



To: Communities and Neighbourhoods Scrutiny Board (4)

Date: 31st March 2022

Subject: Electric Vehicle Charging

1 Purpose of the Note

1.1 The purpose of this note is to brief Communities and Neighbourhoods Scrutiny Board (4) on:

- The Council's on-street electric vehicle charging point programme, including progress to date, future plans and usage.
- The All Electric Bus City project being delivered in partnership with Transport for West Midlands and bus companies.
- Progress with the electrification of the taxi fleet operating within the city, and;
- Progress with the delivery of the Council's e-fleet programme.

2 Recommendations

2.1 The Communities and Neighbourhoods Scrutiny Board (4) are recommended to:

- 1) Consider the information provided in the briefing note
- 2) Identify any recommendations and comments for the appropriate Cabinet Member.

3 Policy Background

- 3.1 In June 2021, Government published *Decarbonising Transport: A Better, Greener Britain* which set out Government's plans to decarbonise the transport system across all modes of transport. Coventry was featured within the document as a case study, with Very Light Rail, All Electric Bus City and the Council's work to promote the use of electric vehicles all being prominently featured.
- 3.2 The Government had already announced the phasing out of new petrol and diesel car sales from 2030, and the implementation plan for *Decarbonising Transport* sets further targets for phasing out diesel powered commercial vehicles, trains and other modes of transport. As well as promoting walking and cycling for local journeys, the *Decarbonising Transport* strategy focuses very much upon how local transport authorities can support residents and businesses in the transition from petrol and diesel transport to zero emission transport, especially electric powered vehicles. This report sets out the progress to date in Coventry with this transition.
- 3.3 Coventry was declared an Air Quality Management Area in 2009 because of high levels of Nitrogen Oxide (NO₂) and more recently the Government's 'UK Plan for Tackling Roadside Nitrogen Oxide Concentrations' document issued in July 2017 identified Coventry as a city where NO₂ exceedance is expected to continue beyond 2020. In May 2021, the Government issued a Ministerial Direction instructing the City Council to implement a Local Air Quality Action Plan to reduce NO₂ levels below the legal limit. Supporting the increased take-up of zero emission vehicles is a key element of this Action Plan.

- 3.4 Coventry's Local Plan includes policies to promote the uptake of electric vehicles. These are Policy AC1 (Accessible Transport Network) and Policy EM6 (Air Quality).
- 3.5 The Government's has published their Making the Connection: the plug-in vehicle infrastructure strategy, a clear vision for infrastructure helping address for those interested in plug-in vehicle infrastructure.

4 On-street Electric Vehicle Charge Point Programme

- 4.1 The Office for Zero Emission Vehicles (OZEV) is a cross Government, industry endorsed team established to promote the uptake of zero emission vehicles (ZEV). OZEV has the remit to dispense funding for the 'on street residential chargepoint scheme' (ORCS) to local authorities, supporting the roll-out of EV charge point networks across England.
- 4.2 The purpose of the scheme is to increase the availability of on-street chargepoints in residential streets where off-street parking is not available, thereby ensuring that on-street parking is not a barrier to realising the benefits of owning a plug-in EV. Within Coventry, just over 46% of households have no access to off-street parking, meaning that many residents will have no private parking area where they could easily charge an electric vehicle.
- 4.3 The ORCS programme has been running since 2018. Although many local transport authorities were initially reluctant to participate in the programme, the City Council saw the potential and between 2018 and 2020 submitted four successful ORCS bids to OZEV, securing a total of £1,424,520 in grant funding which has delivered 403 charging points across the city. These first four phases were delivered in partnership with Char.gy, a charge point company who supplied, installed and maintain the charge points under Contract to the City Council. 75% of the installation costs were funded through the grant secured from OZEV, with the remaining 25% being met by Char.gy. There is also a revenue-sharing agreement, whereby the City Council will receive a share of the income from the charge points once Char.gy have recovered their initial investment.
- 4.4 In 2021 the Council submitted a fifth ORCS bid to OZEV and in December 2021 the Council was awarded £706,820 by OZEV. As the initial contract with Char.gy had reached its limit, a procurement exercise was undertaken which was won by Connected Kerb. Therefore, the fifth phase of the ORCS programme has commenced delivery, on the same basis as the first four phases. Operating systems are specified within both contracts to ensure interoperability of the charge points, so that the end user will see no difference between using a Char.gy or a Connected Kerb charge point.
- 4.5 This fifth phase of the ORCS programme includes 155 on-street EV charge points of which 50 are single-socket chargers and 105 are double socket chargers, leading to an expansion in charging point capacity for 260 vehicles. Work on the installation of these charge points started in January 2022 and they will be fully operational in July 2022.
- 4.6 As a result of these successful bids, Coventry now has more EV charge points than any other English city outside London. In 2020 Coventry was named the best town in the UK for electric cars, as it had a ratio of one charging point to every 2.3 plug-in car owners. Should further rounds of ORCS funding become available, the Council will be in a strong position to submit further bids as the new contract with Connected Kerb makes provision for up to 300 EV charge points over and above those currently being installed.
- 4.7 In addition to the ORCS programme, the City Council has worked with charge point operators on two other programmes within the city. The first, funded using OZEV grant funding, saw 39 rapid charge points installed to support the transition of the city's taxi fleet to electric vehicles. These were installed at locations that were identified as being of greatest convenience to taxis requiring top-up charging during the day, with the majority being within the city centre. Currently, 26 electric taxis are operating within the city, many of which were purchased following driver participation in the "try before you buy" programme funded through the Air Quality Early Measures programme which ran from 2018 to 2020.

- 4.8 The Council also entered into a 10-year agreement with EO Charging in 2019, branded the Plug in Coventry scheme (www.plugin.coventry.org). The rationale was to make it easier for businesses to install charge points at their premises for fleet vehicles and also to encourage more EV take-up amongst their respective employees, particularly those who commute by car to work. OZEV provides financial support for organisations to have charge points installed at their premises. The 'Workplace Charging Scheme' provides a £350 voucher towards each charge point a business decides to install, up to a maximum of 40 chargers per organisation. EO Charging manage the full bid process and subsequent installation of charge points on behalf of participating businesses. The Council helps to publicise the scheme, but no direct costs are incurred by the Council in doing so. To date, over 20 businesses have participated in the programme.
- 4.9 The Council has taken advantage of the 'Workplace Charging Scheme' and has installed 18 charge points in Salt Lane car park with a further 16 chargers being installed at new multistorey station car park.
- 4.10 The EO agreement also includes maintaining a website with information for businesses on charge point installation, issues, and funding (www.plugincoventry.org).
- 4.11 In summary, currently there are four separate Charge Point Operators (See Table 1) operating within the city as part of the City Council's EV charging point programme. There are also other providers in the city (including BP Pulse and Genie Point), which have installed charge points on a totally commercial basis, on private property.

Table 1 – Coventry Charge Point Operators

Operator	No. of Charge Points	No. still to be installed	Location of charge points	Length of contract	Type of chargers
Siemens/ESB	39	0	Across the city	10 +5 Starting 2020	Rapid (50kW)
Char.gy	373	0	Residential areas	5+1+1+1 Starting 2020	Slow (3 -5kW) fast (7kW) semi-rapid (11kW-22kW)
Connected Kerb Ltd	30*	400	Residential	10+3+2 Starting 2022	Fast (7kW)
EO	34	Unlimited**	Salt Lane Car park and Station Car Park	10 Starting 2019	Fast (7kW)

*These chargers were installed using Smart Cities funding. Connected Kerb has recently been awarded a second contract and will be installing a further 400 chargers

**The contract with EO includes car park charge points and an unlimited number of chargers at workplaces which are funded directly by businesses in the city. EO installs the charge points and applies for Government grants on behalf of participating businesses.

- 4.12 The contract with Char.gy and Connected Kerb [Charge Point Operators] has a price cap of 16.2 pence per kW hour built into the contract for the EV charge points, funded by OZEV through the ORCS programme. The cap operates for the first two years after the charge points are operational, after which the charge point operator can increase the cost in line with the other charge point operators in the West Midlands.

- 4.13 The charge point operator has to demonstrate to The Council the price increase is indeed in line with other charge point operators operating in the West Midlands. The onerous is on the charge point operator to ensure that their users are notified about the price increase in advance of the price increase.
- 4.14 While charge points in the city centre and on the arterial routes are mainly rapid with speeds of up to 50kw per hour, in residential areas charging speeds are slower, ranging between 3.5kw to 23kw. This reflects the differing needs of EV users with taxis and others in the city centre requiring fast charging and residential chargers being used mainly overnight and as a result fast charging isn't a major requirement in the residential areas. This provides a good balance of provision aimed at meeting the needs of all users in a balanced way.

Table 2 – Charge Point Classifications

Charge point classification	Charging speed
Rapid DC/AC	43kW to 50kW
Semi-rapid AC	11kW to 23kW
Fast AC	Between 7kW
Slow AC	Between 3.5kW to 5kW

- 4.15 The plan in Appendix A shows the distribution of EV charge points across the city. Whilst EV ownership within the city currently stands at around 1,600 vehicles, the trend is exponentially increasing and demand for additional EV charge points can be expected to increase further in the next few years. The Council is beginning to receive requests from residents for charge points to be installed near their homes, including requests from parts of the city that previously demonstrated reluctance to be part of the programme.
- 4.16 At present, relatively few problems are being encountered whereby residents effect their own charging arrangements, but this can be expected to increase in future years. The Council will therefore need to develop and adopt a policy of how to deal with instances whereby informal charging results in, for example, trailing cables across the footway, which could clearly result in a trip hazard. In such circumstances, liability would rest with the person causing the obstruction (in a similar manner to someone washing their vehicle on-street leaving a hosepipe trailing across the footway), but it is an issue that will need further consideration.

5 All Electric Bus City

- 5.1 The initial phase of investment in electric buses within the city resulted from a successful bid submitted by the Council, in partnership with National Express, to OZEV's Ultra-Low Emission Bus (ULEB) scheme. This secured £2.37 million, supported by £237,000 from the West Midlands Combined Authority and investment by National Express, to procure 10 electric buses, supporting charge point infrastructure at the Coventry Bus Depot, and the installation of solar panels on the bus depot roof to generate clean electricity on-site, and battery storage on site to store that electricity.
- 5.2 These buses were launched in August 2020 and currently operate primarily on the number 9 service, linking the University Hospital with the city centre and Finham, passing along Walsgrave Road, one of the routes within the city identified as having nitrogen dioxide levels at risk of exceeding legal limits set by Government.
- 5.3 Over a 9-month period, the 10 electric buses covered over 660,000 miles saving over 986 tonnes of CO₂.
- 5.4 The Department for Transport (DfT) launched the All Electric Bus Town fund in February 2020, with £50 million in grant funding made available to allow one town or city within England to make the transition to a bus network operated fully by electric powered buses.

- 5.5 The West Midlands Combined Authority (WMCA), as the strategic transport authority, submitted an Expression of Interest, which was developed by Coventry City Council in partnership with Warwickshire County Council, Transport for West Midlands and incumbent Coventry and Warwickshire bus operators. Coventry was shortlisted, and subsequently submitted a formal bid to the DfT. This was successful, subject to the acceptance of the business case.
- 5.6 The FBC was approved by the WMCA board on 19th March 2021 and the grant funding of £50 million was passported from the DfT to the WMCA, as the strategic transport authority for the Coventry area, on 31st March 2021,
- 5.7 This programme means that the remainder of the bus fleet (around 297 vehicles) operating within Coventry will be fully electric by the end of 2025. Procurement of the new buses has commenced, with 130 double decker electric buses ordered by National Express in January 2022 as first phase of the delivery programme. 50 double decker electric buses from the 130 are due to be operational from August 2022.
- 5.8 To facilitate the electrification of buses, it is necessary to provide additional land in the vicinity of the Coventry bus depot and the Pool Meadow bus station to accommodate an electric bus charging facility. A Cabinet Member report was submitted on 5th July 2021 and approval was given to close off where Cox St car park and the site re-purposed as a bus charging facility as it is ideally located for this initiative.
- 5.9 Approval was also given to close off the public highway in Ford Street which serves as a public vehicular access to Cox Street car park. This is to facilitate seamless integration and access to the electric bus charging infrastructure

6 E-Fleet

- 6.1 In 2019, the Council secured around £2.26 million in grant funding from Highways England with £380k match funded by Coventry City Council to invest in 70 electric vehicles for the Council's own fleet. These vehicles are predominantly electric vans (60%) with 30% as cars and 10% taxis (6 Hackney Carriages and 3 private hire cars) and are available for local businesses to use as part of a "try before you buy" scheme.
- 6.2 To date, 131 businesses have participated within the scheme which includes Hackney Carriage drivers and as a result, 15 taxi drivers went on to purchase new LEVC Taxis. As part of the 'Try before you buy' scheme, 10 businesses are actively looking at leasing electric vans as part of their business fleet and two businesses have already transitioned to an e-van/e-car as part of their fleet. So far, 320,000 miles have been driven by these vehicles saving a total of 190 tonnes of CO₂.

7 E-taxis

- 7.1 Coventry is the home of the electric taxi, with LEVC and Dynamo both being based in the immediate area. In 2017, The Council had secured £1.2M funding from Office for Zero Emission Vehicle under the ULEV Taxi Infrastructure Scheme to deliver 39 rapid electric vehicle chargers in the city which was delivered between 2018 to 2020. Running parallel to this, the Council provided a 'Try before you buy' programme through the Air Quality Early Measures fund, where The Council in partnership with LEVC, provided financial incentives to the Hackney Carriage Taxi drivers to purchase electric taxis. Through this programme, 10 LEVC taxis were purchased. The Council has provided support to taxi operators to encourage them to switch to electric taxis, through the Try Before You Buy schemes referred to in 3.30 and 3.31 above. This has resulted in 16 electric taxis being purchased making a total of 26 currently operating within the city.
- 7.2 In addition, in 2019, the Council took the decision to amend its taxi licensing requirements to encourage the transition to zero emission vehicles, and this will mean that from 2024 the hackney carriage fleet operating within the city will be low or zero emission vehicles.

This phased emission-based requirements and timescales are as follows:

Date from	Currently Licensed Vehicles	New Vehicle Applicants
1st January 2020	Only vehicles with an emission rating of Euro 4 or above to be renewed	Required to have zero emission capability
1st January 2022	Only vehicles with an emission rating of Euro 5 or above to be renewed	Required to have zero emission capability
1st January 2024	Only vehicles with zero emission capacity to be renewed	Required to have zero emission capability

- 7.3 This proposal is aimed at addressing the environmental impact of private hire and hackney carriage vehicles in the city taking into consideration the actions and timescales highlighted in the Coventry Local Air Quality Action Plan.
- 7.4 The Council is obliged to improve local air quality and achieve the required reductions in NO₂. Therefore, this proposal to stop licensing older, less environmentally efficient private hire and hackney carriage vehicles was considered the best option to reduce NO₂ levels and encourage a more sustainable taxi fleet for the future.

Name Shamala Evans-Gadgil
Job Title Programme Manager
Contact Details shamala.evans-gadgil@coventry.gov.uk

Appendix A

