

Electric Vehicle Infrastructure in Gloucestershire

Environment Scrutiny Committee

15th January 2020

Alignment with Strategic Policies

- 2018 The Road to Zero (DfT)
- 2019 Gloucestershire Air Quality & Health Strategy
- 2019 Gfirst LEP - Draft Local Industrial Strategy
- 2019 Net Zero
- 2019 Climate Emergency declared
- 2019 Draft Climate Change Strategy agreed
- 2020 Review of draft Local Transport Plan

Local Objectives

- Improving Air Quality in AQMA's (Air Quality Management Areas) by reducing Nitrogen Oxide and Particulate pollution
- Reducing GCC's carbon dioxide emissions by 80% by 2030, and Gloucestershire's to net zero by 2050
- Enabling take up of electric (EV) and ultra-low emission vehicles (ULEVs) by citizens and businesses to achieve Road to Zero targets
- Working with all stakeholders to provide a balanced offer of EV chargepoints and to decarbonise local transport
- An affordable and flexible approach, managing risk to GCC, grid supply infrastructure and adapting to emerging technologies

Sources of Support for EV's

Stakeholders	Charging type	Funding streams	Funding Type
Private Cars	Residential garage/driveway	Home chargepoint Scheme Developers	OLEV grant to private individuals
	Residential on-street	On street residential chargepoint scheme	OLEV grant to GCC GCC funding
	Residential hubs	Government pilots and Clean Air Fund (CAF)	Go Ultra Low CAF
	Destination EV Rapid charging & extended duration	Rapid Charging operators Retailers Car park owners	Rapid: commercial GCC, District/parish councils. CIL.
Employees & Business Fleets	Workplace	Workplace charging scheme CAF	OLEV grant Businesses
Taxis	On street, hubs and Residential	Plug in taxi grant CAF, Licensing authorities	OLEV grants
Buses	Depot/Flexi	Clean Bus Technology Fund LEP infrastructure	DfT retrofit grants EV bus grants

Recommended areas for GCC focus

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Key issues and questions to consider

1. Procurement: GCC's commercial strategy, third party risk appetite favours high demand locations with low installation costs, setting tariffs and sharing revenues.
2. Grid constraints: limited capacity, high connection costs, smart charging to manage excess demand
3. Urban/rural coverage: how much weight is given to air quality and commercial factors when considering sites
4. Predicting future EV demand: how many, where, when?
5. Restricting access to charging bays to EV's only in heavily parked up areas, selective use of TROs
6. Rapidly changing Technology: interim fixes (e.g. pavement cables), leads replaced by induction charging, advances in battery storage and solar PV, kerbside vs hub charging

Key issues and questions (2)

7. Changing Technology: interim fixes (e.g. pavement cables), induction charging, battery storage, kerbside vs hub charging
8. Effect of Government (OLEV) funding on the scale of our investment
9. Policy issues:
 - Enabling EV use in new developments (residential, retail, work)
 - Support for lower income groups, shared ownership / car clubs
 - The role of parishes in rural areas and means of support
 - Investing across wider modes of transport: taxis, LGVs, buses
 - Leading by example: greening our own fleet, mileage rates.
 - Effect of future changes to government policy and subsidies

Implementation Plan

- June - Dec 2019 Research into technologies and procurement routes. Market engagement with EV charging suppliers, other councils and Western Power Distribution.
- Dec 2019 Atkins commissioned to develop Strategy
- March 2020 Draft Strategy and presentation to Scrutiny
- Phase 1 (2020): On street residential charging pilot
(Procurement, implementation and marketing)
Explore taxi hub scheme (Glos City)
Explore town centre rapid charging (Chelt)
- Phase 2: (2021) Large scale on street residential charging
- Phase 3: (2022) Review scope for future phases: e.g. types of charging and geographic coverage