

TITLE	Installation of Electric Vehicle Chargepoints for On-Street Residential and Council-Owned Car Parks
FOR CONSIDERATION BY	The Executive on Thursday, 25 November 2021
WARD	None Specific;
LEAD OFFICER	Director, Place and Growth - Steve Moore Deputy Chief Executive - Graham Ebers
LEAD MEMBER	Executive Member for Resident Services, Communications and Emissions - Gregor Murray Executive Member for Highways and Transport- Pauline Jorgensen

PURPOSE OF REPORT (INC STRATEGIC OUTCOMES)

The purpose of the report is to gain approval from the Executive for the installation of on-street residential and council-owned car parks EV chargepoints.

RECOMMENDATION

That the Executive:

- 1) approve the initial small-scale rollout of approximately 36 on-street residential EV chargepoints subject to a local engagement exercise once preferred sites have been identified;
- 2) approve the provision of EV chargepoints in council-owned car parks;
- 3) approve £66,000 of capital borrowing to fund the council's 25% investment subject to securing the remaining 75% through government funding; this borrowing will be recovered through revenues generated by the project;
- 4) note that Wokingham Borough Council would be the owner and operator of the EV chargepoints but the maintenance would be undertaken by an external supplier with expertise in this sector. All costs related to maintenance and management will be covered by the external supplier following a procurement exercise;
- 5) note that the award of the contract for supplier will be dependent on achieving the financial estimations detailed within this report, ensuring zero net cost to the Council;
- 6) note that a further report will be presented to the Executive for approval following an initial 18-month period of operation of the on-street chargepoints to review effectiveness and summarize lessons learned to inform into the future EV strategy.

EXECUTIVE SUMMARY

Wokingham Borough Council (WBC) has declared a climate emergency and is committed to playing as full a role as possible – leading by example as well as by exhortation – in achieving a carbon neutral Wokingham borough by 2030. Taking into consideration that the road transport sector is the biggest emitter of greenhouse gases, the Council is seeking to take immediate actions towards the decarbonization of the transport system. EVs have a key role to play in reducing greenhouse gases, improving air quality and tackling climate change.

One particular area of concern is providing EV chargepoints for those who do not have off-street parking and are therefore unable to install chargepoints at home. Home charging normally accounts for 80% of an EV owner's charging due to convenience and price, so not having access to this is a major barrier to the EV roll-out.

The role of the council is crucial in encouraging the adoption of EVs and ensuring that on-street parking is not a barrier to realising the benefits of owning an electric vehicle. To enable this, WBC is developing a small-scale project focusing on the installation of EV chargepoint infrastructure in on-street residential locations and council-owned car parks where off-street parking is not available. Any lessons learned from the initial 18-month operation of the project will be reported to Executive and feed into the future EV strategy.

The Council seeks to apply for funding this financial year to the On-Street Residential Chargepoint Scheme currently being administered by the Office for Zero Emission Vehicles (OZEV). The funding available is for 75% of the capital costs of procuring and installing the chargepoints and the associated dedicated parking bays. The proposed locations for the on-street residential chargepoints will be the subject of a further public engagement process in order to ensure there is broad support in the immediate local area.

The remaining 25% will be covered from capital borrowing through the Climate Emergency Investment Board who agreed to fund the proposal. During procurement of the chargepoints assurance will be sought from the suppliers that the investment will be cost neutral or result in some revenue income for the Council.

This paper sets out a detailed description of the project, the likely timescales and capital and revenue impacts.

BACKGROUND

Climate change is one of the most pressing environmental challenges of our time with immediate actions required to reduce or prevent the emissions linked to human activities.

The UK has committed to reduce greenhouse gas emissions by 28% by 2035 and moving to Net Zero by 2050. Wokingham Borough Council, aligning with the national and international policies, declared a climate emergency and is committed to playing as full a role as possible – leading by example as well as by exhortation – in achieving a carbon neutral Wokingham borough by 2030.

Transport, in particular cars, is the largest source of emissions (accounting for 27%). Transitioning from petrol and diesel cars to electric vehicles is therefore key to reducing emissions and meeting Net Zero. To enable this, it is essential that there is a comprehensive and competitive EV charging network in place.

The Department for Transport sets out that 80% of all EV charging happens at home and home charging is expected to be central to the future charging ecosystem.

This is in line with the findings of the WBC EV survey that was conducted earlier in the year, as 83% of the respondents (overall 260 respondents participated in the survey) expressed their preference for charging their EVs most of the time at home where they park overnight. This is followed by 8% of the respondents who prefer to use public areas and 2% who chose workplaces as their preferred place to charge their EVs the majority of the time.

On-street slow or fast charging near the home (where EVs can charge overnight), offers a more convenient, easier and cheaper way to charge than relying on rapid hubs (akin to petrol forecourts) or destination charging. Drivers could save over £100 a year by using an on-street chargepoint rather than rapid charging (which typically costs around 60% more than home charging). It also has greater benefits for the grid as when EVs are plugged in they can help manage the intermittency of renewable energy sources by providing flexibility as well as smoothing demand (<https://www.gov.uk/government/publications/electric-vehicle-charging-market-study-final-report/final-report>).

One particular challenge is providing EV chargepoints for those who do not have off-street parking and are therefore unable to install chargepoints at home. The lack of availability of chargepoint at home is considered a significant barrier restricting the wider adoption of EVs.

In recognition of this challenge, OZEV have created the On-Street Residential Chargepoint Scheme. The scheme gives local authorities access to grant funding which can be used to part fund the procurement and installation of on-street electric vehicle chargepoint infrastructure, to meet residential needs. The funding available is for 75% of the capital costs of procuring and installing the chargepoints and the associated dedicated parking bays (where applicable). There is no provision in the grant for future operation, maintenance, removal, or replacement costs. 75% of the grant is paid upon acceptance of the grant offer, and the remaining 25% paid in arrears upon completion of the project and the claims process.

Despite the fact that the scheme is primarily focused on residential areas with no off-street parking available, OZEV is willing to consider applications for chargepoints situated in car parks owned by the local authority where they meet the criteria of the scheme.

BUSINESS CASE

The role of the council is key in encouraging the adoption of EVs and ensuring that lack of off-street parking is not a barrier to realising the benefits of owning an electric vehicle.

Project Description

To enable this, WBC has developed a proposal for installing on-street chargepoints in residential areas where off-street parking is not available. There are two separate streams to the proposal:

1. A small-scale project focusing on the installation of EV chargepoint infrastructure in on-street residential locations where off-street parking is not available
2. Provision of chargepoints in council-owned car parks enabling local residents to charge their car both during the day and overnight

Any lessons learned from the initial 18-month operation of the project will be summarized in an evaluation report presented to the Executive whilst the main outputs will feed into the future EV strategy.

WBC is liaising with the Energy Saving Trust (EST), gathering evidence to demonstrate existing and future demand for on-street residential chargepoints (this can be proved via chargepoint requests, resident surveys, geospatial analysis plotting streets with high proportion of flats and terraced houses and analysis of EV registrations in local area) and seeks to apply for funding this financial year to the On-Street Residential Chargepoint Scheme.

On-Street Provision

Approximately 36 chargepoints are proposed to be installed in residential on-street areas, the exact location of which would be specified by geospatial analysis combined with the outputs of our recent EV survey and the chargepoint requests received so far. A public engagement exercise will be undertaken upon selection of the chosen on-street residential locations to obtain broad support from the residents and make any amendments to take account of local feedback.

A competitive tender is anticipated later in the year with the awarded supplier providing ongoing input and support on the delivery of the project. The intention is that the council purchases and operates the chargepoints with maintenance undertaken by an external supplier with expertise in this sector, familiar to the users. By monitoring the usage of chargepoints, the council can alter the charging fees determine what incentives might encourage use and control demand, whereas at the same time can regulate load balancing issues, trying to achieve even usage among the entire chargepoint network. By being responsible of the back-office the council can also proactively install and uninstall the charging infrastructure meeting users' needs in a timely manner.

Car Park Provision

Ten council-owned car parks have been identified within the borough which meet the criteria specified by OZEV.

A 3-year pilot, with no long-term commitment is currently being explored at 3 locations within Wokingham (Carnival Pool, Dinton Pastures and Shute End car parks) to investigate the efficiency and effectiveness of Flowbird as a potential supplier. WBC is already using Flowbird as a provider for the parking ticket machines whilst their new technological devices are offering a combined parking and charging element of the payment enabling a seamless and cost-effective experience for the users.

The project is in line with the vision of the Corporate Delivery Plan to Keep the Borough moving and enjoy a Clean and Green Borough now and for future generations to come. The implementation of the project would have a significant potential for abatement of carbon dioxide emissions (CO₂) with the carbon savings being estimated at 7,681 tCO₂e annually.

Cost

The current estimate for the capital cost of the project is approximately £240,000. This is an indicative cost based on informal discussions and research: £155,059 for the residential on-street scheme (the cost encompasses design and project management (£7,200), civils and electrical (£56,446), EV chargepoints hardware (£74,914) and Distribution Network Operators (DNO) power connections (£16,500)) and £85,242 for the car parks (the cost encompasses all hardware and commissioning and set-up. DNO cost is not included).

75% of the capital costs (£180,000) of chargepoints purchase and installation is covered by the On-Street Residential Chargepoint Scheme. The remaining 25% will be covered by capital borrowing through the Climate Emergency Investment Board.

It is therefore anticipated that WBC's commitment to the scheme would be £66,000 (including a 10% contingency) which will cost the Council £11,320pa in interest and MRP (based on a 10-year payback). A business case for the scheme has been completed following the agreed governance process and the funding from the Climate Emergency Investment Board has been approved.

Revenue

Because the Council is providing the capital investment, the operation of these chargerpoints is expected to generate a revenue income that is sufficient at least to cover the councils borrowing costs (based on a 10-year payback). The revenue generated is very much dependent on usage, but it is also impacted by the amount we charge for the energy, and any ongoing cost of maintenance and management.

A number of different financial models have been included in the business case provided to the Climate Emergency Investment Board based on a 10-year operation period. The 10-year period has been chosen due to the longevity of the equipment and taking into consideration that schemes need time to be allowed to bed in; they must be in place long enough for their benefits and disbenefits to be properly evaluated and understood whilst adequate time is required for people to amend their travel behaviour.

The selected financial model would be agreed with the awarded supplier following a procurement exercise, ensuring that the chosen option would be cost neutral or result in some revenue income for the Council.

Timescales

The project duration is estimated at 17 months (which aligns with the requirements of the grant scheme), including the application to the On-Street Residential Chargepoint Scheme currently provided by OZEV, procurement, public engagement on the specific on-street locations identified and installation of the chargepoint infrastructure.

FINANCIAL IMPLICATIONS OF THE RECOMMENDATION

The Council faces severe funding pressures, particularly in the face of the COVID-19 crisis. It is therefore imperative that Council resources are focused on the vulnerable and on its highest priorities.

	How much will it Cost/ (Save)	Is there sufficient funding – if not quantify the Shortfall	Revenue or Capital?
Current Financial Year (Year 1)	Scheme cost: £240,000 Capital cost to the Council: £66,000 (including 10% contingency)	75% covered by OZEV. The remaining 25% (£66,000) to be covered by capital borrowing	Capital
Next Financial Year (Year 2)	(TBC)	-	Revenue
Following Financial Year (Year 3)	(TBC)	-	Revenue

Other Financial Information

It is anticipated that WBC's commitment to the scheme would be £66,000 secured from capital borrowing through the Climate Emergency Investment Board plus interest of £11,320 (based on a 10-year payback). As part of the tender process, it will be ensured that the full cost of the scheme is recovered within the 10-year period.

Stakeholder Considerations and Consultation

EV charging public engagement was undertaken between 24/03/2021 and 30/04/2021 via the completion of an online survey. The outputs of the survey along with chargepoints request received so far would be considered for the identification of the exact locations of on-street residential and council-owned car park chargepoints.

Additional public consultation will take place on the specific on-street locations identified prior to any decision to implement.

Regular meetings between the EV working group, EST and DNO are going to be scheduled to follow up and input in developing the approach.

Public Sector Equality Duty
Initial Equality Impact Assessment (EqIA) has been completed, there are no negative issues identified.

Climate Emergency – <i>This Council has declared a climate emergency and is committed to playing as full a role as possible – leading by example as well as by exhortation – in achieving a carbon neutral Wokingham Borough by 2030</i>
Installing new electric vehicle chargepoints across the Borough and encouraging the uptake of electric vehicles are key objectives of the Climate Emergency Action Plan.

List of Background Papers
N/A

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