Zero Emission Vehicle Infrastructure (ZEVI) Strategy 2019-2029 (2022 Update)

1. Introduction

1.1 Background

This Zero Emission Vehicle Infrastructure (ZEVI) strategy supersedes the previously adopted Low Emission Vehicle Infrastructure (LEVI) Strategy (2019-2029), highlighting the rapidly accelerating policy framework, incentives and technological advances that have and will continue to occur across the EV sector.

Since the LEVI Strategy was adopted in 2019, the National strategy for electric vehicles has been significantly accelerated with the headline policy objective of banning the sale of Internal Combustion Engine (ICE) Petrol/Diesel vehicles by 2040 now brought forward a full 10yrs meaning that pure ICE Petrol/Diesel cars will no longer be sold in the UK by 2030. Furthermore, an additional objective has also been set to ban the sale of Plug-in Hybrid Vehicles (PHEV) by 2035 meaning from that point forward only Zero Emission Vehicles (ZEV) i.e. Battery Electric Vehicles or Hydrogen Fuel Cell Electric Vehicles (HFCEV) can be sold.

To support these commitments Government has set out a roadmap containing key deliverables to meet objectives up to 2035 within the 'Transitioning to zero emission cars and vans: 2035 delivery plan' published in July 2021. Subsequently the UK Government published the 'Taking charge: the electric vehicle infrastructure strategy' which sets out plans to deliver around 300,000 public charge points as a minimum in the UK and enable reliable access to public charge points wherever people live.

The UK Government focus has therefore shifted from Ultra-Low Emission Vehicles (ULEV) which is defined as a motorised vehicle which emits lower levels of harmful emissions and can include Battery Electric Vehicles (BEVs), Plug in Hybrid Electric Vehicles (PHEV) and Hydrogen Fuel Cell Electric Vehicles (HFCEV) to Zero Emission Vehicles (ZEV) which is a vehicle that has no tailpipe emissions or other pollutants from the on-board source of power.

Whilst the majority of vehicles currently on our roads are powered by petrol or diesel fuel, this trend is expected to change rapidly in the coming years. In 2021 the largest annual increase in plug-in vehicles was registered with a 74% growth from 2020 levels, indicating a significant shift towards electric vehicles.

Overwhelming evidence has demonstrated that emissions from road transport, and in particular diesel-powered vehicles, are causing pollution which contributes to poor air quality and is harmful to public health. It is estimated that around 70% of the harm to health linked to poor air quality, originates from transport emissions. With transport emissions also being a significant contributor to climate change, the government has accelerated its commitment to end the sale of new conventional petrol and diesel cars and vans by 2030 and to accelerate the shift to low carbon transport. Policy makers, vehicle manufacturers, transport innovators and national and local governments are therefore working to advance technologies and adoption in the use of alternative fuels. Currently the employment opportunities in the UK across the EV sector (Battery Production, Battery Supply Chain and EV manufacturing) are predicted to grow by 30% in line with Governments ZEV pathway. There may be further opportunities in EV charging technology, software and operations. This is being supported by the increased use of rules of origin is currently being phased in but will achieve permanence

by 2027, at which point the UK can export EVs and PHEVs into the EU market at zero tariff providing that either;

- EVs have 55% UK/EU content and must have an originating battery pack.
- An originating battery pack must have either 65% UK/EU content for the cell or 70% for the battery pack.

The rules of origin serves to support UK and EU EV market and component development but notably also reduces the percentage of such that can be imported from outside of these geographies. An assessment of the automotive industry by the Faraday Institute has suggested that the UK must quickly build battery giga factories and establish well-developed local supply chains.

It is estimated the global market for zero emission vehicles could be worth £1-2 trillion per year by 2030. It is worth noting that battery production, development of battery gigafactories and EV Charging Infrastructure and Operation are all significant growing markets.

1.2 A Strategy for Derbyshire

As transport users make the transition to low emission vehicles over the next few years, there is a growing need for Derbyshire County Council to adopt a Zero Emission Vehicle Infrastructure (LEVI) Strategy. A strategy for Derbyshire will demonstrate a local commitment to promote the uptake and deployment of ZEV's, including an increasing focus on electric, a reducing focus on hybrid over time, and inclusion of hydrogen as well as promotion of electric shared mobility (such as car share and bike share), e-bikes and electric cargo bicycles and potential for electric micro-mobility (depending on future legislation on e-scooters for example). This ZEVI Strategy and accompanying action plan sets out how, locally, we will meet the need for a network which represents good value for money, responds to changing demands and embraces new technologies.

Whilst the expectation is that most ZEV users will choose to charge at home providing they are able to install a charger, development of a public charging network will provide the confidence for residents, businesses, public transport operators, community groups, tourists and leisure industries to use ZEVs in Derbyshire.

This strategy will therefore form a fundamental part, in the wider context, of the Council's longer-term policy and project work.

2. The Policy Context

2.1 National Policy

There has been a range of national policy and strategy announcements to facilitate the shift to low emission transport in recent years including;

- The Carbon Plan (2011), the Clean Growth Strategy (2017), the Industrial Strategy (2017): these include Government plans for the reduction of greenhouse gases and identify that transport has a critical role in meeting the Climate Change Act 2008 obligations.
- Queens Speech (2017) and Automated Electric Vehicles Bill (2018): announcing a fund of £800m for investment into new driverless and zero-emission vehicle technology to boost the Industrial Strategy. The Government had set a target for almost every car and van to be zero emission by 2050 (now brought forward to 2035 when PHEV sales will be banned), require motorway service areas and large petrol stations to install electric vehicle charge points, and ensure common infrastructure standards. It will also invest £200m in researching and testing driverless car infrastructure (Connected Autonomous

Vehicles or CAV) and £600m during this parliament to support ultra-low emission vehicles.

- New planning requirement that EV Charging Infrastructure must be installed for all newbuild homes (at least one EVCI point) and offices (a charge-point for every 5 spaces) expected to be in place by 2022.
- Electric Vehicles (Smart Charge Points) Regulations (Mandatory for Private Charge points) from June 2022 requiring private EVIC to have smart functionality, default settings, cyber and data security, randomised delay, quality assurance, interoperability, monitoring and energy use capabilities.
- United Nations Paris Agreement on Climate Change (2015): The UK Government is
 determined to turn this challenge into an opportunity by setting the lead and standard for
 future transport technologies and to limit global warming to well below 2°C.
- Air Quality Plan for nitrogen dioxide (NO2) (2017): outlining the UK's plans for reducing roadside NO2 concentrations. This contains the previous Government target to ban new diesel and petrol vehicles from sale in the UK by 2040. Ministers also unveiled a £255m fund to help councils tackle emissions, including proposals for clean air zones to tackle pollution issues caused by traffic in some of the country's most congested cities.
- Road to Zero Strategy (2018): confirming the Government's ambition to see at least half of new cars to be ultra-low emission by 2030 (this target now updated) as part of plans to make the UK the best place in the world to build and own an electric vehicle.
- Transitioning to zero emission cars and vans: 2035 delivery plan sets out a roadmap with key deliverables up to 2035 at which point PHEV sales will be banned and all vehicles will be zero emission from that point forward.

It is clear that Government has set an accelerated trajectory for the decarbonisation of transport and as a consequence even recently published policies have become outdated. In addition electric vehicles, batteries and electric vehicle charging infrastructure solutions are also rapidly evolving and improving and therefore technology advances will also require constant monitoring to maintain oversight of how the sector continues to develop.

2.2 Regional Context: The East Midlands The East Midlands' automotive expertise is globally renowned.

The region is at the forefront of developing the next generation of road vehicles and is a world-leading centre for advanced manufacturing, technology and low carbon technology. The East Midlands is fast becoming an electric region with more charge points being installed than ever before, thanks to projects such as;

- Plugged-in Midlands,
- Nottingham City's Go Ultra Low initiative
- Office of Low Emission Vehicle grants.

Government agencies and local authorities have a role in supporting the next generation of vehicles by developing policies to ensure provision of ZEVs and Electric Vehicle Charging Infrastructure (EVCI) in the region as well as also providing for the potential for hydrogen fuel cell infrastructure (HFCI).

Regional organisations, such as Midlands Connect, have revised their own strategies to include provision to encourage further development of ZEVs and EVCI in the region, with <u>Supercharging the Midlands</u> provides a good overview of the challenges and opportunities ahead. The report forecasts that the region requires a total of 17,461 charge points in 2025, rising to 41,662 by 2030 (from 2,174 charge points in January 2021). When considering existing charge points, this averages around 3,000 new EV charge points each year

between 2021 and 2025, and 4,800 between 2026 and 2030. This shows a need to accelerate the rate at which EVCI is delivered across the region.

2.3 Local Context: Derbyshire

At a local government level, collaboration with Boroughs and Districts will be key to maximising the development of Local EVCl and ensuring a consistent approach across the County which meets local needs.

As the local planning authority and as managers of off-street carparks, the Districts and Boroughs will be instrumental, in partnership with the Highways Authority, in securing EVCI through new developments and providing EVCI in the car parks they own and manage.

Authorities are also well positioned to ensure that EVCI solutions are well designed and accessible ensuring consistent standards are met.

Local Authorities will also need to work closely with the Distribution Network Operator, with a view to align investment plans for grid updates and EV infrastructure plans where possible and to seek opportunities to accelerate processes and delivery as required.

2.4 Current and emerging policies to support ZEV and EVCI

Councils across Derbyshire have continued to work together on the climate agenda since the Derbyshire Environment and Climate Change Framework was agreed setting out a number of themes where climate change was to be incorporated into relevant strategies. A number of Strategies are in place or in draft to support the reduction of emissions and adaptation to climate change:

- The Air Quality Strategy (2020-2030) Developed through the Health and Wellbeing Board, the Strategy sets out how partners will work together to reduce the health impact of poor air quality for the people of Derby and Derbyshire.
- The Derbyshire Economic Partnership COVID-19 Recovery Strategy (2021-2025) –
 Developed by the Derbyshire Economic Partnership to identify the priorities to protect and grow Derbyshire's economy in a post-COVID world.
- Natural Capital and Biodiversity Strategy for Derbyshire (due to be published in Autumn 2022) – The study will consider all the natural capital assets that are key to the county's future prosperity, health, and wellbeing. It will identify the priority areas for the protection, restoration, and enhancement of natural capital assets and take climate change implications into account.
- D2N2 Energy Strategy (2019-2030) This Strategy was developed by the D2N2 Local Enterprise Partnership and is being implemented in collaboration with Midlands Energy Hub. The Strategy sets out how the region can align with national and regional ambitions to expand renewable and low carbon energy development and achieve a net zero future.
- Renewable Energy Study for Derbyshire (due to be published in Summer 2022) This study will identify the renewable energy opportunities in the county, including which technologies are most suitable and where they could be located.

Furthermore, a Vision Derbyshire Climate Change Strategy has been produced with input and support from councils not part of the Vision Derbyshire programme. The Strategy is accompanied by a [draft] action plan which sets out agreed priorities and actions which councils can either directly control or influence but also where councils can encourage, promote and facilitate action by others – including central government as well as businesses, communities and individuals across the county.

The shift to electric vehicles and other sustainable and active travel measures are a key component of the action plan.

Within the Districts and Boroughs, policies are currently being developed to include provision for supporting the advance of electric/hydrogen vehicles in the market. At a local level, communities are being encouraged to support the provision of ZEV through the inclusion of policies in their Neighbourhood Plans.

It is clear that the energy and transport sector are becoming increasingly intertwined, with smart charging regulations introduced in July 2022 mandating the need for private charge points to have smart functionality supporting load/grid balancing with a default setting to charge off-peak. EVCI technology continues to innovate and evolve with further testing of Vehicle to Everything (V2X) solutions, supporting the export of energy from a vehicle battery to the grid, home, building, other vehicles and for other uses, and opportunities around developing EVCI networks with renewable energy generation and battery storage services supporting.

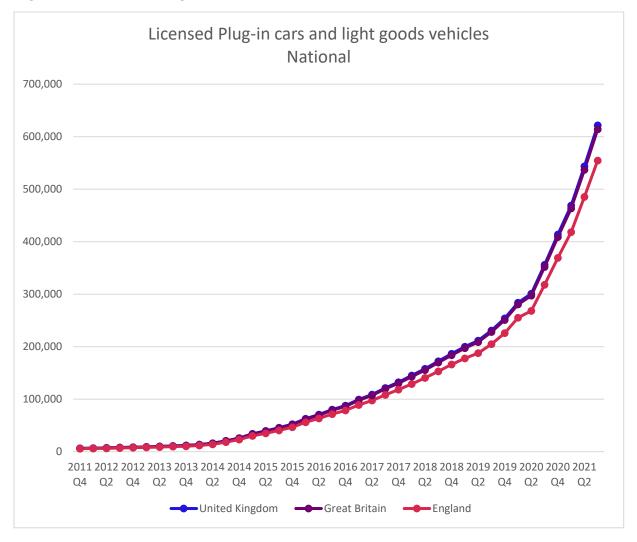
3. Overview of Current Situation

3.1 Ultra-Low Emission Vehicles

The UK has seen a surge in demand for ultra-low emission vehicles. In 2017 Ultra-Low Emission Vehicles (ULEVs) accounted for a small proportion of UK vehicles, just over 100,000, by the beginning of 2022 this has increased to over 620,000 vehicles, registered in the UK. The pace of demand and advancing technology means that by 2025 this is expected to have increased significantly to around 1 million (OZEV).

Battery electric provides substantially lower greenhouse gas emissions even when taking into account the electricity used to fuel and produce the battery and provides the lowest greenhouse gas fuel source (66% lower than petrol cars). Figures suggest the growth of EV car ownership in Derbyshire is increasing at a rate higher than many other areas (see Figure's 1 and 2 below). From October 2017 to September 2021 the number of registered plug-in vehicles in Derbyshire increased by 507%. It is now estimated that the number of registered electric or plug-in hybrid vehicles has grown to 5,744 as at September 2021. As the number of registered electric, or plug-in, vehicles continues to rise sharply in coming years, it is important that the Council, in collaboration with partner organisations, develops a Strategy to ensure infrastructure is in place to meet changing demands of Derbyshire residents, business and visitors.

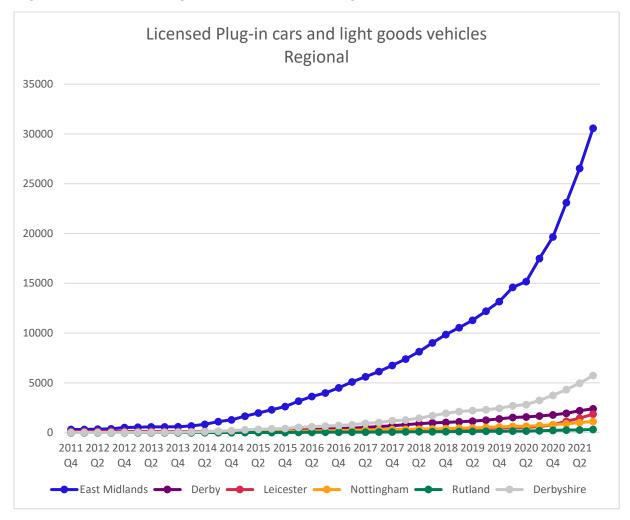
Figure 1 – Licensed Plug-in cars and LGVS - National



Source: DfT Table VEH0131 – Plug-in Licensed Vehicles

Figure 1 demonstrates the trends of plug-in vehicle purchases illustrating an accelerated uptake from 2020, likely to be further supported by Government's commitment to banning the sale of ICE Petrol/Diesel by 2030 but tempered in the short term by supply challenges.

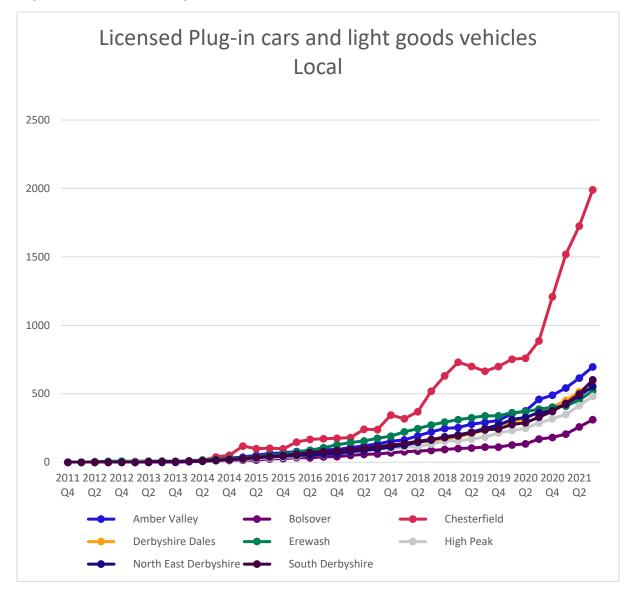
Figure 2 – Licensed Plug-in cars and LGVS – Regional



Source: DfT Table VEH0131 – Plug-in Licensed Vehicles

Figure 2 illustrates the current distribution of licensed plug-in vehicles by region showing that Derbyshire is currently leading within East Midlands, with 5,744 registered vehicles.

Figure 3 – Licensed Plug-in cars and LGVS – Local



Source: DfT Table VEH0131 – Plug-in Licensed Vehicles

Figure 3 provides a breakdown by Local Authority area within Derbyshire illustrating that Chesterfield has a significantly higher volume of licensed plug-in vehicles at 1,990 vehicles. It is worth caveating that the data is by registered address and therefore does not capture if vehicles are used within authority areas or elsewhere and equally this does not reflect plug-in vehicles that are used within authority areas but may be registered elsewhere.

Within the private domestic vehicle market, plug in hybrid electric vehicles had been growing at the fastest rate however more recently there has been an increasing switch to BEV (fully Battery Electric Vehicles), supported by the Governments commitment to also phase out Hybrid vehicles by 2035, increasing range/battery capacity of BEVs and ongoing delivery of EVCI (thus addressing range anxiety).

LGV, HGV and other more specialised forms of transport (public transport, taxis etc) are referred to later in this strategy.

3.2 Current charging/fuelling infrastructure in Derbyshire

There are a number of private and public charge points across Derbyshire, these can be found through Zapmap and also via the National ChargePoint Registry though currently Zapmap contains the most information. Zapmap can also be used to search for publicly accessible (though may be on private land with restrictions) charge point locations within individual districts and boroughs.

- Amber valley
- Bolsover
- Chesterfield
- Derbyshire Dales
- Erewash
- High Peak
- North East Derbyshire
- South Derbyshire

The majority of current charge points are found within private locations including leisure facilities such as hotels and private employers. In terms of electric vehicles there are currently four power levels associated with EV charging. These are slow, fast, rapid and super chargers details are explained below.

Charger speed: Slow

Charger rate per hour: Less than 3.5kW Typical use case: Domestic socket

Charger speed: Standard

Charger rate per hour: Between 3.5kW and 7kW Typical use case: Domestic and Street-Light

Charger speed: Fast

Charger rate per hour: Between 7kW to 23kW for AC and 10kW to 22kW for DC Typical use case: Domestic, Workplace Car Parks, i.e. long stay parking

Charger speed: Semi-rapid

Charger rate per hour: Between 23kW to 43kW for AC and 22kW to 50kW for DC Typical use case: More suited to depots, short-stay parking, etc. however not as popular

Charger speed: Rapid

Charger rate per hour: Between 43kW to 44kW for AC and 50kW to 62.5kW for DC Typical use case: Strategic locations, Destinations, Motorways higher volume of customers, supporting a quick charge and go

Charger speed: Ultra-rapid

Charger rate per hour: Higher than 62.5kW (i.e. 350kW available)

Typical use case: Strategic locations, Destinations, Motorways higher volume of

customers, supporting a quick charge and go

The Council has adopted a target of achieving 1000 public facing EVCP's by 2025 and will review alignment with Midlands Connect 2030 targets.

Residents and businesses with a postcode in Nottingham, Nottinghamshire, Derby or Derbyshire, can currently register for a D2N2 card to take advantage of reduced charging tariffs.

3.3 Increasing the EVCI in Derbyshire

To increase infrastructure availability in the most cost-effective way, it will be important to map current provision and expected demand; take account of the commercial market; as well as EV (on-board charger, battery development) and EVCI technology evolution; consider grid capacity; ensure provision meets the needs of the various PIV (Plug-in Vehicle types and ensure systems are standardised and user friendly.

To achieve a well-balanced and well used provision, a number of factors need careful consideration;

- Traffic Regulation Orders and parking restrictions
- Section 50 License
- District Network Operator (DNO) engagement
- Power Assessments (sub-station capacity, distance from proposed charger to nearest point of connection, cable reinforcements, etc)
- Confirmed Grid connection and the possible need for buffer battery storage and load balancing where the existing grid is not capable of supporting a charge point e.g. in more isolated rural areas
- Liaison with providers of private or limited public access charge points e.g. shopping centres, and the potential to include such units within a Derbyshire charge point network ensuring interoperability
- Preliminary requests for pre-qualification offers from charge point and back-office operators / suppliers to identify the most suitable partnership model(s) that could support a councils-led network
- Potential to aggregate consumer demand via a contract in order to attract large-scale investment to build out a network

Residential On Street

Across Derbyshire there is a need to develop Residential on-street charging facilities, to meet the needs of both residents, without private parking, and visitors. There are a number of considerations required to develop effective residential on street parking systems, including;

- Ensuring provision is targeted effectively
- Mechanisms to ensure fair usage such as Controlled Parking Zones to ensure flexible use of parking
- Innovative charging technologies to maximise space, including street light column and kerbside charge points as well as smart operating platforms to support and manage customer demand
- Undertake soft market testing exercises to assess and explore on-street provision.
- Work with local district and borough councils to identify public facing car parks, close to residential areas where off-street parking is not an option and where demand is evident, so that residents without off-street parking can access electric vehicle charge points close to their homes

Where on-street residents charge vehicles from their own home electricity supply, the Council would not accept any liability for any claims arising as a result of charging cables being located on any part of the highway. Ultimately it will be the legal responsibility of the vehicle owner to make sure that they are not creating a danger or nuisance to other highway users.

3.4 Specialist Transport Sectors

Taxis

From 1 January 2018, taxi license standards were updated requiring all taxis licensed for the first time to be zero emission capable (ZEC). For Private Hire Vehicles (PHVs) the requirements were initially staggered, with the ZEC requirement for all new PHVs presented for licensing being applied from 2020. Regardless of age, all vehicles granted a private hire licence for the first time after 1 January 2023 will be zero emission capable. These vehicles are in use for long periods and so require high-speed charging facilities in strategic or central locations that are convenient for railway stations, town centres and the main highway network

Light Commercial Vehicles (LCV)

Light Commercial Vehicles (LCV) have grown in use across Derbyshire over the last decade. This may be because of the growing service economy in the area, including an increase in demand for deliveries to homes as a result of internet shopping; often referred to as 'last mile delivery'. This represents a need to provide rapid 'top up' charging which supports the commercial LGV market. This sector warrants review as to how improvements could be made to reduce traffic impact and support decarbonisation goals. This could include consideration of consolidation centres, small-scale mobility hubs and use of e-cargo bicycles for some trips where possible.

Other fleet or essential user car drivers in small-medium enterprises (SMEs) adopting EVs/PHEVs and HFCEVs will also require the ability to rapidly charge their cars, for example if their occupation involves driving between many different destinations each day. In such cases rapid charge points on motorways and major trunk roads may not service their requirements – and alternative 'in town' rapid charging hubs may be a consideration.

The Strategy will therefore need to consider the provision of off-street rapid charging facilities in areas of high anticipated demand, in addition to a standard fast charging network.

Freight

The technology to support freight is less advanced than the domestic market in terms of low emission vehicles however significant advances have been made to provide fully electric solutions for all needs. Volvo for example has launched the following (Electric trucks | Volvo Trucks) with more electric innovation expected for freight across the sector. Hydrogen is currently expensive within the consumer market, however, may well be suited to the HGV and fleet markets. Hydrogen vehicles emit around 10% less greenhouse gases than a diesel HGV and 43% lower than a petrol car. It is likely that gas may provide an interim solution for the freight industry. At this time there are no other proposals for publicly accessible hydrogen fuelling stations in the county.

Public Transport - Bus

Exhaust emissions from buses have been improvingly steadily for a number of years due to the increasingly stringent limits set on the new Euro emissions standard engines. The introduction of new vehicles fitted with these engines, has meant there are currently now a number of bus services within Derbyshire operate using these lower emission vehicles.

There are, however, currently no alternative-fuelled vehicles operated by the major operators on their commercial services or by the County Council in Derbyshire.

Case Study

There has been considerable investment in electric and biogas bus technology in the region. In Nottingham the City Council has 58 electric buses in operation on its network of supported bus services, representing the largest electric bus fleet in the UK outside of London. Nottingham City Transport, the main city bus operator in Nottingham, has chosen to invest in Biogas as an alternative clean bus technology. Currently 53 Biogas double decker buses are being introduced onto their services and they are developing a gas fuelling facility. Stagecoach Yorkshire who provided services in the northeast of the county have introduced a limited number of electric hybrid buses in the Sheffield area. These take their power from a combination of diesel and electricity, recycling the energy created from braking and storing it in batteries to power the vehicles.

With this considerable experience of using alternative fuelled buses in the region there is real potential for bus companies in Derbyshire to learn from local experience and best practice. This will be particularly important for operators who's services begin their route in Derbyshire and then travel onto Derby and Nottingham, which are both considering the introduction of clean air zones.

Mobility Hubs

There are aspirations to explore the potential of Mobility Hubs, which are hubs of different scales the physical co-location of transport options and other services to support travel needs and reduce trips by single occupancy cars. Mobility Hubs could include EVCI, electric car clubs, e-bike hire (including e-cargo bicycles), micro-mobility, on-demand and other mobility services.

Electric Car Clubs

There is currently one car club operator within the County, which has been successfully operating since 2015 by Derbyshire Community Health Services (DCHS). The Council will need to consider support to be offered to develop the car club sector and provide appropriate infrastructure.

E-Bikes

E-bikes provide the lowest emission mode of powered transport. E-Bikes are becoming increasingly popular within Derbyshire for both leisure and utility journeys, and are particularly well suited to support cycling in more rural areas, providing pedal assistance to the rider for hills and longer distances. E-bikes can be used on cycle pathways, cycle ways and used in the same way as regular pedal cycles. E-bikes can provide a viable solution to replace short journeys. For the majority of short journeys and days out, E-Bikes will not generally require re-charging during the day. Provision within businesses, cafes, hotels and bed & breakfast accommodation could provide suitable infrastructure for short journey users to re-charge E-Bike batteries (this will sometimes be by allowing access to a standard 3- pin 13 Amp socket).

For longer journeys range anxiety is an issue, particularly in hilly areas. Infrastructure will therefore be required to meet the needs of these users. Charging can take approximately 2 hours, however 80% power charge can be achieved within shorter periods of time, with costs to the electricity provider of around 7p for a full charge.

The purchase cost is higher than that of a regular bike and therefore it will be important to share best practice around workplace salary sacrifice schemes. Adequate storage is also an

important consideration due to the cost of E-bikes. The strategy will therefore need to consider the importance of ensuring suitable storage at appropriate locations.

Hire schemes can provide an important mechanism to increase accessibility and reduce barriers of initial cost. Such schemes can facilitate users to convert to E-bikes for short journeys in urban areas. As such the Council is currently assessing the feasibility of introducing a commercial e-bike hire scheme.

3.5 Sources of funding

Depending on the type of electric vehicle charge point, the initial cost of purchase, installation and maintenance of the units and installation works are likely to be substantial, especially if significant electrical works are required to meet the energy demands required. In addition, there are the statutory order costs for equipment siting, bay designation and enforcement (Traffic Regulation Orders, Section 50 licenses and in some cases i.e. conservation areas planning consent). Sources of funding will also need to consider wider infrastructure identified in this strategy for hydrogen-powered vehicles and e-bikes. The Council will consider a wide range of potential funding sources. These will include assessing:

- Fully or partly funded supplier offers
- Investment funds and other commercial deals
- Office for Zero Emission Vehicles (OZEV) grant funds, as well as the recently announced LEVI fund
- Other suitable Government funds
- Development levies such as Section 106 funding or Community Infrastructure Levy
- Corporate Capital funding
- Other

4. The Strategy

Our Vision: Derbyshire County Council will work collaboratively with local partners to accelerate the adoption of zero emission vehicles across the county, and in doing so make a major contribution to improving local air quality and to reducing greenhouse gas emissions.

5. Policies

Ten strategic policy statements will guide the implementation of Derbyshire County Councils Zero Emission Vehicle Infrastructure strategy. These policy statements (shown below) have been developed following consultation with a range of partner organisations and stakeholders. A working group will ensure the implementation of the strategy through the development of broad actions covering the 10-year period of the strategy and an annual action plan with defined and measurable actions and leads. Governance and monitoring of the strategy will be undertaken through the Environmental Sustainability Group, through quarterly reporting of progress on the annual action plan.

5.1 Strategic Policy Statements

ZEVI 1 Derbyshire County Council (DCC) will work with partners on the provision and delivery of zero emission vehicle infrastructure across the county

Outcomes	Performance Measure
 Derbyshire will have a network of mixed speed public charging infrastructure which is affordable, consistent, accessible and user friendly for residents and visitors. Derbyshire will support the uptake of low emission vehicles in the commercial sector. Residents with no off-street parking will be able to charge their electric vehicle through provision of appropriate infrastructure. Annual monitoring and evaluation processes in place including for the use of ZEVs and EVCI across the county will be monitored and evaluated. Maximised opportunities available through the procurement process to achieve the best possible outcome for Derbyshire. Derbyshire will be a 'safe haven' for e-bike users. Derbyshire will progress shared mobility services (such as bike share and e-car clubs) including as part of mobility hubs. 	 Number of low emission charging facilities. Number of e-bike charging facilities.

ZEVI 2 DCC will adopt a partnership approach to trial new LEV technologies and explore opportunities to innovate

Outcomes	Performance Measure
 Innovate and use best available techniques in order to maximise the opportunities for Derbyshire considering both the vehicle and the infrastructure required. Opportunities to trial new approaches and technology will be explored. 	Number of opportunities for innovation engaged with.

ZEVI 3 DCC will work through the planning system and with private developers and landowners to provide LEVI

Outcomes	Performance Measure
Number of developments with low emission vehicle infrastructure	EVCI provision will be included at the planning stage
installed.	of all developments.

LEVI 4 DCC will adopt a partnership approach to review current parking management policies

Outcomes	Performance Measure
There will be a consistent and effective approach to the policies and practice of parking management for EVCI locations to provide a positive customer experience and remove uncertainty for end users whilst allowing flexibility to adapt to future market demands and changes.	Number of local planning authorities with consistent parking management policies.

ZEVI 5 DCC will work with partners to raise awareness of low emission travel

Outcomes	Performance Measure
 Residents, businesses and visitors will be aware of the low emission vehicle market and of the infrastructure provided to support their use. 	Progress against EVCI Communications Action Plan.

ZEVI 6 DCC will provide LEVI for its employees

Outcomes	Performance Measure
 Derbyshire County Council will provide infrastructure required to support the use of ZEV amongst employees. Derbyshire County Council will facilitate the take up of LEVI amongst employees including the introduction of a salary sacrifice/lease scheme. 	 Number of EV chargepoints installed. Number of ZEV initiatives deployed.

ZEVI 7 DCC will deploy LEV's within its pool fleet

Outcomes	Performance Measure
Derbyshire County Council will accelerate deployment of ZEVs within its pool fleet.	No. of ZEV's within County Council pool fleet.

ZEVI 8 DCC will work with partners to support private industry and public sector organisations to deploy LEV's within fleets

Outcomes	Performance Measure
 Derbyshire County Council in collaboration with partners will support private industry and public sector organisation to accelerate the deployment of LEVs within fleets. 	Number of partner organisations engaged with.

ZEVI 9 DCC will work in partnership to support public transport and taxi operators embrace alternative fuel technologies and infrastructure

Outcomes	Performance Measure
Derbyshire County Council will maximise opportunities to support public transport and taxi operators to embrace alternative technologies and infrastructure.	No. of public transport and taxi operators engaged with.

ZEVI 10 DCC will embed the LEVI Strategy and Action Plan within the context of an umbrella Derbyshire Clean Growth Strategy

Outcomes	Performance Measure
 Derbyshire County Council will provide strategic leadership in the implementation of the ZEVI strategy. 	 ZEVI Strategy embedded within the Derbyshire Clean Growth Strategy.