

9 February 2022**Agenda Item:6****REPORT OF THE CORPORATE DIRECTOR, PLACE****ON-STREET ELECTRIC VEHICLE CHARGING INFRASTRUCTURE****Purpose of the Report**

1. The purpose of this report is to update Committee on the work undertaken to date regarding on-street electric vehicle (EV) charging infrastructure and to seek Committee approval for short-term proposals that enable Nottinghamshire residents without off-street parking provisions to charge EVs on-street.

Information

2. Providing on-street EV charging infrastructure fits with several government strategies, including the 'Ten Point Plan for a Green Industrial Revolution' and the 'Clean Air Strategy 2019' which aim for the UK to be net zero by 2050. The County Council declared a climate emergency in May 2021 and subsequently published 'Nottinghamshire Green Growth', its 'Carbon Reduction Plan', and in November 2021 the 'The Nottinghamshire Plan 2021-2031'. Encouraging and accelerating the uptake of EVs in Nottinghamshire helps deliver national and local carbon reduction aims and objectives.
3. To help deliver government strategic objectives related to climate change, air quality, and its subsequent plans to end the sale of new petrol and diesel cars in the UK by 2030 (and for all new cars and vans to be fully zero emission at the tailpipe from 2035), government has made funding available for the provision of EV infrastructure to encourage and accelerate the uptake of EVs. Businesses, organisations, and residents with off-highway parking facilities are able to apply to help fund the installation of EV charging infrastructure on their property; whilst local authorities are able to apply to help fund the installation of on-street EV charging infrastructure at locations where properties have no off-highway provision.
4. The County Council's current policy on EV charging infrastructure was approved by Policy Committee at its 18 July 2018 meeting; and focuses on the delivery of off-street EV charging infrastructure within public and workplace car parks. Policy Committee determined that the County Council would not, at the time, seek funding for the roll-out of a widespread on-street charging network. Since then, as part of the Nottingham Go Ultra Low programme (working in partnership with Nottingham City and district councils), 68 EV chargepoints have been installed at 23 locations in public car parks in the county; and the County Council has funded 13 EV chargepoints at six workplaces as part of its Travel Choice workplace grants.

Work Undertaken to Identify Potential On-Street EV Charging Solutions

5. Following a motion to investigate EV infrastructure solutions in rural communities, approved at the 10 October 2019 meeting of the County Council; and in recognition of the future need

to provide on-street charging infrastructure to encourage EV take-up, in July 2020 Communities & Place Committee approved the funding of a 'rural and on-street EV charging infrastructure study' as part of the 2020/21 integrated transport programme. AECOM were commissioned to undertake the study looking at:

- practical and policy issues surrounding implementing on-street EV charging infrastructure
 - locations where on-street EV infrastructure may be required in the future
 - an evaluation of the different types of EV infrastructure currently available and their practicality in both urban and rural settings, and
 - specific issues faced in rural communities when providing/considering EV infrastructure.
6. The outcomes of the study will help inform the County Council's planning for the future provision of EV charging infrastructure on the highway, including potential locations for early roll-out of on-street EV infrastructure solutions in a variety of settings (rural and urban, residential, commercial, and retail). This study has, however, been paused pending the outcome of national and regional research and its subsequent guidance.
7. Research being undertaken nationally by the Office of Zero Emission Vehicles (OZEV) (i.e., anticipated guidance following the outcome of recent consultation – see below) and regionally by Midlands Connect (i.e., development of a regional Transport Technology Action Plan which includes EV infrastructure), will likely influence future on-street EV infrastructure solutions in the county. Therefore, to avoid abortive work (and potential wasted resources) it is considered that the Council should wait until the aforementioned OZEV and Midlands Connect research has been completed before implementing large scale permanent on-street infrastructure solutions in the county (such as on-street charging infrastructure or 'charging hubs'). Once the results of the OZEV consultation and Midlands Connect report are published (expected 2022/23), the County Council will review the findings and provide Committee with an update on potential longer-term on-street EV charging solutions. In the interim it is, however, proposed that the Council investigate the potential trial of on-highway EV charging solutions.
8. Recognising residents without off-street parking may need a quick/immediate solution that enables them to charge their EV on-street (and that without appropriate guidance, some EV owners may undertake unsuitable methods to charge their EV on the public highway), the Council's on-street EV charging study also investigated alternative short-term solutions that avoid residents creating obstruction hazards by trailing EV charging cables across the public highway. It is therefore proposed that the first step in providing EV charging solutions for residents without off-street parking is to pilot cable channels cut into the footway.

Interim On-Street Charging EV Charging Solutions

Cable Channels

9. The County Council does not permit any cable to be placed across the public highway as it represents a health and safety hazard, and an impediment to the safe use of the highway by the visually and/or mobility impaired, or other affected user groups. Advice from the County Council's legal service was sought to confirm that the same would apply to EV charging cables across the public highway where it is likely to cause a danger to highway users (i.e., constitute an offence by causing a trip hazard or other danger). In these circumstances, the Highways Act 1980 provides that action may be taken to remove cables that are deemed unsuitable or unsafe. Given the above, trailing EV cables across any part of the public highway is therefore not considered a suitable approach to charging EVs on-street.
10. It is considered, however, that cable channels cut into the footway could provide a discreet and safe conduit for EV cables to extend from a private property to the public highway without creating a trip hazard or adding to street clutter. The simplistic design would offer residents

with an affordable solution to enable those without off-street parking to charge their EV at home (in both rural and urban settings). As this would enable the resident to connect their EV directly to their household's electricity supply via a wall-mounted chargepoint, it also avoids potential grid connection constraints through utilisation of home energy supply. Furthermore, the charging rates for the electricity used will likely be cheaper for the user than a typical on-street EV charger; and it would enable residents with solar panels to charge their EVs from their own renewable energy supply.

11. If Committee wish to permit the use of cable channels cut into the footway, should a resident wish to install an EV cable channel they will be able to do so under the appropriate license/authorisation provided by NCC and/or Via East Midlands (similar to the installation of vehicular dropped kerbs). Each request will, however, be considered on a case-by-case basis as it is recognised that this may not be a suitable solution for some properties, e.g., where parking is not permitted or would be inappropriate, or in certain heritage conservation areas.
12. It should be noted that planning permission may not be required to install external wall mounted EV charging units at residential properties, even those without off-street parking/private driveways. However, residents wishing to install such units on listed buildings (whether internally or externally) would almost certainly require Listed Building Consent from the Local Planning Authority (district/ borough councils).
13. It is not proposed that dedicated parking bays (to accompany a cable channel) be provided outside each resident's property. This would reduce limited on-street parking capacity for residents and visitors where there are already parking pressures, and as the wall-mounted chargepoint would be used exclusively by one household a reserved bay is not considered appropriate. As there will be no changes to parking bays or restrictions, Traffic Regulation Orders (TRO) would not therefore be required, resulting in a quicker and more affordable option. Any resident interested in installing an EV cable channel will therefore be made aware that dedicated parking bays will not be considered or provided meaning they would not be guaranteed to be able to park outside their property (just as at present).
14. The County Council's cable channel proposals are comparable to the ongoing 'OxGul-e' pilot in Oxfordshire (Oxfordshire County Council, Oxford City Council and ODS form the project group). The current phase of the OxGul-e project runs from August 2021 to March 2022 with the aims of finalising the design, licensing mechanisms, and delivering a trial. The County Council has been added to the OxGul-e dissemination list for updates on project progress.
15. Energy Saving Trust has confirmed that at this time cable channels are not eligible for funding from any of OZEV's present funding schemes, including the 'Homecharge', 'Workplace' or 'On-street Residential Chargepoint Scheme'. The cost of installing cable channels to accommodate EV charging cables will therefore need to be met by the household wishing to install it. The current OZEV funding schemes are, however, being reviewed and an alternate funding scheme is expected to start from April 2022. OZEV may therefore offer residents opportunities to apply for funding to help meet the cost of installation in the future.

Potential on-street Infrastructure Pilots

16. Whilst pending the outcome of the national and regional studies it is also proposed that the Council investigates introducing pilot on-highway charging infrastructure as part of its 2022/23 highways capital programme. Should Committee approve this work, officers will undertake the following work prior to seeking further approvals for their delivery/funding as part of a future 2022/23 highways programmes report:
 - Investigate the possibility of delivery through existing concessionaire arrangements

- Identification of potential 'early EV adoption areas' using outcomes from the aforementioned draft rural and on-street EV charging infrastructure study
- Public consultation within these areas to identify specific potential locations for delivery
- Liaison with Western Power Distribution concerning feasibility/network grid capacity
- Scheme design options and delivery cost estimates.

County Council's Response to OZEV Consultation on EV Infrastructure

17. As referenced earlier in this report, as part of its 'Future of transport regulatory review', the Office of Zero Emission Vehicles (OZEV) recently consulted on new primary legislation that would give the government powers to introduce a statutory duty to plan for EV infrastructure (and where this responsibility should lie); and whether a statutory duty should be introduced to deliver EV infrastructure (and where this responsibility should lie). The consultation ran from 28 September 2021 to 22 November 2021, but unfortunately due to the deadline, it was not possible to seek Committee approval before submitting the County Council's response. The submitted response therefore made it clear that it was subject to future Committee approval.
18. The County Council has already undertaken much of the planning element for the provision of EV infrastructure, both off-street (in partnership with the city and district councils through the Nottingham Go-Ultra Low programme) and on-street through the aforementioned on-street EV charging infrastructure study. This work may, however, need to be reviewed should OZEV determine that there will be a consistent approach to delivery across the country (and provide the necessary guidance on how to plan and deliver the infrastructure).
19. The County Council's consultation response therefore reflected the planning work already undertaken and recognised that the roll-out of on-street EV infrastructure should potentially be led by the local highway authorities (i.e., the County Council in Nottinghamshire) to ensure a comprehensive, consistent, effective network distributed across the whole area; free from commercial pressures. Any planning of the rollout of on-street EV infrastructure would, however, need to be funded by government and should include input from all the organisations that have a role in the delivery of such programmes. The response also highlighted that it should be the responsibility of each individual business to consider its own needs and to plan and provide, on its own estate, the necessary EV chargepoints to meet the demand of its own fleet/grey fleet business use.
20. The delivery of EV infrastructure is not solely within the County Council's authority and is dependent on several organisations fulfilling their role (including, importantly, the power distribution companies); and only government has powers to mandate all of these organisations to act. The consultation response therefore reflected that it is considered that it would not be appropriate to place a statutory duty or the onus for the delivery of the on-street EV charging infrastructure on any one organisation (including the County Council); unless that organisation is the government itself.

Other Options Considered

21. Other options considered are set out within this report.

Reasons for Recommendation

22. The reasons for recommendations are set out within this report and aim to help ensure delivery of County Council priorities, national priorities and local transport goals and objectives.

Statutory and Policy Implications

23. This report has been compiled after consideration of implications in respect of crime and disorder, data protection and information governance finance, human resources, human rights, the NHS Constitution (public health services), the public sector equality duty, safeguarding of children and adults at risk, service users, smarter working, sustainability, and the environment and where such implications are material they are described below. Appropriate consultation has been undertaken and advice sought on these issues as required.

Financial Implications

24. As set out in this report, it is intended that the cost of installing cable channels to accommodate EV charging cables will be met by the household wishing to install it, therefore there are no immediate financial implications for the County Council.

25. Notwithstanding this, there will be a cost to the County Council for the ongoing inspections, maintenance and potentially decommissioning of any redundant cable channels. It is intended that the additional costs will be covered under the appropriate license/authorisation fees (similar to the installation of vehicular dropped kerbs); and should the equipment become adopted highway through existing capital maintenance funding allocations.

Public Sector Equality Duty implications

26. The proposals set out in this report comply with the Public Sector Equality Duty. An equality impact assessment was undertaken on the Nottinghamshire Local Transport Plan 2011/12-2025/26 in March 2011 to ensure that the strategy met the duty.

27. The standard design drawings for the cable channels are currently being developed and once finalised an equality impact assessment on the design will be carried out to assess the impact of the proposals on people with protected characteristics to ensure that the design does not have negative impacts.

Implications for Sustainability and the Environment

28. The County Council has a statutory obligation to address carbon reduction and air quality issues resulting from road traffic on its managed roads. The programmes and measures contained within this report have therefore been developed to reduce the County's impact on the environment by promoting greener travel, addressing carbon reduction, and working towards transport decarbonisation resulting from road traffic and its impacts on local communities.

RECOMMENDATIONS

It is recommended that Committee approve:

- 1) the proposals to help enable residents without off-street parking facilities to charge their electric vehicle on-street, as set out in paragraphs 9-15 of this report;
- 2) investigation into the potential delivery of on-street EV charging infrastructure pilots as detailed in paragraph 16 of this report.

Adrian Smith
Corporate Director, Place

For any enquiries about this report please contact:

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Constitutional Comments (SJE – 26/01/2022)

29. This decision falls within the Terms of Reference of the Transport & Environment Committee to whom responsibility for the exercise of the Authority's functions relating to the planning, management and maintenance of highways and pavements has been delegated.

Financial Comments (SES – 07/01/2022)

29. The financial implications are set out in paragraphs 24 and 25 of the report.

30. As set out in this report, it is intended that the cost of installing cable channels to accommodate EV charging cables will be met by the household wishing to install it, therefore there are no immediate financial implications for the County Council.

31. Notwithstanding this, there will be a cost to the County Council for the ongoing inspections, maintenance and potentially decommissioning of any redundant cable channels. It is intended that the additional costs will be covered under the appropriate license/authorisation fees (similar to the installation of vehicular dropped kerbs); and should the equipment become adopted highway through existing capital maintenance funding allocations

Background Papers and Published Documents

Except for previously published documents, which will be available elsewhere, the documents listed here will be available for inspection in accordance with Section 100D of the Local Government Act 1972.

- Reducing emissions from road transport: Road to Zero Strategy – 9 July 2018
- Office of Zero Emission Vehicles - Transitioning to zero emission cars and vans: 2035 delivery plan – 14 July 2021
- The ten-point plan for a green industrial revolution – 18 November 2020
- Clean Air Strategy 2019 – 14 January 2019
- Electric Vehicle Charging Infrastructure – 18 July 2018 Policy Committee report
- Highways Capital & Revenue Programmes 2020/21 – 02 July 2020 Communities & Place Committee report
- Nottingham Go Ultra low Bid to the Office of Low Emission Vehicles (OLEV) – 17th March 2016 Transport & Highways Committee report and 8th October 2015 Transport & Highways Committee report
- Nottinghamshire County Council response to Office of Zero Emission Vehicles consultation "Future of transport regulatory review: zero emission vehicles".

Electoral Division(s) and Member(s) Affected

- All