

To: Cabinet
Date: 13 July 2022
Report of: Head of Corporate Strategy
Title of Report: Oxford Electric Vehicle Infrastructure Strategy

Summary and recommendations	
Purpose of report:	To approve the Oxford City Electric Vehicle Infrastructure Strategy which sets out the Council's approach to ensuring a robust, quality and equitable deployment of charging infrastructure across the city.
Key decision:	Yes
Cabinet Member:	Councillor Louise Upton, Cabinet Member for Health and Transport
Corporate Priority:	<ul style="list-style-type: none"> • Pursue a zero carbon Oxford • Enable an inclusive economy • Support thriving communities
Policy Framework:	Council Strategy 2020-24, Local Plan 2016-2036

Recommendations: That Cabinet resolves to:
1. Approve the draft Electric Vehicle Infrastructure Strategy as set out in Appendix 1, confirming the principles for future decision making within this strategy and delegate authority to the Head of Corporate Strategy in consultation with the Cabinet Member for Health and Transport to make further minor amendments to the draft Strategy prior to its adoption;
2. Note that an Implementation Plan will follow for Cabinet approval in Autumn 2022; and
3. Adopt the Oxfordshire Electric Vehicle Infrastructure Strategy which links in a complementary way with the Oxford city specific policies and actions set out in the Electric Vehicle Charging Infrastructure Strategy.

Appendices	
Appendix 1	Oxford City Electric Vehicle Infrastructure Strategy (OxEVIS)
Appendix 2	Risk Register
Appendix 3	Equalities Impact Assessment
Appendix 4	Oxfordshire Electric Vehicle Infrastructure Strategy (OEVIS)

Introduction and background

1. Oxford City Council has set out a road map and action plan to become a net zero Council by 2030 and with the Zero Carbon Oxford Partnership (ZCOP), compiled of the city's largest institutions and employers, to reach a target of net zero carbon emissions for Oxford by 2040 or earlier.
2. Transport is the second largest contributor to Oxford's emissions, accounting for 171 ktCO₂e (2018), with private cars being the main source of emissions. Transport also contributes 40.47% of NO₂ pollution in Oxford and is therefore a significant area to be addressed to meet these targets.
3. Oxford City Council and Oxfordshire County Council have introduced a city centre Pilot Zero Emissions Zone (ZEZ) to address air pollution and help to reach this target. These measures, combined with the Council's Local Plan 2040, will further stimulate demand for EVs, which will help to reduce transport emissions and improve air quality and support the 2040 zero carbon target.
4. On 21st July 2021, Oxford City Council's Cabinet approved the commissioning of an EV strategy, to set out a strategic framework for the delivery of EV Infrastructure in line with its 2040 net zero carbon target.
5. The full strategy has been drafted over the last year, covering extensive internal and external stakeholder engagement, data collection and analysis of what infrastructure is needed to support Oxford and its residents' needs, alongside a thorough assessment and alignment with local and national decarbonisation and transport policies.
6. This paper requests approval to adopt the Oxford City EV Infrastructure Strategy (OxEVIS). Which sets out the Council's approach to determine the EV charging needs of the city, in a manner that is: fair, equitable, sustainable and economically attractive. It seeks to create policies that will integrate into key Council-led service areas, to ensure a joined-up and collaborative approach to providing charging infrastructure.
7. OxEVIS will be supported by an Implementation Plan, which will be submitted through the Council's constitutional governance approval processes by autumn 2022.
8. OxEVIS is structured to complement and realise national as well as local transport and planning policies, including the Oxfordshire County Council Oxfordshire Electric Vehicle Infrastructure Strategy (OEVIS) published 2021 and the Government's recent Electric Vehicle Infrastructure Strategy 'Taking Charge' published in March 2022. In particular, it will implement the hierarchy (implicit in both OEVIS and 'Taking Charge') of EV charging infrastructure installations that seek to keep pavements accessible and minimise negative impacts on active transport options, prioritising off-street charging

hubs and safe, GUL-e type pavement crossing solutions over conventional on-street EV chargers (where feasible).

9. The GUL-e solution currently being trialled by ODS provides a number of advantages including;
 - a. a convenient, accessible solution with a low Return of Investment for those without access to off-street parking, allowing access to the vibrant and innovative home charging market,
 - b. improved targeting of public EV infrastructure funds for those EV users that cannot rely on home charging as their primary charging,
 - c. utilisation of existing household grid connections, reducing the need for grid reinforcement and enabling smart energy management,
 - d. a revenue opportunity for ODS.
10. Ongoing co-commitments between Oxford City Council and Oxfordshire County Council are essential to the continuous development of comprehensive regional change in travel habits, and partnership working with the Highways Authority is a pre-requisite for Government funding. It will also enhance the collective opportunities for future projects. Therefore, this paper requests approval for the adoption of OEVIS, which forms a strategic umbrella for many of the more detailed Oxford city specific policies and actions set out in the Electric Vehicle Charging Infrastructure Strategy.
11. The Government's Strategy confirmed an estimate of between 450,000-700,000 additional charge points will be needed nationally by 2040. It also clearly defined the strategic role it wants Local Authorities (LA's) to take in the transition to electric vehicles, with Transport and District Authorities working together. It recognises that whilst commercial companies will provide charging, local authorities are best placed to ensure that infrastructure meets the needs of the people they serve, addressing fair and equitable distribution, reducing risks of poorly located and/or insufficiently maintained infrastructure.
12. In support of this ambition the government has recently launched further funding support packages including the Local EV Infrastructure (LEVI) fund. The city is placing a joint bid with Oxfordshire County Council and neighbouring districts to access Pilot funding from this grant pot. This bid is covered in more detail in a separate report, titled LEVI Grant EV Infrastructure Project Approval, which went to Cabinet on 15 June 2022, and submitted to Government on 17 June 2022.

Trajectory of EV Uptake

13. Of the 52,000 vehicles in Oxford today, just under 900 are EVs (less than 2%). In order to meet net zero by 2040, these numbers must rise sharply over the next few years – ZCOP identifies that to meet Oxford's Zero Carbon ambitions, 16,000 fossil fuel cars need to be replaced by EVs in the next four years alone.
14. In a recent survey, 53% of respondents¹ in Oxford stated that they expect to switch to an EV in the coming 6-24 months. EV infrastructure needs to grow quickly to meet this demand.

¹ Survey gained 510 responses and was open to anyone who lives, works or visits the City. Survey open between April - May 2022

15. The table below sets out 3 trajectories for EV uptake in the city. These figures have been calculated using nationally recognised formulas to predict the city’s future car and light commercial vehicle (LCV) EV charging needs². To achieve the city’s zero carbon targets, we would need to achieve the ZCOP uptake trajectory.
16. However, it is recognised that there are many factors that will dictate the actual rate of EV uptake. Therefore, the Strategy recommends that we align targets for EV infrastructure deployment by annually checking EV adoption rates for the city. The purpose of the strategy is to enable EV uptake in an agile way, not to constrain it, while avoiding oversupply of infrastructure that is not used.

TRAJECTORY	Definition	2026	2030	2040
		% EV's in Oxford per total number of cars and vans		
MEDIUM UPTAKE	Based on Oxford's current uptake (before ZEZ implementation)	24%	50%	100%
HIGH UPTAKE	Based on another city which has a highre number of EV chargers currently.	29%	61%	100%
ZCOP TARGET		36%	80%	100%

EV Infrastructure Strategy Vision and Objectives

17. OxEVIS will ‘Progress Oxford’s leadership in the transition to a sustainable, decarbonised transport system through the delivery of a fair, sustainable, accessible and equitable network of EV charging infrastructure”.

6 Vision Objectives:

-  A network that meets current and future demand
-  Providing fair, accessible, and equitable EV infrastructure
-  Accounting for ongoing changes in EV technology
-  Utilisation of Council assets
-  Funding opportunities and revenue generation
-  Community wealth building

² Figures based on formulae and ratios from the Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change and the International Council on Clean Transportation (ICCT) is an independent non-profit organization to provide research scientific analysis to environmental regulators.

18. The Strategy seeks to enable the Council to secure additional investment from the private sector and through grant bids, as well as opening up opportunities for ODS/ODSTL to deliver services in this space.
19. Where possible the Council will seek to structure deployment such that the more lucrative EV charging sites provide cross-subsidy to those, initially, less well-used. It should be noted that sites in those areas of the city with higher numbers of commercial vehicles parked overnight may be currently less attractive to the market, but may eventually see the highest usage of EV charging sites in the latter years once most vehicles are electric.
20. Over the longer term, connected EV infrastructure sites are anticipated to become valuable commercial and community energy assets. In the short term, whilst EV charging uptake is still low, the Council may incur revenue costs to subsidise operation and maintenance of equipment, where this is less attractive to the market, to ensure equitable infrastructure delivery.
21. Any procurements will be structured to seek longer term revenue opportunities for the Council and ODS/ODSTL. Revenue will be used to meet the objectives of this strategy, subsidising equity of provision, best value for the public, maintenance and operation costs and where possible return income to the Council.
22. Quality of provision and value for the public and Oxford City Council will be secured through the Council's award winning EV Infrastructure Dynamic Purchasing System (DPS), which will also enable the Council to generate revenue by supporting other local authorities to procure, building on Oxford's expertise.

Benefits

23. Government confirmed in March '22 that it expects all local authorities to have an EV strategy that is tailored, ambitious, scaled and commercially sustainable, as well as aligned with wider local transport and energy decarbonisation policies.
24. There will only be a limited window of opportunity for local authorities to secure EV infrastructure funding as Government has highlighted that it will only provide such finance in the short to medium term, through competitive bids, until a commercial market is established. By approving this Strategy the city will be able to move swiftly to seek grant funding.
25. This Strategy provides a much needed consistent framework for evaluating, managing and monitoring the Council's approach to public charging infrastructure in a manner that is consistent and robust, ensuring that future infrastructure rollouts holistically meets the needs of the city, its residents, visitors and its energy system, rather than a piecemeal project approach.
26. By setting out city-wide long term aspirations, OxEVIS will facilitate a stronger proposition to commercial suppliers, resulting in better offers / investment solutions from the market, as well as providing an opportunity to balance the needs of the public by ensuring that good commercial sites are mixed with less attractive much needed locations. This will ensure that the city meets one of the core fundamental principles of this strategy, which is to deliver fair and equitable provision.

Financial implications

27. The Implementation Plan will set out any funding required to deliver infrastructure.
28. The ZCOP target to be zero carbon by 2040 requires a significant injection of funds to allow the required 7500 ktCO₂ of carbon reduction by 2040 to be achieved.

29. The Council does not have funding in its Forward Plan to provide public EV charging infrastructure. Funding will be sought from Government grants and by procuring commercial concession contracts and/or Council/ODSTL investment.
30. We will also explore use of revenue gained from initiatives such as Zero Emission Zone, workplace charging schemes and income derived from existing EV contracts and the Council's Dynamic Purchasing System.
31. Access to internal staff resource will be required to support grant funding bids and manage infrastructure delivery. This includes support from within key teams such as Procurement, Property Services, Finance, Planning, Legal and Environmental Sustainability.
32. Some land assets will gain an optimum value for development and will not be suitable for EV Infrastructure, but there is a need to consider investing in other assets to future proof them and create additional value/revenue streams, especially brownfield sites, carparks or unused garages, to avoid them becoming redundant as wider ZEZ zones go live, active travel provision grows and the reduction in parking is implemented.
33. To minimise the public funding requirement, the Strategy proposes to enable solutions that allow private sector investment, such as commercial, private landowner and household investment. The Gul-e solution also requires minimal public funding, as it will be self-funded by the householder, reducing the requirement for funding to provide equivalent solutions to meet the on-street demand. The proposed procurement strategy, zone based procurement, will enable private landowners to deliver public charging on private land, the cable gully (GUL-e) will enable householders to invest in home chargers rather than relying on public supply.

Legal issues

34. Legal input will be required to create land leases and supporting agreements for commercial use of Council land as well as template leases for private landlords.

Levels of risk

35. There are a few risks associated with this strategy.
 - a. **Resource**; there may be insufficient internal resource across relevant departments to implement this Strategy.

Mitigation: EV charging is a key driver of the corporate strategic objective to pursue a net zero Oxford. Close working with key Oxford City Council departments is already taking place, and creation of data-sets to help inform decisions already underway. The strategy work will support Property Services, Housing, ODS, Regeneration and Planning by providing Advice Notes and/or protocols around EV Infrastructure.
 - b. **Planning Legislation**; planning and other legislation has not been updated by Government to support equitable roll out of EV charging infrastructure.

Mitigation: National changes to planning laws are expected in summer 2023 which should reduce the impact of current legislation constraining deployment. The Sustainable Innovation team are working closely with planning colleagues to simplify challenges in heritage areas and will continue to lobby government consultations regarding the changes to national planning policy needed.

- c. **Land availability**; finding suitable locations for EV infrastructure on Council and other city land. Under current land value assessment criteria, the EV charging business case is not attractive enough to trump development opportunities.

Mitigation: A working group will be set up with property services, communities, housing, regen and others to assess all land owned by the Council for future use opportunities including development, sustainable infrastructure development (such as EV, solar farms, battery sites).

The city will maximise current and already approved development opportunities to add in EV provision. Using data layers created in OxEVIS and LEO projects to inform location selection and business plans.

We will work with private landowners where possible to support EV infrastructure roll outs that provide benefit to the city.

36. A risk register is attached (see Appendix 2), outlining the potential known risks.

Environmental considerations

37. OxEVIS aligns with the Council's policies and commitments relating to carbon reduction and safeguarding the environment, bringing us closer to our commitment to becoming a Zero Carbon Council by 2030 or earlier and Zero Carbon Oxford by 2040.

38. However, it should be noted that particulate matter (PM) emanating from braking systems, tyres road surface wear and road dust suspension are also produced by EVs. Ambient PM exposure is associated with health harms and premature mortality, so electrification is pursued alongside measures that support an overall reduction in car ownership, such as electric car clubs, and integrated into the wider transport planning framework supporting active and public transport.

39. OxEVIS supports delivery of the following key council priorities:

- a. The 4th Carbon Management Plan 2021 – 2030: The Strategy will support the development of a plan to decarbonise the City Council's fleet vehicles.
- b. The Net Zero Oxford Action Plan: Net Zero by 2040 requires decarbonisation of road transport.
- c. The Council Strategy 2020 – 2024: Includes the priority to pursue a zero carbon Oxford
- d. Oxford Local Plan 2036: Includes commitments to provide EV infrastructure with new developments.
- e. Air Quality Action Plan 2021 – 2025: Requires the reduction in usage of fossil fuel cars in the city.

Human Resource Implications

40. In order to deliver this strategy, resource from legal, property, planning, housing will be required.

41. An implementation plan will be created which will set out the resource requirements in detail.

42. The strategy does rely on maintaining a core team with EV subject matter expertise. This is acknowledged through active skills retention and succession planning.

43. Few Government grants allow revenue funding allocations in bids or allow resource costs to be capitalised. Therefore it is unlikely grant funding alone will cover all resource costs for the Council and alternative funding will be required. Options to consider may include internal funding bids, income generators such as the EV DPS and subject matter expertise consultancy, or income generated by low carbon initiatives such as ZEZ charging, bus gates, polluter pays, overstay charges or future workplace charging levies.

Consultation and Communications Implications

44. Oxford residents and visitors were surveyed in the context of the strategy preparation. An EV survey in March/April 2022 had over 500 responses. These have been considered and incorporated into the final strategy proposal.

Statutory public consultation on this strategy will commence 13th June 2022.

45. In the creation of OxEVIS, the team have consulted widely with city and county colleagues, ODS, ZCOP members, transport providers, EV infrastructure suppliers, and other organisations who will provide or use EV Infrastructure.

Health and Safety.

46. Projects will be managed by experienced staff in EV construction and health and safety requirements.

Equalities impact

47. There are no adverse impacts on any part of the community only positive ones. OxEVIS provides a framework to support equitability of EV Infrastructure across the city. More details are set out in Appendix 3 the Equality Impact Assessment.

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Background Papers:	
1	https://www.oxford.gov.uk/downloads/file/7685/zero_carbon_oxford_partnership_roadmap_and_action_plan_-_summary
2	Report to Cabinet – 15 June 2022: LEVI Grant EV Infrastructure Project