

Written evidence submitted by Midlands Connect (EVP0066)

Midlands Connect is the Sub-national Transport Body (STB) for the Midlands and transport partner of the Midlands Engine. We are an independent partnership of Councils and Local Enterprise Partnerships (LEPs), funded by Government to research, identify, develop, and recommend the strategic transport infrastructure requirements and priorities for the Midlands, including Electric Vehicle charging infrastructure and alternative fuels for freight and logistics. Midlands Connect, therefore, has a strong and relevant interest in the inquiry and welcomes the opportunity to provide the below written evidence.

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

How the country and our region **decarbonise transport** over the coming years is likely to be our single greatest challenge. We look forward to the publication of DfT's Transport Decarbonisation Plan and **welcome the more ambitious policy commitments** in the Prime Minister's Ten Point Plan for a Green Industrial Revolution, bringing forward the ban of the sale of new petrol and diesel vehicles to 2030 to accelerate the **transition to zero emission vehicles**.

The challenge for Midlands Connect and its local partners will be how to meet the conditions needed in the Midlands to deliver on the transition to zero emission vehicles.

We are currently updating our regional Transport Strategy (to be published by the end of 2021), which will include what we believe needs to happen to ensure the Midlands is well equipped to deliver the infrastructure and connectivity it needs to **positively contribute to the national net zero carbon target by 2050**. As such, the Strategy Refresh programme of work includes the development of a regional-level transport decarbonisation pathway and two workstreams with a focus on infrastructure for zero emission vehicles, which are generating **key pieces of pan-regional evidence** to inform our pathway and recommendations for funding. This includes:

Supporting accelerated delivery of electric vehicle charging infrastructure:

- We have undertaken a piece of work looking at the collective challenges and opportunities Local Authorities face in delivering on-street electric charging infrastructure in the Midlands, which has generated several recommendations.
- **Challenges** highlighted by this work include the increasing pressures Local Authorities have in terms of resources and funding, and the diversity in EV policy and strategy development reflecting differing stages of maturity in EV adoption, technical familiarity, and resource availability. These challenges result in inconsistency of approach and have implications for the speed of delivery required to match the pace of the accelerated policy commitment towards zero emission vehicles.

- The **opportunity**, identified through this work, is in **collaborating at a regional level**. The potential benefits of regional partners taking a consistent, coordinated approach to EV infrastructure provision have been captured as part of this work and relate to **improved user experience, accelerated delivery, cost savings and future proofing**. The benefits of collaborating at a regional level:
 - Enables co-ordinated planning to optimise deployments, avoid gaps and obsolescence
 - A common or more consistent user experience of charge point bays, technologies, and payment options
 - Consistent technical standards can speed up delivery
 - Raises collective capability, reducing resource burdens and removing delivery barriers to accelerate roll-out
 - Working together to make more efficient use of constrained grid capacities and sharing the burden of major upgrades
 - Consistency of planning requirements and standards for charge point provision at new developments
 - Helping achieve an equitable provision
 - Provides a means for sharing good practice to promote improved planning, delivery, and operation
 - Improved strategic level engagement with industry
 - Teaming for strategic funding requests
 - Market strength can drive efficiencies through joint procurement

- To support collaboration on EV charging infrastructure in the Midlands, a set of **common guidance and principles** have been developed to help Midlands partners to accelerate the introduction and rollout of EV infrastructure by reaping the benefits from a consistent approach to delivery across the Midlands. Alongside the guidance and principles, Midlands Connect has also developed a spreadsheet based **EV Forecasting Tool** that can be used to help identify potential areas for EV infrastructure investment, either at an origin, destination, or en-route location. The tool uses socio-demographic data (ACORN), along with other data sources and knowledge such as grid capacity and travel patterns to help **establish priority areas for EV charge point deployment** across the Midlands. In practice, this aims to help Local Authorities when applying for funding by strengthening business cases and quickly and robustly identifying locations to deploy EV charge points once funding is awarded.

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

The above answer applies equally here. Building on this, it is important to emphasise that, now more than ever, is the time for Government to invest, not only in the required infrastructure, but also in **equipping regions and Local Authorities** with the long-term funding and support needed to rise to their part of the challenge, within a clear and complementary set of national measures. The role that **Subnational Transport Bodies** can and are playing as **catalysts for regional collaboration** and the benefits this can bring

(referring back to the previous answer) warrants recognition and we look forward to continuing to work collaboratively with the DfT.

Our EV workstream detailed in the answer above (**Supporting accelerated delivery of electric vehicle charging infrastructure**) has highlighted that a co-ordinated and consistent provision of EV charge points across the region has the potential to improve the reliability of charging opportunities for the public and businesses, giving confidence to support a transition to EVs whilst also supporting the local economy, but the scale of the challenge should not be underestimated.

We welcome the existing financial support for EV infrastructure, including the Rapid Charging Fund and the recent extension of the On-Street Residential ChargePoint Scheme (ORCS) and are also supportive of wider interventions to help accelerate EV uptake. In relation to longer-term support for regions and Local Authorities, we eagerly await the DfT's Transport Decarbonisation Plan.

- 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 support the phase out of diesel trucks as part of the solution to achieve the national net zero target by 2050. And indeed, its importance cannot be overstated for the Midlands. Our own carbon baseline tool is suggesting that, whilst HGVs account for 17% of transport emissions nationally, **the proportion of HGV emissions is higher than average in the Midlands** and could be as much as 30%. This is not unsurprising, given the strategic transport networks running through this part of the country for freight, linking ports and airports, the high proportion of warehouse space and size of the manufacturing, logistics and distribution sectors. Therefore, the question around alternative fuels for freight and logistics has become **an important consideration for Midlands Connect** and is reflected in our programme of work.

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Advancing the shift to alternative fuels for freight and logistics through Energy Hub Networks

- Over the past couple of years, we have been investigating the opportunities and constraints surrounding the wider adoption of alternatively fuelled vehicles, particularly focusing on the freight and logistics sector. Most recently, our work has **identified locations in the Midlands which will be suited for refuelling or recharging infrastructure** against a long list of criteria, as a direct response to some of the challenges highlighted through our research.

- Overall, our survey work has highlighted several **challenges relating to the adoption of alternative fuel vehicles**. Amongst **fleet operators**, the three most **frequently cited barriers** were a lack of recharging and refuelling infrastructure, the upfront cost of vehicle acquisition, and lack of vehicle availability. Amongst **vehicle and infrastructure suppliers**, the top three barriers to alternative fuel uptake were upfront vehicle cost, uncertainty over residual values and lack of recharging and refuelling infrastructure, with infrastructure availability being constrained by access to sites of the appropriate size and location, at reasonable costs. It is challenging for suppliers to find suitable sites, which are near motorways and the strategic road network, which have enough space for large vehicles, including turning circles.
- The **need for public sector intervention** to kickstart demand by investing in infrastructure *and* interventions that better enable and encourage operators to change or convert their fleet, is illuminated through our research.
- Our work has investigated of the availability of alternatively fuelled vehicles and infrastructure and forecasted future trends. This has culminated in the development of a **methodology to estimate the future requirements** for charging and refuelling infrastructure for light goods vehicles (LGVs) and heavy goods vehicles (HGVs) in the Midlands to 2040 and a **methodology for identifying specific locations** for charging/refuelling stations. As such, we have identified locations in the Midlands which will be suited for refuelling or recharging infrastructure.

Overall, our findings suggest that a **regional** public sector organisation working in partnership with **Local Authorities** is well placed to define and implement a consistent approach regarding alternative fuels across the region, whilst local policies around sustainable freight and logistics are limited.

Road pricing

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

The transition from vehicles propelled by Internal Combustion Engines (ICEs) to electric or alternatively fuelled) vehicles presents a range of challenges and opportunities from a transport planning perspective.

The current fiscal base from road transport is under threat as the fleet moves towards being composed of vehicles that attract low or no vehicle excise or fuel duty. **To cover the gap, alternative regimes should be considered including road pricing**, this change being an opportunity to design a system that fulfils a range of social, economic, and environmental goals. The current regime centred around fuel duty does have the advantage of incentivising the uptake of fuel-efficient vehicles, given that as they compose less fuel per mile driven, they will attract less tax. However, beyond this important objective it could be said the **current fiscal regime is somewhat crude and one-size fits all**, with the level of taxation

levied on motoring not reflecting either the externalities generated by highway use or the socio-economic context in which trips occur.

The opportunity presented by the transition to a new pricing regime can allow **principles of economic efficiency and equity to be incorporated into charging for road usage**. From an efficiency perspective an effective road pricing regime would seek to allocate road space to the most economically valuable trips and in doing so reduce congestion and smooth highway demand away from heavily congested peak periods. A dynamic charging regime for highway space based on marginal demand will be greatly facilitated by the development of technology that will allow for the communication of prices in advance and in real time to motorists.

In order, however, for a pricing regime to also be equitable, in addition to acceptable to users, **additional components beyond congestion will need to be incorporated into the charging model**. These should reflect the availability of alternatives to highway use for any given trip, such as public transport or active travel and the ability of users to be flexible in choosing the time of day of their trips.

Whilst investment in alternatives to motoring are most likely to occur in urban areas, many parts of the country will struggle to develop viable alternatives to private car use at least for some trips or parts of trips. The development of rural mobility hubs and ride sharing services can reduce the need for road travel in rural areas, but **car travel will remain a necessity for many**. The pricing regime should reflect this reality and ensure lower or zero charging on many rural roads. Achieving fairness in charging is important. Using in-car technology could enable differentiation in charging according to where you drive, how far you drive and when you drive.

The **impact of fuel cost** under the current regime also has a range of unfavourable distributional impacts, that could be addressed under a more flexible charging regime. **Transport poverty**, where households spend a significant proportion of their income on travel, has a range of adverse socio-economic consequences, chiefly limiting access to employment and economic opportunities and potentially creating pockets of economic deprivation. A regime that reduces travel costs by a targeted reduction in road use charging has the potential to provide a significant contribution to the objectives around **Levelling Up** at a regional and local level.

Reduced road taxation or charging would serve to **aid the expansion of employment catchments**, in particular in isolated and deprived areas and would have the potential to incentivise some sectors of economy to locate in areas they may not otherwise have done so, taking advantage of lower travel and land costs.

Recent land use and economic modelling commissioned by Midlands Connect, included a range of findings to this effect. Including, that reduced fuel costs from electric vehicle uptake has the potential to drive employment and productivity growth in sub-urban and peri-urban areas as well as encouraging economic activity to re-distribute away from current urban centres, somewhat dependent on the relative rates and ease of the uptake of new technology in different locations. Reduced fuel costs for goods vehicles have an economic benefit of reducing the costs of consumer goods and encouraging warehousing and

distribution facilities to re-locate to areas with lower land prices, with the **potential to support economic rebalancing**.

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