

A list of current guidance available on EV charging infrastructure for local authorities

August 2021



Based on an initial compilation of resources by the
Electric Vehicle Energy Taskforce

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1. Background

This document brings together links to resources for local authorities in the UK on different aspects of planning, delivering and operating public EV charging infrastructure. Produced by numerous public and private sector organisations over the last few years, the resources include best practice guidance, research reports, policy briefings, collections of statistics and information on grant schemes and procurement frameworks. They have been categorised broadly by theme and are presented in reverse date order.

This compilation of existing resources was initiated by the Electric Vehicle Energy Taskforce 2 Working Group 1, as part of ongoing efforts to support public bodies and private organisations involved in EV infrastructure delivery and encourage the sharing of best practice.

The Taskforce identified that in order to deliver a high-quality public charging service for EV drivers, Government should provide support to public bodies and private organisations concerned with developing and procuring public EV charging infrastructure.

This compilation of resources was subsequently initiated by the Electric Vehicle Energy Taskforce to support the sharing of best practice and provide specific guidance on procurement of public charging solutions and requirements for effective delivery, ongoing operation and maintenance.

Resources have been selected for their direct relevance and likely practical usefulness to councils when designing and installing public chargepoints. Guidance on EVs aimed at the general public, sales and marketing materials, and so on, has been excluded.

The list will be reviewed and updated periodically. To suggest a resource to be included, please email transportadvice@est.org.uk.

Further support on delivering EV infrastructure is available for local authorities in England through Energy Saving Trust's [Local Government Support Programme](#). Fully funded by the Department for Transport, our advice is free and impartial. Our support includes relevant workshops, strategy reviews, help and advice with local engagement events and data analysis. Get in touch via our [online form](#).

2. Defining a vision for public chargepoints

Resources in this section offer high-level guidance on developing an EV charging strategy as a local authority. For example, some look at the benefits of local authorities of encouraging EV uptake and providing infrastructure (e.g. [LGA, 2020b](#)) and the place of EVs alongside other transport decarbonisation interventions (e.g. [LGA, 2020a](#), [RTPI, 2021](#)).

Some recent key government strategies and research aimed at national policy makers (e.g. [CCC, 2020](#), [Cenex, 2021](#)) has been included to provide context on the wider EV market and policy direction.

Date	Organisation	Title (with hyperlink)	Description
July 2021	Department for Transport	Decarbonising Transport: A Better Greener Britain	This plan sets out the government's commitments and the actions needed to decarbonise the transport system in the UK.
July 2021	Department for Transport & Office for Zero Emission Vehicles	Transitioning to zero emission cars and vans: 2035 delivery plan	This delivery plan sets out the Government's investment and policy initiatives to meet the phase out dates for new petrol and diesel vehicles by 2030.
January 2021	Royal Town Planning Institute	Net Zero Transport: the role of spatial planning and place-based solutions	Explores how different places can achieve an 80% reduction in transport emissions by 2030. It tests the impact of 40 carbon reduction interventions in four place typologies, including considering the role of EVs and charging infrastructure.
January 2021	Cenex	Electric Vehicle Infrastructure Barriers	Although not aimed at local authorities specifically, the report offers analysis of barriers and potential policy solutions. Some suggestions could feed into a local authority strategy or affect local authorities if implemented through national policy changes.
2020	C40 Cities	EV Charging Infrastructure: A quick guide for cities	Two-page guide with key steps that cities can take to build a strategy and deliver charging infrastructure, with further details available in the full report. The high-level steps are also likely to be relevant for other local authorities.
December 2020	The Climate Change Committee	The UK's transition to electric vehicles	While not intended for LAs, this report offers useful background of the EV and chargepoint market, including barriers, government policy options and opportunities.
December 2020	House of Commons Library	Briefing paper: Electric vehicles and infrastructure	Written primarily for MPs, this report provides an overview of central government policy (as of Dec 2020) on EVs, plus international comparisons,

discussion on the impact of EVs on the National Grid and a comparison of EV and conventional vehicle emissions.

September 2020 (a)	Local Government Association	Decarbonising transport: Accelerating the uptake of electric vehicles	Part of a wider series of policy briefings on "Decarbonising transport", this guide outlines 4 key areas of policy action for local authorities and the position of EVs in the context of wider sustainable transport strategies and encouraging modal shift.
August 2020 (b)	Local Government Association	Charging up the green recovery	Aimed at elected members, this short guide highlights the benefits of EVs for local economies.
August 2019	Local Government Association	Councils in charge: Making the case for electric charging investment	Outlines the case for electric vehicles, how local authorities can support the transition and various case studies
June 2018	Renewable Energy Association	Taking Charge: How Local Authorities can champion electric vehicles	A guide to tax, grants, and good practice for local government, developers, and individuals
Updated monthly	HM Government	DfT Vehicle Statistics	Official statistics from DfT and DVLA, including the number of Ultra Low Emission Vehicles registered across the UK, by local authority and fuel type.
Updated quarterly	HM Government	Electric vehicle charging device statistics	Official statistics from DfT and OZEV, updated quarterly, on the number of publicly available electric vehicle charging devices in the UK, with a breakdown by local authority.

3. Detailed guidance on designing an EV charging network and installing chargepoints

Resources in this section vary widely in scope: some offer comprehensive guidance on all steps of project delivery (i.e. [REA, 2019](#), [TfL, 2019](#), [STF, 2020](#), [ICCT, 2020a](#)), while others focus on specific areas, such as forecasting chargepoint requirements ([ICCT, 2020b](#)), future proofing infrastructure ([BEAMA 2020](#)), parking bays ([EST, 2019](#)), and scheme evaluation ([TSU, 2019](#)).

Please see the following sections for specific guidance on procurement and connecting chargepoints to the electricity network.

Date	Organisation	Title (with hyperlink)	Description
Dec 2020	Sustainable Transport Forum (European Commission)	Summary Handbook: Of the Sustainable Transport Forum Recommendations for public authorities for procuring, awarding concessions, licences and/or granting support for electric recharging infrastructure	A European perspective on procuring charging infrastructure for local authorities, drawing on best practice and examples from across Europe. Full 186-page report also available.
September 2020 (a)	International Council on Clean Transportation (ICCT)	Quantifying the electric vehicle charging infrastructure gap in the United Kingdom.	This working paper assess the public, workplace and rapid EV charging infrastructure needed across the UK by 2030 for passenger cars under two EV uptake scenarios.
September 2020	Field Dynamics	On-Street Households: The Next EV Challenge and Opportunity	Discussion of the issue of charging for drivers without access to off-street parking and link to an interactive map which ranks local authorities for chargepoint coverage.
March 2020	BEAMA	Best practice for future proofing electric vehicle infrastructure	Guidance on best practice and guiding principles to future proof charging infrastructure, covering as topics such as interoperability, roaming, chargepoint placement, grid capacity, and adaptability.
2020 (b)	ICCT	EV charging guide for cities	This full report complements the C40 Quick Guide for Cities, and offers international best practice and case studies on EV charging.

2019	Renewable Energy Association (originally published by UK EVSE)	Making the right connections: General procurement guidance for EV chargepoints (2nd ed)	Second edition of the comprehensive, impartial guide aimed at local authorities, businesses, real estate developers, and others wishing to provide chargepoints for members of the public, visitors or employees.
Dec 2019	Transport for London	London's electric vehicle charge point installation guidance	Information on installing EV infrastructure, focused on the implementation process and considerations specific to London's streetscape. Sections likely to interest councils outside London include the design principles for a range of charging types, including technical drawings, and guidance on the typical consents required, parking controls and maintenance considerations, among other topics.
Nov 2019	Go Ultra Low Oxford/Transport Studies Unit at University of Oxford	Criteria to assess on-street electric vehicle charging options	Between 2017 and 2019, Oxford trialled various on-street EV charging technologies. This report summarises the findings of the trial and defines criteria to evaluate on-street charging technologies, acknowledging different perspectives.
August 2019	Energy Saving Trust	Positioning chargepoints and adapting parking policies for electric vehicles	Guidance on how to locate chargepoints and incorporate EVs in local parking provision, including different chargepoint bay layout options, information on TROs and parking incentives for EVs.
June 2019	Transport for London (EV Infrastructure Taskforce)	London electric vehicle infrastructure delivery plan	An example EV strategy, this document sets out the delivery plan for London, including the charging infrastructure priorities, user needs, challenges and how the taskforce will support the market to deliver infrastructure.
April 2019	Cenex	EV Charging in Car Parks	Commissioned by Innovate UK, information on innovative solutions to charging in car parks, aimed at car park operators.
Ongoing		Transport and Energy	Website designed to bring transport and energy initiatives closer together and provide access to news and resources
Ongoing	Energy Saving Trust	Resources for local authorities on electric vehicle chargepoints	Energy Saving Trust holds regular webinars for local authority officers on different aspects of transport decarbonisation and chargepoint deployment. Recordings of past events are also available.

4. Procurement of chargepoints and grant schemes

These resources offer general guidance on procuring chargepoints (e.g. [EST, 2019](#)), information about the On-Street Residential Chargepoint Scheme and two widely-used public sector procurement frameworks ([CCS, 2021](#), [ESPO, 2017](#)). Several of the resources in the previous section also consider procurement (e.g. [REA, 2019](#), [STF, 2020](#)).

Date	Organisation	Title	Description
April 2021	Office for Zero Emission Vehicles	On-street Residential Chargepoint Scheme Guidance for local authorities	Guidance outlining the purpose and funding available to local authorities for chargepoints in residential areas without off-street parking.
April 2021	Energy Saving Trust	On-street Residential Chargepoint Scheme	From this webpage, the latest versions of Energy Saving Trust's Information pack for local authority applicants and model application and claim forms can be downloaded.
Sept 2019	Energy Saving Trust	Procuring EV Charging Infrastructure as a Local Authority	Guidance on procuring EV infrastructure as a local authority, including an overview of different delivery models.
March 2019	Ofgem	Guidance on what you need to know about selling electricity to Electric Vehicle users	Guidance on key considerations and issues when selling electricity to EV users
May 2020	Crown Commercial Service	Vehicle Charing Infrastructure Solutions (VCIS)	Dynamic purchasing system offering access to a range of solutions to develop charging infrastructure, including consultancy, hardware, software, maintenance, and different funding options.
2017	ESPO	Vehicle Charging Infrastructure (Framework 636_17)	Framework offering low emission vehicles as well as a range of charging solutions. Due for renewal in May 2021, so check webpage for updates.

5. DNO connections for chargepoints

Resources in this section offer general advice to reduce DNO connection costs (i.e. [EST, 2019](#)). Each DNO also has guidance on the process of requesting new chargepoint connections and the support and tools they offer to local authorities. See the next section for resources on local area energy planning.

5.1.1. General guidance

Date	Organisation	Title	Description
2019	Energy Saving Trust	Minimising the costs of street works and grid connections for electric vehicle charging infrastructure	Guidance on street works and grid connections to help minimise costs and delays when installing chargepoints.
2021 (webpage)	Ofgem	Network price controls 2021-2028 (RIIO-2)	Information on how Ofgem set price controls for the gas and electricity network companies of Great Britain to balance the relationship between investment in the network, company returns and the amount that they charge for operating their respective networks.

5.1.2. Guidance from each DNO in the UK

Date	Organisation	Title	Description
2021	Western Power Distribution	2021 Guide on Electric Vehicle charging for Local Authorities	Up-to-date guidance for local authorities on connecting chargepoints for fleet and public use. Topics covered include considerations to help fleets determine the capacity required, technical considerations, chargepoint placement and site selection, concluding with a list of steps to follow.
May 2020	UK Power Networks	EV Scenarios Guide	A presentation outlining the process, cost, timescales and considerations when requesting connections for a range of chargepoint types, such as on-street, car park and rapid chargepoints.
2019	Northern Powergrid	Your guide to electric vehicle charging	Guide for households, businesses and local authorities on connecting EV chargepoints, including signposting on further support and the design tools available from Northern Powergrid.
2019	Scottish & Southern	Electric vehicle guide: Helping you understand the	Guide for households, businesses and local authorities, including information on approximate

	Electricity Networks	electric vehicle infrastructure	costs and timescales and considerations for unmetered lampposts.
2018	SP Energy Networks	Connecting Electric Vehicles	Introductory guide for households, businesses and local authorities on connecting EV chargepoints, including information on approximate costs and timescales.
No date	Electricity North West	Connecting multiple EV chargepoints	Webpage with some information about connecting chargepoints applicable to councils.

6. Local area energy planning

These resources consider EVs alongside the decarbonisation of heat through local area planning.

Date	Organisation	Title	Description
July 2020	Centre for Sustainable Energy and Energy Systems Catapult	Local Area Energy Planning: The Method	Methodology report commissioned by Ofgem describing the purpose and value of Local Area Energy Planning (LAEP).
July 2019	Energy System Catapult	Local Area Energy Planning Guidance	Guidance for local authorities on Local Area Energy Planning to achieve the decarbonisation of heat and transport.

7. Local planning policy

These resources cover how chargepoints can be provided at new developments, such as through Local Plans and Supplementary Planning Documents ([EST, 2020](#)) and the Government's proposals to amend building regulations ([DfT, 2019](#)). The RTIP guide ([RTPI, 2019](#)) looks at the strategic picture, including consideration of land allocation and rapid hubs.

Date	Organisation	Title	Description
April 2020	Energy Saving Trust	Incorporating EV chargepoints into local planning policies for new developments	Guidance on how to incorporate EV charging provision into local planning policies for new development.

July 2019	Department for Transport	Consultation Electric Vehicle Charging in Residential and Non-Residential Buildings	Sets out the Government's proposals to require chargepoints to be installed at new developments (and some existing car parks) through changes to building regulations. Check webpage to see if consultation outcome has been published.
July 2019	Royal Town Planning Institute	Planning for a Smart Energy Future	Research on how the planning system can take a proactive and positive approach to supporting a smart energy future, including on EV charging.

8. Measures to support EV uptake

Encouraging EV uptake among residents and businesses should go hand-in-hand with providing public charging infrastructure. These resources offer ideas for initiatives and incentives that local authorities could look to implement as part of their EV strategy.

Date	Organisation	Title	Description
2020	Nottingham City Council (Cenex)	ULEV Experience Programme: What we've learnt	Successes and lessons learnt from the ULEV Experience programme which supported businesses and the public sector to understand, trial and implement ultra low emission vehicles.
2020	Behavioural Insights Team & Transport Research Laboratory	Driving and accelerating the adoption of electric vehicles in the UK	Research commissioned by DfT and OZEV on policy measures that could address the barriers and harness the right motivations to accelerate EV adoption. A useful framework and some suggestions could be implemented locally.
2015	LowCVP (now Zemo)	Good Practice Guide: Local Measures to Encourage the Uptake of Low Emission Vehicles	Guidance to help councils understand the broad range of measures available to them to promote the uptake of EVs. While some sections are now out of the date, the principles remain relevant.