Divisions Affected - All

CABINET – 16 MARCH 2021

OXFORDSHIRE ELECTRIC VEHICLE INFRASTRUCTURE STRATEGY

Report by Corporate Director Communities

RECOMMENDATION

1. **The Cabinet is RECOMMENDED to ADOPT the recommended policies and key actions for the Oxfordshire Electric Vehicle Infrastructure Strategy (2020-2025).**

Executive Summary

2. All six of Oxfordshire's councils have declared climate emergencies; Oxfordshire County Council's broader vision includes an ambition to reducing carbon emissions to tackle climate change and improve air quality. Supporting a transition to zero emission road transport is a key component in Oxfordshire's councils achieving their net zero carbon targets, reducing air pollution, and delivering key transport initiatives such as the Oxford Zero Emission Zone.

3. The government has proposed an end to the sale of petrol and diesel vehicle sales by 2030. Comprehensive, accessible and efficient charging infrastructure is essential in enabling the rapid adoption of electric vehicles. The Oxfordshire Electric Vehicle Infrastructure Strategy (OEVIS) sets out the policies and plans to realise this goal, it has been a true collaborative piece of work with City and District Councils and has been informed through the lessons learnt from various innovative EV charging projects already being delivered. It is amongst the first of its kind in the UK, the strategy will put the county in a strong position to ensure that those wishing to purchase an EV can access convenient charging and we believe the strategy will provide a benchmark for UK Transport Authorities.

4. Our vision for EV charging in Oxfordshire is:

   - *Residents, businesses and visitors in Oxfordshire will be confident they can recharge EVs conveniently, and in a manner appropriate for their needs.*
   - *Oxfordshire's EV charging provision will develop to meet the needs of users now and in the future, and in doing so support Oxfordshire's transition to decarbonising transport and improving air quality.*

5. The OEVIS provides an operational approach to enabling and deploying charging infrastructure in Oxfordshire for cars and car-based vans. In the short-term (2020-2025), our objectives are to:

- Enable and deliver public EV charging strategically across Oxfordshire
- Adopt a common approach to managing EV charging in Council car parks
- Enable residents without access to private off-road parking to access a range of options for EV charging
- Encourage new developments to install high quality EV charging infrastructure
- Set standards for the quality of public EV charging in Oxfordshire which supports development of a network which is high quality, open, accessible and future-proofed
- Work with partners to encourage other landowners to install EV charging infrastructure for businesses, residents and other users.

Exempt Information

6. No exempt information

Introduction & Background

7. All six of Oxfordshire's councils have declared climate emergencies. Supporting a transition to zero emission road transport is a key component in Oxfordshire's councils achieving their net zero carbon targets, this has been reinforced by Oxfordshire County Council's commitment to delivering the UK's first ZEZ in Oxford to reduce air pollution levels, tackle the climate emergency, and improve the health of residents, workers and visitors in Oxford and beyond. The councils are at the forefront of delivering new solutions and a sustainable model for EV charging across the county, with projects across the county delivering up to 430 charging points by 2022 in partnership with City and District Councils and the private sector.

8. Comprehensive, accessible and efficient charging infrastructure is essential in enabling the rapid adoption of electric vehicles. This strategy sets out the policies and plans to realise this goal. The OEVIS has been a true collaborative piece of work with City and District Councils and has been informed through the lessons learnt from various innovative EV charging projects already being delivered. It is amongst the first of its kind in the UK, the strategy will put the county in a strong position to ensure that those wishing to purchase an EV can access convenient charging and we believe the strategy will provide a benchmark for UK transport Authorities.

9. It is proposed that the OEVIS is adopted by all six collaborating Councils in Oxfordshire, and work is underway at each of the district and city councils to present the strategy to their own senior teams and cabinets for adoption over the coming months.

10. To support the drive to reach net zero carbon emissions by 2050, the UK government has set out its ambitions for all new cars to be electric by 2030. Socio-economic factors mean Oxfordshire is likely to have faster growth in EV sales than the national average; University of Oxford predictions indicate that by 2025 there could be over 25,000 EVs on Oxfordshire's roads, and over 44,000 by 2027 (**see annex 1**). Local measures such as the upcoming ZEZ pilot starting in August 2021 may also stimulate additional uptake of EVs, not just within the zone, but also across the county, from where journeys into the zone may originate.

11. The forecast increase in EV uptake makes the need for adequate EV charging infrastructure urgent – we need to plan now for action to be taken on EV charging within the coming 3-5 years. This is particularly acute for the 30 – 40% of households across the county with no off-road parking who are unable to install their own EV charger (**see annex 2**). Residents already contact Oxfordshire County Council and the districts on a regular basis with requests for support with EV charging and on-street EV chargers.

12. Current public EV charging provision in the county is limited and most is focussed in Oxford City. As demand increases, the Councils are each looking into deploying their own infrastructure, and a lack of coordination could result in inconsistency across the county, and loss of opportunities to collaborate to reduce resource demand on the councils and share learning.

13. Oxfordshire has not previously had any detailed operational strategy for the deployment and management of EV charging infrastructure. However, the Councils have achieved recognition, and attracted considerable investment in the delivery of pioneering EV charging projects. A shared strategic approach will ensure we meet customer needs, share learning from our projects, co-ordinate activity across Oxfordshire to ensure a complimentary offering, consistent strategy and policies, and lays the foundation for future projects.

14. The OEVIS provides an operational approach to enabling and deploying charging infrastructure in Oxfordshire in the short-term (2020-2025). The strategy covers the administrative area of Oxfordshire County Council and includes the administrative areas of each of the five District Councils. It focusses on EV charging for cars, car-based vans, and taxis (hackney carriage and private hire vehicles) for three user groups with differing needs for EV charging:

    (a) Oxfordshire residents
    (b) Local businesses, their employees, taxis, logistics operations and car clubs
    (c) Visitors to Oxfordshire.

Recommended Policies

15. The following policies are proposed for the OEVIS and will supported by 'Key Actions' which can be seen in the full OEVIS document (**Annex 3**)

Policy Area	Policy
Targets for EV charging	**Policy EVI 1:** The Councils will seek to enable and encourage deployment of public EV chargepoints in Oxfordshire towards meeting predicted demand by 2025 in line with national and European directives
Funding public EV chargers	**Policy EVI 2:** The Councils will collaborate to seek funding for EV infrastructure and support the development of self-sustaining business models for EV charging in Oxfordshire which rely less heavily on continuing government support in the future
Public Charging in local authority car parks	**Policy EVI 3:** The Councils will aspire to reach or exceed a target of converting 7.5% of local authority managed public car park spaces, to fast or rapid EV charging by 2025.
	Policy EVI 4: The Councils will manage parking bays for EV charging in local authority car parks to encourage both destination and overnight EV charging and for all types of EV ownership, including private vehicles, shared or car club vehicles, and business vehicles where appropriate
Charging at Council sites	**Policy EVI 5**: The Councils will support staff and visitors to access electric vehicle charging at Council premises where appropriate
Charging without off-road parking	**Policy EVI 6:** Recognising that lack of off-road parking may be a significant barrier to EV take-up, Oxfordshire County Council will promote a hierarchy of solutions to EV charging for residents without access to a driveway, prioritising off-street charging hubs, and other solutions which avoid generating additional street clutter or surrounding maintenance and management challenges
Charging in New Developments	**Policy EVI 7:** The Councils will seek to include statements & policies supportive of EV charging infrastructure and, where appropriate, references to the Oxfordshire Electric Vehicle Infrastructure Strategy in their planning standards and guidance
	Policy EVI 8: The Councils will benchmark nationally, and between themselves, each seeking to set minimum standards for the quantity of EV charging to be provided in developments in their planning requirements.
	Policy EVI 9: The Councils will seek to provide support and guidance on EV charging provision to Town and Parish Councils, and other groups writing Neighbourhood Plans

EV Charging in Historic Areas	**Policy EVI 10**: In order to manage the impact of EV chargers without restricting access to EV charging, the Councils will define and communicate the design features of EV chargers which will have the most positive impact on the character of our cities towns and villages, and ensure that where there are specific heritage conservation needs, these are met by the charging equipment deployed.
Commercial car parks	**Policy EVI 11:** The Councils will seek opportunities to encourage organisations, businesses and other owners of commercial and public carparks to deploy public EV charging infrastructure where it is appropriate
Communal residential car parks	**Policy EVI 12:** The Councils will seek opportunities to encourage owners and managers of housing stock of all types of tenure to deploy public EV charging infrastructure where it is appropriate
Workplace Charging	**Policy EVI 13:** The Councils will explore opportunities to encourage uptake of EV charging at workplaces where it is appropriate
Rapid charging on strategic roads	**Policy EVI 14:** The Councils will seek to improve the availability of Rapid and Super-Rapid EV charging on and near the strategic road network and important link roads across Oxfordshire
Charging standards for Oxon	**Policy EVI 15:** The Councils will encourage the deployment of a high quality, reliable, open, value for money, and truly instant access EV charging network for Oxfordshire by setting high standards which seek to reach 'above and beyond' minimum legal requirements
Managing Energy Impacts	**Policy EVI 16:** The Councils will seek to increase the emissions reduction benefits of electric vehicles, and mitigate the impact of EV charging infrastructure on the local and national grid by encouraging and promoting the use of renewable energy for EV charging, encourage 'off-peak' use of EV chargers, and exploring technical options to manage grid demand from EV charging infrastructure.
Promoting EVs & Infrastructure	**Policy EVI 17:** The Councils will promote information about public EV charging in Oxfordshire, and awareness of the benefits of EVs to the public through their online and other communications channels

Governance

16. The OEVIS has been developed with cross Council governance via a Project Board of Assistant Directors, Heads of Service and other managers from each authority:

Organisation	Name	Role
Oxfordshire County Council	Paul Fermer Llewelyn Morgan	Assistant Director – Communities Operations Head of IHub
Cherwell District Council	Ed Potter	Assistant Director - Environmental Services
Oxford City Council	Jo Colwell Rose Dickinson	Head of Environmental Sustainability Carbon Reduction Team Manager
South Oxfordshire District Council	Michelle Wells	Policy & Insight Manager
Vale of White Horse District Council	Michelle Wells	Policy & Insight Manager
West Oxfordshire District Council	Claire Locke	Group Manager - Commissioning

17. A member steering board made up of representatives from each of the Council's has been engaged in the development of the strategy:

Organisation	Name	Council Role
Oxfordshire County Council	Cllr Yvonne Constance	Cabinet Member for Environment (including Transport)
Cherwell District Council	Cllr Dan Sames	Lead Member for Clean and Green
Oxford City Council	Cllr Tom Hayes	Cabinet Member for Zero Carbon Oxford
South Oxfordshire District Council	Cllr Caroline Newton	Climate Emergency Advisory Committee Member
Vale of White Horse District Council	Cllr Catherine Webber	Cabinet Member for the Climate Emergency and the Environment
West Oxfordshire District Council	Cllr David Harvey	Cabinet Member for Climate Change

18. Proposed adoption dates at participating Councils are shown below. Adoption dates at Oxford City Council are yet to be confirmed due to Purdah affecting cabinet meeting dates.

Organisation	Cabinet/Executive Board
Oxfordshire County Council	16/03/2021
Cherwell District Council	06/04/2021
Oxford City Council	TBC
South Oxfordshire District Council	08/04/2021
Vale of White Horse District Council	09/04/2021
West Oxfordshire District Council	24/03/2021

19. Where adoption timelines must be extended at individual districts for local adoption processes, due to Purdah or other events, implementation will not be impacted for Councils where the strategy has been adopted.

20. The OEVIS is an important document for OCC in its own right as Highways Authority. The roll out of OCC's existing pipeline of projects will continue through ongoing collaborative work with the District and City Councils to deliver these, alongside the adoption of this strategy in each Authority.

Corporate Policies and Priorities

21. All six of Oxfordshire's councils have declared climate emergencies; Oxfordshire County Council's broader vision includes an ambition to reducing carbon emissions to tackle climate change and improve air quality. Supporting a transition to zero emission road transport is a key component in Oxfordshire's councils achieving their net zero carbon targets, reducing air pollution, and delivering key transport initiatives such as the Oxford Zero Emission Zone.

22. The OEVIS strategy will act as a supporting strategy for the emerging Connecting Oxfordshire Local Transport and Connectivity Plan (LTCP), and aims to compliment and support the LTCP vision, by:

    (a) reducing emissions from shared transport through promoting EV infrastructure for shared transport
    (b) reducing emission from private road transport where active and public transport is not an option.

23. The strategy has strong ties with the Oxfordshire Energy Strategy, the Oxfordshire 2050 Plan, each of the collaborating Councils' Climate Emergency declarations and net zero carbon targets, and Oxfordshire County Council's Climate Action Framework (CAF). The OEVIS will act as a supporting strategy to the CAF to facilitate delivery of recommended actions and support the drive to meet local and national emissions reductions targets.

24. Oxfordshire County Council and Oxford City Council are proposing to create a Zero Emission Zone (ZEZ) pilot in Oxford city centre, starting in August 2021, and based on a road user charging scheme. This pilot, and any future implementation and expansion, may generate additional need and demand for EV charging for road user groups travelling through or located in the ZEZ.

Financial Implications

25. Oxfordshire's Councils will use their best endeavours to deliver on the commitments made in the strategy, using existing project funding, future Government funding opportunities and partnerships with the private sector which deliver an EV charging network for Oxfordshire with minimal impact on existing Council budgets.

26. Policy EVI 2 sets out the Councils' ambitions to seek external grant funding from government, along with private investment to deliver EV charging infrastructure projects and the ongoing management of EV charging. The policy also sets out our ambition to continue our current exploration of self-sustaining business models for EV infrastructure.

27. Project funding for public EV charging from central government is available through two main routes:

    (a) The Office for Zero Emission Vehicles (OZEV) On-street Residential Charging Scheme
    (b) Innovate UK (IUK) EV infrastructure schemes

28. Oxfordshire County Council has had considerable success in winning government funding and attracting private investment for EV infrastructure projects over the last 5 years:

Project Name	Charging Type	Grant Funding	Private Investment
Go Ultra Low Oxford – On Street Project *(Led by Oxford City Council)*	3-7kW and 7-22kW roadside charging technologies	OZEV grant: £ 816k (Funding to Oxford City Council: 816k)	Concession resourcing
Go Ultra Low Taxi *(Led by Oxford City Council)*	Rapid EV charging infrastructure for Taxis	OZEV grant: £473k (Funding to Oxford City Council: £473k)	Concession resourcing
Park and Charge Oxfordshire	7-22kW EV hubs for residents with no off-road charging access	IUK grant: £3.4m (Funding to OCC: £759k)	£1.8m Concession resourcing
Virgin Park and Charge	7-22kW Using Virgin Media data network to supply energy *(installations in Oxon unlikely)*	IUK grant: £4M (Funding to OCC: £104.5k)	£5.6m Concession resourcing

29. Charge Point Operators frequently offer investment via a concession model, whereby local authorities can 'host' chargers operated and managed by the CPO at little or no cost to the local authority, while revenue from charging is retained by the operator or shared with the host.

30. Oxford City Council have also engaged with the private sector to bring in funding for EV infrastructure and charger operation in several projects via similar models in addition to government grant funding.

31. Management of a licensing scheme for on-street EV charging will have budgetary implications which are yet undefined. Our objective in developing the future licensing scheme is to charge a licensing fee to cover the costs of resourcing.

32. EV charging spaces may generate less income for Councils than ICE spaces in the short term. A financial model for EV charging in Council car parks has been generated and demonstrates that over 5 years the Councils will expect to see usage of spaces and income levels increase. The target for EV charging spaces in Council car parks has been consulted on with parking teams and the risk of loss of potential income, and potential for minor additional resourcing requirements in regard to enforcement was considered acceptable at this level.

Comments checked by:

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Legal Implications

33. This report is not considered to raise any legal implications. A copy of the full OEVIS document was sent for review to both the Environment and Contracts legal teams.

Comments checked by:

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Staff Implications

34. Delivery of the actions recommended in the OEVIS will require some staff resourcing which is as yet undefined until detailed project plans are drawn up. As discussed above in Financial Implications, Policy EVI 2 sets out the Councils' ambitions to seek external grant funding from government, along with private investment to fund the delivery EV charging infrastructure projects and the ongoing management of EV charging. The policy also sets out our ambition to continue our current exploration of self-sustaining business models for EV infrastructure – this exploration includes investigating options for the funding of staff resource.

35. A key component which will require staff resourcing within Oxfordshire County Council is the management of a licensing scheme for on-street EV charging, the requirements of which are yet undefined. Our objective in developing the future licensing scheme is to charge a licensing fee to cover the costs of resourcing.

Equality & Inclusion Implications

36. While many areas of Oxfordshire are affluent, and likely to be among the first to see early mass adoption of EVs, there are significant areas of Oxfordshire where income is low. Lower income households are often disproportionately affected by poor air quality, and also the sector of society least able to adopt EVs early. There may be a perception of unfairness in access to EV charging if chargers are only installed in wealthy areas where people have been able to afford brand new technology.

37. While the Councils are limited in the action they can take to support low income households with the purchase of EVs, the second hand EV market is growing, providing more people with access to electric vehicles. The strategy enables the councils to take a strategic approach to delivering EV charging based on likely future need, rather than consumer demand from more affluent early adopters of EVs. This will allow steps to be taken to ensure equitable access to EV charging. Car club vehicles may also provide a more affordable alternative to private EV ownership, with the potential to give wider access to clean vehicles, and support reductions in private vehicle ownership in line with the aims of Connecting Oxfordshire. Electric car clubs and the chargers needed to power them are therefore included as a valuable measure to improve social inclusion in Oxfordshire's EV ready future.

38. The installation of EV chargers on the public highway, if not carefully managed, may create negative impacts for road users; in particular, pedestrians and those with disabilities, potentially compromising the Council's commitment to inclusive mobility.

39. The strategy sets out the Councils approach to supporting drivers without off-street parking, while prioritising those solutions which avoid installing infrastructure on the pedestrian footway, and where that is not possible selecting options which avoid or minimise obstructions for pedestrians and consider inclusive mobility.

Sustainability Implications

40. Environmental Impacts: The OEVIS strategy has strong links with the emerging Connecting Oxfordshire Local Transport and Connectivity Plan, and aims to compliment and support the LTCP vision. The strategy also has strong ties with the Oxfordshire Energy Strategy, the Oxfordshire 2050 Plan, each of the

collaborating Councils' Climate Emergency Responses, and Oxfordshire County Council's Climate Action Framework. The OEVIS will act as a supporting strategy for the LTCP and CAF to support the drive to meet emissions reductions targets.

41. Key areas of positive impact are:

(a) *Energy use in our buildings or highways*

The OEVIS has a positive impact on Carbon and Air Quality emissions reduction of road traffic on Oxfordshire Highways by supporting transition to ultra-low and zero emissions vehicles on our highways.

(b) *Our fleet*

EV charging equipment in local authority owned car parks will enable longer pool vehicle and grey fleet journeys, in Oxfordshire to be made in ultra-low and zero emission vehicles.

(c) *Staff travel*

Improved access to EV charging will enable more staff to choose ultra-low or zero emission vehicles for their commute.

(d) *Purchased services and products (including construction)*

Encouraging the use of renewable energy, on-site renewable generation, and battery storage options to power electric vehicles will reduce upstream emissions for powering electrified vehicles.

(e) *Enable carbon emissions reduction at district/county level?*

Provision of EV charging infrastructure to drivers, in particular those who cannot charge an electric vehicle at home, will enable greater numbers of Oxfordshire residents and businesses to switch to cleaner low and zero emission vehicles for private, shared and business use

Risk Management

42. Risks associated with the adoption and delivery of the strategy have been considered throughout its development. Key risks are summarised as:

Risk	Mitigation
Financial or resourcing constraints mean actions are delayed or not delivered.	• Discussed under heading 'Financial and Staff Implications'
Ongoing licensing, management and maintenance of EV charging infrastructure generates additional revenue burdens.	• Discussed under heading 'Financial and Staff Implications'

Parking spaces for EV charging generate less income than ICE spaces in the short term	• Discussed under heading 'Financial and Staff Implications' para 30.
Councils are liable for incidents involving EV infrastructure	• Oxfordshire EV Standards will require owners and operators of EV infrastructure to have appropriate public liability and other insurances
Over supply of EV infrastructure, or installation in the wrong places means chargers are not well utilised	• Analysis of likely demand across Oxfordshire has demonstrated key hotspots where need for support with EV charging and likely early mass uptake intersect and where deployment should be targeted. • Ongoing monitoring of demand is recommended during the delivery of EV strategy projects to reduce the risk of over supply
EV chargers do not meet the right standards or are unreliable	• Oxfordshire EV Standards and the proposed on-street EV charging policy will require all EV infrastructure installed or licensed to; • Meet relevant national and international standards, and the higher Oxfordshire Standards designed to ensure reliability and quality. • Be operated and maintained appropriately by a competent ChargePoint operator to best practice SLAs.
EV chargers are not 'future-proofed' for advances in technology, assets become obsolete	• Councils can avoid investing in technology which is likely to be rapidly replaced by and focussing on enabling market led provision of EV charging. • Strategy promotes concessions and licensing options which leave the charger asset the responsibility and property of the CPO and avoid adoption or ownership of EV charger assets by councils. • The Oxfordshire EV charging standards set out a requirement for CPOs to demonstrate a renewal plan for assets at the end of their useful life.
The high technical and operational standards proposed in the strategy put the industry off investing.	• Engagement with the EV charging industry during development has indicated no major challenges arising from the technical and operational standards proposed for EV charging infrastructure in Oxfordshire.

43. Opportunities and Benefits to the Council are summarised as:

Opportunities and Benefits
• Encouraging drivers to switch from petrol/diesel to EV will benefit local air quality through reduced exhaust emissions of NO_X and help decarbonise transport as energy generation progresses from fossil fuels to renewable sources.

• Strategic analysis allows the Councils to focus delivery on areas where need for EV charging will be greatest, in particular where other policies and strategies such as the upcoming ZEZ pilot may stimulate increased uptake.
• Demand for chargers in Oxfordshire is likely to be higher than other regions
• Providing chargers may attract EV users to an area and stimulate nearby shops and the local economy
• District Councils car parks are often located close to businesses and residential properties without off road parking –opportunities to support these with EV charging.
• Charge Point Operators (CPOs) offer concession contracts for chargers operated and maintained by the operator at little or no cost to local authorities and may provide a revenue opportunity in the future.
• A co-ordinated strategy will enable Councils to take better advantage of government funding opportunities for EV charging infrastructure
• Increased EV usage will stimulate the EV technology sector in Oxfordshire which has a rich science and engineering base, and strong links with the vehicle industry.

Consultations

44. The public has not been consulted on the EV Infrastructure Strategy – this decision was made by the project board on the basis that the strategy is a technical and operational document, and that broader issues on reducing transport emissions will be consulted on through the LTCP.

45. The strategy has been developed collaboratively with significant subject matter expert input from each of Oxfordshire's five District and City Councils. External stakeholder groups including Parish and Town Councils have been engaged, as have the EV charging industry.

JASON RUSSELL
Corporate Director, Communities

Annex 1: Predicted Electric Vehicle (EV) Uptake in Oxfordshire
Annex 2: Spatial Analysis of Residential Properties in Oxfordshire with Low Probability of a Driveway
Annex 3: The Oxfordshire EV Infrastructure Strategy

Background papers: Nil.

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February 2021