Transport Select Committee,
House of Commons
London
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EEH Business Unit
c/o Buckinghamshire Council
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15th February 2021

Dear Sir/Madam

Transport Select Committee - call for evidence: Zero emission vehicles and road pricing.

Key Messages:

- England's Economic Heartland (together with the other English Sub-national Transport Bodies) is ideally placed to support Government in realising the shift to zero emission vehicles
- Our Transport Strategy sets out the policies which are required to achieve net-zero carbon emissions
- Transport needs must be considered alongside improvements in digital connectivity and utilities (particularly energy supplies)
- Achieving net zero carbon is an economic opportunity for the Heartland
- Consideration of road pricing should be placed in the context of a wider discussion of the financial business models for the rail sector and buses (particularly rural services)

Background

England's Economic Heartland (EEH) is the Sub-national Transport Body (STB) for the region stretching from Swindon to Cambridgeshire and from Northamptonshire to Hertfordshire, incorporating the area identified by Government as the Oxford to Cambridge Arc: a national economic priority.

In February 2021, EEH will publish its Transport Strategy setting out the need for a new approach to the planning, development and delivery of strategic infrastructure priorities. Our Strategy highlights how, in order to enable economic growth and deliver on the requirement to achieve net zero carbon emissions, it is necessary to consider investment in digital connectivity and utilities (particularly energy systems) as integral elements of that Strategy.

Building on the output of our technical work, the output of our Integrated Sustainability Appraisal and taking into consideration the results of two rounds of public engagement, our Transport Strategy sets out an ambition to achieve net-zero carbon emissions from transport

by 2040: the legal requirement to achieve this by 2050 being considered insufficiently ambitious in view of the challenge posed by climate change.

This ambition reflects the reality that for the Heartland transport-related emissions is a key environmental issue, growing by 10% between 2012-2017, compared to 5% nationally. Emissions per capita in our region are amongst the highest in the UK. While emissions are highest where there are significant sections of the Strategic Road Network, we also see a clear correlation between high emissions, high car mode spilt and poor access to public transport.

The need for change in terms of our approach to the planning, development and implementation of investment is accentuated by the scale of planned growth across the Heartland. Through our Transport Strategy we seek to harness the inherent expertise in technology and innovation to realise a green economic recovery.

Accelerating the Shift to Zero emission Vehicles.

In 2020 EEH commissioned the Universities of Oxford and Southampton to utilise the National Infrastructure Systems Model (NISMOD) to advise us on the 'Pathways to Decarbonisation' for the region's transport system. The output from this work was used to inform our Transport Strategy.

The resulting report set out a number of options/pathways that would enable the Heartland to achieve transport decarbonisation by 2050 (report appended to submission). All of the pathways considered by EEH highlighted the requirement to enable/facilitate the rapid transition from combustion engine vehicles to a zero-emission powered fleet. Commissioned ahead of the Government's 10-Point Plan (published in autumn 2020) and before the Government brought forward to 2030 the ban on the sale of new petrol and diesel powered vehicles, nevertheless the modelling and accompanying report points to the importance of accelerating this policy to maximise the chances of achieving 2050 carbon targets.

Our modelling also shows that as the vehicle fleet relies more on electricity for power so the requirement for additional energy increases. The report identifies that in order to electrify the Heartland's road vehicle fleet there is a requirement for an additional 15 Tera-watt hours (TWh) per year in 2050 for all pathways. For context, the amount of electricity used for domestic purposes in the EEH region in 2017 was 8.7 TWh. In other words, in addition to ensuring an adequate charging infrastructure, there is a requirement for a 200% increase in the energy supply available in order to support electrification of the road fleet. Once consideration of the needs arising from electrification of the rest of the transport system is taken into consideration the figure will grow further.

To achieve this will require significant – and timely - investment in low carbon enabling infrastructure and, a coordinated approach to enable and encourage the required level of investment in enhanced energy generation, supply and distribution systems. More importantly that investment needs to be actively planned for in such a way as to complement the investment being made in transport infrastructure and services.

History suggests that, notwithstanding the enduring ambition held by successive Governments over the years, the ability of Whitehall to provide leadership on the alignment on investment across Departments is limited. Investments in new rolling stock have suffered on a number of occasions by the lack of adequate energy supply being available to enable the investment's potential to be realised.

In contrast strategic collaborative partnerships operating at the sub-national level – of which Sub-national Transport Bodies are a leading example – are consistently demonstrating their ability to identify the requirement for strategic alignment and to act quickly, and effectively, to make that alignment real. More importantly, the strength of such partnerships lies in their ability to use their existing evidence bases to advise Government on strategic priorities.

To illustrate the power of strategic collaborative partnerships, EEH's commissioned work on Pathways to Decarbonisation uses our Regional Evidence Base to identify the need for investment in transport, digital infrastructure and utilities (in particular energy systems). Our

work identifies the overall requirements but is also capable of mapping the spatial distribution of need based on planned growth.

Working with the recently formed Utilities Alliance, EEH is already engaging with the utilities sector to clarify what needs to happen in order to ensure the required investment in energy generation, supplies and distribution is achieved in a timely manner. EEH welcomed the publication of the National Infrastructure Strategy in autumn 2020 and in particular its commitment to review the operation of the current regulatory framework for the utility sector. That review needs to address the scale of the challenge facing our strategic infrastructure systems arising from the electrification of the transport system, and more specifically the need for investment in enabling infrastructure that will support and enable change.

Given the growing body of academic evidence that suggests the UK is already undershooting on the trajectory required to achieve net zero carbon by 2050, there is a need to inject urgency and pace in planning for and delivering the required infrastructure. The Department for Transport's Decarbonisation Plan will be a key document in this requirement and needs to be published as a matter of some urgency. Publication is crucial in accelerating progress on this issue in order to deliver on the legal requirement to deliver on decarbonisation.

As part of EEH's on-going work on decarbonisation we are committed to developing a detailed road map for the Heartland within the next 12 months. As part of this work we will explore the added value of adopting carbon budgets and associated targets to drive forward the investment required to achieve net zero carbon emissions.

EEH welcomed the recent selection of Oxford as one of the two cities to be considered for Electric Bus Town funding. Large scale pilots provide a clear understanding and roadmap for other small and medium sized towns and cities in the region and wider UK to deploy such services. The key challenge to deployments of this type remains the provision of, and access to, low carbon power.

Our Transport Strategy recognises the key role that national policies have in enabling the change required to meet the decarbonisation challenge. Changes to taxation regimes (Vehicle Excise Duty, fuel duty) and fiscal incentivisation (scrappage schemes etc.) can only be led by the UK Government in order to avoid creating disparities between regions that impact on relative economic performance. England's STBs can, and are ready to, support central government through enabling discussions and acting as a conduit. Through regional responses, consensus can be developed as to the best way forward.

Our work to date highlights the critical need to pay special attention to bringing forward solutions for the freight and logistics sector. Whilst the sector is essential to the economic well-being of the country, it contributes disproportionately to the carbon emissions. The Heartland's geographical location means that our strategic roads are vital arteries for the freight and logistics sector. It also means that a large proportion of the UK's strategic distribution centres are located within our region.

Technological and alternative fuelling solutions to many of the challenges we face in heavy vehicles (long distance HGV, refuse collection vehicles and busses) are surmountable in the short to medium term. It is likely that there will be a blended approach to freight power train and fuelling in the future. As such, EEH has several active projects focused on the mapping of potential regional infrastructure requirements to support fuelling scenarios.

Whilst further investment will be required to "pump prime" technical innovations in this space, it is also recognised that significant efficiencies can be gained through better management of highways and road space, using data and improved digital connectivity.

Whilst the primary focus remains on electrification of our transport system, we believe that there is a significant role for hydrogen as part of the overall response to needing to shift to zero emission vehicles. In this regard we will continue to support work to harness the investment already made in hydrogen hubs within the region to enable this technology become a viable part of the energy mix.

Road Pricing

Our 'Pathways to Decarbonisation' work highlights the need for demand management/demand reduction policy and programmes in order to achieve net-zero carbon from surface transport by 2050.

Without a reduction in trip rates and mode shift, it is clear that the legally binding 2050 carbon targets will not be met, network congestion and journey times will increase significantly, resulting in significant impacts on our economic output and quality of life for residents.

Any proposal to bring forward road pricing would need to take place at the national level in order to ensure equity and consistency. A number of EEH constituent authorities are actively addressing the need for demand management measures locally, through developing business cases and in some cases deploying: City-centre access restrictions, workplace parking levies, low traffic neighbourhoods, dynamic parking charges and emission-based congestion zones.

EEH's Pathways to Decarbonisation modelling assessed the impact of demand management utilised road pricing (elasticity models) as a proxy to road user charging.
The outcome of our work showed that whilst trip rates fell, the overall number of trips increased due to population growth in our region, highlighting how measures designed to manage demand need to be seen as one of several tools/policies that need to be combined in order to achieve net-zero.

The EEH Transport Strategy includes the following policy: In identifying future investment requirements we will prioritise those which contribute to a reduction in car journeys in line with the recommendations delivered by the UK Climate Assembly: to facilitate a reduction in the number of private car journeys by a minimum of 5% per decade (of total traffic flow compared with 2019).

However, whilst challenging in of itself, we recognise that this policy may have to be revised in light of our on-going work to develop a decarbonisation road map if the Heartland is to meet its decarbonisation ambitions: such is the scale of the challenge facing the region and the UK.

EEH is committed to delivering further work on decarbonisation and demand reduction and recognises the need for an iterative approach. The DfT Transport Decarbonisation Plan and the work undertaken by the Climate Change Committee on the 6th Carbon Budget will guide our approach to the development of a decarbonisation road map for the region, and help set the balance between policy that delivers demand and supply side requirements for a decarbonised transport system.

The DfT and Treasury have a challenging balance to strike: the revenue lost from VED and fuel duty as the fleet transitions to electric needs to be recouped, whilst also addressing the urgent need to need to reduce the number of trips made in private vehicles - almost certainly using fiscal incentives.

Whilst these reductions to tax receipts serve to act as a catalyst for a debate on the future of road pricing, in truth there is a need for a wide conversation about the way in which we pay for investment and access to transport infrastructure and services.

With a few notable exceptions, we have seen significant reductions in the extent of traditional bus routes particularly those serving more rural and less densely populated areas: a reflection of how the business model used to deliver such services is long overdue.

On the rail network, the growing and continued emergence of more flexible/hybrid ways of working is changing the nature of demand for services. Whilst a smoothing of demand across the day may be helpful in terms of better asset management and an easing of over-crowding, there will be longer term implications for the business model for rail, particularly those areas where commuter revenues have previously been dominant.

As we look to meet the requirement to achieve net zero carbon emissions no later than 2050 so it becomes ever more important for a more fundamental review of the way in which investment in transport infrastructure and services is paid for. With increasing emphasis being given to reducing the need to travel, or at the very least reducing the length of trips, so we

need an approach to transport investment (and use) that is better aligned to the need to achieve wider societal and environmental objectives.

Whilst transport economists have long argued as to the need to monetise transport externalities, the lack of transparency to date when it comes to paying the true cost of our transport choices will create a challenge in transitioning to a new business model. The growing acceptance more widely across society towards 'service models' where the consumer pays for accessing services might form the basis for reform. However, policy makers need to bear in mind the crucial role that transport connectivity plays in enabling access to education, opportunities and services more generally.

If we accept that there is a need to reform the business model by which we invest in and then use our transport system, and that there will by necessity need to be a transition period, then the need for serious debate is now. If we are to secure public acceptability for the way forward, we must be transparent in the choices we face and for those choices to be placed in the context of our shared desire to achieve better outcomes – for society, the environment and the economy.

We look forward to engaging with the department and supporting the development of this agenda in the future.

Yours Faithfully

Mayor Dave Hodgson
Chair, Strategic Transport Forum