



Strategic Transport Leadership Board

8 December 2022

Agenda Item 6: Electric Vehicle Infrastructure - tool demonstration

Recommendation:

It is recommended that the Board:

- a) Receives a presentation by WSP on the electric vehicle infrastructure planning tool
- b) Considers the opportunities the tool offers in the roll out of strategic electric vehicle infrastructure

1. Purpose of report

- 1.1. This paper introduces the 'electric vehicle-ready tool', which consultants WSP are presenting, and invites discussion and comments from the Board.

2. Key points to note

- 2.1. The exponential increase in electric vehicle uptake expected over the next decade will need to be supported by an equally significant increase in charging infrastructure.
- 2.2. For example, government expects the number of public charge points to increase tenfold by 2030.
- 2.3. Local authorities are expected to develop and implement local charging strategies.
- 2.4. EEH – working with partners – has developed a tool to help local authorities plan electric vehicle charging infrastructure.
- 2.5. It includes robust baseline data, electric vehicle uptake scenarios and a forecast of likely charge point requirements. Based on traffic flow and power grid capacity it points to the likely sites where private sector providers will invest, further quantifying the likely areas of focus of public sector support.

3. Context

- 3.1. EEH's transport strategy supports the electrification of the transport system to deliver on the government's commitment to achieve net zero by no later than 2050.
- 3.2. In December 2021, over a quarter of all new cars sold in the UK were battery electric vehicles. The equivalent figure for 2019 was less than 2%.
- 3.3. Currently, there are around 29,600 public charge points for charging electric vehicles in the UK. Just over 5,400 of those charge points facilitate 'rapid' charge, which takes around 30 minutes. By 2030, the government expects the number of public charge points to grow to around 300,000 public charge points as a minimum.



- 3.4. The government's 'Taking charge: the electric vehicle infrastructure strategy' states that local authorities will be expected 'to develop and implement local charging strategies to plan for the transition to a zero-emission vehicle fleet'. These 'should identify how to provide affordable, convenient charging for residents, businesses including fleets, and visitors without causing pavement disruptions that could discourage walking and cycling'.
- 3.5. The Strategic Transport Leadership Board has previously had an update from the Office for Zero Emission Vehicles (OZEV) regarding the policy direction and financial support being provided to authorities for electric vehicle charging infrastructure.
- 3.6. EEH is working with local authority partners and DfT to support the development of joined up and coordinated approach to EV infrastructure deployment strategies. In doing so the region will be better able to consider, across both the public and private sector, market failure risks and gaps in the 'coverage' of public charging infrastructure.
- 3.7. Through its decarbonisation working group, EEH will continue to facilitate collaboration and the sharing of best practice.

4. The EV tool

- 4.1. To maximise efficiencies and strengthen our impact, EEH is collaborating with neighbouring STBs to best position ourselves to support the accelerated role of EV infrastructure.
- 4.2. The tool being presented was jointly commissioned with Transport East and funded through the additional in-year-funding made available to STBs. Its production aligns with the role of the STBs as set out in 'Taking charge: the electric vehicle infrastructure strategy'.
- 4.3. The toolkit provides local authority partners with robust baseline data, electric vehicle uptake scenarios and a forecast of likely charge point requirements. This supports a strategic approach to planning and provision of EV charging infrastructure.
- 4.4. A key output of the tool is basic assumptions (based on traffic flow and power grid capacity) pointing to the likely sites where private sector providers will invest, further quantifying the likely areas of focus of public sector support.
- 4.5. This facilitates better procurement, giving EEH authorities the confidence to develop a clear route to 'packaging' numerous EV charge point sites and ensuring that charging infrastructure is delivered in an equitable manner.
- 4.6. Whilst further work is underway to investigate emerging bilateral private sector partnerships that result in further public EV charge point infrastructure, this tool currently provides the most robust source of EV uptake/planning data pertaining to the region.

5. Next steps

- 5.1. The beta version of the tool is now live and a number of 'tester' authorities have had early access (Hertfordshire County Council has also used an earlier commercial iteration of the tool in the development of their EV infrastructure strategy). Transport East is working on a web hosting arrangement for the platform that will allow for the tool to be more widely accessed. We expect this to be ready by the end of the calendar year.
- 5.2. EEH will continue to work with Transport East on the next phase of this work which includes further constituent partner authority engagement (understanding of capacity and approach to EV charge point provision) and further developing public sector understanding of how and when private capital investment into the sector will occur.
- 5.3. EEH will continue to engage with DfT and OZEV, particularly in order to ensure the upcoming £50m of revenue funding to be allocated to support the deployment of infrastructure is well planned and distributed.

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