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Highways and Transport Committee

Date of Meeting: 19 July 2021

Report Title: Cheshire East Electric Vehicles Charging Infrastructure

Strategy

Report of: Andrew Ross, Director of Highways and Infrastructure

Report Reference No: HT/05/21-22

Ward(s) Affected: All wards

1. Executive Summary

- **1.1.** In May 2019 the Council committed to being carbon neutral by 2025 and work to encourage all businesses, residents, and organisations in Cheshire East to reduce their carbon footprint.
- 1.2. The Environment Strategy 2020-2024 outlines the Council's plans for becoming carbon neutral by 2025 and includes a commitment to producing an Electric Vehicles Infrastructure Strategy.
- **1.3.** Additionally, the Council is committed to improving air quality, as outlined in the 2018 Air Quality Action Plan. Enabling a wider and more rapid transition to electric vehicles is expected to make a significant contribution to these outcomes.
- **1.4.** The purpose of this report is to provide the Committee with an update on work done to develop a robust evidence base and strategic approach to the future provision of Electric Vehicle (EV) charging points in the borough.
- **1.5.** The report contributes to the following priority outcomes identified in the Corporate Plan:
 - 1.5.1. GREEN through proposals that would improve EV charging provision across the Borough, the Council will encourage the early adoption of electric vehicles which will positively contribute both to our response to the climate emergency and to reducing the incidence of air quality problems, especially in urban areas.

- **1.5.2. FAIR** the proposals are intended to create greater consistency and availability of access to EV charging, removing some of the long-standing barriers to purchase and use of electric vehicles within the Borough.
- 1.6. The Council has already invested in providing a number of electric vehicle charge points however there are extensive gaps in current provision within Cheshire East. Notably, there is a lack of provision in the Macclesfield area and in areas of other towns where houses do not have off- street parking. In areas of the borough that do have EV charge points, current provision may be insufficient to support a more rapid uptake of electric vehicles in future years.
- **1.7.** The following objectives have been identified as priority outcomes from the production of the draft Cheshire East EV Charging Strategy:
 - To contribute towards improved air quality and reduced carbon emissions from transport;
 - To support the uptake of electric vehicles by individuals, business and organisations within Cheshire East;
 - To guide the provision of infrastructure that is planned, safe, easy to use and represents good value for money both on installation and throughout its life;
 - To overcome inequalities in infrastructure provision, enabling our communities to transition to electric vehicles in a timely way;
 - To ensure infrastructure makes a positive contribution to the streetscape through sensitive placement and appearance, avoiding negative impacts on other road users, particularly pedestrians; and
 - Supporting electric vehicles in the context of a wider transport system that encourages mileage reduction, active travel and public transport.
- **1.8.** These objectives have guided the development of the strategy and are expected to guide implementation of future infrastructure programmes.
- **1.9.** The strategy assesses potential locations for future EV charge points against a framework of investment criteria including:
 - The contribution to serving residential, destination and on-route charging needs;
 - Site security and ambient surveillance levels;
 - Cost effectiveness of connection to the electricity network;
 - Avoiding conflicts with commercially provided charge points e.g. at supermarkets; and
 - Projected uptake of electric vehicles in the surrounding area.

- **1.10.** This investment framework has been used to assess potential locations in Council car parks across the borough.
- **1.11.** The results provide a high degree of confidence that there is a reliable basis for determining quick wins in Cheshire East that are deliverable, affordable and likely to meet the needs of local users.
- 1.12. The strategy also sets out a range of commercial models that are available to the Council to deliver EV charging infrastructure. The preferred approach is one that retains an element of control over the location of sites and their operation whilst working collaboratively with the private sector to leverage investment funding and access up-to-date technologies throughout the life of a contract or concession. The scope of such an agreement would, in principle, include the installation, maintenance and operation of electric vehicle infrastructure on behalf of the Council.
- **1.13.** Indicative timescales for further development and delivery of the EV Charging Strategy are outlined below:
 - Market testing and public engagement (August October 2021);
 - Soft market testing to identify opportunities for "quick wins". (Oct 2021)
 - Refine EV strategy and develop a preferred delivery mechanism (October – November 2021);
 - Seek Committee approvals for the above (November 2021);
 - Prepare high level business case to consider the case for capital investment as part of the highways capital programme(November -January 2022);
 - Prepare procurement documentation (Dec Jan 2022);
 - Budget setting relating to Business Case at Council (Feb 2022);
 - Seek final committee approvals for the above (Mar 2022); and
 - Launch procurement exercise and implementation of quick wins (April 2022).

2. Recommendations

- **2.1.** The Highways and Transport Committee is recommended to:
 - **2.1.1.** Approve the draft Cheshire East Electric Vehicles Infrastructure Strategy (detailed in Appendix 1) as a basis for consultation and engagement;
 - **2.1.2.** Approve a market testing exercise for a concession approach to delivering EV charging infrastructure;
 - 2.1.3. Note the next steps for the development and delivery of the EV Infrastructure strategy as set out in paragraph 1.13 and that further reports will be submitted to committee to seek necessary approvals.

3. Reasons for Recommendations

- **3.1.** Enabling the transition to electric vehicles is anticipated to make a significant contribution to meeting the Council's commitments to the environment.
- **3.2.** The provision of electric vehicle charging infrastructure will directly support delivery of the 'a council which empowers and cares about people' and 'a thriving and sustainable place' priorities identified in the Council's Corporate Plan 2021-2025.
- 3.3. The provision and maintenance of EV Charging Points is a rapidly growing area of the public utilities sector, requiring a number of sector-specific and technological capabilities. There is a need for the Council to undertake thorough market-testing before entering into any agreement with a supplier. Market testing will ensure the needs of the Council and the opportunities for service provision and revenue generation are fully understood.
- **3.4.** Market testing will ensure that the Council fulfils its obligation to secure best value from any relationship with the commercial sector whilst seeking maximum benefit from enabling provision of EV Charging Points at key locations across the Councils car parking estate.

4. Other Options Considered

- 4.1. The option of leaving the provision of electric vehicle charging infrastructure wholly to the private sector has been considered. Although this option would minimise financial commitments on the Council this is expected to result in an unbalanced charging network with substantial gaps in provision, most notably in some of our more rural or deprived communities. Also, this approach would not realise the benefits of providing charging infrastructure on Council owned land, some of which is located in attractive locations for charging electric vehicles, risking a slower uptake in the borough. This option is not the preferred approach at this time.
- 4.2. The option of the Council taking full ownership and responsibility for investment, installation, maintenance and operation of charge points has been considered. This option would have the benefit of retaining full control of the network, however this would also expose the Council to significant financial risks. As noted in the strategy, the rate of uptake of electric vehicles is uncertain and is likely to be constrained over the short to medium term by the higher purchase cost of electric vehicles and limited supply of vehicles due to manufacturing constraints. This option is not the preferred approach at this time.
- **4.3.** Alternative options may be re-assessed when we have the outcomes of the market-testing exercise.

5. Background

- **5.1.** The Council adopted a new Local Transport Plan (LTP) in October 2019 with key actions including providing electric vehicle charging infrastructure through seeking external funding from government and working collaboratively with commercial partners. At the national level the UK Government has committed to the phasing out sales of new Internal Combustion Engines by 2030.
- **5.2.** The Council has previously invested in the installation of electric vehicle charge points in a range of locations, part funded by central government. Despite this there are still gaps in provision of charge points in the borough, most notably in the Macclesfield area.
- 5.3. Presently, there is relatively low uptake of electric vehicles in Cheshire East (2,119 registered plug-in vehicles in quarter 3 of 2020). Nevertheless, this is comparatively higher than for similar sized local authorities, potentially reflecting the relative affluence of some Cheshire East communities. There is anticipated to be significant growth in electric vehicles in the coming years, particularly from the mid-2020s when price parity with internal combustion engine vehicles is achieved and manufacturing capacity matches demand. Without timely investment in charging infrastructure to ensure a balanced and reliable network, there is a risk the transition to electric vehicles will be delayed.
- **5.4.** Due to the rapid changes in vehicle and charging technology, uncertainty regarding the pace of uptake in electric vehicles, and interplay with demographic factors, an evidence-led strategy has been developed. This strategy provides a strong evidence base to underpin future decisions regarding the timely provision of charge points in Cheshire East.

5.5. A range of measures are considered in the strategy and priorities have been identified for the short, medium and long term as noted below:

| Measure | Short term (0 – 2 years) | Medium term (2 -5 years) | Longer term (5+ years) |
|--|------------------------------|--|---|
| Providing charging points at key destinations (e.g. town centres, retail sites, major employment sites). | ✓ | Continuous monitoring of charge point usage and commercial provision to determine when / if further phases of Council-led charge points are required | |
| Providing on-street charging points to support residents with limited access to parking and home charging, with a focus on off-street car parks and consolidated on-street community hubs. | ✓ | | |
| Providing on-route charging points to serve the Major Road Network. | ✓ | | |
| Introduce charge points for the Council's own fleet and grey fleet. | ✓ | | |
| Continuous engagement and joint working with the District Network Operators (Scottish Power Electricity Networks, Electricity North West, Western Power Distribution) to bring forward cost effective charge points and strategic strengthening of the power network, particularly in Macclesfield and Congleton where capacity is constrained. Investigation could also be conducted into the potential for distributed renewable energy solutions for supporting EV charging in areas of constrained power supplies. | √ | √ | √ |
| Engage with taxi industry and providing charging infrastructure for taxis in convenient locations. | (focusing on rapid chargers) | (focusing on rapid chargers) | √ (potential for wireless inductive chargers) |
| Engage with bus operators and consider providing charging infrastructure for buses. | | ✓ | ✓ |
| Encourage and where possible support the introduction of commercially provided charging forecourts. | √ | √ | √ |
| Introduce charge points for HGVs should appropriate technology come forward. | | | ✓ |

5.6. As part of the next phase of work, site selection for delivery of charge points will be considered further with the aim of providing a balanced network in a timely way to support demand for charging. This will draw on evidence contained in the strategy, detailed cost estimates of connecting to the electricity network and discussions with stakeholders.

6. Consultation and Engagement

- 6.1. In preparing the strategy engagement has occurred with Council service areas to ensure a joined-up approach with adjacent work programmes. Significant engagement has also occurred with District Network Operators (Scottish Power Energy Networks, Electricity North West and Western Power Distribution) to identify cost effective locations for connecting to the electricity grid and longer-term requirements for strategic network strengthening.
- 6.2. Options for electric vehicle charging infrastructure were included within the Local Transport Delivery Plans consultation between December 2020 and March 2021. Further to this a specific consultation is planned on this draft strategy subject to committee approval. Feedback from this consultation will be used to inform the final shape of the strategy and future delivery of charging infrastructure. Further public consultation and engagement is planned for specific charging infrastructure sites as these are brought forward, including any statutory Traffic Regulation Order consultations.
- 6.3. The timeline for implementing the recommendations set out in this report includes an opportunity for further public engagement on the EV Charging Strategy during August to October 2021. This engagement will provide an opportunity for local residents and stakeholders to share views on the options for rolling out EV Charging facilities and, in so doing, help to inform the procurement of a suitable supplier.

7. Implications

7.1. Legal

- 7.1.1. In developing and implementing electric vehicle charging infrastructure, the Council should have regard to the transport needs of disabled persons and of persons who are elderly or have mobility problems. Development of plans will need to be in accordance with statutory and legal requirements for Community Engagement and Equalities Impact Assessment.
- 7.1.2. Members should be fully aware of the equalities implications of the decisions they are taking. This will ensure that there is proper appreciation of any potential impact of any decision on the Council's statutory obligations under the Public Sector Equality Duty. As a minimum, this requires decision makers to carefully consider the content of any Equality Impact Assessments produced by officers.

- 7.1.3. Legally enforceable Traffic Regulation Orders will be required for enacting parking restrictions for bays at which charging infrastructure is installed. Statutory consultation is required before making any Traffic Regulation Order including amending existing Traffic Regulation Orders.
- **7.1.4.** The Council has a duty under section 122 Road Traffic Regulation Act 1984 to provide suitable and adequate on and off street parking and must be mindful of that duty when proposing new Traffic Regulation Orders or amending existing Traffic Regulation Orders.

7.2. Finance

- **7.2.1.** The development of this Cheshire East Electric Vehicles Infrastructure Strategy and subsequent market testing is funded from the established annual budget for the Strategic Transport & Parking service.
- 7.2.2. Operation of the existing network of EV charging infrastructure is expected to be funded from a range of sources including: LTP Integrated Transport Block funding; Community Infrastructure Levy; Section 106 & 278 Agreements; external Government grant funding and the Council's capital and revenue funding.
- **7.2.3.** Following market testing with potential suppliers and wider public engagement to finesse the strategy and identify likely funding requirements, additional approvals will be sought through the Council's budgetary processes.

7.3. Policy

7.3.1. Development of the Cheshire East Electric Vehicles Infrastructure Strategy is being undertaken to ensure there is a consistent policy-fit with all relevant adopted and emerging local policies including: the Local Transport Plan, Corporate Plan 2021 – 2025; regeneration masterplans for Crewe and Macclesfield; Town Vitality Plans; and Car Parking Strategy.

7.4. Equality

7.4.1. An Equality Impact Assessment (Appendix 2) has been drafted for the Cheshire East Electric Vehicles Infrastructure Strategy to ensure that the needs and impacts on residents are understood, especially individuals or groups with identified protected characteristics.

7.5. Human Resources

7.5.1. There are no direct implications for Human Resources.

7.6. Risk Management

7.6.1. Development of the EV workstream will report to Project Board chaired by the Head of Strategic Transport. Officers from procurement, finance, estates, public health and highways will be invited to attend to ensure appropriate project governance and strategic direction. A project risk register is maintained detailing mitigation measures.

7.7. Rural Communities

7.7.1. As part of the strategy public car parks operated by the Council in Principal Towns, Key Service Centres and Local Services Centres have been considered. These locations are anticipated to act as hubs for surrounding areas.

7.8. Children and Young People/Cared for Children

7.8.1. No direct implications for children and young people have been identified.

7.9. Public Health

7.9.1. The strategy has been aligned with the Council's stated policies and action plans relating to Air Quality management. This considers the impact of transport on issues affecting public health, most notably air quality and the contribution that electric vehicles can make to reducing tailpipe air pollutants.

7.10. Climate Change

7.10.1. The Council has committed to becoming carbon neutral by 2025 and to encourage all businesses, residents and organisations in Cheshire East to reduce their carbon footprint. The strategy aims to support the transition away from internal combustion engines that burn fossil fuels. This coupled with decarbonisation of energy generation is anticipated to play a major role in meeting the UK's targets for reducing greenhouse gases.

| Access to Information | | |
|-----------------------|---|--|
| Contact Officer: | Richard Hibbert, Head of Strategic Transport Richard.hibbert@cheshireeast.gov.uk 07866 157324 | |
| Appendices: | Appendix One: Cheshire East EV Charging Strategy (draft) | |
| Background Papers: | None | |