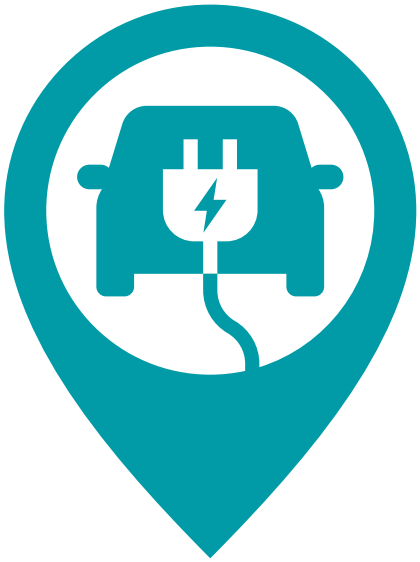
CIHT

Rolling out electric vehicle charging infrastructure: advice for local authorities



February 2026

Disclaimer

Acknowledgements

The Chartered Institution of Highways & Transportation (CIHT) would like to thank all the members of the project group and everyone who commented on earlier drafts of this report, without whom the document would not have been possible.

In particular, we would like to thank the chair of the project group, Peter Molyneux, for his support.

CIHT would like to thank the following people and organisations who have supported this report.

Mike Hale, VolkerHighways
Mark Harrison, Mott MacDonald
Andrew Hough, Transport for the North
Steve Keary, M Group
Eng Laurent Maganga MCIHT, Norplan Tanzania Limited
Simon McGlone, Transport for the North
Roisin Naughton, Arcadis
Theo Parkes
Gareth Pritchard, Highway Electrical Association (HEA)
Philip Sheppard, MCIHT

char.gy
Royal Borough of Kingston upon Thames
Welsh Government

Recognition is also due to CIHT staff members, including Sara Zuin, Matilda Fisher, Robert Pellow, Justin Ward, and Antoneta Horbury.

Published by the:
Chartered Institution of Highways & Transportation

119 Britannia Walk
London N1 7JE
t: +44 (0)20 7336 1555
e: info@ciht.org.uk
www.ciht.org.uk

Registered Charity in England No. 1136896
Registered Charity in Scotland No. SC040873
Registered Charity in Republic of Ireland No. 20103989

Published February 2026.

For any inquiries, please email **technical@ciht.org.uk**

Contents

Foreword

Peter Molyneux FCIHT

Chair, Board of Trustees, CIHT

Decarbonising transport is one of the key tenets of the Government's plan to tackle climate change. Across the industry, plans are in place to move away from the internal combustion engine for cars and vans by 2035. Key to meeting the Government's targets is overcoming existing and future electric vehicle (EV) customers' fears about the ability to be able to recharge their vehicles effortlessly. This relies on an extensive and integrated electric vehicle charging infrastructure (EVCI) being in place before demand outgrows supply.

We have listened to experts across the private and public sectors to seek their views on what we do well, what we should start doing, and what poor practices or barriers we need to overcome. Their time and input into this report have been invaluable in providing this advice note for local authority officers and members.

We hope the advice contained in this report will help reduce the burden on local authorities and assist in the roll-out of an effective and comprehensive EVCI network, at scale and pace.

Foreword

Sue Percy CBE FCIHT

Chief Executive, CIHT

With the UK Government's commitment to end the sale of new petrol and diesel cars and vans by 2035, the transition to EVs is a significant shift that our transport system is facing. But ambition alone will not deliver change. The pace at which people and businesses adopt EVs will depend on a charging network that is reliable, accessible, and designed for everyone.

At CIHT, our priorities include the need to create transport networks that are sustainable, inclusive, and fit for the future. Rolling out EV charging infrastructure at scale is therefore not simply a technical challenge, it is a fundamental opportunity to reshape mobility in ways that support healthier places, fairer access, and long-term economic benefits.

Local authorities sit at the heart of this transition. Their strategic leadership will determine whether communities feel confident to switch to EVs, whether private investment is unlocked in the right places, and whether gaps in provision, particularly for those without access to home charging, are closed rather than widened. Planning decisions made today will influence the shape of our transport system for decades, affecting everything from decarbonisation targets to social equity.

This report has been developed to support that transition. It offers practical advice to local authorities grounded in CIHT's values: prioritising accessibility for all users, addressing underserved needs, and fostering early, open collaboration with stakeholders.

CIHT is pleased to support local authorities in delivering EV infrastructure that meets national goals while truly serving the diverse communities of today and tomorrow.

Executive summary

The UK Government's target to end the sale of new petrol and diesel cars and vans by 2035 has set the direction for a rapid transition to electric vehicles (EVs). While this policy primarily affects vehicle manufacturers, the pace of EV adoption will depend heavily on whether drivers believe they have access to a charging network that is reliable, easy to use, and comprehensive.

Local authorities are central to shaping the roll-out of charging infrastructure in ways that stimulate EV adoption by installing enough public chargepoints to give residents and businesses confidence to switch. They can also create the conditions for private investment by building extensive electric vehicle charging infrastructure (EVCI) in local areas and thereby stimulate uptake of EVs. Finally, they can help ensure accessibility – both geographically, by providing coverage in areas that the market might otherwise neglect, and inclusively, by addressing diverse accessibility needs.

This means planning for both present requirements and future growth, as EV adoption increases and vehicle types become more varied. Choices made now about the location, type, and accessibility of chargepoints will determine how the network develops over time and how widely it can be used.

This report has been developed specifically to support local authorities in fulfilling that strategic role. By combining evidence, expert perspectives, and practical guidance, the report provides local authorities with the tools to make informed, forward-looking decisions on EVCI. In doing so, it aims to help them lead a transition that is in line with national targets while efficiently delivering EV charging solutions tailored to best meet the needs of their local communities.

While the document has been framed in an England context, the key principles are applicable in the wider UK and internationally.

Policy context

With the Government's target to end the sales of new diesel and petrol cars and vans by 2035,[1] encouraging people to shift to using EVs, there is a pressing need to deliver adequate EVCI across the country.

In response to the ZEV (zero emission vehicle) mandate and 2035 ban, vehicle manufacturers[2] have been active in bringing new ZEVs to the market, but the uptake is partially dependent on consumers' perception that there will be reliable, integrated, easy to use, and widespread charging infrastructure available.

In 2022, the UK Government published *Taking charge: the electric vehicle infrastructure strategy*,[3] arguing that the installation of chargepoints across the country will be instrumental in encouraging drivers to switch to EVs. The strategy stated that the Government expected around 300,000 public chargepoints[4] as a minimum by 2030. At January 2026, there were 87,796 public EV charging devices available in the UK, mostly concentrated in urban environments.[5]

In December 2024, the National Audit Office, said that the Government was broadly on track to meet its EV chargepoint targets, but that there were some important challenges relating to location, additional costs, and delays in delivery.[6]

Local authorities play an instrumental role in shaping the delivery of EVCI, encouraging private sector investment, influencing consumer adoption of EVs, and addressing the social and economic challenges linked to its roll-out.

The role of local authorities in delivering EV charging infrastructure

The aim is a transport landscape where EVs are commonplace – covering not just private cars but vans, buses, and various forms of micromobility. To support this, the charging infrastructure must be widespread, able to meet the total energy demand of all EVs, simple to operate for all drivers, and accessible to everyone.

The uptake of EVs and the roll-out of the charging infrastructure are interlinked. More infrastructure encourages EV adoption; more EVs creates demand for additional, and more diverse, chargepoints. Over time, as different vehicle types become more common (e.g. vans, accessible vehicles), infrastructure will need to expand both in number and in variety to meet diverse needs. Figure 1 describes the five anticipated key stages in the EVCI delivery and how the strategic role of local authorities will evolve over time.

[1] DfT (2025) Consultation outcome: phasing out sales of new petrol and diesel cars from 2030 and supporting the ZEV transition: summary of responses and joint government response, Department for Transport

[2] House of Lords Environment and Climate Change Committee (2024) Inquiry into EV strategy: rapid recharge needed, House of Lords Environment and Climate Change Committee

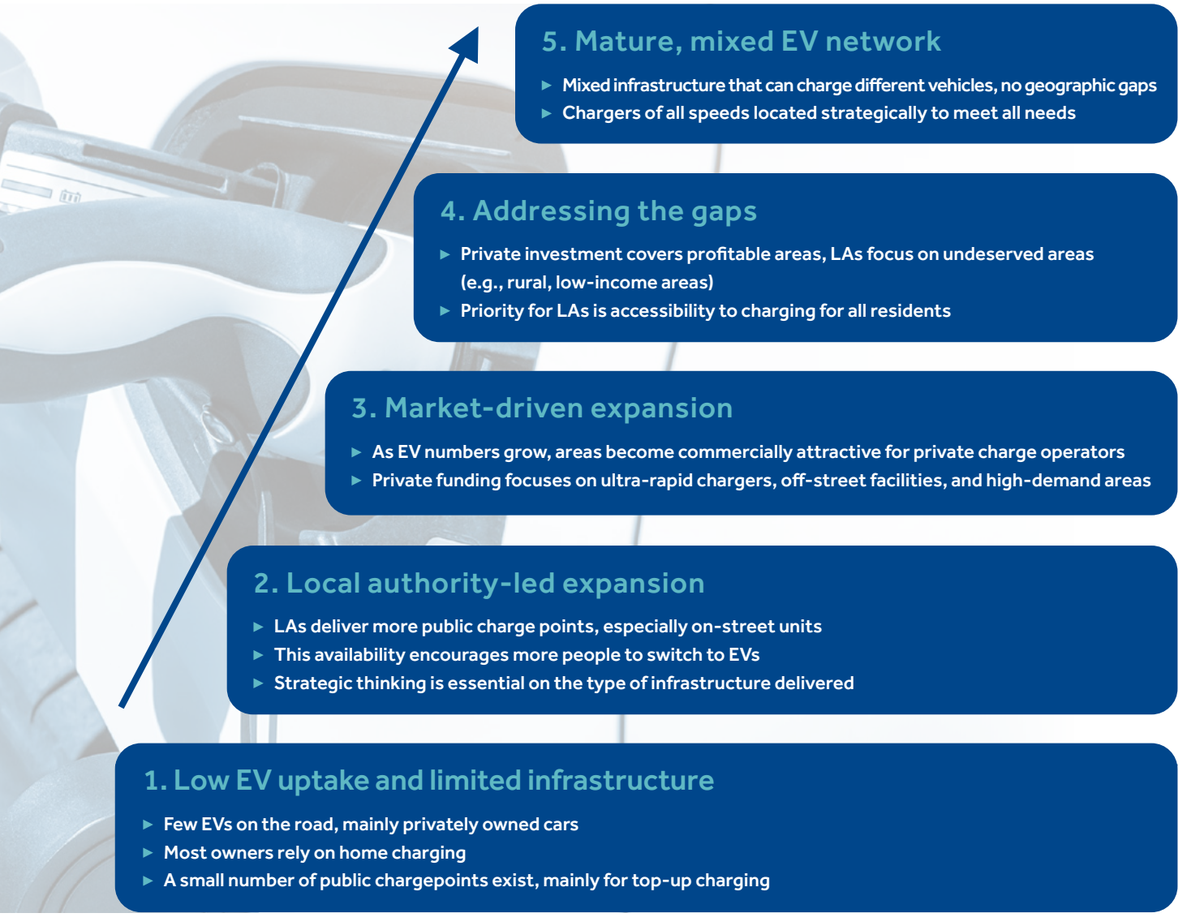
[3] HM Government (2022) Taking charge: the electric vehicle infrastructure strategy, HM Government

[4] It is worth stating that the EV Strategy modelled range was between 250,000 and 700,000 chargers

[5] DfT (2025) Electric vehicle charging devices by local authority, Department for Transport

[6] NAO (2024) Public chargepoints for electric vehicles, National Audit Office

Figure 1: Infrastructure delivery framework – key stages



Certain aspects can run concurrently. This is the case for the second and third stages, especially the areas that chargepoint operators (CPOs) consider commercially viable, where they are looking to develop a foothold for future revenue gain, and local authorities are considering other aspects alongside on-street EVCI, such as car parks and depots.

Being able to connect a chargepoint to an energy supply is crucial to every stage, so it is worth highlighting wider planning for grid infrastructure. The National Energy System Operator (NESO), under Ofgem's guidance, has become responsible for producing Regional Energy Strategic Plans (RESPs) for England, Scotland, and Wales.[7]

[7] Regional energy strategic planning (RESP), National Energy System Operator

Stage 1: Low EV uptake and limited infrastructure

When the number of EVs on the road is low, made up of mainly private cars, and charging facilities are limited, EV drivers tend to rely mainly on home charging. Public chargepoints exist, but only in small numbers and they are generally used for occasional top-ups rather than primary charging.

Stage 2: Local authority-led expansion

As local authorities take the lead in expanding public provision, mainly encouraged by government grants to deliver the charging infrastructure, we expect an increase in public chargepoints, particularly on-street charging. Local authorities can lead this expansion through coherent strategy and planning (in line with local transport plans), but must work with the private sector to deliver these. This will enable more residents to make the switch to EVs, especially those without a driveway, confident that they will have reliable charging infrastructure nearby.

Stage 3: Market-driven expansion

The visible presence of more public chargepoints helps stimulate EV uptake, but careful planning is vital at this stage: the type and location of chargepoints installed will influence the mix of vehicles the area can accommodate and who can make that shift.

As EV ownership rises, local areas become more commercially attractive to private investors. The higher density of EVs, made possible by the groundwork laid by local authorities, creates the conditions for private investors to deliver more charging infrastructure. Private operators, in line with local authority plans and objectives, should be encouraged to invest in ultra-rapid chargers, off-street facilities such as car parks, and other high-demand sites. These types of installations often sit beyond the scope of public funding, making private sector involvement essential for scaling up.

Stage 4: Addressing the gaps

As private investment increases, the next stage shifts the focus of local authorities towards ensuring widespread access to the charging infrastructure. Some areas – such as accessible charging bays, areas of low EV take-up, or where grid connection costs are high – are unlikely to attract private funding. Here, the role of the local authority becomes one of filling gaps, ensuring that no community is left without access to charging and that accessibility requirements are fully met. Local authorities play a key role in specifying accessibility (including fully accessible design) during the contracting stage. It is the role of the CPO to deliver these requirements, and the role of the local authority to ensure that they are met through appropriate KPIs.

Stage 5: Mature, mixed EV network

The final phase represents a mature and balanced network. By this point, the charging infrastructure is geographically comprehensive, with no (or at least very minimal) gaps in coverage. A strategic mix of slow, rapid, and ultra-rapid chargers is available, tailored to user needs and distributed in locations that make charging as convenient and accessible as possible for all types of EV drivers.

Local authorities are not expected to deliver every element of the infrastructure needed to meet long-term demand. Instead, their role is strategic:

- To stimulate early EV adoption by seeding areas with enough public chargepoints to give residents confidence to switch.
- To create the conditions that attract private investment, making local areas plentiful in EVs and therefore giving investors confidence that chargepoints will be used.
- To safeguard accessibility by serving areas that the private market alone may not reach.
- To ensure that the deployment of EV charging fits alongside other transport modes including broader public transport and active travel interventions, supporting local authorities' wider strategic objectives for the environment, social access, and the economy.

The private sector will take on much of the charging infrastructure delivery as demand grows, but the leadership of local authorities remains critical in shaping a charging network that is affordable, comprehensive, integrated, reliable, and accessible.

Purpose and development of this report

This report is specifically aimed at local authorities in England and focuses on supporting their strategic role in the roll-out of EVCI.

The report draws on evidence gathered through desktop research, a call for evidence that ran between May and June 2025, and in-person workshops held in July and September 2025.

Drawing on the evidence collected, we have identified key challenges and proposed practical solutions wherever possible. Where no clear recommendation emerged, we have highlighted the issue to promote continued sector-wide discussion and knowledge-sharing.

Where relevant, we have also highlighted policies and regulations specific to the devolved nations. Please note that this might not be an exhaustive list and readers are recommended to check the government websites in the devolved nations for the latest updates.

Funding, commercial models, and procurement

The 2022 national EVCI strategy T*aking charge: the electric vehicle infrastructure strategy*[8] sets out the responsibility for the devolved administrations to create

"...strategy and policy for the charging infrastructure network in their devolved area"

and for local and mayoral authorities to

"Develop and deliver ambitious tailored local EV charging infrastructure strategies that provide scaled, commercially sustainable public charging provision. They should align with wider local transport and energy decarbonisation policies."

The devolved administrations have also developed their own strategies for EV infrastructure delivery:

- Scotland strategy for EV infrastructure[9]
- Wales strategy for EV infrastructure[10]
- Northern Ireland strategy for EV infrastructure.[11]

To support the required roll-out of the EVCI locally, different funding streams are available to local authorities.

[8] HM Government (2022) Taking charge: the electric vehicle infrastructure strategy, HM Government

[9] Transport Scotland (2023) A network fit for the future: vision for Scotland's public electric vehicle charging network, Transport Scotland

[10] Welsh Government (2023) Electric vehicle charging: strategy and reports, Welsh Government

[11] DfI (2022), Electric vehicle (EV) infrastructure action plan, Department for Infrastructure Northern Ireland

Table 1: Funding streams

England **Local Electric Vehicle Infrastructure (LEVI) funding**[12]	As of 2025, in England the main funding source available to local authorities is the LEVI funding. Funding allocations have now been completed and the strategies are being rolled out. In July 2025, the Government announced more funding for home charging, from which private companies and local authorities will be able to benefit.[13] However, this funding will not support the delivery of public chargepoints.
Scotland **Electric Vehicle Infrastructure Fund (EVIF)**[14]	As of 2025, for Scottish local authorities the EVIF is available.
Wales **Ultra-low Emission Vehicle Transformation Fund**	For Wales, the Ultra-low Emission Vehicle Transformation Fund covered the roll-out of the EVCI locally. This funding was awarded between 2023 and 2024.[15] For 2025 and 2026 the Welsh Government has announced a £110m funding pot for local authorities to improve local transport across Wales and support the installation of more publicly available EV charging points.
Northern Ireland **Consortium funding**	For Northern Ireland, local authorities have had access to public funding through a consortium led by Derry City and Strabane District Councils.[16] The funding pot was allocated through a tender in 2024 and delivery of the infrastructure is estimated to be completed by July 2039.[17]
Private funding	For private operators and businesses there are a variety of UK-wide grant schemes to support new EV chargepoints outside homes and at workplaces.[18]

[12] OZEV (2023) Apply for local electric vehicle infrastructure (LEVI) funding, 7 September 2023, Office for Zero Emission Vehicles

[13] DfT (2025) New £63 million boost for Britain's electric vehicle revolution, Department for Transport

[14] Transport Scotland (2022) Electric vehicle infrastructure fund, Transport Scotland

[15] Welsh Government (2023) Ultra low emission vehicle transformation fund: grants awarded 2023 to 2024, Welsh Government

[16] DfI (2022) Funding boost for electric vehicle charge-points in residential areas welcomed, Department for Infrastructure Northern Ireland

[17] Electric vehicle chargepoints for the NI Electric Vehicle Consortium [notice]

[18] DfT (2023) Electric vehicle charge point and infrastructure grant guidance for installers, Department for Transport

Local authorities should assess available funding sources and what expenses they can cover to understand how much they will have to rely on private investment.

Funding typically covers capital costs, which can be used to procure chargepoints, and resource costs, which covers the costs of staff for planning, procurement, and tendering.

Public funding often also comes with specific conditions – usually regarding the type and power of charging infrastructure – which can shape decisions on location, number of chargepoints, and the CPO.

For example, the LEVI Fund in England includes both capital and resource funding, but it targets:

- local on-street charging that would primarily benefit residents without off-street parking
- low-powered infrastructure (<22kW).

These two conditions, among others detailed in the full tender information pack,[19] have an impact on the way local EVCI strategies are developed.

For instance, the low power requirement (<22kW) means vehicles will occupy charging bays for an extended period, typically overnight. This can lower on-street parking provision for residents who do not own an EV, especially in dense areas with limited off-street options. More of these considerations will be explored later in this report.

While some funding streams might require local authorities to pursue a specific commercial model, there is, in general, a range of commercial models local authorities can opt for:

- concession contract
- own and operate
- public–private commercial partnership
- joint venture
- land lease.

More information can be found on these in Section 6 of *Guide to electric vehicle charging infrastructure for local authorities*.[20]

Specifically for LEVI, a heads of terms[21] has been produced to help local authorities with commercial terms in the concession contract.

For the wider procurement process, local authorities are required to follow the Procurement Act 2023.[22]

Specifically for Scotland is the Procurement Reform Act 2014.[23] Scottish Futures Trust (SFT) has also released a comprehensive pack of documents[24] for local authorities to use, which provide some standard templates for legal and procurement issues.

Through the call for evidence, we identified several recurring challenges faced by local authorities.

In some circumstances, funding conditions – such as power specifications or limitations on the type of infrastructure – combined with CPOs' preference for high-traffic, commercially viable sites (e.g. petrol stations, supermarkets, or highways) have made it difficult for local authorities to deliver a well-distributed charging network, particularly in residential or less commercially attractive areas.

[19] Energy Saving Trust (2025) Local electric vehicle infrastructure fund, Energy Saving Trust

[20] IET (2023) Guide to electric vehicle charging infrastructure for local authorities, The Institution of Engineering and Technology

[21] OZEV (2023) LEVI heads of terms, Office for Zero Emission Vehicles

[22] Procurement Act 2023

[23] Procurement Reform Act 2014

[24] Scottish Futures Trust resources for net zero transport including project pipeline, template legal documents and guidance

Other key challenges relate to the way funding streams have been released and how they have not matched real-world delivery timelines.

Many local authorities had to go to market simultaneously due to short funding windows and this caused concerns about cost increases and unfavourable contractual terms. However, with time lags, in practice the concerns around market saturation might not have come to pass.

The pressure to submit EVCI funding submissions within the short application timeframe led to critical processes – such as utility coordination, compliance with the Construction (Design and Management) Regulations,[25] and in-depth feasibility assessments – being rushed or overlooked entirely. There is further guidance in the Highway Electrical Association's (HEA) *Electric vehicle charge point deployment CDM regulations guidance for clients*.[26]

A further barrier has been the lack of clear guidance around what constitutes a good contract that can attract private investment. Local authorities often enter procurement without a clear benchmark for what good looks like, particularly regarding what private investors expect in terms of chargepoint volumes and revenue models. Feedback received from local authorities suggests that some form of standard guidance from national governments on technical aspects of EV charging roll-out, as well as the contracts, would be helpful.

Finally, capacity within local authorities remains a persistent constraint. Many councils simply lack the in-house expertise or time required, including the time taken to use outside expertise, to run complex procurement processes confidently and ensure the availability of appropriate technical knowledge of the EVCI.

Accessibility

In this report, accessibility of infrastructure means ensuring that barriers that create undue effort and separation for people are removed, creating spaces that are accessible, safe, comfortable, and easy to navigate for everyone.[27]

Currently, *PAS 1899: Electric vehicles accessible charging specification*[28] is the official document from the Office for Zero Emission Vehicles that sets out the minimum specifications for an accessible public chargepoint. It focuses on accessibility of the charging infrastructure, charging bay, and adjacent area.

Local authorities report that feedback from some local disability groups has suggested that PAS 1899 guidance does not make an EV charging space fully accessible.

Accessibility should be central to the entire process of planning, delivering, maintaining, and upgrading the EVCI. Specific accessibility considerations are made throughout the report, citing the PAS 1899 specification where it applies, and flagging additional issues where needed.

We recommend consulting the Motability Foundation website[29] for its ongoing research on the topic of accessibility and EVs and how this relates to charging infrastructure.

[25] HSE (2015) The Construction (Design and Management) Regulations 2015, Health and Safety Executive

[26] See https://thehea.org.uk/hea-resource/hea-ev-charge-point-deployment-guidance-for-clients

[27] CIHT (2024) Creating a public realm for all, The Chartered Institution of Highways & Transportation

[28] BSI (2022) PAS 1899: Electric vehicles accessible charging specification, British Standards Institute

[29] See Motability Foundation information on accessible electric vehicle charging

Planning

Site selection

While there is currently no formal guidance or set criteria for selecting where chargepoints should be installed and how the charging infrastructure should be spread out across a local area, there are some good practice actions that should be taken in the first steps of planning the site selection strategy.

Local authorities are encouraged to carry out feasibility assessments as part of their EVCI strategy that shows how the network is distributed across an area and why specific sites have been selected, based on the criteria in the Table 2.

There can be benefits in taking a wider regional approach to site selection. As an example, Transport for the North (TfN) has supported its local authorities in charging-site selection by providing transport, spatial, and social data.[30]

Table 2: Site selection assessment criteria

Criteria	Explanation
Accessibility	Authorities should identify not just *how* chargepoints meet PAS 1899 standards,[31] but where accessible infrastructure should be prioritised (e.g. near healthcare facilities, schools, and public buildings). Local data on Blue Badge parking spaces can help determine demand and location strategy.
Commercial viability	The selection of a site should maximise the utilisation of the chargepoint: how many hours per day the chargepoint is expected to operate. This will depend also on what type of charger will be installed: slow chargers require long charging times (e.g. 7kW chargers can deliver a full charge in around 8 hours and 22kW chargers around 3 hours), while rapid and ultra-rapid chargers suit short-stay and high turnover areas (such as car parks or petrol stations). Understanding utilisation helps with efficiency and revenue potential.[32]
Cross-borough collaboration	Where possible, strategies should show coordination with neighbouring local authorities to deliver a joined-up network that benefits all residents in a region.
Grid capacity	Areas that are able to host the charging infrastructure without grid upgrades should be prioritised. There is more on grid upgrades later in this report. As this will probably require distribution network operator (DNO) engagement, early DNO engagement is critical in any EVCI planning.

[30] See: https://www.transportforthenorth.com/major-roads-network/electric-vehicle-charging-infrastructure

[31] BSI (2022) PAS 1899: Electric vehicles accessible charging specification, British Standards Institute

[32] Green Finance Institute (2023) Demystifying utilisation, Green Finance Institute

Table 2: Site selection assessment criteria *(Continued)*

Criteria	Explanation
Land ownership	Local authorities may prioritise on-street locations within their administrative boundaries, but if they are considering off-street locations not owned by the local authority – such as privately owned car parks – then permitting installation on these sites is dependent on the owner giving permission to do so.[33]
Mix of fast and slow chargers	Authorities should plan the distribution of fast and slow EV chargers strategically. Slow chargers, which require vehicles to remain parked for long periods, are best suited for residential areas and car parks. Fast chargers, on the other hand, should be located near businesses, where drivers can quickly top up without occupying valuable parking spaces for extended periods.
Resident and consumer demand	Chargepoints should be located where a high volume of people can easily access and use them frequently. It could be helpful to look at information such as: ▸ local population density and car ownership and how this is expected to change with new housing developments in future ▸ the amount of off-street parking available to residents (i.e. prevalence of driveways) ▸ tourism flows in areas with low residency but high seasonal traffic ▸ traffic flows: the higher the volume of traffic, the higher the exposure to possible customers ▸ existing traffic restrictions (more on traffic regulation orders [TROs] later in this report) ▸ proximity to essential services like pharmacies, GP clinics, schools, community centres, shops, and other services that people access on a regular basis.
Space constraints	Installing parking bays and charging infrastructure takes up valuable space and must be carefully planned to avoid disrupting traffic or narrowing roads to a single lane. Long-term considerations – such as the need for TROs – should be addressed early in the process. Local authorities must also factor in existing kerbside uses, street furniture, and other demands on public space, such as bike parking and accessibility needs, to ensure the infrastructure is practical and inclusive. More on this can be found in the sections Traffic regulation orders and Charging infrastructure considerations later in this report.
Spatial distribution	Ensure that chargepoints are spread out across a local area and not too close to one another. Proximity to other infrastructure should also be considered, for example other electrical infrastructure, making sure that charging infrastructure meets the requirements of both BS7671[34] and The Institution of Engineering and Technology (IET) *Code of practice for electric vehicle charging equipment installation*. [35]

[33] IET (2023) Guide to electric vehicle charging infrastructure for local authorities, The Institution of Engineering and Technology

[34] BSI (2022) BS 7671: Requirements for electrical installations, British Standards Institute

[35] IET (2023) Fifth edition of the IET code of practice for electric vehicle charging equipment installation, September 2023, The Institution of Engineering and Technology

Overall, when planning local strategies, local authorities should consider not only how many chargepoints are delivered but also their location and type.

Desktop research, resident surveys, and site visits, where and when possible, can help identify if locations are suitable and how easy it will be to install a chargepoint (and are especially useful in predicting anticipated costs). Every location is unique – for specific site surveys guidance check Appendix C of the IET Guide to electric vehicle charging infrastructure for local authorities.[36]

Planning applications and licences

Chargepoint installations fall under the streets or road works category and must follow the specific procedures and regulations set out in the different devolved nations:

- **Wales:** *National approach for roads and streets works*[37]
- **Scotland:** New Roads and Street Works Act 1991, Section 109[38] and Scottish Road Works Commissioner[39]
- **Northern Ireland:** Street Works Order 1995, Article 11[40]
- **England:** *Plan and manage roadworks*[41]

Specifically for England, the evidence we collected highlighted that the system of licences and permits can slow the roll-out of charging infrastructure. The Department for Transport (DfT) has also acknowledged this issue and, in 2024, ran a consultation[42] on the highway access rights of EV CPOs when carrying out street works.

When work on this report started, CPOs did not have a statutory right to carry out work on the highway and had to apply for a licence under section 50 of the New Roads and Street Works Act 1991.[43] The process was often slow, and costs varied significantly across local authorities.

The Planning and Infrastructure Act (2025)[44] brings CPOs into the street works permitting regime, giving them access to permits rather than licences when installing charging infrastructure. Most highway authorities in England have already adopted a permit scheme under the Traffic Management Permit Scheme (England) Regulations 2007.[45] Approval times are set out in the statutory guidance for street works permit schemes[46] and are considerably lower than those associated with licences.

CPOs will also gain access to Street Manager,[47] the DfT's digital platform for managing street works, enabling better coordination, transparency, and reduced disruption for road users, businesses, and the public.[48] More information on this can be found in the CIHT report *Reducing the impact of highway works on road users*.[49]

[36] IET (2023) Guide to electric vehicle charging infrastructure for local authorities, The Institution of Engineering and Technology

[37] Welsh Government (2025) National approach for roads and street works, Welsh Government

[38] New Roads and Street Works Act 1991, section 109

[39] Scottish Road Works Commissioner

[40] DfI (2013) Apply for a licence to place apparatus in a street (a street works licence), Department for Infrastructure Northern Ireland

[41] DfT (2019) Plan and manage roadworks, Department for Transport

[42] DfT (2024) Street works access: electric vehicle charge point operators outcome, Department for Transport

[43] DfT (2024) Issuing section 50 street works licences, 5 February 2024, Department for Transport

[44] Planning and Infrastructure Act 2025

[45] The Traffic Management Permit Scheme (England) Regulations 2007

[46] DfT (2015) Street works permit schemes conditions, Department for Transport

[47] Street Manager: https://www.manage-roadworks.service.gov.uk

[48] DfT (2025) Street works access: electric vehicle chargepoint operators outcome, 24 December 2025, Department for Transport and the Office of Zero Emission Vehicles

[49] CIHT (2025) Reducing the impact of highway works on road users, The Chartered Institution of Highways & Transportation

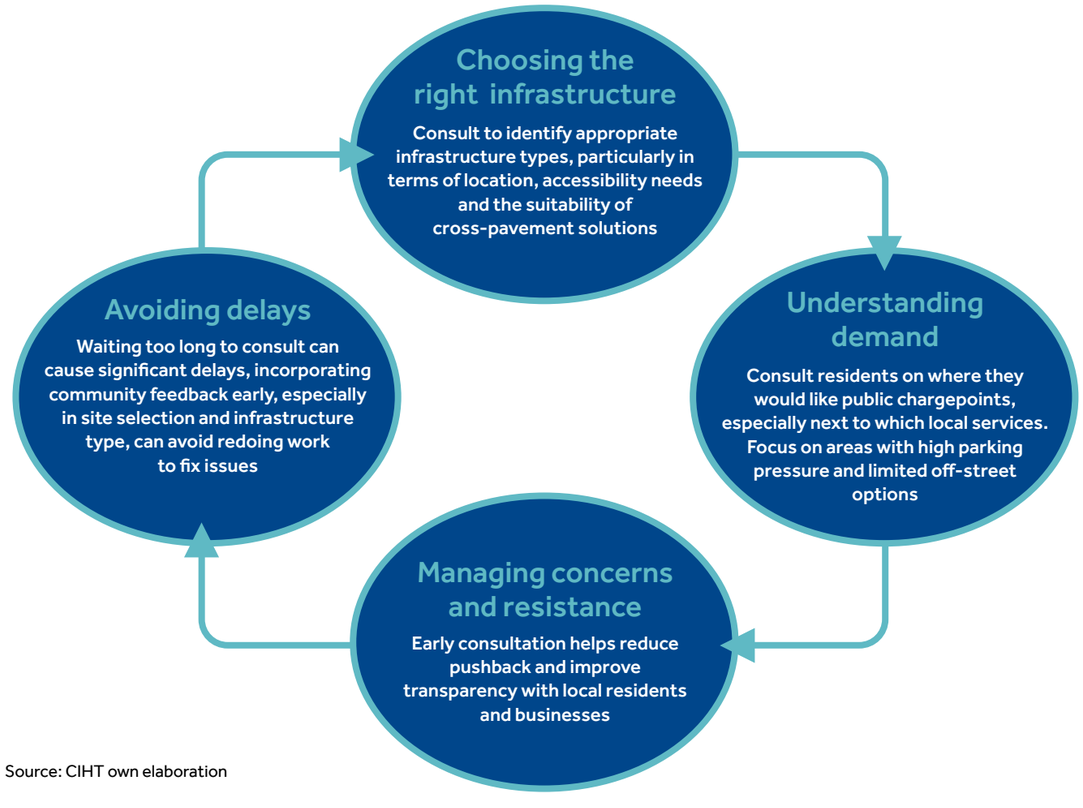
Public consultation and engagement

Public consultation can help local authorities deliver and shape a successful charging infrastructure strategy. It is essential to clearly communicate what the strategy aims to achieve, why it matters to local residents, and how it will benefit the local community. Doing so helps minimise misinformation and misunderstanding, which can lead to public resistance. However, feedback from local authorities has shown that while the principle of an extensive EVCI is generally welcomed, often there are objections to specific sites, especially where the chargepoint is adjacent to a residential single-occupancy property.

Residents who do not own an EV also tend to object to installations of EV-only charging bays, as they perceive them as a loss of parking spaces.

Transport for London, under Section 17 of the London Local Authorities and Transport for London Act 2013,[50] has a specific procedure to notify stakeholders of an imminent installation. This involves posting a notice in the vicinity of the chargepoint with details of the proposed installation, issuing a copy to nearby property owners or occupiers, and setting a clear timeframe for raising objections or concerns.

Figure 2: Benefits of early and inclusive consultation



Source: CIHT own elaboration

[50] London Local Authorities and Transport for London Act 2013

While different local authorities might consult on specific aspects of their EV chargepoint strategy, these general recommendations should be included:

- Clearly **explain why a public charging network is needed and how it supports broader local strategies** such as decarbonisation, air quality improvement, and reduced vehicle emissions.
- Set out **where chargepoints will be deployed** and the **reasoning behind site selection** – considering accessibility, demand, and integration with local services. While you may not wish to ask whether residents agree with all sites, if a site selection impacts a specific group of residents (such as occupiers of adjacent properties) it is recommended that you seek their input before implementation.
- Define **how each chargepoint is expected to be used**. Is it for residents? Long stays? Overnight charging? Short-term visitors using fast charging (e.g. in a car park)?
- Outline **the responsibilities of the local authority and the CPO**, and **what residents can expect** in terms of user experience, including apps, payments, and access times.
- Consider setting up an online platform where residents can nominate potential chargepoint locations. This can help identify demand hot spots and build local buy-in.

Engage key stakeholders from the start
Wider engagement beyond the public is essential. Depending on the area, stakeholder groups may vary, but council departments that will be impacted should be involved early in the process (e.g. planning, transportation, highways, lighting, climate change teams).

DNOs also require early engagement to ensure the electrical grid can support new infrastructure and to plan any necessary upgrades, as delays often occur when chargepoints are ready to be powered but the electrical network is insufficient. DNOs also have online planning tools to support site selection that can be beneficial.

Delivery and implementation

Charging bay considerations (on-street and off-street)

EV charging bays (i.e. areas where vehicles are parked while charging) can either be converted from existing parking spaces or be newly constructed. Both options come with critical planning and operational challenges, particularly in high-density urban areas.

In constrained streetscapes, finding a suitable location for charging bays can be difficult, especially in those areas with limited parking spaces, where adding charging bays usually means reducing the number of parking spaces available to non-EV users. This can mean reducing general-use bays ahead of actual EV demand – which can be a politically sensitive decision in areas of low EV take-up.

Table 3: Key spatial and infrastructure considerations for on-street and off-street charging bays

On-street charging bays	
Spatial and infrastructure issue	**Explanation**
Potential for off-street parking	Chargepoints that are located outside properties which have the potential for off-street parking, even though there is not an existing dropped kerb, should be carefully considered, if the policy of the local authority is to provide dropped kerbs to householders who request it. This is because the chargepoint may need to be relocated should the householder decide that they wish to have a dropped kerb installed at a later date.
Carriageway and footway widths	Installations must leave sufficient space for all users. A minimum of 2 metres of clear footway is generally recommended post installation[51] if the chargepoint is located on the footway. Narrow carriageways may not be suitable for wider dimensions of EV bays, such as accessible parking bays.
Junction proximity	Bays should not be sited too close to junctions if the parked vehicle would obstruct sight lines.
Cambered roads	Sloped surfaces can pose challenges for installation, drainage, and user accessibility.
Build-outs	These discretionary bay extensions must be carefully integrated into surrounding infrastructure (e.g. drainage systems) and will require ongoing maintenance. Build-outs are usually installed when the footway is narrow, but they lead to increased cost as civil works are required, and reduced availability of parking as they take up kerbside carriageway space. To avoid losing too much parking space, build-outs should be considered at the ends of streets, where parking is less desirable as it is close to a junction.
Road safety audits	These should be carried out to assess visibility, traffic impact, and pedestrian safety.

[51] IET (2023) Guide to electric vehicle charging infrastructure for local authorities, The Institution of Engineering and Technology

Table 3: Key spatial and infrastructure considerations for on-street and off-street charging bays *(Continued)*

On-street and off-street charging bays	
Allocation	A key decision is what proportion of bays should be accessible. As accessible bays take more space than standard bays, the total number of available parking bays provided reduces with an increasing number of accessible bays.
Usage rights	Clear rules are needed for who can park, when, and for how long. This is essential to prevent misuse and ensure turnover. More on this in the Traffic regulation orders section later in this report.
Size of bays	Larger vehicles, such as large SUVs and electric vans, need bigger bays. People often bring work vehicles home with them, so charging for larger vehicles needs to be accommodated both on-street and off-street.
Civil works	Installation often requires temporary suspension of parking bays and, in some cases, full or partial road closures. These can take time and should be planned in advance and well communicated to the public.
Accessibility	Accessible EV bays take up significantly more space (especially in car parks where there is an accessible route around the bay) and thereby reduce the amount of parking provided, and they cannot be sited in high-risk areas (e.g. central reservations or narrow high-traffic roads). Site visits are crucial to evaluate space for users to enter and exit safely. Dropped kerbs should be provided in the vicinity of the accessible EV bay to allow easy access for wheelchair users.
Mobile phone signal coverage	Chargepoints should be situated in areas with good mobile signal coverage to aid the use of apps for payment.

Charging infrastructure considerations (on-street and off-street)

Planning and installing EV chargepoints requires careful consideration of the space available, existing infrastructure, and user needs. Each location presents unique challenges that can affect both the design and implementation timeline. Site visits help confirm what space is available and can impact the final chargepoint design.

Both the chargepoint and its cable can present safety and accessibility issues and should not obstruct household entrances, driveways, or pavements.

All installations should meet, at a minimum, *Inclusive mobility*[52] and PAS 1899[53] standards to ensure they are usable by all.

Some chargepoints are bulkier than others and, in tight spaces, even a few centimetres can reduce footway width below accessibility standards, making them unusable. A width of 2 metres is the recommended minimum that should be provided, as this allows enough space for two wheelchairs or larger electric mobility scooters.[54]

Chargepoints should fit in with the wider local public realm; for example, in historic or conservation areas, the appearance of chargepoints or their location should be carefully considered to avoid clashing with heritage surroundings.

There should be consideration of how to address the risk of people walking or running into chargepoints – a particular risk when it is dark and the area is unlit or at times when lighting is switched off.

Chargepoints should not require users to stand in the carriageway to connect their vehicle.

Proximity to existing on-ground and underground infrastructure

All of the following impact where chargepoints can be located:

- Existing and proposed electrical and telecommunication assets (e.g. lamp columns, underground cables, fibre optics).
- Underground utilities. For England consult the National Underground Asset Register (NUAR).[55] For Scotland consult Community Apparatus Data Vault.[56] However, there is an issue with unrecorded or inaccurately mapped utilities, especially electrical service connections, which can make pre-installation planning more difficult and time-consuming.
- Tree root systems that could be damaged by digging.
- Areas where parking is not allowed or desirable (e.g. bus stops and school keep clear markings).
- Whether the charging bay will require a TRO, which is essential if the bay is to be enforced to prevent non-charging vehicles from parking in it.
- Cycling infrastructure, such as cycle lanes, which may limit installation options.

[52] DfT (2022) Inclusive mobility: making transport accessible for passengers and pedestrians, Department for Transport

[53] BSI (2022) PAS 1899: Electric vehicles accessible charging specification, British Standards Institute

[54] DfT (2021) Inclusive mobility: a guide to best practice on access to pedestrian and transport infrastructure, Department for Transport

[55] National Underground Asset Register (NUAR)

[56] Community Apparatus Data Vault – frequently asked questions, Scottish Road Works Commissioner

Installation may require additional civil works like resurfacing, and care should be taken that any new infrastructure installed nearby, after chargepoint site allocation but before chargepoint installation, does not interfere with the chargepoint's safety or functionality. This is best achieved by frequent and open communication about the installation of EV chargepoints between the relevant installation teams and the teams or organisations responsible for other on-street assets.

Traffic regulation orders

To support the installation and use of EVCI, local authorities may need to implement a TRO. However, an incremental approach is often used – no TRO until chargepoint usage is at the required level. This reduces the initial impact on parking spaces.

A temporary TRO might be required during installation of the chargepoint for partial lane closures, suspension of parking bays, or traffic management.

A permanent TRO designates the parking bay as being for EV charging, sets the rules of how it should be used (e.g. maximum stay requirements), and will enable the authority to enforce the parking bay as an EV-only charging bay.[57] It should be noted that residential EV charging bays are mainly used overnight when most civil enforcement officers are not working, so enforcing EV bays overnight may be problematic.

More can be found on TROs in *The BPA traffic regulation orders guide*.[58]

Key considerations when implementing TROs are:

- Existing traffic restrictions, for example maximum stay time at a parking bay – for lower-powered chargepoints the maximum stay might need to be increased, and the existing TRO updated.
- Obtaining a TRO can cause delays to site access and cause missed energisation dates (the agreed date when the charging infrastructure should be connected to energy).
- Installing EV chargers on a permit-only area without changing the TRO for the charging bays limits the possible users to permit holders only.

Cross-pavement charging

Electricity from a domestic source is currently cheaper than electricity from a public charger because VAT is not charged at the same rate on domestic electricity (there are additional costs faced for CPOs, particularly energy bills).[59] This difference in cost between home and public charging is one of the factors that is increasing the demand for cross-pavement charging. The potential move towards reducing VAT on public chargepoints[60] being considered by the UK Government will help reduce the cost difference as this is vital to an equitable transition.

The cost and convenience of charging near home have caused some residents who do not have off-street parking to trail cables from their home across the pavement to charge their vehicle, leading to a potential trip hazard and accessibility problems, particularly for people with visual or physical impairments.

The Government has produced guidance for local authorities in England on cross-pavement solutions: *Cross-pavement solutions for charging electric vehicles*.[61] These allow residents who do not have off-street parking to charge their vehicles at home without trailing charging cables across the pavement. However, some local authorities have reported concerns over installing cross-pavement solutions due to liability and safety issues, particularly for disabled users. There are also concerns over ownership and future ownership if a resident moves and the new resident does not want the charging equipment, or if a resident refuses to extend a licence agreement, if such an agreement is implemented.

[57] IET (2023) Guide to electric vehicle charging infrastructure for local authorities, The Institution of Engineering and Technology

[58] BPA (2019) The BPA traffic regulation orders guide, British Parking Association

[59] ChargeUK (2025) Action on high energy costs needed to keep EV transition on track, 17 September 2025, ChargeUK

[60] Autocar (2026) Mooted VAT cut for public EV charging is 'brilliant news', 12 January 2026

[61] DfT (2024) Cross-pavement solutions for charging electric vehicles, Department for Transport

In August 2025, the UK Government announced a new £25m fund to support the installation of EV cross-pavement channels for local authorities in England.[62]

There should be a balance between public and private infrastructure. Installing a public charging point outside someone's house could remove their ability to install a cross-pavement solution, enabling them to use their own domestic electricity supply, which would contravene the council's own policy on social equity. Similarly, a private cross-pavement charging solution may also cause some residents to incorrectly infer that they have a greater right to park outside their house than other residents due to the investment in the cross-pavement charging infrastructure. There are also equity considerations to be considered where properties are in close proximity (e.g. flats or terraced houses), and an early adopter of a cross-pavement charger could preclude their neighbour from having one. London Councils[63] has issued guidance on such issues.

Electrical grid upgrade

Close regional collaboration between the transport and energy sectors on developing and implementing a systems approach is essential to deliver networks that support decarbonisation of energy and transport. As mentioned earlier in the report, the RESPs by the NESO are a welcome development in improving the planning of the grid.

When planning and selecting EV chargepoint locations, it is important to ensure that the local energy grid can support the additional demand. One of the most cited challenges raised is effective communication and coordination with DNOs, who are responsible for upgrading the grid, and with DNOs and independent connections providers (ICPs) connecting to the grid.

Early engagement with DNOs and ICPs is critical to align timelines, set realistic expectations, and confirm whether the grid can accommodate the planned charging infrastructure.

Grid upgrades, which are often required for rapid chargers, can add significantly to the cost and complexity of an EV chargepoint installation. Because high costs may be incurred, chargepoints may not be viable as this investment may not see a return if utilisation of chargepoints at that location is not high enough. Delays often occur when sites are physically ready (i.e. the chargepoints have been placed on-site) but remain unused because the necessary connection to the grid has not been completed. This delay can quickly cause project timelines to overrun available funding windows.

In the call for evidence, it emerged that power upgrade projects require a minimum of two years from initial work to the final EV charger energisation (i.e. the moment when power is sent to the charging infrastructure). There is scope for improvement in the communication with the DNOs and ICPs and ensuring timeliness of information (essential for accurately forecasting the timing for roll-outs and completing legal processes).

Installing electrical infrastructure, like chargepoints, without immediate energisation creates significant technical risks. When the equipment remains dormant, moisture can accumulate.

Installing equipment a long time prior to energisation also creates significant warranty complications for both chargepoints and low-voltage equipment. Warranty periods begin at installation (or sometimes even delivery) rather than at energisation, creating a critical timing issue. The combination of expired warranties and delayed energisation transfers all technical risks and associated costs to the asset owner.

When considering the design of the chargepoint it is also important to understand if the site is prone to flooding as this can pose a risk to both chargepoint hardware and electrical safety. Underground installations must be designed to prevent water ingress.

For more information on DNOs and power see Sections 3.5 to 3.7 and Section 7 of *Guide to electric vehicle charging infrastructure for local authorities*.[64]

[62] OZEV (2025) Apply for the electric vehicle (EV) pavement channels grant, Office for Zero Emission Vehicles

[63] London Councils (2025) Electric vehicle revolution hits the pavement: new guidance tackles trip hazards in London, 16 July 2025

[64] IET (2023) Guide to electric vehicle charging infrastructure for local authorities, The Institution of Engineering and Technology

User experience

User experience goes beyond the number of chargepoints available and their location.

A driver's experience begins before they arrive at the chargepoint. The quality of information accessed via apps such as ZapMap[65] is important. This should detail where the chargepoint is, what type of charger it is (slow 7kW, fast 22kW or rapid 50kW), whether it is working, and whether it is currently in use or booked.

On arrival, drivers may still face delays and be required to wait in nearby parking spaces for a bay to become free. The surrounding environment does therefore influence the user experience as much as the charging infrastructure itself.

While CPOs might be responsible for aspects of the user experience, local authorities can take some actions, where and when possible, to improve user satisfaction:

- Ensure user satisfaction and the availability of services and information for users are included in any contract with the CPO, with appropriate penalties for poor performance.
- Ensure contracts specify that chargepoints in non-residential areas, or areas with a high level of visitors, have contactless payment as an option so visitors are not required to download a new app to pay for charging. This may be less of an issue for chargepoints in very residential areas, as these will most likely be used regularly by the same people and downloading the app may offer more favourable payment rates.
- Keep charging stations and surrounding areas well lit, clean, and free of obstructions; safety is a high priority, especially for women and vulnerable users, so installation of CCTV where possible would help with the perception of safety.
- Display clear, visual charging instructions on-site – new EV drivers may be unfamiliar with different charger types.
- Ensure contracts specify that chargepoints should have screens that are bright enough and the text is large enough to be easily read.
- Define responsibilities and timeframes for resolving technical issues between local authorities and CPOs.

There could be merit in considering, where applicable, making it a condition of public funding or tax breaks that commercial chargers should be available for use by members of the public when not in use (e.g. charging infrastructure at fleet car parks).

For more information on the experience of consumers using public chargepoints across the UK we recommend consulting the guidance on the Public Charge Point Regulations 2023.[66]

Chargepoints should also be compliant with the Open Charge Point Protocol (OCPP)[67] to ensure interoperability and future-proofing.

OCPP is an open-source system that allows communication between different EVCI, regardless of the type or manufacturer. It allows operators to manage charging stations remotely, for example controlling access, updating software, setting up configurations, or handling payments and billing.[68]

The full OCPP document can be found on the Open Charge Alliance website.[69]

[65] See Zapmap: Find EV charging stations and pay for charging

[66] OZEV (2023) Public Charge Point Regulations 2023 guidance, Office for Zero Emission Vehicles

[67] Open Charge Point Protocol

[68] Yocharge, Open Charge Point Protocol (OCPP): a complete guide, Medium

[69] Open Charge Point Protocol

Post implementation and considerations of future needs

Local authorities should carry out regular checks to ensure that installed chargepoints are working properly and continue to meet public needs. Some considerations are listed below.

Collecting data to assess performance and predict further demand

Under the Public Charge Point Regulations 2023,[70] all CPOs are required to adopt the Open Charge Point Interface (OCPI) to manage and share data. This data must be accessible to relevant bodies, including government agencies, DNOs, transmission owners, and the electricity system operator.

Clarifying responsibilities

Depending on the council, responsibility for EVCI falls under different teams, from highways, parking, and lighting teams to climate change and legal departments. EV infrastructure, however, cuts across all these areas. It should not fall solely to one officer or department. Instead, it demands a coordinated approach that leverages the diverse skills and expertise within the local authority.

As the EV landscape continues to evolve, local authorities should invest in upskilling staff across departments. Since this is an emerging field with limited existing expertise, building internal capacity now is critical. Diverse professional backgrounds will help approach challenges from multiple angles, ultimately leading to more resilient solutions.

Future-proofing through contracts

Given how rapidly EV technology is changing – and the likelihood that today's systems may not be in place in 15 years' time – it is vital to future-proof chargepoint contracts.

It is important to involve legal teams early to ensure that contracts are comprehensive and enforceable, and that the contract specifies what happens if a CPO exits and a new operator (or the council) takes over, or the infrastructure becomes obsolete. These decisions should be embedded in the initial contract to avoid uncertainty later.

To ensure long-term flexibility local authorities should:

- Consider the implications and benefits of contract end dates (e.g. simultaneous or staggered).
- Clearly state who is responsible for maintenance and repairs, vandalism and accidental damage, decommissioning and disposal of infrastructure, technology upgrades and replacements.
- Include clear terms for handover procedures and asset ownership at contract end.
- Establish whether the infrastructure can be reused by a new provider (preferable to avoid the needless removal of equipment that is working perfectly well) or must be replaced.
- Ensure chargepoints are compliant with the OCPP[71] to ensure interoperability and future-proofing.
- Ensure user satisfaction and the availability of services and information for users are included in any contract with the CPO.
- Ensure contracts specify that chargepoints in non-residential areas, or areas with a high level of visitors, have contactless payment as a payment option so visitors are not required to download a new app to pay for charging.
- Ensure contracts specify that chargepoints should have screens that are bright enough and the text is large enough to be easily read.

[70] OZEV (2023) Public Charge Point Regulations 2023 guidance, Office for Zero Emission Vehicles

[71] Open Charge Point Protocol

CIHT

Summary of recommendations

The following recommendations are drawn from feedback from evidence gathered by CIHT. One mechanism for oversight in addressing these could be for local authorities to assemble an internal EVCI working group or project management team, including officers from highways, plus lighting, planning, legal, procurement, communications and stakeholder engagement, and potentially housing if the local authority manages its own council housing stock.

Table 4: Recommendations for EV infrastructure roll-out

No.	Findings or issues	Recommendations
1	Public funding can cover capital costs for procuring chargepoints and resource costs for staff involved in planning, procurement, and tendering.	Local authorities should assess the conditions attached to the available funding sources and what expenses they can cover, to understand how much they will have to rely on private investment. Local authorities also need to understand the ongoing revenue implications of procuring chargepoints.
2	Will the funding conditions meet the overall aims of a comprehensive EVCI network? For example: ▸ power specifications or limitations on the type of infrastructure ▸ CPO preference for high-traffic, commercially viable sites (e.g. petrol stations, supermarkets, or highways). These can make it difficult for local authorities to deliver a well-distributed charging network, particularly in residential or less commercially attractive areas.	Local authorities are encouraged to carry out feasibility assessments as part of their EVCI strategy that shows how the network is distributed across an area and why specific sites have been selected based on: ▸ commercial viability ▸ demand by residents and consumers ▸ cross-borough collaboration ▸ space constraints ▸ mix of fast and slow chargers ▸ accessibility ▸ grid capacity ▸ land ownership.
3	Many local authorities had to go to market simultaneously due to short funding windows and this caused concerns about cost increases and unfavourable contractual terms. Many councils lack the in-house expertise or capacity required to run complex procurement processes and may not have the local technical knowledge of EVCI.	The relevant government departments should issue minimum standards guidance on technical aspects of EV charging roll-out, including sample contract templates. Local authorities should outsource elements or all of the EVCI work where there is insufficient expertise in-house. Local authorities should set up cross-departmental teams including EV charging, highways, and departments managing other relevant neighbouring assets.
4	Feedback from local authorities has shown that while the principle of an extensive EVCI is generally welcomed, often there are objections to specific sites, especially where the chargepoint is adjacent to a residential single-occupancy property.	EVCI strategies will require equality impact assessments – consultation should include engagement feedback from people with the protected characteristics. Local authorities should conduct public consultation to shape charging infrastructure strategies and explain in plain English: ▸ why a public charging network is needed and how it supports broader local strategies such as decarbonisation, air quality improvement, and reduced vehicle emissions ▸ where chargepoints will be deployed and the reasoning behind site selection – considering accessibility, demand, and integration with local services ▸ how each chargepoint is expected to be used ▸ the responsibilities of the local authority and the CPO, and what residents can expect.
5	Installing parking bays and charging infrastructure may take up valuable space and must be carefully planned to avoid disrupting traffic flow.	Local authorities should conduct site visits to help confirm what space is available that could impact the final chargepoint design. Both the charging column or bollard and its cable can present safety and accessibility issues and should not obstruct household entrances, driveways, or pavements. Chargepoints should fit in with the wider public realm and should be assessed for proximity to existing on-ground and underground infrastructure (e.g. electrical and telecom assets, utilities, tree roots, active travel infrastructure).
6	To support the installation and use of EVCI, local authorities may need to implement a TRO. This can cause delays and affect energisation dates (the agreed date when the charging infrastructure should be connected to energy).	Local authorities should consult and implement TROs early in the process in collaboration with the DNOs. When implementing TROs consider: ▸ existing traffic restrictions such as maximum stay time at a parking bay (e.g. for lower-powered chargepoints the maximum stay might need to be increased and the existing TRO updated) ▸ installing EV chargers on a permit-only area without changing the TRO for the charging bays may limit the possible users to permit holders only.
7	From feedback received it emerged that power upgrade projects require a minimum of two years from initial work to the final EV charger energisation (the moment when power is sent to the charging infrastructure). A critical bottleneck occurs when waiting for DNO information, which is essential for completing legal documents. The combination of expired warranties and delayed energisation transfers all technical risks and associated costs to the installing organisation, effectively doubling the potential financial exposure of each installation.	Local authorities should engage with DNOs early to align timelines, set realistic expectations, confirm whether the grid can accommodate the planned charging infrastructure, and manage risks. When considering the design of the chargepoint it is also important to understand if the site is prone to flooding as this can pose a risk both to chargepoint hardware and electrical safety. Underground installations must be designed to prevent water ingress. (Ofgem's end-to-end grid connections review should result in steps to speed up connection processes.)[72]
8	Electricity from a domestic source is cheaper than electricity from a public charger because full VAT is not charged on domestic electricity. The cost and convenience of charging near home have caused some residents who do not have off-street parking to trail cables from their home across the pavement to charge their vehicle, leading to a potential trip hazard, particularly for people with visual impairments.	The Government has produced guidance for local authorities in England on cross-pavement solutions,[73] which allow residents who do not have off-street parking to charge their vehicles at home without trailing charging cables across the pavement. However, local authorities have reported concerns over installing cross-pavement solutions due to liability and safety issues, particularly for disabled users. It is recommended that DfT should update its guidance to tackle this issue.
9	In constrained streetscapes, finding a suitable location for charging bays can be difficult, especially in those areas with limited parking spaces, where adding charging bays usually means reducing the number of parking spaces available to non-EV users.	When planning a new on-street or off-street charging bay local authorities should consider: ▸ potential for future off-street residential parking ▸ carriageway and footway widths ▸ junction proximity ▸ sloped surfaces (which can pose challenges for installation, drainage, and user accessibility) ▸ build-outs and how they are integrated in the surrounding infrastructure ▸ road safety audits (to access visibility, traffic impact, and pedestrian safety) ▸ proportion of bays that should be accessible ▸ usage rights (who can park, when, and for how long) ▸ size of bays ▸ need for civil works ▸ mobile phone signal coverage.
10	Users experience inconsistent payment systems, poor instructions, and safety concerns.	Local authorities should: ▸ Ensure improved consumer experience and the availability of services and information for users are included in any contract with the CPO, with appropriate penalties for poor performance. ▸ Ensure contracts specify that chargepoints in non-residential areas, or areas with a high level of visitors, have contactless payment as a payment option so visitors do not need to download a new individual app to pay for charging. This is less of an issue for chargepoints in some residential areas, as these will most likely be used regularly by the same people and downloading the app may offer more favourable payment rates. ▸ Keep charging stations and surrounding areas well lit, clean, and free of obstructions; safety is a high priority, especially for women and vulnerable users, so installation of CCTV where possible would help with the perception of safety. ▸ Display clear, visual charging instructions on-site – new EV drivers may be unfamiliar with different charger types. ▸ Ensure contracts specify that chargepoints should have screens that are bright enough and the text is large enough to read easily. ▸ Define responsibilities and timeframes for resolving technical issues between local authorities and CPOs. It is recommended that the Government make it a condition of public funding or tax breaks that commercial chargers should be available for use by members of the public when not in use (e.g. charging infrastructure at fleet car parks).
11	Contracts often lack clarity on responsibilities for maintenance, handover, and asset ownership.	Local authorities should carry out regular checks to ensure that installed chargepoints are working properly and continue to meet public needs. Local authorities should also future-proof contracts: ▸ Consider the implications and benefits of contract end dates (e.g. simultaneous or staggered). ▸ Clearly state who is responsible for maintenance and repairs, vandalism and accidental damage, decommissioning and disposal of infrastructure, technology upgrades and replacements. ▸ Include clear terms for handover procedures and asset ownership at contract end. ▸ Establish whether the infrastructure can be reused by a new provider (preferable to avoid the needless removal of equipment that is working perfectly well) or must be replaced. ▸ Ensure chargepoints are compliant with the OCPP to ensure interoperability and future-proofing. ▸ Ensure user satisfaction and the availability of services and information for users are included in any contract with the CPO. ▸ Ensure contracts specify that chargepoints in non-residential areas, or areas with a high level of visitors, have contactless payment as a payment option so visitors do not need to download a new app to pay for charging. ▸ Ensure contracts specify that chargepoints should have screens that are bright enough and the text is large enough to read easily.
12	Many councils simply lack the in-house expertise or time required to run complex procurement processes confidently and technical knowledge of EVCI.	Local authorities should invest in upskilling staff across departments. Since this is an emerging field with limited existing expertise, building internal capacity now is critical. Alternatively there could be a regional centre of excellence that could offer technical support for local authorities.

[72] Ofgem (2025) Ofgem sets out major reform package in next step to accelerate grid connections, 8 December 2025, Ofgem
[73] DfT (2024) Cross-pavement solutions for charging electric vehicles, Department for Transport

Further reading and useful documents

BPA (2019) BPA traffic regulation orders guide, British Parking Association

BSI (2022) BS 7671: Requirements for electrical installations, British Standards Institute, published 2018 and updated in 2022

BSI (2022) PAS 1899: Electric vehicles accessible charging specification, British Standards Institute

ChargeUK (2025) Action on high energy costs needed to keep EV transition on track, 17 September 2025, ChargeUK

CIHT (2024) Creating a public realm for all, The Chartered Institution of Highways & Transportation

CIHT (2025) Reducing the impact of highway works on road users, The Chartered Institution of Highways & Transportation

DfI (2013) Apply for a licence to place apparatus in a street (a street works licence), Department for Infrastructure Northern Ireland

DfI (2022) Electric vehicle (EV) infrastructure action plan, Department for Infrastructure

DfI (2022) Funding boost for electric vehicle charge-points in residential areas welcomed, Department for Infrastructure Northern Ireland

DfT (2015) Street works permit schemes conditions, Department for Transport

DfT (2019) Plan and manage roadworks, Department for Transport

DfT (2021) Inclusive mobility: a guide to best practice on access to pedestrian and transport infrastructure, Department for Transport

DfT (2022) Inclusive mobility: making transport accessible for passengers and pedestrians, Department for Transport

DfT (2023) Electric vehicle charge point and infrastructure grant guidance for installers, Department for Transport

DfT (2024) Cross-pavement solutions for charging electric vehicles, Department for Transport

DfT (2024) Issuing section 50 street works licences, Department for Transport

DfT (2024) Street works access: electric vehicle charge point operators outcome, Department for Transport

DfT (2025) Electric vehicle public charging infrastructure statistics: April 2025, Department for Transport

DfT (2025) New £63 million boost for Britain's electric vehicle revolution, Department for Transport

DfT (2025) Phasing out sales of new petrol and diesel cars from 2030 and supporting the ZEV transition: summary of responses and joint government response, Department for Transport

Energy Saving Trust (2025) Local electric vehicle infrastructure fund, Energy Saving Trust

Green Finance Institute (2023) Demystifying utilisation, Green Finance Institute

HEA (2025) Electric vehicle charge point deployment, CDM regulations guidance for clients, Highway Electrical Association

HM Government (2022) Taking charge: the electric vehicle infrastructure strategy, HM Government

House of Lords Environment and Climate Change Committee (2024) Inquiry into EV strategy: rapid recharge needed, Environment and Climate Change Committee

HSE (2015) The Construction (Design and Management) Regulations 2015, Health and Safety Executive

IET (2023) Fifth edition of the IET code of practice for electric vehicle charging equipment installation, September 2023, The Institution of Engineering and Technology

IET (2023) Guide to electric vehicle charging infrastructure for local authorities, The Institution of Engineering and Technology

IHE (2021) Passive safety electrical guidance, Institute of Highways Engineers

London Councils (2025) Electric vehicle revolution hits the pavement: new guidance tackles trip hazards in London, 16 July 2025

London Local Authorities and Transport for London Act 2013

NAO (2024) Public changepoints for electric vehicles, National Audit Office

New Roads and Street Works Act 1991, Section 109

OCA (2025) Open charge point protocol, Open Charge Alliance

Ofgem (2025) Ofgem sets out major reform package in next step to accelerate grid connections, 8 December 2025, Ofgem

OZEV (2023) LEVI heads of terms, Office for Zero Emission Vehicles

OZEV (2023) Public Charge Point Regulations 2023 guidance, Office for Zero Emission Vehicles

OZEV (2025) Apply for the electric vehicle (EV) pavement channels grant, Office for Zero Emission Vehicles

Procurement Reform Act 2014

Procurement Act 2023

Planning and Infrastructure Act 2025

Regional energy strategic planning (RESP), National Energy System Operator

SFT (2025) Net zero transport: developing approaches for the financing and delivery of EV charging infrastructure, Scottish Futures Trust

The Traffic Management Permit Scheme (England) Regulations 2007

Transport Scotland (2022) Electric Vehicle Infrastructure Fund, Transport Scotland

Transport Scotland (2023) A network fit for the future: vision for Scotland's public electric vehicle charging network, Transport Scotland

Welsh Government (2023) Electric vehicle charging: strategy and reports, Welsh Government

Welsh Government (2023) Ultra low emission vehicle transformation fund: grants awarded 2023 to 2024, Welsh Government

Welsh Government (2025) National approach for roads and streets works, Welsh Government

Procurement routes advice

This is not an exhaustive list but provides advice on a variety of routes for procurement.

Welsh Government – Electric Vehicle Charging Infrastructure Framework

- A national all-Wales EV charging procurement framework run by Welsh Government Commercial Delivery (WGCD)
- Designed to allow public sector bodies (including local authorities) to procure design, supply, and installation of EVCI and associated services – organised into multiple lots (chargepoints, emerging tech, advisory)
- Tender notice on Find a Tender (procurement detail): Electric vehicle charging infrastructure – Find a Tender

Note: This framework is accessible to Welsh local authorities and other public bodies and includes more than just supply (e.g. emerging technologies and advisory services).

Crown Commercial Service (CCS) frameworks

RM6213 – Vehicle Charging Infrastructure Solutions (VCIS) dynamic purchasing system (DPS)

- DPS specifically for EVCI goods and services (hardware, installation, back office, consultancy, maintenance)
- Allows direct award or mini-competition within pre-qualified supplier lists

Note: Perfect for mainstream EV chargepoint roll-outs and modular procurement where you want flexibility and a broad supplier base. This currently expires in April 2026.

CCS Transport Technology & Associated Services (TTAS) framework

- Includes EVCI under a specific lot (for zero emission transport infrastructure)
- Useful if integrating charging procurement with wider transport technology procurement

Public sector framework providers

These are third-party compliant frameworks that local authorities can call off from without running full tenders:

ESPO Vehicle Charging Infrastructure (VCI3)

- Open to all UK public bodies and covers hardware supply, installation, back-office systems, and service packages

NEPO Electric Vehicle Charging Infrastructure

- Procurement framework available nationwide (not just north-east) for EVCI products and services

The Procurement Partnership Limited (TPPL) Electric Vehicle Charging Framework

- Offers end-to-end EV charging solutions – supply, installation, support and maintenance

Local and regional authority frameworks (example DPS models)

Examples of this include Oxford and London Councils DPS

Scotland

Procurement frameworks applicable in Scotland (not necessarily just for procuring EV) include the following:

Scotland Excel Electric vehicle charging infrastructure

Public Contracts Scotland (PCS)
https://www.publiccontractsscotland.gov.uk

Useful websites

British Parking Association traffic regulation orders guide

Community Apparatus Data Vault, frequently asked questions, Scottish Road Works Commissioner

Electric vehicle charge point and infrastructure grant guidance for installers, GOV.UK

England
Plan and manage roadworks
Motability Foundation website
National Underground Asset Register (NUAR)

Northern Ireland

Open Charge Point Protocol
Public Charge Point Regulations 2023
Street Works Order 1995, Article 11

Scotland

New Roads and Street Works Act 1991, Section 109
Scottish Road Works Commissioner
Street Manager
UK Earthing & Bonding Design Reference

Wales
National Approach for Roads and Streets Works

About CIHT

CIHT provides strategic leadership and support to help our members develop, deliver, and maintain sustainable solutions for highways, transport infrastructure, and services that:

- **Address the challenges of climate change**
- **Support the economy**
- **Help address societal inequalities**
- **Reduce environmental degradation**
- **Respond to a changing world**

We bring members together to share, learn, and feel confident about addressing these challenges through the application of good practice, by embracing innovation and by acting with integrity. It is through this and the values that CIHT can demonstrate and deliver on thought leadership and shaping the highways and transportation sector for the public benefit.

Whether you are a student, apprentice, work in the private or public sectors or are a company director, CIHT has a place for you and a commitment to fulfilling your professional development needs throughout your career.

www.ciht.org.uk