FOR PUBLICATION

DERBYSHIRE COUNTY COUNCIL

IMPROVEMENT AND SCRUTINY COMMITTEE - CLIMATE CHANGE, BIODIVERSITY AND CARBON REDUCTION

MONDAY, 1 JULY 2024

Report of the Executive Director - Place

Review and Update of the Roll Out of Electric Vehicle Charging Infrastructure

1. Purpose

1.1 To provide an update on activities within the Council's Low Emission Vehicle Infrastructure Strategy that seeks to increase the uptake of electric vehicles across the County through the provision of an enhanced public electric vehicle charging network that utilises both private sector and Government funding.

1.2 To raise discussion points and considerations on the progress being made, share issues and raising questions.

2. Information and Analysis

Background

2.1 The Council's Climate Change Strategy: Achieving Net Zero, embeds the Council's Low Emission Vehicle Infrastructure (LEVI) Strategy (2019-2029). This Strategy sets out a vision that the 'Council will work collaboratively with local partners to accelerate the adoption of low emission vehicles (hybrid, electric, hydrogen and e-bikes) across the county, and in doing so make a major contribution to improving local air quality and to reducing greenhouse gas emissions'. This report provides

an opportunity to consider and review the delivery of electric vehicle charging infrastructure across the County.

2.2 In context, since the publication of the Council's LEVI Strategy, the number of private and company owned plug-in cars and light goods vehicles registered in Derbyshire (as recorded by the latest Department for Transport data) has accelerated from 2,185 (April 2019) to 18,012 (March 2023). The Committee should note that the number of plug-in vehicles remains significantly lower than the number of diesel and petrol car light goods (523,700) currently registered in Derbyshire at March 2023.

2.3 There has been good progress in supporting the private sector and other partners to deliver 361 publicly available electric vehicle charge points across the County. The Council is aware though, from over 1,000 responses to an open consultation on the Council's website, that there is high demand from both existing electric vehicle users and potential new adopters for more charge points (see map in Appendix 2).

2.4 There are significant challenges in delivering electric vehicle charge points in Derbyshire, notably in more remote rural areas with lack of electrical infrastructure, cost and commercial viability being a risk to coverage across all areas of Derbyshire. Consequently, the Council has been working with various partners, including the Department for Transport (DfT), the Energy Savings Trust (appointed as the DfT LEVI Support Body), Midlands Connect Sub Regional Transport Body, and Council Departments to develop five workstreams which will deliver a minimum of 4,500 additional charge points, and provide good coverage across the County. The current funding package is made up of the following financial contributions: £580,560 contribution from the DfT LEVI Capability Fund, £6.604m contribution from the DfT LEVI fund, and £300,000 from Derbyshire County Council. The five workstreams are:

- Workstream 1: Lamp Column Based Electric Vehicle Charging Infrastructure.
- Workstream 2: - On-street stand-alone chargepoints.
- Workstream 3 - Private sector funded rapid and ultra-rapid chargepoints.
- Workstream 4 - Derbyshire Council - Estates Electric Vehicle Charging Network.
- Workstream 5: Council capability and capacity to deliver the LEVI programme.

2.5 The DfT LEVI fund criteria makes clear that grants must be used to:

1) install electric vehicle (EV) charging infrastructure in areas where there is little or no residential off-street parking;
2) be in areas where charge point operators are unlikely to invest (e.g. rural areas or economically deprived areas); and
3) help to encourage uptake of electric vehicles.

2.6 Therefore, the schemes funded through LEVI fund focus on areas where on-street charging provision can be established to cover points 1-3 above, but in areas that the market would likely overlook or delay installations until they become more commercially attractive.

DfT LEVI Fund Workstream 1 - Lamp Column Based Electric Vehicle Charging Infrastructure

2.7 The £2.5m LEVI funding allocation will cover all capital costs associated with the supply and installation of lamp column based electric vehicle charging infrastructure. Ongoing management, back office and maintenance responsibilities will lie with a third-party operator under a concession contract arrangement. The capability funding will cover revenue costs associated with the project development and on-going management.

2.8 Concession contracts are a contractual arrangement between a public authority and an economic operator (the charge point operator). The latter provides services and is remunerated by being permitted to exploit the service. In this case, it is the use of the highway to operate EV charging points.

2.9 In addition, the concession contract provides for an ongoing revenue share providing an income stream to the Council over the contract duration (15 years) accrued from each charging transaction.

2.10 The LEVI fund award was provisional depending on a three-stage process:

- Stage one: expression of interest - completed in spring 2023.
- Stage two: application form, criteria compliance and tender document review - completed in November 2023 with confirmation of the award in February 2024.
- Stage three: contract review - submission deadline of mid-June 2024, with feedback from the LEVI Support Body expected in August/ September 2024. (The DfT has established the LEVI Support Body to support local authorities to deliver LEVI funded projects).

2.11 To adhere to the terms of the funding, the Council has had to demonstrate to the LEVI support body and charge point industry that there is a viable and sustainable commercial Electric Vehicle Charging Infrastructure contract opportunity in Derbyshire to deliver the lamp column charging project. Through the contract specification, an equitable geographic spread of charge point provision is a perquisite so that priority areas, rural areas and areas of socio-economic deprivation are not excluded.

2.12 Work completed includes detailing both existing and forecast demand, running an on-going public survey around charge point locations, site feasibility, electric supply and capacity assessments, and engaging with suppliers to further understand the options available, liaising with electricity Distribution Network Operators around the cost and energy implications of a large-scale installation.

2.13 Under the LEVI funded lamp column contract, the Council is requiring a minimum number of 2,500 lamp column chargers across the County.

2.14 Alongside the technical aspects, work is also ongoing to finalise the requirements of the concession contract tendering process.

DfT LEVI Fund Workstream 2 - On-Street Electric Vehicle Charging Infrastructure

2.15 The LEVI funding will cover all capital costs associated with the supply and installation of on-street electric vehicle charging infrastructure. Ongoing management, back office and maintenance responsibilities will again lie with a third-party operator under a concession contract arrangement. The capability funding will cover revenue costs associated with the project development and on-going management.

2.16 This project is being led by Midlands Connect, the sub-national transport body for Derbyshire's region, with legal and procurement support led by Nottinghamshire County Council. The project will utilise the £6.604m LEVI funding awarded to the Council and follows the same timeline and procedures as the lamp column based EVCI project.

2.17 The project will roll out on-street chargepoint networks across the East Midlands Council Combined Authority area. The charging equipment for this project will be free-standing, independently powered bollard style chargepoints located on the highway.

2.18 Although being led by Midlands Connect, the Council will own and manage the contract for the network within Derbyshire. The Council's

Sustainable Travel Team is part of the project delivery group and is closely involved in all decisions related to pre-procurement and tendering. The Sustainable Travel Team will be the lead for project management once the contract is in place.

2.19 The project is seeking around 2,000 charge points at circa 800 sites across the County, with up to four chargepoints installed per site (subject to local technical assessments), as the premise is to provide for those without access to off-street parking and therefore the ability to charge their vehicles overnight. These chargepoints will be mostly lower powered (<11kWh) chargers to facilitate overnight, long stay charging.

DfT LEVI Fund - Procurement and Delivery

2.20 Throughout the application process, the recommended procurement process has been to use Oxford City Council's Dynamic Purchasing System (OxDPS), designed specifically for EVCI contracts, specifically to limit the number of bidders to pre-vetted charge point operators and therefore speed up delivery.

2.21 This process was to be used by the circa 50 local authority and consortia that received LEVI funding. However, in April 2024, the advice from Oxford City Council and the Government changed substantially, notably that the use of a DPS could leave the Council open to legal challenge under the Concession Contracts Regulations 2016. Consequently, an alternative procurement approach of open tender has been adopted.

2.22 Revised tender documentation have been submitted to the LEVI support body in June 2024, with an agreement to proceed to tender expected in early autumn 2024. The Sustainable Travel Team is maintaining regular contact with leading suppliers to keep them up to date on progress in issuing the contract to the market. It is expected that the award of the contract will take place in early 2025, with implementation of lamp column-based chargers commencing in March 2025.

2.23 As part of the tender evaluation for both projects, the Council will require the successful chargepoint operator to provide details of how they will ensure that the spend will be in accordance with grant conditions. Grant conditions and bid scoring will include (but not limited to) such things as technology specification, locations, deadlines, maintenance and repair, carbon reduction, social value, revenue share and the approach to tariff setting. Delivery plans, evaluated as part of the award criteria, for both DfT work packages will also need to

demonstrate how they will accelerate a step-change in the deployment of electric vehicle charge points, and commercialisation of this infrastructure.

2.24 Whilst the change of procurement approach has caused a delay, site selection is being progressed in tandem. Locations are being identified that ensure equitable geographic spread locations and on factors including known demand, forecast demand, likelihood of private investment, rurality and levels of deprivation.

Cross-Pavement charging solutions

2.25 Several technological solutions are coming to market to facilitate the use of a home charge point. Solutions include cable gullies set into footways, overhead gantry systems and satellite electricity connections that allow for a charging cable to be connected to a home electricity supply whilst plugged into a vehicle parked on the highway.

2.26 We have seen an increase in the number of requests from residents seeking permission to install such solutions and thus utilise their own electricity, which is cheaper than using a commercial provider.

2.27 Whilst a handful of authorities are currently undertaking very limited trial of the various technologies, the longer-term management and impact of such solutions is untested. Concerns remain regarding public liability, impact on street scape and on-going highways maintenance implications.

2.28 Section 178 of the Highways Act provides that no one shall place cables across the highway without the highway authority's consent, and section 162 provides that a person who places wire or other apparatus across the highway in such a way as to cause a danger to users is guilty of an offence and liable to pay a fine. Due to the potential risks associated with unattended trailing cable across footways, it is Council policy that we do not permit trailing of cables over pavements. This includes the provision or installation of either gully based or overhead gantry systems, including those covered by a heavy-duty cable covering, set in a gully, or on an overhead gantry system.

2.29 How local authorities manage such request was complicated in March 2024 when central Government announced that funding will be made available to provide such solutions for households that have no off-street parking. The grant is intended to provide EV drivers with support towards the costs of the purchase and installation of EV chargepoints at

residential properties if they are also installing a cross-pavement charging solution.

2.30 The grant scheme advises that In order to be eligible for this grant the applicant must have all relevant permissions from the local planning and relevant highways authority (where the highway is public land).

2.31 However, there has been no guidance issued to councils about how they should respond, what preferred solutions might be and how to address the long erm implications. The Council will need to review approaches to suitability of cross pavement solutions when National guidance is issued and make recommendations to Cabinet to consider whether a policy change is appropriate.

Workstream 3 - Private Sector Funded Rapid and Ultra Rapid Electric Vehicle Charging Infrastructure

2.32 Facilitating the switch to electric vehicles requires a mix of different types and speeds of charging infrastructure dependent upon their driving and travel patterns. The need for the roll out of a rapid chargepoint network was outlined in the Council's Zero Emission Vehicle Infrastructure Plan in 2019. However, delivery of this action was not possible under LEVI funding which does not permit a wide scale roll out of rapid chargers. The roll out of these types of chargers are viewed as being more commercially attractive to deliver by the private sector and is therefore not eligible for public funding.

2.33 The Council has been approached by several market leading chargepoint operators to establish a rapid and ultra-rapid charging network in the County, wholly funded by the private sector. To this end, the Sustainable Travel Team has been working with district and borough officers and consultants Jacobs Ltd to identify and assess potential car park and key locations that could host rapid/ultra-rapid charging infrastructure.

2.34 This has identified 40 shortlisted sites that could host one or more rapid/ ultra-rapid chargers.

2.35 Final agreements are now being sought with district and borough partners around site confirmation, parking bay leases, parking fees, tariffs, revenue share, wayleaves, management responsibilities, maintenance, repair, and an exit strategy. Selection of sites is expected to be confirmed by the end of July 2024, following which the Council will appoint a rapid/ultra-rapid chargepoint operator by March 2025, ensuring best value and the high-quality service provider.

Workstream 4 - Derbyshire Council - Estates Electric Vehicle Charging Network

2.36 The Council is committed to becoming net carbon zero in its own estate by 2032, or sooner. To achieve this, the electrification of its own vehicle fleet will be a priority, as will encouraging employees to switch to electric vehicles. Four chargepoints are currently available for use at County Hall, one at Ambergate depot and one at Brimington Depot, all are operated by BP Pulse (BPP).

2.30 The BPP units are now at the end of their operational life and are now experiencing frequent outages. To ensure good reliability, officers are currently seeking to replace the chargepoints at County Hall and Ambergate with ProjectEV chargepoint units, which are the same as those being installed through the pilot EV project with Children's Services.

2.31 The Council is able to install units at around a third of the cost of a commercial provider utilising an existing framework contract: the cost of two 7kWh units is £3,250 compared to £9,000 delivered by commercial providers.

2.32 Advantages of the Council owner-operated solution includes:

1) the ability to fully control who uses the chargepoints, ensuring security and appropriate usage;
2) direct oversight of energy consumption, enabling more efficient management and substantial cost savings;
3) the potential to generate revenue through a kWh uplift, turning energy usage into a financial asset; and
4) a centralised management system that provides detailed reporting across the entire estate. This includes managing access, monitoring energy use, and tracking cost recharging, thereby improving operational efficiency.

2.33 It is acknowledged that further electrification of the Council's fleet can only be achieved through provision of, and more widely available, charging options.

2.34 In order to achieve this, a proposal was taken to the Climate Change and Environment Programme Board for endorsement (June 2023) to provide appropriate infrastructure i.e., electric vehicle chargepoints (EVCPs) on Council premises for use by employee's private vehicles

and the Council fleet, including the fleet of electric pool cars for employees to use whilst on Council business.

2.35 The proposal advocated taking a two-stage approach of 1) delivering pilot sites, followed by 2) development of a wider strategic roll out plan. The proposal also set out Terms of Reference, including roles and responsibilities, and high-level project plans to take forward both the pilot and wider strategic projects, with the former acting as a proof of concept of a Council owned charging system.

Pilot Stage

2.36 As previously reported to this Committee, the pilot sites are being selected to support the reduction of grey fleet mileage for Children's Services, the teams that have the highest grey mileage by supporting a shift to electric pool cars. The pilot phase will deliver up to ten EVCPs across five sites, of which Clay Cross will be the first to have the chargers installed. The four other sites are: Hub Normanton, Mercian Place (Ilkeston), Eco Centre and Kents Bank (Buxton).

2.37 Taking this phased approach will allow the Council to evaluate the model, test reporting mechanisms (including energy offsetting and cost recuperating), as well as providing an opportunity for testing operating systems away from County Hall, such as vehicle booking, vehicle management, fault and issue reporting, and monitor service performance.

Strategic Roll-out

2.38 In June 2023, it was agreed that Sustainable Travel team would commission consultants to develop an Estate EV Charging Network Delivery Strategy. The commission has though been postponed until this financial year, due to the budget situation in the second half of 2023-24.

2.39 The Sustainable Travel Team is currently working with Estate colleagues to refresh the project and a clear delivery plan. Looking ahead, the Sustainable Travel Team will continue to offer technical advice but, in the long term, the management of EV charging infrastructure must become a routine part of the Council's facility offerings, akin to other service offerings such as building maintenance or IT infrastructure provision and management.

3 Consultation

3.1 There are no statutory consultations required at this stage of the projects.

3.2 It is important to note that since April 2023, through an online consultation page, the Council has been collecting expressions of interest (EOIs) from residents who want to see charge points delivered in their area. To date, over 1,000 EOIs have been registered, and this data forms part of the Council's Site Selection Strategy across all three projects.

3.3 As the LEVI projects progress, officers will continue to actively engage with all partners, stakeholders and the local community, and will ensure that all necessary statutory consultations are carried out in accordance with Council requirements, expectations and standards.

4 Alternative Options Considered

4.1 Option 1: No action - Taking no action to reduce the environmental impact of petrol and diesel powered vehicles would not support the urgent need to reduce greenhouse gas emissions to reach the Council's target to achieve net zero emissions across the County by 2050.

4.2 Option 2: Do Not utilise LEVI funding - Whilst not adhering to LEVI requirements may have let the street lighting tender sooner, at the time the difficult timescales and changing criteria were not expected. Taking this approach would have meant Derbyshire lost out on significant funding (£2.5m).

4.2.1 Furthermore, the availability of the LEVI funding meant the Sustainable Travel Team was able to relinquish £1.65m during financial reviews through late 2023.

4.2.2 Taking no action to reduce the environmental impact of petrol and diesel powered vehicles would not support the urgent need to reduce greenhouse gas emissions to reach the Council's target to achieve net zero emissions across the County by 2050.

5 Implications

5.1 Appendix 1 sets out the relevant implications considered in the preparation of the report.

6 Background Papers

6.1 Not applicable.

7 Appendices

7.1 Appendix 1 – Implications.

7.2 Appendix 2 – Requests for Residential Charging (by Parish).

8 Recommendations

That the Committee:

a) Notes the update on activities within the Council's Low Emission Vehicle Infrastructure Strategy that seeks to increase the uptake of electric vehicles across the County through the provision of an enhanced public electric vehicle charging network that utilises both private sector and Government funding.

b) Discusses and considers the progress being made, sharing issues and raising questions as appropriate.

9 Reason for Recommendations

9.1 To ensure appropriate information and understanding of the various electric vehicle infrastructure work programmes to reduce the carbon emissions and environmental impact of petrol and diesel vehicles and to encourage uptake of electric vehicles across the County.

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Appendix 1

Implications

Financial

1.1 The Sustainable Travel Team has secured a capital grant of £6.604m from the Government's Local Electric Vehicle Infrastructure fund, in addition to a further revenue grant of £0.580m capability funding to ensure staff and resources are in place to deliver the electric vehicle infrastructure roll out over three years.

1.2 All projects detailed in this paper are live and ongoing and are being delivered by the Sustainable Travel Team using the LEVI funding and private sector funding. There is no requirement for any further financial commitments from the Council at this time however, a capital borrowing of £0.300m was secured in financial year 2021-22 for use on this project should it be required.

Legal

2.1 There are no legal implications associated with this paper. Any such implications are dealt with on a project by project basis. Sustainable Travel Team officers are working closely with members of the Council and Nottinghamshire County Council legal teams around the legal implications and requirements of the projects.

Human Resources

3.1 It is intended to utilise this capability funding to boost Derbyshire's in-house resource for LEVI planning and delivery through the creation of up to five fully grant funded posts across the Sustainable Travel and Highways teams; to confirm, these posts are proposed to be offered on a fixed term basis and recruitment will be in line with the Council's established processes. A Senior LEVI Officer has been in post since November 2023.

Information Technology

4.1 Electric Vehicle charging points require reliable digital connectivity. Such implications are considered at project development stage to ensure deliverability.

Equalities Impact

5.1 The delivery of specific actions within this paper may have Equalities Impact implications for the Council. These will be considered on a case-by-case basis.

Corporate objectives and priorities for change

6.1 The actions set out in this paper support the Council's commitments to tackling climate change and reduce vehicle borne emissions, as set out in the Derbyshire County Council Climate Change Strategy (2021-2025) and Zero Emission Vehicle Strategy (2019-2029).

Other (for example, Health and Safety, Environmental, Sustainability, Property and Asset Management, Risk Management and Safeguarding)

7.1 Environmental sustainability considerations are embedded in the overall programme of work described above and in the individual projects.

Appendix 2

Request for Residential Charging – by Parish