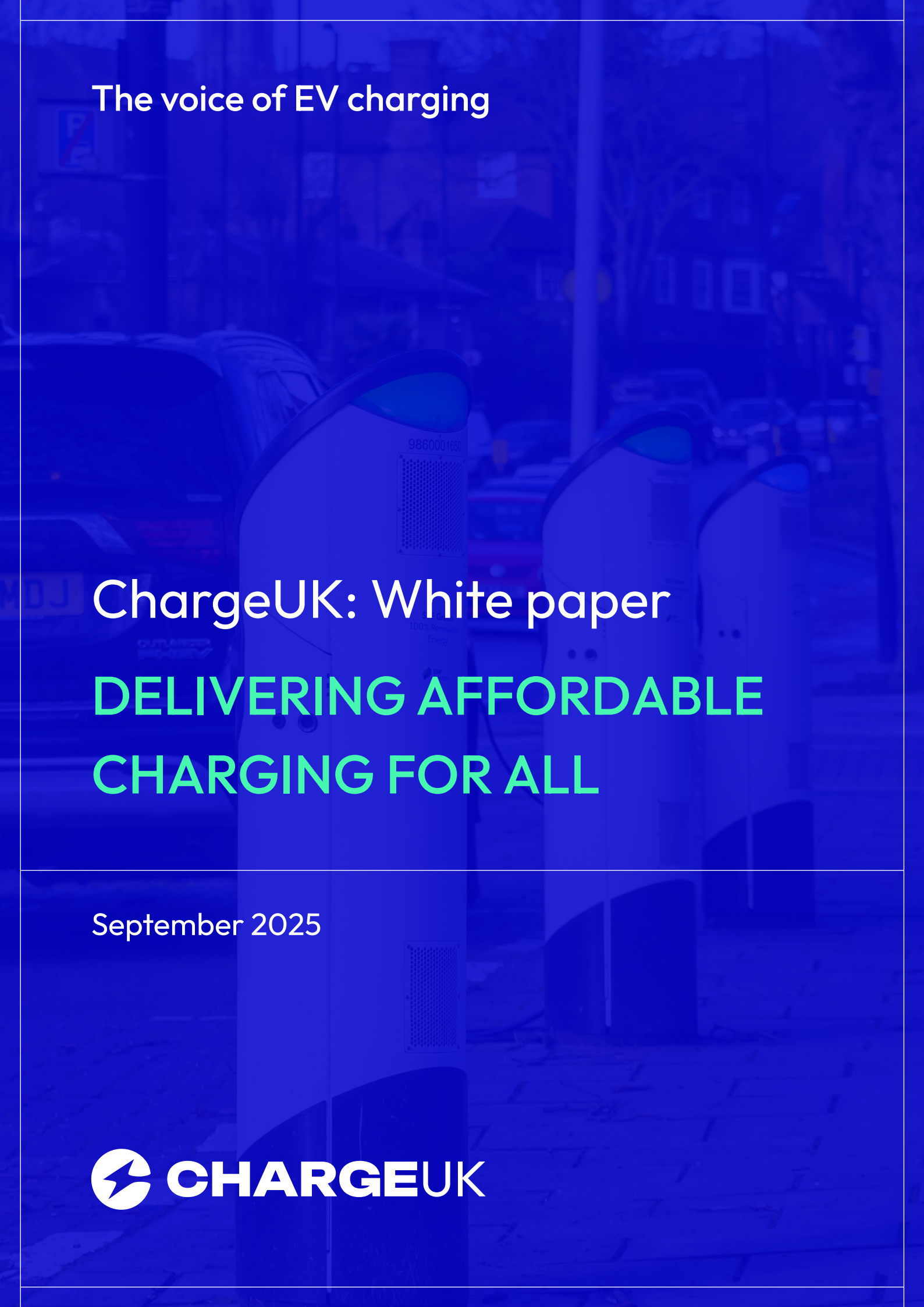
The voice of EV charging



ChargeUK: White paper

DELIVERING AFFORDABLE CHARGING FOR ALL

September 2025

CHARGEUK

Executive summary

The UK has one of the world's most comprehensive EV charging networks. With over 85,000 public charge points at present, and more than a million at homes and workplaces, the charging sector has played a vital role in enabling one in four cars sold today to be fully electric[i].

The future too looks promising, as the sector invests billions to grow the public network by around 30% a year[ii], so that millions more drivers can make the switch.

However, this success story faces a critical challenge. Although most EV drivers can charge cost-effectively, using a blend of home, near-home, destination and en-route options at a variety of price points – average public charging prices have risen by 38% since 2021[iii] .

New analysis by Cornwall Insight reveals that these average price increases have principally been driven by **soaring energy costs, which have increased by as much as 79% since 2021**.

Two key factors sit behind these increased energy costs. The first affects all UK businesses, particularly those that are heavy energy users: **wholesale electricity prices remain 66% above pre-Energy Crisis levels**.

The second is Ofgem's 2023 Targeted Charging Review, which changed how businesses' "network charges" are calculated. This hits Charge Point Operators (CPOs) uniquely hard, with **the standing charge element of their bills rising by as much as 462%**. These charges are now mainly calculated by capacity not usage, meaning that CPOs – who must secure grid connections sized for future demand – are effectively paying electricity costs today for the customers of tomorrow, at a time when utilisation remains immature. CPOs also carry the burden of policy levy costs, including the Climate Change Levy, despite playing a central role in transport decarbonisation

Cornwall Insight's analysis reveals that it is these elevated energy costs, combined with **the Government's continued policy of charging VAT on public charging at 20%** (versus 5% for home charging), that has put pressure on public charging prices.

With affordability a key issue for drivers considering an EV as their next car, ChargeUK members recognise the importance of **all** drivers being able to charge cost-effectively using the mix of charging available to them, including when they are reliant on the public network.

Our members are already doing what they can to offer competitively priced public charging, through dynamic pricing, subscriptions and partnerships, while simultaneously investing heavily to grow the network.

But because the fundamental cost pressures impacting pricing are determined by policy and regulation – and with many sites currently operating with costs up to 60% higher than the driver-facing price – industry innovation alone cannot deliver a scenario where all drivers can charge affordably across the charging mix.

The Government has already recognised that affordability is key to accelerating the transition to EVs and taken firm action by introducing the new Electric Car Grant. To open up electric mobility to the mass market, **we now need Government attention to turn to the affordability of charging**.

ChargeUK is therefore calling on the Government to take **three clear and deliverable steps**:

1. Tackle operators' prohibitively high energy costs

While CPOs would benefit from any reforms that lead to cheaper wholesale electricity, we ask for action on two parts of the energy bill that uniquely impact our sector:

- Following Ofgem's TCR, standing charges now make up 70% of some CPOs' total energy bill, compared to 15% for comparable small businesses. They represent 8-10p/kWh in CPO costs at an average slow/fast site, and 20-30p/kWh at an average rapid/ultra-rapid site.
- Policy levies contribute 6p/kWh to CPOs' electricity costs at all sites, with significant increases expected by 2030.

To provide urgent relief from elevated standing charges, Government should accelerate implementation of DCP420/454 reforms.

To protect CPOs from rising policy levies, Government should extend levy exemptions to the charging sector as it has for other strategically important sectors.

2. Boost the charging business case with the Renewable Transport Fuel Obligation

The Renewable Transport Fuel Obligation (RTFO) is the UK's main policy tool for decarbonising transport, but doesn't include renewable electricity despite it being the principal sustainable "fuel" driving this policy. Its inclusion in equivalent schemes in the EU has created additional revenue for CPOs worth 2.5-8.5p/kWh, which is used by CPOs to manage the challenging economics of building ahead of demand.

To support charge point investment in commercially marginal sites (e.g. rural or regional areas), as well as supporting cost-effective pricing, Government should include EV charging in the RTFO.

3. Eliminate the VAT penalty on public charging

The current discrepancy between the VAT approach applied to public charging (20%) and home charging (5%) adds 6.75p/kWh to prices at slow/fast charging sites and 9.5p/kWh at rapid/ultra-rapid charging sites, unfairly adding costs to drivers who do not have access to home charging.

To ensure the transition to EVs does not leave some drivers behind, Government should reduce VAT on public charging to match the 5% home charging rate.

1 Introduction

Affordability at the heart of a successful EV transition

In April 2025 the Labour Government reaffirmed the UK's commitment to phase out sales of new petrol and diesel cars by 2030, with sales of hybrid vehicles ending in 2035. Additional Government funding announcements in July 2025 to support charging and EVs further underscored the commitment to this transition.

The UK has already made remarkable progress against these targets: one in four cars sold in August 2025 was fully electric[iv], while the public charging network has grown to more than 85,000 charge points[v] and continues to expand by c.30% each year[vi]. The Public Accounts Committee recently reported that the UK is on track to deliver 300,000 public charge points by 2030[vii] - testament to the billions in private investment being deployed by CPOs.

However, EV adoption must continue to increase rapidly in the next five years to achieve the 2030 and 2035 goals, as will the charging network. To be successful, the switch also needs to take place in a way that does not leave people or places behind.

Affordability is key to a successful transition. EVs already offer great value for money: according to an Electric Vehicles UK report from February 2025, 80% of people buying an EV in 2025 will save money compared to an equivalent petrol car, with average savings of £5,850 across the term of ownership[viii]. The recently announced Electric Car Grant provides further help to ensure drivers have access to affordable EV options.

The evolving cost of EV charging

The cost of charging is a key part of the total cost of EV ownership. Today's EV drivers benefit from an ecosystem of charging options, each of which serves distinct needs at different price points, reflecting the underlying costs of deploying and operating them (Figure 1). This blend means that most drivers can charge cost effectively across the range of options available to them[ix].

Charging category	Typical use case	Average price
Home (7kW)	Overnight charging	8p/kWh (off-peak EV tariff)
		26p/kWh (domestic price cap)
Public slow/fast (<50kW)	Near-home	52p/kWh
	Long-dwell destinations	
Public rapid/ultra-rapid (50+ kW)	En-route	76p/kWh

Figure 1: Summary of EV charging costs, Cornwall Insight

At the start of the decade all home and public charging options allowed drivers to charge their EVs more cost effectively than an equivalent petrol car (Figure 2), creating a strong incentive for drivers to switch to an EV[x]. However, this situation has changed in the last four years, with average prices for public charging rising 38% between 2021/22 and 2024/25.

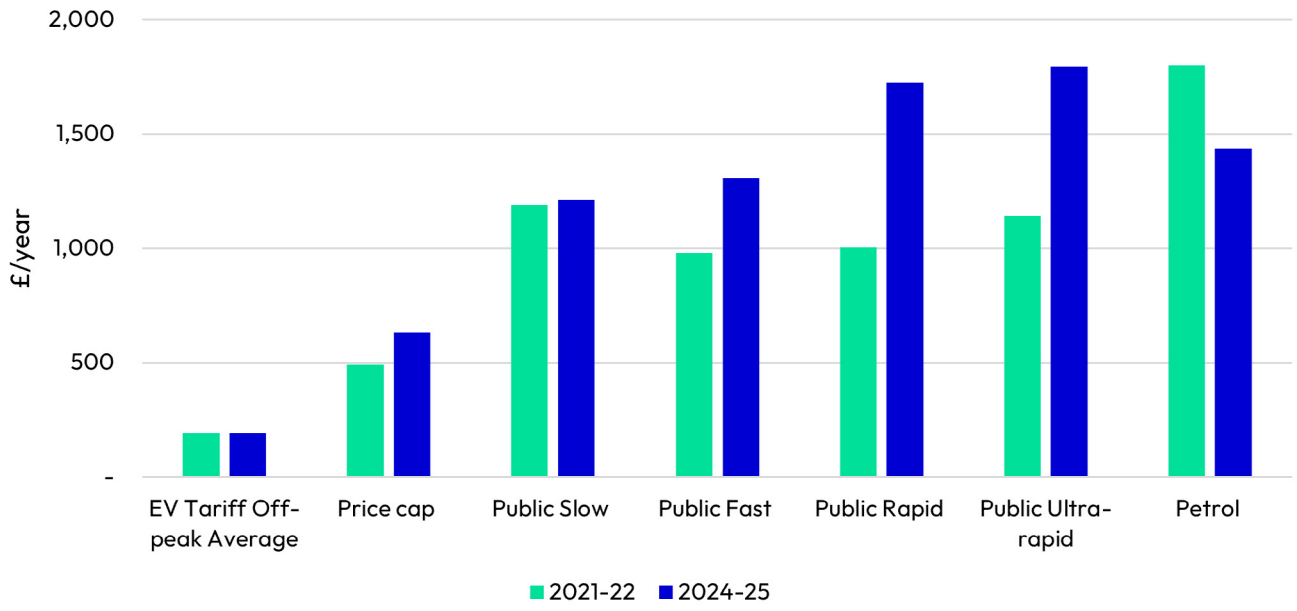


Figure 2: Illustrative costs of EV charging by use case, Cornwall Insight, including using data from DESNZ

Delivering affordable EV charging for all

While the majority of charging currently takes place at home in the UK[xi], most drivers use a blend of home and public charging. Public charging will be increasingly important as the EV transition accelerates, particularly for the one in three[xii] households without off-street parking and the UK's fleets, who are more likely to rely on public networks. The cost of public charging, as part of the wider mix of charging options, is therefore an important factor in the UK's transition to EVs.

Different charging options (home, near-home, destination, en-route) are always likely to be priced differently because of fundamental differences in underlying costs and use cases. However, ChargeUK members recognise the vital importance of drivers being able to charge cost-effectively using the blend of charging solutions available to them, including when they are reliant on the public network. This not only ensures a fair EV transition but is essential to deliver the strong growth in EV adoption needed for charging investment to continue at scale.

Therefore, to understand what happened between 2021/22 and 2024/25 to drive up average public charging prices, and to help identify the steps needed to support affordability, ChargeUK commissioned Cornwall Insight to analyse original data from our members on the cost of operating public charging infrastructure.

Combining Cornwall Insight's findings with member insights and analysis, this paper sets out:

In Part 2: the costs behind the deployment and operation of different types of public charging and how these have changed since 2021/22

In Part 3: the correlation between CPO costs and driver pricing

In Part 4: how the charging industry is innovating to offer drivers cost-effective public charging

In Part 5: the policy steps required to enable all drivers to have access to affordable charging options.

Ultimately this paper sets out how targeted Government intervention on energy costs, VAT, and investment incentives is urgently required to ensure the UK successfully transitions to EVs, leaving no driver behind.

Please see Annex 1 for methodology, disclaimers and important notes.

2 Understanding the costs behind public charging infrastructure

To understand what happened in recent years to drive up public charging prices, ChargeUK commissioned Cornwall Insight to conduct an independent analysis of the real costs that Charge Point Operators (CPOs) face. Their analysis was based on anonymised data from ChargeUK members, covering the full spectrum of public charging types and business models across the UK sector.

Cornwall Insight used our member data to develop two representative models to illustrate cost pressures, without identifying specific companies or approaches:

Slow/fast charging (below 50kW) – typically used for on-street and destination charging

Rapid/ultra-rapid charging (50kW and above) – primarily used for en-route and hub charging

Within each model, costs are split into "wholesale electricity" (costs faced for electricity commodity purchases), "other energy" (fixed or capacity-based charges for using the grid), and "non-energy" (all other costs including land, grid, hardware, operational expenditure).

While there is significant variation in business models within these categories, these archetypes were used to illustrate broad impacts across the sector.

The growing role of energy in CPO costs

Cornwall Insight's analysis of our members' data reveals that energy costs – both wholesale electricity and other energy– are by far the largest element of CPO expenditure, representing roughly two-thirds of all costs(see Figure 3).

The dominant role of energy costs in operators' cost stacks mean they are extremely exposed to changes in the underlying drivers of these costs. Rapid/ultra-rapid CPOs are especially affected by changes to "other energy costs", which include the network charges and policy levies that are captured on the energy bill as standing charges.

Importantly, Cornwall Insight's analysis also shows that these total energy costs have increased significantly in recent years, up 34% on average since 2021, with increases especially acute for rapid/ultra-rapid sites, which have seen an increase of 79%. The following sections explain these increases in more detail and why this has happened.

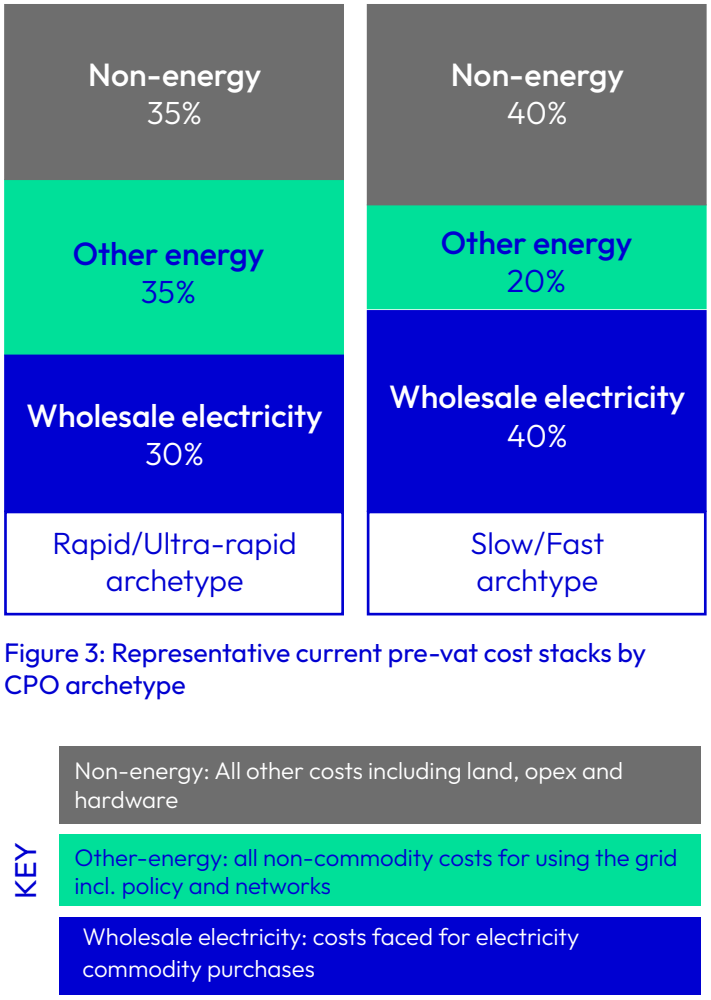


Figure 3: Representative current pre-vat cost stacks by CPO archetype

Wholesale electricity costs – the impact of the energy crisis

Unsurprisingly, wholesale electricity costs represent a significant component for all CPOs. As shown in Figure 4, these costs increased by 450% between 2021 and 2023, primarily due to the war in Ukraine and the subsequent energy crisis.

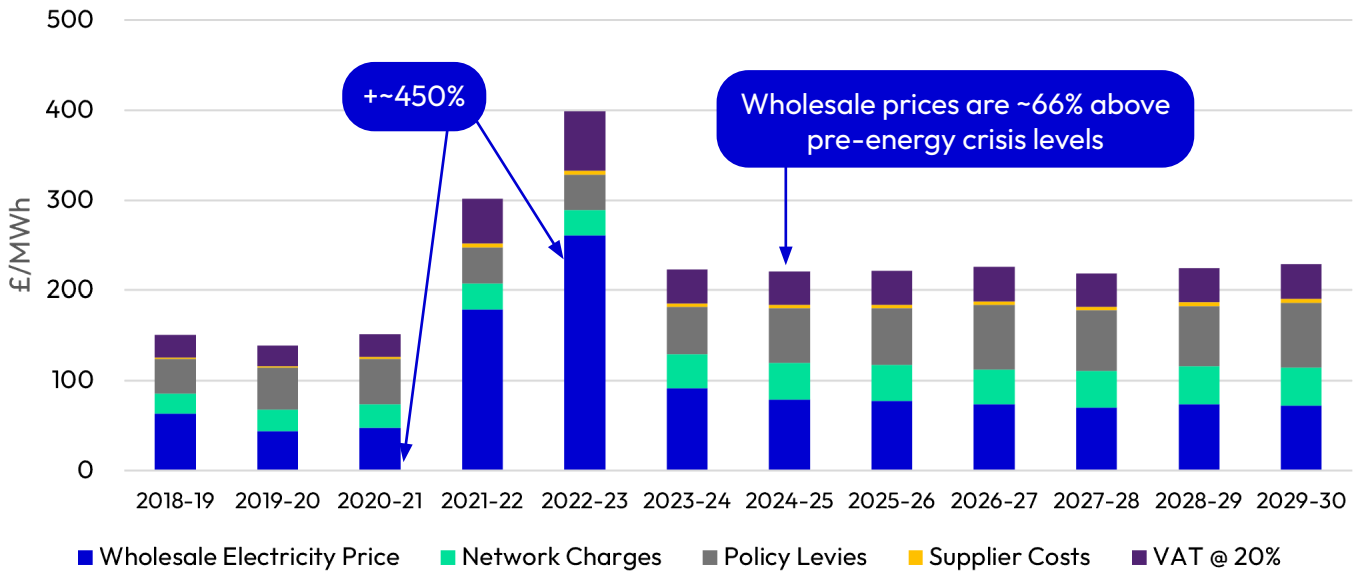


Figure 4: Historic energy costs, archetypal small industrial user, Cornwall Insight

While the Government did provide some business support during this period, this was less extensive and shorter-lived than the Energy Price Guarantee that protected households until end of March 2024. Many CPOs were forced to increase their prices significantly during this period simply to cover these extraordinary wholesale costs.

Although wholesale prices have retreated from these historic peaks, they remain stubbornly high – currently about 66% higher than at the start of the decade. Cornwall Insight forecasts they will stay around 33% higher than historical norms through to at least 2030, meaning that this cost pressure will remain albeit at a level below its 2022-23 peak.

Given these elevated costs look set to persist, ChargeUK shares other industries' concerns about the affordability of energy and its impact on investment, growth and competitiveness. We would welcome any outcomes from the developing reformed national pricing initiative that deliver lower and more predictable electricity costs.

Other energy costs

In addition to wholesale electricity costs, CPOs face a range of other energy costs – principally the network charges for using the grid and the policy levies that fund Government schemes. Cornwall Insight's analysis shows that these "other energy costs" – which are principally reflected in energy bills through the standing charge – have risen by around 150% on average across all CPOs since 2021, and by around 230% for rapid and ultra-rapid sites, creating an acute cost pressure for the sector even as wholesale prices decrease.

Network charges

The single most significant cause of these cost increases is that the way network charges are recovered has changed. Following Ofgem's Targeted Charging Review (TCR), which was implemented in April 2023, a greater proportion of these charges are now calculated based not on sites' actual energy consumption but instead on the maximum capacity available at that site.

This change hit CPOs uniquely hard. CPOs generally secure grid connections sized for future demand rather than the demand they have today. This is because upgrading grid connections after initial deployment is not only extremely expensive, but can also cause major disruption – requiring roadworks, service outages and delays to charging provision.

The move to focusing on a capacity basis when calculating network charges means that although CPOs are doing exactly what the transition needs – building ahead of demand to ensure the EV charging network is ready – they are now being penalised for doing so, facing high fixed costs based on future capacity and not current usage.

As a consequence, network charges are now around 300% higher for rapid and ultra-rapid sites than in 2021/22 and 70% higher for slow and fast sites.

Network charges are principally reflected in customers' bills as the "standing charge". As a result of the network charge increases, standing charges have risen 389% at slow/fast sites compared to 2021/22 and 462% for rapid/ultra-rapid sites, with this portion of the bill now making up approximately 70% of energy total costs, compared to around 15% for comparable small and industrial businesses (as seen in Figure 5). The standing charge share of the bill is lower for slow/fast sites, but still more than twice the level of the small industrial and commercial (I&C) business counterfactual.

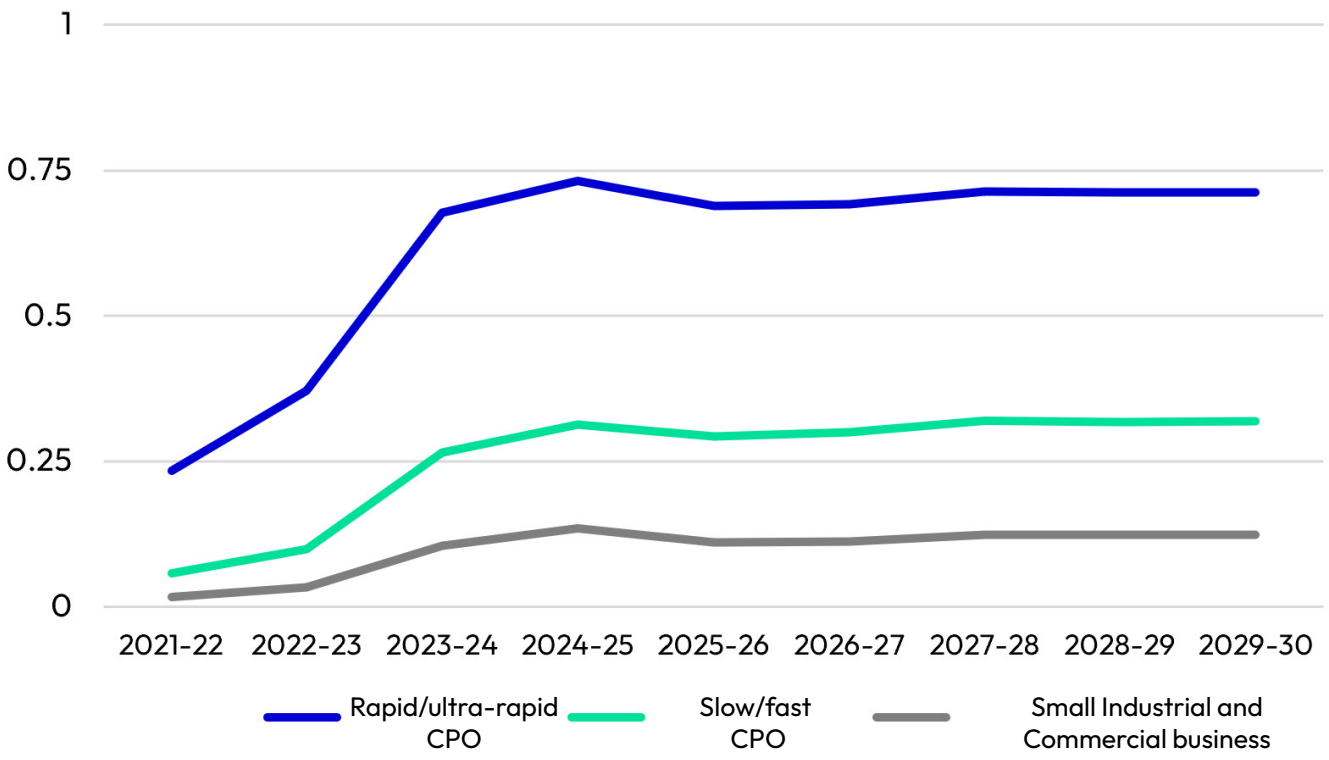


Figure 5: Share of total energy costs made up by standing charge elements, CPO and I&C archetypes, Cornwall Insight, including using ChargeUK member data

At current utilisation levels, we estimate that these fixed charges translate into CPO costs of 20-30p/kWh for a typical rapid/ultra-rapid site and 8-10p/kWh for a typical slow/fast site – a striking cost burden that is almost entirely unrelated to the amount of electricity consumed.

The post-TCR approach to cost recovery therefore makes utilisation the critical factor in determining whether sites can recover their costs affordably. While utilisation will inevitably grow over the next decade, continued EV charging network expansion means that as long as network charges are calculated this way, this cost-recovery challenge will persist – Cornwall Insight's analysis forecasts that standing charges will stay high through to 2030 and beyond.

Policy levies

CPOs also face a heavy and growing burden from Government policy levies, which are applied to every unit of electricity consumed. These levies currently add approximately 6p/kWh to CPOs' bills, with additional levies set to increase this by more than 10% or more by 2030. While most energy consumers are exposed to these policy levies, there are two aspects of the levy approach that appear inconsistent with the charging sector's role in transport decarbonisation.

Firstly, while some sectors do receive exemptions from certain levies through the British Industry Supercharger scheme – and more will follow under the Government's new Industrial Competitiveness Scheme – CPOs receive no such relief. This support is currently restricted to manufacturers with electricity-intensive processes, meaning the EV charging sector is not in scope. In fact, CPOs must instead pay the EII levy to help fund the costs of the Scheme, despite being heavily exposed to high electricity costs themselves.

Secondly, CPOs are also subject to the Climate Change Levy – a levy designed to encourage businesses to reduce energy consumption and carbon emissions. While some sectors receive a discount if they meet efficiency targets, CPOs pay the full CCL on electricity they use for charging EVs, despite their significant contribution to transport decarbonisation.

Non-energy costs: the scale of investment required

Beyond energy costs, operators of public charging infrastructure face substantial "non-energy costs" – the other costs of investing in and operating a charging network. These represent 35-40% of total costs on average across slow/fast and rapid/ultra-rapid sites and have also been rising above inflation over the last five years, compounding increasing energy costs.

To convey a sense of the scale of investment required, ChargeUK members provided broad cost estimates to the ChargeUK team, which were then compiled and anonymised. Across the development lifecycle of a charging site, the investment involved can stretch into the millions of pounds.

It should be noted that within the broad cost ranges indicated below, actual costs vary substantially between charging types, in particular between slow/fast and rapid/ultra-rapid deployments.

Planning and development

- Pre-construction: CPOs must navigate extensive surveys and assessments which can cost £50,000-£120,000 for larger rapid/ultra-rapid hubs.
- Section 50 licensing and Traffic Management Orders can cost £250,000 per deployment.

Grid and infrastructure

- Combined grid connection: £30,000-£500,000 per site for rapid/ultra-rapid
- Non-contestable grid works: £2,000-£5,000 per site
- Primary grid connection: £40,000-£300,000 depending on requirements and location
- Grid upgrades: can sometimes exceed £1 million
- Electrical infrastructure: £120,000-£160,000 per site for substations and equipment

Equipment and installation

- Charging units: £18,000-£80,000 per unit depending on power rating and specification. Per-unit installation: £10,000-£120,000 per charging unit depending on site complexity.
- PAS 1899 accessibility standards, while improving inclusivity, can add £50,000+ through extended bay designs requiring additional excavation and retaining walls.

Ongoing operations

- Warranty and direct maintenance; 24/7 customer support; back-office expenses; maintenance and monitoring; service fees for payment systems; insurance and security; regulatory compliance.
- CPOs often lease land from landlords or Local Authorities, with rents costing £1,000s per bay annually.

This scale of investment, combined with the energy cost pressures outlined above, explains why public charging requires a different pricing model from home charging, which is subject to a different underlying infrastructure and energy costs and a different regulatory and tax regime. CPOs must recover both substantial upfront infrastructure costs and ongoing elevated energy costs through driver pricing, while building ahead of demand to ensure the network is ready for, and actively supporting, the 2030 transition.

3 The link between public CPO costs and pricing

Having analysed the energy costs that sit behind public charging and how they have increased since the start of the decade, Cornwall Insight looked at how driver prices have changed during the same period.

Clear correlation between costs and prices

As shown in Figure 6, driver prices have increased since 2021 quite simply because CPOs' underlying costs have increased. Between 2021/22 and 2024/25, energy costs increased on average by 34% and driver prices increased by 38%.

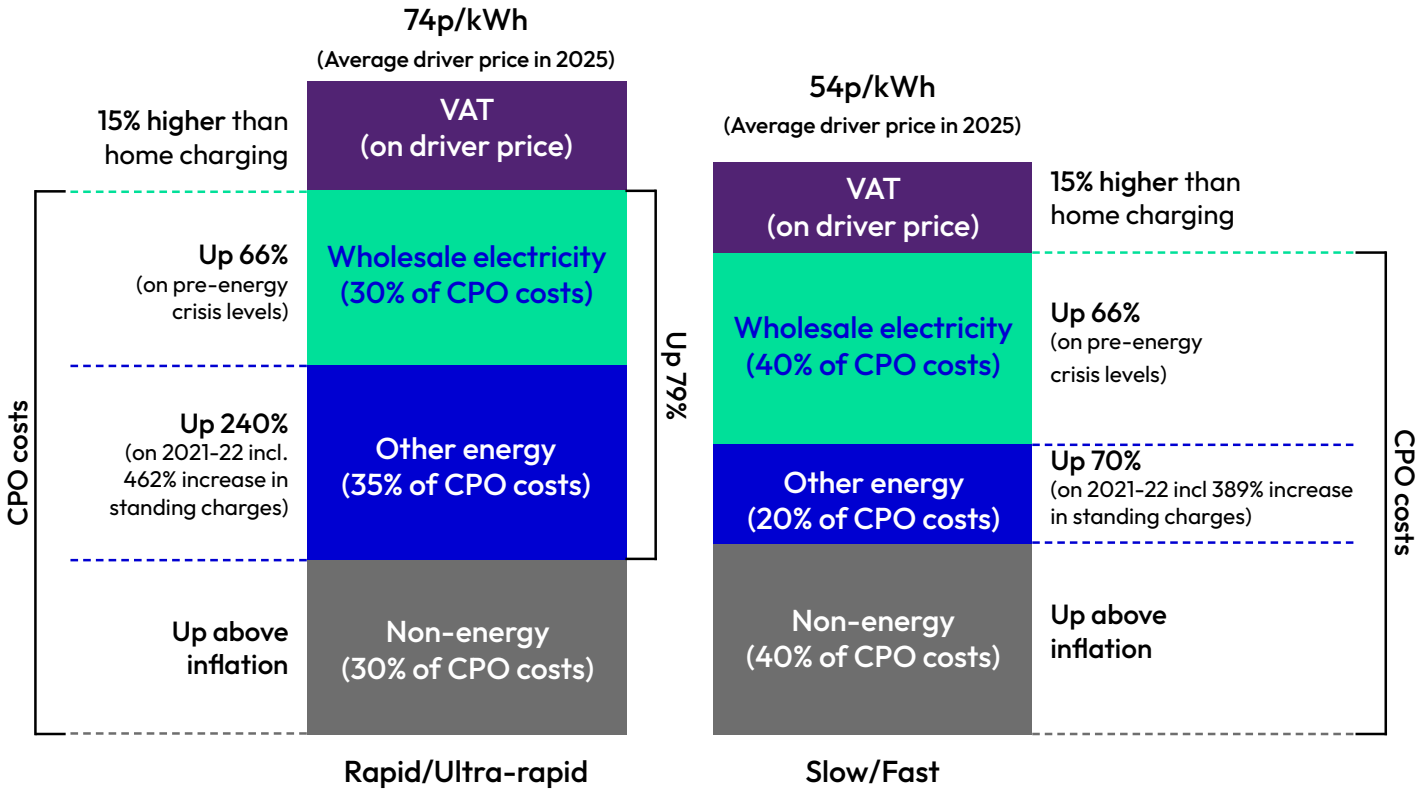


Figure 6: Significant increases in CPOs' costs since the start of the decade have pushed up average public charging prices by 38%, Cornwall Insight

The correlation between costs and pricing is particularly striking for rapid and ultra-rapid operators, because "other energy costs" make up a larger share of their total costs, meaning they have been more exposed to the increase in standing charges following TCR.

This is clearly shown in Figure 7 (on page 13), which reveals that average driver pricing for rapid and ultra-rapid charging has risen very sharply in line with the rise in wholesale energy costs at the time of the energy crisis in 2021/22 and then the introduction of the TCR in 2023, which led to the surge in standing charges.

By comparison the Small I&C (similar sized businesses to CPOs) counterfactual energy costs rise initially during the energy crisis, but then fall – this is because unlike CPOs other small businesses have not seen their standing charges rise following the TCR. Therefore, while other businesses' total energy costs have fallen after the peak of the energy crisis, CPOs' costs have remained high.

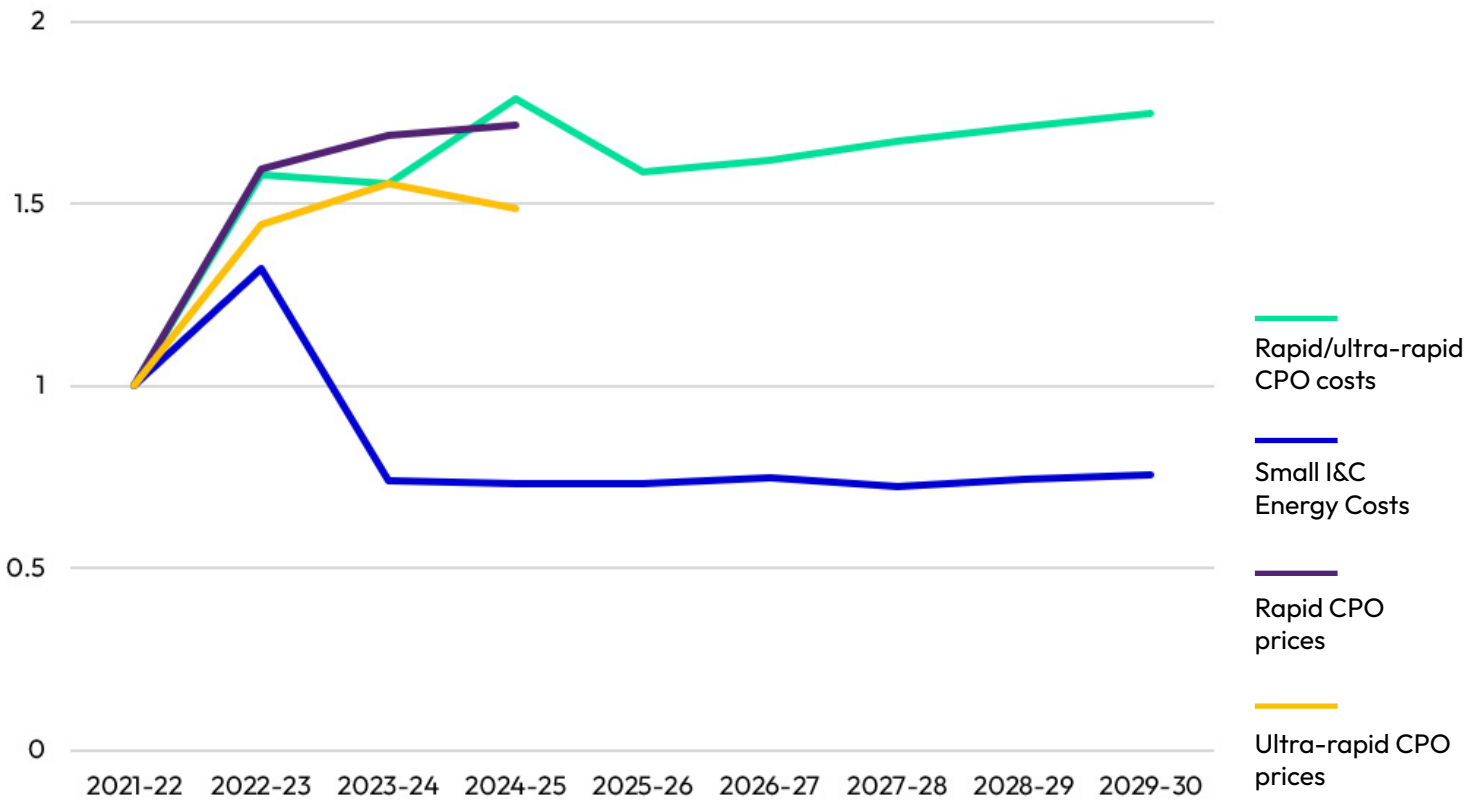


Figure 7: Change in driver prices and energy costs (historic and forecast) for rapid/ultra-rapid CPOs and Small I&C archetypes, Cornwall Insight

As seen in Figure 7, the close tracking between costs and consumer pricing suggests that CPOs have had limited ability to absorb these external cost increases and Cornwall Insight's analysis of CPO cost stacks confirms this. The data shows that for some sites or portfolios, CPO costs can be up to 60% higher than driver-facing prices: these sites are loss-making on a p/kWh basis. Where a margin can be made, even at the most utilised sites a maximum uplift of only 10% is seen when comparing driver prices against CPO costs at more utilised sites.

Operators are already managing challenging economics at parts of their network, particularly at newer sites or those in areas with lower EV adoption at present. The sector's ability to cross-subsidise between sites to maintain network coverage whilst managing these cost pressures appears increasingly constrained. While CPOs continue to seek commercial solutions to manage costs – as detailed in the following section – the structural nature of these cost increases means that pricing relief for drivers will require addressing underlying costs.

Additional impact of VAT approach

The impact on drivers of the increase in CPOs' underlying costs is compounded by the Government's "pavement tax", which means that VAT is charged at 20% for public charging as opposed to 5% for domestic energy via home charging.

This additional 15% of tax equates to approximately 9.5p/kWh of added cost to the driver on public rapid/ultra-rapid charging (where the average price is 76p/kWh) and 6.75p/kWh in additional costs on slow/fast charging (where the average price is 52p/kWh).

Zapmap has undertaken research indicating that reducing VAT on public charging to 5% in line with home charging would save EV drivers without access to home charging £145 a year[xiii]. Looking again at the role of VAT, in addition to understanding the role of regulation in impacting prices, is therefore vital part of any attempt to improve affordability of charging.

4 Industry innovations

ChargeUK's members are fully committed to ensuring all drivers have access to affordable charging using the blend of options available to them. Our members' networks will only thrive if drivers use them regularly and affordably, and we recognise that this is fundamental to helping drivers to switch to driving an electric.

As set out earlier in this paper, increases in average public charging prices are the result of structural factors outside of operators' control: the impact of a higher VAT rate on public charging, the persistently high wholesale energy costs, the policy levy burden and the fact that network charges are calculated according to future capacity rather than current usage. Combined with the very significant capital and operational investment required to deploy and run public charging networks, these factors limit how far charging tariffs can be reduced.

Within those constraints, however, ChargeUK members are actively developing offers that give drivers the opportunity to access lower cost charging. Many of these offers work precisely because they find ways to minimise or offset the structural cost pressures that we have set out.

Dynamic and time-of-use pricing

Like other energy consumers, the cost of electricity for CPOs fluctuates in broadly predictable patterns depending on the time of day. Wholesale prices tend to fall overnight when demand is low and renewable supply is high, and certain network charges are significantly cheaper outside the early evening peak. Charging during these times reduces two of the largest elements in an operator's cost base, creating scope for CPOs to pass on savings.

Many ChargeUK members have built propositions around these patterns. On-street charging operators such as char.gy, Connected Kerb and Ubitricity offer significantly cheaper charging overnight, helping residents without driveways to cut their costs. Several rapid and ultra-rapid operators, including Be.EV, Mer and Osprey Charging have similar propositions, offering lower rates outside the peak evening period.

In some cases, operators also offer dynamic discounts that respond to exceptional market conditions. For example, "plunge pricing" events are triggered by surges in renewable supply, which lead to sharp drops in the wholesale electricity price. Octopus Electroverse partners with a range of ChargeUK CPOs to offer deep, time-limited price cuts during these periods.

Research by the Centre for Net Zero shows that these discounts are highly attractive to drivers: they found that a 15% off-peak saving increased usage by 30%, and a 40% discount more than doubled it, with drivers without home charging the most responsive[xiv]. These offers also work for operators because the underlying wholesale and network costs are lower at these times, reinforcing the point made earlier in this paper that tackling these cost drivers at source could unlock price cuts for drivers.

Subscriptions and memberships

High fixed costs – particularly standing charges on large-capacity connections built ahead of demand – comprise a significant part of operators' cost stacks. Subscriptions help to recover some of these costs through a predictable monthly fee, enabling operators to offer lower per-unit rates for regular users.

Examples include subscriptions offered by Believ, bp pulse, ESB Energy, Fastned, IONITY and Source EV, all of whom offer drivers a discount of 20-30% in exchange for a fixed monthly fee. Some members have also experimented with seasonal subscriptions, including Allego's "Summer Pass" which offers 30% off rapid/ultra-rapid charging during the holiday season. Some of these plans also offer discounts on operators' European networks helping to bring down the cost of travelling with an EV.

For drivers who use the public charging network as part of their work – for example, through taxi, delivery or corporate fleets – dedicated fleet cards and charging subscriptions can provide access to preferential tariffs, simplified billing and consolidated reporting. These arrangements can deliver substantial savings for high-utilisation vehicles, while offering CPOs predictable sources of utilisation.

Loyalty schemes and retail partnerships

In addition to lowering the headline tariff, some CPOs use loyalty rewards or commercial partnerships to reduce the effective cost of charging. These include retail-linked rewards like Tesco's partnership with Pod, which enables drivers to collect Clubcard points with every charging session, and traditional operator-run loyalty schemes like bp pulse rewards, Osprey Hatch Card, Sainsbury's Smart Charge/Nectar or Shell Go+, which offer points, credits, or discounts for regular usage.

While the mechanics vary, these schemes provide helpful additional value to drivers over time, even where the benefit is modest on a per-session basis.

Targeted tariffs

Finally, some CPOs also offer preferential rates to specific groups who rely heavily on public charging or have specific charging needs. These include, for example, Be.EV's discounted rapid charging for licensed taxi drivers in Greater Manchester, bp pulse's reduced rates for Uber drivers, and Source London's reduced tariffs for local residents.

By showing that meaningful savings are possible when the underlying cost drivers change – even temporarily or in limited circumstances – these innovations give a clear indication of the potential benefits that could be delivered if Government intervention tackled key issues at source. They also demonstrate the efforts that operators are making on behalf of drivers, even in challenging market conditions.

5 Policy solutions for affordable charging

The innovations detailed in Part 4 demonstrate the industry's commitment to affordability, but their extent and impact is fundamentally constrained by structural cost challenges highlighted in Part 2. With these costs outside CPOs' control, addressing them requires targeted Government and Ofgem intervention.

The challenge

The unique challenge facing CPOs is the need to build capital-intensive infrastructure ahead of demand, while covering costs based on today's utilisation. Their forward investment – worth £6 billion up to 2030 – is essential for meeting the UK's Net Zero targets, but this challenge creates immediate pressures: sites must carry the full burden of energy and infrastructure costs years before they reach the utilisation levels needed to recover them.

As we have set out elsewhere in this paper, these costs have risen dramatically just as the sector needs to accelerate deployment. This challenge is significant in and of itself. However, as we have argued, policy and regulatory decisions have exacerbated this challenge, with an inevitable and unavoidable impact on driver pricing, putting the success of the EV transition at risk.

Priority interventions

In addition to continued policy focus on growing the number of EVs on the UK roads, and therefore charge point utilisation, ChargeUK has identified three areas of Government intervention that would materially address or compensate for the factors that have pushed up driver prices.

These are all interventions that Government and Ofgem have the tools and the opportunity to carry out.

1. Tackle prohibitively high energy costs

As we have set out above, rising network charges following Ofgem's Targeted Charging Review and policy levies have resulted in an average 150% increase in other (non-wholesale) energy costs for CPOs since 2021, which have lead to an increase of up to 462% in the standing charge element of CPOs' energy bills. It is essential that Government now intervenes to ensure that these increases are addressed.

Grid operators and Ofgem are already considering targeted standing charge relief for EV charging sites through proposed modifications to DCUSA – the rulebook which sets out how charges are calculated – through the DCP420/454 reforms process. However, these changes are far from guaranteed and could take many years to implement (noting that the process has already taken two years), meaning that any positive impact on driver pricing could be too late for the 2030 phase out.

Despite playing a central role in the UK meeting its transport decarbonisations goals, CPOs also face the full burden of policy levies, including the Climate Change Levy, while other strategically important sectors receive relief through the British Industry Supercharger Scheme, despite CPOs playing a vital role in the UK meeting its transport decarbonisation goals.

Required action:

- Accelerate standing charge reforms proposed in modifications to the DCUSA rulebook to address cost increases following the TCR, ensuring that relief is delivered by April 2026.
- Extend levy exemptions to the charging sector, parallel to the British Industry Supercharger and Industrial Competitiveness schemes, recognising its long-term strategic importance.

Impact:

- Following increases in CPOs' "other energy costs", standing charges now account for 20-30p/kWh at an average rapid and ultra-rapid site and 8-10p/kWh at an average slow/fast site at typical utilisation levels.
- CPOs are subject to policy levies worth £6p/kWh and are set to rise by at least 10% by 2030.

2. Boost the public charging business case

The Renewable Transport Fuel Obligation (RTFO) is the UK's main policy tool for decarbonising the transport sector. Similar to the ZEV mandate, the RTFO sets annual targets for the supply of renewable fuels. Each unit of fuel sold earns a tradeable credit, with the strongest performers able to generate additional revenue by selling spare credits to others. The RTFO acts as a market-based incentive to increase the supply of renewable fuels at no cost to the Treasury.

However, the RTFO excludes renewable electricity supplied to EVs via charging. This is despite electricity's central role in transport decarbonisation, and the successful inclusion of EV charging in equivalent schemes in the Netherlands, Germany, France, California, Washington and Oregon, and with implementation now underway across the whole of the EU.

Extending the UK scheme would create a small but impactful additional revenue stream for CPOs, helping to boost the business case for accelerated deployment, increased investment and potentially reductions in consumer pricing.

The Department for Transport consulted on this proposal earlier in 2025 but recently declined to commit to progressing this as a priority, despite the positive impact it would have on the transition. ChargeUK regards this as a missed opportunity for three reasons. First, inclusion of renewable electricity in the scheme would improve the underlying business case for CPOs at a time when – as demonstrated above – key costs are rising and out of CPOs' control. Secondly, the lack of renewable electricity's inclusion in RTFO puts the UK at a competitive disadvantage to its European neighbours, where this valuable revenue stream improves the attractiveness of those locations to inward – and mobile – investors. Finally, and in the context of this report, this additional revenue stream would give CPOs the option to reflect on their own pricing strategies so that drivers can charge affordably.

Required action:

- Swiftly follow on from the most recent consultation, to extend the RTFO scheme to include renewable electricity supplied to EVs, following proven European models.

Impact:

- Equivalent schemes in the EU offer credits worth 2.5p-8.5p/kWh, depending on the implementation[xv]. EU-based CPOs have used this revenue either to expand infrastructure deployment, particularly in marginally viable sites, such as in rural, regional or economically deprived areas and/or keep consumer prices competitive.
- The German scheme also offers a cash bonus directly to EV drivers that is currently worth €100 per year, with over 1 million EV drivers receiving this bonus in 2024.

3. Eliminate the VAT penalty on public charging

The current VAT treatment – 20% on public charging versus 5% for home charging – adds approximately 9.5p/kWh to drivers' public rapid charging costs and 6.75p/kWh to slow/fast charging costs. While recognising constraints on the public purse, this disparity raises questions about fairness in the transition, particularly for those unable to access home charging, and plays a material role in explaining why public charging prices, including slow/fast options that are used in near-home scenarios, are usually more expensive than home charging.

Required action:

- Reduce VAT on public charging to 5%, in line with home charging.

Impact:

- Research indicates that equalising VAT to 5% would save EV drivers without access to home charging £145 a year[xvi].
- Half of non-EV drivers say they would switch to an EV sooner if this were the case[xvii].

6 Conclusion

The transition to Electric Vehicles in the UK is well underway: we have a clear Government commitment to end sales of petrol and diesel cars by 2030 and hybrids by 2035, and both EV sales and the charging network are growing at pace.

But realising these goals requires growth not just to continue but to accelerate, with affordability a key factor in determining whether millions of potential EV drivers are able to switch.

While most EV drivers can already charge affordably, using a blend of home and public charging options at different price points, average public charging prices have risen by 38% since 2021/22. This is an important factor in many drivers' decision to switch, particularly those who cannot charge at home.

Government has already recognised the importance of the affordability of EVs themselves and has taken firm action through the new Electric Car Grant. We now need Government's attention to turn to the underlying factors impacting the cost of public charging.

ChargeUK is committed to ensuring that all drivers can charge affordably across the range of charging options available to them. We have also demonstrated that the charging sector itself is innovating to offer affordable charging options, while simultaneously investing billions in expanding the network before utilisation levels have matured.

But CPOs have been hit by a dramatic increase in energy costs in the last four years, which combined with a higher rate of VAT and significant underlying deployment and operational costs, explains today's public charging prices.

Both energy costs and VAT are factors that sit outside CPOs' control. Therefore, if the Government wishes to ensure that the cost of charging does not become a determining factor in whether millions of drivers switch to EVs, it will need to take action – to reduce standing charges, remove policy levies, equalise VAT and introduce EV charging to the RTFO.

Annex 1:
Methodology, disclaimers and important notes

- Although many credible organisations monitor petrol, diesel and charging prices, Cornwall Insight analysis of driver prices and CPO member costs are used throughout to ensure consistency.
- Average driver prices for 2024/25 are used throughout, drawing on Cornwall Insight analysis of pay-as-you-go pricing from CPO websites and ZapMap. Within each charging category actual prices will vary, with CPOs often offering lower than average tariffs.
- The price a driver pays depends on how payment is made – whether contactless, through the CPO's app, or a third-party roaming provider – with many CPOs offering ways to access cheaper tariffs, e.g. subscriptions and plunge pricing.
- In many cases driver pricing is determined not by the CPO but by the landlord, and in particular the Local Authority.
- Individual companies determine their own pricing in line with their commercial strategies and operating constraints. ChargeUK does not have insight into individual pricing strategies and members do not discuss pricing or pricing strategies.
- ChargeUK cannot make commitments on behalf of members about specific pricing approaches in light of any future policy changes.
- Discussion of cost bases are illustrative – while they draw on ChargeUK member data they do not represent any actual businesses.
- Although workplace charging plays an important role in the charging mix, we have not analysed prices or costs in this paper.

Annex 2: Key statistics

EVs and charging:

- As of September 2025, there are 85,000 public charge points, with more than a million charge points at homes and workplaces. (Zapmap)
- The public network is growing at around 25-30% a year (Zapmap).
- One in four cars sold in August was fully electric (BEV). (SMMT)
- Average prices for public charging rose 38% between 2021/22 and 2024/25. (Cornwall Insight)
- 80% of people buying an EV in 2025 will save money compared to an equivalent petrol car, with average savings of £5,850 across the term of ownership. (Electric Vehicles UK)

CPO costs (all Cornwall Insight):

- Charge Point Operators' (CPOs') total energy costs (wholesale and other energy) across slow/fast and rapid/ultra-rapid sites have risen by 34% since 2021/22 on average. Total energy costs have risen 79% at rapid/ultra-rapid sites.
- Wholesale electricity prices remain 66% above pre-Energy Crisis levels.
- Other energy (non-wholesale) costs have risen by around 150% on average across all CPOs since 2021/22, and by around 230% for rapid/ultra-rapid sites.
- Network charges are around 300% higher for rapid/ultra-rapid sites than in 2021/22 and 70% higher for slow/fast sites.
- Standing charges have risen 389% at slow/fast sites compared to 2021/22 and 462% at rapid/ultra-rapid sites.
- Standing charges now make up approximately 70% of energy total costs for rapid/ultra sites, compared to around 15% for other small businesses customers.
- The standing charge share of the bill is lower for slow/fast sites than for rapid/ultra-rapid sites, but still more than twice the level of other small businesses customers.
- Policy levies contribute 6p/kWh to CPOs' electricity costs at all sites, with significant increases expected by 2030.

Other:

- Today, CPO costs can be up to 60% higher than driver-facing prices at some sites. Where a margin can be made, even at the most utilised sites a maximum uplift of only 10% is seen when comparing driver prices against CPO costs at more utilised sites. (Cornwall Insight)
- RTFO: including renewable electricity in equivalent schemes in the EU has created additional revenue for CPOs worth 2.5-8.5p/kWh. (ChargeUK)
- The differential in VAT approaches at public (20%) and home (5%) charging, equates to 9.5p/kWh of additional cost to the driver on public rapid/ultra-rapid charging (where the average price is 76p/kWh) and 6.75p/kWh in additional costs on slow/fast charging (where the average price is 52p/kWh).
- Lowering VAT at public charging sites to 5% in line with home charging could save EV drivers without access to home charging £145 a year. (Zapmap)

Endnotes

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[xv] ChargeUp Europe, RED III Implementation Guide, June 2024, https://www.chargeupeurope.eu/positions/red-iii

[xvi] Zapmap, "EV charging VAT analysis," Zapmap.com, July 2025, https://www.zap-map.com/ev-stats/ev-charging-vat

[xvii] GRIDSERVE, "Half of non-EV drivers would go electric sooner if public charging had the same 5% VAT as home charging" (press release), June 12, 2025, https://www.gridserve.com/pressroom/half-of-non-ev-drivers-would-go-electric-sooner-if-public-charging-had-the-same-5-vat-as-home-charging/

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