honda E; C - Nissan Quashquai - Nissan Ariya; D - BMW 4 Series - BMW I4; E - Audi Q8 - Audi Q8 ETron



The allowance ensures that drivers are not discouraged from switching to electric vehicles purely due to added weight from current battery technology. It would still capture revenue from the larger and more luxurious models, while shielding smaller electric models from additional charges.

This approach helps maintain fairness by achieving parity between like-for-like models across different powertrains. The allowance level should be subject to periodic review, with a view to gradual reduction as battery technology advances and average EV weights decline. Energy density in EV batteries is expected to improve by 30% by 2035, enabling longer driving ranges without proportionally larger or heavier battery packs²⁹. To reduce vehicle costs it is likely that manufacturers will also reduce battery pack sizes in the future to deliver the same range as today but at lower battery cost. Periodic review will ensure that all vehicle types make an equitable contribution relative to their impact, while supporting the ongoing transition to cleaner transport.

²⁹ IEA (2024) [Global EV Outlook](#)



Additionally, with cheaper and smaller EVs already coming to the market in the coming years, consumers will have a growing choice of more affordable options. By 2027, over a twenty new small EV models priced at £25,000 or less will be available to the UK market.³⁰

Given the real world contribution of emissions and the small battery size of PHEVs (average 12-15 kWh compared to 60-80 kWh for BEVs³¹) they should not be eligible for this allowance as there is no significant weight differential driven by the battery and as mentioned PHEVs already benefit from significant tax loopholes.

3.4 Revenue split across different car types

This levy would raise revenue from all powertrains, ICE vehicles would be expected to generate the largest share (43%), followed by PHEVs (37%) and BEVs (20%), delivering a combined £1.72 billion annually. This approach ensures that all vehicle types, including heavier electric models, contribute fairly including to government expenditure on road upkeep and safety improvements. This is a significant revenue stream as in comparison, the £10 VED acquisition tax introduced on BEVs from April 2025 applied to the same period, would only raise £3.74 million in revenue.

Despite a comparatively low percentage of sales, PHEVs would be more significantly impacted as models are concentrated within larger and more luxury segments. In 2023, SUVs made up 74% of sales of all PHEVs in the UK.³²

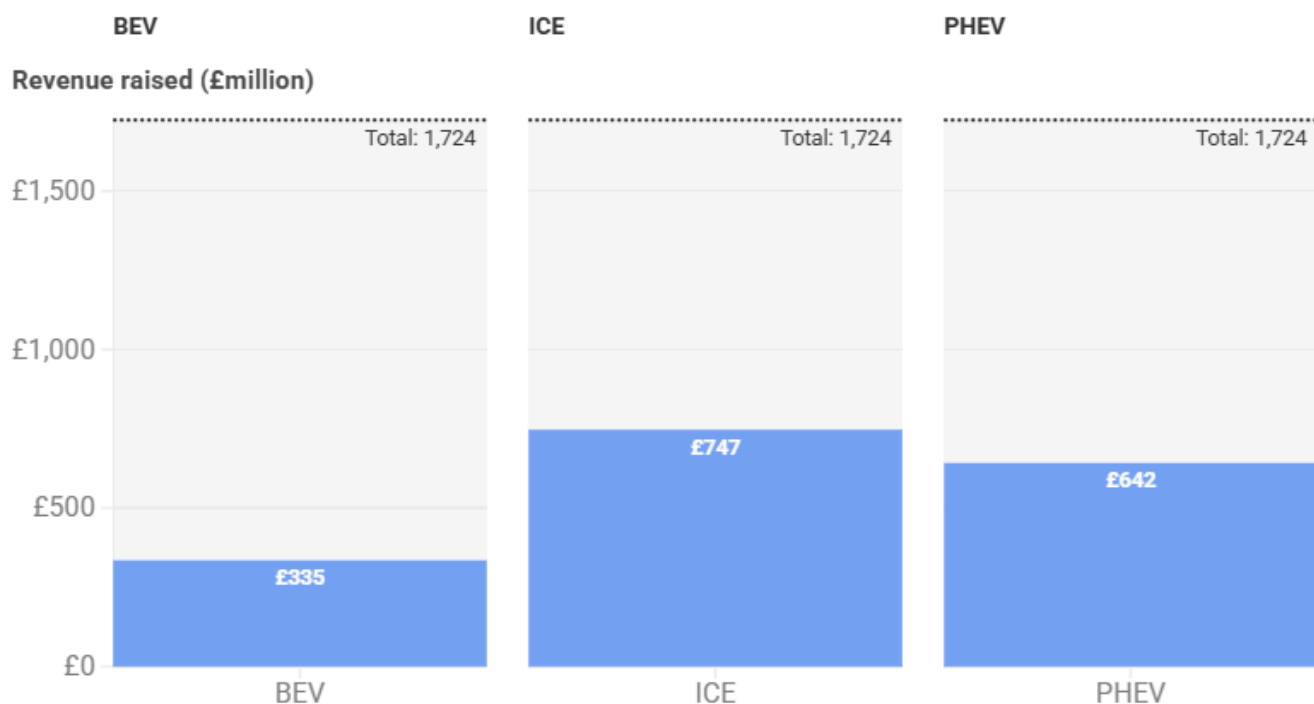
³⁰ T&E (2025) [EV Market](#)

³¹ IEA (2024) [Global EV Outlook](#)

³² T&E UK (2024) [What's happening with SUVs in the UK](#)

Substantial revenue would be raised from all car types

A £10/kg tax established in this manner would fairly introduce a new charge to vehicles regardless of their power train, targeting larger and luxury models



T&E

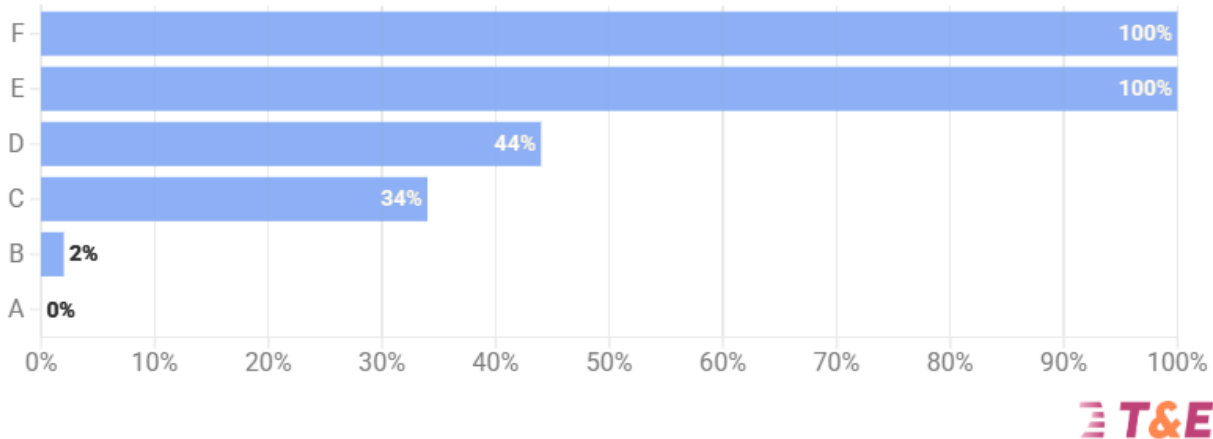
The proposed Large Vehicle Levy would almost exclusively affect the largest and most luxurious vehicles on the UK market. Every model in the F and E segments exceed the weight threshold, meaning all of these car types would incur the charge. The impact to the next two segments is limited, with 44% of D segment and 34% of C segment affected. All of those impacted in the mid-range C segment are either an SUV or PHEV model. The effect is negligible in the smallest categories with just 2% of B-segment (two PHEV SUV models) and none of the A-segment fall under the levy.

This distribution underscores the policy's targeted nature: it concentrates the cost on the heaviest, most space intensive vehicles, while leaving the vast majority of smaller, everyday models untouched.

Share of car models that would be impacted by this charge by segment

The Large Vehicle Levy targets the biggest and most luxurious vehicles sold in the UK

Vehicle Segment



3.5 Impact on specific car models

The following details how the levy would be applied to sample car types from segments B-E.

Model	Fuel type	Segment ³³	Weight (kg)	Large Vehicle Levy	Current VED	Starting price
BMW iX	BEV	E	2,561	£5,610	£10	£75,405
BMW X5	PHEV	E	2,505	£9,050	£110	£82,255
BMW X5	ICE	E	2,249	£6,490	£3,300	£73,430
Land Rover Defender	PHEV	D SUV	2,606	£10,060	£130	£65,915
Land Rover Defender	ICE	D SUV	2,354	£7,540	£5,490	£57,135
Nissan Leaf	BEV	C	1,613	£0	£10	£28,495

³³ Segments as defined by the European Commission

Nissan Ariya	BEV	C	2,120	£1,200	£10	£39,645
Ford Kuga	PHEV	C	1,848	£2,480	£110	£38,655
Ford Kuga	ICE	C	1,712	£1,120	£440	£32,365
MINI One	BEV	B	1,512	£0	£10	£26,905
MINI One	ICE	B	1,315	£0	£540	£25,265
Renault Captur	PHEV	B	1,628	£280	£110	£25,195
Ford Puma (UK's most popular car)	ICE	B	1,312	£0	£440	£26,580

The greatest financial burden is placed on the heaviest, most expensive models, while limiting the amounts placed on mid-range cars. For example, top of the range SUVs such as the BMW X5 and Land Rover Defender (ICE and PHEV models) would face significant additional costs relative to their weight and luxury positioning.

By contrast, mass-market cars in the C-segment, such as the Ford Kuga (the UK's best selling car) or the Nissan Ariya, see only modest increases, while smaller vehicles like the MINI One remain entirely exempt including completely exempt for the electric model. This creates a fairer, more progressive tax signal, targeting large, space-intensive vehicles.

3.6 Cost of the Levy is less than optional extras

When considering the additional cost of the levy relative to a vehicle's starting price, it is important to recognise that the additional tax is limited compared to the price of the vehicle and that buyers, especially those of higher-end models, often spend significantly more on optional extras. Manufacturers actively market add ons, and consumers frequently choose them, particularly in the premium segments.

Across the EU5 (UK, Germany, France, Spain and Italy), optional equipment accounts for an average of 18% of the retail price in segment E vehicles, compared with just 5% in segment C. In

2024, the average new car was purchased with around 2.8 optional extras.³⁴ For the BMW X5, a segment E vehicle, this may mean that the final price paid by the customer is around £86,467, up from £73,430. This constitutes around £13,000 in optional add-ons, compared to the £6,490 that would be charged under the Large Vehicle Levy.

Some single options can rival the scale of the proposed levy: for instance, an upgraded wheel rim package for a Range Rover Sport S can cost up to £5,400 (7% of the vehicle starting price), comparable to the levy that would apply to many large vehicles³⁵. This underlines that for luxury buyers, the levy would be a small addition relative to typical discretionary spending on upgrades, further supporting its fairness and feasibility.

Even for mid-range cars that are impacted by the levy, additional costs are commonplace. When looking at the Ford Kuga, the average cost of an upgrade between the different trim variations on offer comes to £2,270³⁶ (7% of the original starting price), double the additional levy cost.

3. Conclusions

By linking a levy directly to vehicle weight, the system would send a clear and consistent tax signal: the larger the vehicle, the greater the impact on road and parking space, other road users and infrastructure and therefore the greater the contribution to maintaining and improving the transport network. As well as contributing to closing the £51 billion budget shortfall, revenue could be reinvested in supporting uptake of compact EVs for those on low incomes, road repairs, safety improvements, and redesigning streets to better balance the needs of all users, helping offset the disproportionate impacts of large, luxury models on space, safety, and the environment.

A flat £10 per kilogram charge introduced above 1,600kg (with a 400kg EV allowance) would target the largest and most space-intensive vehicles, with minimal or no impact on the majority of everyday cars. This simple, transparent approach, raising £1.72 billion, would be applied fairly across all fuel types. In doing so, it would not only secure a sustainable revenue stream but also make UK roads safer, fairer, and better suited to the needs of the future.

³⁴ JATO (2024) [Unlocking hidden revenue](#)

³⁵ [Range Rover](#) (2025)

³⁶ Ford (2025) [Ford Kuga](#)

Further information

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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