Appendix 1

Bournemouth, Christchurch, and Poole Council Public Electric Vehicle Infrastructure Strategy 2024 to 2030

Contents:

1. Introduction

1.1 Context

The transport sector, due to its dependency on fossil fuels, is a major contributor to society's carbon footprint, and affects air quality and public health. In 2020, transport in the Bournemouth, Christchurch and Poole (BCP) area was responsible for 33 percent of carbon dioxide (CO2) emissions, an estimated 390 kilotons of CO2 equivalent. Decarbonising the transport sector will be a key challenge in moving towards a zero-carbon future.

Reducing car travel and achieving modal shift in favour of public transport and active travel will have a significant role in addressing these impacts. However, for certain activities and particularly in parts of the BCP Council area with limited public transport provision, cars and vans are the most suitable means of transport. Replacing existing petrol or diesel vehicles with electric vehicles (EVs) is therefore a key part of BCP Council's Climate and Ecological Emergency action plan to help achieve our climate change and air quality goals. It is also in accordance with the environmental objectives of the Council's draft Corporate Strategy and Vision.

The UK Government has introduced a ban on the sale of new petrol and diesel cars and vans from 2035. The ban will speed up the transition to EVs. By 2030 it is estimated that EVs could account for up to 44 percent of all cars and vans in the BCP Council area (approximately 106,000 vehicles).

Charging infrastructure is essential to encourage EV ownership. In the BCP Council area there are currently 133 public electric vehicle charge points or 33.2 per 100,000 population. To meet growing charge point demand, it is forecast that between 997 to 1178 public charge points will be needed by 2030 to meet demand from residents, businesses, and visitors (Nevis/Cenex, 2023).

By adopting this Public Electric Vehicle Infrastructure Strategy (PEVIS), BCP Council is demonstrating a commitment to promote the uptake and deployment of EVs. This document sets out a vision, the Council's planned approach in the form of an action plan, and how the Council will use data to monitor the impact of the strategy.

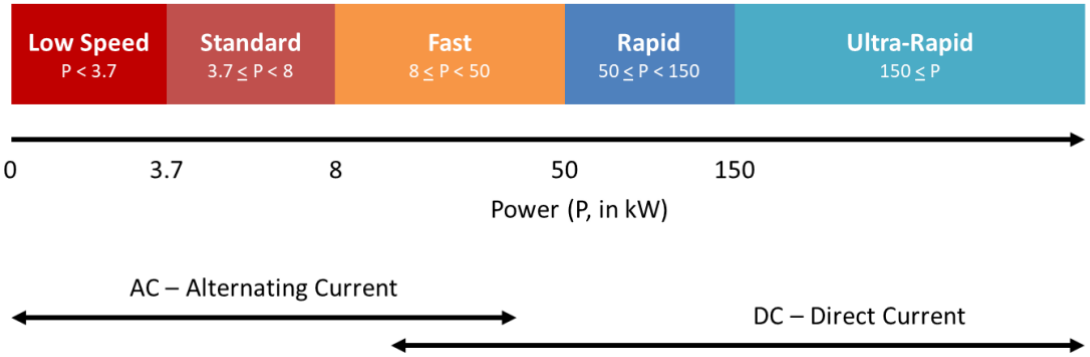
The PEVIS, covers 2024 to 2030. During this period the PEVIS shall focus on what is currently known, what can be practically delivered, and for the EV market in the UK to mature. This timespan also:

- Aligns with Office for Zero Emissions Vehicles (OZEV) Local Electric Vehicle Infrastructure (LEVI) funded deployment, which provides an opportunity to secure both capital and revenue funding streams to support this strategy.
- Aligns with the scheduled conclusion of the Council's current programmed Electric Vehicle Charging Infrastructure programme, which is being delivered through a contracted Commercial Service Provider (JoJu/Mer).

The PEVIS will be reviewed regularly to provide opportunity to reflect upon rapid technological and socio-economic change.

The following nominal charging equipment power ratings have been defined to describe different types of EV charging infrastructure referenced in this strategy:

- **Low Speed** – for charging equipment dispensing at a maximum power of up to 3.7 kW.
- **Standard** – for charging equipment dispensing at a power of greater than or equal to 3.7 kW, but less than 8 kW.
- **Fast** – for charging equipment dispensing at a power of 8 kW and above, but less than 50 kW.
- **Rapid** – for charging equipment dispensing at a power of 50 kW and above, but less than 150 kW.
- **Ultra-Rapid** – for charging equipment dispensing at a power of 150 kW and above.



Charge times for vehicles (varies based on size and type of use of vehicle) using the respective charger types are broadly as follows:
***Low Speed** = 8 hours+ ; **Standard** = 4-8 hours; **Fast** = up to 4 hours; **Rapid** = 40-60 minutes; **Ultra-rapid** = 30 minutes (200 miles)*

2. Scope of the PEVIS

This Strategy covers the following:

2.1 Destination Charging

Publicly accessible off-street charge points in destinations. This includes public car parks, retail, leisure, and tourist attractions. Destination charge points provide top up charging opportunities and address range anxiety concerns. This includes the concept of hub-based charging (a group of charge points at a central location in or out-of-town). Sufficient grid capacity must be available to accommodate high powered charging. Power can also be generated on-site from renewable sources.

2.2 Residential Charging

Charge points located at or near EV owners' homes (there may be an overlap with destination charging). These serve residents primarily for overnight charging and are important for residents that lack private off-street parking at home. Charge points could be

situated on-carriageway or in off-carriageway locations depending on the setting and local constraints. Convenience for residents will be a priority consideration when locating these charge points. No charging infrastructure will be considered on residential streets, to avoid causing pavement obstructions that could discourage walking and cycling, as well as creating accessibility issues. Community charging also falls into this category.

2.3 Mobility Hubs

Mobility hubs conveniently bring together shared transport (bike, e-bike, e-scooter, e-cargo bike and car club services), public transport (bus and rail) with active travel options at a single location. This enables seamless interchange between transport modes. They provide an opportunity to deliver publicly accessible EV charging infrastructure as part of the local sustainable transport offer.

2.4 Upgrading the BCP car club network

Car clubs provide socially inclusive, low emission mobility which helps to break dependency on private car ownership. They help policy makers to meet targets at local, regional, and national levels, including emissions reduction; reduce congestion; support improved air quality and encourage individuals to increase their use of sustainable modes. BCP Council in partnership with Co-Wheels run a fleet of 12 vehicles predominantly powered by Internal Combustion Engines. Upgrading the BCP car club fleet to electric vehicles will rely on the provision of Electric Vehicle Charging Infrastructure (EVCI).

2.5 Charging provision for leased/fleet vehicles

The British Vehicle Rental & Leasing Association BVRLA has provided data showing that 50% of all new vehicle registrations are fleet/leased vehicles. In addition, 80% of UK Battery Electric Vehicles (BEV) are forecast to be fleet or leased vehicles by 2025.

The PEVIS needs to consider several challenges faced by van drivers to help drivers transition to EVs:

- Many residents are van drivers and will need to park works vehicles at home over night. The assumption that all van users can re-charge in a workplace depot is not accurate.
- Insurance policy requirements for van drivers, requiring vehicles to be parked within sight of home.
- Consider public EV charge point bay dimensions. Vans require longer bay lengths.
- Consider existing height access restrictions to car parks hosting public EV charging infrastructure.

The potential for bookable EVCI. EV van users working to a schedule, want to be able to book charging appointments to fit in with their work schedule. Software and hardware procured/supplied through LEVI needs to be future proofed.

2.6 Community Charging

Community charging is where electric car drivers can access EV charge points by borrowing them from others while they are not in use, a fee is paid for the use of the charge point. Community EV charging gives drivers who are looking to get an electric car the confidence

to make the switch, knowing that there are local home chargers that they can use. Individuals/community groups can generate revenue by renting out their home chargers while supporting their local EV community.

There are currently a number of companies that facilitate community charging, for example Co Charger and Just Charge . The providers offer app-based tools which allow individuals/community groups to sign up and register their charge points, set their own tariffs, and receive payment for the use of their charge point. The app also allows drivers to search, book, and pay for a convenient private charge point. There are currently an estimated 600,000 privately owned electric charge points in the UK. Providing the public paid access to a community charging network could speed up the transition to EV, by drivers that do not have access to their own off-street parking and charge point.

2.7 Development Policies

The application of planning requirements on new developments to ensure planning applications fully provide for future uptake of EVs. The council already expects the inclusion of charging points for electric vehicles in all new developments as outlined in section 3.6 of the BCP Parking Standards document.

2.8 Areas out of scope for the PEVIS 2024 to 2030

Not within the scope of the PEVIS are:

- **Charging at BCP Council sites** - Charge points installed in depots and at Council offices to enable electrification of the Council operational and pool fleet. Sufficient grid capacity must be available to accommodate high powered charging.
- **Workplace charging on private land** - Charge points installed at workplaces within private car parks for use by a company's employees and fleet vehicles. Workplaces could also provide community charging facilities if the charge point is made publicly accessible.
- **Bus and taxi charging** - Charging infrastructure that meets the requirements of future electric bus and taxi fleets. Sufficient grid capacity must be available to accommodate high powered charging.
- **Renewable energy generation and supply for electric vehicle charging** - The generation of renewable energy to supply electric vehicle charging infrastructure. Renewable energy could either be generated on-site co-located with charging infrastructure or be generated off-site.
- **Motorbikes** – There is currently low demand for e-motorbikes. Almost all e-motorcycles currently use 3-pin chargers and therefore no dedicated charging infrastructure is required.
- **Rail transport** – rail infrastructure is the responsibility of Network Rail. BCP Council has limited powers to influence the rail sector and its adoption of zero emission vehicle technology.

- **Freight transport** – The adoption of zero emission vehicle technology will occur later than the period covered by this strategy. It is unclear at this time if electric or hydrogen will emerge as the primary energy source for powering freight vehicles.
- **E-Bikes and e-cargo bikes** – Ebike batteries can be removed and are charged using a standard 3 pin plug. Therefore, no dedicated charging infrastructure is required.
- **Hydrogen power solutions** – The technology and vehicle availability of hydrogen powered solutions is not at a mature enough stage to be considered as part of this strategy.

En-route charging along the strategic road network – This is managed by Highways England.

3. The current demand for EV charging infrastructure in the BCP Council area

3.1 The BCP Council area vehicle mix

The most recent data from the National Charge Point registry for 2022 **(Figure 1)**, shows that 1.6% of the BCP Council area vehicle population were classified as electric vehicles. The number of EV's in the BCP Council area is currently estimated to be 8900 **(Figure 2a)**, with the number expected to reach nearly 106,000 by 2030 **(Figure 2b)**. Aligned to this significant increase in number of EV's, comes the increase in demand for Electric Vehicle Charging Infrastructure.

Figure 1 – 2022 BCP Council area vehicle mix for car and light goods vehicles data (National Charge Point Registry (NCR), compiled by NEVIS).

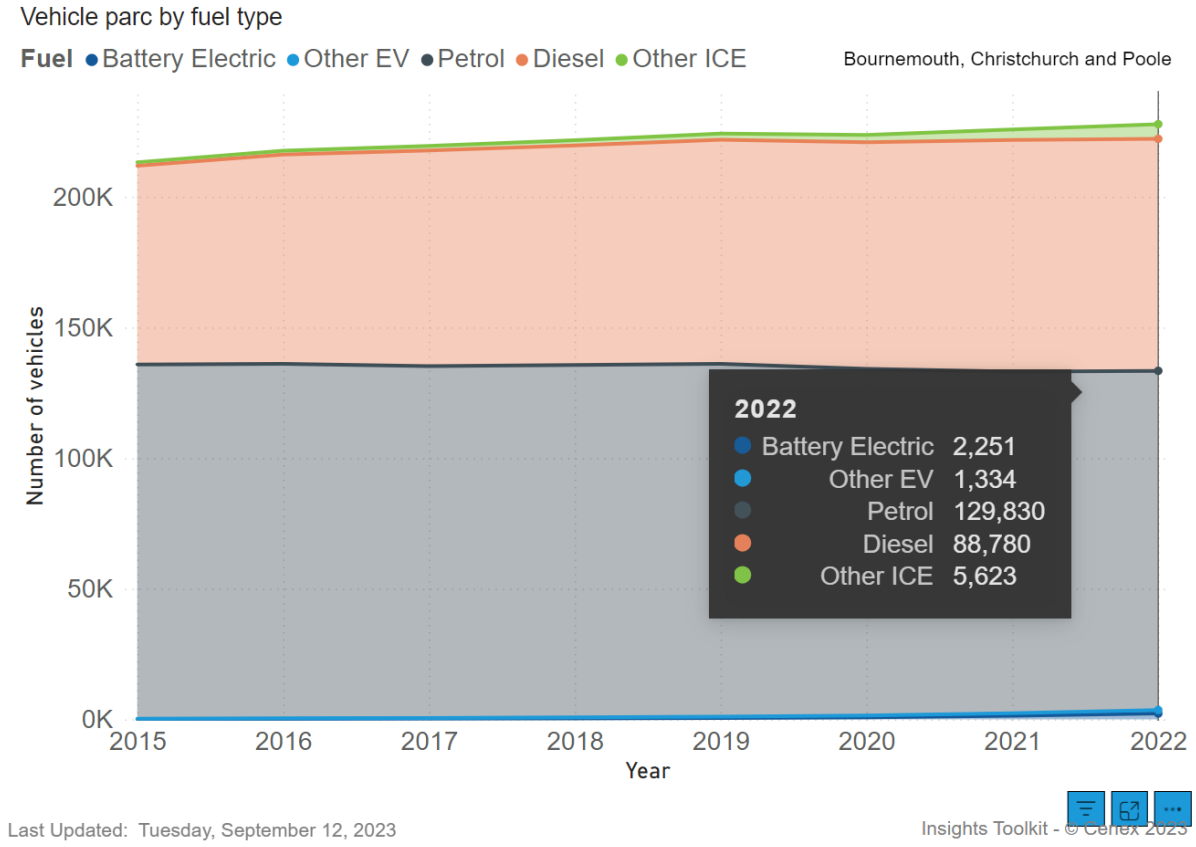
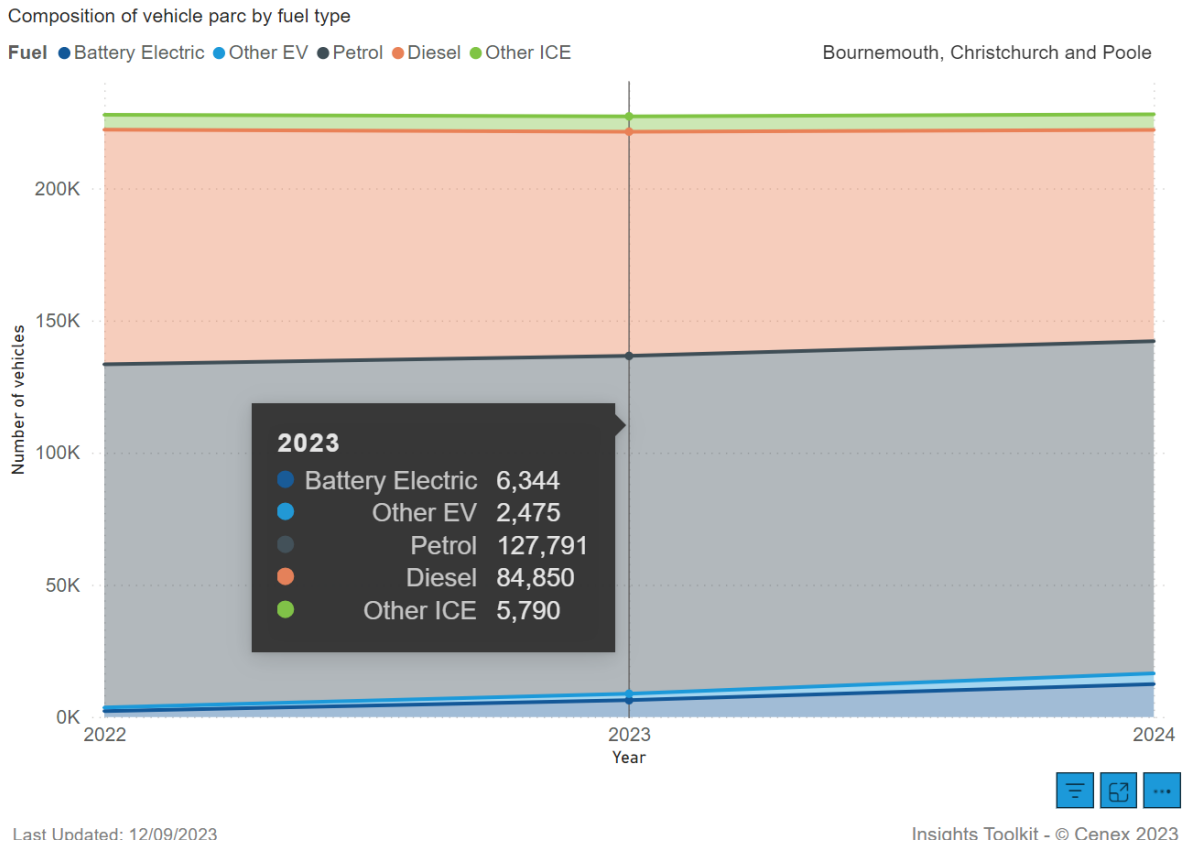


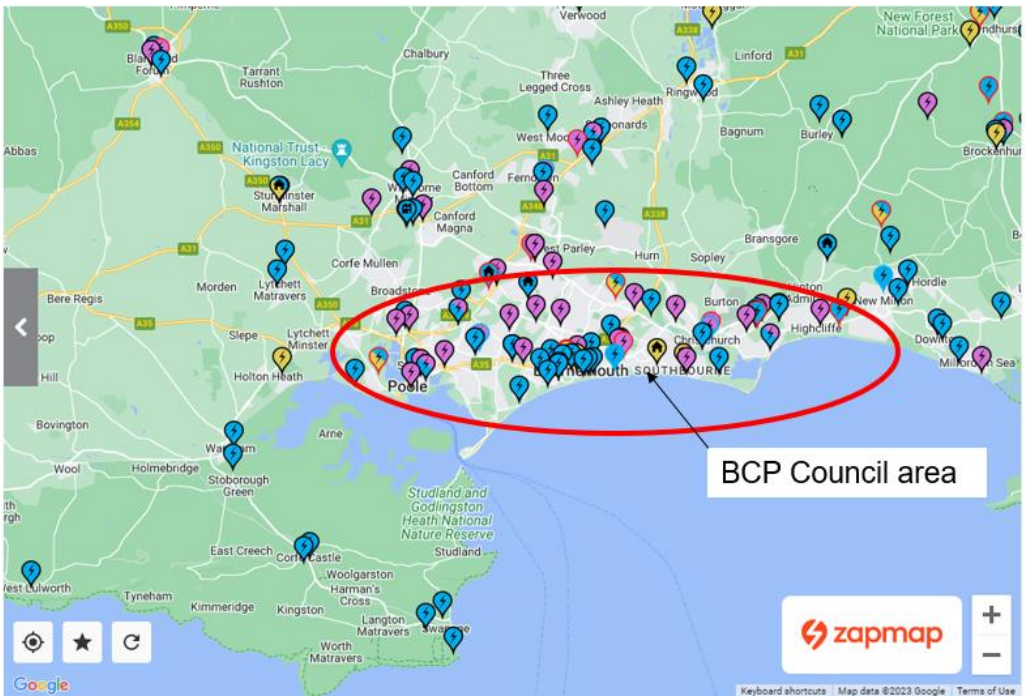
Figure 2a - BCP Council area vehicle mix (cars and light goods vehicles) 2022 to 2024



3.2 The current demand for / supply of public EVCI

Figure 3 provides a visual summary of the current quantity and distribution of publicly accessible EVCI in the BCP Council area and surrounding areas (SE Dorset and Hampshire), source: https://www.zap-map.com/live/ (May 2023).

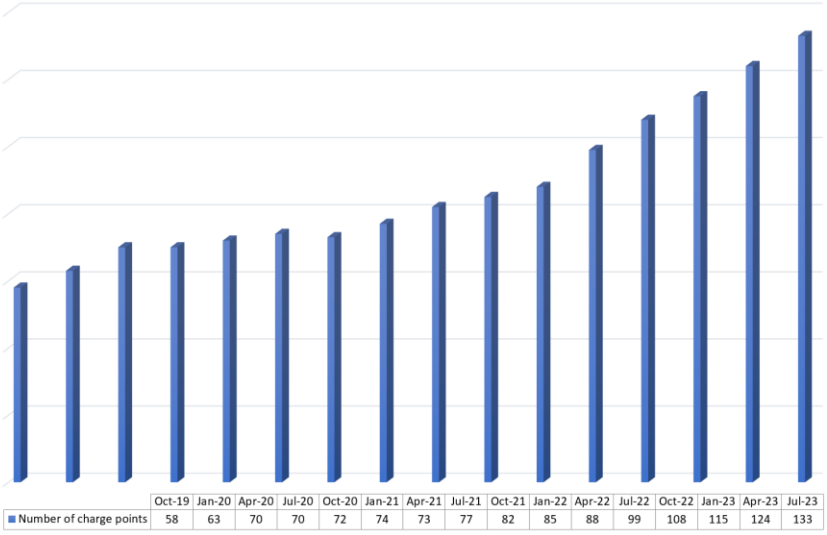
Figure 3 – Current publicly available EVCI in SE Dorset and surrounding areas



In July 2023, the number of publicly accessible charging points in the BCP Council area was estimated at 133. This is an increase of over 50% over the previous 12 months (Figure 4). This shows the impact of the BCP Council public EV charging contract that was awarded to JoJu/Mer in April 2022.

This equates to 33.2 devices per 100,000 population. It is lower than the English national average of 66.7 charging devices per 100,000 population including London at 152, but higher than Bristol at 31.6 (a comparable area in terms of environment and population).

Figure 4 - The Public EVCI network growth (BCP Council area) Oct 2019 to July 2023



	Oct-19	Jan-20	Apr-20	Jul-20	Oct-20	Jan-21	Apr-21	Jul-21	Oct-21	Jan-22	Apr-22	Jul-22	Oct-22	Jan-23	Apr-23	Jul-23
Number of charge points	58	63	70	70	72	74	73	77	82	85	88	99	108	115	124	133

4. The future requirements for public EV charging infrastructure

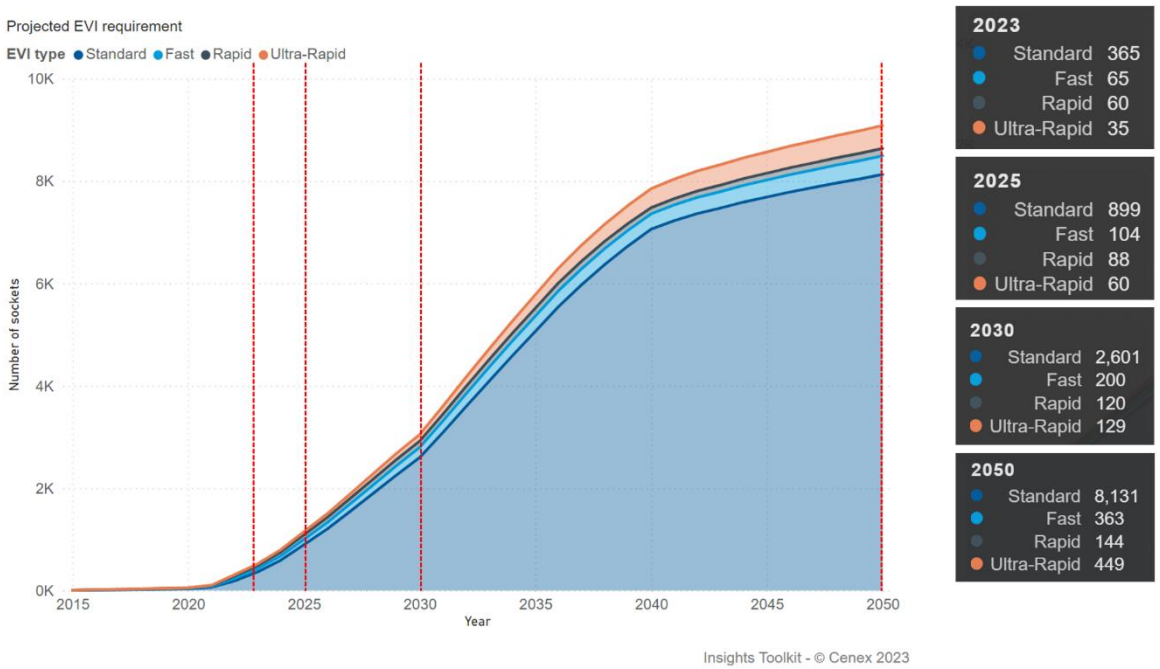
4.1 The future demand for EVCI in the BCP Council area

Data estimates from the Nevis/Cenex Insights toolkit, indicates that the number of EVCI devices required in the BCP area will increase exponentially over the next few years. The extent of the requirement will vary dependent on the speed of uptake and the preferred strategy for delivering EVCI across the local area. There are three different roll out approaches considered:

1) **Residential** - This provides a projection with a preference towards standard charging near-home.
2) **Hub-based** - This provides a projection with a preference towards ultra-rapid charging which is similar to the current fuelling station approach.
3) **Blend** – This provides a projection with a blend between the two other approaches.

Based on a medium EV uptake projection in the BCP Council area from 2023 to 2030, **Figure 5** outlines the number of EVCI units that will be required, based on a blended delivery approach of residential charging / hub provision. Based on this projection scenario, the quantity of charge points required to meet the local demand will increase to 2,600 standard charge points; 200 fast charge points; 120 rapid charge points; and 129 Ultra rapid charge points.

Figure 5 – Projected EVCI requirement in BCP Council area 2023 to 2050, based on a medium uptake of EV provided for by a blended residential/hub charging approach



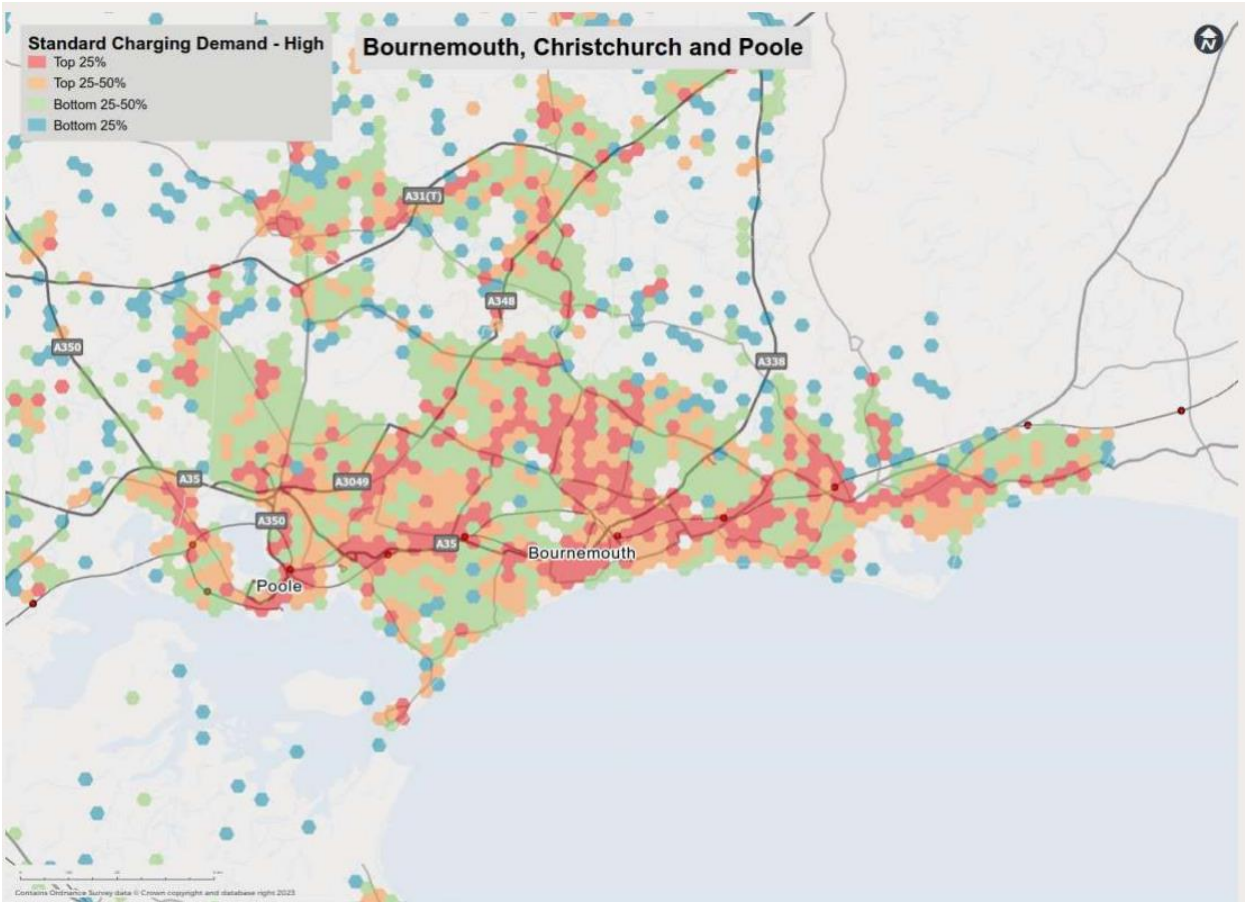
4.2 Western Gateway Strategic Transport Body modelling

The Peninsula and Western Gateway Sub-National Transport Bodies (STBs) have commissioned a strategic Electric Vehicle Charging Study for the Southwest region. As part of this work, an analysis was undertaken to provide an initial indication of where to deploy charging infrastructure for AC charging demand (up to 22 Kw).

Figure 6 is a map of the BCP Council area, highlighting locations which will have the greatest need for charging provision by 2030 (red and orange hexagons). The greatest demand is focussed in residential areas where drivers do not have access to domestic off-street charging. The PEVIS will consider this analysis when identifying suitable sites for the provision of public residential charging infrastructure.

As part of the STBs EV charging study, some analysis was also undertaken of areas that have the greatest reliance on on-street parking. **Figure 7** is a map which shows the results for the BCP Council area. The red and orange hexagons highlight which areas within the conurbation have a proportion of households that rely on on-street parking (45% or more).

Figure 6 – Bournemouth, Christchurch, and Poole - Charging Demand area analysis

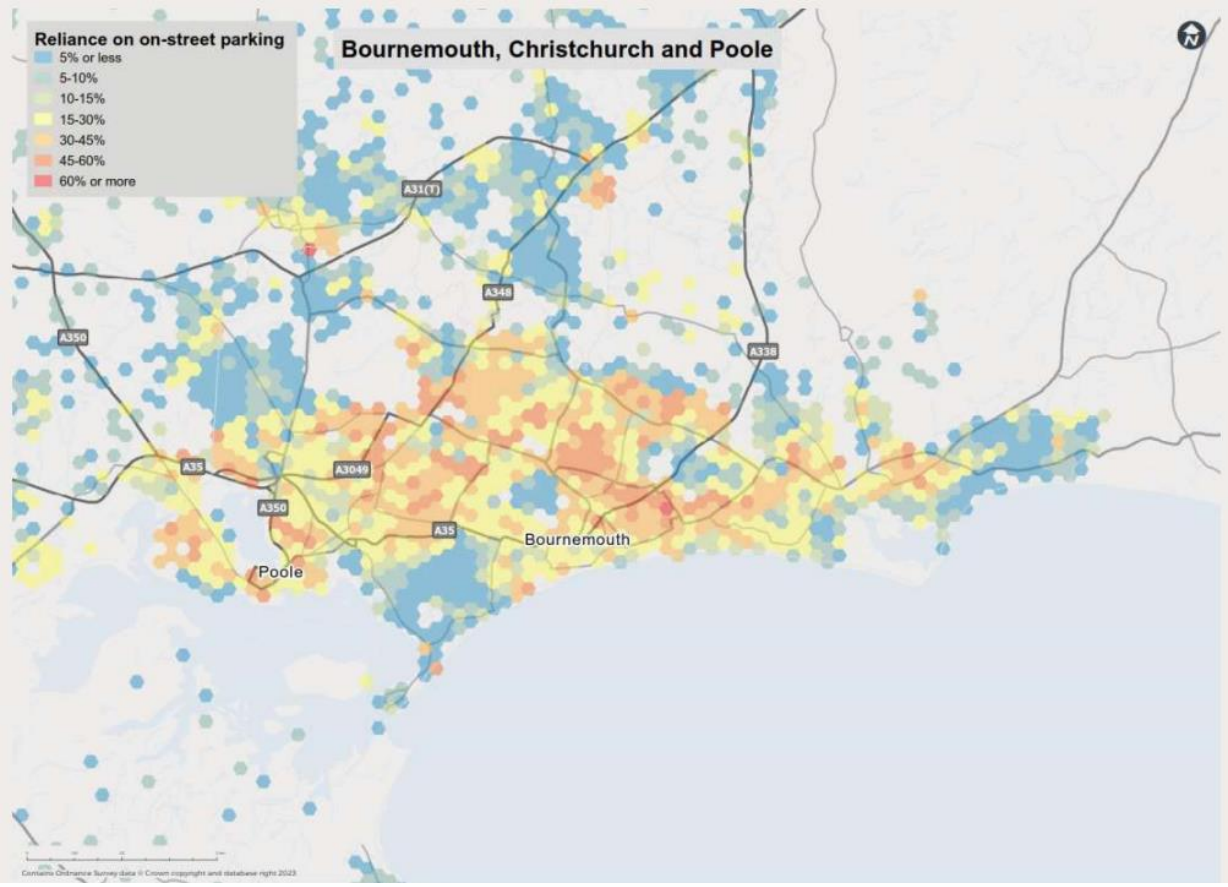


Source: The Peninsula and Western Gateway Sub-National Transport Bodies (STBs) Electric Vehicle Charging Study.

The STB model takes a range of inputs in order to calculate EV uptake at a neighbourhood level. A key metric used is an estimate of the reliance on street parking within a hex area (400x400m). This is calculated using Experian Mosaic consumer demographic data which includes information around the housing stock within each postcode area. The model made assumptions around the types of housing which are likely to have a private driveway. Whilst this metric is an approximation, testing highlighted a high rate of accuracy.

The PEVIS will also consider this analysis when identifying suitable sites for the provision of public residential charging infrastructure.

Figure 7 – Bournemouth, Christchurch, and Poole – map showing areas with the greatest reliance on on-street parking



Source: The Peninsula and Western Gateway Sub-National Transport Bodies (STBs) Electric Vehicle Charging Study.

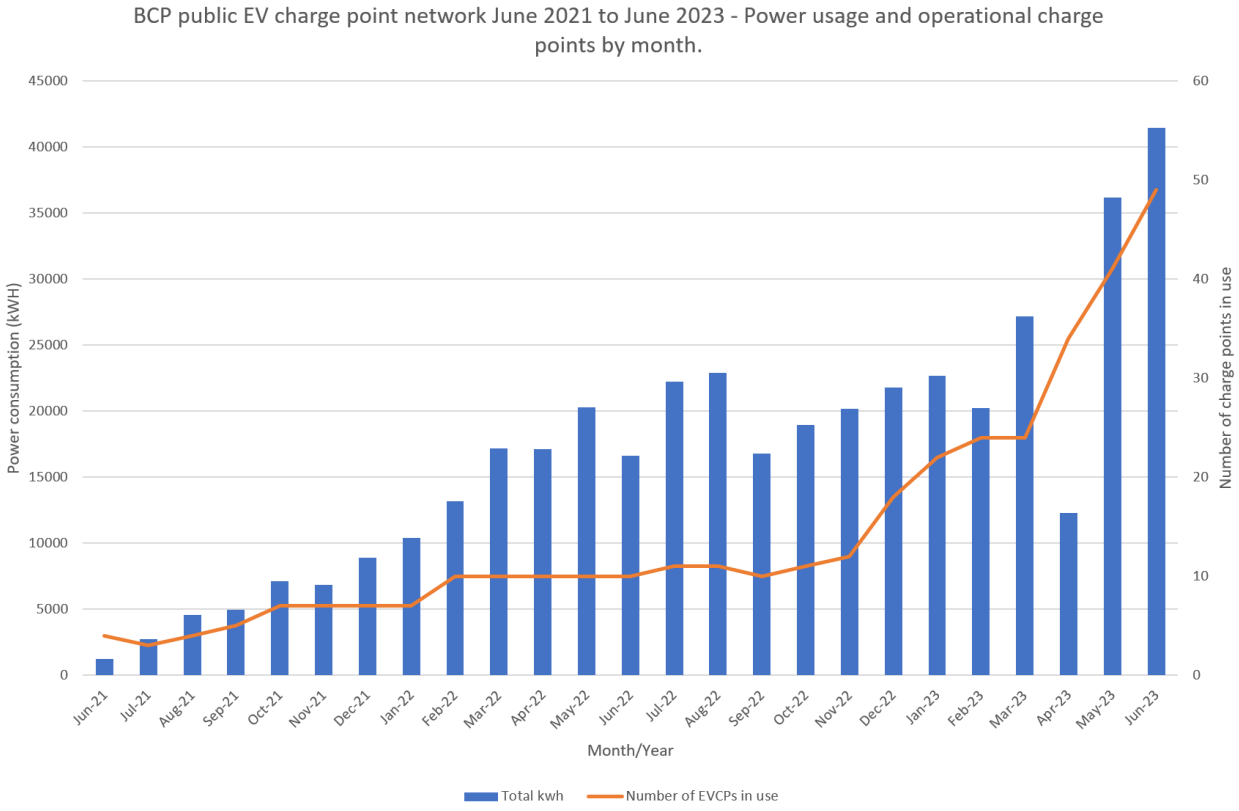
5. The BCP Council public EV charge point network

5.1 Existing provision

BCP Council's past and current role in the delivery of publicly accessible EVCI is summarised as follows:

- In what is now the BCP Council area, 12 rapid charge points were installed in 2015 by Borough of Poole, Bournemouth Borough Council and Dorset County Council, following a grant funding award from OLEV, under an own and operate model. Due to issues with the appointed contractor responsible for maintenance, the resolution of faults was problematic and slow, leading to on-going issues with poor reliability and frequent, negative user experience.
- The 12 legacy rapid charge points were upgraded in 2021 by BCP Council's current Service Provider JoJu/Mer. The performance of the charge points has significantly improved and has resulted in improved user experience and utilisation.
- In 2022 BCP Council appointed JoJu (charge point installer) and Mer (charge point operator) to deliver an agreed program of rapid and fast EVCPs at key destination based public car park sites across BCP. This is a supplier funded arrangement, through a concession-based contract. BCP Council receives a % of profit share from electricity supplied to power the infrastructure. To date this arrangement has delivered 29 operational publicly accessible EVCP sites in BCP Council car parks, a mix of 40 fast and rapid public charge point units, serving 80 sockets/EV bays). **Figure 8** is a graph which illustrates the positive impact that this contract has had on the roll out and supply of publicly available EVCI in the BCP area. **Figure 8** also details the impact of the infrastructure provision on energy consumption, required to supply the BCP charge point network.

Figure 8 BCP Council Public EVCP Network June 2021 to June 2023 – No. of Charge Points and Power Usage



5.2 Current BCP Parking policy for EV users

Existing BCP Council Parking policy stipulates that vehicles using public EV charge point bays located within BCP car park sites must pay the appropriate fee for the use of the parking space in addition to paying for the use of the charge point. Feedback from the BCP Council EV consultation (see section 8) indicates that this is unpopular with some drivers.

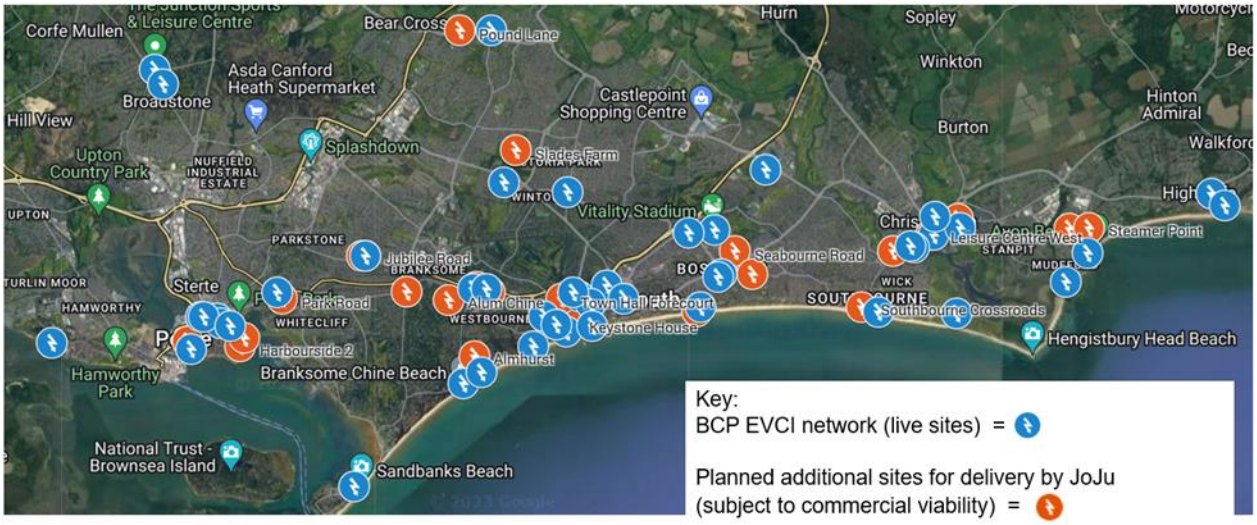
The current policy reflects the use of space and fact that the BPC EVCP network operates as a concession, whereby the Council receive a small profit share of the electricity used during EV charging. This revenue is used by the Council to support the administration of the scheme and would be insufficient to cover lost income should parking charges be removed.

The removal of parking charges for EV drivers whilst other users are required to pay would also present issues in terms of monitoring the legitimate use of public EV charge point bays in BCP Car Parks.

5.3 Additional planned provision

Through existing contractual arrangements, BCP Council is working with JoJu/Mer to deliver a further 36 sites with public EVCPs by March 2025.

Figure 9 - Map to show the location of existing and planned EVCP sites provided through BCP Council contracts



5.4 Seasonality and impact of Tourism

The tourism industry is important to the local area with an estimated 9.9 million visits (day visits and staying trips) annually, contributing £1.3 billion to the local economy in 2021 (BCP Tourism Strategy 2023-2027). A surge in demand for EV charge points in the summer poses a specific challenge, which is already being addressed through the installation of rapid and fast charge points, as described in 5.1 and 5.3. Data from existing BCP Council public rapid charge points shows that the average demand increases across the network by 10-14% in the months of July and August. At certain locations, the average demand can increase by as much as 140% in the peak summer months. As a result, the PEVIS will need to consider the provision of public EVCI to meet the needs of both residents and visitors throughout the year.

6. The PEVIS vision

6.1 Objectives

Our vision is to create a reliable and accessible charging infrastructure for residents, businesses and visitors, and to contribute to making the area carbon neutral before 2050.

By implementing this strategy BCP Council will:

- Lead by taking action in areas which the Council directly controls.
- Lead on securing funding and generating revenue.

- Lead on keeping residents, businesses and visitors engaged and consulted on future measures.
- Enable the expansion of a reliable and accessible public charge point network that complements commercial networks.
- Enable residents without off-street parking to access convenient and affordable public charge points.
- To consider the electric charging needs of van drivers and fleet vehicle users.
- Explore opportunities to encourage taxi operators to switch to EVs.
- To consider opportunities to support Community Charging schemes.
- Provide increased access to public charge points through the provision of Mobility Hubs, to promote a range of sustainable travel modes. The hubs will include infrastructure for e-car club vehicles at priority sites.
- Provide a fully electric car club offer within the local area.
- Enable, through planning policy, new developments to install active or passive charging infrastructure.
- Work closely with the private sector to leverage private match funding capital and to maximise capital funding secured through central government grants.
- Work with Councillors, the Community and other public sector organisations.
- Co-ordinate with other commercial and public network operators to deliver EVCI.

Work with Scottish and Southern Electricity Networks (SSEN) Distribution Network Operator (DNO) to identify future public EV charge point demand to feed into strategic infrastructure plans.

6.2 Key stages of development up to 2030

Figure 10 presents a summary of the progress made by BCP Council to install publicly accessible EVCI to date, as well as outlining the major stages of EVCI development up to 2030.

Figure 10 – Key stages of development up to 2030

Year	EV Market Share BCP	Stage	Resource	
			BCP	Private sector
2015 to 2021	Increased up to 1%	**1 Foundation** The number of chargers increases dramatically from a small base with destination EVCPs in strategic town/ neighbourhood centres. Investment led by the private sector.	£	££

		12 Rapid charge Points installed and operated by a consortium of local authorities. BCP Council takes ownership of this EVCI network in 2019 when the Unitary authority is formed. The network experiences poor reliability and user experience as a consequence of on-going maintenance issues through the own and operate model.		
BCP Council enters a concession-based contract with Private Service Provider to rollout EVCI in BCP council area				
2022 to 2023	Increasing to 5.4% (estimate)	**2 Development** Chargers added into 65 BCP public car park sites through a concession contract with a commercial service provider to fill network gaps and roll out charging at other public locations (leisure centres, parks etc). BCP submits LEVI funding to roll out EVCI aimed at residents without access to off street parking. BCP Council secures LEVI funding for a dedicate EV project officer resource. BCP launch EVCI strategy 2024 to 2030.	~~£~~£	~~£~~£~~£~~£
BCP Council launch EVCI strategy 2024 to 2030				
2024 to 2025	Increasing to 12.9% (estimate)	**3. Expansion** The residential public charging network to undergo significant expansion with the support of LEVI capital funding. Increasingly EVCPs will be available in towns, neighbourhoods and tourist destinations.	~~£~~£~~£~~	~~£~~£~~£~~£
2026 to 2027	Increasing to 23.6% (estimate)	**4. Growth** Charging infrastructure is now widely available across BCP Council area. Public charging is expected to increase substantially as EV usage increases and as more households without access to off-street parking adopt EVs. More recharging hubs with significant renewable energy development. BCP Council focus is on enabling EVCI through private sector investment and delivery.	~~£~~	~~£~~£~~£~~£~~£
2028 to 2030	Increasing to 44.1% (estimate)	**5. Maturity**	~~£~~	~~£~~£~~£~~£~~£

		EV charging easily accessible at destinations, in residential areas and at workplaces. It is likely that the growth in the number of charger locations may flatten, although capacity at existing charge stations is likely to increase.		

7. Links to other Strategies and Plans

7.1 Link to the Transport Decarbonisation plan

The UK Government has developed a plan to decarbonise transport. The Transport Decarbonisation Plan (TDP), published in July 2021, sets out in detail how to deliver the significant emissions reduction needed across all modes of transport to achieve net zero emissions from transport by 2050. The Setting the Challenge 2020 report identifies the decarbonisation of road vehicles as one of six strategic priorities:

In March 2022, the UK Government published its Taking Charge EV Strategy which sets out a vision and action plan for the rollout of electric vehicle charging infrastructure in the UK.

The UK Government's Local Electric Vehicle Infrastructure (LEVI) Fund supports local authorities in England to work with the charge point industry, to improve the roll out and commercialisation of local charging infrastructure, with a focus on planning and delivery of charge point infrastructure for residents without off-street parking. The fund comprises of:

- **Capital funding** to support charge point delivery. In April 2023, BCP Council was indicatively allocated up to £1,447,000 of capital to deliver a step-change in the deployment of local, primarily low power, on-street charging infrastructure and to accelerate the commercialisation of, and investment in, the local charging infrastructure sector.
- **Capability funding** to ensure that local authorities have the staff and capability to plan and deliver charge point infrastructure. BCP Council was awarded £67k of funding in March 2023 to progress a dedicated EV Officer resource and to upskill existing officer resource. A further £305k of capability funding was allocated to the Council in April 2023.

BCP Council is currently working through a 3 stage LEVI application process to secure the Capital funding allocations to deliver against the fund objectives.

7.2 Links to Local Transport Plan goals

The joint Local Transport Plan (LTP) with Dorset Council has a vision for a safe, reliable, and accessible low carbon transport system that assists in the development of a strong low carbon economy, maximises the opportunities for sustainable transport and respects and protects the area's unique environmental assets (Bournemouth, Poole, and Dorset Local Transport Plan 2011 to 2026). As set out below, this Strategy will make a significant

contribution to meeting the LTP goals. The LTP is currently being refreshed (LTP4), and an updated plan is expected to be published in 2025.

The PEVIS supports the following LTP goals:

- **equality of opportunity** - improving access contributes to greater equality of opportunity, particularly for those who do not have home charging facilities.
- **reduction of carbon emissions** - BEVs produce zero exhaust emissions. Applying smarter choices and supporting “green technology” to encourage modal transfer and low carbon travel behaviour by providing infrastructure for charging electric vehicles in public locations, mobility hubs and at work/retail centres.
- **supporting the economy** - commitment to the guiding principles of the Green Knowledge Economy. Low carbon solutions will be favoured where possible.
- **improved quality of life** - reducing harmful vehicle emissions will improve quality of life for all, improve air quality, and the local environment.
- **value for money** - value for money will be achieved by maximising our assets.

better safety, security, and health - encouraging and supporting safe and sustainable travel will contribute to improved health.

7.3 Links to the BCP Council Climate and Ecological Emergency Action Plan

The Council Climate and Ecological Emergency Action Plan lists these areas for action that align with this strategy:

- Explore development of an extended network of EV charging points for Council use to provide certainty of provision.
- Investigate replacement of Council vehicles with zero emission EVs or hydrogen vehicles, or alternatives where practicable, such as cargo-bikes.
- Work with partners to consider installing electric vehicle charging points across the conurbation.
- Work with partners to promote and expand car club schemes across the BCP Council area.
- Seek to include policies in the new Local Plan for climate change mitigation and adaptation, including a policy to encourage zero carbon developments, subject to viability testing.
- Consider carrying out a strategic parking review to examine parking/car club standards.

7.4 Other Links

Besides being one of the supporting strategies for LTP and Local Plan, the EV strategy also plays a vital role to underpin the broader objectives and priorities, like reducing carbon emissions, improving air quality, sustainable environment and one of the best places in the world to live, work, invest and play, in our key objectives of the Council's Corporate Strategy. It also has strong links and synergies with:

- Health and Wellbeing Strategy
- BCP Economic Development Strategy
- Dorset Heathlands Interim Air Quality Strategy
- BCP Green Infrastructure Strategy
- BCP Council High Street and District Centre Strategy
- Parking Standards Supplementary Planning Document
- BCP Bus Service Improvement Plan (BSIP)
- BCP Local Cycling and Walking Infrastructure Plan (LCWIP)
- BCP Council Sustainable Fleet Management Strategy
- BCP Council Equality and Diversity Policy

8. BCP Council Electric Vehicle Charging Infrastructure Consultation

8.1 Consultation background

The Council conducted a 6-week public consultation on EV charging from 21 August to 1 October 2023 with the following aims:

- To identify the scale of EV ownership and prospective ownership across the area.
- To assess the demand for local public EV charge points.
- To generate interest in community EV charger sharing.
- To identify 'barriers' to transitioning to EVs from petrol/diesel vehicles.
- To assess interest in community car club electric vehicle hire.
- To identify locations where there is a need for publicly available EV charge points and electric community car club vehicles.
- To share and receive feedback on the priorities, opportunities, and actions for delivery of public EV infrastructure.

In total, **365** consultation on-line surveys were completed. There were **194** suggested locations provided on the public EV drop pin map, and **64** suggested EV car club locations provided on the electric community car club drop pin map.

8.2 Consultation findings

A full summary report of the consultation findings can be found in Appendix A. As result of the consultation feedback, the PEVIS should consider the following key issues/opportunities, broken down into key themes:

Demand for Public EVCI

- There is existing demand within the BCP Council area for public EV charging infrastructure. A sizeable proportion (**32%**) of respondents (current EV users) rely on charging facilities away from the home.
- Providing public EV charging infrastructure in the BCP Council area will be crucial to assisting existing non-EV drivers to transition to EV (**32%** of non-EV drivers stated that they planned to rely on charging facilities away from the home when they transition to an EV).
- The PEVIS will support a sizeable number of non-EV drivers (**49%** of respondents) who plan to own or lease an EV within the next 5 years.

Removing barriers to transition to EVs

- To remove significant barriers for existing non-EV drivers to transition to EVs. The barriers include being unable to install an EV charge point at home (**28%** of respondents); a lack of public EV charge points close to where drivers live (**41%**).

E Car Club vehicles

- Over **a third** of respondents would consider booking and hiring an EV Car Club vehicle to replace existing personal vehicle journeys.
- Nearly **40%** of respondents would be more likely to consider using a Car Club vehicle if it were an EV.
- Over **half** all respondents confirmed that they belong to a household which has two or more vehicles. The expansion of an electric car club fleet could help to reduce both first and second car ownership levels within the conurbation, whilst helping to increase access to public EV charging points in residential areas (on carriageway) where there is a lack of residential off-street parking.
- People are divided on whether they would be interested in joining the scheme. There is a need for more education, and possibly more visibility of the scheme.

Location, quantity, and type of public EVCI

- A significant number of respondents' feedback concern of a lack of existing public EV charge points in the BCP Council area and supported the aspiration to deliver an increased uplift in provision through the PEVIS.
- Many respondents support the idea of multiple EVCPs in a hub location to reduce chances of having to wait around / look for another charge point elsewhere.
- There is definite support for Fast charge points up to 22kwh, that can charge more than one vehicle at a time.

- Nearly **three quarters** of respondents are willing to walk up to **10 mins** to access public EV charging (**73.4%**).
- A clear message that EV users and drivers want to see banks of Fast charge points in car parks close to where people live/work/spend leisure time.
- Strategically located Rapid/Ultra Rapid charge points are valued and have a place within the PEVIS.

A consensus that facilities for residential areas without access to off street parking are necessary.

Design considerations

- The provision of future public EVCI should cater for Type 2 connectors.
- Respondents want a public EV charging solution which is easy and simple to use at all public charging points. Contactless payment at all charge points was a recurring feedback theme.
- Several respondents said that EVCPs needed to be more accessible for disabled users. In the absence of additional information, the Council should continue working to the industry accessibility standard PAS 1899.

Policy considerations

- Many respondents complained about having to pay for parking while charging. Consideration of BCP Car Park payment options to support EV drivers is required (for example, free or reduced fee parking in District Car Parks overnight).
- Consider systems and policies to prevent vehicles from continuing to park in EV bays for pro-longed periods once they have finished charging. This seems to be a current frustration for a number of local EV users.

Safety and accessibility

- Feedback was received requesting charge point infrastructure to be in the carriageway and not on the footway, to reduce clutter and improve/maintain space for pedestrians.
- **12.5%** of respondents reported that someone in their household was a Blue Badge holder. The design of public EV charging equipment, bay layout and back-office systems must consider the needs of users with accessibility needs.
- Several respondents expressed concerns about safety in poorly lit and remote car parks, especially for people with disabilities. Areas of elevated vehicle crime were also mentioned as a possible risk. User safety is an important consideration and needs to be carefully considered and addressed by the Council in collaboration with current and future EV infrastructure delivery partners.

Community Charging schemes

- There was a sizeable number of EV drivers that already have access to their own private charge point, who would consider making it available to others through a Community EV charging scheme. The consideration of support for a Community EV sharing scheme would provide an opportunity for many drivers that don’t have access to off street parking within the conurbation, to gain access to charging infrastructure.

- A number of respondents were unsure if they'd want to allow their home charger to be used for community charging. This presents an opportunity for to consider some way of informing users as to what Community Charging is and how it works.

Mobility Hubs

- There were several positive comments provided which supported the idea of Mobility Hubs, for example "Mobility Hubs would help make BCP a wonderful place to live. It would be useful to have car clubs in more locations and in easy reach of home". No negative comments were received.

9. Destination charging (EV1)

9.1 Priorities for 2024 to 2030:

- To continue to increase the destination charging network coverage in BCP Council area by working with the appointed Service Provider to install fast, rapid, and ultra rapid charge points (where viable) in agreed BCP Car Park sites.
- To have installed a minimum of **100** fast and or rapid destination charge points in **65** identified BCP Car Park sites by March 2025 (as shown in **Figure 7**).
- To include the opportunity for the further provision of EVCI at BCP destination car parks, by identifying potential/suitable commercial sites within BCP's LEVI Fund bid and to include within the scope of a new concession-based contract to deliver a BCP LEVI capital programme (subject to any funding award). This provides an opportunity to leverage private sector investment to deliver the core objectives of the LEVI Fund.

9.2 Opportunities:

- The council owns and manages public car parks, leisure centres and parks/open spaces. These can provide ideal locations for fast charging and the strategic positioning of rapid and ultra rapid charge points to support local community, visitor, and enroute charging.
- Consultation feedback from the public on the subject of parking charges in BCP Council car parks for EV users should be reviewed and measures to incentivise the use of car park sites for the purpose of EV charging considered.
- The Council is well placed to consider the location, type, and number of charge points in the context of current and future development plans.
- Network operators may fund destination charge points in locations where they can expect a return on investment. Working closely with operators can maximise on private investment while ensuring that provision matches the needs of residents, businesses, and visitors.
- The existing BCP Council public EV charging infrastructure provided by JoJu/Mer has been supplier funded. We are supportive of the commercial model as we know it provides users with a modern, well maintained, and operated public EV charging network, whilst generating a modest revenue stream for the Council. This revenue supports officer time associated with the contract management and administration of the

network. At the same time, the concession-based contract arrangements means that all on-going costs over the lifetime of the contract are the responsibility of the Service Provider and do not fall to the Council. The Council therefore will look to use a similar model to grow the existing public EVCI network in the BCP Council area. Other benefits of this model include improved consumer experience; wider geographic spread; and faster rollout rates.

9.3 Key stakeholder groups:

- SSEN
- National Grid
- Network operators
- Town and Parish councils
- Neighbouring local authorities
- Landowners
- Business Improvement Districts
- BCP Chamber of Trade & Commerce
- Tourism Board / Destination Management Board

9.4 Destination charging actions:

EV1.1 – Continue a phased roll-out of destination charge points through the existing contract with JoJu/Mer. Locations will be selected to meet current and future demand from residents, businesses, and visitors, fill in gaps in the charging network, and have good access from the strategic road network. Individual sites will be subject to a feasibility study including an assessment of local grid capacity. This programme commenced in April 2022 and is scheduled to be completed by 2025.

The upgrade of 12 legacy Rapid charging points was delivered in 2021. This involved the renewal of the existing charge point infrastructure to improve reliability at popular charging locations.

Phase One - The installation of fast and rapid charge points in BCP Council public car parks through an appointed Service Provider. **65** named sites were approved in April 2022. By May 2023, **29** sites had been installed and were operational, offering a mix of fast and rapid public charge points (**40** charge point units, serving **80** sockets/EV bays). The remaining **36** sites are due to be delivered by 2025 (subject to being identified as commercially viable by the service provider).

From feedback received through the Council EV public consultation, it was clear that many respondents would like to see multiple EVCPs in a Fast/Rapid hub location to reduce chances of having to wait around / look for another charge point elsewhere. There is also an opportunity to deliver public EVCPs at destination locations where people travel for work, retail, leisure, activities.

EV1.2 - Monitor charge point use and other market trends to inform future provision of fast and rapid charge points.

EV1.3 – Ensure that the charge point locations are communicated online via zap map, to promote availability and use.

EV1.4 - Match the power output of the charge points to suit average dwell times so that the right type of charger is available at the right location. **Table 1** provides a guide to which charge point types are appropriate for different situations.

EV1.5 – Review parking policy in relating to parking charges for EV users in BCP Car Park sites whilst charging vehicles during off peak periods.

EV1.6 – Procurement of a Service Provider to deliver destination-based charge points as part of a concessions contract to deliver a LEVI Fund EVCI programme in the BCP Council area.

Table 1 - Charge point Type Guide

Type	Capacity (kW)	Charge time (hours)	Suitable at
Low speed	0 to <3.7	12 to 15	Domestic
Standard	3.7 to <8	6 to 10	Residential
Fast	8 to 49	2 to 4	Residential/ destinations, charging hubs or workplaces
Rapid	50 to 149	0.5 to 1	Destinations, charging hubs, taxi ranks, enroute charging, and use by fleet or commercial vehicles
Ultra-rapid	150 plus	0.3 to 1	

EV1.7 – To work in partnership with the appointed supplier to install, maintain and operate the Council's destination charging network under the terms of the agreed contract. We will continue to work closely with the operator to select appropriate charging locations to deliver an enhanced network across the BCP Council area that is viable and accessible to all.

EV1.8 - Ensure that the network operator fulfils their service level obligations to maintain a reliable network and provide a customer focussed support function as set out in the contract. We will work with the operator to investigate any complaints about the network and respond to problems.

EV1.9 - Share experience and knowledge with other public bodies to help them expand the public charging network.

EV1.10 - Engage with neighbouring local authorities, landowners, other local charge point stakeholders, and commercial network operators to ensure coordination of charge point delivery. This approach will ensure that resources are maximised and the networks that develop are complementary to one another.

EV1.11 - Ensure that all charging bays meet all equalities legislative requirements and access for disabled people where possible.

EV1.12 - Enforce parking regulations in line with local restrictions. Enforcement will ensure the use of parking bays is restricted to EV use and that EVs are connected and charging. Under the current parking policy, fees will continue to apply at the times stipulated at the car park.

EV1.13 – The Council will seek opportunities to work with partners to ensure that public charge points on its land are being supplied with electricity from green energy suppliers who produce 100% of their electricity from zero-carbon sources.

10. Residential charging – EV2

10.1 Priorities for 2024 to 2030

To secure Office for Zero Emission Vehicle (OZEV) Local Electric Vehicle Infrastructure (LEVI) funding and/or On-street Residential Charge point Scheme (ORCS) funding to support the provision of residential charge points at scale for residents in the BCP area who do not have access to off street parking and to provide a high quality, reliable and consistent customer experience.

10.2 Opportunities

Work undertaken by the Western Gateway Sub-National Transport Body (WGSTB) has identified that an important factor to EV uptake and EVCP demand is the extent to which areas are reliant on on-street parking. To date, those with access to off street parking, where they can conveniently and reliably charge their vehicle overnight, have been over three times more likely to switch to an EV. Analysis undertaken by the WGSTB, estimates that **27%** of households within the BCP Council area are reliant on on-street parking (see Table 2). It can therefore be inferred that a high proportion of households within the BCP area will require access to public charging provision to assist households to transition to an EV. Data from the BCP Council EV consultation also highlights the need to provide for existing EV drivers who unable to charge at home (**32%**), and to consider non-EV drivers who plan charge away from their home when they transition to an EV (**32%**). Whilst home charging maybe the cheapest and most convenient way to charge a vehicle for many, it is not the only solution with destination, community charging, workplace, and charging hubs offering potential alternatives.

Table 2 – Household statistics

Area	Population	Households	Total vehicles	Average number of vehicles per household	Proportion of households reliant on on-street parking
BCP Council	400,000	173,800	245,802	1.41	27%
Western Gateway	3,108,300	1,321,100	2,244,332	1.7	26%

Source: Peninsular Transport and Western Gateway Electric Vehicle Charging Study, 2023

As the Local Highway Authority, we have control over most public highways in the Council area. This includes roads and footways, except for the main strategic routes (A31 and A35) which are the responsibility of Highways England.

A mechanism is required be in place for the Council to consider public requests for new charge point locations.

The Council aims to secure the full LEVI capital funding allocation indicatively awarded to BCP by OZEV. The objective of LEVI is to deliver at scale, local charge point infrastructure aimed at residents without access to off street parking. OZEV is encouraging Local Authorities to engage with the private sector to leverage more private investment to facilitate the provision of increased local EVCI. BCP Council has been classified as a Tranche 1 authority by OZEV, acknowledging the council has the ambition for, and capability of, delivering a capital EVCI programme from April 2024 to March 2025. The Council is required to submit a detailed business case (Stage 2 of the LEVI Fund application process) by 30 November 2023.

To deliver the LEVI Capability funding awarded in March 2023 and to secure the further allocated capability funding (April 2023). The Council is recruiting a dedicated Senior EV Officer post and will upskill existing staff, to ensure the council has sufficient staff resource and expertise to undertake the planning and delivery of the LEVI Capital scheme and EVCI delivery in general.

The Office for Zero Emission Vehicles (OZEV) On-street Residential Charge point Scheme (ORCS) grant, administered by the Energy Saving Trust, provides funding for local authorities to install residential charge points. Funding has been extended into 2023/24. A capped funding award of up to £200,000 is available to part-fund (50%) the capital costs of EVCP procurement and installation up to £7,500 per charge point. Charge points located off-street (for example, within public car parks) are also eligible for funding if it can be demonstrated they meet a local residential charging need. ORCS funding can also be put towards the costs of providing charging infrastructure for car clubs.

Figure 11 - A high-level timeline of key tasks associated with delivering EV1 to EV6

Date	Task	Status
March to November 2023	Develop a BCP Electric Vehicle Infrastructure Strategy (EVIS 2024 to 2030)	In progress
April to December 2023	Approval and recruitment of a dedicated EV Officer to provide additional resource, expertise and capability to deliver LEVI capital program.	In progress
May 2023	Submit Expression of Interest for LEVI capital and capability funding allocations.	Complete
August to September 2023	Public Consultation on EVIS 2023 to 2025.	Complete
August to November 2023	Develop and submit Stage 2 developed business case for LEVI capital funding. This will consider and include feedback from the public consultation on the EVIS.	In progress
December 2023	Cabinet approval to adopt EVIS 2023 to 2025 and to accept OZEV LEVI capital funding award (if successful)	Planned
January 2024 to March 2024	Procurement process via Crown Commercial Services Framework route to aware a concession contract to a Service Provider to design and deliver the EVCI through the LEVI capital funding award/Service Provider investment.	Planned
April 2024 to March 2025	EVCI program commences funded by LEVI capital funding.	Planned

10.3 Key stakeholder groups

- Residents
- Councillors
- Town and Parish councils
- Disability groups
- Landowners / internal council services
- SSEN
- National Grid
- Network operators
- Energy Savings Trust

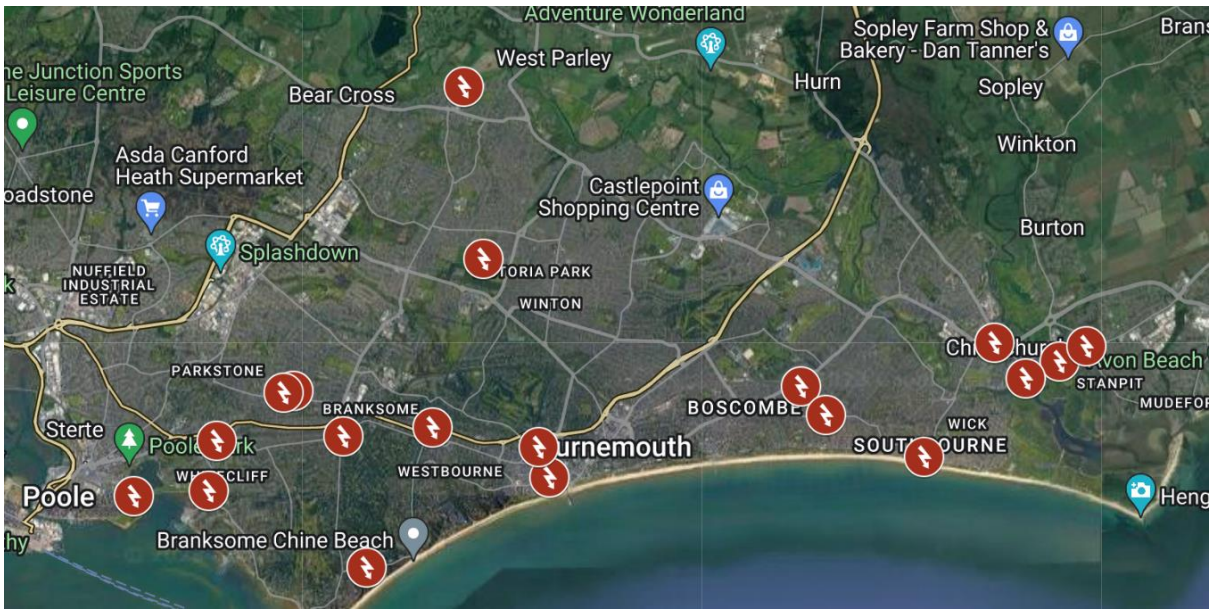
10.4 Residential charging actions:

EV2.1 - Consider the location of residential charge points. Locations will be identified where there is a high proportion of properties lacking off-street parking and the area demonstrates high demand for charge points.

The Council has identified BCP Council car park sites that are considered potentially appropriate for off peak residential fast charging hubs, due to being located within a short

walk (e.g., up to 10 minutes) of a high number and proportion of households without off-street parking. It is envisaged that between 8 and 12 Fast charging bays could be provided at each car park site, to deliver a significant quantity of 22kwh Fast charging sockets/bays in total. There is also the potential for the installation of Rapid Charge points at some of these sites. This will be explored through the procurement process for a EVCI delivery/service provider. **Figure 12** shows the BCP Car Park sites being considered for Fast residential charging hub sites.

Figure 12: Draft LEVI Implementation Plan – Fast residential charging hubs



The Council has undertaken a public EV consultation where the sites in **Figure 12** were shared. Respondents were invited to drop marker pins on an online map, indicating where they felt public EV charge points would be beneficial. In total **194** locations were provided. **Figures 13a, 13b, and 13c** show the location of the suggested locations.

A high-level cluster analysis has been undertaken for suggested public EV charge point locations. **Table 3** provides a list of 'cluster' sites for the East, West and Central BCP Council areas. A cluster is defined as two or more requests within a 5-minute radius. The outputs of **Table 3** will be considered when considering locations for public EV charge points to be submitted within the Council's LEVI bid. Some of the suggested locations are already being progressed through the existing delivery of the BCP Council public EV charge point contract with Joju/Mer, as indicated by the Notes column in Table 3. For these sites refer to EV1.1.

Figure 13a – Consultation map pin outputs West BCP Council area - suggested locations for public EV charging infrastructure by the public

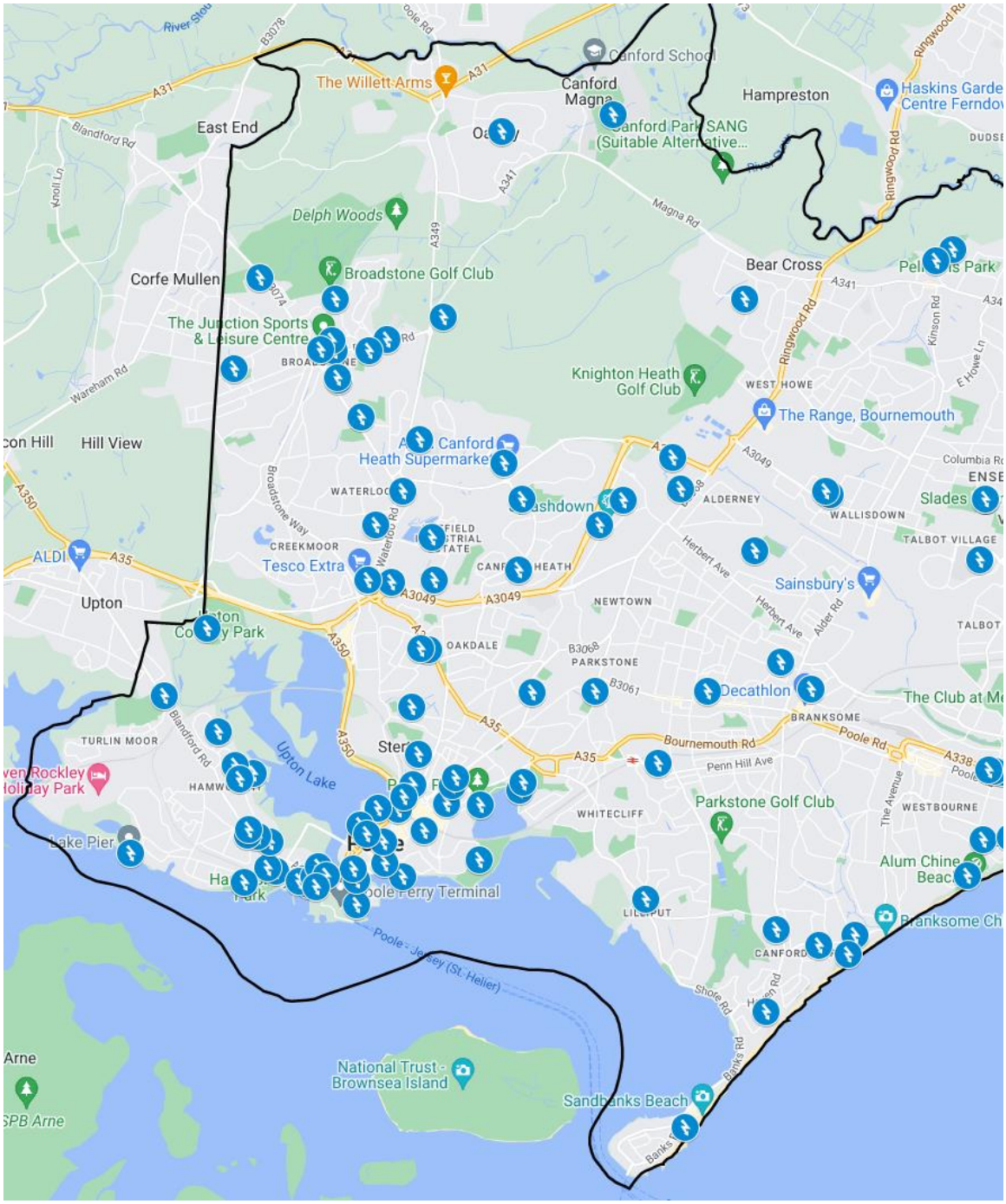


Figure 13b - Consultation map pin outputs Central BCP Council area - suggested locations for public EV charging infrastructure by the public

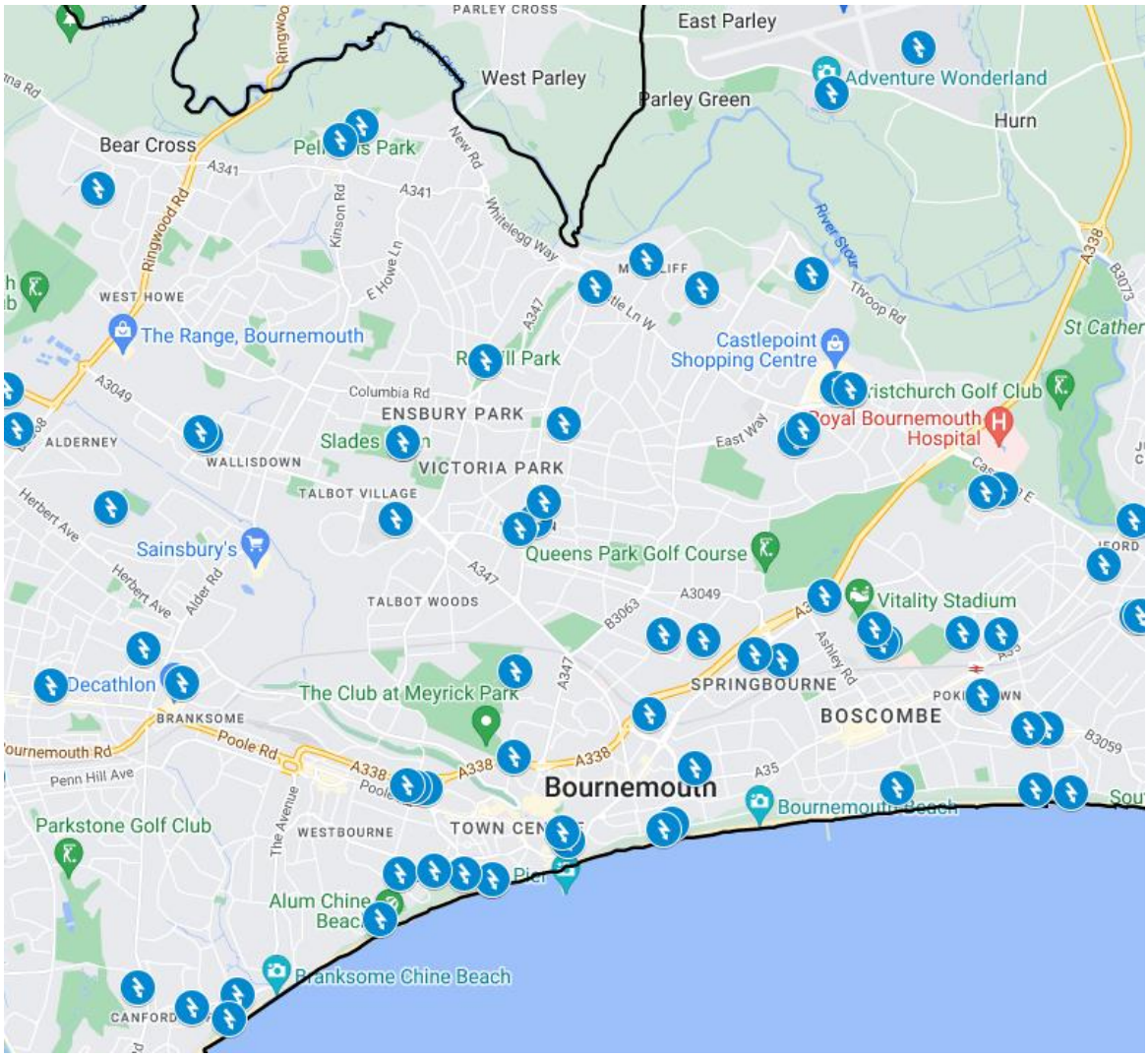


Figure 13c - Consultation map pin outputs East BCP Council area - suggested locations for public EV charging infrastructure by the public

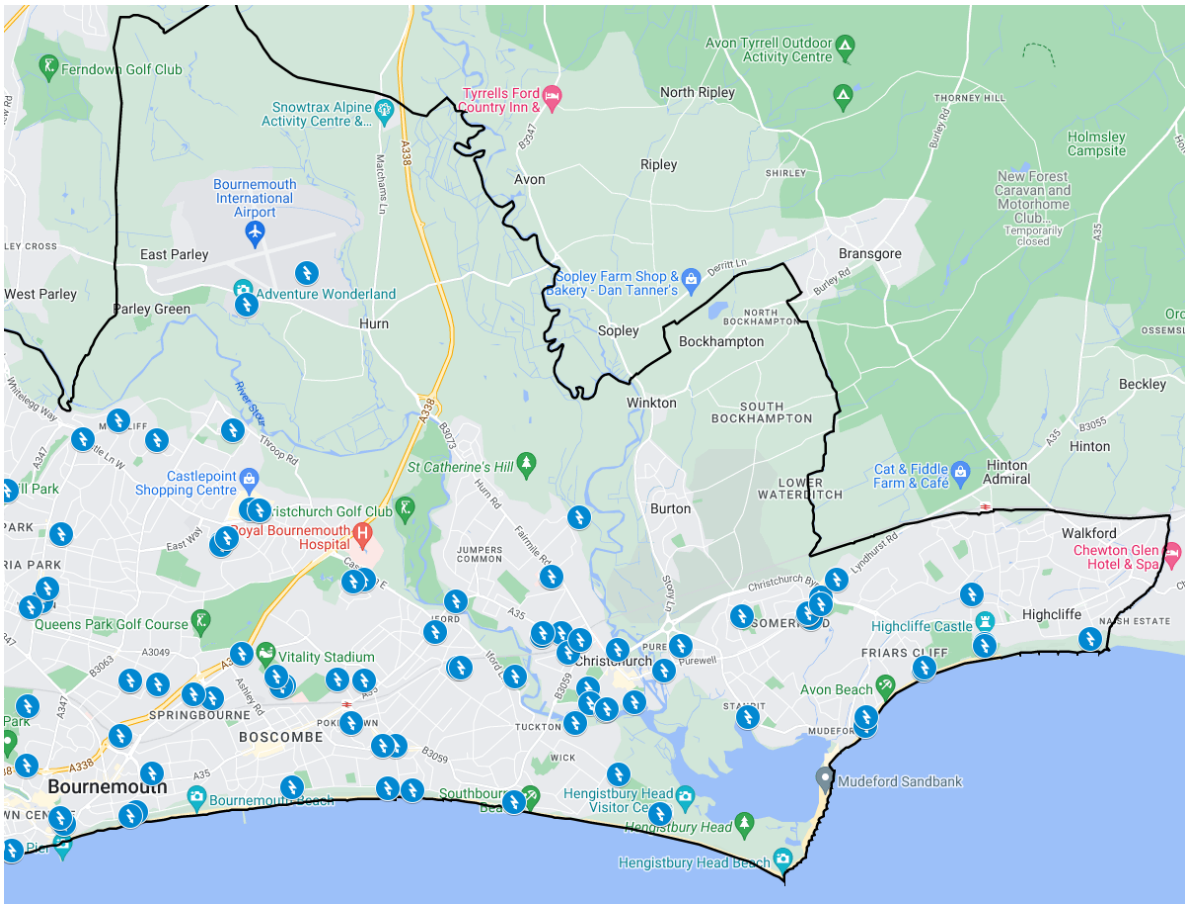


Table 3 – High level Cluster analysis of suggested locations for public EV charging infrastructure – BCP Council EV consultation

BCP Council Area	Location	Postcode	Notes
West	Broadstone - Wentworth Dr/Tudor Rd	BH18	1 x Fast installed at Station Approach – BCP Phase 1.
	Broadstone - Lower Blandford Rd shops	BH18	Charge points planned for BCP Storey Lane car park - BCP Phase 1.
	Hamworthy - area around Ferry Terminal/Norton Way	BH15	
	Poole Old Town	BH15	EVCPs planned in Prosperous Street and Lagland Street – BCP Phase 1.
	Poole Hospital Car Park	BH15	
	Dolphin Shopping Centre	BH15	2x charge points planned - BCP Phase 1.
	Hamworthy - Cornerstone Academy/Liberal Club	BH15	
	Canford Cliffs - Western Rd	BH13	EVCPs planned in Western Rd and Ravine Rd car park – BCP Phase 1.
	Fleets Corner	BH17	
	Tower Park	BH12	
	Poole Park	BH15	
Central	Durley Chine/West Cliff Rd	BH2	2 x fasts installed in Durley Rd car park – BCP Phase 1.
	Queens Rd Car & Coach Park	BH2	
	Bournemouth Pavilion	BH1	
	Pelhams Park	BH10	
	Winton - Wimborne Rd shops	BH9	Charge points planned in Wimborne Rd and Cranmer Rd car park.
	Kings Park	BH7	2x charge points installed, Rapid hub planned - BCP Phase 1.
	Castlepoint	BH8	
	Mallard Rd retail park	BH8	
	Littledown Leisure Centre	BH7	Rapid hub planned - BCP Phase 1.
	Pokesdown shops	BH5	
East	Mayors Mead car park	BH23	Charge points planned here – BCP Phase 1.
	Christchurch Retail Park	BH23	
	Bournemouth Airport	BH23	
	Somerford Rd	BH23	
	Highcliffe Castle Car park	BH23	
	Steamer Point car park	BH23	EVCPs planned here – BCP Phase 1.
	Avon Beach/Avon Run Rd car parks	BH23	2x charge points already installed in Avon Run car park - BCP Phase 1.

EV2.2 - Consider all available residential charging options, with solutions designed to balance the needs of residents, businesses, and visitors, while keeping a safe and accessible network of footways, and minimising the amount of street furniture and clutter. The council's EV consultation feedback highlights a clear preference for charge point infrastructure targeted at residential streets, to be in the carriageway and not on the footway. This will reduce clutter and improve/maintain space for pedestrians. Individual site surveys will be required to assess potential on-carriageway locations.

EV2.3 – The BCP Council EV consultation provided a mechanism for engaging and consulting with residential communities and wider stakeholders. The consultation survey data has helped the council to understand residents' needs and determine which locations would be best suited for charging infrastructure. Council officers will engage with Ward Members in locations where the potential location of charge points could be deemed unwelcome or controversial such as areas where parking is already at a premium.

EV2.4 - Submit an OZEV LEVI Fund application to secure the full capital funding allocation for the roll out of residential charge points at scale in the BCP area.

EV2.5 – Appoint an external Service Provider to install, maintain and operate charge points at locations identified for delivery from the BCP Council LEVI funded programme (subject to funding). A concession delivery model is the preferred option as this shares risk and shifts the requirement to manage and maintain the charge points to the supplier. The Council will work closely with the appointed Service Provider to select appropriate charging locations to deliver an enhanced network across the BCP Council area that is viable and accessible to all. The Council, through the procurement process, will use the LEVI grant funding as a capital investment to cover costs associated with providing site electrical connections and to provide and install EVCPs at locations which are not currently commercially viable/deliverable without subsidy support. The competitive procurement exercise will aim to achieve a minimum **50%** funding contribution from the appointed Service Provider(s). This could be in the form of delivering Fast/Rapid/Ultra Rapid charge points at sites which are deemed to be commercially viable, without the need for cross funding.

EV2.6 - Enforce Traffic Regulation Orders (TROs) to restrict petrol or diesel vehicles parking in EV charging bays and limit the length of stay for an EV. These offences will be enforced through Penalty Charge Notices (PCNs).

EV2.7 - Ensure all residential charge points, whether in BCP Car Park sites or on carriageway, will have public access. Charge points will not be considered personal to any individual or business.

EV2.8 – Explore opportunities for residential charge points provided through the BCP Council public EV network, being supplied with electricity from green energy suppliers who produce 100% of their electricity from zero-carbon sources.

EV2.9 – Develop an online feedback mechanism for residents to suggest locations for an electric vehicle charging point.

EV2.10 – Review the current BCP parking policy in relating to parking charges for EV users in BCP Car Park sites whilst charging vehicles during off peak periods, for example off peak parking tariffs in district car parks to incentivise residential charging overnight.

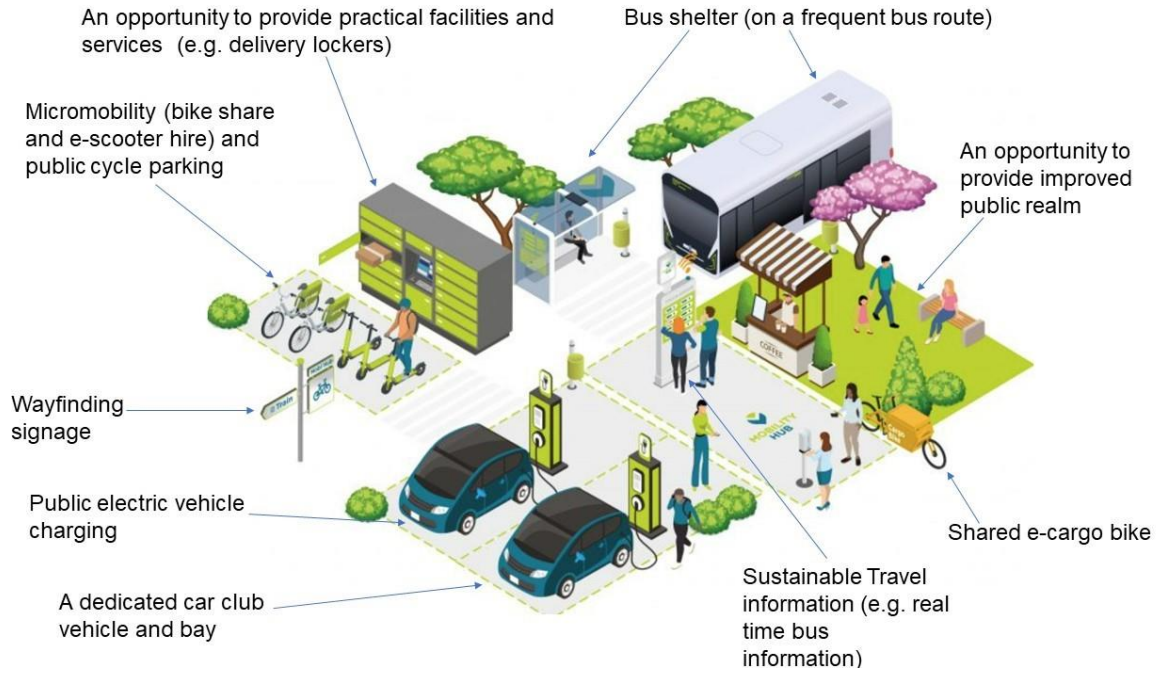
11. Mobility Hubs – EV3

11.1 What is a Mobility Hub

A Mobility Hub is a highly visible, safe, and accessible space where public, shared and active travel modes are co-located to improve access to and connectivity between sustainable travel modes. Mobility hubs can provide opportunities to incorporate public realm improvements and enhanced community facilities.

Mobility hubs can vary in size and the range of transport services/public facilities that they offer. **Figure 14** is an illustrated example of a Mobility Hub.

Figure 14 – The features of a Mobility Hub



Source: https://www.como.org.uk/mobility-hubs/overview-and-benefits

11.2 Priorities for 2024 to 2030:

- BCP Council has identified locations that may be considered for the provision of a mobility hub (**Figure 15**). These locations are either town/neighbourhood centres or

key trip generating destinations (e.g., transport interchanges/hospitals/employment sites/higher education sites). The Mobility Hub concept of combining shared, public, and active transport modes in spaces designed to improve the public realm for all, provides an opportunity to identify, plan and deliver publicly accessible EVCI to complement and support sustainable travel behaviours. The LEVI capital funding bid provides an opportunity to prioritise and deliver the provision of Mobility hubs at some key sites to complement Destination, Residential and Car Club EVCI.

- To engage with local authorities and transport organisations (e.g., The Energy Savings Trust and CoMo UK) to identify best practice models for providing EVCI at priority Mobility Hub locations.
- To develop proposals for the delivery of EVCI of up to 7 mobility hub locations within the BCP Council area as part of LEVI capital funding bid submission, using best practice input to inform the site specification and plans.

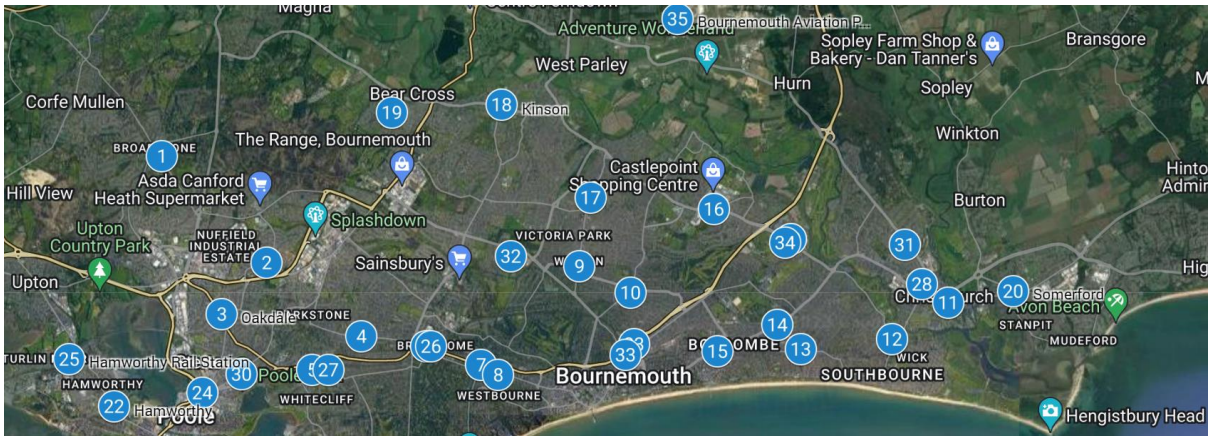
11.3 Opportunities

- To work with external local organisations to seek opportunities to develop and deliver Mobility Hubs to include publicly accessible EVCI.
- To consider branding and signage requirements to ensure users understand the different connections and types of travel modes available through the hub, and to promote recognition and use of the facility.

11.4 Key stakeholder groups:

- Residents
- Councillors
- Town and Parish councils
- Disability groups
- Landowners / internal council services
- SW Railways/Hospitals/Bournemouth University/Arts university Bournemouth
- SSEN
- National Grid
- Network operators
- Energy Savings Trust and CoMo UK
- Local sustainable transport operators (bus, rail, micro mobility, car share)

Figure 15 – Potential priority mobility hub locations



Key:

Site	Mobility Hub potential location	Site	Mobility Hub Location
1	Broadstone	19	Bearwood
2	Canford Heath	20	Somerford
3	Oakdale	21	Highcliffe
4	Ashley Road, Poole	22	Hamworthy
5	Ashley Cross, Parkstone	23	Bournemouth Rail Station
6	Branksome	24	Poole Rail Station
7	Westbourne West	25	Hamworthy Rail Station
8	Westbourne East	26	Branksome Rail Station
9	Winton	27	Parkstone Rail Station
10	Charminster	28	Christchurch Rail Station
11	Christchurch High St.	29	Bournemouth Hospital/Wessex Fields
12	Tuckton	30	Poole Hospital
13	Southbourne	31	Christchurch Hospital
14	Pokesdown	32	Bournemouth University Talbot Campus
15	Boscombe	33	Bournemouth University Lansdowne Campus
16	Castlepoint	34	Littledown/Chaseside
17	Moordown	35	Bournemouth Aviation Park
18	Kinson		

11.5 Mobility Hub actions:

EV3.1 - Consider the location of priority mobility hub locations to complement EV2.1 by providing public access to EVCI in geographic areas less well served by EV2.1 within the local area. As a principle, a minimum of 2x fast electric charge sockets will be delivered at priority mobility hub locations as part of the sustainable transport offer. This will however be dependent on space and infrastructure provision at each site.

EV3.2 - Consider all available EVCI options for mobility hub locations, with solutions designed to balance the needs of residents, businesses, and visitors, while keeping a safe

and accessible network of footways, and minimising the amount of street furniture and clutter. The provision of EVCI and any upgrades to electric infrastructure should consider opportunities to support and other sustainable travel modes with the hub location (e.g., providing an additional power supply/charging socket for a car club vehicle or to support powered micro mobility assets).

EV3.3 - Undertake engagement with the DNO in relation to electrical infrastructure requirements. In addition, consult with stakeholders and local members in locations where the potential location of mobility hub charge points could be deemed unwelcome or controversial (e.g., the removal of on street parking to provide space for Mobility Hub assets).

EV3.4 - Submit an OZEV LEVI Fund application to secure the capital funding allocation for the roll out of EVCI at priority Mobility Hub locations.

EV3.5 - Contract a charge point supplier to install, maintain and operate charge points at priority Mobility Hub locations as per EV2.5.

EV3.6 - Enforce Traffic Regulation Orders (TROs) to restrict petrol or diesel vehicles parking in EV charging bays and limit the length of stay for an EV. These offences will be enforced through Penalty Charge Notices (PCNs).

EV3.7 – To consider, design and deliver a consistent Mobility Hub branding/signage solution.

EV3.8 - Ensure all Mobility Hub charge points, either on BCP Highways or on private land will be publicly accessible and not considered exclusive to individual organisations. The exception will be dedicated bays/EV sockets provided for BCP Car Club vehicles.

12. Upgrading the BCP car club network – EV4

12.1 Priorities for 2024 to 2030:

- To upgrade the existing BCP car club fleet (12 vehicles) to fully electric vehicles. The current BCP car club provider (Co-Wheels) has indicated that it will cover the cost of replacing existing vehicles to fully electric models if BCP Council can fund and deliver the EVCI (a dedicated fast socket and parking bay) required.
- BCP Council to undertake a review of current Car Club usage/utilisation to consider the location of existing vehicles, and to consider the reallocation of Car Club bays to improved locations (subject to analysis). Review and relocation to be conducted prior to EVCI delivered.
- To seek opportunities to expand the existing BCP Car Club fleet. Immediate aspirations are to deliver e-car club vehicles at Christchurch Station and in Central Poole (Lagland Street). To advance these schemes, funding through LEVI or ORCs should be considered.
- To develop proposals as part of LEVI capital funding bid submission to provide 12 EVCI Charge points at existing BCP Car Club locations and to provide additional

Charge Points at two new proposed Car Club locations. Consideration of best practice designs provided by CoMo UK to include a Charge Point with a dedicated socket for 1x publicly accessible EV bay and 1x dedicated Car Club bay will inform the site specification and plans.

- To develop and implement a design for an on street dedicated car club bay to dovetail with a publicly accessible dedicated fast EV charging bay, with on carriageway infrastructure in a street with on-street parking. The concept is that by providing on-street dedicated car club bays in residential areas, this will reduce the demand for on-street parking (e.g., reduced second car household ownership) and will free up space for on street residential charging infrastructure.

12.2 Opportunities:

- To consider how the provision and expansion of Mobility Hubs can provide opportunities to expand the BCP Car Club network, as a tool to reduce private car ownership and contribute towards BCP Council Climate Change objectives.
- To identify funding opportunities to pump prime additional e-car club vehicles to expand the existing BCP Car Club network.

12.3 Car Club actions:

EV4.1 - Consider the location of BCP Car Club dedicated bays prior to the installation of any dedicated EVCI. We will undertake analysis of the existing fleet data and work with Co-Wheels to review locations which could provide greater opportunities for the use of this sustainable travel scheme.

EV4.2 - Consider best practice design of joint EVCI that incorporates a dedicated Car Club socket and a dedicated publicly available charging socket.

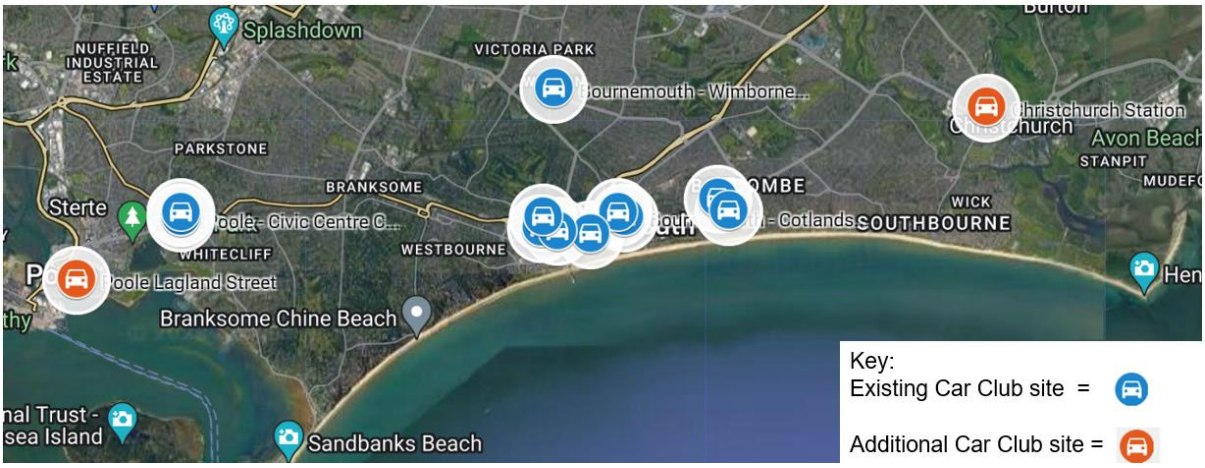
EV4.3 - Undertake engagement with stakeholders and Ward Councillors in locations where there is the potential re-location/addition of Car Club vehicles. The reallocation of parking/carriageway space may be deemed unwelcome or controversial (e.g., the removal of on street parking to provide space for a dedicated Car Club bay and on street EV charging bay, with EVCI).

EV4.4 - Submit an OZEV LEVI Fund application to secure the capital funding allocation for the roll out of EVCI at 14 current/proposed Car Club locations. The design at each site will include the provision of 1x fast EVCI with a dedicated charging socket for a dedicated Car Club bay and a dedicated socket for a public EV bay. Figure 16 provides a proposal based on existing BCP Car Club locations, with the addition of two new locations.

EV4.5 – To actively pursue external funding opportunities to pump-prime e-car club vehicles in new and additional locations, to grow the network. The infrastructure will be provided by EV3.4 and EV4.4.

EV4.6 – To develop and implement a design for an on street dedicated car club bay to dovetail with a publicly accessible dedicated fast EV charging bay, with on carriage way infrastructure in a street with on street parking.

Figure 16 – Current and future BCP car club locations to be considered for upgrading with EVCI



13. Charging provision for leased/fleet vehicles – EV5

13.1 priorities for 2024 to 2030:

- To identify and consider the demand for public EVCI by van users within the BCP area.
- To consider and provide larger public EV charging bays accommodate van users. To work with the BCP Council contracted Service Providers to ensure that where possible 1 in every 4 EV bays can accommodate vans.
- To consider height access restrictions to BCP carpark locations when planning future Public EVCI locations.
- To consider how to deliver bookable public EV charging for the BCP public EVCI network. Many van users work to a schedule and want to be able to book charging appointments to fit in with their work schedule. Software/hardware required to delivery this aspiration needs to be considered as part of any BCP Council procurement to appoint a Service Provider/s to deliver the LEVI funded programme and any future public EVCI contracts.

13.2 Opportunities:

- The work being delivered by BCP Council and the appointed service provider to delivery destination-based charging allows for future planned sites to consider van users within the design of public EV charging bays.

- The delivery plans for LEVI capital funding to provide additional public EVCI will require a procurement exercise to appoint a Service Provider. The specification to award a contract allows for the consideration of fleet and lease vehicle users within the scope of the contract to deliver key priorities.

13.3 Leased/fleet EVCI actions:

EV5.1 – Consider an appropriate ratio of Public EV bays that will be made accessible for larger vehicle such as vans. This will be dependent on the site location and suitability. As a general principle, 1 in 4 public EV bays should be accessible by vans.

EV5.2 – Consider height access restrictions when choosing locations public EV charge points, although it may not always be possible to accommodate height restrictions at certain locations.

EV5.3 – Work with the appointed Service Provider to consider and develop a booking system for public EV charging provision which supports the needs of commercial van drivers and their day to working requirements. This will be considered through the LEVI tender specification.

14. Promotion and incentivisation of Community Charging – EV6

14.1 Priorities for 2023 to 2030:

- To consider a Communications and Marketing campaign to make residents aware of Community Charging schemes to:

    a. Make private charge point owners aware of the benefits of signing up to a Community Charging Scheme (income generation).
    b. Make EV users aware of Community Charging schemes and to communicate how many private charge points are accessible to the public within the BCP Council area.

- To secure LEVI funding to create and deliver a grant funding scheme aimed local community groups/organisations/clubs to cover the costs of purchasing and installing EVCI, with a mandatory condition that the charge points at made available for public use through a Community Charging scheme.

14.2 Opportunities:

- To promote and incentivise Community Charging schemes to private charge point owners, to encourage them to make private charge points available to members of the public. This will help to increase the supply of publicly accessible EVCI within the BCP area and give drivers who are looking to get an electric car the confidence to make the switch.

- To encourage and incentivise local community groups/organisations/clubs that own private car parking to install EVCI and to sign up to a Community Charging scheme, to increase the supply of publicly accessible EVCI within the BCP area.
- LEVI funding can be utilised to promote and incentivise Community Charging schemes. There is scope within the BCP LEVI delivery program to include initiatives to support this.

14.3 Community Charging actions:

EV6.1 – Consider how to best support the uptake of Community Charging schemes (e.g., Co-Charger) within the BCP Council area. This is likely to be in the form of a communications and information campaign. Sharing or renting out of home chargers by EV owners could significantly increase community access to charge points and remove the barriers to owning an EV in residential areas without off-street parking. The council EV consultation feedback showed there is public support for this model.

EV6.2 – Investigate the potential for developing and delivering a community grant initiative, to incentivise community groups with private parking facilities to install private EV charging points and to make the charge points available for public use through an agreed Community Charging scheme.

15. Development policies – EV7

15.1 BCP Council Parking Standards Supplementary Planning Document

BCP Council has a Parking Standards Supplementary Planning Document which clearly sets out an expectation for the inclusion of charging points for electric vehicles in all new developments. Proposals for houses/bungalows with at least one designated parking space within the curtilage of its own plot must ensure the installation of at least one active EV charging point.

The EV charging requirements in the Parking Standards SPD have been developed according to the government's Road to Zero strategy and the Transport Decarbonisation Plan, alongside BCP Council's own Carbon Neutrality Strategy. **Tables 4 and 5** outline the EV requirements for new developments and EVCI requirements set out in the BCP Parking Standards Supplementary Planning Document.

Table 4 – EV requirements for new development applications

	Percentage of bays with "active[14]" chargepoint provision	Percentage of bays with "passive[15]" chargepoint provision
All houses/bungalows with 1+ space	100%	0%
All other residential development less than 10 spaces	20%	80%
All other residential development with 10+ spaces	50%	50%
Non-residential development with 10+ spaces	30%	70%
Non-residential development less than 10 spaces	To be agreed with LPA	

Table 5 - The EVCI charge requirements by intensity of usage

EV Charging Requirement	Charge Point Specification	Power Requirement
Individual charge socket	7kW Mode 3 with Type 2 Connector	230V AC 32A Single Phase dedicated supply
Communal fast charge socket	Feeder pillar or equivalent permitting future connection	230V AC 32A Single Phase dedicated supply
Intensive communal rapid charge socket	50kW -350kW Mode 4 (DC) Multi-standard charge point	400V AC 100A Triple Phase dedicated supply

15.2 Priorities for 2024 to 2030:

- To continue to ensure that BCP Council Development Control polices support the transition to electric vehicles by providing an appropriate mechanism to assist in the delivery of public EV charging infrastructure.

15.3 Opportunities

- The Parking Standards Supplementary Planning Document provides a mechanism for the provision of EVCI on-street where on-site constraints eliminate all other methods of onsite provision. Details will require agreement with the Local Planning

Authority to ensure that such features do not result in highway safety issues or encroach on active travel or public transport infrastructure. A Traffic Regulation Order (TRO) would be required for any on-carriageway bays.

- The Parking Standards Supplementary Planning Document states that “for developments in Zones A and B with greater than 50 units on site provision of at least 2 car club bays will be expected. For developments of fewer than 50 units an equivalent financial contribution towards an existing car club will be sought.”. This provides a financial mechanism to support EV4.5.

15.4 Development policy actions:

- **EV7.1 –** If the current Parking Standards Supplementary Planning Document is reviewed prior to 2030, then the updated policy/document must continue to provide an appropriate mechanism to assist in the delivery of EV charging infrastructure.
- **EV7.2 –** BCP Council Officers from the Transport and Sustainable Travel team to engage with the Local Plan team, to ensure that new developments consider provision for publicly accessible EV charging infrastructure.

16. Strategy approach

16.1 PEVIS approach

The PEVIS is focused on delivery between 2024 to 2030. It is based upon the best available evidence on the current EV market at the time of production and forecasts for how the market will develop over the period covered by the strategy.

The strategy acknowledges that the EV sector is still maturing and will undergo significant changes over the coming years. We will adopt an agile approach to respond quickly to technological, market and socio-economic changes. We will also identify and adopt innovative approaches to ensure that delivery is effective, and the infrastructure meets the needs of BCP Council residents, businesses, and visitors.

16.2 LEVI funding approach

LEVI capital funding has been identified as the main funding mechanism to deliver the PEVIS.

The impact of the existing BCP Council EV charging network

GIS analysis has been undertaken to show the positive impacts that delivering a LEVI funded EVCI project would have on the BCP Council Area. The methodology used can be described as:

- A GIS system has been used to plot the locations of BCP Council area public charge points that have been delivered/are due to be delivered through the existing contract by March 2025.

- A 10-minute walking isochrone has been applied to each of the 68 EVCI sites.
- Census data has been used to estimate how many residents live within a 10-minute walk of the EVCI network.
- The Strategic Transport Board (STB) Model data, which estimates the reliance on on-street parking, has been used to calculate the number of residents that live within a 10-minute walk of the EVCI network

A summary table of the GIS analysis outputs is provided in **Table 6**. The data shows that the by March 2025, almost **184,000 people will live within a 10-minute walk of a BCP public EV charging site** (46% of the BCP Council area population). It is estimated that over 42,000 of these residents will live in dwellings reliant on on-street parking.

Figure 17 – Current and future BCP car club locations to be considered for upgrading with EVCI

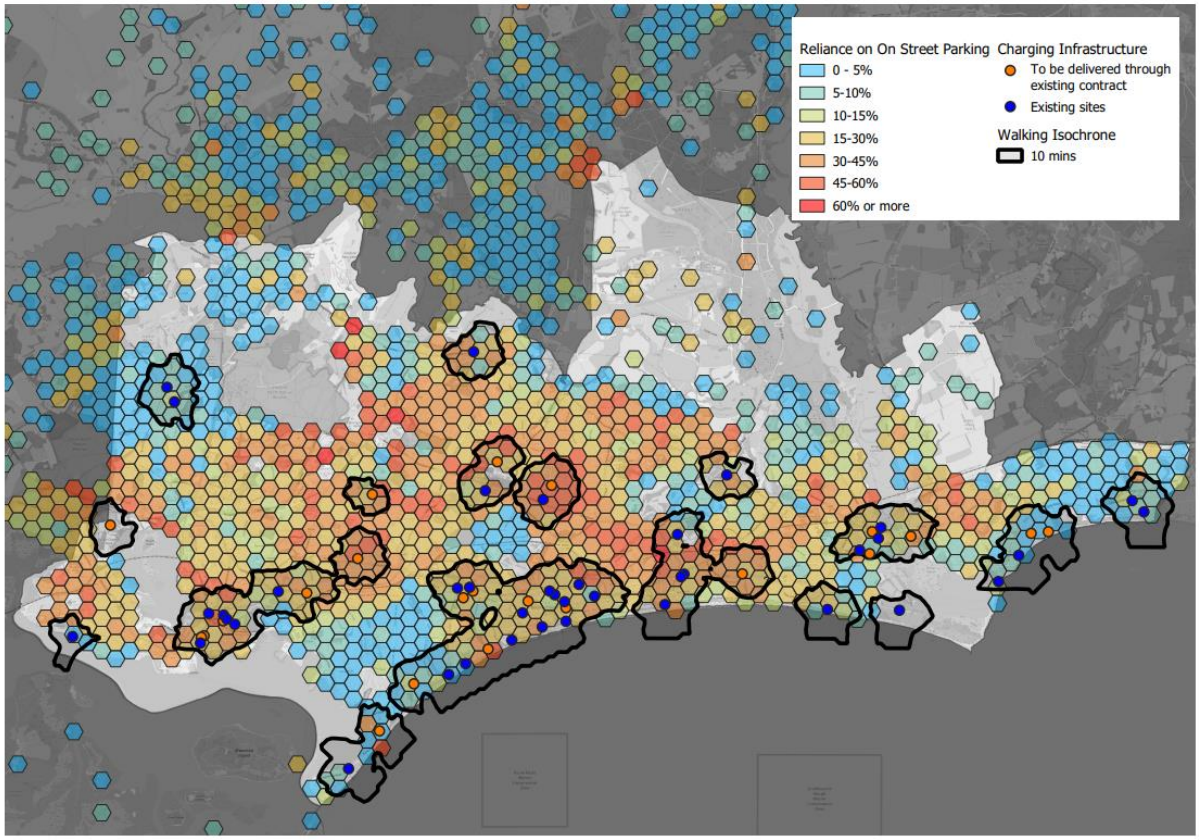


Table 6 – Summary of Existing and planned public EVCI to be delivered through the existing BCP Council contract with Joju

Number of charge points delivered/to be delivered	Number of residents - within 10 min walk of a public charge point	% of BCP Population within 10 min walk of a public charge point	Reliance on on-street parking estimate (STB Model)	Number of residents within 10 min walk of a public charge point, reliant on on-street parking
68	183,892	46%	23%	42,295

The potential to expand the BCP Council EV charging network through LEVI capital funding

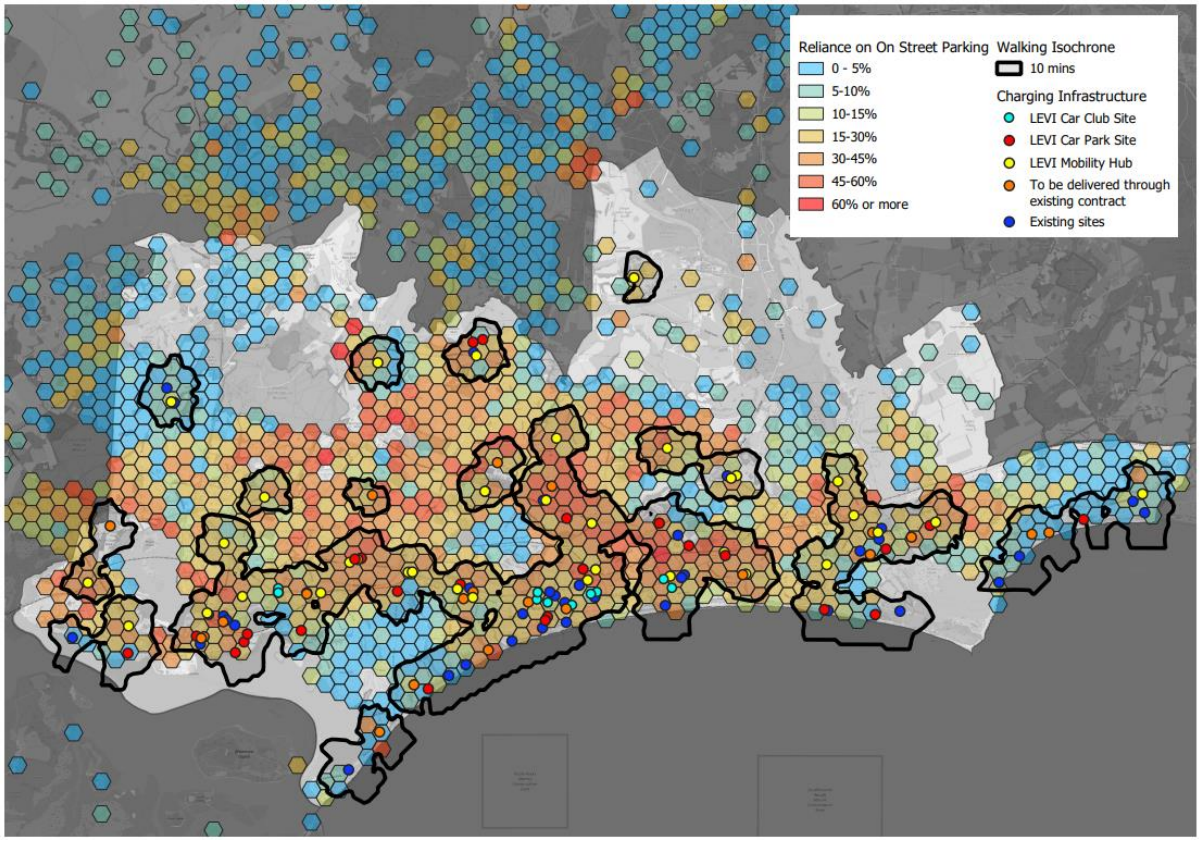
If BCP Council is successful in gaining LEVI capital funding, the PEVIS will look to deliver further public EV charging points through:

- Fast residential charging hubs in BCP Car Park sites
- Potential Mobility Hub locations
- Existing/planned Car Club sites

A GIS analysis has been undertaken to show how the delivery of these plans could enhance and expand the existing BCP Council public EVCI network. A map of the enhanced network is shown in **Figure 18**.

The GIS system has plotted all the sites that are being considered for delivery through LEVI funding, as well as the existing and planned sites through the existing BCP Council contract.

Figure 18 – Map to show what the BCP Council public EV charging network could look like post LEVI funded projects



A summary table of the GIS analysis outputs is provided in **Table 7**. The data shows that if LEVI funding is secured to deliver the PEVIS, then an additional 100,000 residents would be benefit by living within a 10-minute walk of an EV charge point site (71% of the BCP Council

population. It is estimated that over 68,000 of these residents will live in dwellings reliant on on-street parking.

Table 7 – Summary of what the BCP Council public EV charging network could look like when LEVI funded plans are delivered

Number of charge points delivered/to be delivered	Number of residents - within 10 min walk of a public charge point	% of BCP Population within 10 min walk of a public charge point	Reliance on on-street parking estimate (STB Model)	Number of residents within 10 min walk of a public charge point, reliant on on-street parking
139	**283,982**	**71%**	**24%**	**68,156**

The LEVI fund presents the Council with an opportunity to significantly improve access to public EVCI for EV users. The full allocation of LEVI funding is estimated to achieve 71% of the BCP Council population being within 10 minutes' walk of a public chargepoint. The Council will continue to work post LEVI project delivery, to fill remaining gaps in the public EVCI network, focussing on areas with a high reliance on on-street parking. The aim is for 100% of the population to have this level of access to public EVCI. To help deliver this aspiration, the GIS analysis will be further developed to identify further opportunities to increase public EVCI provision across the conurbation, should further funding become available.

17. Action Plan summary

The action plan sets out the measures we will undertake within this strategy period between 2024 to 2030. This will be regularly reviewed by strategy and delivery teams within the Sustainable Travel and Infrastructure every six months to ensure it stays relevant. The Action Plan summary can be found in **Appendix B**.

18. Monitoring Progress

Key performance indicators (KPIs) have been set to monitor progress towards the vision set out with this strategy. This strategy is evidence driven, using data to drive and monitor change. The KPIs will be reviewed annually to measure progress and to also ensure thy remain fit for purpose.

ID	Indicator	Measure	Actions	Source
1	Number of charge points	• total public charging devices • public charging devices per	EV1.1 EV1.2 EV1.3 EV1.4 EV1.5 EV1.6 EV1.7	• DfT Statistics • table EVCD01 • record of Council installations

ID	Indicator	Measure	Actions	Source
		100,000 population • quarterly/annual number of charge points installed by us by type	EV2.2 EV2.3 EV2.4 EV3.1 EV4.1	• Nevis/Cenex insights tool
2	Geographical coverage of charge point network	percentage of settlements with public charge points	EV1.1 EV1.6 EV2.1 EV2.2 EV2.3 EV3.1 EV3.2 EV4.1	GIS analysis
3	Charge point use	• kWh of electricity drawn • percentage charge point utilisation • number of public charging events • Income generated per site to the Council	EV1.1 EV2.2 EV2.3 EV3.1 EV4.1	Back-office data reports from Contracted Service Providers
4	Charge point network reliability	percentage charge point uptime	EV1.1 EV1.7 EV2.2 EV2.3 EV4.1	• Back-office data report • Maintenance logs
5	Customer satisfaction	percentage overall very satisfied or satisfied with public network	EV1.1 EV1.6 EV1.9 EV2.5 EV3.5	• Annual survey • Engagement with driver forums • Capture complaints/compliments received by the Council • Complaints log
6	Community/stakeholder engagement	• number of engagement activities	EV1.5 EV1.9 EV1.10 EV2.1	• Engagement logs • Webpage analytics

ID	Indicator	Measure	Actions	Source
		• number of individuals, businesses, and groups engaged	EV2.2 EV2.3 EV2.6 EV2.7 EV2.10 EV3.1 EV3.2 EV3.3 EV3.6 EV4.3 EV4.6	
7	Capital funding secured	grant funding	EV1.6 EV1.9 EV2.4 EV3.4 EV4.4 EV4.5	• LEVI funding secured £'s • ORCS funding secured £'s • Other public sector external funding opportunities • Private sector investment £'s
8	Car Club use	• Utilisation • Number of bookings • Hours of use • Length of trip	EV4.1	• Co-Wheels data

Glossary

Battery electric vehicle (BEV) – A vehicle powered by a battery, which can be plugged into an electricity source to recharge. Also known as 'pure' or '100 per cent' EVs, they have zero tailpipe emissions.

BCP – Bournemouth, Christchurch, and Poole Council area.

BVRLA – The BVRLA represents over 1,000 companies engaged in vehicle rental, leasing and fleet management. The membership is responsible for a combined fleet of four million cars, vans and trucks (One-in-ten of all vehicles on UK roads).

Car Club – A local, member-based initiative that provides access to self-service, pay as you drive, low-carbon vehicles.

Charge Point – A charging socket which is connected to an electric vehicle via a charging cable to allow the battery to be recharged with electricity.

Charge Point Network – The way that users access a charge point via RFiD card or web or app.

Central Southern Region (CSR) EV Framework – A public sector for obtaining, developing, and delivering EV charge points open to public sector bodies based in and around Hampshire, Berkshire, Devon, Dorset, Isle of Wight, Oxfordshire, Surrey, West Sussex, and Wiltshire.

Crown Commercial Services (CCS) Framework – A public sector framework which can be used for obtaining, developing, and delivering EV charge points open to public sector bodies based in the UK.

EV – Electric Vehicle; the vehicle is powered by electricity so requires plugging in to recharge the battery.

Electric Vehicle Charging Infrastructure (EVCI) – The equipment used to enable the use of electric powered vehicles (e.g., charging stations).

Fast charge point – A charge point which can recharge an EV in 2 to 4 hours with a capacity of 8 to 49 kWh.

kWh – Kilowatt Hour; a unit of electricity. Car batteries are sized in kWh i.e., a 50 kWh battery stores 50 kWh of electricity.

LEVI Fund – A UK Government funding (Capital and Revenue) to support local authorities in England to work with the charge point industry, to improve the roll out and commercialisation of local charging infrastructure.

LTP – Local Transport Plan; the council's strategy and policy framework for transport and guide for investment priorities.

Mobility Hub – Mobility hubs bring together shared transport with public transport and active travel in spaces designed to improve the public realm for all.

p/kWh – Pence per Kilowatt Hour. Users are charged for each kWh they consume. Charging tariffs are in pence per Kilowatt Hour.

Payment by bank card – In line with national regulations, all new Rapid and Ultra Rapid chargers will accept payment via a contactless bank card (credit or debit card). This allows users to access these chargers without joining a Network.

PEVIS – Public Electric Vehicle Infrastructure Strategy

PHEV – Plugin Hybrid Electric vehicle; combines a smaller battery with a conventional internal combustion engine and an electric motor. This allows an electric range of between 20 – 50 miles and the ability to drive with an empty battery for hundreds of miles using petrol or diesel.

ORCS – On-street Residential Charge point Scheme.

Overstay fee – To encourage appropriate use of charging bays and assure they are available for people who need them an overstay fee will apply after a vehicle has finished charging and grace period has been exceeded.

OZEV – Office for Zero Emission Vehicles.

Rapid charge point – Rapid and ultra-rapid charge points allow faster charging for electric vehicles, taking around 20 minutes to get an 80% charge, depending on a vehicle's battery capacity. They have a capacity of between 50 to 150 kWh.

Traffic Regulation Order (TRO) – TROs are legal documents that restrict or prohibit the use of the highway network, in line with The Road Traffic Regulation Act 1984. They help Local Authorities to manage the highway network for all road users, including pedestrians and they aim to improve road safety and access to facilities.

STBs – Strategic Transport Bodies.