
Update on Electric Vehicle Charging infrastructure in Sevenoaks District

To: Sevenoaks Joint Transportation Board – October 2023

Main Portfolio Area: Growth, Environment & Transport

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Classification: For Information

Electoral Division: County Wide

Summary: This report provides an update on Electric Vehicle (EV) Charging Infrastructure in Sevenoaks including information on accessible chargers for disabled residents.

1. Introduction

- 1.1. This report gives a broad overview of the EV charging network in Sevenoaks and wider context for Kent. It provides a look at Kent County Council's (KCC) role in ensuring residents and businesses are able to switch to electric vehicles.
- 1.2. It looks at the current numbers of EV chargers in Sevenoaks and outlines any developments that have occurred since KCC's allocation of local Electric Vehicle Infrastructure (LEVI) funding.
- 1.3. It gives information about accessible charging

2. On-Street Electric Vehicles Charging Infrastructure

- 2.1. Electric Vehicle (EV) sales are growing in the UK and the demand for charging infrastructure is rising even in light of recent announcements to push back the date from which petrol and diesel vehicles can be sold to 2035. Demand will still be driven by the Government's Zero Emission Vehicle mandate requiring 80% of vehicles sold in 2030 to be EV. This is not traditional refuelling as we know it. The speed, and therefore price, of charging varies from the slowest 3kwh up to a potential 350kwh. This could be the difference between charging in 10 hours or charging in 10 minutes.
- 2.2. Industry data suggests the vast numbers of EV owners choose to charge at home if they have access to a home charger. It is convenient and provides the lowest cost option. VAT on electricity is paid at 5% at home but 20% on the public network - arguably penalising those who do not have access to off street parking.

- 2.3. In order to help the transition to electrification, with all the carbon and air quality benefits this would bring, KCC have developed an EV infrastructure programme to install EV charging points across the county.
- 2.4. In March 2022 the Government Published their Electric Vehicle Infrastructure Strategy and released some Pilot funding to go alongside this.
- 2.5. The Government has now launched the Local Electric Vehicle Infrastructure (LEVI) Fund for Highway Authorities to apply for in their region. This is primarily focused on providing resident charging to those without off street parking. The funding is to deliver against a Regional EV strategy, in collaboration with District/Borough Authorities.
- 2.6. KCC's LEVI funding allocation is set at £12,081.000.
- 2.7. KCC officers are in the process of developing an Outline Business Case setting out the available options. Officers continue to liaise with all District/Borough partners to determine how best to deliver against the targets.
- 2.8. To provide high level targets for Local Authorities to work towards, the Government have commissioned CENEX to produce the NEVIS tool. It forecasts charger requirements for each Local Authority Area to meet the 2030 decarbonisation goals.
- 2.9. However, it should be noted that the majority of chargers across the different forecast scenarios are slower (7kw) and this is not aligning with the private sector led investment in this space who are largely delivering ultra rapid charging (100kw-350kw). The forecast data is reviewed regularly and updated against the public EV charge point network in Kent. Officers are in discussion with the LEVI support body to understand if forecast data is likely to change to reflect the recent announcement relaxing the government's 2030 target. It is not anticipated they will change significantly due to the ZEV mandate driving sales of EV's.

Date	Total Public sockets (all speeds)	Required sockets	% of target
2022	32	132	24.24%
2023	34	204	16.67%
2024		325	0.00%
2025		412	0.00%
2026		527	0.00%
2027		661	0.00%
2028		795	0.00%
2029		926	0.00%
2030		1048	0.00%

Figure 1 – Data from July 2023. Taken from the NEVIS tool kit. Shows that by 2030 it is expected Sevenoaks District may need 1,048 chargers to meet forecast demand.

2.10. In July 2023 the following public chargers were available to use. (DfT Electric Vehicle Device statistics) Source: <https://maps.dft.gov.uk/ev-charging-map/index.html>

District	Total public charging devices	Total public rapid charging devices	Total public fast charging devices	Charging devices per 100,000 population
Ashford	63	10	53	47
Canterbury	63	12	51	40
Dartford	86	40	46	73
Dover	98	25	73	84
F&H	132	24	108	120
Gravesham	61	6	55	57
Maidstone	76	32	44	43
Sevenoaks	34	15	19	28
Swale	68	18	50	45
Thanet	35	10	25	25
T&M	68	17	51	51
T Wells	53	11	42	46
Total	837	220	617	

2.11. It should be noted that simply installing chargers does not necessarily mean they are being well used, maintained or are in strategically important locations and at the “right” speed. All these factors must work together to create a coherent and useful charging network.

2.12. KCC’s EV charge point programme consist of the below projects:

<u>The Kent EV Network (Kent 600)</u>	A multi-partner framework is installing 7kw chargers in 150 car park locations around Kent under a concession model. 200 EVCP’s have been installed to date with a further 200 in development. All District/Borough Authority Councils are able to join the framework and to date 6 have either joined or intend to join in the coming weeks.
<u>The LEVI Pilot project</u>	Delivering 100-150kw ultra rapid charging across 3 locations to test technologies, provide learning to the Department for Transport (DfT) and create a revenue income to support the wider EV network.
<u>The Rapid Taxi charger Project</u>	Installing 28 x 50 kw rapid chargers for the taxi community to encourage a switch to EV across the county. To date 24 EVCP’s have been installed.
<u>The Parish charger Network</u>	Set to install up to 100, 7kw EVCP’s in Parish communities across Kent in response to market failure in rural locations in the county. To date 46 EVCP’s have been installed.
<u>Ultra Rapid Charging Hubs</u>	A project looking to create ultra rapid EVCP hubs on KCC owned land along the Strategic Road Network including A-roads. In development with internal Governance decisions required.

- 2.13. The above projects have focused primarily on off-street charge points, for instance in local authority owned car parks. Following the announcement of KCC's provisional LEVI funding allocation, officers are building a case for the delivery of on-street charge points. This will be subject to internal governance before seeking approval at Member level before a formal decision to apply for the funds is made.
- 2.14. If KCC proceed with on-street EV charge point delivery, it will not be in isolation, but to complement existing projects. The below prioritisation has been provisionally developed to define network planning and site selection:

Priority 1	Off Street Car Parks
Priority 2	On Street "Standard" 7.7kw chargers
Priority 3	Lamp Column 3-5kw Chargers
Priority 4	Other areas of influence (workplace charging, peer to peer charging, rapid charger hub deployment)

3. Off-street Electric Vehicles Charging Infrastructure

- 3.1 As part of the Kent 600 framework the District Council is proceeding with Connected Kerb to provide an additional 12 x 50Kw rapid chargers to our off-street car parks at the following locations.

Off-Street Car Parks
Bligh's car park, Sevenoaks
Park Road car park, Swanley
Quebec Avenue car park, Westerham
South Park car park, Sevenoaks
Station Road car park, Swanley

- 3.2 The Council have committed to installing electric vehicle charging points in Sevenoaks District Council owned car parks and land. This is included as an action for the Net Zero 2030 work. Currently the Council has installed 18 charging points within Sevenoaks District Council owned car parks. Detailed in the following table.

Car Park	Location	Capacity	Disabled use bays	Single use disabled bays	Other bays	EVCPs
Sevenoaks Town Car Park	Sevenoaks	449	19	4	0	8
Bradbourne Car Park	Sevenoaks	420 + 20 Premium	8	2	0	2
Argyle Road Weekend Car park	Sevenoaks	96	0	4	0	4

Argyle Road front visitor car park	Sevenoaks	12	0	3	0	4
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3.3 With the new Connected Kerb project, this will make the Council's off-street network, a total of 30 electric vehicle-charging points.

3.4 Measure 15 of the Sevenoaks District Council's Air Quality Action Plan 2022-2027 commits the district council to improving and developing infrastructure for Electrical Vehicles within the district. In September 2022, the District Council commissioned a study into future EV demand within Sevenoaks District. Following a round of competitive procurement, Field Dynamics were appointed.

3.5 Owing to the type of charger that it is proposed to install the scheme outlined in 3.1 & 3.2 (above) will increase modelled coverage of households to approximately 46% (7,581 on-street households covered).

4. Accessible Charging Infrastructure

4.1. It is important to consider the needs of those within groups of Protected Characteristics. The design of charging bays, where possible, can be made as accessible and welcoming to all. Particular consideration can be made for those with mobility limitations who may struggle to access charging.

4.2. The British Standards Institute published Pas1899:2022 – Accessible Charging Specification 1 which gives best practice guidance regarding accessible charging. It covers measures such as dropped kerbs for wheelchair users, suitable heights of EVCP units, cable lengths and more.

4.3. Pas1899:2022 is not mandatory but most Charge point operators aim to comply where possible. The specification for the LEVI tender will ensure that the units and general layout designs comply. It may not be possible to adhere to all recommendations in all situations, for example providing dropped kerbs nearby due to existing street furniture, but the LEVI fund could be used to support specific measures over and above those within direct control of the CPO. For example, some funding could be used to install dropped kerbs in areas where blue badge parking bays exist.

5. Conclusions

5.1. This report shows that much more work is needed to facilitate the forecast requirements for EV charge point infrastructure in Kent over the coming years and decades. KCC will continue to work with District and Borough authorities to help provide the infrastructure required for residents to make the switch, with a particular focus of those without the facility to charge at home.

6. Recommendation(s)

6.1. That the report be noted.

¹ <https://www.bsigroup.com/en-GB/standards/pas-1899/>

7. Background Information

Future demand for EV Infrastructure Survey – Sevenoaks District Council

<https://cds.sevenoaks.gov.uk/documents/s54777/09%20-%20EV%20Infrastructure%20Study-%20Report%20SDC%202023%204.pdf?J=4>