

Written evidence submitted by SMMT (EVP0136)

Introduction and Sector Overview

1. The Society of Motor Manufacturers and Traders (SMMT) is one of the largest and most influential trade associations in the UK. It supports the interests of the UK automotive industry at home and abroad, promoting the industry to government, stakeholders and the media. The automotive industry is a vital part of the UK economy accounting for £78.9 billion turnover, £15.3 billion value added and invests more than £3 billion each year in automotive R&D. With some 180,000 people employed directly in manufacturing and 864,000 across the wider automotive industry, it accounts for 13% of total UK exports with over 150 countries importing UK produced vehicles, generating more than £100 billion of trade. More than 30 manufacturers build more than 70 models of vehicle in the UK supported by over 2,500 component providers and some of the world's most skilled engineers.
2. The UK automotive industry is committed to supporting the transition to low and ultimately zero emission vehicles and welcomes the Committee's forward-looking inquiry. SMMT has made a number of recent calls to Government for greater, and longer-term certainty on, incentivisation of these vehicles using existing fiscal measures such as Vehicle Excise Duty (VED) and a tax-free approach, and also giving certainty for the Plug-In Vehicle Grants. Furthermore in response to the government's 2020 consultation on the end-of-sale date for petrol, diesel and hybrid cars and vans, we set out the key joint actions, between government, industry, recharging companies, the energy supply sector and of course consumers to deliver on ambitions. It is essential the key mechanisms can deliver a timely and effective market and industry transformation, for a thriving and diverse UK vehicle market as well as industrial transformation, resilient supply-chains and securing UK automotive jobs, noting there are currently 180,000 in manufacturing roles and 864,00 jobs in total, in communities across the UK reliant on the sector.
3. Such market transformation to new technologies does not and will not happen overnight, we have seen substantive market development in recent years, with zero-emission vehicle (ZEV) registrations rising by 185.9% in 2020 to take a record 6.6% market share – but those 2020 volumes represent over half of all ZEVs registered in the past 20 years. In 2019 ZEVs accounted for just 0.3% of the 35 million cars in use on the roads. The consumer journey will take time. The impact of these ZEVs becoming more prevalent in the vehicle fleet and hence impacting on government emission-based revenues is a number of years away, however, it is right now to begin to consider the implications and look at future fiscal regimes and options. During the transitional phase with an already sensitive market we must ensure that zero emission vehicles are not, or are not even perceived as, being disincentivised in any way and risk undermining the market or net zero ambitions. Ultimately, we believe the shape of any road pricing or fiscal regime will depend largely on the reasons for fiscal burden, eg if it is purely revenue raising or instead trying to influence consumer behaviour in some way. The more tailored the new fiscal scheme is to changing specific behaviours, the more complex and costly it is likely to be. It is also important that any scheme is designed to reflect the wide scope of vehicles and technologies in use on our roads, not just cars, such as vans, lorries and coaches, and that any new regime considers such vehicles from the outset and not as an afterthought.

4. SMMT's response sets out its position on accelerating the uptake of zero emission vehicles and considerations for any road pricing scheme.

SMMT Position on the accelerating the uptake of zero emission vehicles

5. Designing, developing, investing and bringing to market vehicles with ever lower emissions is an absolute priority for the global automotive industry. While all classes of car have reduced emissions by at least a third since 2000, one of the biggest reductions was achieved in dual purpose cars (-48.8%), aided by increased availability of battery electric vehicles (BEV) and other low emission models. Around 30% of dual purpose vehicles are now zero emission-capable, demonstrating their vital role in helping to reduce overall CO₂ emissions. Latest SMMT analysis shows that 2020 recorded the largest ever fall in average car CO₂ emissions, spurred on by increased uptake of BEV, plug-in hybrid electric vehicles (PHEV) and hybrid electric vehicles (HEVs) which accounted for almost one in six new car registrations. In fact, more than half of all BEVs registered in the past two decades were registered in 2020 alone. Combined with ongoing improvements to petrol and diesel engines, average vehicle CO₂ emissions dropped to 112.8g/km – a reduction of -11.8% compared to 2019 and -37.7% compared to 2000. There can be no let-up in the pace of environmental improvement, however, as the industry must achieve a UK-only CO₂ fleet average target of 95g/km this year or face severe penalties.
6. We are in a critical decade for the development of zero emission technologies, vehicles, markets and infrastructure. Government's Ten Point Plan for a Green Industrial Revolution, announced in November 2020, set out the UK commitment to bring forward the end-of-sale of diesel and petrol cars and vans to 2030. The scale of the ambition and challenge for the automotive sector is substantial. This is amongst the most ambitious targets set globally and must be matched by a world-class package of measures. Market incentives must enable the UK to take the lion's share of EV production volumes, infrastructure must put to rest consumers' fears of unavailable and unreliable charging and we must ensure a refreshed UK industrial strategy delivers the battery manufacturing investment and supply chain transformation that makes this transition "made in the UK". We must make sure the UK is globally competitive in its market support and business environment, and the strategy is developed and delivered with the utmost urgency.
7. For UK manufacturing, it is clear that the urgency to deliver UK battery capability and capacity at scale must be accelerated. Similarly, increased consumer uptake of these vehicles in the UK domestic market is essential and we require other sectors to match our own industry's commitment to electrification. SMMT will continue to work with Government on the detail of a strategy to deliver a successful, rapid transition that benefits all of society and safeguards automotive manufacturing today and in the future. Delivery of the Automotive Transformation Fund, in addition to a minimum eight giga-factories by 2040, is critical, but we need to break ground on these urgently if the 2030 ambitions are to be realised. As well as supporting mass manufacturing, we must also support small volume manufacturers and specialist vehicle builders, with pilot facilities to support specialist battery development production, as well as ensuring wider supply-chain support for powertrain development and battery assembly. We also support project funding worth £375 million for the Advanced Propulsion Centre (APC), building on the progress already achieved by the

APC. These are crucial for the future of the supply chain for power electronics, electric motors and drives (PEMD), which is also a critical factor that can influence a decision to locate ULEV production.

8. UK automotive is at the forefront of the transition to net-zero and decarbonisation, but it has to date largely been driven by fleets (70% of growth in battery electric vehicles in 2020 came from large fleets). This must extend to a focus on the private consumer in 2021, to ensure mass market electrification continues. The announcement of the end-of-sale date for petrol and diesel engine vehicles as 2030 and hybrids in 2035 (all subject to further consultation) is welcome clarity but delivering this as a market and production base is critical and requires a steep trajectory. The consumer is critical and we welcome confirmation of continued plug-in vehicle incentives but, if the UK is to be the most competitive market and attract a greater share of production volumes, we need an enhanced incentive on a longer-term basis, as well as the removal of the price cap to maximise the opportunity. SMMT supports the tax-free treatment of ultra-low emission vehicles – namely being subject to no VAT, no VED, no company car tax or insurance premium tax for a suitable period of time, eg six years (two buying cycles). This would send the right message to consumers, manufacturers and retailers alike.
9. It will be necessary to develop a holistic infrastructure strategy that ensures adequate vehicle charging is delivered in each part of the network, with the appropriate mix of charge points in the right locations – home (on and off-street parking), workplace, depot, destination, motorway and strategic road network. Recent funding announcements are welcome but must be both increased and accelerated to meet ambitions. Public investment in the Plugged-in Places dating back to 2011 was a catalyst to the proliferation of an embryonic network of public chargepoints. Neither historic nor recently committed public funding is enough to support the delivery of additional on-street chargepoints, particularly for residents who are unable to have a dedicated private wallbox or charge off-street, required to meet the Government's ambition to end the sale of petrol and diesel cars and vans by 2030.
10. Latest SMMT analysis illustrates the potential number of chargepoints required to support government policy means 9.18 million chargepoints of all types are needed by 2030 including 1.95 million on-street 7-22kW public chargepoints, to serve the needs of those without off-street parking. This analysis is based on today's charging behaviour according to current consumer preference and prevailing charging models. Government must consider all use cases and vehicle types in their proposed charging infrastructure strategy. We welcome the extension of Project Rapid to include the Strategic Road Network and ask that other distribution network bottlenecks be included as a priority. The Electric Vehicle Homecharge Scheme, Workplace Charging Scheme and On-street Residential Chargepoint Schemes should be maintained, enhanced and extended.
11. Specifically, on hydrogen, government must urgently bring forward in partnership with industry the national hydrogen strategy complete with ambitious funding, competitive when compared to support elsewhere in Europe. Hydrogen as a zero-emission technology will be important for larger, heavier vehicles, such as trucks and buses, as well as cars and vans.

12. The move to decarbonise vehicle fleets and manufacturing processes is expected to see a significant uplift in electricity use (Government's itself recognises this in its recent Energy White Paper says demand could double to 2050). Government must therefore ensure there is an abundant supply of low-carbon electricity available at a cost that is comparable to other automotive manufacturing destinations. We welcome government's plans to transition to clean energy by 2050, but it needs to be accelerated so that is in advance of the switch of new vehicle fleets to zero emissions by 2035, and we further recognise the CCC ambition for zero carbon electricity production by 2035. Clean energy sources must be reliable, stable, and competitively priced, with costs fairly apportioned to support businesses and consumers through this transformational period. It must also be accompanied by a massive uplift in regional and rural energy infrastructure and vehicle recharging provision.
13. Achieving zero tailpipe emissions in the heavy vehicle sector remains a significant challenge. Government policy and strategy needs to recognise the unique role and operation of the heavy goods vehicle (HGV) sector. Decarbonisation of HGVs requires a specialised approach and should not simply follow the approach taken with cars and vans.
14. Whilst the current model range of zero tailpipe emissions HGVs remains limited at this time in the medium and heavy-duty categories, the industry is developing a wide range so low and zero emission products. The main barriers to uptake remain increased vehicle cost, limited zero emission range and the weight-payload trade-off of alternative fuel powertrains. The wide diversity and operating dynamics of vehicles within this sector, means that no one technology currently offers the breakthrough necessary to remove the reliance on conventionally powered vehicles (i.e. there is no silver bullet).
15. Therefore, a phased transition that allows manufacturers to develop new products and supports operators to introduce new technology into their fleet without raising costs for consumers is essential. To enable a battery electric vehicle (BEV) solution for the very largest and heaviest commercial vehicles, further breakthroughs in battery technology will be needed to provide the necessary vehicle range that is affordable to the consumer. Similarly, hydrogen solutions are also being developed, but also face barriers, notably around high product costs and availability of fuel and infrastructure. SMMT would continue to support fuel and technology neutrality whilst technology advancements are being sought. We would also not wish to see diesel HGVs penalised during this period, as this risks slowing the pace of fleet renewal and adding to the general cost of doing business in the UK.
16. On buses, it is key that we unlock the funds that government has already announced to accelerate the shift to zero emission buses, that this pot is adequate and also sees a National Bus Strategy with a clear vision of the importance of this sector. The committed funds need to be spent immediately to not only support the trial and uptake of such vehicles but also ensure the businesses that make them in the UK can survive the current crisis of the pandemic, which has seen bus ridership and so new registrations and demand temporarily cut significantly. Bus manufacturers are ready and keen to provide a full spectrum of technologies, recently several electric and hydrogen buses have also been developed and brought to market, but more fiscal support to local authorities and bus operators is necessary. The grid connections at

depots are also very expensive, especially if grid upgrades are required, and so significant help with this issue is also required. This also follows for HGV operators and strategically placed truck rest stops.

17. SMMT notes the Committee's use of the word 'ban' in the end of sale date, yet it is unclear precisely how this will translate into a legal reality. We welcome dialogue with government on this. It is also unclear how uptake of technologies, such as efuels from hydro, which have no tail-pipe emissions, but readily use a conventional internal combustion engine, will be treated. Terms like 'bans' also create confusion for consumers and could potentially slow demand for transitional technologies which could be very important for delivering environmental improvements in the here and now, whilst several consumers are still undecided about making the transition to a full zero-emission solution.

SMMT Position on road pricing or pay-as-you drive schemes

Early considerations

18. SMMT believes a longer-term comprehensive study needs to be undertaken into this area. In this paper we have set out views on some of the considerations which need to be taken into account in that study. This is clearly an evolving and untested policy area and issue, and one that needs careful consideration and consultation. Furthermore, this should be considered now but developed properly overtime, this is ever more important and realistic given the status of the ZEV market, limited revenue impact anticipated for some time and the current crisis conditions impacting government and lives across the UK, We would also look to ensure that ZEVs are not penalised, and indeed this should not be considered, until such time as the market is developed and in no way undermined. ZEVs currently do face higher up-front purchase costs than internal combustion engine (ICE) equivalents but benefit from having lower running costs – in part because of the very high taxes on fuel, and any move to shift this dynamic could undermine the uptake of ZEVs.
19. Fuel duty is often considered as a very good example of the polluter pays principle – the more a vehicle is driven the higher the fuel use and so is the cost. Similarly, driving in peak times incurs congestion and so higher fuel use and driving style can also greatly influence it. Vehicle excise duty (VED), as well as company car tax (BIK) and 1st year capital allowances (CA), are examples of taxes based on a vehicle's CO₂ emissions (noting for cars registered pre-March 2001 and for commercial vehicles, VED is not CO₂ based – for cars registered from April 2018 onwards once they have been first registered, a flat rate VED fee then applies each year subsequently). VED revenues are ring-fenced to pay for the roads, whilst other taxes simply go into the general pot.
20. Motoring taxes amount to over £50 billion per annum (noting 2020 might be lower given Covid impacts on restricted vehicle use and sales). This includes over £40 billion which is somehow related to a vehicle's efficiency – with some £28 billion from fuel duty, over £5.5 billion in VAT on fuel duty, £7 billion from VED and over £2.5 billion on BIK related to company vehicles.

21. As vehicles move to zero emissions this will have an impact on these revenues. However, it is likely to take a number of years, if not at least a decade, before ZEVs are really impactful in the fleet and so the government revenues. Whilst Government will rightly have undertaken modelling work on this, and whilst the recent uplift in new ZEV registrations is impressive, the outlook remains very dependent on multiple issues and supportive factors, notably product, infrastructure and consumer demand – all of which, as forementioned, can be influenced by government policies. SMMT believes there is considerable merit in a joint-working group between industry and key stakeholders in order to ensure this modelling work gets the best inputs and a common pathway could be broadly established.
22. SMMT believes introducing an additional tax on ZEVs at present would be counterproductive, risking destabilising this market. Through fuel duty we currently have a system that encourages this transition, moving too early risks undermining the transition. However, it is right to begin the dialogue on the options that could exist for an alternative to fuel duty, VED and BIK. SMMT would support the development of government led key stakeholder working group inclusive of expert sector market and product knowledge to be consulted and consider the options. This must include consideration around the objectives of the fiscal instrument, its scope, as well as timing of introduction and whether it replaces or interacts with existing measures.
23. Key considerations for any new fiscal regime – such a road pricing - must focus on:
- **Objective** – is it purely revenue raising or to adjust consumer/market behaviour, if the later to what?
 - **Scope** – to cover cars, vans, trucks, motorbikes, etc – noting a one-sized fits all solution may not be optimal
 - **Timing** – any new regime needs early signposting, to prepare consumers and industry to a major change, but must not be to the detriment of encouraging the uptake of ZEVs in the near term
 - **Interaction to existing schemes** – does new regime replace all motoring taxes, emission charges, congestion charges and road tolls, or just fuel duty and when does it need to be implemented and will it run alongside existing regimes for some time (forever)? Further how would cost of electricity change in the future and would road pricing lead to additional cost burden on consumers.
 - **Cost of implementing, collecting and enforcing** – which will be dependent on answers to some of above (noting a technology based system might be particularly expensive and potentially placing addition burden on OEMs)
 - **Social impacts** – notably around higher costs being imposed on motorists, potentially impacting most those with few alternatives (eg rural communities).
 - **Impact on the UK manufacturing base** – either through adversely impacting demand for ZEVs or technology based vehicle solutions adding to OEM costs

More detail on key considerations

24. The decision-making process around these type of considerations could lead to very different outcomes, which is why a detailed review, with inputs from key stakeholders will be necessary before any new regime is introduced.
25. Vehicle manufacturers are particularly concerned that any scheme which relies overtly on new technologies will add cost to the industry and potential liability if the technologies have any issues, are tampered with or fail. Technological solutions that rely upon vehicle telematics may also require suitable mobile coverage, which could be problematic or costly in certain areas (notably rural) and also runs the risk of suffering from power failures and such like. There is also the major issue of data sharing and compliance issues. In addition, if the solution is technology focused, how does that fit in with the existing vehicles in use, which do not have that technology and to which it maybe (prohibitively) expensive to retrofit.
26. On social impact, given the higher purchase price of ZEVs currently it will be important that any new fiscal regime does not overly penalise certain aspects of society. This could impact on mobility and the broader economic strategy (eg access to employment, the levelling up agenda etc). In addition, those in more rural areas might have few options other than private cars or need to travel further distances, so maybe more penalised by particular approaches to road/distance pricing.
27. Regarding objectives, given the move to ZEVs will significantly reduce CO₂ and other emissions associated with air-quality (depending of course on how clean the electricity supply is), this removes a large reason for taxes on motorists. With VED ringfenced to pay for the roads, the other main societal cost borne would largely be around congestion – with the majority of which would likely be impacted upon the motorist themselves, and also accidents. Data on the costs of congestion is difficult to establish, but one [study](#) puts it at almost £7 billion per annum. Connected and autonomous vehicles (CAVs) have the ability to help remove congestion and accidents, so potentially reducing societal costs and the need for road pricing.
28. SMMT notes the significant increases in electricity demand expected to come from a variety of sources in the future, including electric vehicles and moving away from gas for heating. Therefore, the UK needs to develop a secure and low-cost supply of carbon neutral electricity. A fully developed strategy is therefore needed to ensure all aspects of net zero are carefully delivered in unison. SMMT does not believe that just because the electricity is used in a vehicle it should command a higher price than in other appliances.
29. In terms of the type of scheme: in most basic form it could simply be an extension of VED and a single charge, differentiated by vehicle type and irrespective of mileage, merely to generate taxes. It could be based on mileage, calculated once a year based on distance travelled since last MOT – this again would be relatively simple, very visible (which could be viewed in different ways, but would be less of a ‘stealth’ tax than fuel duty). It could be based on data related to systems on the vehicle, eg a ‘black-box’ device or using the vehicles own sat nav or similar. Or it could be based on some external monitoring system, eg number plate recognition cameras. The more later options could relate to specific or strategic road networks, and could allow for greater differentiation, eg time of day as well as vehicle type etc. To note, any scheme targeted at particular roads does run the risk of pushing users onto other roads, which

could create unintentional consequences. The UK's high number of smaller roads may mean that solutions adopted in some countries may not be as effective here. In addition, there needs to be careful consideration on differential by vehicle types, to ensure certain vehicle types are not unduly penalised and how the different modes of transport may interlink.

30. All of these options include different costs, enforcement issues, have different intrusion levels to the user, may require different data protection measures if smart systems are required to track vehicle mileage, and so forth. Consideration should be given to the cost of implementing, maintaining and enforcing the scheme and ensuring the costs borne are not excessive and have an adverse impact on the broader economy or indeed specific aspects of the motoring community, notably considering regional and socio-economic considerations.
31. For company cars there may need to be some way of differentiating the new road charging costs for the user, so they are able to assign those costs to business or personal use of the vehicle.
32. In the short time of this inquiry, SMMT has not had time to review lessons learned from other countries – and we have limited knowledge on complete systems, but several countries have toll roads across the EU, including Norway, Holland and Denmark. In the UK we do have toll roads and the London Congestion Charge to draw upon. Within Europe, there is also the Eurovignette system, which is a road user charge for HGVs (over 12T HGVs can buy the Eurovignette to use motorways and toll highways in certain counties such as Denmark, Luxemburg, the Netherlands and Sweden).
33. In the case of toll roads, the fee is typically to pay for the build and maintenance of those roads, rather than a national revenue raising measure. The CC in London is to encourage users to switch to cleaner and more efficient vehicles or mobility switching – the latter may prove more difficult in a national scheme where some parts of the country have very limited alternatives to motor vehicles. A national scheme could also have very different impacts on rural users, who may tend to do a higher mileage to get to basic services. There is considerable data on the London CC and the Ultra-Low Emission Zone, including the costs of running the system and how many older vehicles still pay to enter the zone (presumably as they are unable or unwilling to buy a newer compliant vehicle). It is not clear what would happen to these existing schemes if a national scheme was introduced.
34. It is clear that that this is an area that requires very careful consideration and the scope and objectives of any road pricing or pay-as-you drive type approach need to be clearly defined and ramifications considered before a suitable solution to such a simple and, in the framework of the polluter pays principle, neat, solution as fuel duty can be developed without avoiding winners and losers in society. SMMT believes therefore that a government lead exercise needs to be undertaken, but it must not undermine the market transition at this early and crucial stage of the development of zero-emission vehicles, nor should it place an excessive cost burden on the technologies required in the vehicles or see motorists and the businesses that rely upon cars, vans trucks, buses and coaches, etc face excessive costs from a transition to any new fiscal regime.

February 2021