

Coventry Electric Vehicle Charging Infrastructure Strategy

2025 - 2035

Executive summary

The Coventry Electric Vehicle Charging Infrastructure Strategy sets out how the city of Coventry will maintain its position at the vanguard of the electric vehicle revolution, enabling our residents to make the change more easily to electric vehicles.

This strategy focuses on encouraging the transition to electric cars, taxis, and vans by facilitating and leading on the installation of electric vehicle chargepoints, which removes barriers to electric vehicle take-up. This strategy covers a 10 year period from 2025 to 2035, with the actions initially focused on the first 5 years up to 2030. It will be updated on an annual basis.

There are many national, regional, and local policies and strategies that have a focus on encouraging the switch to electric vehicles, improving air quality and further decarbonising transport. Key national policies include 'Decarbonising Transport: Setting the Challenge' and the 'UK Electric Vehicle Infrastructure Strategy', which mandated the production of an Electric Vehicle Charging Infrastructure Strategy by all Local Authorities.

There are currently over 150,000 cars and nearly 14,000 light commercial vehicles (LCVs) located in Coventry, with 4.42% of these being battery electric or plug-in electric vehicles. This is a higher percentage than the West Midlands Combined Authority area but is lower than the overall UK figure. As the number of petrol and diesel vehicles decrease, pollutant emissions will also decrease, which will have a positive impact on public health in Coventry.

As of July 2024, Coventry has 2,084 public chargepoints which is the highest in the UK outside of London. Coventry City Council will continue with the rollout of public electric vehicle chargepoints in order to facilitate the transition from petrol and diesel to electric vehicles.

Forecasts produced by Cenex have identified that by 2030, 24% of cars and LCVs in Coventry will be battery electric and plug-in hybrid electric. This figure rises to 49% in 2035 and 73% in 2040. An increase in the network of public electric vehicle chargepoints is required to accommodate the increase in demand, and forecasts have identified that a total of 2,319 chargepoints will be required by 2035, which is less than 250 more than the current number in Coventry. Therefore, Coventry City Council will meet this target nearly 8-10 years before the required date.

The Council will work towards this target in partnership with our Strategic Energy Partner, E.ON, along with our contracted chargepoint operators to install the required amount of chargepoints. This will be progressed as part of on-street residential charging installations, local residential charging hubs and supercharging hubs.

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Abbreviations and definitions

Active travel – travelling in an active way, such as cycling, walking and wheeling

BEV – Battery Electric Vehicle

CCC – Coventry City Council

CO₂ – Carbon dioxide

DEFRA – Department for Environment, Food and Rural Affairs

DfT – Department for Transport

EAI – Early Adopter Index

EV – Electric Vehicle

EVI – Electric Vehicle Infrastructure

HGV – Heavy Goods Vehicle

ICE – Internal Combustion Engine

kW - kilowatt

LCV – Light Commercial Vehicle

NO_x – Nitrogen Oxides

OZEV – Office for Zero Emission Vehicles

PM – Particulate Matter, with PM_{2.5} having a diameter of 2.5 microns or less

RCI – Residential Charging Index

SMMT – Society of Motor Manufacturers and Traders

TfWM – Transport for West Midlands

ULEV – Ultra Low Emission Vehicle

UK – United Kingdom

Vehicle parc – all registered vehicles within a defined geographical region

VLR – Very Light Rail

WMCA – West Midlands Combined Authority

ZEV – Zero Emission Vehicle

1. Introduction

1.1 Background

Once in a generation, there is a revolution in personal mobility, changing how people travel and resulting in major societal and economic changes affecting how people travel and people's lives for the better. Coventry has a history of being innovative and revolutionary in its uptake of new technology, becoming a test bed for addressing a number of fascinating transport challenges.

One such revolution, the mass-produced bicycle, started out here in Coventry, and now the city has the opportunity to be at the forefront of the next revolution – the electric vehicle (EV). This strategy sets out how the city of Coventry will build on previous success and be at the vanguard of the EV revolution, becoming a centre of excellence for zero-emission at tailpipe vehicle technology and enabling our residents to make the change more easily to EVs.

The opportunity exists to truly decarbonise Coventry's transport network and this strategy sets out how the Council will work with manufacturers, suppliers, transport companies and network managers to achieve the following truly innovative vision:

'To contribute towards a cleaner, greener future for Coventry by decarbonising the transport network, developing innovative zero-emission transport systems, and by providing the right infrastructure that will enable our residents and businesses to invest in electric and zero-emission vehicles with confidence.'

1.2 Scope of the strategy

This strategy is focused on encouraging greater uptake of all kinds of EVs. While progress to date has largely been focused on electric cars, the strategy also covers electric taxis and vans. EVs are still an emerging technology and advancements are being made in areas such as battery life and charging speeds. It is expected that substantial further improvements will be made over the lifetime of this strategy. Section 3 of this strategy explores the advancements expected in electric vehicles and the associated charging infrastructure. Other modes of transport, such as buses, road and rail freight and electric micro-mobility are not within the scope of this strategy.

The focus of this Strategy is on increasing the provision of public electric charging infrastructure for cars and vans, which is one of the barriers to greater levels of take-up. It is recognised that there are other barriers to electric vehicle take-up, such as vehicle cost, but those are not within the scope of this strategy.

Therefore, while the vision described here is intended to be realised over a 10-year period, the actions described are to be focused in 5 year increments.

The Council would like to align this Strategy with the City Region Sustainable Transport Settlement (CRSTS) funding periods. The current CRSTS funding period runs from 2022 to 2027. The following periods are 2027-2032 and post-2032.

The Council will review the strategy annually and will amend, remove, or add specific goals, targets and actions as required. This will ensure that the Council's approach remains adaptable and always reflects the latest technological improvements.

Although not directly covered by this strategy, it is recognised that other forms of non-fossil fuels may also be important in realising the vision described here. This includes hydrogen, which has the potential to play an important role in delivering more sustainable freight transport on both road and rail, and gas, including biomethane which can be sustainably produced from waste products. The Council will look to work collaboratively with neighbouring Local Authorities on alternative fuels.

Finally, it is also recognised that the transition to EVs is only one part of a wider change to the way in which we travel, which is necessary in order to tackle climate change, reduce air pollution and deliver improved public health. The Council adopted its Transport Strategy in December 2022, which covers these wider activities in more detail.

Section 1 Summary

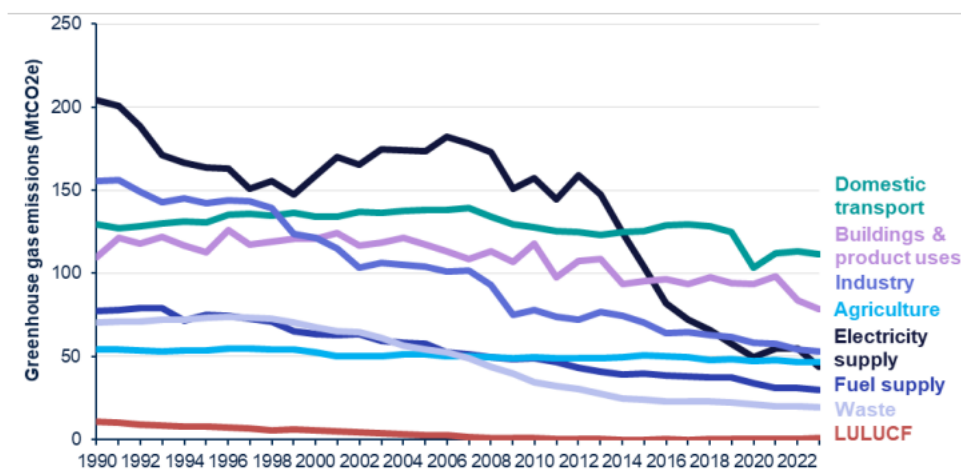
The purpose of this strategy is to identify the number of electric vehicle chargepoints that will be required to meet future demand for cars and vans, and identify how this target will be reached. This is a 10 year strategy, with the actions initially focused on the first 5 years.

2. Policy background

2.1 Transport and climate change

In 2019 the Government set itself a legally binding target to achieve 'net zero' greenhouse gas emissions by 2050. In the same year, West Midlands Combined Authority declared a climate emergency and set out their vision to make the West Midlands net zero by 2041.

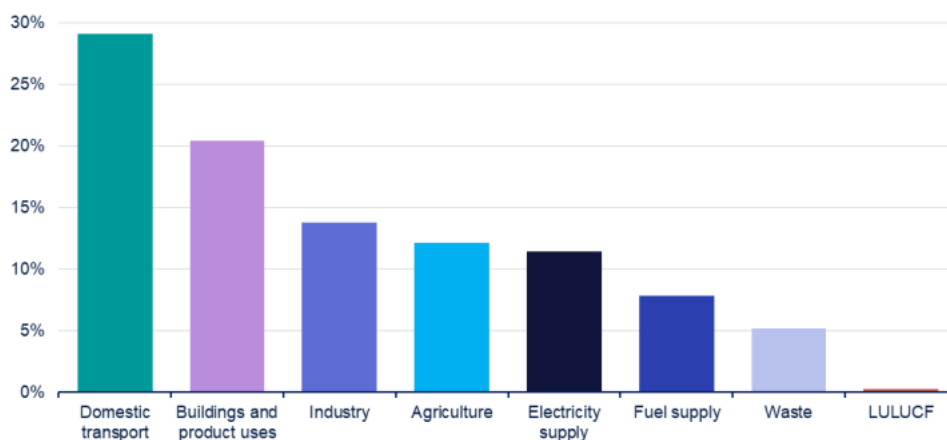
Overall emissions have been on a downward trend over the last 30 years, as shown in Figure 1. However, this has mostly been driven by large reductions in the energy sector, while emissions from transport remained largely static until 2020, where the COVID-19 pandemic and associated lockdowns reduced vehicular transport and the associated emissions.



Source: Table 1.2, Final UK greenhouse gas emissions statistics 1990-2023 Excel data tables
Note: LULUCF is land use, land use change and forestry.

Figure 1: Greenhouse gas emissions by sector – 2023

In 2015, transport became the largest source of UK greenhouse gas emissions, accounting for 29% of the total emissions in 2023. Figure 2 shows the split in greenhouse gas emissions from different sectors.



Source: Table 1.2, Final UK greenhouse gas emissions statistics 1990-2023 Excel data tables
Note: LULUCF is land use, land use change and forestry.

Figure 2: Greenhouse gas emissions by sector, by proportion – 2023

Light vehicles including cars, vans and motorcycles are by far the largest source of transport emissions, accounting for 70% of domestic transport emissions. These are followed by HGVs at 16% and buses at 2%. EVs, and other zero-emission vehicles, therefore present an opportunity to significantly reduce the country's overall carbon footprint. However, widespread adoption would not negate the need for a more substantial change in the way that we travel. Emissions are still generated through the manufacturing and shipping of EVs, which also do not address issues like congestion and air pollution in areas where there are simply too many vehicles on the road.

A fundamental shift, with fewer journeys being made by car and more by walking, cycling and on public transport, is therefore still required. However, as part of a wider change to the way that we travel, electrification has the potential to contribute to a major reduction in carbon emissions.

2.2 Current policy relating to Electric Vehicles

National policy

At a national level, the UK Government is keen to further accelerate the transition to EVs and other Ultra-Low Emission Vehicles (ULEV)s.

Over the past ten years, the sales of zero emission vehicles have increased rapidly in the UK, with Battery Electric Vehicles accounting for 19.4% of new car sales in March 2025, and Plug-In Hybrid vehicles accounting for an additional 9.4%. The Government introduced the Zero Emission Vehicle (ZEV) Mandate in January 2024 which looks to further increase this by requiring a minimum percentage of each manufacturer's new car and van sales to be zero emission. This percentage will increase each year until 2030, ahead of a complete ban on the sale of all new petrol and diesel cars and vans coming into effect from 2030. The sale of new hybrid cars and vans will also be banned from 2035.

Other measures, through which the Government encourages a switch to EVs, include providing grants to meet some of the costs of installing EV chargepoints to:

- Landlords with residential or commercial properties.
- People who own or rent a flat with a private off-street parking space.
- Small-to-medium sized businesses with commercial car parks for staff and fleet
- Eligible businesses, charities, and public sector organisations.

In addition, the Government also provides funding for local authorities to install public chargepoints on streets where residents do not have access to off-street parking, and therefore cannot install their own home chargepoints, and to support the rollout of electric buses across the UK.

It is also important to ensure that the electric vehicle charging network is accessible for all drivers. A Publicly Available Specification (PAS 1899) was published in October 2022, which provides best practice guidance on how to ensure that chargepoint installations are accessible for all drivers.

Decarbonising Transport: Setting the Challenge

In March 2020, DfT published *Decarbonising Transport: Setting the Challenge*, which made the case for further Government action to reduce emissions. It makes clear that there is a substantial gap between expected reductions through existing policies and what is required to deliver a net zero transport network by 2050. One aspiration is for all road vehicles to become zero emission. *Decarbonising Transport* identifies several areas for focus, including taking further action to decarbonise road vehicles, such as by providing improved refuelling and recharging infrastructure to encourage greater ULEV take-up. Initiatives to decarbonise transport in Coventry include the All Electric Bus City project, where all buses in Coventry will be fully electric by the end of 2025, and Coventry Very Light Rail which is a pioneering research and development project that looks to deliver an innovative new style of affordable light rail system for Coventry and beyond.

The Transport Decarbonisation Plan sets out a series of actions and timings that will decarbonise transport by 2050 and deliver against carbon budgets as part of the Government's ambition to achieve Net Zero across the economy by 2050. There are six priority themes:

1. Accelerating modal shift to public and active transport
2. Decarbonising road transport
3. Decarbonising how we get our goods
4. UK as a hub for green transport technology and innovation
5. Place-based solutions to emissions reduction
6. Reducing carbon in a global economy

UK Electric Vehicle Infrastructure Strategy

The Government published the UK Electric Vehicle Infrastructure Strategy in March 2022. The strategy identified that there are approximately 29,600 public chargepoints in the UK, of which 5,400 are rapid. However, the pace of chargepoint rollout must accelerate. The Strategy focuses on two sectors which require an accelerated pace of rollout: high powered chargepoints on the strategic road network and local on-street charging.

The Strategy includes targets for increasing rapid charging provision at every motorway service area. By 2035, it is estimated that there will be over 6,000 high powered chargers along our strategic roads by 2035.

The Strategy also highlights that it is important to increase the number of EV chargepoints in residential areas, especially for those without access to off-street parking. A £450m Local Infrastructure Support Programme has been developed to support the deployment of local chargepoints at scale. The Strategy also sets out an obligation for Local Authorities to develop and implement local charging strategies to plan for the transition to zero emission vehicles.

Other national strategies include:

- **Transport Investment Strategy** sets out the DfT's approach for future transport investment decisions and identifies that a key component of transport investment is to improve the user experience. Investment in the attractiveness, design and

retail experience around transport hubs can play a part in improving user experience. More information on this strategy can be found [here](#).

- **Net Zero Strategy: Build Back Greener Strategy** outlines why reaching net zero is crucial to tackle climate change and joins together tackling climate change and delivering economic growth. The actions described in this EV Strategy build on previous work in this area, at a local level, and contributes towards national strategies. More information on this strategy can be found [here](#).

Regional policy

Coventry City Council's local strategies will support West Midlands Combined Authority's (WMCA) wider vision for the region. In January 2020, WMCA published its Climate Change Strategy, **#WM2041**. This sets out plans to achieve net zero status by 2041, nine years earlier than the current national target of 2050.

#WM2041 makes clear that a fundamental change is required to the way in which we travel and sets out plans aimed at ensuring that in the future most journeys are made via mass transit or active travel, with a much smaller proportion being made by car. It suggests that by 2041 most residents will not be car owners at all but will instead use electric car clubs, when they absolutely need to travel by car. Taxis, buses, and goods vehicles will also need to be electrified. The necessary infrastructure will therefore need to be provided to enable this switch, alongside wider changes to encourage a more general shift away from car travel.

Other key regional strategies also support this agenda. The **WMCA Local Transport Plan** outlines five 'motives for change'. These are:

- Tackling the climate emergency
- Reducing transport inequality
- Reducing physical inactivity
- Enhancing local communities and places
- Building a strong inclusive economy.

The shift to electric vehicles will help to tackle the climate emergency as this will reduce tailpipe emissions and help improve local air quality.

The **Midlands Connect 'Supercharging the Midlands'** document was published in September 2021 and identifies that transport emissions must decrease significantly if the UK is to meet climate and net zero targets. This is even more significant with the West Midlands target of net zero by 2041, and the shift from internal combustion engine vehicles to electric vehicles will help meet this target. To facilitate the switch to electric, an increased number of electric vehicle chargepoints will be required.

The draft **Regional Zero Emission Vehicle (ZEV) Infrastructure Strategy** is expected to be published in 2025 by TfWM. This Strategy will outline the regional objectives and strategy for increasing electric vehicle charging infrastructure. TfWM's Strategy will be consistent with this Coventry Strategy, as both use the same scenarios and methodology for calculating future projections of vehicles and chargepoints, emissions reductions and mitigated damages costs.

Key areas covered by the Regional ZEV Infrastructure Strategy include technological roadmaps for battery electric and hydrogen vehicles and infrastructure, driver behaviour and how that impacts the location and power output of chargepoints, projected figures for the number of vehicles and chargepoints in the region and calculates the benefits of emissions reduction. It also highlights priority areas where TfWM has a role to play.

Local policy

The Coventry **Local Plan** was adopted in December 2017 and sets the vision and framework for the future development of Coventry. The Local Plan is the statutory development plan and is the starting point for determining planning applications within Coventry. Appendix 5 of the current Local Plan details the requirement for 5% of all new parking spaces to have provision for electric car charging points. However, the Local Plan is currently in a review period and is being updated. Updated policies within the revised Local Plan are expected to continue to promote and support sustainable development and climate change adaptation.

The Coventry City Council **Transport Strategy** was adopted in December 2022 and sets out the vision for the future of Coventry's transport system. The overall purpose of this strategy is to offer a safe, sustainable, equitable and resilient transport system, which enables our residents, visitors, and businesses to thrive. The strategy takes a multi-modal approach, recognising that no one form of transport can meet everybody's needs. This includes walking, cycling, public transport improvements, encouraging more sustainable car use and an approach that embraces emerging modes of travel arising from new technology.

The Council has recently published its **Climate Change Strategy**. The strategy sets out the framework of how Coventry City Council plan to tackle climate change in Coventry. The two priorities in this strategy are to reduce carbon emissions and avoid worsening the problem and preparing the city for inevitable changes in the climate.

Both of these strategies set out the actions that will be taken to dramatically reduce carbon emissions from the city's transport network, both by reducing reliance on the private car and by switching to zero-emission vehicles.

The Council is already taking some action to accelerate the transition to EVs. Ongoing activity to encourage this includes:

- Establishing a growing network of public charge points. By June 2024, this consisted of 2,084 chargepoints, the largest network in the UK outside of London. The public charge point network in Coventry comprises of rapid chargers and lower power residential chargepoints.
- Working with National Express to support the rollout of the city's first ultra-low emission buses. As of October 2023, there are 140 double decker electric buses operating in Coventry. The city is committed to developing a zero-emission public transport network. Coventry will be the first All Electric Bus City by 2025, with only electric buses in operation in Coventry from that point.
- Pioneering the development of Very Light Rail (VLR), an innovative, new form of mass transit. VLR will be a battery-operated, rail-guided vehicle which will

ultimately be capable of operating without a driver. A test track and test vehicle are currently being developed at the VLR Innovation Centre in Dudley

- Encouraging the transition to zero emission taxis. From 1st January 2026 any replacement taxi vehicles and any new taxi vehicles are required to be Zero Emission Capable. A full review is currently being carried out into the taxi licensing policy which will include emissions.
- The Council has previously offered a 'try before you buy' scheme for some electric vehicles, including taxis. The scheme has now concluded.

Section 2 Summary

There are many national, regional, and local policies that have a focus on encouraging the switch to electric vehicles, improving air quality and decarbonising transport.

To date, Coventry City Council has made great progress on the rollout of public electric vehicle chargepoint infrastructure, with 2,084 chargepoints installed as of July 2024.

3. Roadmaps to Electric Vehicles transition

The Electric Vehicle Technology Roadmap in Figure 3 shows the transition to EVs across differing vehicle types, including cars, vans, and buses.

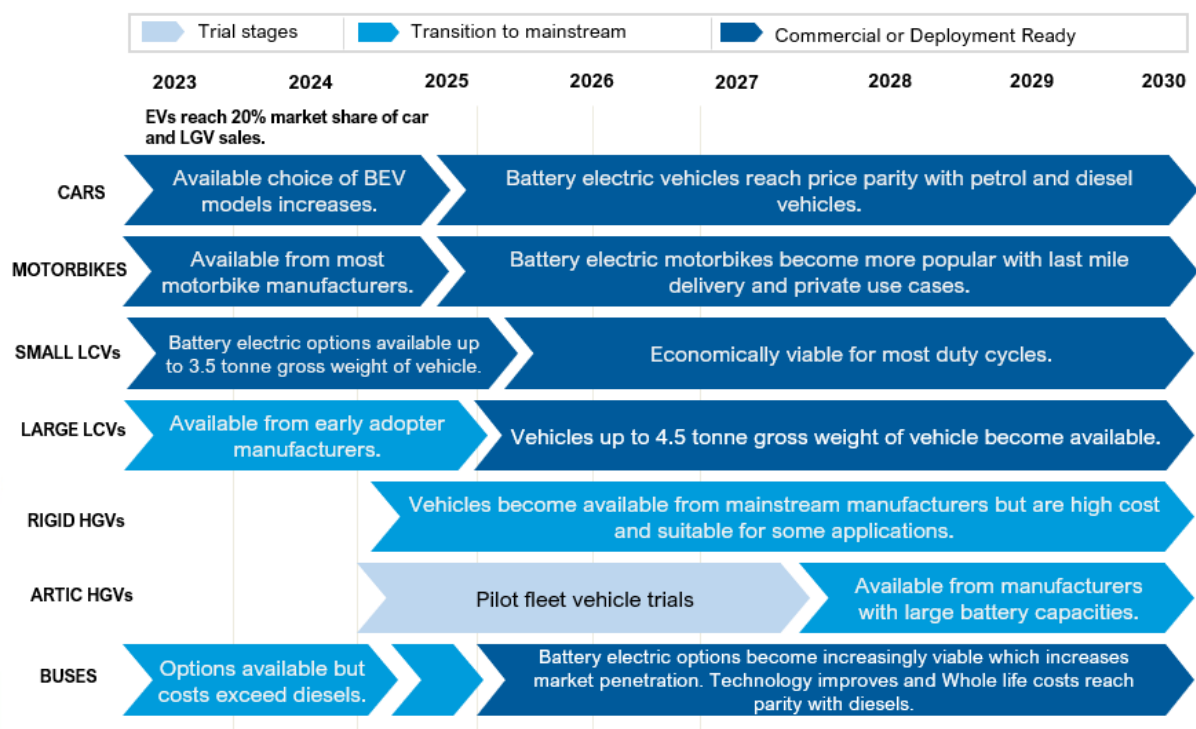


Figure 3: Electric Vehicle Technology Roadmap

EV sales have continued to rise in recent years. The battery capacity for Light Commercial Vehicles (LCVs), such as vans, has also increased, making them a more viable option for companies to switch to. The range of Battery Electric car models has increased, with many car manufacturers offering at least one Battery Electric car model.

Between 2025 and 2030, Battery Electric cars are expected to reach price parity with equivalent Internal Combustion Engine (ICE) cars, making them a more economically viable choice for a wider range of drivers. Small LCVs will also become more viable for a greater number of use cases. Large electric LCVs are expected to become available up to 4.5 tonne gross weight.

Although this strategy does not cover Heavy Goods Vehicles (HGVs), Figure 3 shows the upcoming expected progress in HGV electrification, including Rigid and Artic HGVs. Great progress will be made on trialling fleet vehicles and increasing battery capacity, but due to high cost and other constraints, they will likely not be deployment ready until beyond 2030.

Figure 3 shows that Battery Electric buses are available but more costly than diesels, with battery electric becoming more viable from 2025. There are already 140 double decker electric buses operating in Coventry, and this will continue to increase. Coventry is committed to becoming the first All Electric Bus City by the end of 2025, with only electric buses operating in Coventry from that point onwards.

The Electric Vehicle Infrastructure Roadmap in Figure 4 shows the anticipated growth in EV charging technologies.

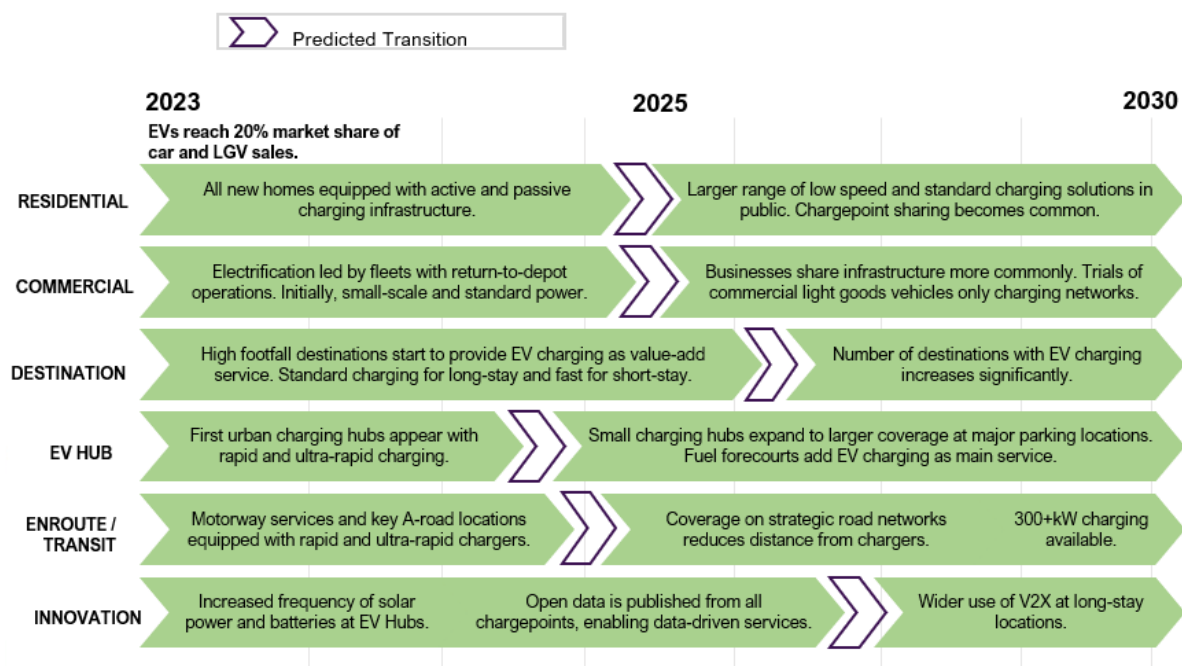


Figure 4: Electric Vehicle Infrastructure Roadmap

New Building Control regulations came into force on 15th June 2022 that stipulated that new homes approved after this date must have access to an electric vehicle charging point. This also applies to new homes created by a material change of use, major renovations of a residential building and mixed use buildings with more than 10 parking spaces. This marks a significant progression on home charging as shown in this roadmap. Also from 2023, residential public charging will be delivered using the Government Local Electric Vehicle Infrastructure Fund scheme.

From 2025, it is anticipated that increases in residential public chargepoints will reduce the barriers to switching to EV. There will also be an increase expected in community charging and sharing of residential chargepoints. Over time, there will be a greater abundance of public chargepoints available with EV charging hubs available in more locations.

Figure 4 also shows the upcoming innovation in EV charging technologies, including utilising solar power and battery storage at EV charging hubs and increasing the availability of data to allow data-driven services to come forward. As part of our EV Charging Infrastructure Strategy, it is essential to promote the development of a smart and flexible electricity system. This initiative should include mechanisms to incentivise EV drivers to charge their vehicles at times that optimise grid performance and energy efficiency. By integrating advanced technologies for real-time energy management, we can ensure a more sustainable and resilient power network, which is essential for supporting the growing adoption of electric vehicles.

Section 3 Summary

The Electric Vehicle Technology Roadmap outlines the future transition to electric for vehicles, including cars and vans. It identifies when EVs become a viable choice for different modes of transport and outlines the factors that will encourage more people to choose an EV. This roadmap identifies that from 2025, electric cars will reach price parity with petrol and diesel cars. Electric Vehicle Infrastructure Roadmap outlines the expected advances in electric vehicle charging technologies alongside the growth in EV chargepoint availability.

4. Current status

4.1 - Current Status in Coventry

Cars are the most common vehicle type in Coventry, with over 150,000 registered. There are almost 14,000 Light Commercial Vehicles (LCVs) such as vans located in Coventry.

Petrol cars are responsible for the highest proportion of CO₂ emissions, while diesel cars release the highest amount of Nitrogen Oxides (NO_x) and Particulate Matter (PM) emissions. Diesel LCVs also emit a large amount of NO_x.

At present, 2.59% of cars and LCVs registered in Coventry are battery electric, and a further 1.83% are plug-in electric vehicles, totalling 4.42% of cars and LCVs registered that are zero emission capable. This is higher than the West Midlands Combined Authority figure of 2.48% for battery electric and 3.82% for total combined zero emission capable vehicles. However, it is lower than the national average for the adoption of battery electric vehicles of 2.82%. This shows the scale of change that is needed to convert the vehicle parc to zero emission vehicles.

Figure 5 is a graphic showing the terms used for chargepoints of different powers.

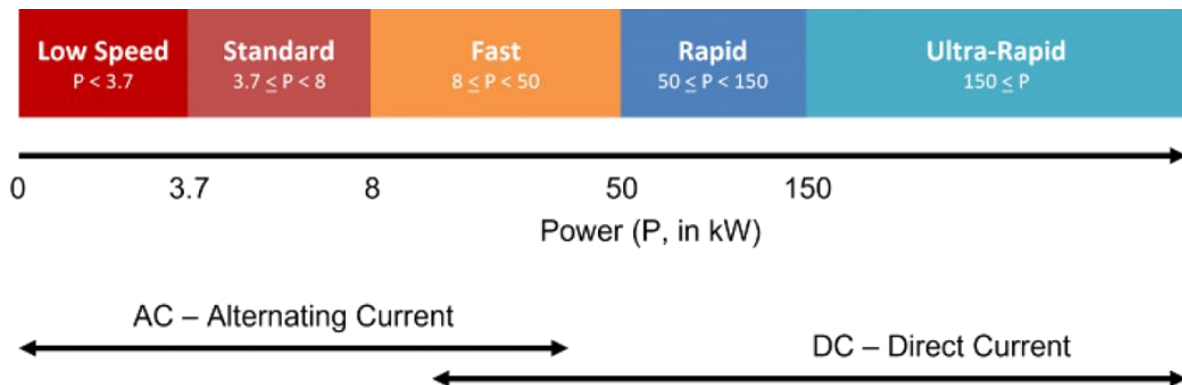


Figure 5: Graphic showing the categorisation of electric vehicle chargepoints by power.

The typical use cases for different types of charging are as follows:

- Low speed and Standard – often used in places where vehicles will be parked for a longer period of time, such as at residential properties and on residential streets. This includes lamppost column charging.
- Standard and Fast – this is the power of chargepoint often used in residential or destination areas, including public car parks.
- Fast, Rapid and Ultra Rapid – these are often installed in short stay areas, such as petrol stations or Motorway Service Areas. These are also often useful for electric taxi recharging or for recharging when undertaking long journeys.

4.2 - Current Electric Vehicle Charging Infrastructure

Table 1 shows the number of public charging devices that have been installed in West Midlands Combined Authority areas, including Coventry. This data has been taken from Department for Transport statistics in July 2024.

Local Authority	Total public charging devices	Total public rapid charging devices	Charging devices per 100,000 population
Coventry	2,084	79	586
Solihull	343	65	158
Dudley	179	69	55
Birmingham	583	188	50
Wolverhampton	83	50	31
Sandwell	94	52	27
Walsall	73	27	26
UK	64,632	12,474	96

Table 1: Table showing the number of public charging devices installed in Local Authority areas within the WMCA area (using DfT figures from July 2024)

Coventry has the highest total number of public charging devices in the West Midlands Combined Authority area, at 2,084 devices. This is 1,501 chargepoints more than Birmingham, who have the next highest figure. Coventry is also leading the metric of charging devices per 100,000 people in the population. Coventry has 586 charging devices per 100,000 people which is over 6 times higher than the UK figure of 96. This shows that there is a greater density of electric vehicle chargepoints in Coventry than in other areas. Data shows that 67.7% of the city is within a 4-minute walk of a lower powered chargepoint, which is ideal for people who do not have a home chargepoint.

The map in Figure 6 shows the location of all of the publicly available chargepoints in Coventry, and what power they are.

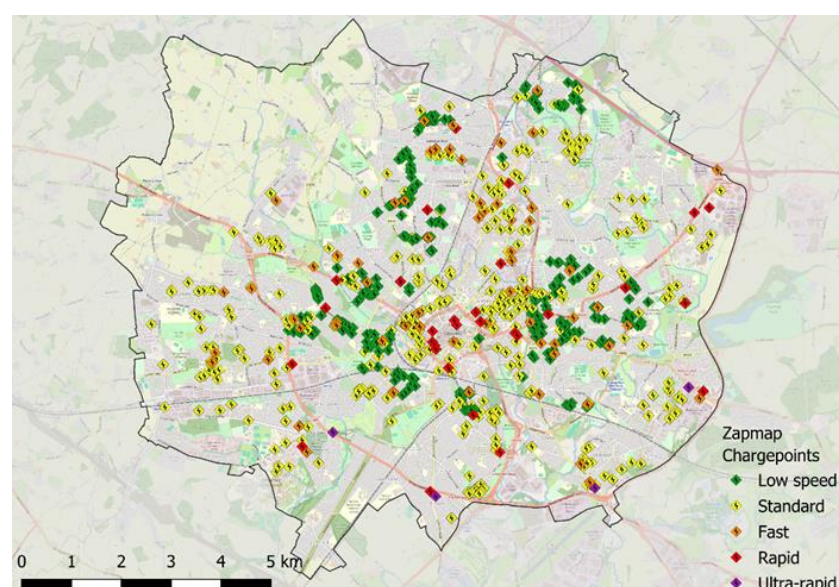


Figure 6: Map showing the location and power of chargepoints in Coventry

4.3 - Electricity grid capacity

Electricity grid capacity varies significantly across the region. Due to this, some sites will not currently be viable for chargepoint installation. Where possible, Coventry City Council will look to incorporate solar PV panels and battery storage as part of charging hubs, to increase renewable energy storage and usage for electric vehicle charging infrastructure.

Section 4 Summary

There are currently over 150,000 cars and nearly 14,000 light commercial vehicles in Coventry. Petrol and diesel cars are responsible for the majority of CO₂, NO_x, and PM transport emissions in Coventry.

4.42% of the registered cars and LCVs in Coventry are currently either Battery Electric or Plug-in Hybrid. This is a higher rate than the West Midlands Combined Authority area, but adoption of Battery Electric Vehicles is lower than the overall UK figure.

There are 2,084 publicly available charging points in Coventry. Coventry also has 586 charging devices per 100,000 population, which is the highest rate in the West Midlands Combined Authority area.

There are areas in Coventry with reduced substation capacity, meaning that some sites will not currently be viable for chargepoint installation.

For more detailed information on the current status, please see the Technical Appendix.

5. Future projections

5.1 - Scenarios for future projections

Coventry City Council commissioned Cenex to produce projections of how many electric vehicle chargepoints will be required in future year scenarios. Three scenarios were developed by Cenex which assess the impact of the Government ZEV mandate on the vehicle parc in Coventry, along with other factors such as reductions in vehicles or vehicle mileage. Vehicle parc means all of the registered vehicles within a defined geographical region, in this case, Coventry. The three scenarios are: Baseline, Aspire10 and Bold20. Aspire10 includes a 10% reduction in car and LCV mileage and Bold20 includes a 5% reduction in the number of vehicles and a 15% reduction in mileage, therefore fewer EV chargepoints will be required for these scenarios compared to the Baseline scenario. More information on the scenarios can be reviewed in the Technical Appendix. It was decided to proceed with the Baseline scenario to ensure that a sufficient number of EV chargepoints are installed to cater for all scenarios.

It can be challenging to predict behaviour change, the future of transport technologies and how modal shift targets will affect vehicle numbers, so some assumptions on behaviour change have been made (which can also be reviewed in the Technical Appendix).

5.2 – Vehicle parc projections

The graph in Figure 7 shows that the vehicle parc in Coventry electrifies rapidly from 2025 onwards. This will be due to the ZEV mandate requiring a higher percentage of EV sales from manufacturers each year. EVs are also expected to reach price parity with equivalent ICE vehicles from 2025, which will contribute to the increase in EVs. There are some enduring petrol and diesel vehicles in the vehicle parc beyond 2035, this is likely to represent older vehicles, which have not been replaced with EVs. The ZEV mandate only covers sales of new vehicles.

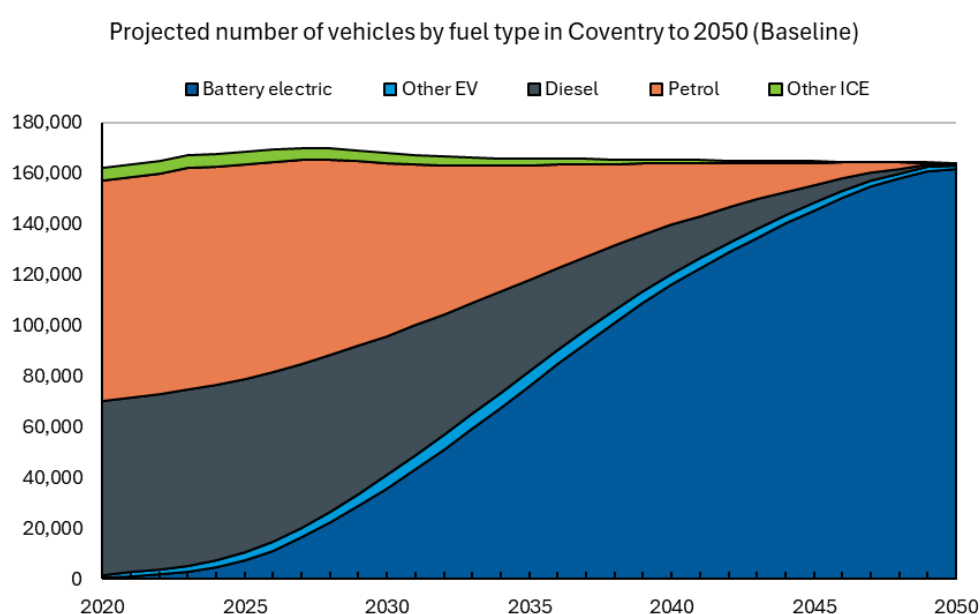


Figure 7: Vehicles by fuel type in Coventry to 2050 (Baseline)

Table 2 shows the percentage of Coventry-registered cars and LCVs that are Battery Electric and Plug-in Hybrid Electric reaching 24% in 2030 and then reaching 73% in 2040.

Year	2030	2035	2040
% cars and LCVs that are electric	24%	49%	73%

Table 2: Table showing the estimated proportion of EVs by chosen years

Table 3 shows the number of electric vehicles that will be registered in Coventry by 2030, 2035 and 2040 in the baseline scenario (further information on Aspire10 and Bold20 can be found in the Technical Appendix).

	Baseline
2030	40,854
2035	81,809
2040	120,311

Table 3: Table showing the total number of Electric Vehicles in Coventry in different years

5.3– Projected charging need in Coventry

A range of factors are applied to the uptake of EVs to calculate the total energy needed to charge, and subsequently the number of chargepoints needed. This includes typical vehicle mileage, driver behaviour, vehicle driving efficiency and EV infrastructure charging efficiency.

The energy is then split to model the public charging requirement for households without access to private parking. This calculates the number of public charging that will be required to meet demand, and what powers of chargepoints are needed.

Figure 8 depicts the projected number of chargepoint sockets that will be required in Coventry by 2045.

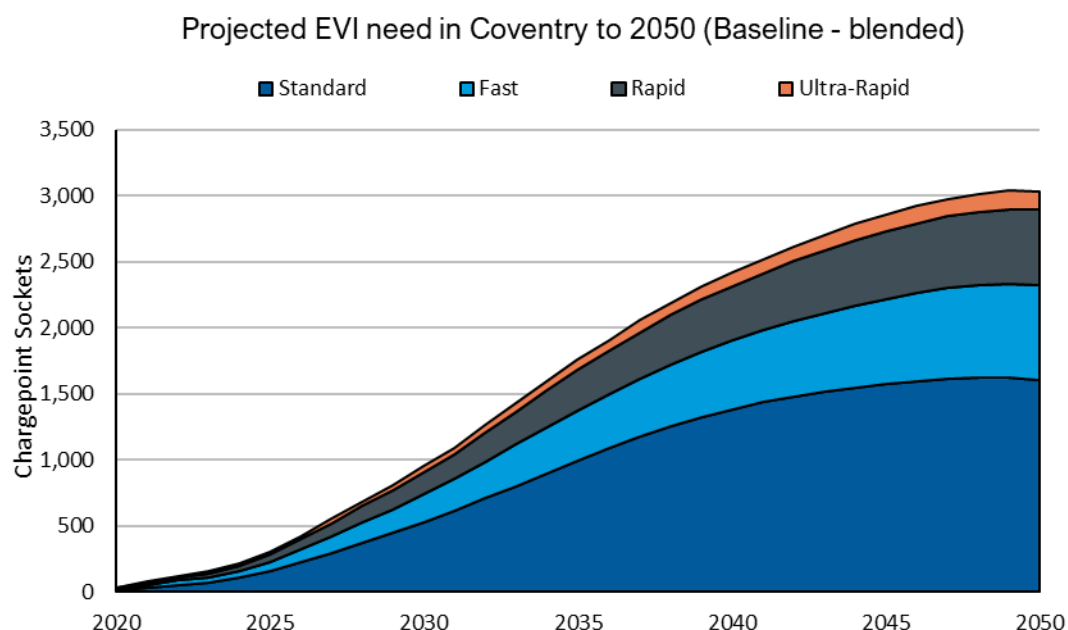


Figure 8: Graph showing the projected number of chargepoint sockets required in Coventry by 2050.

This shows that a total of approximately 3,000 public electric vehicle chargepoint sockets will be required by 2050 to meet the anticipated demand. As of July 2024, there are 2,084 electric vehicle charging points installed in Coventry. This is approximately 70% of the total chargepoint sockets that will be required by 2050.

All of the projections utilise the baseline scenario, but the specific projections for the number of chargepoints required vary by the installation approach taken. There are three types of approaches that the Council could use: blended, hub and residential.

- The 'hub' approach assumes a preference towards clustered charging at dedicated locations and requires more ultra-rapid charging sockets.
- The 'residential' approach assumes a preference towards public residential and destination charging, requiring more standard sockets.
- The 'blended' approach projects a balance between the two.

It has been determined that the blended approach is the most suitable approach to accommodate all the needs of all drivers. The projections referenced in this strategy refer to the 'blended' approach, but further information on the 'hub' and 'residential' approaches can be found in the Technical Appendix.

Table 4 shows the number of charging sockets required by 2030, 2035 and 2040.

	Blended			
	Standard	Fast	Rapid	Ultra-Rapid
2030	509	203	161	44
2035	956	366	290	74
2040	1,330	499	396	99

Table 4: Table showing the number of chargepoints required by 2030, 2035 and 2040

The Technical Appendix details the predicted number of chargepoints required for each of the three scenarios: Baseline, Aspire10 and Bold20. This section focuses on the outcomes using the baseline scenario. Table 5 shows the total number of chargepoint sockets that will be required in 2030, 2035 and 2040.

Number of sockets	Baseline
2030	917
2035	1,686
2040	2,319

Table 5: Table showing the number of chargepoint sockets required in different years

5.4– Early Adopter Index

The Early Adopter Index (EAI) uses census demographics to determine the likely locations of households which fit an early adopter profile. This data indicates that those with the means to purchase an EV are most likely to do so.

The EAI for Coventry is shown in Figure 9 and shows the likelihood of people purchasing an EV. The areas that are more likely to adopt EVs are shown in green, and the areas less likely are shown in red. The EAI shows that the city centre is the area least likely to adopt EVs.

Whilst the likelihood to switch to EV is mixed throughout Coventry, in general the outer areas (particularly the Northwest) are shown to be the most likely area to adopt EVs. The EAI considers only the likely early adopter households so is best used to indicate the early EV chargepoint demand rather than long-term provision.

The Early Adopter areas shown in Figure 9 are more likely to have the capability to install private chargepoints off-street on driveways or in garages. The On-Street Residential Charging Scheme (ORCS) programme to date has focused on areas with limited off-street parking. Therefore, the Council has ensured that the public charging network in Coventry will serve the long-term needs of the city and accommodate drivers who rely on on-street parking and charging.

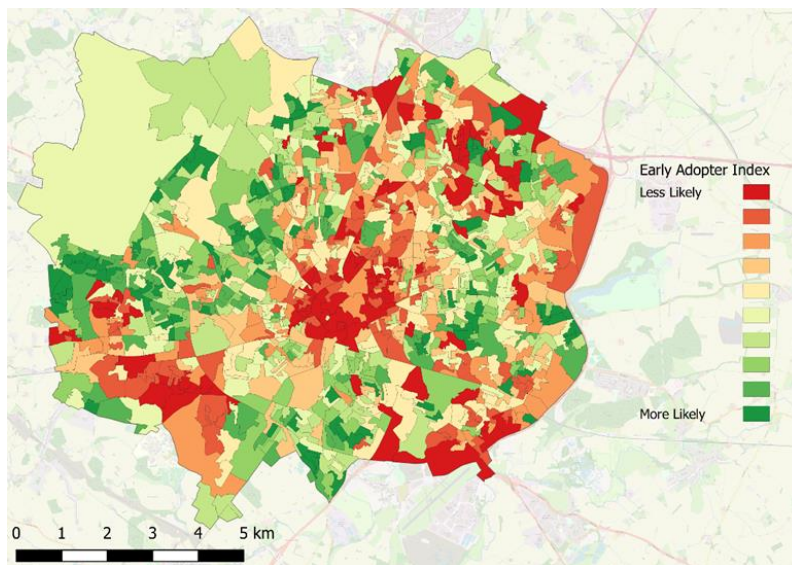


Figure 9: Coventry Early Adopter Index Map

5.5 – Residential Charging Index

The Residential Charging Index (RCI) builds on the EAI to incorporate the amount of off-street parking available in Coventry and is shown in Figure 10. The RCI highlights focus areas for the rollout of public EV chargepoints and is a measure of where individuals may wish to adopt an EV but are unlikely to have off-street parking to install a home chargepoint.

The areas identified as having the highest need of chargepoints are likely to need more chargepoints installed sooner but are not the only places which require public residential chargepoints. The 'higher need' areas that do not currently have EV chargepoints are likely to be the priority areas for public residential chargepoint demand.

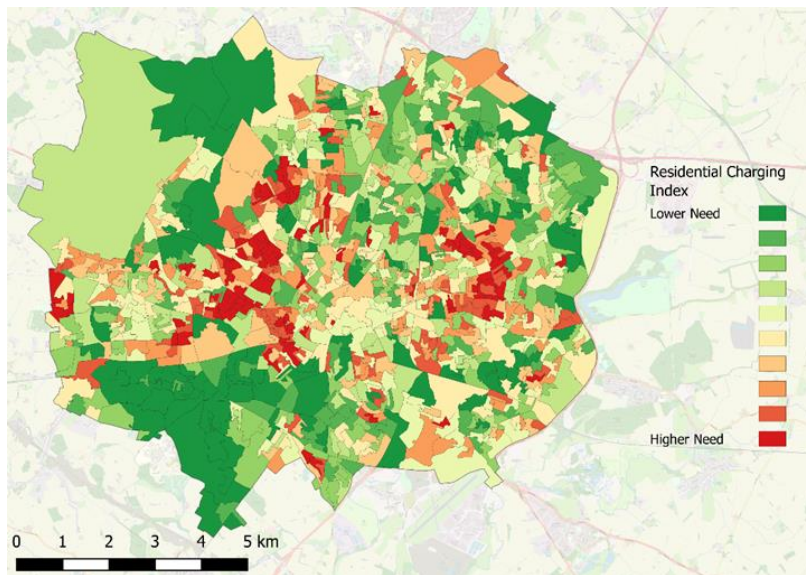


Figure 10: Residential Charging Index for Coventry

Section 5 Summary

Three scenarios were developed to identify the future number of EVs and the number of chargepoints required. These are baseline, Aspire10 and Bold20. All scenarios use the Zero Emission Vehicle mandate but use varying other factors such as reduction in mileage and reduction in vehicles.

Future projections show that 24% of cars and LCVs in Coventry will be electric by 2030, 49% by 2035 and 73% by 2040.

Three installation methods are explored: hub, residential and blended. The blended method was determined to be the most suitable approach.

To meet the demand of EVs in Coventry, 2,319 EV chargepoint sockets will be required by 2040 using the baseline blended approach.

For more detailed information on future projections, please see the Technical Appendix.

6. Potential benefits

As part of the development of this Strategy, Cenex calculated the potential benefits that could be achieved if the uptake of Electric Vehicles and use of chargepoints increased. This section will highlight the potential reduction in carbon dioxide (CO₂), nitrogen oxides (NO_x) and Particulate Matter 2.5 (PM_{2.5}) emissions in addition to the potential savings from mitigated damages. For detailed analysis of emissions reductions, please see the Technical Appendix.

6.1 - Emissions reductions

Table 6 shows the emissions (tonnes) in 2024 and in 2030, 2035 and 2040. This shows significant reduction in CO₂ and NO_x, and substantial reductions in PM_{2.5} from the tailpipe.

	CO ₂	NO _x	PM 2.5 (Tailpipe)	PM2.5 (brake and tyre wear)
2024	375,000	730	10.4	29.5
2030	286,000	546	7.8	28.6
2035	184,000	347	5.0	27.6
2040	97,000	175	2.5	26.9

Table 6: Table showing the emissions levels in 2024, 2030, 2035 and 2040

Unlike other vehicle emissions, PM_{2.5} wear will persist from the wear of tyres and brakes regardless of the type of vehicle. In order to reduce emissions from brake and tyre wear, a reduction in the number of vehicle miles driven would be required. Coventry City Council will continue to encourage travelling by active modes or public transport where possible.

6.2 - Savings from mitigated damages

A reduction in vehicle emissions will result in social and financial cost savings. This is due to a reduction in air quality related illnesses resulting in NHS savings, or avoided costs associated with meeting carbon reduction targets. Significant savings are predicted in all cases, including due to reduced PM_{2.5} wear emissions.

Section 6 Summary

Potential benefits were calculated based on what could be achieved if the uptake of EVs and chargepoint usage increase. This section looks into the benefits associated with a reduction in carbon dioxide, nitrogen oxides and particulate matter. The switch to EVs will result in significant reductions in emissions. Between 2030 and 2040, there will be the following reduction in emissions:

- Over 189,000 tonnes of CO₂
- 371 tonnes of NO_x
- 5.3 tonnes of PM_{2.5} from tailpipe emissions
- 1.7 tonnes of PM_{2.5} emissions from road, tyre and brake wear

7. The Strategy

7.1 - Coventry's vision for the future

The Council's vision for the charging network in Coventry is that everybody is able to recharge their electric vehicle in an easy and stress-free way. We also want everybody to be able to switch their vehicle to electric with confidence that the infrastructure can meet their needs.

7.2 - What, where and when?

There are several types of EV charging. Those included in this strategy are residential, workplace, destination and on-the-go charging.

Residential charging

Private cars typically remain stationary for long periods when parked at home overnight, making it the most convenient place to charge. For people who have off-street parking, they can arrange to have their own private chargepoint installed, subject to any restrictions.

For people who don't have off-street parking available, on-street charging provision in residential areas is important to encourage the shift to electric vehicle. The chargepoints installed on-street in residential areas are often slow to standard power, with an electric vehicle being able to charge to a full battery overnight.

Great progress has been made by the Council to date on the installation of chargepoints in residential areas, with 67.7% of the city being within a 4-minute walk of a lower powered chargepoint.

Policy 1. The Council will continue the rollout of public on-street electric vehicle chargepoints in residential areas.

Home charging for those without a driveway

The Council appreciate that drivers would like to use home charging due to preferential electricity rates, but this is not always possible if there is not off-street parking available.

Current legislation (Part IX, The Highways Act 1980) places a restriction on cables being placed across the highway without the consent of the Highway Authority. This legislation covers electric vehicle charging cables trailing across the highway from a property to an electric vehicle. The Council must ensure that charging infrastructure does not obstruct pavements or cause a hazard to pedestrians. The footway surface should remain clear of obstruction, with no trailing wires, or raised feature.

The Council is investigating the feasibility of using 'gully channels' across the footpath that will allow people to safely charge their vehicle using their home electricity supply without obstructing the highway for pedestrians. As part of this investigation, a 1-year pilot scheme is currently underway using 7 houses to identify the effectiveness and feasibility of this solution. The frame of reference for the trial is

detailed in Appendix 1. There are local constraints on this type of gully channel, therefore there will be a limit of how many can be installed on a street. This limit will be dependent on the street in question, and will be affected by the space available, other equipment located on the street and the properties themselves.

Any charging infrastructure installed within the footway will require design approval and the relevant agreements to be in place before work commences.

Policy 2. The Council will continue investigating 'gully channels' including undertaking a pilot scheme. The outcomes of this pilot scheme will inform as to the practicality and costs of implementing this solution further.

Lamppost charging is often a useful charging solution for people without driveways. In Coventry, the majority of lampposts are located to the rear of the footpath which makes it challenging to use these to install chargepoints. The Council are investigating the feasibility of using 'gully channels' to provide charging from lampposts at the back of the footway. This will include identifying what measures will be needed for safety and accountability alongside developing a delivery model and running a trial scheme to review this in practice.

Policy 3. The Council will investigate combining two solutions, lamppost charging and a gully channel, for public charging use.

The Council is working on a project funded by the Local Electric Vehicle Infrastructure (LEVI) Fund which will deliver approximately 250 charging units across 4x hubs located in off-street car parks in residential areas of Coventry. These will be located in areas where a high proportion of homes do not have access to off-street parking.

Policy 4. The Council will progress the LEVI project to create 4x residential charging hubs, with the aim of rolling out a wider network of charging hubs subject to successful funding bids.

New build homes

New build homes must now be provided with the infrastructure for an EV chargepoint, where there is an associated car parking space. This will help to encourage the shift towards drivers choosing an electric vehicle.

The Government published Approved Document S to the Building Regulations which came into force on 15th June 2022, meaning that all planning applications submitted from this date must include the provision of EV chargepoints as part of the application. Part S provides technical guidance for EV chargepoint requirements and installation. Among other building types, this document applies to the construction of new residential buildings.

An excerpt from S1, Part S of Building Regulations is included as Figure 11 and summarises the EV chargepoint infrastructure requirements for the erection of new residential buildings.

This section deals with requirement S1 from Part S of Schedule 1 and regulation 44D of the Building Regulations 2010.

Requirement	
The erection of new residential buildings	
S1.	<ul style="list-style-type: none">(1) A new residential building with associated parking must have access to electric vehicle charge points as provided for in paragraph (2).(2) The number of associated parking spaces which have access to electric vehicle charge points must be—<ul style="list-style-type: none">(a) the total number of associated parking spaces, where there are fewer associated parking spaces than there are dwellings contained in the residential building; or(b) the number of associated parking spaces that is equal to the total number of dwellings contained in the residential building, where there are the same number of associated parking spaces as, or more associated parking spaces than, there are dwellings.(3) Cable routes for electric vehicle charge points must be installed in any associated parking spaces which do not, in accordance with paragraph (2), have an electric vehicle charge point where—<ul style="list-style-type: none">(a) a new residential building has more than 10 associated parking spaces; and(b) there are more associated parking spaces than there are dwellings contained in the residential building.

Figure 11: S1, Part S of Building Regulations (Available at: <https://www.gov.uk/government/publications/infrastructure-for-charging-electric-vehicles-approved-document-s>)

All building work **must** meet the requirements of Building Regulations, and Part S sets out the guidance for EV chargepoint installation to help meet these requirements. The document is available on the Government webpages at the following link: <https://www.gov.uk/government/publications/infrastructure-for-charging-electric-vehicles-approved-document-s>

Public on-street charging

The usage of public on-street chargepoints has increased greatly since the first chargepoints were installed. When the Council first installs a chargepoint, parking restrictions are not often implemented on the parking bays. This decision was made because, at the time, there may have been fewer electric vehicles and more infrequent demand.

As the demand for chargepoints increase, it is becoming more necessary to place restrictions on the parking bays so that they can be designated for electric vehicle charging only. There have been increasing occasions of petrol and diesel vehicles parking in the bays next to chargepoints, which prevents electric vehicles from accessing them. The Council are committed to ensuring that drivers can access vehicle charging points as needed.

Policy 5. The Council will look to amend the Traffic Regulation Orders for parking bays with chargepoints that are in high demand or where drivers are encountering issues with accessing the chargepoint. This will be considered on a case-by-case basis and will be reviewed annually.

Destination charging

Destination charging is the term used to refer to where people charge in their daily life. The chargepoints installed at these locations are often standard to fast. Typical locations include car parks, shopping centres and train stations. Private companies can install their own chargepoints on their own land that are available to customers of their business or the wider public, such as supermarkets or petrol filling stations.

The Council have installed 19 7kW chargepoints in Salt Lane Multi-Storey Car Park in Coventry City Centre, and 20 7kW chargepoints at Coventry Train Station Car Park.

Policy 6. The Council will continue the rollout of public electric vehicle chargepoints in destinations. This will include analysing the usage of existing chargepoints, and increasing the number installed when there is additional demand.

Workplace charging

Another place that people often recharge their electric vehicles is their workplace. Some organisations provide electric vehicle charging, either at a cost or for free as a workplace benefit. The Council encourage organisations to install electric vehicle chargepoints for use by their employees.

The Government provides support grants that are available to part-fund the installation costs for a set number of electric vehicle chargepoints at workplaces, this is currently through the Workplace Charging Scheme.

Approved Document S to the Building Regulations also details the chargepoint requirements for the construction of new buildings other than residential or mixed-use.

An excerpt from S4, Part S of Building Regulations is included as Figure 12 and summarises the EV chargepoint requirements for the erection of new buildings other than residential or mixed-use. S4 stipulates that where a new building has more than 10 parking spaces, one of those parking spaces must have access to electric vehicle chargepoint infrastructure. It also requires that cable routes for EV chargepoints must be installed in a minimum of 20% of the total number of remaining spaces.

This section deals with requirement S4 from Part S of Schedule 1 and regulation 44G of the Building Regulations 2010.

Requirement	
Erection of new buildings which are not residential buildings or mixed-use buildings	
S4.	Where a new building which is not a residential building or a mixed-use building has more than 10 parking spaces—
	(a) one of those parking spaces must have access to one electric vehicle charge point; and
	(b) cable routes for electric vehicle charge points must be installed in a minimum of one fifth of the total number of remaining parking spaces.

Figure 12: S4, Part S of Building Regulations (available at <https://www.gov.uk/government/publications/infrastructure-for-charging-electric-vehicles-approved-document-s>)

All building work **must** meet the requirements of Building Regulations, and Part S sets out the guidance for EV chargepoint installation to help meet these requirements. The document is available on the Government webpages at the following link: <https://www.gov.uk/government/publications/infrastructure-for-charging-electric-vehicles-approved-document-s>

Fleet charging

Coventry City Council acknowledge that fleet vehicles are not always able to be recharged at depots, workplaces or at driver's homes. Therefore, the Council would like to help facilitate on-street charging for electric fleet vehicles, including both cars and vans. This will be done by ensuring that there are parking bays of a sufficient size for these vehicles to be able to recharge.

Policy 7. Where more than 3 Electric Vehicle chargepoint bays are introduced, the 4th bay should be a minimum of 6 metres long.

On-the-go charging

When people charge on-the-go, they often use rapid chargepoints of 50 kW or higher. These chargepoints can often charge an electric vehicle to 80% or higher within 1 hour. Rapid chargepoints are often installed in service areas or hub arrangements.

To date, the Council have installed 39x 50 kW kerbside chargepoints including 5 in surface car parks across Coventry. These are standalone chargepoints, for use by drivers, including taxis.

The Council are looking to explore developing charging hubs, that will consist of both rapid and standard-fast chargepoints.

LEVI Pilot Project

The LEVI Pilot Project will deliver 2x micromobility hubs in existing public car parks and 2x charging hubs at community facility buildings. The community facilities are currently used by staff and visitors during the day but are unused at night. The proposal will see the car parks attached to these facilities opened to residents for overnight EV charging. The designs of the hubs will be carefully considered and will take ease of access, lighting provision and personal safety into account when planning the hub designs. A total of 107x 7kW charging bollards will be installed across these four locations. These are suitable for overnight charging and are expected to mainly be used by people who live within a 10-minute walk of the hubs, and who do not have access to off-street parking at home. There will also be some chargepoints installed for e-car club vehicles in the public car parks.

In addition, 2x rapid charging points will be installed in one of the public car parks. The EV charging facilities, which are the focus of this proposal, will be complemented with other forms of e-mobility, such as electric hire cars, e-bikes, e-

mopeds and potentially (depending on changes to legislation) e-scooters at some locations, to create e-mobility hubs. These will offer residents a choice of zero emission modes of transport and support a move towards a healthier, more sustainable transport system. Finally, to provide a source of locally generated, renewable energy for these sites, solar canopies and battery storage facilities will also be installed at two of the hubs.

Also, as part of the LEVI Pilot Project, 4x 11kW static wireless charging pads will also separately be installed in on-street disabled bays at various locations across Coventry city centre. These will support disabled residents, who in some cases may be unable to easily access existing charging facilities, to transition to an EV.

Policy 8. The Council will work with partners to develop a network of micromobility and charging hubs, comprising a mixture of rapid and standard-fast chargepoints, commencing with the delivery of the LEVI Pilot Project.

Supercharging hubs

The Council is keen to support the development of a network of supercharging hubs in more strategic locations. These would be intended to provide facilities at which motorists making longer distance journeys could quickly charge their electric vehicle and would therefore need to be handily located for the strategic road network. Potential locations would be near to the M6 Junction 2 or 3, or near to the A45 / A46 Toll Bar Interchange.

The Council has worked with partners to develop outline proposals for the Coventry and Warwickshire CLEAN Hub to demonstrate the principles of what a multi-modal transport interchange, with electric vehicle charging facilities and park and ride services, could look like. A similar outline proposal for a site adjacent to the newly designated Greenpower Park Investment Zone has also been developed.

The Council will work with partners to further develop such proposals and seek funding for multi-fuel, multi-purpose, charging hubs at strategic locations. The Council will also support the Transport for West Midlands proposal for a new charging hub on the A444 near to M6 Junction 3, to be funded from the regional CRSTS programme as one of several strategic charging hubs to be built across the region.

Policy 9. The Council will support the delivery of the proposed TfWM charging hub on the A444 in the northern part of Coventry.

Policy 10. The Council will work with partners to develop a network of supercharging hubs at strategic locations around the city.

7.3– Policy Summary

The policies referenced in Section 7.2 are summarised in Table 8 below.

Policy	Actions and timeframe
1. The Council will continue the rollout of public on-street electric vehicle chargepoints in residential areas	<p>142 charging sockets have recently been installed in on-street locations across Coventry.</p> <p>Coventry City Council will continue to seek out additional funding to continue with the rollout of electric vehicle chargepoints.</p> <p>Coventry City Council will also look to support the commercial rollout of more chargepoints by private companies through allocation of kerbside spaces that meet the relevant criteria.</p> <p>Through these methods, we will meet the target of 2,319 chargepoints by 2040.</p>
2. The Council will continue investigating 'gully channels' including undertaking a pilot scheme. The outcomes of this pilot scheme will inform as to the practicality and costs of implementing this solution further.	7 residential properties are participating in the current pilot scheme
3. The Council will investigate combining two solutions, lamppost charging and a gully channel, for public charging use.	This will include a trial at one location in the coming months.
4. The Council will progress the main LEVI project to create 4x residential charging hubs, with the aim of rolling out a wider network of charging hubs subject to successful funding bids.	Regional procurement to be undertaken prior to starting installation as detailed in implementation plan.
5. The Council will look to amend the Traffic Regulation Orders for parking bays with chargepoints that are in high demand or where drivers are encountering issues with accessing the chargepoint.	This will be considered on a case-by-case basis and will be reviewed annually.
6. The Council will continue the rollout of public electric vehicle chargepoints in destinations.	This will include analysing the usage of existing chargepoints, and increasing the number installed when there is additional demand. This is a rolling programme and is highly dependent on securing funding.

7. Where more than 3 Electric Vehicle chargepoint bays are introduced, the 4th bay should be a minimum of 6 metres long.	This will be considered for each future installation.
8. The Council will work with partners to develop a network of micromobility and charging hubs, comprising a mixture of rapid and standard-fast chargepoints, commencing with the delivery of the LEVI Pilot Project	Completion of the LEVI Pilot Project in 2026/27 financial year. This will require the installation of 123 charging units, solar panels, battery storage, e-bikes, e-mopeds, e-car clubs.
9. The Council will support the delivery of the proposed TfWM charging hub on the A444 in the northern part of Coventry.	The Council will work closely with TfWM to support this scheme.
10. The Council will work with partners to develop a network of supercharging hubs at strategic locations around the city	The Council will continue to work closely with partners to work towards this target.

Table 8: Summary of the policies referenced in Section 7.2

8. Delivering the strategy

8.1 - Commercial arrangements

Coventry City Council currently have four active contracts with Chargepoint operators. These are concession contracts with revenue share arrangements. For future contracts, the decision on what type of contract to progress with will be made on a case-by-case basis.

Coventry Strategic Energy Partnership

Coventry City Council has partnered with E.ON in a pioneering 15-year initiative designed to revolutionise the city's approach to carbon reduction while saving residents money and stimulating the local economy. As Coventry's new Strategic Energy Partner (SEP), E.ON will invest substantial time, resources, expertise, and capital to help build a cleaner, more sustainable city. This commitment will drive a new green economy, fostering job creation and skills development.

Believed to be a first for the UK, this partnership will see our organisations collaborate to transform energy use in Coventry, benefitting local communities and the wider economy. The SEP will enable long-term sustainable infrastructure planning, supporting our route to net zero through innovative energy generation and security, sustainable transport, and the decarbonisation of buildings and homes.

The Council and E.ON will work together to develop ideas and projects that benefit Coventry residents, creating a strategic plan that aligns with the five priorities of our One Coventry Plan and tackles critical climate change initiatives.

Moving forward, the SEP will provide strategic insight and support the delivery of Coventry's Electric Vehicle Charging Infrastructure Strategy. Their expertise as a Charge Point Operator and product supplier makes E.ON an ideal and effective partner in the Council's efforts to spearhead the EV transition.

8.2 - Long term funding options

To date, EV chargepoint installation in Coventry has been funded by:

- The Office for Zero Emission Vehicles, including from the On-Street Residential Chargepoint Fund and Local Electric Vehicle Infrastructure Fund
- Chargepoint operator investment, including ESB and Connected Kerb
- Coventry City Council direct investment

The Council currently receives a revenue share from the chargepoints installed in Coventry. Revenue from the charging points is ring fenced to be used for the expansion of the network.

Future chargepoint installations will utilise funding from Office for Zero Emission Vehicles, investment from Chargepoint Operators and investment from Coventry City Council. There is a proposal to explore a fully funded model by chargepoint operator once locations are identified based on demand.

8.3- Accessibility

It is important to ensure that the electric vehicle charging network is accessible for all drivers. Motability and the Office for Zero Emission Vehicles sponsored the publication of PAS 1899 in 2022 to provide best practice guidance on ensuring that chargepoint installations are accessible for all drivers. PAS 1899 includes guidance on many aspects of chargepoint installation including the physical design of chargepoints, chargepoint placement and cable length and weight.

Coventry City Council will look to follow all best practice guidance, including PAS 1899, where possible. The Council also encourages all private chargepoint installers to follow best practice guidance.

The PAS 1899 document is available in more detail from the British Standards Institution webpage.

The Council appreciate that the pricing of charging infrastructure is important for EV drivers, so there are measures in place for chargepoints installed through CCC contracts which regulate pricing tariffs, to ensure that pricing is fair and reasonable, and in line with market rates.

8.4- Monitoring and evaluation

The Council receive data on a regular basis from the Chargepoint Operators that run the Council-installed chargepoints in Coventry. This data is reviewed to monitor the performance of the charging network. The data reviewed includes:

- The total number of chargepoints in Coventry
- The number of EVs registered in the city
- Number of charging sessions
- kWh delivered through charging sessions
- The proportion of charging carried out on rapid or residential charging points
- Number of faults reported
- Uptime and downtime of each charger
- If any faults reported, the length of time to repair

If it is identified that a chargepoint is near to full use, or the access is restricted, the Council will use this as a benchmark to implement a Traffic Regulation Order. These Traffic Regulation Orders will restrict use of the parking spaces, so that only electric vehicles can park in those spaces.

8.5- Implementation Plan

This section will detail how Coventry City Council will meet the targets detailed in Section 5.

Projections identify that 2,319 chargepoints of varying powers are required by 2040 to meet anticipated demand. Through this strategy, Coventry City Council will set a target to reach this figure. Plans for future installations will be kept under review, to identify sources of funding and potential locations for chargepoints.

As of July 2024, there are already 2,084 public chargepoints available in Coventry. This means that 235 additional chargepoints must be installed to meet the anticipated demand by 2040.

Even though Coventry City Council have made excellent progress with the rollout of electric vehicle chargepoints and are nearing the projected number of chargepoints required, future work will focus on increasing the location coverage of residential charging alongside increasing the provision of rapid chargepoints which will accommodate a different type of charging demand. This will provide a mix of charging to best accommodate residential, visitor and on-the-go charging.

Table 9 shows how Coventry City Council will contribute towards this goal.

Phase	Number of chargepoint units and sockets	Type of location (car park, residential streets, hub)	Installation date
LEVI Pilot Project	123 charging units, solar panels, battery storage, e-bikes, e-mopeds, e-car clubs	2x micro mobility hubs in existing public car parks, 2x charging hubs at community facility buildings and 4x wireless charging facilities in on-street public disabled bays in the city centre to facilitate accessibility.	Project to be complete in 2026/27 financial year.
Phase 9 of the residential EV chargepoint project	Approx. 76 units, 143 sockets	Residential streets	Completion by end of March 2025
LEVI	Approx. 250 charging units	4 x hubs (off street) in residential areas based on land availability	Regional procurement to be undertaken prior to starting installation.
EV chargers in surface car parks	7 x 150kW, 9 x 50kW DC 6 x 22kW DC 32 x 7kW AC	81 chargers in 11 car parks, which is 10% of the total capacity of the car park spaces	Partial funding secured with delivery starting in 2026/2027

Table 9: Implementation plan