

Written evidence submitted by RAC Motoring Services (EVP0013)

About the RAC

The RAC provides complete peace of mind to 12 million UK private and business drivers, whatever their motoring needs. We provide breakdown assistance, with a 1,600-strong branded patrol workforce attending more than two million breakdowns every year, fixing on average four out of five vehicles at the roadside.

Additional products include insurance, a used car buying website, vehicle inspections and checks, legal services or up-to-the-minute traffic and travel information.

The RAC also works to support the interests of its members and UK drivers on the most important motoring issues which it identifies via the annual RAC Report on Motoring and the RAC Opinion Panel. The Report on Motoring is the longest running analysis of driver opinion in the UK having been published every year since 1989. The 2020 RAC Report on Motoring can be found [here](#). The Report is based upon a survey of a representative sample of 3,068 drivers in the UK. The RAC website can be found at www.rac.co.uk.

Response to call for evidence:

The Transport Committee will hold an inquiry into the implications of accelerating the shift to zero emissions vehicles and the potential for introducing road pricing, or pay-as-you-drive, schemes. We would welcome written evidence on the following matters:

Part 1: Accelerating the shift to zero emission vehicles

The feasibility, opportunities, and challenges presented by the acceleration of the ban of the sale of new petrol and diesel vehicles to 2030;

The ban on the sale of petrol and diesel cars and vans is a welcome step towards reducing emissions in the road transport sector, and the RAC fully supports efforts to do this. Our response looks carefully at the feasibility, opportunities and challenges from the point of view of drivers:

Feasibility:

- We believe this is more a question for manufacturers as the impact will be most felt on their production lines and supply chains.
- We would also encourage the Committee to engage with electricity suppliers and others involved in the energy sector to understand the feasibility of demand on grid capacity and the role that smart charging will play.

Opportunities

- **More electric vehicles on the market more quickly:** Bringing forward the ban on the sale of new petrol and diesel cars and vans should in theory accelerate the availability of more competitively priced new electric vehicles on the market. The RAC's 2020 Report on Motoring research¹ shows that 64% of drivers agree that

manufacturers need to offer more variety of electric vehicles before they will consider purchasing one.

- **Greater availability of EVs on the second-hand market:** Bringing forward the date should not only increase the choice of new electric vehicles, it should also improve the availability of EVs on the second-hand market, something which is vital to many consumers who cannot afford or justifying buying a brand new car.
- **Reduce emissions more quickly:** The environmental and health benefits are likely to be accelerated, however much will depend on how quickly drivers opt for an electric vehicle over an equivalent conventionally powered vehicle.

Challenges

- **Cautious take-up:** The 2020 RAC Report on Motoring showed that upfront cost, a desire for greater range on a single charge and access to charging (either at home or publicly) are likely to be the biggest barriers to encourage mass take-up of electric vehicles. Though almost one-in-10 (9%) of drivers said they will opt for an electric vehicle as their next choice, our research found that drivers would like a minimum range of 375 miles on average, which is not currently viable unless they purchase one of the most expensive models. More than three-quarters (78%) agree electric vehicles are still too expensive compared to similarly sized conventional vehicles, with nearly half (48%) believing the Government should incentivise EV take-up by offering some form of scrappage scheme. More than a third (36%) say the Government should abolish VAT on electric vehicles and 30% saying they should increase the current plug-in car grant. More than four-in-10 drivers believe the Government should commit to a national target for the installation of electric charge points, this perhaps indicating this could reduce concerns about running out of charge when on the road.
- **Practical issues for consumers:** There are concerns about access to home charging, particularly for those without off-street parking, potential confusion about different connection types for charging, alongside the fact that some models are not compatible with certain charging speeds. In addition, there are multiple and different types of tariffs and pricing platforms, and drivers may also be concerned about the speed and reliability of public charging when on long-distance journeys and being able to access up-to-date information on charge point availability. Presently, owners of conventional vehicles can simply refuel quickly, have clear and transparent pricing, and only have to worry about misfuelling, which is a comparatively rare occurrence. We have also been contacted by a number of RAC members who have suffered damage to their vehicles' high-voltage batteries with electrical surges when charging at home. We believe this is something that needs to be looked at to ensure that more vehicles are not damaged and if they are consumers have some form of redress.
- **Practical challenges for some businesses:** For the breakdown sector and for other sectors, there is concern about a lack of practical alternatives to diesel-powered vans. For example, when we are unable to fix a vehicle at roadside, our patrol vans are able to tow vehicles home or to a garage. As yet our technical team has not been able to identify an electric van that has anywhere near the capacity of a diesel-powered van to be able to tow a broken-down vehicle the distances we require without greatly

reducing the range of the battery. This is not currently viable for our business as it would negatively impact overall service for our customers.

The actions required by Government and private operators to encourage greater uptake of electric vehicles and the infrastructure required to support them;

Given our messages above, we believe focus should be on the following areas:

Lack of on-street and home charging: The Government and the industry could look at local fast-charging hubs, which allows residents who don't have access to off-street parking to quickly charge up their batteries. In addition to this, local authorities should look carefully at how they can convert existing lamp posts into dual street lighting and chargepoints. There is an example of where this has already happened in East London².

Renters and leaseholders: The Government should look at whether current planning laws are adequate and, if not, should amend them to allow leaseholders and renters the right to require their landlord or freeholder to install home charging points.

Charge point reliability: We would encourage charge point operators to establish a database where a 'live status' can be relayed to drivers in their vehicles or via their apps to understand where the nearest working and available public charge point is. Unfortunately, our patrols have attended EV customers who have made it to a charge point only to discover that it is out of order.

Different connector types: Due to there being an increasing number of electric vehicle models with so many different connectors and charging requirements, we believe there may be confusion among consumers about which charge points their vehicle is able to use and is compatible with. There is a need for greater standardisation to reduce the confusion which may hinder mass take-up. Manufacturers will be able to provide greater clarity here.

Rapid charging points: We believe it is important for the Government to commit to a national target of ultra-rapid public charge points on the strategic road network and on other major routes. This will give drivers greater confidence to go electric knowing that they will quickly and easily be able to recharge their vehicle when making a longer journey.

Pricing of public charging: We believe it is important that buyers of electric vehicles have access to as much impartial information as possible about how they wish to charge their vehicles and what would give them best value for money. In the same way owners of petrol and diesel vehicles can clearly see a 'pence per litre' cost, we feel there should be a standardised approach for charging electric vehicles, for example 'pence per kw/h'. We also think it would be helpful if this were displayed on a charge point or, in the case of larger charging forecourts, on totems outside for all to see.

Stimulating demand: While there has been encouraging growth in the electric vehicle market even in 2020³, our research demonstrates that comparative upfront costs remain a barrier to mass take-up. We would encourage the Treasury to look at a number of options available to stimulate demand. Firstly, they may choose to increase support through the plug-in car grant which is an established system which fairly provides incentives to make EVs more affordable. The Government may also wish to introduce a scrappage scheme to encourage drivers of certain more polluting vehicles to buy an electric vehicle. A targeted

scheme like this could make the cost more affordable to the Treasury rather than a blanket national scrappage scheme.

The Government could either cut or scrap VAT on the purchase of new electric vehicles, however this is likely to most benefit wealthier drivers who are likely to already be able to afford a high-end electric vehicle. The key to incentives should be to focus on stimulating mass-market adoption of EVs.

The particular challenges around decarbonising buses and how these should be addressed;

The RAC cannot respond in detail, however we encourage a switch to electric buses as rapidly as possible. Evidence⁴ shows buses tend to emit higher average amounts of NOx per vehicle than any other vehicle type.

As buses tend to follow the same daily routes, vehicle charging should be easier to schedule.

The Government's ambition to phase out the sale of new diesel heavy goods vehicles, including the scope to use hydrogen as an alternative fuel.

We point you to some of the practical issues we raised with electric vehicles (in the case of the breakdown sector regarding the capacity to tow without drastically reducing range) and accept that hydrogen may provide a more feasible solution for these vehicles.

Part 2: Road pricing

The case for introducing some form of road pricing and the economic, fiscal, environmental and social impacts of doing so;

- **Economic and fiscal:** In 2019/20, the Government's income from fuel duty revenues was around £27bn⁵. While income is forecast to exceed £30bn by 2022-23⁶, the longer-term picture is for fuel duty revenues to fall substantially as the vehicle parc becomes increasingly electric. Therefore, an alternative means of taxing drivers is inevitable, otherwise the Government will substantially lose tax revenue.
- **Environmental:** Introducing a new system, perhaps modelled on the pay-per-mile principle is likely to encourage drivers to think more carefully about the types of journeys they take. We detail findings from the 2019 RAC Report on Motoring below in our evidence but there is some agreement that a 'pay per mile' system would encourage drivers to think more carefully about the types of journeys they make and could mean fewer short journeys, thus reducing congestion from car journeys of less than two miles.
- **Social impacts:** This aspect is more difficult to assess. A new system which taxes on use is likely to increase transparency for drivers but any such move should come with a government 'contract' with drivers that what they pay in tax will at least partially be reinvested back into road and transport infrastructure.

Which particular road pricing or pay-as-you-drive schemes would be most appropriate for the UK context and the practicalities of implementing such schemes;

There are schemes which have been written, most notably Miles Better⁷, the 2017 Wolfson Economics Prize winner by Gergely Raccuja, which had input from the RAC Foundation. The scheme would see “a single per-mile charge, the rate of which would depend on your vehicle’s weight (hence taking into account the damage it does to the road) and its tailpipe emissions.” The tax would be collected by insurers. Under the system after every £100 of tax drivers pay, £20 would be guaranteed for road spending. We believe it is important to recognise that the existing fuel duty scheme is in essence a tax on the number of miles driven, the only variable being the fuel efficiency of each driver’s vehicle. This automatically taxes drivers of vehicles that use the most fuel more heavily while those who drive more fuel-efficient vehicles pay less.

The RAC believes that a movement towards a road pricing (in this instance ‘per mile system’) scheme should be underpinned by certain principles:

1. **The IT infrastructure** background that can register, manage and collect duties from drivers on an annual basis. This could be the responsibility of the DVLA (or insurers as suggested in Miles Better). This system would receive data – either when a vehicle is due its MOT or at an approved garage – of the mileage drivers have undertaken that year. In the future, as even more cars are manufactured with telematics devices built-in, these could be linked to such a system so that mileage data would be automatically submitted to the system, dispensing with the requirement for manual submission). Currently, external telematics devices can be plugged into vehicles on-board diagnostics port but these would be vulnerable to tampering.
2. The Government would have to be very clear on how they plan on **calculating taxation**. This would likely be based on miles travelled, weight of vehicle and emissions. The latter would eventually be replaced by an annual ‘registration fee’ as the vehicle parc becomes increasingly zero-emission. Ministers may also consider some routes or roads as meriting a higher ‘per mile charge’ to manage congestion but this is likely to impact on those living in more densely populated areas and may not be popular.
3. There would need to be a **transition period**. This could possibly begin with some fleets which would be best set-up for such a scheme. They would receive a 100% discount on fuel duty and other road pricing schemes (such as the Congestion Charge) while the system is embedded. The Government would then need to mandate a requirement for all new vehicles sold to include an in-built telematics device which will eventually filter down to the used market.
4. **Fairness:** Such a scheme should demonstrate that the majority of drivers will be no worse off than previously. Opposition to such a scheme will be based upon a perception that this is a stealthy way to increase revenue from drivers. To that effect, there should be no net fiscal benefit when the scheme launches nationally. Any new system would have to be introduced to replace the current system – vehicle excise duty and fuel duty – in its entirety and not operated as well as those taxes.
5. **Re-investment:** A proportion of revenues should be spent on improving the road network. There is a common perception among drivers that the roads they use represent poor value for money for motoring-related taxation they pay each year. Ring-fencing revenues will create a new level of transparency between drivers and the Government.

We believe that it is now time for the Government to commit to a road pricing taskforce, with help from the industry and road user groups such as the RAC, to establish a framework for a new scheme.

The level of public support for road pricing and how the views of the public need to be considered in the development of any road pricing scheme;

The RAC published in-depth research on the principles of a ‘pay per mile’ scheme within our 2019 RAC Report on Motoring. In the survey of 1,763 drivers, we found the following:

- 43% of people agree that a pay-per-mile system would be fairer than the current fuel duty system
- Almost half (49%) of people agree with the principle “the more you drive, the more tax you should pay”.

In relation to some of the more specific or controversial aspects that might make up a road pricing scheme, we found the following:

Statement	Net agree	Net disagree
I am worried the Government will use a ‘pay per mile’ system to increase amount motorists are charged	75%	7%
Money raised from a new ‘pay per mile’ system should be solely reinvested into the road network	67%	8%
A vehicle with lower emissions should pay a reduced ‘per mile’ rate	60%	15%
I would be happy to have a device in my vehicle ensure I pay the right amount of tax	48%	28%
A variable charge by road type would encourage me to use minor roads	44%	19%
A ‘pay per mile’ system would make me consider cutting out short vehicle journeys	43%	27%
A ‘pay per mile’ system would reduce congestion	38%	30%

I would be happy to pay a higher rate per mile to drive in peak periods	33%	40%
---	-----	-----

The lessons to be learned from other countries who are seeking to decarbonise road transport and/or utilise forms of road pricing.

Norway is often cited as a country where electric vehicle take-up is far ahead than the rest of the world. In Norway, the Government has implemented the following policies⁸:

- No purchase/import taxes (1990-)
- Exemption from 25% VAT on purchase (2001-)
- No annual road tax (1996-)
- No charges on toll roads or ferries (1997- 2017).
- Maximum 50% of the total amount on ferry fares for electric vehicles (2018-)
- Maximum 50% of the total amount on toll roads (2019)
- Free municipal parking (1999- 2017)
- Parking fee for EVs was introduced locally with an upper limit of a maximum 50% of the full price (2018-)
- Access to bus lanes (2005-).
- New rules allow local authorities to limit the access to only include EVs that carry one or more passengers (2016)
- 50 % reduced company car tax (2000-2018).
- Company car tax reduction reduced to 40% (2018-)
- Exemption from 25% VAT on leasing (2015)
- Fiscal compensation for the scrapping of fossil vans when converting to a zero-emission van (2018)
- Allowing holders of driver licence class B to drive electric vans class C1 (light lorries) up to 4250 kg (2019)

Of these policies, the UK Government has implemented no annual road tax and reduced company car tax rates. The introduction of green number plates in 2020, however gives local authorities scope to offer incentives such as reduced parking rates, access to enforced bus lanes and other local ‘perks’.

On road pricing, this arguably already exists in the UK. The London Congestion Charge is a form of road pricing, though the flat rate which is levied does not take into consideration the number of miles a vehicle does, which arguably makes it less fair than a ‘per mile’ charge.

February 2021

Endnotes

¹ <https://www.rac.co.uk/drive/features/report-on-motoring-2020/>

² <https://www.fleeteurope.com/en/new-energies/europe/analysis/1300-street-lights-converted-ev-chargers->

[london?a=JMA06&t%5B0%5D=Siemens&t%5B1%5D=Ubitricity&t%5B2%5D=electric%20vehicle&t%5B3%5D=charging%20infrastructure&t%5B4%5D=London&curl=1](https://www.gov.uk/government/news/charging-infrastructure-london)

³ <https://www.smmr.co.uk/vehicle-data/evs-and-afvs-registrations/>

⁴

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/633270/air-quality-plan-detail.pdf (Figure 4)

⁵ <https://www.gov.uk/government/statistics/hydrocarbon-oils-bulletin>

⁶

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/871799/Budget_2020_Web_Accessible_Complete.pdf

⁷ <https://www.racfoundation.org/research/economy/racf-contributes-to-winning-wolfson-prize-entry-economics-2017>

⁸ [https://elbil.no/english/norwegian-ev-](https://elbil.no/english/norwegian-ev-policy/#:~:text=The%20Norwegian%20Parliament%20has%20decided,54%20%25%20market%20share%20in%202020.)

[policy/#:~:text=The%20Norwegian%20Parliament%20has%20decided,54%20%25%20market%20share%20in%202020.](https://elbil.no/english/norwegian-ev-policy/#:~:text=The%20Norwegian%20Parliament%20has%20decided,54%20%25%20market%20share%20in%202020.)