

Written evidence submitted by the Association of Directors of Environment, Economy, Planning and Transport (ADEPT) (EVP0036)

Introduction

The Transport Select Committee has released a call for evidence which looks into the implications of accelerating the shift to zero emission vehicles and the potential for introducing road pricing, or pay-as-you-drive, schemes which considers the following matters:

- 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 actions required by Government and private operators to encourage greater uptake of electric vehicles and the infrastructure required to support them;
 - The particular challenges around decarbonising buses and how these should be addressed;
 - 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.
- Road pricing
 - The case for introducing some form of road pricing and the economic, fiscal, environmental and social impacts of doing so;
 - 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;
 - 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 lessons to be learned from other countries who are seeking to decarbonise road transport and/or utilise forms of road pricing.

Who are ADEPT?

ADEPT represents place directors from county, unitary and combined authorities, along with Local Enterprise Partnerships (LEPs), sub-national transport boards and corporate partners drawn from key service sectors throughout England.

ADEPT is a membership based, voluntary organisation with:

- 85+ county, unitary and combined authority members,
- 3 sub-national transport bodies,
- 12 local enterprise partnerships (LEPs) and
- 20 Corporate Partner members across England.

The key to unlocking economic recovery and renewal lies with local leadership. Place directors create the strategies, run the services and lead the projects that shape local places for their communities. The whole country benefits from investment in local place. Tackling inequality and climate change, while promoting health and wellbeing, supporting business

and maintaining critical infrastructure is most successful when national investment is locally led.

ADEPT represents members' interests by proactively engaging central government on emerging policy and issues, responding to consultations and enquiries, creating national guidance, and promoting initiatives aimed at influencing government policy. ADEPT also represent public sector interests across all our key areas in national sectoral organisations.

Response:

Accelerating the shift to zero emission vehicles

In November 2020, the Government announced that it would end the sale of new petrol and diesel cars and vans by 2030, with all vehicles being required to have a significant zero emissions capability from 2030 and be 100% zero emissions from 2035.

ADEPT has identified the following opportunities presented by the acceleration of the ban of the sale of new petrol and diesel vehicles to 2030:

- Opportunities to improve air quality in local towns and cities and reduce carbon emissions.
- Encourage innovation and take-up of new technology.
- Provides certainty to the private sector.
- Accelerate the adoption of zero emission vehicles
- Increased take up will reduce premium cost of EVs to compete with petrol and diesel vehicles.
- Reduction in carbon emissions - increased support in achieving net zero at a local level.
- Increase in local political interest in electrifying council fleets.
- Could encourage an increased uptake of walking and cycling or public transport.
- Speeds up the pace of innovation in charging technology.
- Increases public perception / understanding of climate challenge.
- Increase in number of highly skilled jobs.
- Drive design for alternative fuel models.
- National driver for activities being undertaken at local level.
- Noise reduction opportunities.
- Change in commercial model for filling stations.
- Develop a plan for the approach rather than ad hoc responses.

ADEPT has identified the following challenges presented by the acceleration of the ban of the sale of new petrol and diesel vehicles to 2030:

- On street charging points needed for those without a driveway which can be expensive and there is limited space.
- Risk of increased car dependency and associated congestion.
- Could be seen as providing the whole answer - ignores the Avoid and Shift factors.
- Installing enough reliable infrastructure to meet demand and having the resources to do so.

- Difficulties in getting investment in charging infrastructure before large EV uptake.
- Levels of support at urban/rural locations are likely to be different.
- Take-up unlikely to have significant effect by 2030.
- Energy grid capacity and supply capabilities.
- Shortage of technical skills to maintain EV engines.
- Insufficient infrastructure for newer technologies.
- What happens to the petrol/diesel vehicles once replaced for an EV?
- Challenges in collaboration across the UK or specific area when it comes to charging facilities.
- Impact on lower income families who tend to drive older vehicles.
- Public perception to technology e.g. range anxiety.
- Cost to local authorities to implement EV charging.

Actions required by Government have been identified by ADEPT to encourage greater uptake of electric vehicles, these include:

- Clear guidance on what local authorities need do.
- Financial incentives for zero emission vehicles such as grants for buying EVs and scrappage schemes.
- Ensure all taxis are zero emission by 2025.
- Create platform where local authorities can find Charge Point Operators.
- Investigate potential of other forms of charging e.g. wireless induction charging pads.
- Consideration of tax position in relation to road tax etc.
- Targets for electrifying grey fleets.
- Campaigns to provide guidance and reassure users about EVs.
- Attempt fast/rapid charge point standardisation.
- Place based solutions - account for variation.

Actions required by private operators have been identified by ADEPT to encourage greater uptake of electric vehicles, these include:

- Increase range / endurance.
- Alternative models such as lease systems.
- Recycling old vehicles for new EVs.
- Opportunity for trials over reasonable period of time.
- Continue to research alternative fuels instead of electric batteries.
- Fair charging.
- Make charging process as easy as filling up with petrol.
- Continue to decrease charging times.
- Increase public awareness around EVs.
- More of a joined-up approach across the country for charging points so that users do not have to download several different apps or cards for each Charge Point Operator.

Actions required by Government have been identified by ADEPT to encourage greater provision of electric vehicle charging infrastructure, these include:

- Local Plans and Integrated transport strategies.

- Mandatory in all new developments, building regs and planning conditions.
- Common procurement principles.
- Introduce minimum standards.
- Support development and implementation of ultra-rapid charging capabilities.
- Improve the grid capacity in rural areas.
- Highways England to be required to include EV charging points for new major roads / dualling.
- Sub-national Transport Bodies (STBs) to have role in wider spatial planning.
- Use of local and regional evidence & intelligence to deliver an effective future travel / energy network plan.
- Allocate revenue and capital resources for local government rather than relying on competitors.
- Delivery at a manageable scale and enough size to encourage private sector.
- Consideration to cross local authority boundary movements.

Actions required by private operators have been identified by ADEPT to encourage greater provision of electric vehicle charging infrastructure, these include:

- Standardisation of socket types.
- Maintenance of EV chargers needs to improve.
- On street is a major challenge and needs more research on potential solutions such as compact, unobtrusive and/or wireless chargers.
- Easy to use by the customer
- Data interoperability.

ADEPT has identified particular challenges around decarbonising buses which include:

- In rural areas bus ridership is very low which means services are infrequent, so ridership stays low. Difficult to justify upgrade to electric if ridership is low.
- EV buses life span too short - not a good investment for smaller bus operators.
- Unclear what the right fuel alternative for larger vehicles, like buses, is.
- High cost of charging infrastructure at bus depots.
- Carbon savings may be negated if patronage is low.
- Hydrogen charging stations require a lot of land.
- The time it takes to recharge a bus could impact the number of services.
- High cost of low emission buses.
- Issues with grid and power supply at bus depots.
- Attractiveness and commercial viability compared to private vehicles.
- Contract prices would increase which could negatively impact on supported bus network and home to school transport budgets.

Solutions to the above identified challenges include:

- More financial support for smaller bus companies to change fleet to electric.
- Planning at effective spatial scale.
- Grants for retrofitting buses.
- Clarity over the most appropriate fuel model to go for.

- Support for introduction of appropriate infrastructure.
- Awaiting DfT Transport Decarb plan for a top down lead.
- Target most-used services for switchover to EV.
- Rebuild confidence in trains and buses.
- National electrical infrastructure strategy (to support recent Energy White Paper)
- Encouragement of using buses for travel, incentivise users.
- Consideration of alternative fuel sources including hydrogen and offshore wind.
- Consider school transport vehicles.
- Supporting fixed rural routes to move to demand responsive routes.

Considerations the Government should review prior to consulting on a date for phasing out the sale of new diesel heavy good vehicles have been identified by ADEPT, these include:

- Greater use of rail networks.
- Changes to people's travel patterns due to COVID-19.
- Prioritising the SRN for EV/H fuelling infrastructure sites, to divert HGVs away from rural roads.
- Information garnered from alternative fuel live labs across the country.
- Highways England move to considering motorways as primarily freight routes.
- Will people perhaps be more willing to live with less and therefore need less goods to buy/transport.
- Impacts of Brexit.
- Embedded carbon cost of current diesel HGV fleet - will early scrappage reduce the carbon benefits of better fuels.
- Less shops and businesses in general due to economic impact of COVID-19.
- Transport is a highly polluting sector, should be doing anything possible to reduce emissions and HGVs should not be an exception.
- Last mile deliveries in smaller electric vehicles.
- Understanding the freight refuelling infrastructure requirements around Urban Consolidation Centres, and urban spatial planning.
- How this will be managed with ports and airports (first mile/last mile access)

Road Pricing

The Government has said that the tax system will need to encourage the uptake of electric vehicles and that revenue from motoring taxes must keep pace with this change. One consequence is that the £40 billion annual income from Fuel Duty and Vehicle Excise Duty is likely to decline sharply in future.

ADEPT has identified potential reasons as to why the Government should look to introduce some form of road pricing, these include:

- Loss of income from fuel duty.
- Incentivising public transport use, encouraging behaviour change.
- Support climate change objectives through clear relationship between travel and cost.
- Better management of road network.
- Fairer system of paying for externalities caused by transport use.
- To ensure costs of providing transport infrastructure is fully recovered.

- Revenue generation to fund other infrastructure and maintain existing infrastructure.
- Reduced congestion / pollution, improved air quality and reallocation of road space to non-motorised road users.

Impacts associated with introducing some form of road pricing have been identified by ADEPT. These can be categorised as either economic, fiscal, environmental or social, and have been split into positive and negative impacts:

Impacts	Positive	Negative
Economic	<ul style="list-style-type: none"> • Reduced traffic should lead to faster travel times and more reliable journeys. • Better maintained roads. • Better use of the roads as an asset. • Reduction in pollution. • Improved public health. • Local raised revenue to support sustainable travel choices. • Generates alternative income. 	<ul style="list-style-type: none"> • Businesses move outside of the charging area. • Discourages people taking journeys. • Impact on business running costs/ freight costs. • May be an impact on bus fares if the operator must pay more for their services. • Inequalities between charging and non-charging urban areas. • Social inequality issues i.e. poorer people more adversely impacted.
Fiscal	<ul style="list-style-type: none"> • Able to better understand the link between demand and maintenance cost. • Able to better understand the link between infrastructure upkeep and demand. • Revenue to invest in maintenance of highway network. • Local raised revenue to support sustainable travel choices. 	<ul style="list-style-type: none"> • Funding may not be distributed between Council areas. • Restricted scope of reinvestment opportunity. • Risk of complexity. • Local vs national distribution of costs on strategic urban motorways. • Government may bypass local authorities in terms of provide a revenue stream for local transport. • Impact on smaller business higher costs that cannot easily be absorbed. • Users may not generate enough revenue to cover costs. Therefore, extra subsidy may be needed from national purse for economic gains. • Will income be ringfenced for transport?

Impacts	Positive	Negative
Environmental	<ul style="list-style-type: none"> • Reduced emissions - greenhouse and particulates. • Encourages operators to upgrade their fleets to lower emission. • Encourage public transport use. • Improved air quality and public realm. • Dynamic /surge pricing to nudge demand on days with bad air quality. • Member buy in to environment agenda. 	<ul style="list-style-type: none"> • Does not tackle levels of traffic. • Risk of numerous solutions with no interaction. • Infrastructure could have negative visual impact. • Although CO2 emissions could fall, particulate pollution may still be an issue. • Noise levels still an issue unless demand reduced. • If the wrong price signals are set, then this may encourage more travel by road.
Social	<ul style="list-style-type: none"> • Improved public health. • More quiet streets that can be closed for children to play or other activities. • Drives behavioural change towards other means of travel. • Can reallocate road space for socio-environmental uses. • Perception of a "fairer society". • Easier for people to make more informed travel choices 	<ul style="list-style-type: none"> • Could prevents disadvantaged people from accessing essential services. • Potential to disadvantage lower income groups. • Urban and rural differences - rural isolation. • Those that depend on road travel for livelihood may see it as unfair.

When identifying which road pricing or pay-as-you-drive schemes would be most appropriate for the UK context, ADEPT consider eight types of road pricing mechanism. The following list outlines the which mechanisms members considered to be most applicable to the UK context ('1.' being the most applicable and '8.' being the least):

1. Congestion pricing (time-variable) – A fee that is higher under congested conditions than uncongested conditions, intended to shift some vehicle traffic to other routes, times and modes.
2. Cordon fees – Fees charged for driving in a particular area. e.g. London ULEZ zone
3. Distance-based fees – A vehicle use fee based on how many miles a vehicle is driven.
4. Pay-As-You-Drive insurance – Prorates premiums by mileage so vehicle insurance becomes a variable cost.
5. Road toll (fixed rate) – A fixed fee for driving on a particular road.
6. Micro-Transactions – e.g. Charging mobility providers for accessing kerb space (for example for docking/pick up)

7. HOT Lanes – A high-occupant-vehicle lane that accommodates a limited number of lower-occupant vehicles for a fee.
8. Road space rationing – Revenue-neutral credits used to ration peak-period roadway capacity.

Potential other identified options include:

- National system that integrates many of the different schemes & provides flexibility at a local level.
- Needs to think about freight and the likely increase of goods / services / deliveries.
- Consider other road users such as scooters, bikes, motorbikes etc.
- Differentiation between private and commercial travel.

The practicalities of implementing such schemes included the following observations:

- Data requirements are central to all road pricing mechanisms which needs to be managed, with data privacy and ethics considered carefully.

ADEPT has identified the following ways as to how the views of the public should be considered in the development of any road pricing scheme:

- Full public consultation.
- Scenarios, trials, pilot studies.
- Keep it simple, so people understand what is changing.
- Start small to assess the impact before scaling.
- Highlight local benefits/disbenefits.
- Engage public and business from the outset.
- Share evidence, research and case studies with public.

Identified lessons learned from other countries who are seeking to decarbonise road transport and/or utilise forms of road pricing include:

- Tyne tunnel toll is an example where there's no viable alternative using public transport.
- We can learn from our own limited experiences including London congestion zone and Nottingham Workplace Parking Levy.
- Lots of car pool lanes used in California.
- San Sebastian (Spain) had great success with reducing car use in their city by increasing the cost of parking, using tablets on buses to let them know when they were behind schedule and implementing "trolleys" to take people up and down steep inclines.

February 2021