

ESBC Electric Vehicle Charging Infrastructure Strategy



January 2023

Introduction

Background

In November 2020 the UK Government announced that the sale of cars wholly powered by petrol and diesel will end in 2030 with the aim to decarbonise road transport.¹

At the end of March 2022, there were 833,000 licensed ultra-low emission vehicles (ULEVs) in the UK, an increase of 71% compared to the end of March 2021². As this trend continues it will lead to increased demand for publicly accessible charge points and it is important to ensure that everyone can have easy access to a well-structured EV charging network across the UK.

This strategy sets out how East Staffordshire Borough Council (ESBC) will support the uptake of Ultra Low Emission Vehicles (ULEVs) by facilitating the growth of Electric Vehicle charging infrastructure across the district.

It supports Staffordshire County Council's (SCC) Public Electric Vehicle Charging Infrastructure Strategy to ensure a consistent and coordinated approach to the development of accessible chargepoints across the County.

It is important to recognise that it is not the intention to increase the number of vehicles on our roads, more so the desire to ensure that a far higher proportion of vehicles using highways across our district are powered by ultra-low emission fuels rather than petrol or diesel.

EVs and charging infrastructure provision should be considered as part of a sustainable, holistic mobility strategy that also encourages walking, cycling, car-sharing and public transport use.

The strategy contains an overview of why it is important for East Staffordshire Borough Council to support EV infrastructure along with the vision, aims and objectives followed by an Implementation and Action Plan.

¹ [UK electric vehicle infrastructure strategy - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/uk-electric-vehicle-infrastructure-strategy)

² [Vehicle licensing statistics: January to March 2022 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/vehicle-licensing-statistics-january-to-march-2022)

Definition of key terms

AQMA	Air Quality Management Area – Location where Nitrogen Oxide levels exceed the national maximum threshold. We are required to implement a plan to reduce emissions in AQMAs
BEV	Battery Electric Vehicle – vehicles relying solely on battery power. Generally operate to a 100-300 miles range
Chargepoints	The physical devices that deliver electricity to EVs
DNO	Distribution Network Operator (electricity companies!)
ESBC	East Staffordshire Borough Council
EV	Electric Vehicle
EV Forecourt	Fuel stations that include chargepoints
EV Charging Hub	Fast, rapid, or ultra-rapid chargepoints at a specifically designed location
FCEV	Fuel Cell Electric Vehicle – Hydrogen powered vehicles. These will not be considered in this strategy but ESBC will monitor the development of this technology closely
Fast Charger	The most common type of publicly available charger. Tends to take 3 - 4 hours to fully charge an electric vehicle
ICE	Internal Combustion Engine (usually petrol or diesel)
Hybrid	A vehicle that combines an electric motor supporting an Internal Combustion Engine
kW / kWh	Kilowatt/Kilowatt hour – the measure of power
Off-street Charging	Chargepoints in car parks
On-Street Charging	Chargepoints located on the street
PHEV	Plug-in Hybrid Electric Vehicle – Conventional petrol or diesel working alongside an electric motor
Rapid Charger	These chargers can fully charge a compatible vehicle in around 30 minutes
Residential Off-street Charging	Private chargepoints installed by users at their residence
Smart Charging	This refers to electric vehicles and chargepoints sharing a data connection
SCC	Staffordshire County Council
Trickle Charger or Slow Charger	Typically requires 7-8 hours for a full charge and is mostly suitable for homes or workplaces
ULEV	Road-using vehicles that are reported to emit less than 75 grams of carbon dioxide (CO ₂) from the tailpipe for every kilometre travelled

Section 1: Why

East Staffordshire Borough Council alongside our neighbouring boroughs and Staffordshire County Council need an Electric Vehicle Infrastructure (EVI) Strategy to coordinate the action in response to environmental challenges and to align with national and local policies, as well as public demand:

1.1 Environmental

Climate Change is the biggest environmental challenge facing the world today, and as the planet is warming we need to mitigate this by drastically reducing carbon emissions. One of the key priorities of the Council's Corporate Plan is to take action against this

Transport is now the UK's largest emitting sector, responsible for almost a quarter of emissions (91% of those emissions coming from road transport³). In East Staffordshire transport is responsible for approx 30% of the area's CO2 emissions, second only to buildings.

Transport was the largest emitting sector in the UK in 2020, responsible for almost a quarter of emissions



FIGURE 1: BEIS 2020 UK GREENHOUSE GAS EMISSIONS

We need to tackle climate change by reducing the impact our transport has on the environment, and if we are to meet our commitments to reduce carbon emissions there will have to be a switch to sustainable travel modes such as public transport, walking and cycling. However, as a largely rural county, many East Staffordshire residents rely on cars and vans for their daily needs, so in the future, EVs will ensure those journeys are taken in a way that minimises carbon emissions.

³ [Final UK greenhouse gas emissions national statistics: 1990 to 2020 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-national-statistics-1990-to-2020)

1.2 Societal and Public Health

1.2.1 Air Pollution

Everyday life is impacted by the widespread use of conventionally-fuelled engines in life, commuting, business and leisure. However, road transport is a major source of both greenhouse gases and air pollutants responsible for significant contributions to emissions of carbon dioxide, nitrogen oxides, and particulate matter⁴, which have been shown to have a harmful effect on health.

The 3 main conditions associated with air pollution are respiratory conditions (such as asthma), cardiovascular disease (CVD), and lung cancer, and there is emerging evidence for associations with dementia, low birth weight and Type 2 diabetes.⁵

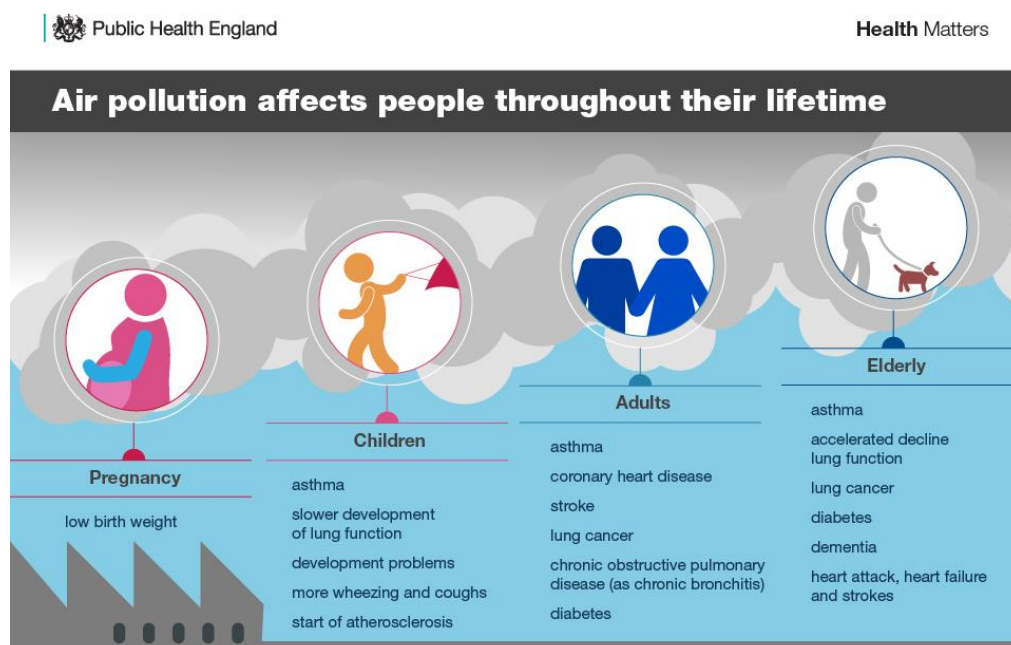


FIGURE 2: PUBLIC HEALTH ENGLAND INFOGRAPHIC - HEALTH EFFECTS OF AIR POLLUTION

In 2018, a committee of health experts brought together by the Government estimated that at least 28,000 people die prematurely in the UK every year as a result of poor air quality⁶. Full EVs have zero exhaust emissions and therefore do not emit NOx emissions or carbon dioxide, so transitioning to EV will result in improved air quality.

1.2.2 Noise

Noise from conventional vehicles affects human health and damages the environment.

⁴ [Road transport and air emissions - Office for National Statistics](#)

⁵ [Health matters: air pollution - GOV.UK \(www.gov.uk\)](#)

⁶ [The case for electric vehicles | Local Government Association](#)

The World Health Organisation (WHO) estimates that the noise impact of road traffic is second only to pollution as the biggest environmental impact of vehicles.

The annual social cost of urban road noise in England is estimated to be £7–£10 billion. At low speeds, vehicles driven by electric motors are significantly quieter than those powered by conventional engines.⁷

1.3 Policy (National and Local Context)

1.3.1 National

In 2019 the UK government set a legally binding target of net-zero emissions by 2050⁸. Transport from cars and taxis alone represents 52% of UK transport emissions; as part of plans to decarbonise road transport in November 2020 the government announced that sales of all new petrol and diesel cars and vans would end in 2030.

In March 2022 the Department for Transport published ‘Taking charge: the electric vehicle infrastructure strategy’⁹ setting out their vision and action plan for the rollout of electric vehicle charging infrastructure in the UK, in which they outline how expectations for local government to develop their own chargepoint strategies to enable a rapid scaling up of the rollout of public chargepoints.

1.3.2 Regional

Staffordshire County Council published their ‘Staffordshire Climate Change Action Plan 2021-2025’ in 2021 which recognises that a range of actions are needed to stop or reduce the carbon emissions. Working alongside district and borough councils, including ESBC they have developed an EV Infrastructure Strategy and Low Emissions Vehicle Infrastructure Action Plan to ensure a consistent approach is taken across Staffordshire and to help guide how a charging network should be developed.

1.3.3 Local

ESBC declared a Climate Emergency in August 2020 with a target to make the Council’s activities carbon neutral by 2040 and aspires to make the Borough carbon neutral by 2050.

Transport is the most carbon-intensive sector in the UK, which is mirrored locally with road transport representing approximately 30% of all CO2 Emissions in East Staffordshire¹⁰, therefore our Climate Change Action Plan¹¹ has targets to support the transition to cleaner vehicles through the provision

⁷ [The case for electric vehicles | Local Government Association](#)

⁸ [Net Zero Strategy: Build Back Greener - GOV.UK \(www.gov.uk\)](#)

⁹ [Taking charge: the electric vehicle infrastructure strategy \(publishing.service.gov.uk\)](#)

¹⁰ [www.gov.uk/government/collections/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics](#)

¹¹ [Climate Change Action Plan | ESBC \(eaststaffsbc.gov.uk\)](#)

of EV infrastructure, providing incentives and information to existing and potential private car users to make the switch to electric cars.

ESBC's Corporate Plan¹² sets out the way in which the Council will deliver, develop and improve its services over a 12-month period. It plays an important role in ensuring strategic objectives are achieved and forms the foundation for operational service planning. Set out in the document is the following performance target:

“EHW08 - Climate Change Initiatives: Undertake a number of Climate Change initiatives as outlined in the Action Plan for 2022/23. Including developing an electric vehicle (EV) strategy for East Staffordshire and the delivery of 3 EV charging points in Burton”

1.4 Demand

According to the Local Government Association¹³ in a social attitude survey on motorists' views on upgrading to EVs, the two most important issues raised after the purchase cost were the distance that could be travelled on a single charge and the availability of charging infrastructure.

East Staffordshire is a mixture of urban and rural areas and it is therefore important that we provide EV infrastructure in our areas to increase driver confidence.

Responding to these challenges and bringing our EV charging infrastructure to fruition can bring many benefits to the local area, including improved air quality, reduced environmental impact and/or quieter roads and might also be found to have as a monetary value through mitigated damage costs.

¹² [ESBC Corporate Plan 2022-23.pdf \(eaststaffsbc.gov.uk\)](#)

¹³ [The case for electric vehicles | Local Government Association](#)

Section 2: The Current Picture

2.1 EV Uptake & Chargepoints To-date

As of 1st October 2022, there were 34,637 public electric vehicle charging devices installed in the UK, an increase of 34% since October 2021¹⁴.

Across Staffordshire the figures are as follows:

Local Authority	Total public charging devices	Total public rapid charging devices	Charging devices per 100,000 population	ULEVs registered (Q2 2021) (<75g/km CO2)	ULEVs registered (Q2 2022) (<75g/km CO2)	% Increase
UNITED KINGDOM	34,637	6,395	51.6	561,283	910,734	38%
Staffordshire	300	137	34.0	4,108	6,892	40%
Cannock Chase	37	16	36.5	436	764	43%
East Staffordshire	46	18	38.0	504	924	45%
Lichfield	21	5	19.9	668	1,184	44%
Newcastle-under-Lyme	47	23	36.3	458	742	38%
South Staffordshire	54	31	48.1	591	876	33%
Stafford	71	38	51.5	730	1,199	39%
Staffordshire Moorlands	9	2	9.1	388	657	41%
Tamworth	15	4	19.5	332	545	39%

TABLE 1 - ULEV REGISTRATIONS & NUMBER OF CHARGE POINTS

(Sourced from ONS: [VEH0132 - Licensed ultra-low emission vehicles \(ULEVs\)](#) and [Electric vehicle charging device statistics: October 2022 report](#))

In 2021 there were 504 ULEVs registered within the borough, and 20 public charging points (according to SCC EV Strategy data).

By the end of Q2, 2022 this had risen to 924 ULEVs registered within the borough, an increase of 83% and a total of 46 public charging points.

One of these public charging points is in an ESBC owned car park located in Uttoxeter (Trinity Road, ST14 8TH). It is privately operated by BP Pulse and is a 43kW rapid charger.

A further three dual floor-mounted EV charging points are currently being procured and will be installed in Coopers Square Car Park in Burton by March 2023.

¹⁴ [Electric vehicle charging device statistics: October 2022 - GOV.UK \(www.gov.uk\)](#)

Whilst the current level of EV uptake is relatively low and in its early stages, it is clear that it is a growing market, therefore ESBC has a role to play in developing a sustainable and effective charging network by building up capability and capacity in advance of this requirement.

ESBC have worked with Staffordshire County Council to create a strategy for EV within the County to help guide how a charging network should be developed and identify where chargepoint installation should be considered.

This identifies various types of charging solutions, the current picture, and estimated future demand for the borough to inform decision-making.

2.2 Charge point types and typical locations

There are a number of different ways EV owners can currently charge their vehicles. EV chargepoints are mainly defined by the power they can produce and the how quickly they can charge an EV as the following table shows:

Charge point type	Power transfer		Typical charging time	Recommended location
Slow	<3kW	Single Phase	8-12 hrs	Ideal for vehicles that will be parked for periods of 8 hours or more
Fast	<7kW	Single Phase	3-4 hrs	
	<22kW	Three Phase	1-2 hrs	
Rapid	<43kW	Three Phase	80% in 20-30mins	These chargers are ideal for vehicles that need a quick turnaround or vehicles that have large batteries installed like HGVs with 250+kWh batteries.
	<50kW DC			
Ultra Rapid	<43kW	Three Phase	<20-30mins	
	<50kW DC			

TABLE 2 - CHARGEPOINT SPECIFICATIONS

(Sourced from [Western Power: 2021 Guide on Electric Vehicle charging for Local Authorities](#))

Where each of these chargepoint types can typically be found can be summarised as follows;

Typical Locations	
Residential: Charge points located at or near EV drivers' homes. These typically have a rated capacity of 3-7 kW	Slow charging is often suited to off-street residential solutions, as in these cases vehicles can be charged overnight, and this aligns with the current Department for Transport recommendations of charging overnight.

<p>Work: Charge points installed in workplaces, for use by employees who commute to work using an EV. These typically have a rated capacity of 3-22 kW.</p>	<p>Delivered through a variety of chargepoints, kerbside units, dedicated parking bays or residential charging units, fast charging can support the top-up of EVs while visiting points of interest such as supermarkets, retail parks or tourist locations; fast charging can also be used in off-street residential solutions.</p>
<p>Slow/Fast Public: Publicly accessible charge points, excluding those classified as Work or Residential, with a charging capacity ≤22 kW.</p>	<p>Fast chargers tend to be found at destinations such as car parks, supermarkets, or leisure centres, where you are likely to be parked for an hour or more</p>
<p>Rapid Public: Publicly accessible charge points with a charging capacity ≥43 kW.</p>	<p>Commonly found at motorway services or locations close to main routes, forecourts, charging hubs or commercial locations.</p>

TABLE 3 - CHARGEPOINT LOCATIONS

Often when installing fast chargepoints, power supply upgrades can be required to ensure the required electrical infrastructure and capacity.

Fast charging can also be used in off-street residential solutions.

Both Fast and Rapid chargepoints are the suggested solution for public car parks.

Section 3: Projections

The government predicts that by 2030, 300,000 public chargepoints will be required as a minimum in the UK, but there could potentially be more than double that number¹⁵.

The Energy Saving Trust (EST) forecast that there will be between approximately 8 million and 11 million hybrid or electric cars in the UK by 2030 and 25.5 million by 2040.

Specific predictions of the future mix and number of chargepoints are inherently uncertain at the beginning of 2023 due to rapid developments in battery and charging technology, and because consumer preferences about where and when they would like to charge are still being revealed.

Overall, this indicates that the network and its current capacity will need to be developed over a relatively short period of time and will need to be continually expanded to achieve our net zero targets.

The analysis completed with Staffordshire County Council suggests that the focal points of the charging network be off-street residential and off-street charging, for example in car parks.

East Staffordshire has a total population of 120,923 with a total number of households at 52,899.

35,777 (68%) have access to off-street parking, whilst 17,122 households don't. Only 5.6% of the 17,122 on-street households are currently within a 5-minute walk to a chargepoint.¹⁶

Figure 3 below shows the propensity for EV demand within East Staffordshire and identifies a large proportion of off-street charging infrastructure solutions, both residential and based in public car parks. Analysing the current likely areas for EV ownership, it is suggested that a large proportion of these could be best served through off-street residential solutions.

However, where off-street residential charging wasn't a suitable solution but there was high propensity for EV transition, off-street charging in car parks shall be considered as a solution where these are located close to residential properties that do not have access to off-street parking.

These locations will be reviewed to consider facilitating EV charging installation.

¹⁵ [Taking charge: the electric vehicle infrastructure strategy \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/114114/taking-charge-the-electric-vehicle-infrastructure-strategy.pdf)

¹⁶ [On Street Charging \(acceleratedinsightplatform.com\)](https://acceleratedinsightplatform.com/)

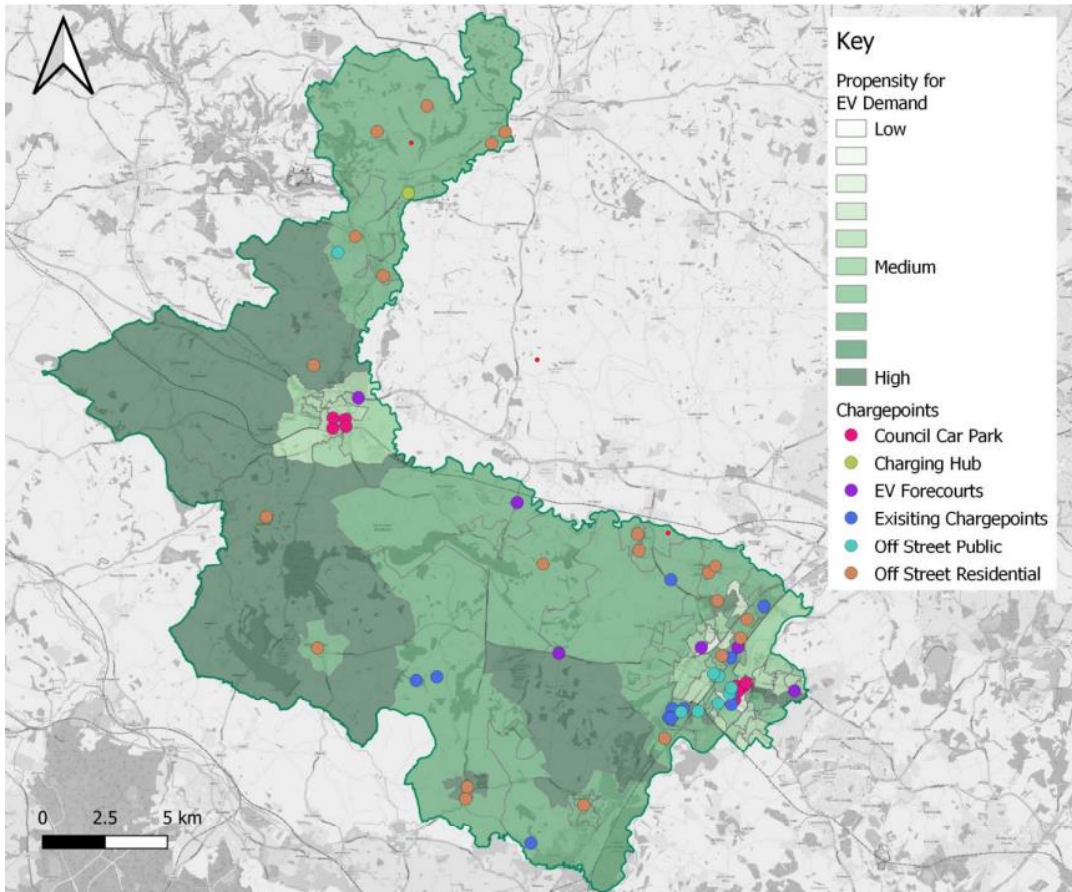


FIGURE 3 - PROPENSITY FOR EV & PROPOSED LOCATIONS

EV Charging Hub	EV Forecourt	Off-street public	Off-street residential
Suggested multiple fast, rapid, or ultra-rapid at specifically designed locations	Existing fuel stations (highly likely to be converted to EV over the coming years)	Suggested chargepoints at car parks	Main areas where private chargepoints should be encouraged at residences (e.g. on driveways)

FIGURE 4 – KEY TO TYPE OF EV CHARGEPOINTS PROPOSED

Section 4: Strategy

The uptake of electric vehicles is increasing rapidly and, whilst most users currently prefer to charge at home there is demand for destination-based charging.

In order to promote the visitor economy and also to provide options for residents, some publicly available charging infrastructure is required to build on the charger already available in Trinity Road Car Park, Uttoxeter and the three chargers which will be available in Coopers Square Car Park from March 2023.

This should be supplemented by measures to ensure new homes have charge points, looking at opportunities for electric fleet adoption and also working with third-party land owners to maximise the locations available for EV users to recharge their batteries.

Understanding what is needed, what can be implemented and at what cost will be crucial to supporting the transition to Ultra Low Emission Vehicles (ULEVs).

4.1 Vision

Our vision is to support cleaner vehicles and improve public transport to reduce carbon emissions and improve air quality in the Borough.

4.2 Aims

To achieve this vision there are two aims that are vital:

- Increase the amount of electric charging points in Council car parks and implementation of Council incentives to increase usage.
- Increase the proportion of vehicles that are ultra-low emission by supporting residents and businesses and increasing awareness of EVs.

4.3 Objectives

- To provide charging infrastructure for electric vehicles in order to incentivise the use of electric/hybrid vehicles over internal combustion engine-powered equivalents.
- To make electric vehicle infrastructure across the Borough sustainable for the future.
- To coordinate charging infrastructure with neighbouring authorities and commercial charging network operators
- To support the transition of commercial and public transport vehicles to plug-in vehicles, in particular taxis.

4.4 Implementation and Action Plan

To deliver the objectives detailed above, 7 key actions have been identified which correlate to actions detailed within the Climate Change Action Plan as outlined below:

➤ **Action 1: Work with SCC as Highway Authority on the provision of additional locations for public charge points**

Staffordshire County Council has recently published their Public Electric Vehicle Charging Infrastructure Strategy for the county which acknowledges the importance of engaging with borough councils to facilitate a consistent and effective EV charging solution for the people of Staffordshire and its visitors.

In implementing the strategy, SCC will coordinate with district and borough councils to develop joint bids and gain access to relevant funding from the Department for Transport and Office for Zero Emission Vehicles.

This will deploy funding to support the widest distribution of charge-point solutions and explore the commercial partnership opportunities which may be applicable with a particular focus on EV charging hubs.

➤ **Action 2: Raise awareness of the EV market so people can understand the options and benefits of EV ownership, such as reduced environmental impacts and improved air quality.**

Throughout developing this strategy document, it is clear that open and regular engagement with neighbouring district, county and parish councils and working across local authority boundaries will be key to facilitating a well-connected and effective EV charging solution for the people of East Staffordshire and its visitors.

It is also important we bring residents and businesses along with us on this journey to ensure we coordinate a solution that benefits all.

An engagement programme that reaches all stakeholders will be developed to include:

- Information sharing by setting out key information that the public will want to know when it comes to owning and running an EV. Using SCC's 'EV Charging Public toolkit' published on their website as a resource, ESBC will be responsible for signposting residents to this through our own web pages and social channels.
- Establish an EV Community Comms Group with diverse community groups and stakeholders such as village halls groups, housing associations, parish churches and libraries to share information and also to act as an open

channel for feedback from the community, for example on potential chargepoint sites

- Sharing resources to help local groups access funding and information to empower them to install charge points at local community buildings for the benefit of their local residents.
- Engagement with local businesses about the needs of their fleets, and consideration of how these can be addressed and also share plans to help them access funding and information to empower them to install workplace charge points for employees and the public.
- We will undertake a public consultation in the form of a survey within the Borough throughout 2023 to developing an improved understanding of residents opinions and thoughts on EV's and charging infrastructure, and to identify the most appropriate chargepoint locations.
- Share plans with local businesses
- Linking in with our Climate Comms Plan (to be completed in March 2023) we will tie any EV messaging to other work we will be doing to encourage other sustainable transport initiatives such as car share schemes, cycle route and installing charge points at local community buildings for the benefit of their local residents.
- It is also expected that chargepoint operators operating across the county will engage with local users, taking onboard feedback and ensuring that the solutions meet demand and expectations.

Raising the local perception of EV's along with the associated infrastructure, and the co-benefits for the environment, for example, cleaner air and less noise pollution, we aim to provide residents with the confidence to make the switch and thereby increase the speed at which net zero is reached.

➤ **Action 3: Increase publically available EV Infrastructure at locations owned by ESBC**

Charging infrastructure needs to be in place to support the move to EVs and give consumers and businesses the confidence to purchase an EV. Whilst it is not ESBC's role to install and maintain the charging network, we do have a commitment to achieving net zero and therefore an important role in coordinating and facilitating access.

Locations:

Public EV charging will be considered at locations owned by ESBC including public car parks that also provide off-street parking for residents and leisure centres. To identify the most appropriate locations we will undertake a public consultation within the Borough in 2023/24.

Site Assessment Criteria:

Before any chargepoint solution is installed, detailed feasibility of the proposed areas for EV charging sites is required. This would confirm location and solution suitability using the following criteria to shortlist potential locations:

- Proximity to properties with on-street parking
- Proximity to amenities
- Proximity to key routes
- Location of electrical infrastructure
- Impact on parking supply
- Proximity to alternative chargers
- Analysis of users in the area
- Installation costs

A key factor as to the type of chargepoint recommended in each solution is the speed (slow, fast and rapid/ultra-rapid) at which EVs could be charged and the compatibility across vehicle types.

Fast charging can be used in off-street residential solutions, and both fast and rapid chargepoints are the suggested solution for public car parks.

Operation of proposed charging infrastructure:

For the supply of off-street and carpark chargepoints there are a variety of models that could allow users to access the chargepoint.

Options include 'own and operate' where the authority own the chargepoints themselves and set the cost for charging a vehicle or alternatively authorities may use external operators to manage and install the chargepoints.

A full range of commercial models that may be considered are detailed in Appendix 1 along with the advantages and disadvantages of each option.

When considering the model to use, ESBC will consider the following:

- Cost to the user
- Cost to the authority
- Customer service implications
- Marketing capability and requirements
- Capability and responsibility of installation
- Capability and responsibility to maintain chargepoints
- Ongoing support and management of EV charging systems and suppliers
- Ongoing support and management of infrastructure

Commercial properties owned and operated by ESBC:

The potential to provide suitable charge points at commercial properties owned by ESBC will be investigated to enable our residents to adopt ULEV technology.

The first sites for consideration will be leisure centres in Burton upon Trent and Uttoxeter, as these are key destination-based locations owned by ESBC with close access to amenities. They will also support further opportunities as part of the Burton Town Centre Development and Uttoxeter regeneration plans which will also consider infrastructure at the Maltings car park.

➤ **Action 4: Bid for third-party funding opportunities to secure delivery of electric vehicle charging infrastructure**

There have been a number of available government grant funding options which are expected to continue ahead of the phase-out of all new petrol and diesel cars and vans by 2030.

ESBC will target appropriate funding opportunities with a view to these enabling the provision of further charging infrastructure across the borough.

Relevant funding opportunities will also be promoted to other organisations within the borough as part of ESBCs climate change communications.

➤ **Action 5: To support and encourage parish councils and public and private sector partners to install charging points on their estates for use by staff and the public**

Parish councils have a strong connection with their local communities and can be instrumental in raising the local perception of EV charging.

We will work with partner organisations, businesses and employers within East Staffordshire to encourage car share schemes and the installation of EV Chargepoints for the use of staff, visitors, customers and local residents.

➤ **Action 6: Consider the use of planning conditions to ensure delivery of electric charging points on new development**

As the planning authority for East Staffordshire, the Planning Team can place appropriate requirements on new developments.

To address air quality issues and the wider public health agenda we will consider whether an update to the Parking Standards Supplementary Planning Document (SPD) is required to ensure an increase in the provision of charging points for all new developments where appropriate.

➤ **Action 7: Assess opportunities to encourage the uptake of electric-powered public transport services such as taxis**

Taxis play a key role as they can help connect people to work, friends and family, especially in areas or at times of the day where there is limited public transport.

They can also support individuals with specific needs, such as a disability, and may help some households to reduce their private vehicle ownership.

However they account for 4% of the UK's domestic transport greenhouse gas emissions despite accounting for only 0.93% of all registered cars, due to their relatively high mileage and age.

There are 479 taxis registered with ESBC and whilst all vehicles will be required to meet Euro 6 status there are only a handful of ULEVs registered.

By working with the taxi trade, ESBC can help drivers and operators prepare for the phase out of petrol and diesel engines while encouraging and facilitating a quicker switch to EVs. Drivers will benefit from the lower running costs of EVs, and it can also help improve air quality and reduce carbon emissions.

Section 4: Monitoring and Review

To keep track of chargepoint provision, we will use the following set of metrics to enable us to monitor progress. This will be reported annually as part of the Climate Change Action Plan based on the following targets:

ULEV Registration:

We will monitor the increased number of ULEVs registered within East Staffordshire annually and provide a comparison with our neighbouring authorities.

EV Infrastructure:

We will monitor the number of EVCPs installed within East Staffordshire annually as follows:

- Chargepoints owned and managed independently of the Council by commercial charging network operators
- Chargepoints at commercial properties owned by ESBC
- The supply of off-street and carpark chargepoints funded by the Council

We will also report on EV usage within our car parks to determine whether there is demand and whether additional chargepoints are required.

Air Quality:

We will continue to monitor the air quality in the AQMAs and will report any reduction in Nitrogen Oxide levels.

The government will also be publishing improved metrics to monitor provision and disparities between local areas while accounting for local needs, such as:

- The percentage of households with vehicles parked on-street compared to the number of public chargepoints in an area
- Typical average walking time to a public chargepoint for households in areas with many vehicles parked on the street
- Utilisation of public chargepoints (this will be over a longer time frame and will build on work to open up chargepoint data)
- They will also monitor consumer behaviour and experiences at chargepoints, as these are both fundamental to maximising the benefits of EVs as well as assessing progress on consumer confidence and specific consumer experience issues at public chargepoints.¹⁷

¹⁷ [Taking charge: the electric vehicle infrastructure strategy \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/844447/taking-charge-the-electric-vehicle-infrastructure-strategy.pdf)