South Cambridgeshire District Council

Approach to Electric Vehicle Charging

2022

South Cambridgeshire District Council

Contents

Executive Summary

South Cambridgeshire District Council's approach to public Electric Vehicle (EV) charging is based on the following key components. We will:

- Continue to identify and deliver opportunities for installing public EV charging in areas we directly control on our own estate, including Council Housing sites.
- Provide aid (where possible) to parish councils and community buildings, to install public EVCPs in areas where there is sufficient demand.
- Work with partners at Cambridgeshire and Peterborough Combined Authority, Greater Cambridge Partnership and Cambridgeshire County Council to support production and implementation of a cohesive public EV charging strategy and assist in applications for related government funding such as the Local EV Infrastructure (LEVI) Fund.
- Through planning policy, require provision of public and private EV charging in new developments both private and Council-led.
- Use our influence to promote and support measures that complement public EV charging infrastructure such as charger sharing and EV car clubs.

Background

1.1. The UK Government has made a commitment to reach net zero emissions by 2050, set out in the Climate Change Act 2008 (2050 Target Amendment) Order 2019). Transport is the UK's largest emitting sector, and according to the Department for Business, Energy and Industrial Strategy, 91% of those transport emissions come from road transport.

1.2. To reduce these emissions, we will need to travel less and/or replace journeys in petrol and diesel fuelled vehicles with travel by other modes like walking, cycling, and public transport. However, some journeys will still need to be made by road vehicles, particularly in rural areas of the UK such as South Cambridgeshire. It is therefore hugely important that carbon emissions for these journeys are also reduced significantly.

1.3. To help meet its carbon reduction aims, UK Government declared in November 2020 that the UK would phase out new petrol and diesel vehicles by 2030. This announcement has accelerated sales of electric vehicles (EVs); in 2020 there were 8,000 cars with an electric plug (battery or hybrid) in the UK. As of March 2022, this has increased massively with 450,000 battery electric vehicles in the UK according to data from the Department for Transport.

1.4. This increase has created a demand for improved EV charging infrastructure, primarily Electric Vehicle Charge Points (EVCPs). It is generally acknowledged that while progress is being made nationally in this area, the rate of the rollout needs to be accelerated to meet demand. In support of this aim, the UK government has published Taking Charge: The Electric Vehicle Infrastructure Strategy (2022) and has announced it will be releasing further funding for EV charging infrastructure.

1.5. The Government's strategy acknowledges the importance of Local Authorities in EVCP rollout, due to their understanding of local needs and role in local transport planning. Furthermore, supporting EV infrastructure will help Local Authorities to meet their local carbon reduction aims.

Types of Electric Vehicle Chargers

1.6. Slow: Charging rates range between 2.3 kW (domestic) and 3 kW. These are most suited to overnight home charging as they take approximately 10-14 hours to reach full charge

1.7. Fast: Charging rates range between 7kW and 22kW and take between 2-6 hours to reach full charge, depending on the type of EV battery.

1.8. Rapid: Charging rates between 43-50kW, able to charge an EV to 80% in around 20 minutes, with another 20 mins to full charge. These speeds suit users who need to charge their electric vehicle quickly, such as taxis, commercial vehicles, and those doing longer journeys.

1.9. Ultra-Rapid: As above, albeit even more rapid, being capable of 100kW+ and reaching a full charge in 20 minutes.

Rationale

2.1. Transport accounts for over half of the overall carbon emissions in the district of South Cambridgeshire, with 98% of these emissions (approximately 665,000 tonnes of CO_2 per year) produced by road traffic.

2.2. South Cambridgeshire District Council's Zero Carbon Strategy (2020) sets an ambition for the district to achieve a 50% reduction in carbon emissions by 2030, compared to a 2018 baseline, and to reduce to net zero carbon emissions by 2050.

2.3. As is the case nationally, the transition to EVs will play a key role in meeting these goals for carbon reduction in South Cambridgeshire.

2.4. The council is directly responsible for less than 1% of emissions within the district but has already taken steps to reduce vehicle emissions from its own operations, installing 20 EVCPs for staff at its South Cambridgeshire Hall office, and is beginning to electrify its fleet of waste collection vehicles, having purchased 3 eRCVs. EVCPs are also being installed at our commercial properties for our commercial tenants and their visitors.

2.5. While the remaining 99% of emissions are outside our direct control, we can influence progress toward net zero emissions directly through our policies and procurement, and more widely through working with partners and communities.

2.6. The objectives of the council's Business Plan 2020-2025 recognise this, committing us to "identify and deliver opportunities to invest in publicly accessible electric vehicle charge points in priority locations in the district, working with partners".

2.7. The approach set out in this document forms aligns with the approach set out in the Zero Carbon Strategy and Business Plan, by using our three spheres of influence to promote EV uptake and improve EV charging infrastructure. These spheres are: being an example to others by putting our own house in order, using our direct influence through policies and procurement, and making the most of our wider influence through partnerships in in our communities.

Current situation in South Cambridgeshire

3.1. As a predominantly rural district, detached and semi-detached homes dominate the district's housing stock, accounting for approximately 75% of homes in South Cambridgeshire.

3.2. Although not every detached and semi-detached home will have a parking space suitable for home charging, this suggests the majority of EV users in the district will be able to charge at home overnight, on their own driveways. The Government's EV Chargepoint Grant now supports private renters in purchasing chargers, which can be installed with their landlord's permission.

3.3. Home charging will be supplemented by workplace chargers (Government funding for workplace charging is available through the Workplace Charging Scheme), destination charging, or rapid chargers provided by the private sector on the major road network.

3.4. However as noted in the council's Local Plan 2018 around 25% of homes in South Cambridgeshire are terraces, flats, and maisonettes, so are less likely to have access to private off-street parking, where they can charge an electric vehicle. Although this is less than the national average of around 30% identified in the Department for Transport's National Travel Survey 2021, it still amounts to a significant minority of homes. Not all of these will be

occupied by drivers. However, those that are, will need to access EV charging by other means.

3.5. Access to public EVCPs will therefore be important for these residents, and as the Government have indicated it is this particular gap in provision that Local Authorities have a clear role in addressing.

3.6. Parking spaces at our own Council housing are unallocated to individual properties. Council homes account for approximately 8% of housing in the district and so represent a sizable number of homes without private parking Our approach to EV charging for these homes is addressed in section 4.

3.7. While we will not be able to provide all the infrastructure required, we are committed to enabling and where possible provide charging infrastructure. In doing so, we can ensure that there will charge points available across the district for residents and visitors, to support EV uptake, reduce carbon emissions, and facilitate large scale transition to EVs in time.

Approach to Public EV Charging

Use of Council land

4.1. Unlike many district councils, South Cambridgeshire does not directly control public car parks or leisure facilities which would otherwise present obvious locations to install public EVCPs. Some of the ‘quick wins’ for public charging accomplished by other districts are therefore not open to the Council.

4.2. Furthermore, we are not the Local Highways Authority and we do not have direct control of site selection and installation of public EVCPs at locations on the highway.

4.3. However, there remains a role for us to encourage wider EV uptake and support infrastructure by investigating and taking opportunities to install EVCPs on its own estate where possible. We have installed a public EVCP next to the Marketing Suite at Cambourne Business Park and will proceed with a trial EVCP installation at Sheltered Accommodation Communal Rooms, for use by South Cambridgeshire tenants and the public. If successful, these can be rolled out to other suitable Communal Buildings across the district, and we will continue to look for opportunities to install public EVCPs on our own land.

4.4. It is envisaged that public EVCPs installed by or on behalf of the council will be fast chargers (7kW or 22kW) and will incorporate smart technology, and user experience improvements including contactless payment modules.

4.5. Where EVCPs are located on council land, we will not seek to make a profit from EVCPs. Users will be billed at cost for electricity used, inclusive of any maintenance and management costs to the Council. This will be set out in a separate Electric Vehicle Charge Point Policy document which will set out how payment, management, and communications around EVCPs on Council land will operate.

Rapid EVCPs

4.6. It is generally acknowledged that rapid charge points are best located adjacent to major and strategic roads, where they can support users needing quick charges, before continuing longer journeys. The Government's strategy sets the expectation that the private sector will deliver rapid EVCPs where they are commercially viable, for example adjacent to major and strategic roads, and that government will only intervene when there is a clear market failure.

4.7. The private sector has begun to install rapid chargers within South Cambridgeshire, at 5 locations so far including petrol stations (Shell, Fourwentways) motorway services (Boxworth services A14) and destinations such as supermarkets (Morrisons Supermarket, Cambourne).

4.8. The installation of rapid EVCPs is challenging due to the cost of the equipment and the amount of energy required, which often necessitates expensive upgrades to the grid connection. The forthcoming £950 million Rapid Charging Fund recognises these constraints and aims to boost rapid EVCP provision by "future-proofing electrical capacity at motorway and major A road service areas to prepare the network for 100% zero emissions vehicles (ZEV) uptake".

4.9. While we will continue to investigate opportunities for rapid charging, there will be less emphasis of our involvement in installing rapid charge points in future, given the above.

Planning Policy

4.11. As the Local Planning Authority, South Cambridgeshire District Council is well placed to enhance provision of both private and public EVCPs in new developments through its planning policy.

4.12. The current Local Plan 2018 advises that for new homes at least one parking space should be allocated within the curtilage of the residential property, which would provide householders with access to their property to charge electric vehicles.

4.13. The Greater Cambridge Sustainable Design and Construction Supplementary Planning Document (2020) makes more detailed recommendations for levels of EVCP provision within parking layouts for homes with allocated and unallocated parking, and non-residential

developments. This includes recommended measures for rapid charging and passive charge points to enable future expansion of EVCP provision.

4.14. At the time of writing, the First Proposals for the Greater Cambridge Local Plan (2021) propose both active and passive provision for EVCPs of a minimum of 7kw, at all developments at the following levels:

- Dwellings with private parking: 1 charge point per dwelling (100% active)
- Communal parking areas: 1 charger per parking space (50% active, 50% passive)
- Employment: 30% of bays with active charge points, and 30% with passive.
- Retail: 20% of bays with active charge points, and 20% with passive.

Management strategies will be required for communal charge points.

Council Developments

4.15. The above planning policies and guidance will apply to new Council developments. However, the Greater Cambridge Housing Strategy 2019-2023 and the New Build Council Housing Strategy 2020 - 2025 also affirm new Council developments will be designed to respond to and mitigate against climate change, referencing the guidance within the Sustainable Design and Construction SPD.

4.16. This has been demonstrated with inclusion of EV charge points at recent Council developments such as 11 affordable apartments in Sawston, completed in 2022.

4.17. While EVCPs installed at Council housing sites will be primarily for the use of the Council's tenants, there may be opportunities for these to be open to the public if appropriate and practical.

4.18. Installation of EV charge points will be required to serve the communal parking areas for existing Council properties. A single supplier will be

procured to provide these across existing council housing sites and new builds where possible. This will enable a unified user experience and will ease administration for the Council.

4.19. A procedure for identifying and responding to EVCP demand, and delivering EVCPs on Housing land, will be developed by Officers across the Housing Department and the Climate & Environment Team.

Partnership working

4.20. We operate within a network of local public bodies which each have a remit for an aspect of transport in our area: Cambridgeshire and Peterborough Combined Authority as the Local Transport Authority, Cambridgeshire County Council as the Local Highway Authority, and the Greater Cambridge Partnership.

4.21. We are committed to working with and supporting these partner organisations to develop a plan for electric vehicle charging delivery within South Cambridgeshire and the wider county. A joined-up approach to EVCP delivery across the county will provide a more cohesive user experience of public charging and allow partners to combine resources in this complex and multi-tiered area of work.

4.22. We will also assist partner organisations in preparing any possible bids for central government funding related to provision of EV charging infrastructure, for example the Local Electric Vehicle Infrastructure (LEVI) scheme, which targets large-scale charging infrastructure projects with the intention of leveraging private sector investment.

4.23. We will work with and support parish councils and community organisations to install EVCPs at suitable sites where there is likely to be demand for public charging. This could include top-ups to money raised by these

organisations for EVCPs, match funding for applications made to government funding such as the On Street Residential Charge Point Scheme (ORCS) or additional funding streams such as the Zero Carbon Communities Grant Scheme.

4.24. We will continue to identify opportunities to work with Cambridgeshire County Council to enhance public EVCP provision. This will build upon current projects, such as collaborating on a potential rapid charger for taxis and public use at the Council Council's Babraham Road Park and Ride site.

Promotion

4.25. We have a role to inform residents of the benefits of EVs and to address gaps in knowledge or understanding to support EV uptake in the district.

4.26. To achieve this, we will use our various communication channels, including South Cambs Magazine for residents and the Zero Carbon Communities network. These methods will raise awareness of the benefits of EVs, charger technology and emerging charging solutions that can supplement physical charging infrastructure. This includes technologies such as charger sharing, also known as peer-to-peer charging, which allows owners of a home charger to share or rent it to neighbours via an app.

4.27. We will also use these channels to promote the various opportunities for Government funding that supports EV charging and uptake. This includes the Workplace Charging Scheme and the Electric Vehicle Homecharge Scheme.

Future reviews of this approach

5.1. The electric vehicle sector is relatively young and is fast-moving. As new technology and solutions emerge there may be a need to revaluate our approach to ensure it remains current. This document will therefore be reviewed by the Climate and Environment Team within 9 - 18 months of its completion.

5.2. This will allow us to keep abreast of developments in technology that may add to options available for on-street charging. For instance, solutions such as the Gul-e, developed by ODS and Oxfordshire County Council, may have particular use in South Cambridgeshire, given the distribution of homes without off-street parking. The Gul-e is a recessed cable gulley set within the footway, to allow on-street charging without running a cable across the footway.

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