

Communities Overview and Scrutiny Committee

10 April 2024

An update on EV charging infrastructure progress

1. Recommendation

That the Communities Overview and Scrutiny Committee notes and comments on progress to date in respect of the Council's plans to deliver publicly accessible electric vehicle (EV) chargepoints.

2. Introduction

- 2.1. Between 2022 and 2023, there has been a 47% increase in the number of electric vehicles on UK roads. More than 16.5% of new vehicles sold in 2023 were battery-electric cars. When plug-in hybrids are included, this rises to 23.9% of new car sales. This increase in demand is creating a growing need for publicly accessible EV charging in Warwickshire.
- 2.2. Based on projections from CENEX, the UK's centre of excellence for low emission vehicles, Warwickshire is expected to need more than three thousand chargepoints by 2030. This is a sixfold increase on current provision.
- 2.3. The Government is keen to facilitate the switch to EVs. In late 2022, it published *Taking Charge: the electric vehicle infrastructure strategy*. This sets out the roadmap for growing the charging network and supporting drivers to adopt EVs. Department for Transport funding for chargepoint installation is sizable and targeted primarily at improving facilities for residents without off-street parking.
- 2.4. As the local Highway Authority, the County Council is best placed to manage installation of chargepoints on-street. The public highway is often the best location for chargepoints, given their proximity to residents' homes and visitor destinations, including town centres.

3. Our approach to EV charging

- 3.1. While many residents in Warwickshire can charge their vehicles from home, this is not possible for everyone. Around 30% of households nationally do not have access to off-street parking, making charging an EV from home much more difficult. This disparity between residents' ability to charge their cars will become increasingly important to address as EVs become more popular.
- 3.2. To tackle this, the Council is prioritising areas of the county that lack significant off-street parking. This has been determined by utilising analysis from Field Dynamics, a transport consultancy, as well as a complex site identification tool developed by CENEX. Using these, a detailed map of the county is currently being produced to show current and future need for EV infrastructure.

- 3.3. Using this data, the Council is creating a long list of potential sites across the county where chargepoints are needed and could be installed. Local demand for chargepoints is also indicated by requests from members of the public, who can suggest locations using the Council's dedicated electric vehicles webpage.
- 3.4. The Council adopted an EV Parking Policy in March 2024, that enables the Council to designate on-street EV chargepoint parking spaces as EV only, through new Traffic Regulation Orders (TROs). The process of bringing in a TRO includes consultation with the public. A TRO would enable enforcement action to support fairer use of EV chargepoint spaces and prevent them being blocked by non-EVs and "non-charging" EVs. This will support residents and visitors to make sustainable travel choices by using EVs, particularly benefiting those without access to off-street parking.
- 3.5. By supporting the development of a reliable public charging network with accessible chargepoints, the Council will increase residents' confidence that adopting an electric vehicle will not be detrimental to their lifestyle and may save them money. It will also safeguard rural communities' ability to travel independently.

4. Projects update

- 4.1. Warwickshire County Council is managing several projects that will see more publicly accessible charging infrastructure available for residents across the county. While this will form part of the infrastructure necessary, many more will be installed privately without council involvement. The main projects are detailed below:
- 4.2. **Previous chargepoint rollout:**

In 2020 and 2021, Warwickshire County Council secured funding from Government and the Coventry and Warwickshire Local Enterprise Partnership to install chargepoints throughout Warwickshire. 79 chargepoints, all twin-headed (thus allowing 158 vehicles to charge), were installed. The majority are in car parks, and some on-street. This was the first on-street public chargepoint installation programme in Warwickshire.

Number and usage of these chargepoints has risen gradually since installation, with many residents now reliant on the infrastructure. The chargepoints usage by district and borough is presented below, for the period since July 2021.

<u>District/ Borough</u>	<u>Sockets</u>	<u>Recharges</u>	<u>kWh</u>
Warwick	72	17,380	401,416.1
Stratford	38	11,089	223,071.4
Nuneaton & Bedworth	14	1864	27,455.3
N. Warwickshire	20	3510	65,731.1
Rugby	14	2856	55,233.1
<u>TOTAL</u>	<u>158</u>	<u>36,699 recharges</u>	<u>772,907kWh</u>

- 4.3. **Midlands Connect Consortium:**

Warwickshire County Council has secured £3.295m from the Government's Local Electric Vehicle Infrastructure (LEVI) fund. To maximise the value of this funding the Council has joined a consortium of 14 local Midlands authorities led by the sub-national transport body Midlands Connect. Progress on this bid is ongoing, with the consortium submitting our Stage 2 application to Government in November 2023. Funding is expected to be received by September 2024.

All funding made available to Warwickshire County Council will be spent in Warwickshire, but the consortium approach will allow the Council to explore common local authority requirements, work collaboratively, and develop understanding and co-operation in our chargepoint delivery. It is projected that by joining the consortium, the Council will attract significantly more private sector finance and deliver more chargepoints than if the County Council had proceeded alone.

Expected numbers of chargepoints are still uncertain, but the consortium expects Warwickshire will see more than 1000 additional sockets installed through LEVI. Installation of these is likely to begin in early 2025. The vast majority of sites will be on-street locations, although a small proportion may be in off-street car parks. The Council is working closely with district and borough colleagues to collaborate on suitable site identification.

4.4. **Charging from home – Cable protectors & gullies:**

While the Council is working to deliver public on-street charging, we are also supporting residents access to charging now. In July 2023, a 6-month trial began allowing residents to charge by trailing a cable over the footway when protected by a suitable cable protector. User guidance and a cable protector specification was put on the Council's website and promoted widely. The trial was a success, with many residents able to charge from home, and no complaints have been received. In January 2024, this approach was made permanent. The number and locations of residents using cable protectors to charge their vehicles is unclear as we have not requested them to register their usage.

Officers are aware of gully solutions that allow the deployment of a charging cable across a footway in a below surface level gully. These are being considered carefully by Highways officers to explore issues like cost, maintenance, and ownership. If suitable for Warwickshire's streets, these could be considered as a viable alternative to cable protectors in the future.

4.5. **Website development:**

To communicate our approach regarding electric vehicles more clearly to residents, a new website has been developed. These webpages explain the benefits of electric vehicles as well as demystifying some of the associated jargon. The site provides advice on the Council's cable protector approach; the process of installing a home charger; as well as how residents can report faults with current chargepoints.

The website also gave the Council an opportunity to engage with residents by asking for suggested chargepoint locations. A survey was produced, which has already generated nearly 200 unique responses from residents. This information will be very valuable when selecting potential sites for chargepoint installation.

4.6. **Potential chargepoint trials:**

To meet the interim demand for charging, the Council is also exploring several fully funded trials across the county. These include looking at lamp column charging, as well as innovative options like rising chargepoints and ‘flat-and-flush’ solutions that are level with the footway surface. It is necessary to ensure that any pilot approach is compliant with procurement legislation and does not affect the Council’s ability to lawfully procure a longer-term solution in due course. Work is actively ongoing to consider the most viable and cost-effective compliant approach.

4.7. LEVI Pilot:

The Council was awarded funding in February 2023 to deliver a community charging hub in the village of Harbury. This exciting project will include chargepoints and the use of renewable sources of energy including a small solar canopy, and battery storage. The project is ongoing, with an invitation to tender expected to be released in the spring.

5. Financial Implications

- 5.1. All necessary funding has already been secured through external government grants such a LEVI or is expected to be obtained through private financing.
- 5.2. Currently, chargepoints in Warwickshire installed under the BP Pulse contract are producing revenue for the council. Similar revenue share arrangements will be sought with any future contracts installing chargepoints.

6. Environmental Implications

- 6.1. The development of a reliable publicly accessible network of chargepoints will be essential in Warwickshire’s trajectory towards net zero, and a sustainable future, both of which are key aims of our new local transport plan (LTP4), the Sustainable Futures strategy, and the strategic priorities in the Council Plan. Transport accounts for 40% of all carbon dioxide emitted in the UK. Electric vehicles produce significantly less CO2 over their lifetime than vehicles powered by fossil fuels and have no emissions at the tailpipe. This has a big impact on air quality and overall carbon emissions across Warwickshire.

Appendices

- 1. Taking charge - the electric vehicle infrastructure strategy

Background papers

- 1. Warwickshire County Council - [Electric Vehicle Infrastructure Strategy](#)
- 2. Task and Finish Group Report – [Electric Vehicle Charging Strategy & Infrastructure Delivery in Warwickshire](#)

	Name	Contact Information
Report Author	Sebastian Burch, Strategy and Policy Officer Jon Rollinson, Strategy Manager Transport Planning	sebastianburch@warwickshire.gov.uk, jonrollinson@warwickshire.gov.uk
Director	David Ayton-Hill, Director of Economy and Place	davidaytonhill@warwickshire.gov.uk
Executive Director	Mark Ryder, Executive Director for	markryder@warwickshire.gov.uk

	Communities	
Portfolio Holder	Cllr Jan Matecki, Portfolio Holder for Transport and Planning	janmatecki@warwickshire.gov.uk

The report was circulated to the following members prior to publication:

Local Member(s): not applicable – county wide report

Other members: