



Department
for Transport



Office for
Zero Emission
Vehicles

Cost of Public Electric Vehicle Charging Review

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Chair's Foreword

The UK has made real progress on developing electric vehicle (EV) infrastructure. Public charging networks have grown at such a pace in recent years that we already have more charge points than fuel pumps.¹ Operating standards, connectivity and app-mediated interoperability are much improved. Range anxiety is falling down the list of concerns for people already driving EVs. Innovative new tariffs and customer offers are becoming widespread, enabling EV drivers to participate in new flexible electricity markets. But one problem is getting worse. The cost of charging away from home has risen sharply and is likely to keep rising. That matters for every driver, but especially for people who cannot charge at home and are already facing wider cost-of-living pressures. Unless it is addressed, it will slow the move to EVs and weaken the economic and environmental gains that the transition can deliver.

This review was commissioned in response to this challenge and tasked with three objectives: an assessment of the current situation and outlook, an analysis of the drivers behind charging price inflation, and recommendations for practical action. Its conclusions are grounded in extensive data and evidence from a wide range of stakeholders and experts.

As the independent chair of the review, I have sought to establish some basic parameters. It has to be driven by improving outcomes for all current and potential EV drivers, especially those who cannot charge at home and are wholly reliant on more expensive public charging. It has to recognise that EV charging is not a single market, but several markets all at the nexus of complex systems that are themselves still developing. Therefore, a systems-thinking approach is essential. To be credible it also has to recognise broader economic realities. The levers themselves are limited; self-help by the charging industry is crucial, but beyond that any “missing money” will need to be funded by the general taxpayer, other users of the electricity system or other motorists. These considerations lead to potential conflicts and trade-offs across the diverse web of stakeholder interests involved. There may be elements of the review that different stakeholders – whether private sector, civic or government – find uncomfortable. Were it otherwise, I would worry that we had failed in upholding the standards of independence, balance and objectivity that the topic demands.

The review has concluded that there are two distinct but connected problems. The first is the increase in charging prices across all types of chargers. The unit price of electricity has increased (as have petrol and diesel prices) but the increase in fixed costs, including increases in electricity network charges (especially those based on capacity rather than usage), has been a bigger issue. This is because the average utilisation of charge points has, to date, been very low, as a consequence of investment in charging infrastructure (overwhelmingly by the private sector) occurring ahead of need. Supply overall exceeds

¹ <https://www.gov.uk/government/publications/comparing-fuel-pumps-to-electric-vehicle-public-chargers/comparing-fuel-pumps-to-electric-vehicle-public-chargers>

demand but, in this case, it has led to an increase in prices as low utilisation pushes up the unit cost that operators seek to recover from customers.

The second is a structural problem. There is a basic unfairness at the heart of the market. Charging at home is much cheaper than charging elsewhere. Around a third of UK drivers do not have access to their own driveway, and many are less able to absorb higher prices. Unsurprisingly, 90% of current EV drivers can charge at home. Although for most drivers it is still cheaper per mile to drive an EV, if the transition is to work for the whole country, public charging must become a credible and affordable option for those who depend on it. This is a cost-of-living question.

Resolution of the challenge is more urgent than may initially appear. Underutilised infrastructure and fixed cost increases are driving higher unit costs, which feed into prices. Higher prices risk reducing EV uptake, slowing the rate of increase in utilisation. Add to this the high barrier to entry faced by a third of the market, and there is a risk of a negative feedback loop emerging that, if left unaddressed, will otherwise require radical and more expensive intervention to resolve later.

A laissez-faire response will not suffice. Charge point operators are starting to take self-help steps to improve cost efficiency and asset utilisation, and sector consolidation is happening. But this will at best stabilise things. Establishing a positive feedback loop, where lower and fairer prices attract more drivers to EVs, improve charger utilisation and drive even lower prices, requires external intervention. The landing pad for possible solutions is very small, with apparent easy fixes ruled out. The review has navigated this by highlighting interventions that address structural challenges, target pain points and deliver savings for drivers when the benefit is most needed. Care has been taken to consider unintended consequences. For example, the key recommendation in the report, enabling drivers without home charging to use public chargers with their domestic electricity tariff, should deliver the same effect as alternatives but at lower system cost, with greater access, better asset utilisation and potentially lower community disruption.

The result is a mix of technical changes and highly focused financial levers. The recommendations should be seen as a package; no one recommendation addresses all the issues. Some measures will be technically difficult, and some will require hard choices. That is not a reason to delay them. It is a reason to begin now.

An EV transition that works only for people with driveways is not a fair or durable transition. The prize is a charging system that gives every driver a practical route to switch, supports confidence in the market and strengthens the case for electric mobility across the UK. This review sets out how government, industry and the wider energy system can move towards that goal.

Many organisations and individuals have been generous in giving their time and insights to the review. The grace, openness and positive spirit that has characterised the great majority of these engagements has made my task a pleasure.

The OZEV team that I have been privileged to work with have been fantastic.

Philip New, October 2026

Summary of Recommendations

The review makes five recommendations to the UK Government. These recommendations are mutually reinforcing and should be taken forward as a coherent package rather than in isolation.

Addressing the equity gap

Recommendation one: develop and pilot local tariff ‘porting’ – a solution that could enable drivers to charge at lower powered public chargers near their homes using their domestic energy tariff.

Recommendation two: provide targeted, time-limited financial support to reduce charging prices for drivers.

Addressing system costs and improving utilisation

Recommendation three: address the tension between the UK Government’s EV priorities and the electricity network charging and policy levy regimes in Great Britain.

Recommendation four: implement a certificate trading scheme for renewable electricity used to charge EVs.

Recommendation five: extend financial support, and provide guidance, for deploying battery energy storage solutions.

Government and industry must also take steps to improve price awareness and transparency, increase physical charger signage and ensure forthcoming energy system plans properly account for public charging requirements.

The Review

The UK Government appointed Philip New to undertake a review into the costs of charging an EV on the public charge point network, and to make recommendations for what government, industry and consumers could do to make charging more affordable.

Philip conducted the review between April and October 2026, working to Terms of Reference set out in Annex A. The review report is structured in three sections:

- Section one: a review of the current costs of public charging, the reasons behind recent increases in prices, and an assessment of how costs might change in the future.
- Section two: observations and implications for identifying suitable interventions.
- Section three: recommendations for what government, industry and consumers could do to reduce charging costs. Recommendations on tax policy were out of scope of this review.

In developing the review, Philip has engaged extensively with stakeholders across central, devolved and local government, as well as more than 60 organisations spanning consumer groups, charge point operators (CPOs), the energy and transport sectors, research bodies and commercial investors.

The review has also been informed by a targeted request for evidence, which gathered data from UK CPOs and local authorities operating their own charging networks.

Unless otherwise stated, references to energy system policies and costs relate to Great Britain. Northern Ireland has a different energy market and regulatory arrangement, which may affect how the review's recommendations are implemented. This includes the role of the Utility Regulator and the planned deployment of Smart Electricity Meters in Northern Ireland from 2028.

Recommendations apply across the UK, except where a different territorial extent is specified.

Section One: Part One – The State of Play

The EV transition is accelerating but uptake is uneven

There are now more than 2.3 million EVs on the UK's roads, and the direction of travel is clear: driving an EV is easier, cleaner, and for many, much cheaper than driving a petrol or diesel-fuelled car or van.²

However, EV uptake has so far been uneven between those with access to off-street parking (around two-thirds of households in England), and those without.³ Consumer research suggests 89% of EVs are driven by those with access to home charging, with the ability to access the cheapest electricity prices: EV-specific domestic energy tariffs offer overnight charging costs as low as 2p per mile for drivers in Great Britain.^{4 5}

Alongside any workplace charging facilities they can access, drivers who cannot charge at home are reliant on the public network, where prices have increased significantly in recent years. Since 2021, average charging prices for lower powered alternating current (AC) charging and higher-powered direct current (DC) charging have risen by 69% and 94%, respectively, in real terms.⁶

At today's prices, those charging in public pay on average at least twice the total costs of those who can charge at home

Public charging prices are now regularly cited as a barrier to EV ownership, in particular for those who cannot access cheaper overnight domestic charging tariffs.

But overnight tariffs do not tell the whole story about costs for those who charge at home. To draw a fair comparison with the average costs faced by a driver reliant on public charging, we must account for both the cost of purchasing and installing a home charger, aggregate electricity tariffs across all domestic energy use (not just EVs) and actual charging behaviour. Consumer research suggests that most drivers with home charging will still use the public network for top-up charges, for example while stopping at motorway service areas during longer journeys.⁷

² Vehicle Licensing Statistics, June 2026 - <https://www.gov.uk/government/statistics/vehicle-licensing-statistics-april-to-june-2026>

³ English Housing Survey (2026) - <https://www.gov.uk/government/statistical-data-sets/english-housing-survey-data-on-parking-mains-gas-and-ev-chargepoints>

⁴ EV Driver Tracker (2025) - <https://www.gov.uk/government/publications/electric-vehicle-ev-driver-behaviours-and-attitudes-tracker>

⁵ EV-specific energy tariffs which require smart domestic metering are not yet available in Northern Ireland.

⁶ Comparison of CMA analysis of refuelling costs based on Zapmap data (February 2021) - <https://www.gov.uk/government/publications/electric-vehicle-charging-market-study-final-report> and Zapmap Price Index, October 2026 - <https://www.zapmap.com/ev-stats/charging-price-index>

⁷ EV Driver Tracker (2025)

Taking this into account, analysis suggests a typical driver who can charge at home pays an effective charging rate of 8–12p per mile, depending on the extent of overnight charging they do.⁸

For those charging on the public network, more than 40 CPOs are now competing to provide their services to UK drivers, across three core markets:

- Standard and standard-plus AC charging: analogous to home charging and typically found on-street or in residential car parks, these lower powered chargers provide a full charge in 6–10 hours, at costs around 12–16p per mile depending on the time of use, as many AC charging networks offer cheaper overnight prices.⁹
- Rapid and ultra-rapid DC charging: typically found on A-roads, motorways, petrol stations and at forecourt-style hubs, these higher powered chargers provide a full charge in 10–60 minutes, at costs around 24p per mile.¹⁰
- Destination charging: typically a mix of standard and rapid charging according to dwell time at the location, which include retail and leisure sites.

For price-conscious drivers with access to lower powered AC chargers, the cost differential between home and public charging can be narrowed. But provision of these chargers is currently piecemeal across the UK, and consumer data shows drivers are more likely to use a range of infrastructure.

Analysis suggests a driver reliant on the public network, charging at a mix of powers, pays 17–20p per mile at current prices.

And while all EV drivers with access to home charging will save considerably versus refuelling an equivalent petrol vehicle (with current costs of 22p per mile), cheaper running costs are no longer a foregone conclusion for those charging on the public network.¹¹

Table 1 summarises refuelling costs in different scenarios.

⁸ Cost per mile including the cost of installing a home charger, with some daytime and off-peak charging as well as a proportion of charging on the public network. Off-peak charging tariff and public charging costs: Zapmap Price Index

⁹ Advertised off-peak charging tariffs, February 2026; Zapmap Price Index

¹⁰ Zapmap Price Index

¹¹ DESNZ Weekly road fuel prices (2026) - <https://www.gov.uk/government/statistics/weekly-road-fuel-prices>

Type of refuelling	Cost per mile	Notes
Predominantly home charging, with a small share of public charging, charger installation costs included	8–12p	Accounts for cost of home charger. Range depends on extent of off-peak home charging
Only standard and standard-plus public charging	12–16p	Range depends on extent of off-peak public charging
Public charging using a mix of charging powers	17–20p	
Only rapid and ultra-rapid public charging	24p	
Petrol (2025 price)	17p	Pre-Middle East conflict
Petrol (September 2026 price)	22p	

Table 1: EV and petrol vehicle refuelling costs

Evidence suggests that, on average, drivers who cannot charge at home are more likely to have lower incomes.¹² That this group of drivers are, overall, significantly less likely to own an EV presents both a warning of the potential for an inequitable transition, and an opportunity. If these drivers can be confident that an EV is the right choice for their next vehicle, then not only will the wide-ranging benefits of clean driving be shared across more people, it will also supercharge the UK towards its goal of clean, meaningful growth across the country.

To understand why charging prices have risen more than inflation in recent years, this review has examined how the charging network has developed, the complex dynamics influencing CPO commercial decisions, and the interaction between EV charging and the wider energy system.

The charging network is growing, but utilisation is lagging behind investor forecasts

The UK's public charging network has expanded substantially in recent years, with operators developing strong market positions in anticipation of demand as EV uptake accelerates, supported by the zero emission vehicle (ZEV) mandate. While growth has slowed in 2026, the past 12 months have still seen an average of 28 chargers added to the network every day.¹³

¹² English Housing Survey (2026) - <https://www.gov.uk/government/statistical-data-sets/english-housing-survey-data-on-parking-mains-gas-and-ev-chargepoints>

¹³ Electric vehicle charging infrastructure statistics, October 2026 - <https://www.gov.uk/government/collections/electric-vehicle-charging-infrastructure-statistics>

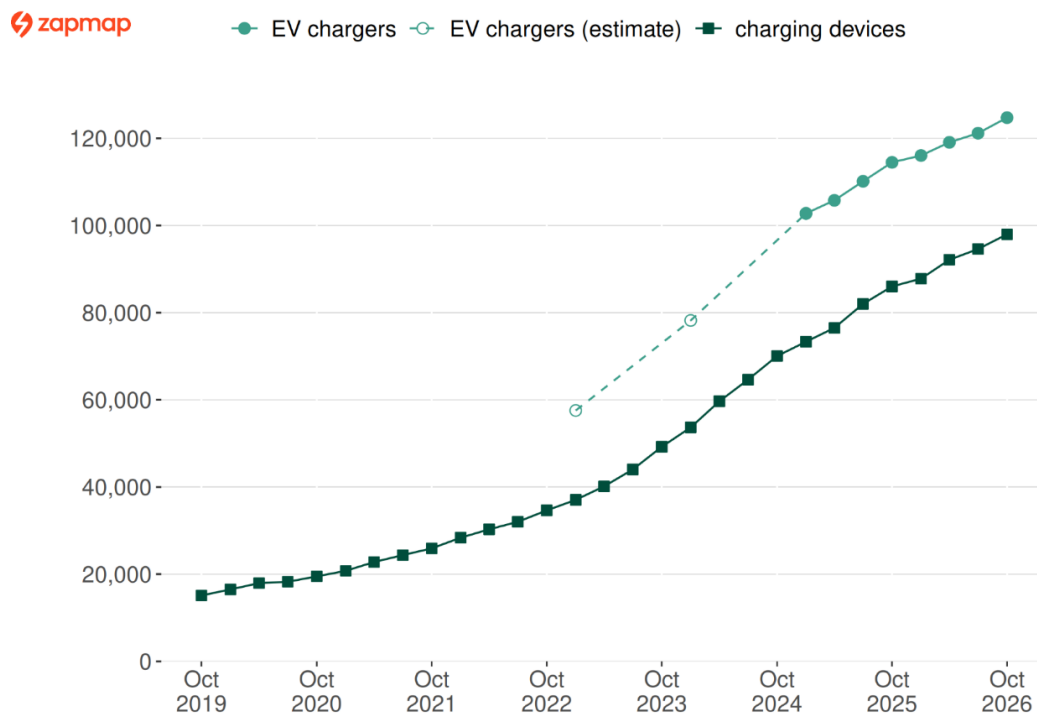


Figure 1: Growth in the number of EV chargers in the UK between 2019 and 2026

In almost all cases, CPO economics are driven by maximising charger utilisation, and therefore volume of electricity sold. But the fact that most CPOs have focused on building either standard AC or ultra-rapid DC charging networks reflects the different underlying commercial considerations for each. They are distinct, separate markets.

While more expensive to install and operate, the maximum daily throughput for rapid chargers is much higher than for lower powered chargers, offering greater economic potential. For example, some ultra-rapid chargers can deliver the same amount of electricity in one hour that a standard charger can deliver in 24 hours.

This potential, and the wide customer base, which includes those who predominantly charge at home, means rapid charger deployment has been driven by private investment. CPOs have built ahead of market maturity, and while 'cold spots' remain, there is growing consensus amongst stakeholders that supply of en-route and depot charging is at least matching demand, in aggregate.

In contrast, the standard charger market has depended on public subsidy to unlock private finance, reflecting the more challenging business case and lower present demand.

There is geographic disparity in standard charger coverage: London and Scotland have the highest provision relative to population size (figure 2). This is being addressed, with the UK Government's £480 million Local EV Infrastructure (LEVI) Fund supporting local authorities and CPOs to install over 100,000 further chargers across England, and the Scottish Government's EV Infrastructure Fund (EVIF) expected to support an additional

24,000 chargers.¹⁴ Governments are also taking steps to make installations easier by simplifying planning requirements.

But access to the cheapest form of public charging is not currently widespread.

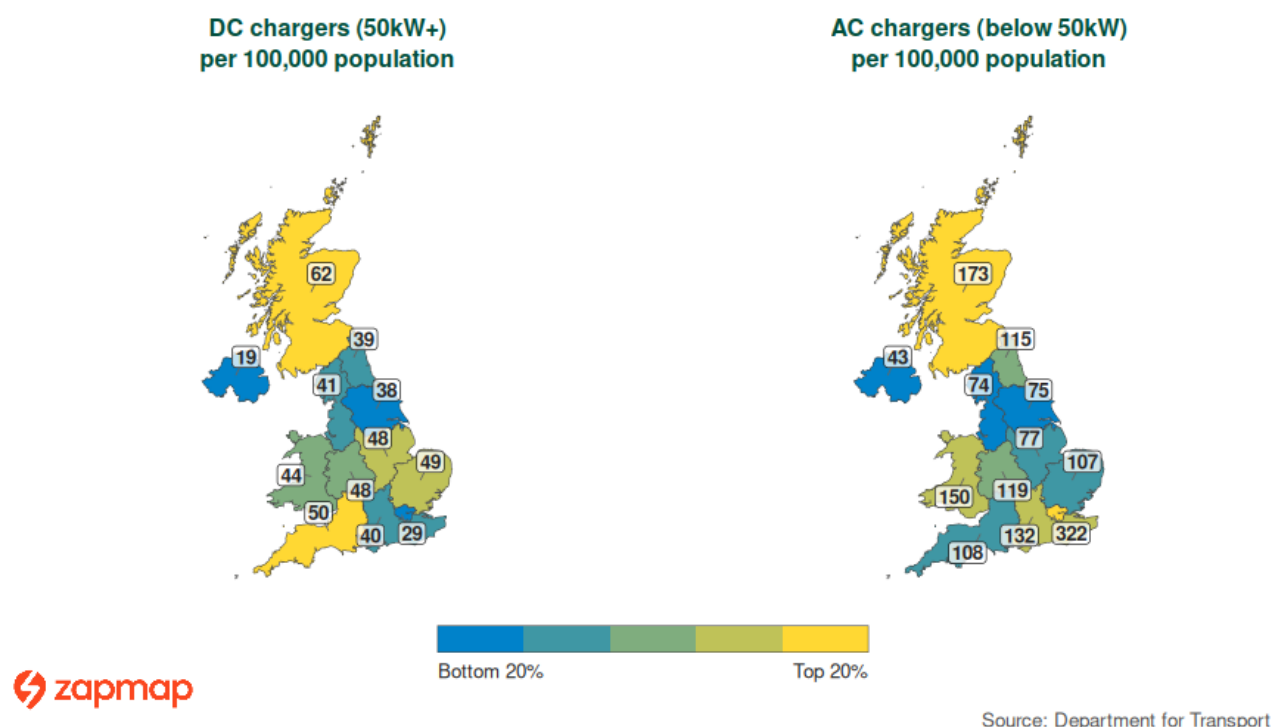


Figure 2: Distribution of DC and AC chargers across the UK, per 100,000 population¹⁵

Across charger markets, current utilisation is below the rates that many early investment cases were built on, according to industry engagement. In 2025, average energy-based utilisation was 3–4% across rapid and ultra-rapid DC networks, and 3–7% across standard AC networks.¹⁶ This equates to a charger being used between 5 and 12 hours a week, on average.

These relatively low rates have a critical impact on how CPOs manage their costs and set prices.

Charger cost stacks

The review has developed average cost stacks for standard and rapid chargers, at current typical utilisation levels. The stacks were built using data provided by CPOs, and represent illustrative examples rather than any individual operator, given the range of business

¹⁴ Local EV Infrastructure Fund (LEVI), England: <https://www.gov.uk/guidance/apply-for-local-ev-infrastructure-levi-funding>; Electric Vehicle Infrastructure Fund (EVIF), Scotland: <https://www.transport.gov.scot/our-approach/environment/electric-vehicle-infrastructure-fund/> and Regional Transport Fund, Wales: <https://www.gov.wales/regional-transport-fund-guidance-applicants-2026-27>

¹⁵ Electric vehicle charging infrastructure statistics, October 2026 - <https://www.gov.uk/government/collections/electric-vehicle-charging-infrastructure-statistics>

¹⁶ Energy-Based utilisation, Demystifying Utilisation report, Green Finance Institute and Zapmap, May 2026 - <https://www.zapmap.com/news/gfi-utilisation-report-2026>

models employed across the sector.¹⁷ Variation in utilisation, locations and underlying cost components means individual cost stacks may differ significantly from the averages presented, which show broad cost drivers and trends.

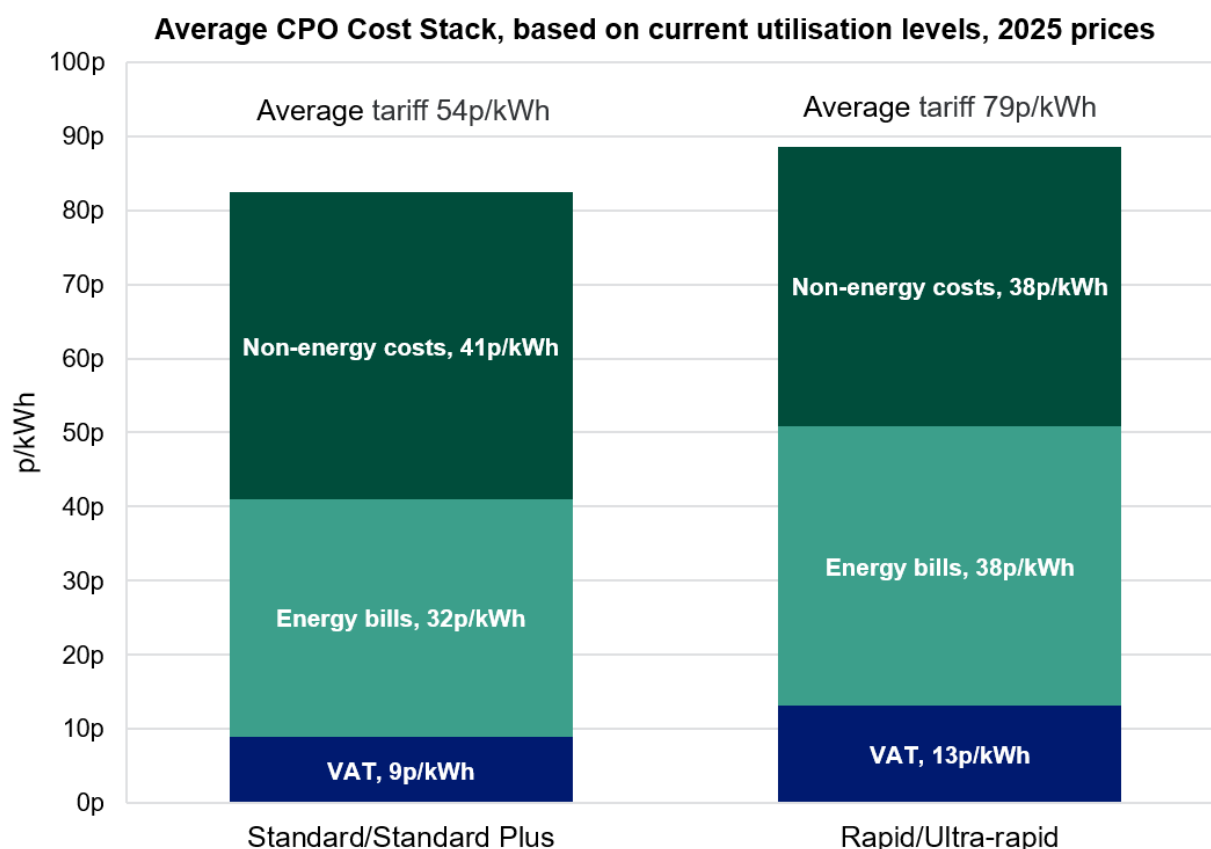


Figure 3: Average CPO cost stacks, based on current utilisation levels and CPO-reported costs

When compared to the average standard consumer tariff of 54p/kWh, the standard cost stack suggests that, in general, AC chargers are not recovering their costs at current utilisation. In fact, they are making significant losses on each kWh sold. The rapid and ultra-rapid stack indicates more cost-reflective pricing, as the average consumer tariff of 79p/kWh is closer to underlying cost levels.¹⁸

Across the sample, total costs ranged from 31p/kWh to 155p/kWh for standard and standard-plus sites, and 30p/kWh to 206p/kWh for rapid and ultra-rapids, demonstrating the large degree of variation within the market.¹⁹

¹⁷ Data on costs and energy sold was gathered via a request for evidence to CPOs conducted by DfT in May 2026. Results presented are based on a selection of average site data. All data points were cleaned to consistent units across sites and timeframe. These varied largely across site characteristics. High level conclusions only were drawn for the purpose of this report due to the low number of data points. Figures are indicative of overall cost and direction, rather than highly accurate. Viable site data is for GB only.

¹⁸ Zapmap Price Index

¹⁹ Data on costs and energy sold gathered via a request for evidence to CPOs.

At these utilisation levels, fixed costs are a significant element of the cost stack

CPO costs can be allocated across six categories, summarised in table 2. In the cost stacks in figure 3, commodity energy costs, electricity network charges, and the costs of policy levies and the Climate Change Levy are combined into the ‘energy bills’ component.²⁰

It is important to differentiate between costs that are variable, scaling with the amount of electricity sold, and costs that are fixed, incurred regardless of charger utilisation.

Cost category	Description	Fixed or variable
Non-energy costs	The costs of investing in, and operating, charging networks. This includes: • Hardware and maintenance • Planning and installation • Land rental, concession fees and revenue share (e.g. with local authorities) • Cost of finance	Predominantly fixed
Energy bills: Commodity energy costs	Wholesale cost of non-domestic electricity Associated brokering fees	Variable
Energy bills: Non-commodity energy costs – network charges	The costs of maintaining and developing the electricity grid	Many are fixed costs (standing charges). Some are variable
Energy bills: Non-commodity energy costs – policy levies	Applied to non-domestic electricity bills (e.g. Renewables Obligation)	Predominantly variable
Energy bills: Non-commodity energy costs – Climate Change Levy	Tax applied to non-domestic electricity bills	Variable
Value Added Tax	Applied at the full 20% rate	Variable

Table 2: Cost stack categories and components

At current utilisation rates, costs which are predominantly fixed, including non-energy costs and non-commodity energy costs, make up around half of total charger costs.

CPO costs have risen in all areas

The increase in charging prices is in part explained by how CPO costs have changed in recent years.

²⁰ Network charges differ materially by charger location, total electricity volume, agreed capacity and tariff structure. Due to limited responses and high variation in individual costs, the average cost does not reflect the range of costs incurred across locations.

Non-energy costs

These costs have increased with inflation. Some have become more prominent in the cost stack in recent years. For example, more CPOs are dealing with the additional costs of financing network growth and installations through structured debt rather than equity. Many are working with both public (e.g. local authorities) and private partners (e.g. retail sites), where rent and concession fees are increasingly common. These are often fixed fees, paid regardless of charger utilisation.

Commodity energy costs

Wholesale electricity costs have increased in response to geopolitical events and, while significantly below their 2022 peak, remain approximately double pre-energy crisis levels in 2021.²¹

Non-commodity energy costs – electricity network charges

These charges recover the costs of building, maintaining and operating the electricity networks. In Great Britain, Ofgem sets the regulatory framework and total costs that can be recovered over a five-year period, and approves the National Energy System Operator (NESO) and Distribution Network Operator (DNO) plans on how to recover these costs from billpayers.

While some of these charges are levied on a consumption basis, and scale according to energy use, a significant proportion are fixed charges. Also known as standing charges, these are paid daily based on the number, or capacity, of connections owned by the billpayer.²²

Network charges have increased substantially to fund electricity grid build-out. Charges vary by region, type of charger and connection capacity, but analysis estimates CPOs are facing 83–283% higher standing charges than in 2021.²³

And while all electricity consumers are subject to these higher charges, the deployment of infrastructure ahead of need, vital to the EV transition, leaves CPOs particularly exposed to the fixed elements of these charges. With lower utilisation, CPOs have fewer customers to spread these costs across.

²¹ Ofgem Wholesale market indicators - <https://www.ofgem.gov.uk/news-and-insight/data/data-portal/wholesale-market-indicators>

²² NESO transmission and balancing charges - <https://www.neso.energy/industry-information/charging/connection-charges>; DNO distribution charges, tariff data - <https://ncs.dcusa.co.uk/>. Across DNO regions, distribution charges can vary by up to 223% for unit costs and fixed daily charges by 675%. In some regions, CPOs may face fixed network charges of up to 4,557p/MPAN/day and capacity charges of 13.5 p/kVA/day. Similarly, transmission charges can also vary by 340% by region. Sites that secure additional capacity ahead of demand may face additional network costs before that capacity is fully utilised depending on secured tariff rates.

²³ Network charges calculations based on Ofgem's 2020/21 and 2026/27 DUoS rates and public EV charging statistics, October 2026. Estimated power ratings on site is used as a proxy for capacity and may not reflect accurate charges.

This challenge has been compounded by changes to how some network charges are calculated. Ofgem’s Targeted Charging Review, implemented in 2022, changed residual network charges from a consumption-based variable levy to a fixed charge based on connection capacity. With many CPOs operating sites with connection capacities based on future, rather than current, demand, this change has significantly impacted the CPO business case.

While the changes introduced following the Targeted Charging Review were intended to make network charges more cost-reflective across wider electricity users, the review has not seen evidence that the changes to residual network charges are properly cost-reflective for public EV charging.

At current utilisation levels these increasing network charges particularly impact the costs of operating rapid and ultra-rapid chargers, due to the larger average connection size.

However, while the charges levied on each charge point are lower, they are increasingly affecting standard 7–22 kW AC charging economics too (lamp column chargers are less impacted as they pay a different set of network charges).

Non-commodity energy costs – policy levies

Energy users in Great Britain pay for the costs of various social and environmental government policies through levies added to their energy bill. These levies are generally consumption-based, and apply differently between domestic and non-domestic electricity users. For example, domestic energy consumers receive a 75% discount on the Renewables Obligation. Table 3 lists and compares the largest levies paid on public charging with the equivalent domestic rates.²⁴

Levy	Non-domestic rate	Domestic rate
Renewables Obligation	3.3p/kWh	0.8p/kWh
Capacity Market Charge	1.5p/kWh	1.6p/kWh
Contracts for Difference	0.8p/kWh	1.5p/kWh
Feed-in Tariffs	0.8p/kWh	0.8p/kWh
Total	6.4p/kWh	4.7p/kWh

Table 3: Policy levies paid on public and domestic charging²⁵

Analysis estimates that the largest policy levies listed above add up to 6.4p/kWh to the CPO cost stack.

²⁴ The list of levies is non-exhaustive.

²⁵ Based on current government levy rates, gathered from CPO data in May 2026 via a request for evidence and Ofgem’s price cap levels - <https://www.ofgem.gov.uk/energy-regulation/domestic-and-non-domestic/energy-pricing-rules/energy-price-cap/energy-price-cap-default-tariff-levels>

Non-commodity energy costs – Climate Change Levy

The Climate Change Levy (CCL) is a UK-wide tax on non-domestic energy supplies, designed to incentivise energy efficiency. The CCL does not apply to domestic energy supplies, including home charging. Businesses, including CPOs, are subject to the main rate of CCL for electricity which is currently 0.80p/kWh, and will rise to 0.83p/kWh in April 2027.²⁶

Value Added Tax (VAT)

VAT for public charging is applied at the full 20% rate, in line with the treatment of petrol and diesel. Domestic charging attracts the reduced 5% rate, which has been reduced to 0% from October 2026 for a limited period.

Asset adoption payments help to offset build costs, but come with strings attached

While costs have increased, it has also become more common for CPOs, particularly in the rapid market, to offset upfront capital expenditure through asset adoption payments from independent distribution network operators (IDNOs).

These one-off payments are made by IDNOs based on the long-term network charges revenue they will receive from the newly constructed electricity assets. IDNOs include contractual claw-back mechanisms when making these payments, should the expected revenue not materialise, for example if the network charges regime changed.

Utilisation curves illustrate the relationship between fixed costs and prices

Rising fixed costs mean low utilisation has considerable consequences for unit costs and is one of the key drivers of higher public charging prices.

Greater utilisation would allow CPOs to spread fixed costs across more units of electricity sold and, in a competitive market, should reduce prices.

Figures 4 and 5 use example cost stacks provided by CPOs for standard/standard-plus chargers, and rapid/ultra-rapid chargers, to illustrate how CPO unit costs would reduce with increased utilisation rates.²⁷ At current utilisation levels, the chargers do not cover their costs.²⁸

²⁶ Climate Change Levy rates - <https://www.gov.uk/guidance/climate-change-levy-rates>

²⁷ Energy-based utilisation rates calculated based on CPO response data. These utilisation cost curves are presented for illustrative example sites. The data received provides a wide range of site characteristics and utilisation levels, therefore utilisation curves are indicative of overall cost and direction, rather than highly accurate. Figures are for sites in GB only.

²⁸ Site utilisation = average daily energy sold (kW/day/charger) / theoretical maximum daily energy output over 24hrs x number of chargers on site. These are provided as illustrative example sites. Some sites reported lower utilisation rates and therefore higher costs per kWh sold, and others reported higher rates and lower costs, depending on location, competition and launch date. CPO tariffs are set at network level.

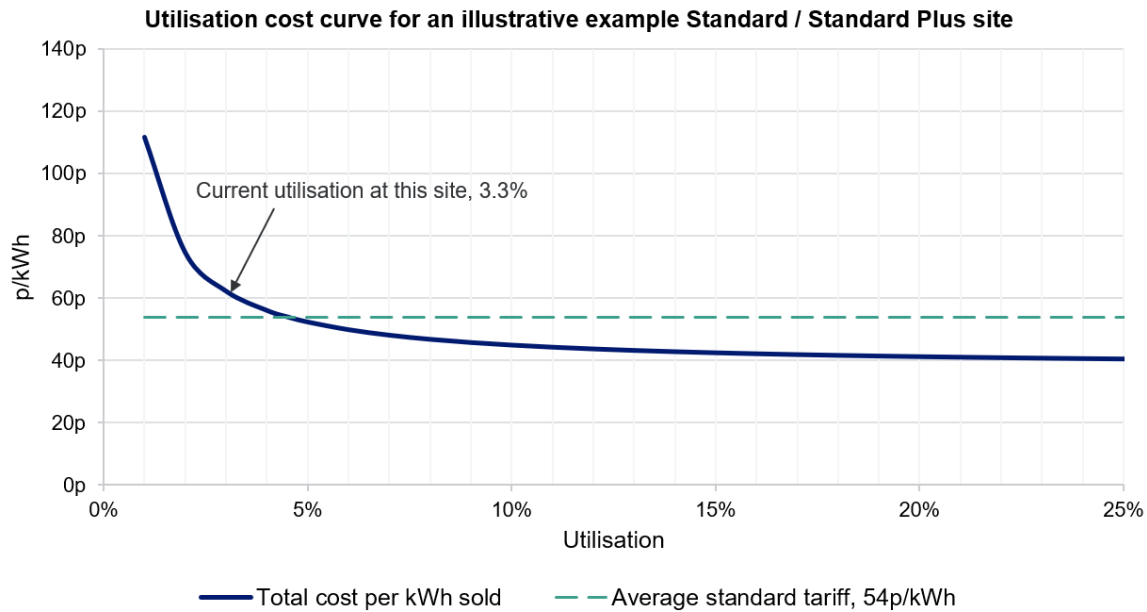


Figure 4: Illustrative utilisation cost curve for an example standard/standard-plus site

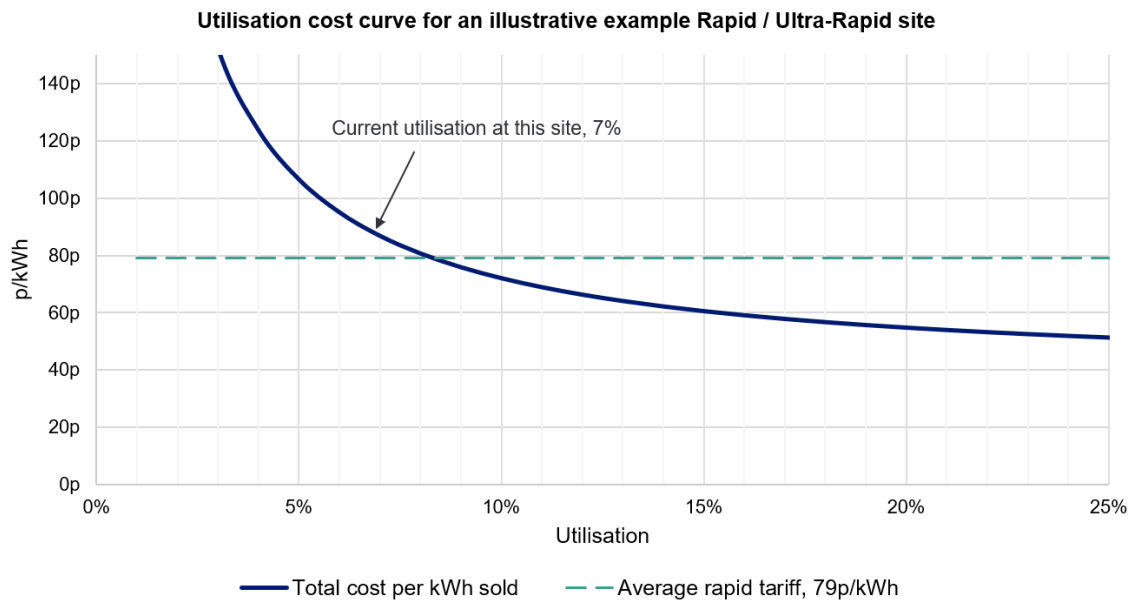


Figure 5: Illustrative utilisation cost curve for an example rapid/ultra-rapid site

Pricing structures are contributing to an inconsistent consumer experience

Despite costs and utilisation varying significantly by site, most CPO networks maintain national-level tariffs. Unlike petrol and diesel fuel retailers, CPOs review tariff structures relatively infrequently, often on a quarterly or six-monthly basis.

Consumer groups report a complicated user experience. While tariffs must be displayed in p/kWh, they are often hard to locate, and calculating the cost of a charging session in advance is challenging. Some CPOs offer tariff discounts which are only available when registering via an app or through subscription models, and may not be available when charging through a roaming provider.

Drivers are also frustrated by chargers providing less than the advertised power and high pre-authorisation holds on drivers' bank accounts, which can be as much as £60 per charge.

Although the sector is not yet fully mature, some CPOs are introducing more sophisticated pricing strategies. Many standard AC operators offer reduced nighttime pay-as-you-go prices, taking advantage of cheaper overnight electricity. Some rapid DC operators also offer reduced nighttime tariffs, but these generally require sign-up through CPO apps. Location-specific and limited-time 'plunge pricing' has also been trialled recently.

Overall, pricing is either close to, or below, costs. Rapid networks are typically deploying more cost-reflective pricing, passing on increases to their customers rather than aggressively competing on price to build market share, grow utilisation and reduce unit cost. This may indicate that rapid charging is not yet showing significant price elasticity.

Standard networks are, on the whole, in a more challenging position, attempting to drive demand with prices often below actual costs.

The investment case is weakening for some networks

The review has found many operators are under financial strain, with very few achieving positive earnings before interest, taxes, depreciation and amortisation (EBITDA); it is unlikely that any have a positive net profit. CPOs have experienced an investment learning curve, with more risky decisions exposed by the increasingly challenging environment.

Some operators are attempting corrective measures by installing battery energy storage systems to manage energy costs, handing capacity back to the grid or closing sites, but the sector is not currently able to attract significant equity investment, with debt the primary source of finance.

Section One: Part Two – Looking Ahead

There will be growing demand and efficiency opportunities, but, absent intervention, charging prices are likely to increase

Accelerating EV uptake, and therefore utilisation, is a fundamental requirement for CPO economics. Though uncertain, DfT modelling estimates that energy demand for public charging could grow by three times between 2026 and 2030, under current ZEV mandate trajectories.²⁹

While the business case for CPOs is driven by maximising charge point utilisation and aggregate volumes at network level, the commercial case differs materially by charger type.

Rapid and ultra-rapid networks depend on EV uptake translating into higher volumes of electricity sold. Additional sites can improve coverage, total volumes and EV driver confidence, but they also add capacity and offset utilisation gains from the increase in EV numbers.

However, given the relative slowdown in network expansion this year, it is possible that utilisation rates will improve in the shorter term, especially if EV uptake continues to accelerate. This could support lower charging prices by spreading fixed costs over a greater number of charging sessions. Development in energy management technology such as battery storage and smart charging will also contribute to a more efficient, cost-effective network.

Lower powered networks, typically installed on-street and in residential car parks, face a different utilisation challenge. They depend on regular use by local drivers without access to home charging, and are more exposed to this group's lower EV adoption rate to date. Utilisation is a very local issue, with EV uptake likely to reflect both neighbourhood charger access and prices. Charger availability is a necessary driver of increased adoption, but utilisation lags will likely be extended while prices are perceived as high, especially if EV adoption continues to be led predominantly by drivers who can charge at home.

The solution to high prices is better utilisation, but better utilisation depends, at least in part, on lower prices. And network growth over the coming years (for example through the LEVI Fund and other schemes) may have a diluting effect on utilisation gains in some areas.

In both cases, market consolidation may provide CPOs with opportunities to lower some costs through economies of scale. However, many CPO costs are expected to rise. At this stage of the transition, continued increases to fixed electricity network charges will have an outsized impact.

Ofgem's updated five-year framework for transmission-level charges, which commenced this financial year, is beginning to feed through to prices. An updated framework for distribution-level charges, beginning in April 2028, will likely lead to further rises. While

²⁹ DfT/DESNZ Charge point Demand Modelling, September 2026

some CPOs on longer-term fixed energy contracts have been shielded from these costs, these increases will be factored into their next round of negotiations with energy suppliers.

The cost of policy levies is also likely to rise, albeit to a smaller degree. The greatest increases are expected from the capacity market charge, Contracts for Difference and Nuclear Regulated Asset Base, which are all expected to require roughly double the funding to be raised in 2030–31 compared to this financial year.^{30 31} Other policy levies are expected to remain largely stable over the same period, and some will decline. The Feed-in Tariffs levy is slowly decreasing from 2030 until reaching zero in the early 2040s, and the renewables obligation is expected to decrease by 23% between now and 2030–31.^{32 33}

While grid decarbonisation should support lower wholesale electricity prices in the long term, geopolitical events mean they are expected to rise in the coming months (albeit by less than petrol and diesel prices). These increases will be felt more quickly by CPOs on variable energy contracts, and those with expiring fixed-term contracts.

Overall, the impact on prices will be a function of underlying cost increases, the pace of EV adoption, and the extent to which charging network expansion addresses gaps in coverage, rather than simply adding supply in already well-provided areas. Against the backdrop of higher underlying energy system costs, any slowdown in EV adoption and/or undisciplined capacity expansion will mean consumer prices are likely to rise over the medium term, from 2027.

In the longer term, broader energy system design and cost arrangements are being reviewed by Government and Ofgem, reporting to timeframes beyond this review. This work will clearly impact the costs of public charging and, as set out in section three, must adequately account for the EV transition.

³⁰ Office for Budget Responsibility (OBR) Economic and fiscal outlook detailed forecast tables, March 2026 - <https://obr.uk/download/march-2026-economic-and-fiscal-outlook-detailed-forecast-tables-receipts/?tmstv=1788276116>

³¹ Higher costs of the Contracts for Difference levy do not automatically mean higher electricity prices overall, as Contracts for Difference spending is inversely related to wholesale electricity prices.

³² Department for Energy Security and Net Zero, Feed-in tariffs (FIT) scheme: indexation changes, March 2026 - <https://www.gov.uk/government/consultations/feed-in-tariffs-fit-scheme-indexation-changes>

³³ OBR Economic and fiscal outlook detailed forecast tables, March 2026

Section Two: Implications for the Review

While the price to charge on the public network has increased significantly, the vast majority of current EV drivers still save on refuelling costs versus an equivalent petrol or diesel vehicle. Those who can charge at home are in the best position, but some drivers who do all their charging in public are also able to save, depending on the type of chargers they use.

And the shape, and scale, of the charging network is evolving rapidly, for the better. Low utilisation is a fundamental commercial issue, but given EV uptake is at record levels, it also indicates that network expansion is, in aggregate, ahead of demand.

There is more to do to ensure the right level of provision across the UK, with particular challenges in both rural and remote locations (which often have high grid reinforcement costs), and densely populated urban areas (where there is less physical space and grid capacity constraints are common). But with significant government and private sector investment supporting local authorities and CPOs to roll out chargers at scale over the coming years, the question of whether there is enough charging is being answered.

This is still an emerging, relatively fragmented market, with diverse business models and significant uncertainties in the transition from niche to mainstream. Stakeholders expect network consolidation to accelerate over the coming years, although this should bring with it the opportunity for lower unit costs through economies of scale, and a better, simpler consumer experience, provided appropriate market competition remains.

While the UK's charging network is establishing itself thanks to ambitious business cases and supportive government policies, persistently low utilisation will make it increasingly challenging for CPOs to both reduce charging prices and continue to build network density, without undermining financial sustainability. Evidence suggests the standard AC charging market is in a particularly precarious position, with utilisation needing to more than double, in some instances, for CPOs to fully recover costs.³⁴

Action is required to drive utilisation and to address system cost challenges, some of which have been exacerbated by government policies addressing challenges in other sectors.

Without it, there is significant risk of entering a negative feedback loop: higher charging prices suppress EV demand, and in turn, charger utilisation continues to lag. Operators will then need to raise prices further to recover increasing costs. Ultimately, any investment risks being focused in areas of actual demand, entrenching both geographical and cost inequity in the EV transition.

High public charging prices will also lead drivers to look for alternative ways to reduce their charging costs, such as installing cross-pavement solutions, or domestic charger sharing through apps. While these solutions provide access to cheaper charging for some drivers,

³⁴ Based on CPO responses to request for evidence, May 2026

they are not suitable for all use cases. They also remove utilisation from the public network, further increasing costs for those who remain dependent on public charging.

If the UK can foster a transition that supports all drivers, and a thriving, affordable public charging sector, then a mutually reinforcing cycle emerges: improved utilisation allows CPOs to reduce prices, driving EV demand while also supporting network growth right across the country, further widening access to charging and EV ownership.

The potential benefits are clear for drivers, CPOs and the automotive industry, but also for wider society. The more EVs on the UK's roads, the greater the contribution they can make towards a secure, flexible energy system – both by enabling smarter use of renewable energy, and by spreading fixed system costs over more users.

To solve this challenge, the barriers to entry for non-EV drivers must be removed as far as possible. Particular focus must be given to those drivers who cannot charge at home, and are most reliant on public charging infrastructure while being, on average, least able to afford to use it. This group, covering around a third of households, must be presented with a compelling offer to make the EV switch.

This starts with the cost of charging, and ensuring that conditions enable prices to be as close to domestic charging as possible, and certainly cheaper than fuelling an internal combustion engine vehicle. But it extends to the experience of locating, conducting, and paying for a charge, too.

Building the perception that there is sufficient public charging across the country is clearly essential to driving EV adoption. But future network expansion must also be disciplined and strategically targeted. Continuing to build ahead of demand will remain necessary in some locations to give drivers confidence to transition to an EV, but deployment should increasingly focus on genuine access gaps and support local EV uptake. Without this, additional capacity risks diluting utilisation, increasing the impact of fixed costs across the network and increasing the cost of charging for consumers.

It must be acknowledged that the system, encompassing drivers, CPOs, and the electricity network, is working in a closed loop. Some efficiency and consolidation savings should be possible. But with most CPOs currently loss-making, and investment harder to come by, it is not clear how the sector, on its own, can find savings large enough to reduce prices.

This means external intervention in this closed system, through investment or cost redistribution, is required. There are three relevant sources of money to support interventions: the taxpayer, via the Exchequer; other electricity consumers; or drivers of internal combustion engine vehicles.

And any financial support provided or reallocated from these groups can be targeted at two areas: either directly to consumers, or into the supply chain.

Section three sets out recommendations for actions across these groups of funders and recipients. Given the review's clear focus on reducing charging prices, options that target the supply chain must be designed carefully to ensure pass through to actual prices, ensuring consumers get maximum benefit from any action. And ultimately, all options will have trade-offs with other users and stakeholders in the system.

Section Three: Recommendations

The review's position is that government and industry should target interventions towards two broad objectives, recognising these are mutually reinforcing and need to be taken forward as a coherent package rather than in isolation:

- Narrow the cost disparity between those with and without home charging, as far as possible. This will drive EV uptake, charger utilisation, and facilitate a more equitable transition. This is a structural challenge, and demands a structural response.
- Reduce, or offset, increasing system costs. This should enable CPOs to pass savings through to consumers as lower prices. This is an immediate, but hopefully short- to medium-term issue, and a function of low utilisation rates as infrastructure develops ahead of need.

Alongside these objectives, wider enabling measures are needed to increase utilisation, improve charger awareness and strengthen the consumer experience.

Addressing the equity gap

Recommendation one: develop and pilot local tariff 'porting' – a solution that could enable drivers to charge in public near their homes using their domestic energy tariff

Territorial extent: Great Britain

Local tariff 'porting' would enable drivers to pay for some of their public charging through their domestic energy tariff. The solution is intended to, as far as possible, narrow the cost disparity between those with and without home charging. It offers a structural solution to a structural problem and, if implemented, could enable broader benefits to the electricity system and market.

Rather than paying the full public charging tariff directly to a CPO, a driver would be able to charge at a standard or standard-plus public charger near their home and have the electricity they used billed through their domestic supplier. A driver would also pay an access fee that reflects the costs faced by CPOs for installing, operating and maintaining the infrastructure. The solution could potentially enable those without driveways to access cheaper EV-specific domestic energy tariffs at specific, nearby public AC chargers.

Local authorities are best placed to identify chargers that residents could use to access their domestic tariff, drawing on local evidence about households without off-street parking and public charge point availability in their area. For example, eligibility could map to existing residential parking permit areas, where they are in place.

The tariff 'porting' concept would require changes to charger and energy supplier software, Elexon's balancing and settlement codes and potentially distribution network codes. It is

being developed by a consortium of industry stakeholders that have been awarded funding to support feasibility studies through Ofgem's Strategic Innovation Fund.³⁵

Similar solutions are already being piloted internationally, including in Germany. Their work suggests that tariff porting benefits could be more widespread than residential public charging, with potential applications for fleets and company cars.

Analysis suggests tariff 'porting' could deliver savings for drivers. By increasing utilisation, it could also help spread fixed infrastructure costs across a greater volume of electricity sold, supporting lower unit costs over time.

'Porting' could also enable access to smart charging and vehicle-to-grid opportunities for more drivers, potentially increasing the amount of charging done when the costs of generating and supplying electricity are lowest. This would provide cheaper charging, while reducing costs for the whole energy system.

To ensure CPOs can cover the costs of installing and operating chargers, drivers would likely need to pay a regular fixed access fee, which could be paid to their local authority. This could, for example, be set at a comparable level to amortising the costs of a domestic charger, which is paid by those with off-street parking (e.g. £1,000 amortised over 5 years which equates to £200 per year). System costs that would not be recovered following the transfer of volume from commercial to domestic tariffs will be comparatively minor, given low volumes of electricity sold through this channel today.

While the cost of charging on the public network remains high, and continues to increase, drivers will look for alternative ways to reduce charging costs, for example by installing cross-pavement solutions or using domestic charger sharing apps. Tariff 'porting' offers a scalable alternative for drivers without off-street parking, while maintaining or increasing public charger utilisation.

The system costs that would not be recovered through tariff 'porting' would be no greater than those lost through drivers accessing their domestic tariffs using these alternative methods, while 'porting' also helps to defer, or reduce, substantial electricity unlooping costs for DNOs, avoids the cost and disruption of pavement works and limits potential competition for adjacent parking spaces.

There are, however, commercial complexities, including how 'porting' would interact with existing local authority and CPO concession contracts. Pilots should be designed with local authorities and CPOs from the outset, and consider this issue alongside others including how to manage the access fee. If designed carefully, tariff 'porting' could broaden access to domestic-style charging prices while supporting the continued development of public charging business models.

The review recommends the UK Government develops a series of pilots to test tariff 'porting' across different use cases.

To enable this to be delivered as quickly as possible, government should establish a taskforce of senior representatives from central and local government, regulators,

³⁵ <https://www.ofgem.gov.uk/policy/strategic-innovation-fund-cycle-6-projects-funding-decisions>

consumer groups and industry to build on initial work to bring this solution to market. This taskforce should agree a clear delivery timeline with Ofgem and Elexon to identify the required settlement and code changes, to avoid delays in delivering this solution. The taskforce should also set up a dedicated workstream to explore how 'porting' could be implemented in Northern Ireland.

Recommendation two: provide time-limited financial support to reduce charging prices for drivers

Territorial extent: UK-wide

It will take time for tariff 'porting' to come to market, and for wider regulatory reform to complete. But government must act sooner to address the growing cost gap between domestic and public charging prices. Temporary financial support for drivers charging at lower powered public chargers, which are analogous to home chargers, should drive EV uptake and utilisation, and provide a bridge to longer-term solutions.

This targeted consumer support could be delivered through a subsidy to CPOs, or a delivery body, and offer discounted prices at lower powered resident-focused chargers. Financial support would directly discount p/kWh prices for drivers, with the objective of reducing, and as far as possible equalising, the systemic cost disparity between those with and without access to home charging.

Targeting support at lower powered on-street charge points, and those in residential car parks, would help to make EV ownership more attractive for the third of drivers without access to a driveway, who are currently much less likely to own an EV. This support would also likely increase utilisation at lower powered chargers, allowing the high fixed costs faced by CPOs to be spread across more units of electricity sold, decreasing consumer prices over time.

A central challenge for time-limited financial support is ensuring that funding is passed through to drivers as lower charging prices, rather than being absorbed into operator revenues or offsetting wider commercial pressures. This risk is greater in the nascent EV market where tariffs vary significantly between operators, pricing is often set nationally rather than at an individual charger level, and many CPOs are seeking to recover fixed costs from low current utilisation levels.

Scheme design would need to include clear pass through requirements, regular reporting of electricity sold, prices charged to consumers and subsidy claimed. Controls would be needed to prevent participating CPOs from increasing underlying tariffs before applying the discount.

The review recommends the UK Government provides time-limited financial support to reduce lower powered public charging prices for drivers reliant on the public charging network. Support should be targeted at local chargers to narrow the cost disparity between those who can and cannot access domestic charging rates. Funding would be dependent on clear pass through to consumers, and would support EV uptake and improve utilisation.

Addressing system costs and improving utilisation

Recommendation three: address the tension between the UK Government's EV priorities and the electricity network charging and policy levy regimes in Great Britain

Territorial extent: Great Britain

As Great Britain's energy system decarbonises, the goal of clean, cheaper energy in the longer term means current system users are being asked to fund large parts of the substantial upgrades required to the electricity network. While government policy to date has focused on protecting households from these costs, the impact of sharply increasing non-domestic energy bills is playing out across the economy.

As the review has shown, CPOs are particularly vulnerable to fixed costs at this stage in the EV transition. Building a comprehensive charging network just ahead of need is fundamental to delivering the transition, but this brings with it an inherent utilisation challenge. The increases to fixed electricity network charges (standing charges) faced by CPOs (83–283% between 2021 and 2026) compound the problem and are driving charging prices upwards.³⁶

These network charges will continue to rise for all energy users over the next decade, but CPOs have been disproportionately disadvantaged by changes to cost allocation arrangements. Ofgem's Targeted Charging Review has had a severe impact on CPOs' unit costs by changing residual network charges from a consumption-based variable levy to a fixed charge based on connection capacity.

This change to network charging policy risks working against government's transport decarbonisation objectives. By increasing fixed costs for sites built ahead of demand, it makes it harder for CPOs and fleet depots to make the early infrastructure investments needed to support EV uptake.

Ofgem, with responsibility for decisions on changes to the network charging framework in Great Britain, must urgently address this tension. The UK Government must support Ofgem in this work by setting the wider policy context and ensuring transport decarbonisation aims are properly represented.

This review has examined ongoing work and potential additional interventions. Routes to swift sector-specific relief or regulatory change are limited, and complicated by wider reform considerations.

Ultimately, the review's position is that the most appropriate route to aligning the network charging regime with cost of living and decarbonisation goals is through the interlinked strategic workstreams led by government and Ofgem. These include Ofgem's Cost Allocation and Recovery Review (CARR) and the delivery of Reformed National Pricing.

³⁶ Network charges calculations based on Ofgem's 2020/21 and 2026/27 DUoS rates and public EV charging statistics, October 2026. Estimated power ratings on site is used as a proxy for capacity and may not reflect accurate charges.

The Energy Independence Bill will also provide Ofgem with new regulatory powers, following a government review which proposes expanding Ofgem duties to facilitate net zero and promote economic growth, alongside the existing duty to consumers.

Government and Ofgem must ensure these essential workstreams, which will resolve over the next two to four years, lead to transparent, fair cost allocations that support, rather than hinder, affordable public charging. Whatever the ultimate design of updates to the network charging regime, they should ensure CPOs are paying network charges that are no higher than they would have been prior to implementation of the Targeted Charging Review. The benefits of reintroducing a usage-based approach to residual cost allocation for EV charging should be considered in detail.

However, the timelines for this work mean interim action on network charges, to support the charging sector to navigate this period of lower utilisation when the impact of these costs is worst, should be explored.

For example, industry-led proposals to reduce residual charges allocated to EV charging are in development and may be submitted to Ofgem for decision shortly.³⁷ These changes could support CPOs to bridge the gap to higher utilisation levels, and possibly lower prices. If these proposals are rejected by Ofgem, government must consider whether similar changes could be introduced, or their costs offset, via alternative routes.

But like all interventions attempting to minimise system costs for CPOs, there are challenges of consumer pass through and cost redistribution. At least a proportion of these costs allocated away from CPOs, if not all, would have to be recovered from other energy consumers or the taxpayer, and this is a key consideration.

A further challenge to any carved-out intervention is the material risk that IDNOs will use clawback mechanisms within their contracts with CPOs to demand repayment of asset adoption payments, because of foregone network charging revenues. This would reduce the savings available for consumer benefit.

While policy levies are different in structure, and have a smaller impact on CPO costs, many of the same considerations apply. Government has taken steps to protect domestic consumers and energy intensive manufacturing industries from some of these costs. Given drivers charging at home pay approximately 1.7p/kWh less on levies than those charging on street, there is a case to look at rebalancing these costs.³⁸ But intervention here would need to be designed to mitigate the pass through risk, and the question of which other consumers pick up the costs remains.

Overall, this review concludes that government and Ofgem must work quickly to address the unintended consequences of the Targeted Charging Review, and implement an updated network charging regime that recognises the critical role that affordable EV

³⁷ <https://www.dcusa.co.uk/group/dcp-420-working-group/> and <https://www.dcusa.co.uk/group/dcp-454-working-group/>

³⁸ Based on CPO responses to request for evidence, May 2026. In addition, the Climate Change Levy tax does not apply to domestic energy supplies, including home charging. The Climate Change Levy rate is currently 0.80p/kWh, and will rise to 0.83p/kWh in April 2027.

charging prices have in enabling an inclusive transition. And when implemented, CPOs must be expected to pass on savings to consumers via lower prices.

While this work is undertaken, government should focus on additional deliverable measures to bring down the cost of public charging, including by providing CPOs with the tools to offset increasing system costs.

Recommendation four: implement a certificate trading scheme for renewable electricity used to charge EVs

Territorial extent: UK-wide

Certificate and credit trading schemes such as the UK's Renewable Transport Fuel Obligation (RTFO) reduce greenhouse gas emissions by requiring conventional fuel suppliers to include a percentage of low carbon fuel in their fuel mix. This is done by creating certificates for eligible low carbon fuels, which are bought by the obligated conventional fuel suppliers. The value of these certificates reflects the extra cost of supplying low carbon fuels compared with conventional fuels. This helps bring more expensive low carbon fuels to market, with the cost spread across all road fuel sales. Similar schemes in the European Union and California have been expanded to include renewable electricity used to charge EVs, creating a revenue stream for CPOs and depot operators that helps offset their costs.

Introducing a market-based certificate scheme for renewable electricity used to charge EVs on the public network in the UK could bring similar benefits. It could provide CPOs with a revenue mechanism in response to short-term cost pressures and low utilisation, although this would require trade-off choices on scheme design and have cost implications for petrol and diesel drivers.

Early analysis suggests that introducing a market-based credit mechanism could reduce CPO costs by around 3.6–10.2p/kWh in today's market (7%–19% and 5%–13% of average current AC and DC tariffs, respectively), with no additional cost to electricity users. However, obligating fuel suppliers to purchase more certificates would create an additional cost for petrol and diesel vehicle drivers as costs are passed through. The relatively small volume of certificates generated by current charging volumes (assuming a grid average carbon approach to determining the level of renewable electricity used) means the impact on fuel prices would be limited to less than 0.4p per litre in 2027.³⁹

As grid electricity gets cleaner and public charging volumes grow, this cost will increase. This could be limited by placing a cap on the number of total certificates available for renewable electricity. For example, a cap to ensure fuel costs increase by a maximum of 1p per litre.

³⁹ Public charging energy demand estimates are converted into certificates using the renewable grid share, an efficiency unit of 4 (<https://www.legislation.gov.uk/eudur/2018/2001/article/27/adopted>), assumed fuel-equivalence factors and certificate prices. The certificates are valued to estimate p/kWh and p/litre and impacts are capped at a fuel price increase of 1p/litre. This calculation should be treated as illustrative. Results depend largely on assumptions.

With a cap mechanism, certificates would be most valuable in the early years, when support is most needed to offset low utilisation.

Some international schemes require revenue raised by CPOs to be used to reduce the cost of charging, or fund network growth. Similar requirements could be explored for any UK scheme.

The review has considered two broad options for how a certificate scheme could be introduced:

- a) Build on the existing RTFO on fuel suppliers, by enabling certificates to be generated from the use of renewable electricity to charge EVs on the public network (and possibly at fleet depots). These certificates would be interchangeable with existing low carbon fuel certificates traded in the RTFO.
- b) Introduce a standalone scheme that obligates the same fuel suppliers, but does not interact with the existing RTFO.

Both delivery mechanisms are likely to reduce consumer prices by creating a revenue stream for the CPOs to help offset their costs. It appears possible to design both to have the same fundamental mechanisms and financial effect. But building on the existing RTFO is likely to require primary legislation to be amended which could be challenging to deliver quickly, and would require careful policy design to avoid distorting the existing RTFO framework.

A standalone scheme could potentially be easier to introduce. It would also avoid direct interaction with the existing RTFO, reducing the risk of distorting the RTFO certificate market or weakening the policy framework for renewable fuels.

The review recommends the UK Government develops a standalone market-based certificate scheme for renewable electricity used to charge EVs on the public network, and possibly at fleet depots, in the UK.

Recommendation five: extend financial support, and provide guidance, for deploying battery energy storage solutions

Territorial extent: UK-wide

Battery energy storage allows CPOs to optimise energy usage and costs, provide a more consistent user experience and offers flexibility benefits for the grid.

Many CPOs operating DC networks are installing battery solutions, particularly where they enable lower capacity grid connections which avoid the highest fixed network charges. However, upfront capital costs are cited as a barrier to widespread deployment.

Government is already supporting CPOs to roll out battery storage on the Strategic Road Network (SRN) in England through the £10 million SRN Innovation Fund. This support could be extended to non-SRN locations, through a grant focused on projects that evidence how cost savings will support cheaper charging. Given the typical connection sizes and location considerations, this support would be targeted predominantly at DC hub-style charging, rather than AC deployments.

Support should be targeted at sites where batteries can clearly reduce required grid connection capacity and exposure to high peak capacity charges, with CPOs required to evidence how battery storage technology will support lower charging prices. Recent developments in battery technology have expanded the range of possible deployment opportunities and battery innovation means this should continue in the future.

Government should also work with DNOs to address inconsistent approaches to permitting battery deployment, which CPOs have identified as a barrier to installing this technology in some areas.

The review recommends the UK Government extends grant support for battery energy storage solutions to non-SRN locations, alongside guidance and targeted support to help CPOs understand how batteries can improve project viability, reduce system costs and lower charging prices.

Enabling actions for a more transparent, efficient charging market

Enabling a more transparent, efficient charging network will help consumers, CPOs and those involved in the charger installation process to make better informed choices, which together should support more competitive pricing. The review has identified three priority action areas.

Improve price transparency and make it easier for consumers to compare charging prices

Territorial extent: UK-wide

EV drivers report unclear pricing, and the challenge of calculating how much a charge will cost. Improved price transparency, both at a single charger and between charging networks, is critical if policy-driven reductions in CPO costs are to be passed through to consumers.

The Public Charge Point Regulations 2023 (PCPR) mandate that CPOs must display charging tariffs in p/kWh. This is commonly done via a smartphone app or web page, rather than physical signs (such as in petrol forecourts).

The PCPR also requires CPOs to share location and pricing data. This data sharing is currently fragmented and unreliable across providers. While live pricing data for public chargers is available to consumers and improving, experiences across apps and providers vary. Many drivers compare charging prices using online Mobility Service Providers (MSPs) such as Zapmap and Octopus Electroverse. MSPs help consumers make an informed choice about charging costs, however some features are paywalled.

The PCPR is being reviewed this year. Revisions being considered include extending pricing transparency requirements to MSPs and clarifying open data requirements to improve CPO compliance.

There is opportunity to go further. For example, the development of a central data platform holding public charge point data could enable third parties to develop non-paywalled, user-

friendly apps that help drivers identify low prices and available chargers. Government's Fuel Finder model provides a blueprint for how this could be done.

This could improve the charging experience for drivers, support higher network utilisation, and increase price and data transparency. It could also reduce the technical complexity and cyber security risks for individual CPOs. However, the cost of serving these data consumers would need to be factored into the costs of running this platform, whether funded by industry or through another mechanism.

The review recommends the UK Government considers developing a central charger data platform, and options to increase pricing transparency, for example requiring CPOs to display the cost of a full charge for the driver, alongside the p/kWh rate.

Increase awareness of chargers around the country by accelerating EV signage installations

Territorial extent: England, with traffic signage regulation devolved to national governments in Scotland, Wales and Northern Ireland

Real-world visibility of charging infrastructure is key to helping existing EV drivers to navigate to chargers, and to encouraging drivers to switch to an EV.

In engagement with consumer groups and the charging sector, it was consistently raised that a lack of directional signage to charging locations means existing infrastructure is less visible than it should be. While digital navigation systems are the principal tool that EV drivers use to navigate to chargers, this should be complemented by physical signage, which provides reassurance and supports safety. Petrol and diesel vehicle drivers are unlikely to use EV-specific apps to check charger availability in their local area or on longer journeys.

The review also heard that signage is costly to install and can involve complex implementation processes. Stakeholders said it can take many months to install a sign on the SRN, and the most expensive signs can sometimes cost more than £100,000.

And while open data is fundamental for charger price awareness, the presence of clear on-site price signage helps drivers to make informed decisions at the point of charging. This includes displaying the pay-as-you-go price clearly at the site, rather than relying solely on apps or information that is only visible once a driver is at the charger.

Progress is being made, with changes in 2025 allowing larger EV charging hubs to be signposted from major A-roads in England. The review also welcomes government's ongoing engagement with Motorway Service Area Operators, CPOs and local authorities to improve the visibility of charging provision on the SRN and local roads across England.

But it is clear that current signage arrangements are too limited to effectively support the EV transition, and the review recommends prioritising further work in this area to reduce costs, simplify compliance requirements, and ultimately accelerate the installation of charger signage. This will bring benefits to both EV and current petrol and diesel drivers, support perception of charger availability and drive charger utilisation.

Improve planning decision-making between DNOs and CPOs

Territorial extent: Great Britain

The process to identify suitable locations for new chargers and connect to the electricity grid is inefficient and costly. NESO is responsible for the development of new Regional Energy Strategic Plans (RESPs) across Great Britain, which offer an opportunity to ensure that local areas get the energy infrastructure they need to meet their decarbonisation and economic growth ambitions.

The review recommends that NESO ensures RESPs properly take account of the future deployment of EV charging, and particularly high-capacity DC charging. CPOs, DNOs and local transport bodies must engage and share relevant data with the appropriate RESP working groups, to enable greater cooperation between themselves and the wider energy planning system.

Conclusions

Within the boundaries of this review, there are no straightforward solutions to the two central challenges it identifies: the inequity that risks excluding around a third of drivers from the EV transition, and the difficulty of relying on private capital to build infrastructure ahead of demand without driving higher public charging prices.

The review concludes that the recommended measures are most effective when taken forward as a coherent package to support a more efficient, affordable and equitable public charging market. Domestic tariff 'porting' offers the best long-term structural response to the equity challenge. If delivered, it would address the core disparity directly, at minimal direct cost to government and at a lower system cost than the alternatives. It should also support EV uptake, improve utilisation across the public network and create conditions for lower charger tariffs.

In the shorter term, targeted financial support could partially mitigate the gap for drivers without off-street parking. In both cases, the ambition should be to bring kerbside charging costs down to domestic charging costs, including an allowance for the cost of buying and operating a home charger.

Broader utilisation challenges faced by CPOs could be addressed through a certificate scheme for renewable electricity used to charge EVs. This would be most valuable in the near- to medium-term, when high fixed costs and lower utilisation have the greatest impact on tariffs, and while the impact on fuel prices remains manageable.

Taken together, these measures could be designed to reduce local public charging costs by around 15–20p/kWh, and reduce public charging costs more generally by up to 10p/kWh.

Battery energy storage also has an important role to play in helping CPOs manage system costs and reduce prices, particularly at higher-powered sites. Government should support deployment through targeted funding and guidance, and DNOs should be encouraged to take a consistent, enabling approach to viable projects. Better transparency and coordination between energy system actors and CPOs will also be essential to reducing the cost and inefficiency of building new capacity.

In the longer term, and particularly if the package above is not delivered, further reductions in public charging prices are likely to depend on reform of electricity network charges and policy levies. Future system cost recovery mechanisms must support, rather than penalise, the policy ambition to build charging infrastructure ahead of need.

Finally, lower prices will not be enough on their own. Government and industry will need to go further to improve price awareness and transparency, simplify consumer decision-making, and increase confidence in charger availability through more prominent physical signage.

Annex A: Terms of Reference

Background

The UK is accelerating towards a zero emission vehicle (ZEV) fleet, with the trajectory set to end the sale of new petrol and diesel cars and vans by 2035. Whilst we expect many drivers to primarily charge their electric vehicle (EV) at home, effective, accessible and affordable public charging infrastructure is critical to support those who will rely on the public charging network.

Good progress has been made to develop this network, with more than 120,000 public chargers installed across the UK. However, the tariffs drivers must pay to charge their vehicles on the network have risen in recent years, with industry analysis estimating that average charging prices have increased by 38% since 2021. (ChargeUK; Delivering Affordable Charging for All, September 2025)

Purpose

At Budget 2025, the UK Government committed to reviewing the cost of public EV charging, reporting in autumn 2026. The review will consider:

- the impact of energy prices
- wider cost contributors
- options that government and industry can take for lowering these costs for consumers

Leadership and governance

The government has appointed Philip New as independent chair for the review, with support provided by the Office for Zero Emission Vehicles (OZEV).

The review will report to ministers in the Department for Transport, the Department for Energy Security and Net Zero and His Majesty's Treasury.

OZEV, a joint unit between the Department for Transport and the Department for Energy Security and Net Zero, is the responsible government sponsor for the review.

The review will be developed in collaboration with Ofgem, given their responsibilities for energy sector regulation in Great Britain.

Where relevant policy is devolved, the review will consider impacts and outcomes with the devolved governments.

Scope

This review will:

1. Examine the costs of charging electric cars and vans on the UK public charge point network, how these costs have changed in recent years, and how they might change in the future without intervention.
2. Consider the costs of charging across the entire public charging network, including lower powered on-street charging, destination charging (for example, in retail car parks) and higher powered en-route charging (for example, at motorway service areas).
3. Consider the costs of charging relative to the costs of fuelling internal combustion engine cars and vans.
4. Consider the extent to which cost savings from policy changes might be passed on to consumers that use the public charging network, including consideration of market competition.
5. Consider the impacts of possible options, and costs, on other energy consumers.
6. Consider the impacts of possible options on the costs for EV fleet operators that charge at private depots.
7. Consider the impacts of greater access to domestic charging for more drivers.
8. Propose options and recommendations for reducing public charging costs. The areas to be considered include, and are not limited to:
 - Regulation
 - government funding routes and prioritisation
 - wider government levers and policies to address costs
 - actions taken by the relevant regulators
 - market-based trading schemes
 - dynamic pricing (time of use tariffs)

Tax costs will be reflected within the report, within points 1 to 3 above. However, the review will not make recommendations on changes to tax policy. This is consistent with other such reviews which avoid pre-empting fiscal events, where decisions on tax can be made in the round, taking into account the wider economic and fiscal context.

Domestic charging costs are out of scope.