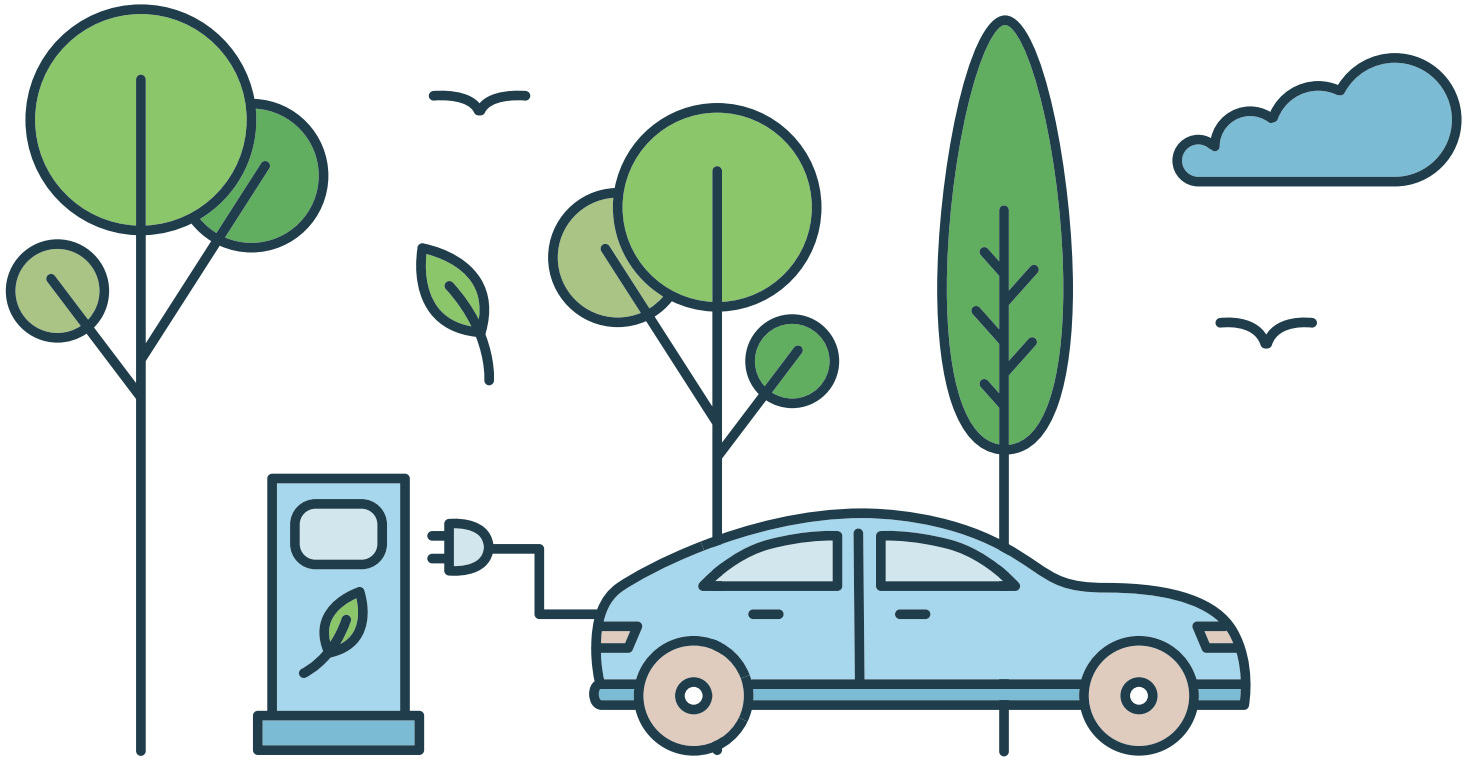
Herefordshire Council

Electric Vehicle Strategy
for Herefordshire



Contents

List of reviewers:

Economy and Environment Directorate - Sustainability and Climate Change, Transport and Access, Parking Services, Highways, Strategic Planning, Development Management, Planning, Building Control, Licensing, Economic Development

Corporate Services - Estate Management

Community Wellbeing - Regeneration Programmes, Talk Communities

Public Realm Contractor - Balfour Beatty

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1. Executive Summary

Climate change is an increasingly pressing concern that effects every aspect of life, and confronting its challenges requires immediate and sustained action. In recognition of this, Herefordshire Council declared a Climate and Ecological Emergency in March 2019, following which it committed to dramatically reduce its carbon emissions in the short term, aspiring to reach net zero carbon emissions by 2030/2031.

To achieve this target, it is necessary to carry out a critical review of the activities of, and facilities and services provided by, the authority, including an evaluation of the provision for emerging technologies such as ultra-low emission vehicles.

Transport plays a key role in the UK's greenhouse gas output, contributing 26% of the country's emissions in 2021. Nationally, the impact of transport on carbon emissions has been recognised through the governments ban on the sale of new petrol and diesel cars and vans by 2035, further facilitating the transition to Electric Vehicles (EVs), and supporting the journey to net zero.

Herefordshire has seen a 42% increase in EV ownership from Q3 2022 to the same period in 2023, leading to a growth in demand for EV charge point infrastructure. Herefordshire Council has an important role to play as a facilitator in meeting this demand, and has a responsibility to its residents to contribute to the move to zero emissions vehicles and other sustainable transport methods.

This strategy assesses the national and local status quo in relation to EV uptake, including the current provision of, and forecasted need for, charge point infrastructure. Taking into account national and local policy, grants, and other funding prospects, it reviews the opportunities available to expand the network of charge points ahead of demand. This strategy also recognises the challenges faced in improving EV charging infrastructure, particularly those specific to predominantly rural counties, such as Herefordshire. In doing so it seeks to better understand how Herefordshire Council can provide for residents across the county and:

- Accelerate the shift to low and zero carbon transport
- Improve air quality
- Ensure provision of and access to EV charging infrastructure is equitable

Herefordshire Council is already engaged in a concession contract with a charge point operator to deliver charge points across its public car parks; and is also taking part in the government funded Local Electric Vehicle Infrastructure (LEVI) scheme, working with a consortium of Local Authorities to deliver on a wider variety of infrastructure, including on-street charge points. This strategy will support the progress of these schemes and other associated work, whilst providing guidance for future projects relating to EV infrastructure.

2. Introduction

This strategy aims to identify the Council's role in supporting the current and predicted rise of electric vehicle ownership both locally and nationally. The vision is to deliver a solution for Herefordshire, which is forward thinking but adaptable to the fast-changing and dynamic nature of low emission vehicles and charging technologies. In recognition of the fast moving nature of the industry, there will be regular revisions and updates of this strategy and the associated actions that will take into consideration any updates to relevant local and national strategies and policies.

2.1 Aims and Objectives

The Council's **key aims** through this strategy are to:

- Support the Council in its adopted Local Transport Plan aim to *"...make sure new developments maximise healthier and less polluting forms of transport including walking, cycling and bus use, by delivering and promoting active travel schemes and by reducing short distance single occupant car journeys."*
- Encourage and support the use of electric vehicles as a form of low emission transport both locally and nationally to support carbon reduction measures and improvements in air quality.
- Support equity in the provision of and access to Electric Vehicle (EV) charging infrastructure across the county.
- Consider the carbon emissions and pollution associated with the use of electric vehicles, and how using renewable sourced electricity where possible might reduce these.

The **key objectives** of this strategy are as follows:

1. Review the current legislation, policies and commitments both nationally and locally relating to the switch to electric vehicles.
2. Review current guidance on predicted future EV ownership and assess its implications for transport in Herefordshire.
3. Establish Herefordshire Council's role in supporting the transition to EV through cross directorate discussion and liaison with external bodies.
4. Review Herefordshire Council's current policies and actions in relation to supporting the transition to EV use in Herefordshire and identify gaps in provision.
5. To encourage use of EVs amongst Herefordshire residents and businesses where the use of vehicles is essential and other active travel measures are not possible.
6. Develop actions to fulfil the Council's agreed roles, aims and objectives going forward and address gaps in provision.

On-street EV chargers installed in other parts of the UK.

2.2 Timescales and reviews

Due to the fast changing and evolving nature of the EV industry there will be a watching brief throughout the period covered by this strategy. In addition to this, the following reviews will take place:

- This strategy runs until 2035 to reflect the major change that the ban on the sale of internal combustion engine (ICE) vehicles will have on the national situation.
- The strategy will be reviewed at least every 2 years. Any significant changes in policy, legislation and opportunities for funding will trigger a review of the strategy within the 2 year timeframe.
- Actions and targets within the Action Plan will be monitored throughout the period and included in the reviews of the strategy. A final review of Action Plan targets will be carried out ahead of 2035.
- A public summary of the strategy and any updates thereafter will be published once adopted.

3. Background and context

The Council has an adopted Local Transport Plan strategy[1] that supports and encourages the move away from ICEs and individual car ownership to more active travel and use of public transport. Where this is not possible, the aim is to support the switch to low and zero emission vehicles.

This is not a new area of interest, work to support the switch to electric vehicles both nationally and locally has been developing in recent years. National policy and funding support has been made available; and in response, the Council has developed strategies, installed infrastructure and made purchases that support the switch.

3.1 National and local policy and commitments

3.1.1 National policy

With the Paris Agreement of 2015[2], the UK joined 196 other parties in agreeing to a goal of keeping global temperature rise this century to well below 2 degrees Celsius above pre-industrial levels, and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius[3].

The Intergovernmental Panel on Climate Change reports that maintaining a temperature rise to below 1.5 degrees Celsius can only be achieved through rapid changes such as the '*demotorisation and decarbonisation of transport, including the expansion of electric vehicles*'[4].

Traffic congestion in Hereford.

[1]Policy LTP ZLV 1 – Zero and Low Emission Vehicles; Active travel LTP AT1, ATP2; Smarter Choices Policies LTP SC1, SC2, SC3 and SC4 https://www.herefordshire.gov.uk/downloads/file/2631/local_transport_plan_2016-2031_policy

[2]Paris Agreement - Status of Ratification (20) United Nations. https://unfccc.int/process/the-paris-agreement/status-of-ratification

[3]The Paris Agreement (2020) United Nations. https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

[4]Strengthening and implementing the global response (2018) Intergovernmental Panel on Climate Change. https://www.ipcc.ch/sr15/chapter/chapter-4/

To deliver on the Paris Agreement, the UK declared a climate emergency and committed to a 100% reduction of greenhouse gas emissions (compared to 1990 levels) by 2050, achieving net zero emissions. Local authorities across the UK have also recognised the threat of climate change, declaring local climate emergencies. Herefordshire Council declared a Climate and Ecological Emergency in March 2019, following which it committed to take a major step to minimise impact on the environment, agreeing to accelerate a reduction of emissions and aspire to become carbon neutral by 2030/31[5].

In the UK in 2021, transport was responsible for 26% of total emissions - remaining the largest emitter by sector. The majority (91%) of emissions from domestic transport came from road vehicles – of which cars and taxis made up more than half[6]. The transport sector needs to do more to decarbonise. The Road to Zero makes a clear statement that a shift to EVs is vital for achieving net-zero targets[7].

In recognition of this the Government announced in November 2020 that the sale of new petrol and diesel cars and vans would be phased out by 2030 (now 2035), and that all new cars and vans would be zero emission by 2035, as part of a Green Industrial Revolution[8]. This was further strengthened in 2024 with a mandate requiring that 80% of new cars and 70% of new vans sold in Great Britain will be zero emission by 2030, increasing to 100% by 2035, became law.

Additionally, the Government has set out its ambitions to improve EV charging infrastructure, and the vision of an accessible, reliable network of publically accessible charge points in the national electric vehicle infrastructure strategy[9] and transport decarbonisation plan[10].

A second driver for adoption of EVs is the issue of air quality[11]. Long-term exposure to human-made air pollution is responsible for between 28,000 to 36,000 premature deaths in the UK annually[12]. There is therefore a need to reduce harmful air pollutants.

These national policies and associated strategies have implications for the local authority (see section 3.1.2) and this strategy will need to be responsive to those changes.

Other relevant strategies and plans include:

- Consultation Response: EV Charge points in Residential and Non-residential Buildings (2021)[13]
- British Standards Institution - PAS 1899 - Electric vehicles accessible charging specification[14]

[5] Agenda for Cabinet on Thursday 26 September 2019, 2.00 pm - Herefordshire Council

[6] Transport and environment statistics: 2023 - GOV.UK (www.gov.uk) https://www.gov.uk/government/statistics/transport-and-environment-statistics-2023/transport-and-environment-statistics-2023

[7] The Road to Zero Next (2018) HM Government. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/739460/road-to-zero.pdf

[8] Pathway for zero emission vehicle transition by 2035 becomes law https://www.gov.uk/government/news/pathway-for-zero-emission-vehicle-transition-by-2035-becomes-law

[9] Electric vehicle infrastructure strategy https://www.gov.uk/government/publications/uk-electric-vehicle-infrastructure-strategy

[10] Decarbonising Transport: A Better, Greener Britain https://www.gov.uk/government/publications/transport-decarbonisation-plan

[11] Clean Air Strategy (2023) Department for Environment Food & Rural Affairs. Air Quality Strategy - Framework for local authority delivery (publishing.service.gov.uk)

[12] Associations of long-term average concentrations of nitrogen dioxide with mortality (2018) Committee on the Medical Effects of Air Pollutants. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/734799/COMEAP_NO2_Report.pdf

[13] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1046250/consultation-response-electric-vehicle-charging-in-residential-and-non-residential-buildings.pdf

[14] PAS 1899:2022 Electric vehicles accessible charging | BSI (bsigroup.com)

3.1.2 Local Policy and commitments

The Council has had policies and commitments in place for many years to support the reduction of carbon emissions, air pollution and the move to sustainable transport. These have been further strengthened by the declaration of a Climate and Ecological Emergency in 2019 with the commitment to reach organisational and countywide net zero by 2030.

This EV strategy document will, along with guidance and toolkits available from central government[15], help inform future reviews of the adopted Local Transport Plan and other local policies and commitments.

Key local policies and commitments include:

- Environmental Policy (2019): "Working to control, reduce and prevent pollution from our activities and those of the wider community" and "Promoting and using sustainable, integrated and active transport solutions."
- The Local Transport Plan (2016-2031)[16]: Policy LTP ZLV 1 states, "Considering, where appropriate, increasing the availability of charging points for electric vehicles on Herefordshire Public Services owned premises."
- The Councils Carbon Management Plan 2020/21-2025/26[17]- Pathway to Carbon Neutral includes emissions from Council fleet, business miles and contractors assets in scopes 1 and 2 of the plan.
- Herefordshire Local Plan Core Strategy 2011 - 2031[18] Policy SS7 and SD1 – Climate Change Measures compliance checklist includes installation of electric vehicle charge points in new developments[19].

Other local policies and commitments that support the switch to zero emission electric vehicles include:

- Design guide to be updated when the 'Manual for Streets' is updated
- Herefordshire Council Fleet Management – move to electric vehicles
- Government announcement (November 2021) in regards to EV charge points for residential and non-residential buildings[20]

In all cases government regulations and requirements will supersede local arrangements that may have been put in place e.g. new building regulations requiring EV charging infrastructure to be included in new developments have superseded local planning guidance.

[15] Transport decarbonisation: local authority toolkit - GOV.UK (www.gov.uk)

[16] https://www.herefordshire.gov.uk/downloads/file/2912/local_transport_plan_2016-2031_strategy

[17] https://www.herefordshire.gov.uk/downloads/file/20530/carbon-management-plan-2020-21-to-2025-26

[18] https://www.herefordshire.gov.uk/downloads/download/123/adopted_core_strategy

[19] https://www.herefordshire.gov.uk/downloads/file/21421/ss-sd1-climate-change-compliance-checklist

[20] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1046250/consultation-response-electric-vehicle-charging-in-residential-and-non-residential-buildings.pdf

3.2 Support from Government

To support action in relation to the switch to low carbon transport, the government has provided funding that local authorities, individuals and employers can apply for to cover some of the costs involved in switching to low emission vehicles. Funding available in the Midlands has included:

- Plugged in Midlands (2011 – 2014) – to support local authorities in the Midlands to install charge point infrastructure.
- Subsidy towards the cost of purchasing plug-in electric vehicles (2011 – ongoing).
- Charge point grant for renters and flat owners (2014 - ongoing) – to subsidise the cost of buying and installing home charger units.
- Workplace charge point scheme (2016 – ongoing) – to subsidise the cost of purchasing and installing charge points for workplaces.
- On-street Residential Chargepoint Scheme (ORCS) (2016 – March 2024) – to subsidise the costs for public authorities to install charge points to support residents with no off-street parking.
- EV infrastructure grant for staff and fleets (2022 – March 2025) – supporting small and medium-sized businesses by subsidising the cost of installing EV charge points and supporting infrastructure for their staff and fleet vehicles.
- Local Electric Vehicle Infrastructure (LEVI) funding (2023 – ongoing) to plan and deliver charging infrastructure for residents without off-street parking and ensure equity of provision.

There have been other funds made available for local authorities and businesses to bid for. The Plug-in Taxi Grant (2017) with associated charging infrastructure and Zero Emission Buses Regional Area scheme (2021). Herefordshire has benefitted from the Local Transport Authority Bus Service Improvement Plan (LTA BSIP) funding, supporting and improving services throughout the county.

In addition, National Highways have provided funding for rapid charge points in Herefordshire as part of their initiative to increase charge point provision for vehicles using the strategic road network (SRN).

These grants and subsidies are likely to shift as LEVI funding adds to provision and others expire. In order to take advantage of funding where available, Herefordshire Council will continue to explore funding streams and maintain awareness of new opportunities. Information on grants and subsidies currently available is included on the government websites[21].

A SWARCO rapid charge point at St. Martins car park in Hereford.

[21] https://www.gov.uk/government/collections/government-grants-for-low-emission-vehicles and https://www.gov.uk/plug-in-car-van-grants

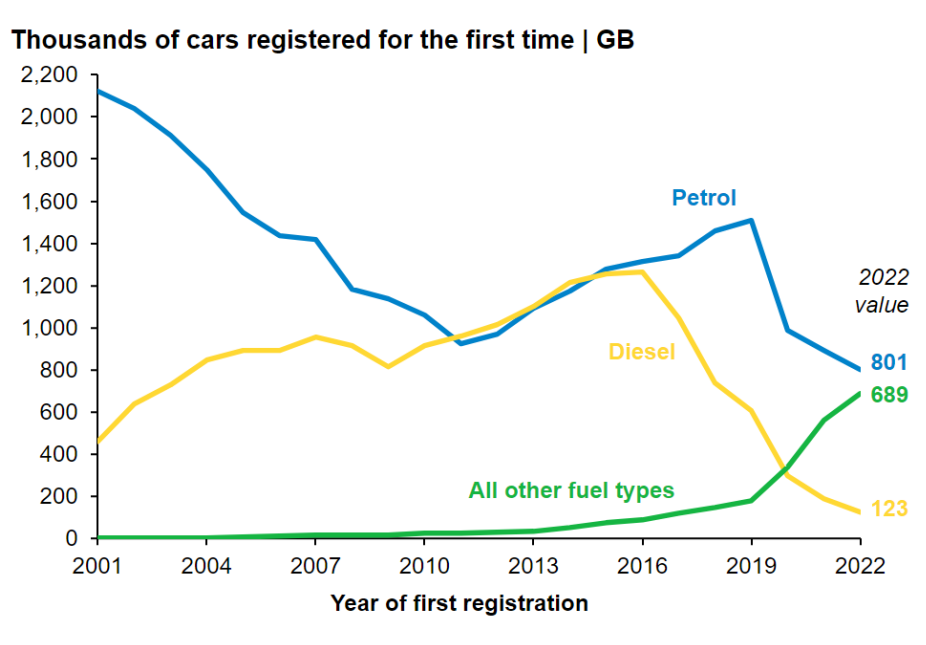
4. EV ownership and infrastructure

4.1 EV ownership – current and predicted

The latest figures show that in November 2023[22] there were 24,359 battery electric vehicles registered in the UK, which brings the total registered up to November 2023 to 286,846. This is an increase of 27.5% in the number registered so far in 2023 compared with the whole of 2022, and represents over 16% of total vehicles registered in the year to November 2023. When combined with plug-in hybrids this increases to over 23% of the total numbers registered.

This figure does not include non-plug-in hybrids – cars which have both internal combustion engines and electric motors, or mild hybrids - cars with a small electric generator installed in place of a starter motor and alternator, showing the rapid growth of the battery electric vehicle (BEV) market across the nation.

Recent studies have shown that the groups most likely to need extra support to encourage the switch to EVs are; high mileage drivers because they have concerns about charging infrastructure nationally[23], and residents with no access to off street parking who are likely to be dependent on publically available charging infrastructure.



The graph shows the growth of plug-in and hybrid electric vehicle sales compared to the corresponding decline in sales of vehicles utilising fuels required for internal combustion only[24].

The percentage of EV ownership is increasing, and will continue to increase, but the lack of charging infrastructure is causing some groups of drivers to delay making the switch.

[22] New UK EV and AFV Registrations - SMMT monthly data

[23] https://www.field-dynamics.co.uk/who-are-the-5-per-cent/

[24] Cars registered for the first time by fuel type, Great Britain, 2001 to 2022 (VEH1153a)

The governments Electric Vehicle Infrastructure Strategy[25] highlights the importance of Local Authorities in addressing the shortfall in charging infrastructure for residents, and is supported by the Local Electric Vehicle Infrastructure (LEVI) funding scheme. Herefordshire Council is taking part in the LEVI scheme as part of a consortium of local authorities across the Midlands supported by Midlands Connect. Charge points funded through this scheme are due to be installed over a number of years beginning in financial year 2024/25.

4.2 National Charge point provision

At the end of December 2023, there were 53,906 electric vehicle charging points across the UK, across 31,056 charging locations, 5,628 of which were rapid and 4,869 ultra-rapid, representing a 45% increase in the total number of charge points across the country since December 2022[26].

5. Herefordshire – current situation

5.1 EV ownership – current and predicted

Government statistics show that in Herefordshire by Q3 2023 there were 2,658 ULEV (Ultra Low Emission Vehicles) registered for the first time of which 1,686 are classified as BEV[27].

Whilst absolute numbers of BEVs currently owned are known, predictions about the increase in ownership between now and 2030 vary widely.

The Midlands Connect[28] report from 2021 bases its estimates on the number of BEVs owned in Herefordshire in 2020 as a percentage of the total in the West Midlands (1.7%). Using this percentage figure, they estimate that in 2025 ownership in Herefordshire would be 7,100 vehicles, rising to 30,000 vehicles by 2030. The Energy Saving Trust, in their recent workshop delivered to Herefordshire Council, suggested estimates of between 14,000 and 24,000 by 2025, and between 40,000 to 80,000 vehicles by 2030.

These are all credible methods for predicting EV ownership but the results vary widely and so it is difficult to assess with any accuracy what the level of EV ownership in the county will be between now and 2030. As uptake is expected to be lower in rural areas than urban areas it is reasonable to assume at this stage that the ownership in Herefordshire is likely to be at the lower end of the ranges predicted. It is also not clear how the second hand market will develop, as this is likely to contribute a significant proportion of the BEVs on the road by 2030.

The Energy Saving Trust, in their recent workshop delivered to Herefordshire Council, suggested estimates of between 14,000 and 24,000 by 2025, and between 40,000 to 80,000 vehicles by 2030.

An electric vehicle parked in Hereford.

[25] https://www.gov.uk/government/publications/uk-electric-vehicle-infrastructure-strategy

[26] How many EV charging points are there in the UK - Zapmap (zap-map.com)

[27] https://www.gov.uk/government/statistical-data-sets/all-vehicles-veh01#ultra-low-emissions-vehicles-ulevs

[28] Supercharging the Midlands, *Overcoming the challenges of a rapid, region-wide roll out of electric vehicle infrastructure*; Midlands Connect; September 2021

National Grid District Network operator (NGED) have developed a tool using the OFGEM and National Grid Future Energy Scenarios (FES[29]) and they predict 66,251 BEV by 2030.[30]

The National EV insight System (NEVIS) developed by Cenex predicts 46,470 BEV will be in use in Herefordshire by 2030.

These are all credible methods for predicting EV ownership but the results vary widely and so it is difficult to assess with any accuracy what the level of EV ownership in the county will be between now and 2030. As uptake is expected to be lower in rural areas than urban areas it is reasonable to assume at this stage that the ownership in Herefordshire is likely to be at the lower end of the ranges predicted. It is also not clear how the second hand market will develop, as this is likely to contribute a significant proportion of the BEVs on the road by 2030.

5.2 Charge point provision in Herefordshire

5.2.1 Current provision in all settings

In recent years, increasing numbers of charge points have become available in Herefordshire, particularly at supermarkets and on some garage forecourts. As of October 2023, there were 83 public charge points available in Herefordshire of which 20 are classed as rapid[31].

The table below shows the number of public electric vehicle charging devices in the UK per 100,000 population (business and local authority combined) and shows that Herefordshire is currently on par with other rural areas. It also shows that the numbers of charge points available across those areas are increasing; between October 2022 and October 2023 an additional 8 charge points were made available in Herefordshire (not local authority).

Local Authority	Number of devices per 100,000 population October 21	Number of devices per 100,000 population October 23
Herefordshire	34.6	44.3
Shropshire	21.5	60.1
Malvern Hills	12.6	42.5
Wyre Forest	14.8	33.4
Stroud	35.6	41.1
South Gloucestershire	41.3	74.0
Monmouthshire	55.7	103.0
Powys	66.9	83.1

A newly installed ultra-rapid EV charging point at Broad Street car park, Leominster.

[29] https://www.nationalgrideso.com/future-energy/future-energy-scenarios/fes-2020-documents

[30] https://www.westernpower.co.uk/distribution-future-energy-scenarios-map

[31] https://maps.dft.gov.uk/ev-charging-map/index.html

5.2.2 Current provision in public car parks

Until 2013, there were no publically available charge points in Herefordshire. Using Plugged in Midlands grant scheme funding, the Council installed 12 dual charge points in 11 locations – 6 in Hereford city and 1 in each of the market towns.

In 2020, National Highways funded the installation of three rapid charge points in Council car parks close to the A49 as part of their scheme to support EV drivers using the strategic road network. These were the first rapid charge points installed in Council car parks.

At present, through a concession contract with charge point operator Wenea, the Council are identifying sites across its managed car parks for additional charge points to be installed including rapid and ultra-rapid chargers. For all updates regarding the progress of charge point installations on Council car parks, see the associated web page on the Council web site.[32]

5.2.3 Provision at public transport hubs

There are currently no charge points installed at any of the Herefordshire train or bus stations. Rail providers currently have no plans to install charge points in Herefordshire, however, they are being installed at larger stations in the West Midlands and these may support business cases for installation elsewhere.

Midlands Connect are taking railway sites into consideration and will be engaging with all rail stakeholders under their 'Supercharging the Midlands' work stream.

5.2.4 Forecasted need

Cenex, through NEVIS, also indicate a forecasted need for EV charging infrastructure on a national and local scale. In Herefordshire they are predicting that 1,416 chargers will be required by 2030 – a significant increase on current provision.

Herefordshire Council will have a part to play in meeting demand, though are by no means the sole provider of charge point infrastructure. The private sector will contribute significantly, including through off-street destination charging such as those in supermarket car parks, forecourt charging and rapid charging at motorway services.

EV charging spaces in a Herefordshire Council car park.

[32] Electric vehicle charging – Herefordshire Council

6. The scope of this strategy and the role of Herefordshire Council

6.1 Scope

This strategy sits within the Council's overarching Local Transport Plan strategy and contributes towards the aims of supporting and encouraging the move away from ICEs to other forms of transport.

Other low emission transport options such as hydrogen vehicles or e-bikes and motorbikes have their role to play in the move to low emission transport but are not currently included in this strategy, which specifically focuses on the switch to electric vehicles such as cars and vans. However, their inclusion may be considered at future reviews of the strategy to ensure the strategy reflects the current situation and guidance in relation to these forms of low emission transport.

Electrification of the bus fleet is identified in the BSIP, however progressing this proposal will be dependent on government funding which is not available at the time of writing in March 2024.

6.2 The Role of Herefordshire Council

As a result of the upcoming ban on new ICE vehicles in 2035 the number of people switching to fully electric or hybrid vehicles is increasing. While the market is delivering some charging points there is a gap in provision, which is causing problems for residents, and businesses that want to make the switch but are not adequately served by current charge point infrastructure. In addition, even once the market is established there are likely to be sectors where charge points are less profitable and therefore could suffer with a lack of privately funded charge points.

In order to bridge this gap government has historically provided some funding for local authorities and other public bodies to install charging infrastructure. In 2022 the Electric Vehicle Infrastructure Strategy (EVIS)[33] was published and as well as signalling the provision of additional funding it also defines the local authorities role in providing charging infrastructure and supporting the switch to EVs by stipulating an obligation of Local Authorities to develop and implement local EV charging strategies.

The EVIS recognises the need for both high-powered chargers on the SRN (focusing on Motorway Services), and the need more local charging infrastructure to be provided by local authorities. This local infrastructure is intended to provide affordable, convenient charging for residents, businesses including fleets, and visitors without causing pavement disruptions that could discourage walking and cycling.

An electric bus in traffic.

[33] UK electric vehicle infrastructure strategy - GOV.UK (www.gov.uk)

To agree and document this role, and begin the process of developing an EV Strategy for the council, a working group of cross-directorate representatives was set up in 2021, and worked in consultation with the Energy Saving Trust on identifying the key roles for the council.

The following lists the key roles identified to support the switch to low emission vehicles in the county, in the context of the council's overarching Transport Strategy and the governments EVIS, and includes some of the actions that have been taken in support of these roles. The full list of completed, ongoing and future actions are detailed in the action plan accompanying this strategy:

6.2.1 To provide publically available charge points while the market is still getting established

In the long term, the market is expected to provide solutions to the issues surrounding the switch to EVs, including increased range of EVs, cheaper market prices, and charge point infrastructure; but in the short term, the market is unlikely to provide sufficient infrastructure until profitability increases. The Council has direct control over property that could be used to provide publically accessible charging infrastructure, and has access to grant funding to support charge point provision.

As a result the decision was taken to procure a concession contract to facilitate expansion of the council's network of charge points in its public car parks. Wenea hold the current contract for that expansion and are developing plans for additional charge points in car parks across the county. The council is also seeking to establish understanding around sites where on-street charge points can be situated. In areas where residents have limited access to off-street parking the provision of charging points close to their home is another key way that the council can use land it has direct control over to support increased public charge point provision while the market becomes established.

Action	Detail
Installation of the first charge points in council car parks	12 charge points installed in 11 locations across the county – 6 locations in Hereford and 1 in each market town (2013/14)
Ensure installed equipment is up to date	Replacement of existing charge points in council cars with new equipment in 2019, 2022 and 2024
Installation of first rapid (50kW) charge points in council car parks	3 rapid charge points funded by Highways England and installed by SWARCO in 3 council car parks - Hereford, Leominster, Ross on Wye (2020/21)
Encourage early adoption of switch to EV by offering concessions	Offer free electricity to charge point users (until 2022), dedicated parking bays and parking concessions (30 minutes free)

An Alphen fast charger in a Herefordshire car park.

6.2.2 To deal with issues of equity in relation to access to charge point infrastructure

6.2.2.1 Equity relating to area

If the market is the main provider of charge points there is likely to be some inequity in the access to charge point provision, especially for residents.

Areas most likely to be affected by this include:

- areas with low population density, such as rural areas
- areas with high levels of on-street parking
- less affluent areas

In all cases, the relatively low turnover of charge point users makes provision less attractive to private companies. These are therefore areas that may benefit from local authority support, for example through the provision of publically accessible charge points or by accessing grant funding to support charge point operator costs.

Furthermore, charge point operators are likely to request varied rates for charging, and there is a risk that this will see residents in some areas paying more per charge on average, especially in the early stages of market growth when there are fewer options available. Herefordshire Council is responding to that risk, and supporting equity, by requiring concessionaires to benchmark their tariffs to ensure costs to users are comparable across the region.

6.2.2.2 Equity relating to accessibility

EV's and associated hardware are part of an industry whose rapid growth has seen a huge range of manufacturers bring their products to the market. There is an equally diverse array of sites at which these charge points are likely to be installed, and a variety of protective measures to be put in place. Physical access to, and usability of, the hardware is now a source of inequity that needs to be addressed.

In their recent study, Motability suggest that, up to 50% (1.35 million) of all drivers or passengers with a disability (estimated at 2.7 million) are expected to be partially or wholly reliant on public charging by 2035[34]. This user group requires particular consideration to ensure their access to charge point infrastructure meets their needs.

Careful selection of the wide range of hardware options on the market, and taking into account the particular needs of potential users in each particular area, will ensure installations are carried out based on what is most appropriate in each case. The Council will utilise available guidance, including the Publicly Available Specification (PAS) 1899:2022[35] on accessible charging for electric vehicles.

On-street EV chargers installed in other parts of the UK.

[34] Electric Vehicle charging infrastructure for people living with disabilities (motabilityfoundation.org.uk)

[35] PAS 1899:2022 Electric vehicles accessible charging | BSI (bsigroup.com)

Across charge point installations completed under its concession contract, Herefordshire Council has sought to ensure access to wheelchair users by requesting larger bay sizes including an additional minimum 1.2m area at the side of the space, in accordance with the Department for Transport's Inclusive Mobility guidelines[36].

Action	Detail
Identify and enable charging opportunities for areas with little / no off-street parking	Utilise LEVI funding to support provision of on-street charge points in areas with little / no off-street parking
Ask for feedback from user groups with specific needs regarding attitudes toward EV and barriers towards adoption	Incorporate findings from feedback into policies and plans for roll out of EV infrastructure.
Utilise available guidance to ensure charge point installation is appropriate for each location and accessible to a wide range of users	Require charge point operators installing in council locations to use the latest guidance, such as PAS 1899:2022, and careful selection of hardware, to ensure charge points are as accessible as practicable.
Address misconceptions and concerns about EV and EVI within the general public	Run targeted workshops and other public engagement events to break down misconceptions surrounding EV and associated infrastructure

6.2.3 To increase and support Council use of electric vehicles

The Council has made commitments to reduce its own carbon emissions and pollution caused by its actions. One way it can do this is by reviewing vehicle usage across the Council and identifying opportunities to go ultra-low, including public realm contracts (BBLP) and other key contracts such as domiciliary care and waste.

Through a 'Go Electric' Webinar, the Council has already sought to engage officers and councillors in learning, both to strengthen understanding of EV use, and promote the use of the electric pool cars available to its workforce. Additionally, the Council held a number of workshops to consult on the content of this strategy to promote internal engagement in the Council and County wide move to EV.

One of Herefordshire Council's electric pool cars being charged using the fast EV chargers at Plough Lane.

[36] Inclusive Mobility. A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure (publishing.service.gov.uk)

Action	Detail
Carry out a fleet review with a view to moving to low emission vehicles for council use	Fleet review carried out (2014) resulting in the purchase of 6 BEVs and 6 hybrid pool cars for staff use
Provision of dedicated charge points for pool cars and staff to use at Plough Lane	2 of the existing 4 network charge points at Plough Lane restricted to pool cars only (2019)
Provision of dedicated charge points for pool cars and staff to use at other offices	Installation of a charge point for the use of staff at Elgar House when HC were occupying

6.2.4 To influence the public and businesses through planning policy and licensing

The Council has indirect control and influence over development, both residential and commercial, through its planning policies and guidance. Through the government's recent review of building regulations, and the subsequently adopted document S[37], there are England-wide requirements for developers to consider in relation to EV charging.

Residential developments:

- New residential homes, if they have associated parking, must have an EV charger installed on the property.
- Residential buildings that have more than ten parking spaces, if they undergo major renovations, must have one EV charger per dwelling installed by project end, and cable routes laid in all remaining spaces.

Commercial/non-residential buildings:

- For new builds and those undergoing renovation with more than ten parking spaces, at least one EV charger must be installed.
- A minimum of 20% of the parking spaces must have cable routes laid.

The Council has capacity to ensure that these regulations are upheld through new developments across the region. In addition, licensing conditions can support those wanting to change to EVs and ensure that barriers are removed where possible.

EV Chargers installed at a new development in Hereford.

[37] Approved Document S: Infrastructure for the charging of electric vehicles (publishing.service.gov.uk)

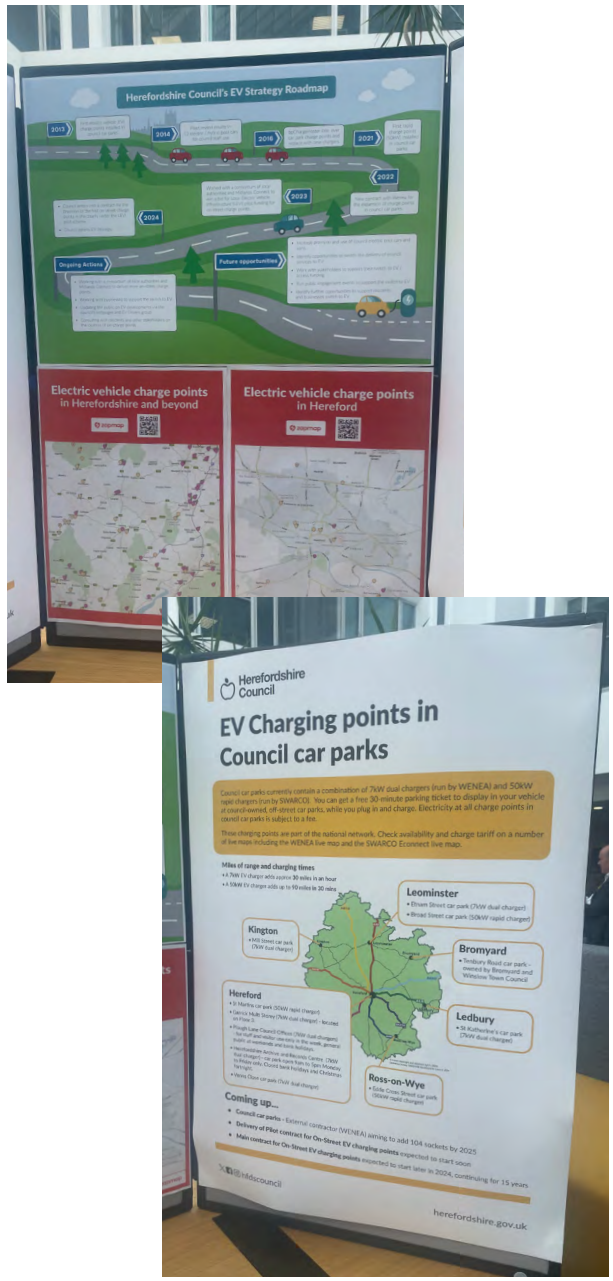
Action	Detail
Include policies relating to low emission vehicles in the Local Transport Plan	Plan includes Policy LTP ZLV 1 - Zero and Low Emission vehicles
Incorporate EV strategy for Herefordshire council into the planned review of the Local Transport Plan	Adopt the EV strategy for Herefordshire, and at next review of the Local Transport Plan, adopt as a sub strategy.
Liaise with development control, highways and licensing in relation to policies linked to EV and EVI	Ensure any reviews of planning, highways and licensing policies include consideration of EV and EVI

6.2.5 To work with and support stakeholders

The Council works with many stakeholders which puts it in an ideal position to work with and support them in identifying what is needed in the county to support the switch to EVs and to provide support, for example with installation of infrastructure, and help with planning or funding applications.

Stakeholders could include:

- Neighbouring authorities
- Herefordshire Disability United
- Parish Councils
- Community groups
- Local NHS Trust
- Universities and Colleges
- Large Employers
- Public transport providers such as rail and bus networks
- District Network Operator NGED
- Business support networks such as Hereford Bid, Chamber of Commerce
- Marches Energy Strategy Working Group
- Other public services



Display boards about the Council's EV charging point provision created for community events.

Users throughout these stakeholder groups present a variety of needs - it's important that the Council considers the challenges faced by these groups, in order to ensure their needs are met and effectively engage them in the transition to EV.

Taxi drivers are one example, and as a high mileage user group are likely to need additional support to transition to EV. In 2021 and 2023 online surveys of Herefordshire taxi drivers were carried out by the Council in collaboration with the Taxi Licencing Service and the Energy Saving Trust. These surveys revealed attitudes and behaviour regarding electric taxis.

Notably:

- Fully EV is not practical due to the uncertainty of distance remaining, need to be able to accept last minute bookings
- More access to fast/ rapid chargers, often booked when needed
- National and local infrastructure is not good enough

Taxi drivers and other key user groups will be considered for targeted workshops and other communication going forward, both to break down any existing misconceptions of EV functionality, and to ensure they are kept up to date with availability of charging infrastructure as this is improved.

Action	Detail
Work with Midlands Connect on the 'Supercharging the Midlands' work stream	Join the working group on the Midlands Connect project
Collaborate with DNO and CPOs in relation to site suitability for electric vehicle infrastructure	Make use of feedback and charge point requests to inform site selection process, and regularly meet with DNO and CPOs to share available information
Engage with stakeholders to identify how Herefordshire Council can support different user groups in the uptake of EV	Continue to reach out to key groups throughout the process of charge point installations to ensure policy of right hardware in the right place is upheld
Incorporate consideration of the transition to EVs in local business Sustainable Travel Plan reviews	Travel Plan Officer within Sustainability and Climate Change Team to offer support to businesses wanting to set up Sustainable Travel Plans

Taxi rank in Hereford.

6.2.6 To promote and publicise the use of electric vehicles

The Council can support and influence the switch to EVs through promotion of its own charge point network and associated actions. Particular focus on promotion of new installs will increase awareness and drive uptake, and maximise benefits to residents – communication will be clear and concise, and consider accessibility through varied formats.

The Council has access to a number of channels for promotion including its own website and social media channels. Additional promotion will be carried out through associated websites, including the Councils dedicated EV charge point page, social media channels, and available e-bulletins, as well as concessionaire blogs and social media.

Communication will include locations of charge points, how to use charge points and report issues, and direction on how to request a charge point installation in an area. These pages will be regularly reviewed to ensure information is kept up to date.

Action	Detail
Publicise and support use of council installed charge points through the council webpage	Set up a dedicated council webpage with information on all the councils charge points and how to use them.
Raise awareness of EVs through training sessions - internal whole council	EST delivered staff training session - Go Electric
Publicise and support use of council installed charge points through social media and the press	Recent press releases related to improvements in the council's charge point network and current collaborative working to access LEVI funding.
Run public engagement events to demonstrate charging infrastructure functionality	Plans are being formulated to run open events that demonstrate charge point function and offer the opportunity to ask questions in 24/25

7. Delivery

7.1 Site selection

Location is as important as total numbers of charge points in ensuring access to charging is equitable and reliable. The right hardware in the right location will enable communities and businesses to transition to EV with confidence. Mapping the location of charge points can promote suitable site selection for future installs by identifying gaps in provision. Herefordshire Council can ensure the expansion of the network compliments current delivery, provides additional resource for residents, and drives up use.

As the number of EV users increases, it will be necessary to consider the growing number of consumers without access to off street parking, and the need to incorporate on-street charging into the infrastructure. Near-home charging has been identified as the most appealing and desired primary charging solution for the future[38] as it most closely matches driving and parking behaviours of residents. Allowing users to retain their existing habits as closely as possible will play a key part in encouraging EV uptake.

As part of the LEVI scheme, Herefordshire Council is actively seeking to identify areas where the need for on-street parking is most apparent. Dwell time, availability of off street parking and the needs of residents will be taken into account when selecting sites - resident's feedback is crucial in building this understanding.

Charge point location will also be affected by budget availability – install costs are heavily influenced by location and access to the grid, especially in rural settings. Charge point operators will be motivated by likely usage, thus the adopted business model of any delivery partner engaged will have a role in determining sites for installation.

As the industry grows new types of charging infrastructure are being developed and ways of working effectively with the existing technologies refined. On-street charging includes a range of charge point types including bollard and streetlamp chargers as well as the opportunity to access home charging via cable gullies or overhead lances etc. Initially the council is concentrating its car park provision and potential on-street LEVI funded provision on free-standing charge points and pavement mounted solutions. Consideration of streetlamp chargers and other types of charging will be included in future reviews of this strategy and action plan outside of the current LEVI funding round.

Typical street with on-street parking in Hereford.

[38] Public Electric Vehicle Charging Infrastructure. Deliberative and quantitative research with drivers without access to off-street parking. Research report. (publishing.service.gov.uk)

7.1.1 Recognising challenges

Whilst Herefordshire Council endeavours to keep the needs of residents at the heart of decision making, there are factors beyond its control that will determine suitability of sites for charge point installation.

Being a rural county with a low population density, Herefordshire has historically been overlooked by telecommunications companies in terms of investment in infrastructure. Whilst connectivity to mobile networks has improved over the last few years, the county still suffers from patchy connection in many areas. Due to the dependence of charge point infrastructure on the ability to connect to mobile networks in order to deliver charging, network connection is a key influencer in the selection of sites for charge point installation.

Similarly, the rural nature of Herefordshire means much of the county has limited grid capacity. National Grid are the Distribution Network Operator (DNO) for Herefordshire. In some areas, connecting to the grid will incur significantly higher costs due to low grid capacity and the need to upgrade transformers and substations to meet the high energy demand required for EV charging. This is a particular risk in rural settings and could lead to an inequitable distribution of charge points.

Data held by the DNO can help to further determine site suitability through revealing capacity in specific locations. Determining where need for additional capacity overlaps with need for additional charge points could strengthen the case for investment in those areas. Herefordshire Council is collaborating with the DNO (National Grid – NGED) to support their decision making about strategic improvements to the grid whilst offering the charge point operators vital information regarding current viability of potential sites.

Herefordshire has eleven main rivers and a vast number of smaller ordinary watercourses, a number of which pose a well-recognised flood risk, including the River Wye. The increasing likelihood of extreme weather events, brought about by climate change, demands careful consideration for all development. Ensuring that infrastructure is safe to use, through avoiding areas prone to, or likely to become prone to, flooding, will be of crucial importance in the expansion of charge point infrastructure across the county.

7.2 Maintaining a reliable network

As these opportunities are progressed, the Council seeks to ensure the network remains reliable. Herefordshire Council holds no responsibility for maintaining the functionality of the hardware installed at charging locations under its concession contracts; the concessionaire accepting full responsibility for any necessary maintenance, modification, disassembly, or removal of the hardware.

Users can report charge point malfunction and damage through the dedicated helpline clearly displayed at each charging station, and due to the remote access feature of charge points it is possible to resolve the majority of issues without the need for engineer call out.

Herefordshire Council monitors charge point functionality through its access to the back office software, and through close collaboration with the concessionaire. Contract stipulations include performance requirements that are closely supervised to highlight issues in this area as they arise.

7.3 Energy supply

The transition to EV is primarily motivated by a need to reduce burning fossil fuels. The method of generation of electricity that supplies EV charge points is therefore of great importance in how effective this transition will be in lowering overall emissions and improving air quality.

Herefordshire Council already elect to use 100% renewable energy in their buildings and street lighting and have included this as a requirement in the current concession contract for charge points in council car parks.

7.4 Monitoring charge point usage

Monitoring charge point usage to understanding uptake can feed into strategies for network expansion. The Council works closely with current charge point operators to monitor usage data and use this information to determine priority areas, identify issues and inform the promotion of the network. Such monitoring will be used in all future contracts to ensure utilisation and expansion is optimised.

8. Looking Ahead

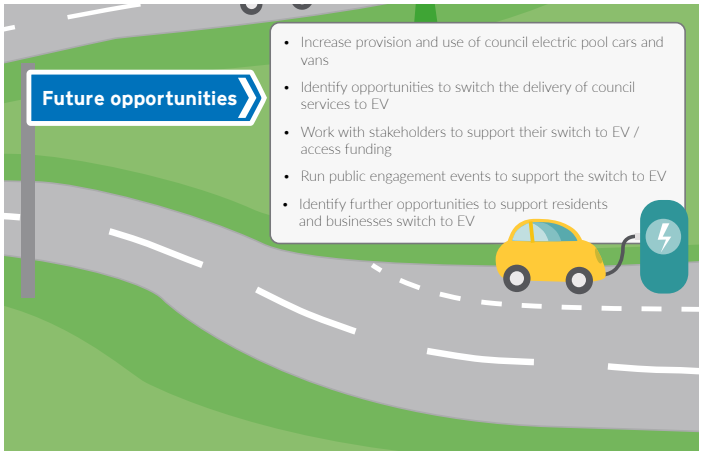
Aspects of this strategy will develop significantly ahead of the next scheduled review as a result of the projects Herefordshire Council is already engaged in. These developments will inform future projects and impact the additions, alterations and conclusions of the councils EV Strategy. Some of the opportunities that may arise have already been recognised and added to the action plan, although all are subject to change in the light of the fast moving nature of the industry.

As has already been recognised, on-street charge points offer a solution to charging whilst allowing EV drivers to maintain as closely as possible the driving habits they current practice using ICE vehicles. Whilst at-home chargers offer a solution to this for those with access to off-road parking at home, those without this facility must consider alternatives. At present, Herefordshire Council does not permit the use of trailing cables, in accordance with Section 178 of the Highways Act 1980 - prohibiting a person from placing or running a cable or wire over, along, or across a public highway, however this will be reviewed in the light of the upcoming government guidance on cross pavement cable gullies.

A study carried out by officers at Herefordshire Council to assess the potential of contracted school transport operators up-grading their vehicle fleets to electric vehicles, found that there is little likelihood of significant electrification of school travel in the short to medium term. Small independent operators throughout Herefordshire are still dealing with the effect of the pandemic and lack the capital to invest in newer vehicles. This is likely to change in the coming years as the effects of the pandemic wain, though difficult to predict.

Herefordshire's Bus Service Improvement Plan[39] (BSIP) includes proposals for carbon reduction in terms of public transport. Proposed project and schemes include the electric vehicles trial - Development of service 78X serving the county's biggest employment area converted to fully electric vehicles. At present there is no funding available to Herefordshire Council to support this, but it remains as a consideration for long term decarbonisation.

Similarly, taxi operators have concerns regarding the function and availability of chargers, incurring a resistance to the adoption of EV. The concession contracts already awarded will result in an increase of rapid and ultra-rapid charge points, which should improve confidence and benefit such companies, but uptake in this area is still likely to be slow. Revisiting this in light of the planned installs will allow for a better understanding of how such user groups attitudes to EV develop.



A detail from Herefordshire Council's EV Roadmap infographic.

9. Action Plan

An Action Plan has been developed to set targets, identify opportunities and monitor progress.

The Action Plan includes current completed work, work in development, and potential new projects where a gap or opportunity has been identified. It considers areas where the Council has direct control, for example over its own fleet, and where it primarily has indirect control and influence, for example through licensing and planning functions and through public engagement.

The Action Plan will be reviewed regularly and results included in the Strategy reviews.

The Sustainability and Climate Change Team will coordinate the review of the Strategy and Action Plan. Completion of agreed actions will be the responsibility of the Lead officer or Team listed against each action. The results of the reviews of both the Strategy and Action Plan will be shared with internal stakeholders and an update publicised.

[39] https://www.herefordshire.gov.uk/bsip