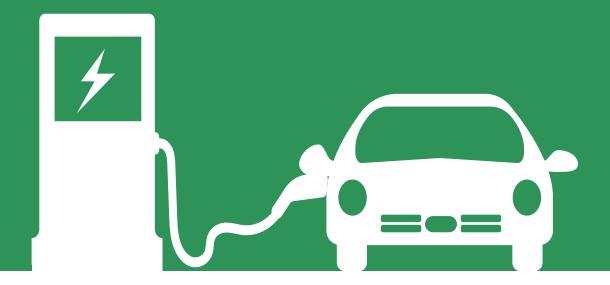
Worcestershire County Council (WCC) Electric Vehicle Charging Infrastructure (EVCI) Strategy Consultation Results







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1.1. Electric Vehicle Charging Infrastructure Strategy

Worcestershire County Council (WCC) declared a climate emergency in July 2021 and have set a target to be carbon neutral by 2050. At a national level, the Government is banning the sale of new petrol, diesel and plug in hybrid cars from 2035 as part of its commitment to reach Net Zero by 2050. It is recognised that the transition to electric vehicles is a crucial element to achieving these targets.

The Office for Zero Emission Vehicles (OZEV), part of the Department for Transport (DfT) and the Department for Energy Security and Net Zero, are working to support the transition to Zero Emission Vehicles (ZEVs). To assist with this, OZEV is providing funding to support delivery of charge point infrastructure across the UK. OZEV's current funding includes the Local Electric Vehicle Infrastructure (LEVI) fund, which enables local transport authorities in England to plan and deliver charging infrastructure for residential locations without off-street parking.

The aim of the first Electric Vehicle Charging Infrastructure (EVCI) Strategy for Worcestershire, is to set out: the County Council's and its partners intentions to support the transition to electric vehicles; and help with mechanisms to coordinate the development of accessible chargepoints across the County.

This report contains the results from the EVCI Strategy Consultation that was held in summer 2024. The prime aim of the consultation was to seek views of both residents and businesses on the draft EVCI Strategy. In addition, WCC also sought people's views on key issues related with uptake of Electric Vehicles (EVs) e.g. whether they owned them, where they might charge them and if they do not own one what might be the barriers to owning one.

1.2. Headline Result

The consultation ran from 9th July to 24th September 2024. A summary of the themes coming out of the consultation and WCC's responses to them can be found in Appendix 1. An electronic survey was hosted online during this period from which a total of 509 responses were collected. An additional 10 responses were received via emails¹. This report contains the findings from 509 responses.

The majority of respondents filling in the online survey 93.9% (478 respondents) were identified as a resident in Worcestershire. The remaining 6.1% (31 respondents) indicated that they were replying on behalf of a business/organisation, who may or may not be a resident in Worcestershire.

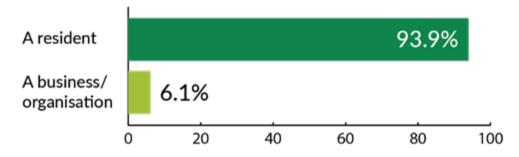
1 Whilst the comments and WCC's responses are included in Appendix 1, they are not part of the online survey results.

About You and Vehicle Ownership/ Access to Vehicles

2.1. Question 1: Are you responding as a resident or a business/organisation?

Respondents were asked to indicate if they were answering the online survey as a resident or as a business/organisation with the results indicated in the following chart:

Chart 1: Are you responding as a resident or as a business/organisation?



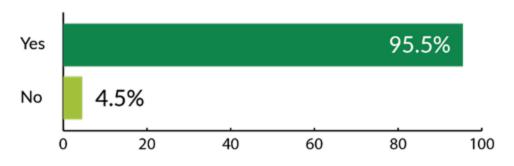
Base: 509 responses

The Chart 1 above shows that a majority of respondents 93.9% (478 respondents) were identified as a resident with only 6.1% (31 respondents) indicated that they were replying on behalf of a business/ organisation.

2.2. Question 2: Do you own or have access to a vehicle?

Respondents were asked if they owned or had access to a vehicle and results are summarised in the following Chart 2:

Chart 2: Do you own or have access to a vehicle?



Base: 509 responses

The Chart 2 shows that the majority of respondents 95.5% (486) owns or has access to a vehicle.

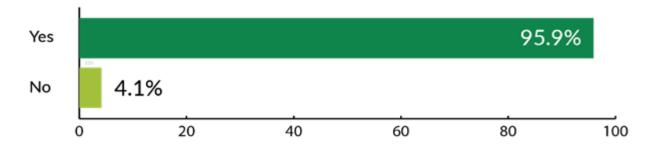
Vehicle Ownership

All of the questions in this section were routed so that only respondents providing a "Yes" response to Question 2 (Do you own or have access to a vehicle) were able to respond.

3.1. Question 3: Do you keep a vehicle/vehicles at your home address?

Respond were provided with a simple "Yes" or "No" choice with the results summarised in the following chart:

Chart 3: Do you keep a vehicle/vehicles at your home address?



Base: 486 responses

Respondents providing a "Yes" response were then routed through to Questions 4 to 8, whilst those providing a "No" response were routed to Question 9 (Where do you park your vehicle overnight?)



3.2. Question 4: How many vehicles do you keep at your home address and where do you park them?

Of the 509 respondents to the online survey 95.5% (486 respondents) owned or had access to a vehicle. Of the 486 respondents who had access to or owned a vehicle 466 (95.9%) of them kept their vehicle at home. They were then asked (of those who kept their vehicle at home i.e. 466 of them) where they parked their vehicle/s. Respondents were given a number of parking options and then asked to indicate how many vehicles were parked in that option. The results are summarised in the Table 1.

Table 1: How many vehicles do you keep at your home address and where do you park them?

Parking Location	0	1	2	3	4	5	6+	Total
Driveway	91	132	181	49	11	1	1	466
Garage	358	74	24	6	2	0	2	466
On The Street	372	74	16	3	0	1	0	466
Communal Parking – No Allocated Space	446	14	6	0	0	0	0	466
Communal Parking - Allocated Space	451	8	6	0	0	1	0	466
Pull in - Layby	460	5	0	0	0	1	0	466

Base: 466 responses

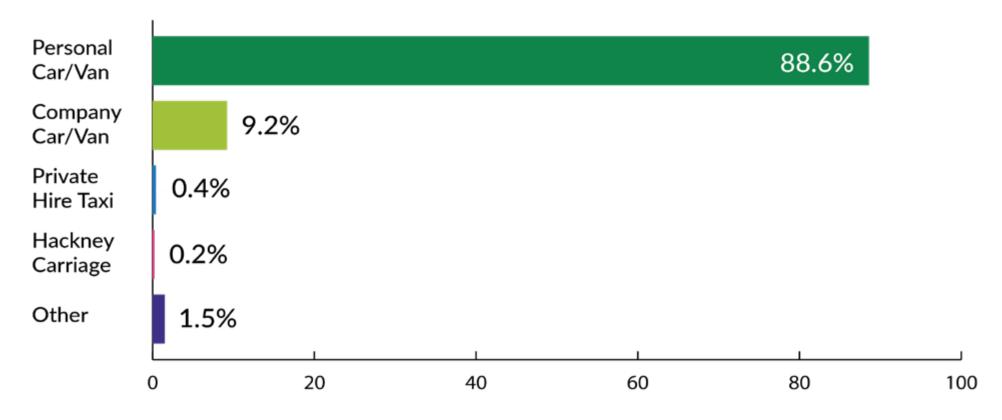
As detailed in the table above, the driveway and garage are where most of the respondents keep their vehicles. Third most popular option for parking a vehicle is on street, followed by communal parking with no allocated space, then communal parking with an allocated space and finally parking at a pull in or layby. The least popular option was "Pull in or Layby" with only 6 responses (1.3%) indicating that this was a home address parking option for their vehicles.

A key caveat to note here is that in the table above one may be able to ascertain information about an individual who may be exercising several different options when it comes to parking the cars. For example, an individual may might be parking a certain number of car/s in his/her/their garage and yet at the same time he/she/they might also be parking additional vehicles on the street.

3.3. Question 5: The main vehicle you drive

Respondents were asked to indicate what the vehicle type is for the main vehicle that they drive. A list of four options plus an "other" option was included. The results are summarised in the Chart 4.

Chart 4: Type of the main vehicle you drive



Base: 466 responses

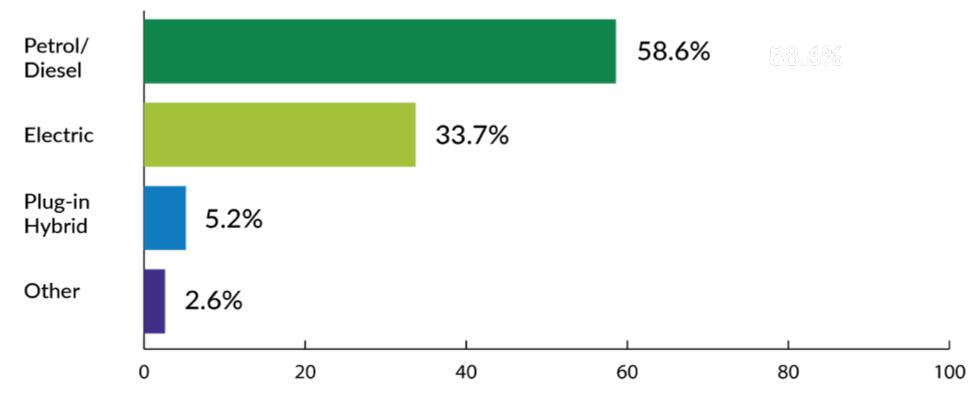
As shown in the Chart 4 above, Personal Car or Van was the highest selected option with the majority of respondents stating that this was their main vehicle that they drove².

² The "Other" option attracted a total of 7 responses and with respondents identifying their main vehicle as: Motorcycle – 3 responses,

3.4. Question 6: What is the main fuel source for this vehicle?

Respondents were provided with a list of three options plus an "Other" option³. The results are summarised in the chart below:

Chart 5: What is the main fuel source for this vehicle?



Base: 466 responses

Chart 5 above shows that just over half of the respondents (58.6%) indicated the main fuel source of their vehicle was petrol or diesel. However, a significant 33.7% are driving an electric car and 5.2% of respondents use a Plug-in Hybrid vehicle for their journeys.

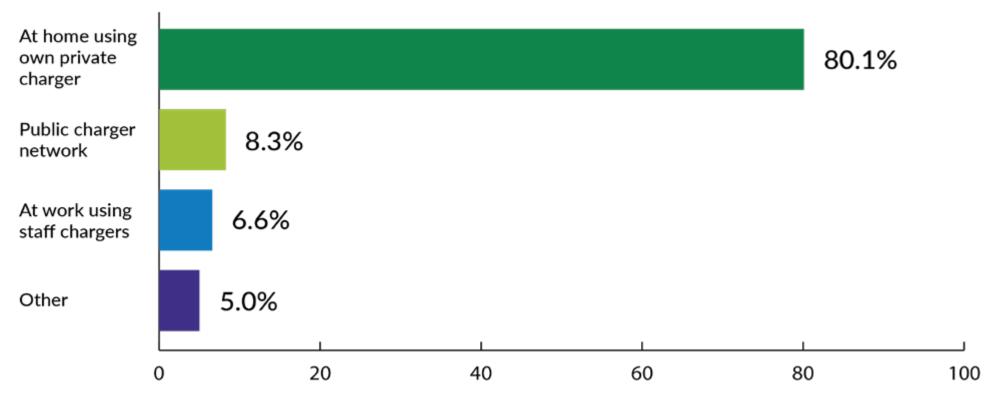
Disability/Motability Car - 2 responses, Car Club Car - 1 response, Private Car - 1 response

The "Other" option attracted a total of 12 responses with respondents identifying other main fuel type as the following: Petrol Hybrid (not plug in) - 5 responses, Self-Charge Hybrid - 5 responses, EV Hybrid - 1 response, Hybrid - 1 response

3.5. Question 7: Where do you normally charge your Electric/Plug-in Hybrid vehicle?

For Question 6, a total of 181 respondents indicated that the main fuel source for their main vehicle is Electric. These respondents were then directed to Question 7, which was set out as "Where do you normally charge your electric/plug-in hybrid vehicle?"

Chart 6: Where do you normally charge your Electric/Plug-in Hybrid vehicle



Base: 181 responses

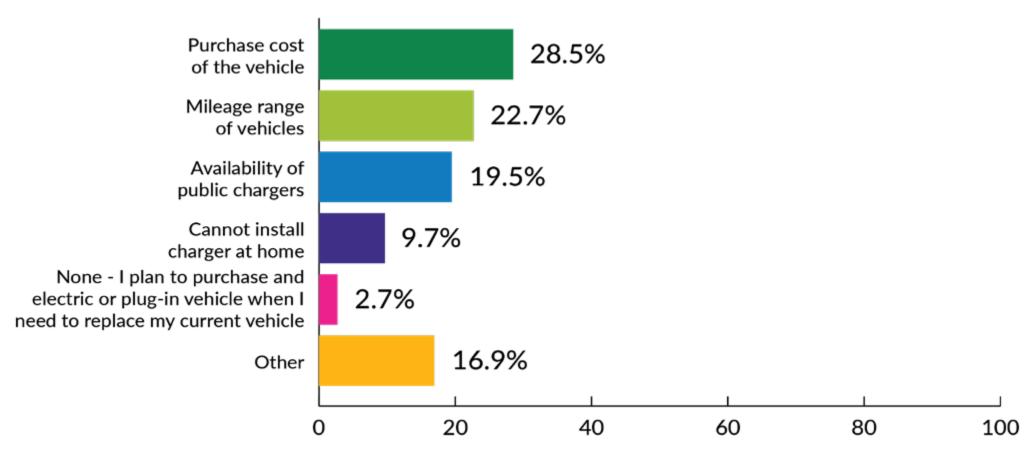
The majority (80.1%) of those who responded charge their cars at home using a private charger. This was followed by 8.3% of respondents who indicated they used the public charging network as their main charging source.

3.6. Question 8: If you don't own an Electric Vehicle Or Plug-in Vehicle, what are the main barriers to you owning one?

The 285 respondents who do not own an electric vehicle (see Question 6) were directed to Question 8 i.e. they were asked about the main barriers for owning an electric car

This was set as a multiple response question meaning that respondents were allowed to pick as many of the options as were applicable. This led total of 590 responses which are summarised in the chart below:

Chart 7: If you don't own an Electric Vehicle Or Plug-in Vehicle, what are the main barriers to you owning one?



Base: 590 responses

Purchase cost of the vehicle was the most cited reason (28.5%) for not buying an EV, the second most selected reason (22.7%) was the mileage range of the vehicle followed by 19.5% of respondents who chose the availability of public charges as the key reason for not owning an EV. A significant fourth (circa 10%) was that the respondents could not charge at home.

A total of 100 respondents ticked the "Other" option which revealed a text box for verbatim comments. These responses varied from single short comments with a single theme/strand to larger text comments highlighting a number of themes/strands. A total of 215 comments were provided. Further analysis was undertaken to highlight the main themes/strands by the number of comments that mentioned that particular theme/strand. The results are summarised in the following Table 2.

Table 2: Additional responses on the main barriers to owning an Electric or Plug-in Vehicle

Theme/Strand	% of Comments
Question the green credentials of EVS - mining of raw materials used in manufacturing & supply chain, recycling of components	19.1
Do not want to own an EV, too expensive, don't like them, too big	12.1
Safety concerns - inflammable batteries, damage caused by accidents	10.2
Battery technology is currently in its infancy, not a tried and tested method, especially for replacement batteries	7.9
Servicing & repair costs, battery & vehicle life, depreciation and used vehicle values all unknowns at present and major deterrent to purchase	7.4
Other fuels currently more economic/in development – e.g. hydrogen, hybrids, as well as petrol and diesel	7.4
Range limitations of current EV available on the market	5.6
National Grid capacity not enough for EVs at present	5.1
Others	25.1
Total	100.0

Base: 215 comments

As can be seen from Table 2 above, some of the themes that came out when people selected "other" as a barrier to not owning an EV are actually detailed in the options provided in the question. However, additional comments also questioned "green" credentials of an EV. Some respondents accepted that emissions from EVs would be lower than traditional Internal Combustion Engines(ICE) at point of use but felt that the supply chain, manufacturing and raw materials used for producing an EV would be just as environmentally unfriendly as a traditional ICE. Particular concerns were raised about the links with mining of earth's resources in support of the EV industry.

Few respondents also raised concerns that battery technologies were currently at the development stage of the life cycle albeit this may fall under one of many myths about EVs.

The actual costs of purchasing and then running an EV were also raised as being major deterrent to an EV purchase. There seemed to be a feeling that limited information is available about the true costs of servicing and repair including on consumables such as tyres. Rate of depreciation and the value of used EVs were also flagged as potential deterrents to first purchase of an EV.

Another aspect raised by respondents was the feeling that the National Grid would be unable to cope with sudden increased demand for powering the growing number of EVs. Running counter to this was the development in cleaner and newer vehicle fuels-e.g. hydrogen – which should also be given some consideration.

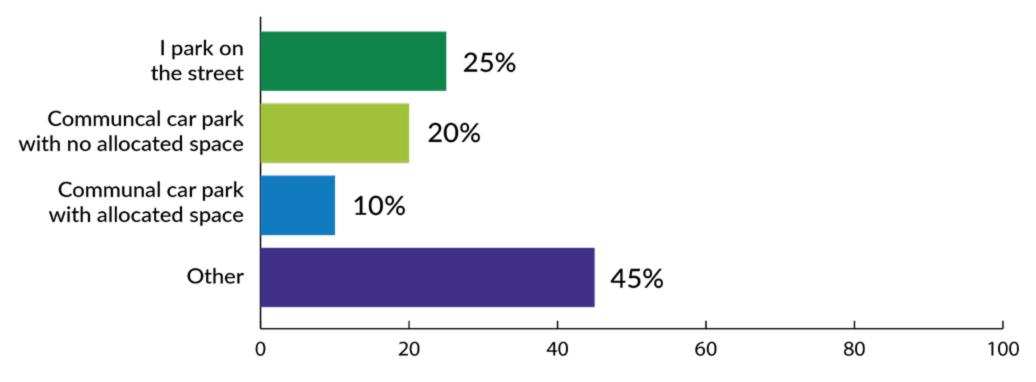


3.7. Question 9: Where do you park your vehicle overnight?

This question was only shown to those respondents who had provided a "No" response to Question 3 (Do you keep a vehicle/vehicles at your home address?) of the survey

A total of 20 respondents answered this question with the results summarised in the following Chart 9:

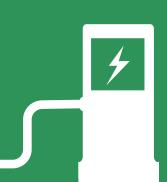
Chart 8: Where do you park your vehicle overnight?



Base: 20 responses

For those respondents who did not park their car at their home address the most popular alternative was on street, followed by communal car park with no allocated space⁴.

The "Other" responses were: Rent space in a private/business/secure car park – 3 responses, Rented garage – 1 response, Public car park – 1 response, Council owned land – 1 response, Staff take fleet vehicles home – 1 response, Don't own a car – 1 response, Answer withheld – 1 response.



4.1. Question 10: Future EV Charging Infrastructure, what kind of chargers do you feel we need more of in Worcestershire?

The respondents were asked what type of chargers they need more of in the near future. Three options were put forward as follows:

- For residents that have no off-street parking (Fast Charging).
- At destinations across the local area e.g. shops, leisure facilities, etc (Fast Charging)
- For people travelling through the local area (Rapid and Ultra Rapid Charging)

All 509 respondents answered this question, with the results shown in Table 3

Table 3: What kind of EV Chargers do you feel we need more of In Worcestershire

Charger/User Type	Yes - we need more of these	No – we don't need more of these
For residents that have no off-street parking (Fast Charging)	75.6	24.4
At destinations across the local area – e.g. shops leisure facilities, etc (Fast Charging)	78.0	22.0
For people travelling through the local area (Rapid and Ultra Rapid Charging)	73.9	26.1

Base: 509 responses

The majority of people responding to the survey felt that, irrespective of user, the type of charger required in Worcestershire were fast/rapid chargers.

4.2. Question 11: Determining factors for you about possible future use of Public EV Charger/Charging Points.

The 509 respondents were also asked to rank⁵ determining factors that would encourage them to make use of public EV charger/charging Points.

Respondents were provided with an option of six factors plus an "other" response option. They were requested to rank how important these factors were to them with 1 = most important and 7 = least important. The mean score for each of the factors was then calculated with the results shown in the following table:

Table 4: Ranking mean score analysis for factors determining future possible use of Public EV Chargers/Charging Points

Factor	Mean Score (highest possible score is 7.0)
Cost Of Charging	5.38
Guaranteed Availability	4.96
Speed Of Charge	4.72
Distance From Your Home	4.31
Safety And Security	3.47
Proximity To Other Facilities – eg shops, where you work, leisure centres/gyms etc	3.15
Other	2.46

Base: 509 responses

Table 4 shows that the key factors that would influence respondents future possible use of a public EV charger/charging point are: Cost of Charging, followed by Guaranteed Availability and then Speed of Charge. Those factors that were of lesser importance Safety and Security and Proximity To Other Facilities.

A total of 147 respondents ticked the "Other" option which revealed a text box for verbatim comments. These responses varied from single short comments with a single theme/strand to larger text comments highlighting a number of themes/strands. A total of 200 comments were provided.

Analysis was undertaken to highlight the "other" main themes/strands by the number of comments that mentioned that particular theme/strand. The results are summarised in the next Section (Section 4.3).

Respondents were provided with 6 factors plus an "other" response option and asked to rank how important these factors were to them with 1 = most important and 7 = least important.

4.3. Question 12: Other response - Determining factors for You about possible future use of Public EV Charger/Charging Points.

A total of 147 respondents ticked the 'Other' response, a total of 200 comments were provided.

Analysis was undertaken to highlight the main themes/strands by the number of comments that mentioned that particular theme. The results are summarised in the Table 5:

Table 5: 'Other' response for Determining factors for You about possible future use of Public EV Charger/Charging Points

Themes	% of Responses
Reliability and security of chargers as well as information about chargers - need to be able to find out if charger is working before driving there.	11.0
EV charging infrastructure should be done by private enterprise and for them to bear the cost, taxpayers money should not be involved	7.5
Equity - pay the same for public chargers as charging the EV at home, same price per kwh, vehicle to grid support to earn money back when electricity demand is high	6.0
Accessibility and ease of use – e.g. charging whilst towing a caravan, trailer, current height/weight restrictions prevent access for vans, some electric cars, etc	6.0
More chargers in locations/facilities, chargers in lamp posts and under pavement channels in residential streets, more chargers in rural locations	6.0
Don't agree with EVs, not a green option, other options are available e.g. hydrogen	6.0
Don't own/will never own an EV	6.0
Ability to pay by a number of means – e.g. credit/debit card as well as via apps	5.5
Need to be near other infrastructure/ amenities to spend time whilst car is charging – e.g. car parks, transport interchange hubs, town centres, near toilets, etc	5.0
Cost of owning and running an EV is too expensive for the majority at present	5.0
Others	36.0%
Total	100%

Base: 200 responses

Table 5 shows that the top 10 themes accounted for 64.0% of the responses. Reliability and availability (in terms of being switched on) was a key consideration for 11.0% of respondents. Part of this issue was also the availability of real time information on the app systems that many charging infrastructure providers use about which chargers were live and available and which were not.

The need for more chargers generally was indicated by a combined total of 11.0% of responses. Of these 6.0% advocated more chargers available in residential streets and rural locations, whilst 5.0% highlighted the need for more charging facilities within town centres, car parks, transport interchanges, etc.

Another aspect about the digital application system was highlighted by 5.5% of responses. This was related to being able to make the payment by credit/debit card and smart technology rather than use of e.g. a mobile application/system that is supplied by a Charge Point Operator (CPO).

Accessibility was highlighted by 6.0% of responses with examples including the need to be able to recharge whilst towing a caravan/trailer, which wouldn't fit in a standard size bay. In addition, current height and weight restrictions were also put forward as current barriers for electric van and some electric car owners being unable to access some public EV charging sites. The remaining 36.0% of comments were accounted for by a further 20 themes with individual values of between 0.5% and 4.9% of comments. These comments as well as the other comments received during this consultation have been group into themes with a Worcestershire County Council response to the comment provide as well as changes to the document as a result of the comment as appropriate and provided in Appendix 1.

Cost of Charging, followed by Guaranteed Availability and then Speed of Charge, were the most important factors. Those factors that were of lesser importance were Safety and Security and proximity to other facilities.



Electric Vehicles Strategy – Vision and Objectives



5.1. Question 13: To what extent do You agree with the proposed vision

Respondents were given the following information about WCC's EVCI's vision:

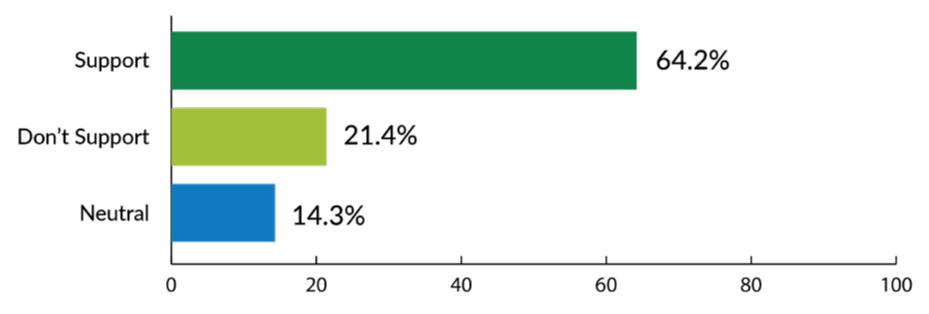
Our vision for Worcestershire:

A robust EV charging infrastructure for residents, businesses and visitors. Charging solutions are equitable, accessible and reliable giving confidence to drivers to drive EVs. Charging infrastructure integrates with local transport services, supports EV mobility and has positive decarbonisation impacts in our county.

The three response options provided were: Support, Neutral, Don't Support with the results shown in the chart on the next page.



Chart 9: "To what extent do you agree with the proposed vision?" (% of responses)



Base: 509 responses

The chart indicates that the majority of the respondents (64.2 %) support the vision.

5.2. Question 14: To what extent do you support the 5 objectives of the Strategy

Respondents were also provided with the information on EVCI's objectives. The respondents were informed of the Strategy's five objectives as follows:

Objective 1: Environmentally Sustainable:

To contribute towards
Net Zero by assisting
with reduced emissions
through decarbonising of
transport in and around
our county and assist
with delivering improved air quality.

Objective 2: Reliable

To facilitate charging solutions that are dependable and which drivers are confident in using.



Objective 3: Equitable

To enable access to charging facilities for residents for those that require it regardless of social, economic or rural landscape.



Objective 4: Accessible

To facilitate charging solutions that can be used easily regardless of age or disability, and they will be located close to homes that rely on on-street parking.



Objective 5: Integrated

To provide opportunity for integration with wider local transport services, active transport, and to widen travel choice.



Respondents were then provided with a grid style question with three response options: Support, Neutral, Don't Support. The results are shown in the following Table:

Table 6: To what extent do you support the 5 objectives of the Strategy? (% of responses)

Objective	Support	Neutral	Don't Support
Objective 1: Environmental Benefits	67.2	13.5	19.3
Objective 2: Reliable	73.7	10.0	16.3
Objective 3: Accessible	70.7	12.4	16.9
Objective 4: Equitable	65.0	15.9	19.1
Objective 5: Integrated	61.5	21.4	17.1

Base: 509 responses

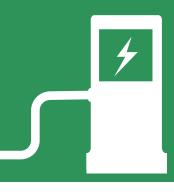
The table indicates that there is significant support for each of the objective. As high as 80-85% respondents were either supportive or remained neutral about WCC's draft EVCI strategy's objectives.

5.3 Question 15: Do You have any further comments on the vision and the objectives?

Respondents were provided with a free text box for any further comments that they would like to make on the WCC's EVCI Strategy's Vision and Objectives. Respondents were able to provide as much information as they wished and responses varied from single short comments with a single theme/strand to larger text comments highlighting a number of themes. A total of 260 comments were provided by 171 respondents.

Analysis was undertaken to identify the main themes with a total of 42 themes identified for this question in the online survey. However, many of these themes/strands were not restricted to just the Vision and Objectives but further explored the wider general subject area of Electric Vehicles. These have been grouped into themes with a Worcestershire County Council response to the comments provided, including any resulting changes made to the strategy, see Appendix 1.





In Total 519 responses were received during the consultation period, 509 of these responses were electronic and the remaining 10 were received via emails.

The majority of respondents filling in the online survey 93.9% (478 respondents) were identified as a resident in Worcestershire with 6.1% (31 respondents) indicated that they were replying on behalf of a business/organisation.

The majority of respondents were in support of the proposed vision and objectives.

For those that currently do not own an electric vehicle, the main barriers to not owning one is, purchase cost of the vehicle, which was followed by the mileage range of the vehicle and the availability of public chargers. 10% of respondents identified they could not install a chargepoint at home and this was the main barrier to owning an electric vehicle.

The driveway and garage were where most of the respondents keep their vehicles. Third most popular option for parking a vehicle is on street, which is then followed by communal parking. In all 25% indicated that they parked on the street which echoes the data in the strategy where around 30% of all homes in Worcestershire do not have access to off street parking.

Cost of Charging, followed by Guaranteed Availability and then Speed of Charge were the most important determining factors for possible future use of public EV charger/charging points. Those factors that were of lesser importance to the respondents were safety and security and proximity to other facilities.

The majority of people responding to the survey felt that, irrespective of users' type, Worcestershire is in need of deploying fast/rapid chargers.





Appendix 1- Summary of the themes coming out of the consultation and WCC responses



Detailed below in the table is a summary of the themes coming out of the EVCI Strategy consultation and the Worcestershire County Council (WCC) response including any changes needed to the draft EVCI Strategy as a result.

EVCI should not be delivered by local authorities and public funding (this was the most frequently raised theme within the consultation)

Ref	Comment	WCC Response
1	a) Concerns around ability of local authority to deliver / public funding being used for EV charging /private industry issue / reinvest funding to selffund / delivery quick enough b) What is the Council doing / what are other Councils doing?	1) WCC are working with Midlands Connect in a consortium of County Councils to access LEVI funding. This funding will be used to leverage additional private finance therefore increasing the overall investment of EVCI in the county. (Paragraph 8.5.4)
		2) WCC are working within the timeframes as set by Government through the LEVI fund to providing charging options for those without off street parking.
		3) EVCI will be primarily powered on street chargers located in areas where there is high reliance of on street parking. Engagement with the EV chargepoint industry will assist the consortium in appointing a suitable charge point operator with which to partner and benefit from their expertise in location, design and operation of chargepoints.
		4) Whilst the majority of chargers will be low powered 7-22kW, there will also be an opportunity for an operator to install rapid chargers in suitable locations. Rollout would be anticipated to be around 5 years – consider updating action plan 10.1
		5) WCC has also received capability funding to upskill key staff and bring in expertise as necessary to support the project. WCC is not contributing any public funding towards the LEVI project.
		6) Paragraph 6.3.6 of the draft EVCI Strategy sets out that to finance the required EVCI, WCC have identified a public-private commercial partnership as it offers the most flexible approach. WCC will utilise the LEVI government funding as capital investment to retain some control over deliverables whilst transferring the risks including from installation, operation, and maintenance to the service provider.
		7) The On Street Residential Charge Point Scheme (ORCS) is an additional EVCI initiative accessible by District Councils and WCC support district councils in in their implementation of this.

Environmental credibility of EVs (this was the most frequently raised theme within the consultation)

Ref	Comment	WCC Response
2	a) Non-renewable energy to charge EVs, greater wear on road & increase in PM's – heavier vehicles/ materials used for	We acknowledge that the transition to EV's will present environmental challenges, however, it also provides an opportunity to innovate and create more sustainable solutions for transport. The industry is already seeing a wide selection of EVs on the market with many smaller and lighter options becoming available.
	components batteries b) EVs are not the solution / hydrogen should be invested in	We recognise the are arguments for and against EVs. However, it should also be noted that due to ongoing technological innovations EV's are a more sustainable alternative option to petrol and diesel vehicles which is supported by the government and industry alike.
		We note comments made about the consideration as Hydrogen as a fuel type, however this consultation and the money provided by the government for LEVI is for the purpose of the installation of ECVI infrastructure
		There is a carbon footprint associated in manufacturing all vehicles. Most emissions associated with EVs are from the manufacture of the battery, however an EV can be powered from renewable electricity and emits no tailpipe emissions unlike conventional cars.
		 Due to the UK's very clean electricity mix, from 2020 a typical battery electric car is estimated to save ~65% GHG emissions compared to an equivalent conventional petrol car.
		 By 2030, BEVs are estimated to deliver a ~76% GHG reduction compared to an equivalent conventional petrol car, due to a combination of improved battery technology and a further decarbonised UK electricity grid. By 2050, these savings could increase to 81%.
		By 2050 BEV production emissions could reach close to parity with those of conventional vehicles.
		Lifecycle Analysis of UK Road Vehicles
		Car batteries very rarely are totally redundant due to a thriving second hand market. Technology to recycle lithium batteries is already available and the industry plans to recycle EV batteries when there is volume enough to warrant it.
		(How green are electric vehicles? - Energy Saving Trust)
		paragraph 7.1.2. on the draft strategy in which it states "EVs do not address the issues of carbon neutrality as emissions can be attributed to the energy supply and in manufacturing. Whilst significantly reducing GHG emissions as there are no tailpipe gases, EVs can still contribute to some particulate matter from tyre wear."

EV & EV Battery Safety & costs relating to maintenance and battery replacement

Ref	Comment	WCC Response
3	a) Issues raised included batter lifetime/ safety issues which may be effected by temperatures. safety implications of this (for example if there was a road traffic	1) Advancements in technology are continually improving battery longevity. These advancements are being developed to better regulate battery temperature, using techniques like thermal insulation and active cooling or heating, a broader range of temperatures and environmental conditions. As technology evolves, these innovations can help mitigate the effects of extreme temperatures, extending battery life.
b) th c)	b) General maintenance and lifetimes of the car were also highlighted as issues	2) It would be beyond the remit of this consultation to call in to question safety regimes of EV manufactures but we note the concern. 3) We note the comments that people made regarding concern over the sound EVs make/ don't make. The control of the
	c) Safety with regards to the lack of noise.	sound EVs make although acknowledging in the strategy is beyond the scope of this consultation. 4) It is estimated that EVs are around 20 times less likely to catch fire than ICE vehicles and are safer (and less costly to maintain) that a standard combustion engine vehicle.
		5) Noted. Control over the sound EVs, although acknowledged in the Strategy, is beyond the scope of this consultation (7.2)

Reliability and security & Safety of chargers (this was the most frequently raised theme within the consultation)

Ref	Comment	WCC Response
4	a) Deterrents / Enforcement for misuse / blocking charging bays b) Charging away from another vehicle/theft / Is charger working	1) WCC recognises that maintaining a reliable and functioning charger network is essential for EV drivers. WCC will be seeking a comprehensive contract with an operator to ensure: communication with devices to identify problems quickly, speedy rectification of problems and; thorough maintenance of systems to keep units operational. 2) WCC also note that site selection, layout and the local environment can either help or hinder keeping EVCI equipment in good working order and deter vandalism and theft. We will work with our chosen operator to seek solutions to prevent unhelpful and unwanted attention to keep the units in operational order. 3) Through the procurement process we will be asking for suppliers to evidence how their systems will communicate with users before, during and after charging.

Ease of Use (this was the most frequently raised theme within the consultation)

Ref	Comment	WCC Response
5	Includes payment / Contactless. Not reliant on apps to use chargepoint	Noted, WCC will cover issues relating to ease of use in procurement documents, requiring that chargepoint access must be in compliance with the Alternative Fuels Infrastructure Regulations 2017 (or as amended), including facilitating ad-hoc access (Pay As You Go, PAYG) without mandating ongoing Contracts, membership schemes or downloading specialist Apps to benefit from that standard access. This will not however prevent the operator from using an app to allow registration of special services should the driver wish to engage in this.
		We will also be asking that the general appearance of the chargepoints themselves are easy to use signposting to appropriate instructions and support if required.
		Noted, also covered in procurement

Affordability of EVs& Equity in price of charging (this was the most frequently raised theme within the consultation)

Ref	Comment	WCC Response
6	charging the EV at home, same price per kwh, vehicle to grid support to earn money back when electricity demand is high. b) Concerns over owning and running costs / charging compared with home charging) / possibility of incurring parking fees/ 20% VAT at public chargers	1) Noted, WCC will be addressing affordability of public charging at that is installed through LEVI and as such we are looking for the EVCI to be competitively priced (see 8.4.11-13). A primary aim of the LEVI project is to ensure the cost of charging an EV is affordable.
		2) WCC will also welcome potential operators to offer solutions to give preferential rates to EV drivers without off- street parking to support the aims of LEVI
		3) While the upfront cost of EVs can be higher, over time the total cost of ownership often favours EVs due to savings on fuel and lower maintenance costs.
		4) Whilst VAT on electricity is not within the control of WCC, we will be seeking competitive pricing from potential operators that make use of time of use tariffs.
		5) We are therefore building in a mechanism to protect the users of these charges from extortionate fees in our specification.
		6) Developments in the project have identified that locations of LEVI funded chargers will be WCC maintained footways close to resident's homes, therefore negating the need for additional parking fees and making them as easy to access as possible.
		7) Details on cost of charging here: Zapmap Price Index - Average weighted price to charge on the public network - Zapmap (zap-map.com).

Location of chargers (this was the most frequently raised theme within the consultation)

Ref	Comment	WCC Response
7a	Correct locations/ Prioritise off-street parking / rented property / Council estates. EVCI needed at: Transport interchange hubs, charging hubs, town centres, near toilets, Fuel Stations, park & Rides, cap parks etc Prohibit active travel e.g. by homes without drives.	Around 30% of households in Worcestershire do not have a drive to park on and so are unable to install an EV charger at home. LEVI funding is provided to deliver charging solutions for these residents delivering at scale, low powered publicly accessible chargepoints installed on the footway.
7b	Safety concerns of increased traffic movements at EVCI hubs – busier carriageways	Noted, safety is at the forefront of the criteria for site selection. This will include adequate lighting, the physical space around the chargepoint itself and not being isolated. All locations will have to meet the requirement of being close to homes with high reliance of on-street parking. Developments in the project have identified LEVI funded chargers will need to be on WCC maintained footways.
		Agreed, any changes to widths should align to LTN 1/20 and Manual for streets (where there is impact and re-design is required). We agree, the strategy to be amended to reflect this.
7c	Match installations with demand	The presence of EVCI will be required to allow some residents to transition over to an EV. Echoed in our findings from our consultation where 20% of respondents cited availability of public chargers as a main barrier to owning an EV / Plug in vehicle. to comply with LEVI funding requirement WCC will be setting out an implementation schedule to make use of the funding within optimal timeframes for both the operator and residents.
7d	Chargers needed in places of work	Noted, however, business transition to workplace EV charging is beyond of the scope of this strategy. At the time of writing, the Government's Workplace Charging grant scheme is currently government funding specifically for this purpose: Workplace Charging Scheme application form - GOV.UK
7e	'Right charger, right place' to be more prominent	Noted, we will look to amend the strategy to better reflect the 'right charger, right place' philosophy to ensure that it is more prominent in within the document as appropriate.
7f	Rural communities need EVCI to assist transition	The LEVI Fund supports local authorities in England to plan and deliver charging infrastructure for residents without off-street parking. As part of this it takes account of those living in rural areas.
7g	Concern over having perpendicular charging as a criteria	Noted. The strategy is not intended to only install at perpendicular parking arrangements nor to install perpendicular parking arrangements in order to install EVCI. WCC will revisit this section and ensure it reads as intended.

Quantity & Distribution of Chargers

Ref	Comment	WCC Response
8	Distribution of chargers Estimated number of EVCI to be delivered not discussed in the body of the strategy	Noted, this is an unknown until WCC engage in a tender process.

Compatibility & different types of chargers

Ref	Comment	WCC Response
9	Right charger right place right number / assessment of the place for different speed chargers / sockets for all vehicle types needed	The LEVI funding will be used to increase the scale of investment in chargers and as such WCC will be looking to procure an operator that can demonstrate they are able to deliver a minimum number of chargepoints whilst also asking for additional offers above this.
		WCC are committed to the right charger right place principle within scope of the LEVI funding requirements and recognise the benefits and requirements of different charger power types. The site location would generally indicate the power type of charger to be installed as outline in Appendix 1, however we will be encouraging EVCI operators to propose a mix of different power chargers for installation across the county.
		WCC will be requiring chargepoint operators to supply EVCI that supports Type 2, CHAdeMO and CCS. These chargepoints are suitable for all mainstream EVs available on the market today.

Accessibility

Ref	Comment	WCC Response
10 a	Concerns over blocking / narrowing footways / shared footpaths/	Agreed, safety is at the forefront of the criteria for site selection and access for other footways users will be a key factor in choosing safe sites.
10b	disabled residents / not deter walking, wheeling, and cycling	EVCI will not be installed where it will prevent access for other users of the footway.
10c	Space to charge whilst Towing, height/ weight restrictions at chargepoints etc	Agreed, as the EVCI will also be available to use by LGVs the procurement process will ask potential suppliers to cater for the requirements of larger vehicles. All EVCI for LEVI will be installed on WCC owned land which will not be barriered.

R	ef Comment	WCC Response
10	Od Consider control of chargers including Permits	Noted, whilst the strategy's focus is those without dedicated off-street parking, EVCI may also be utilised by visitors, tourists, non-residential commuters, taxi & private hire and commercial car and Light Goods Vehicles (LGVs) and this is reflected in the vision. We will be encouraging potential operators to utilise technology to support the aims of the LEVI funding

Battery concerns

Ref	Comment	WCC Response
11	Various battery concerns	We note comments regarding the lifespan of around 8 to 10 years for EV batteries, it is worth noting that advancements in technology are continually improving battery longevity.
		A battery replacement is not usually expected to be needed for BEV cars and vans over normal operational lifetimes with current technology.
		Batteries do deplete over time but can be expected to last 10-20 *years, unlike a conventional car, battery health is more obvious whilst the lifespan of a conventional car is hidden and unknown due to the complexity of the mechanics. As a comparison, the lifespan of the average combustion engine car in the UK is currently 14 years.
		*How green are electric vehicles? - Energy Saving Trust

Integration with public transport & local neighbourhood needs

Ref	Comment	WCC Response
12a	Support public transport / integrate charging with pub transport & community charger schemes/ regular and cheap/active travel/ 20-minute neighbourhoods.	We note that integration with wider local transport, works best when local transport is regular, reliable and affordable, however, this is beyond the scope of this consultation.
12b	Trying to integrate with local transport services could further restrict the positioning of charging infrastructure	It should be noted the support for EV charging is not at the detriment to public transport.
		While acknowledging this, these are largely beyond the remit of the Strategy and any integration of public transport & community charger schemes would be decided upon on a case-by-case basis. Whilst LEVI largely dictates the location of EVCI, WCC will be mindful of integration with public transport where possible.
		WCC wish to identify and utilise locations such as train stations and key commuter car parks that would also aid drivers to charger EVs that might not have off street charging solutions at home.

Ref	Comment	WCC Response
12 c	Local transport must be regular, reliable and relatively cheap /routes designed to serve the locations & residents	Noted, however, this is beyond the scope of the consultation.

Range of Charging Solutions

Ref	Comment	WCC Response
13a	Different powered chargers (7, 22, 50+kW)	WCC are committed to the right charger right place principle within scope of the LEVI funding requirements and recognise the benefits and requirements of different charger power types. The site location would generally indicate the power type of charger to be installed as outline in Appendix 1, however we will be encouraging EVCI operators to propose the most suitable power for each specific location across the county.
13b	More inspirational / creative solutions required.	LEVI funding is provided to deliver charging solutions where there is high reliance of so-street parking. It aims to deliver at scale, low powered publicly accessible chargepoints installed on the footway.
13c	Cross Channel charging solutions / Lamp post Chargers / overhead arms / flush fitting chargers / rising chargers	Cross-channel solutions would not deliver publicly available EVCI as these types of solution are intended for private usage with a home installed charging unit. Some authorities have been approved to use LEVI funding on cross channel solutions. These do not however provide freely accessible chargepoints and are providing access to a single residential home; this severely limits the scale of deployment that could be achieved.
		Innovative solutions e.g. cross pavement channels and lamppost charging would not be able to de delivered at the scale that 'standard' type EVCI can be due to unit costs and adaptations that would need to existing infrastructure. To comply with the OZEV approved project that WCC are involved with, WCC need to ensure that the chargers are delivered at scale in order to bring access to the maximum number of Worcestershire residents.
		Whilst LEVI is not aimed at deployment of innovative solutions, through the procurement process, we will be asking operators to suggest a small percentage of innovation solutions for our installations, and this is likely to be dependent upon specific site locations. Industry soft market testing, revealed that specifying specific innovative solutions, will limit the number of operators that will be able to respond. To ensure as many operators as possible will respond to our tender, we will not be asking for any one specific solution and instead, we will be letting the market propose suitable solutions for our needs.

Ref	Comment	WCC Response
13d	Other Councils investing LEVI in cable gully trials.	Response on Cross pavement solution in general: Government guidance on cross pavement charging is now available and is being reviewed by WCC to fully understand the implications for the user, the authority and users of the footway. Issues such as the structural integrity of the footway, maintenance, electrical safety and liabilities must be resolved in the first instance. Until all issues have been fully considered and a formal decision made, it is the responsibility of the person charging the vehicle to avoid putting themselves and others at risk when trailing a cable across a footway or an area people may cross.
		Cross channel solutions require the homeowner to purchase and install a private chargepoint on top of any installation costs and or annual licence fees which can make these options less favourable to some.
		Response on Lamp post chargers in general:
		The vast majority of our lamp post columns are located at the back edge of the pavements, therefore not ideal for retrofitting a charging point as this causes issues with trailing cables. This type of charger also delivers a far reduced kW meaning the time needed to charge is double of that required to a standard charger which is not convenient for most EV drivers. There are also added costs in upgrading wiring within the columns that make the solution costly when compared with the offer from a standard charger for example. It is beyond the remit of LEVI funding to secure the upgrade and relocation of lampposts
13e	Explained and justify why gullies not supported clearly in the strategy.	Noted. Consider additional comment / guidance on this in strategy.
13f	Use Parking bays & other sensors appropriately	Agree. The use of innovation in bay monitoring will be at the discretion of the CPO. It will not be specified as part of the tender going to market as this is beyond the remit of the LEVI fund

Stakeholder engagement

Ref	Comment	WCC Response
14a	Help with sighting of chargers necessary to ensure all matters are properly taken into account such as archaeology and	This consultation is the first part of reaching out to community stakeholders, all sectors of our residential community including disability groups, pregnancy and maternity groups, social care groups and voluntary groups. The Joint Impact Assessment (JIA) carried also supported this consultation work to identify other important factors
	environment/disability groups	for consideration, add detail around this. Further into the project WCC are expecting additional smaller site-specific consultations when identifying locations to install EVCI; this is likely to be within the remit of the operator.
14b	Address Negative perception of EV's	Agree, as part of the LEVI project, the operator will be required to assist with communication and information sharing.

Ref	Comment	WCC Response
14c	No mention of working in partnership with stakeholders or targeting of key groups where implementation will be difficult to achieve without support/encouragement	This consultation is the first part of reaching out to community stakeholders and all sectors of our residential community; this includes disability groups, social care groups and voluntary groups. The Joint Impact Assessment (JIA) was carried out to support this work and as such we identified those groups that may be impacted by this project. Representative organisations were then contacted as a result to request a response to our consultation. - Consider giving clarity around the JIA process and stakeholder engagement in this project. An additional JIA process will be undertaken prior to award of contract that will assess Equality, public Health and sustainability issues in relation to the project.

Concerns around impact on archaeology and historic buildings

Ref	Comment	WCC Response
15	Concerns around impact on archaeology and historic buildings	This will be considered along with other important factors as part of the site selection process.

Grid capacity / generation issues / integrate with generation solutions.

Ref	Comment	WCC Response
16	Where chargers are being installed, if renewable energy can be generated then this should be part of the strategy.	Whilst this is outside the remit of the strategy as grid restrictions and network capacity are under the control of NGED and network operators. However, WCC/MC have shared the plans for the deployment of LEVI funded chargers in the County (and further afield) to allow them to plan infrastructure to support LEVI.
		There has been continuous support on net zero shown both by the previous and the current government. This is assumed to support the transition to electric vehicles (EVs) and help the UK to reach its climate targets
		Industry wide the sector is scaling up electricity generation from the renewables sector and this will also be used alongside other technology including variable load management and smart and variable time of use tariffs to assist with the energy required to power EVs where and when required.

Planning Changes Needed

Ref	Comment	WCC Response
17	Restrictions such as Grid network and Planning function should make provisions for EV charging easier	WCC do not believe the current planning regimes in place will have any negative impact on deployment of LEVI funded EVCI. Implementation of any other EVCI is outside the remit of this strategy.

Additional Environmental benefits

Ref	Comment	WCC Response
18	Large benefit of the EVCI strategy will be to reduce air pollution caused by nitrogen oxides (NOx)	Agreed, update term Nitrogen oxides to take account of both Nitric oxide and nitrogen dioxide.

Comments of Support

Ref	Comment	WCC Response
19a	Support the initiative / Great to see / positive to see Worcestershire push forward plans to address Air Quality and noise pollution welcome the positive and pro-active strategy	Noted, thank you for your response.
19b	Support / strengthen EV Community Car Clubs / Beryl Bikes	Noted, this is outside of the scope of the strategy, however, WCC are in support of EV community Car Clubs, e bikes etc and where possible would want to see integrated EV charging solutions into the community to support them.
19c	There needs to be the ability under the Electric Vehicle Charging Infrastructure (EVCI) Strategy to add lower powered charging facilities (up to 22kwh, but typically 7.4kwh) to cater for properties with shared/communal parking areas.	Agreed, thank you for your response.

Ref	Comment	WCC Response
19d	There are other environmental considerations such as pollution impacts on environment and historic environment. All measures that support a move away from the use of fossil fuels are beneficial to the historic environment.	Noted and Agree.

Addressing Structure Wording & Syntax, and Application of Strategy

Ref	Comment	WCC Response
20a	The word robust is difficult to quantify	Robust was selected to convey longevity, reliability, and trusted network.
20b	8.2.3 remove the reference to 'AQMA' (not explained)	Noted, consider removal of this clause and reference AQMA in Glossary.
20c	Changing the wording to 'transition to EVs,' rather than 'drive EVs' would improve the vision superfluous in the sentence.	Noted, however a vision should be forward thinking setting out what you hope to achieve. It would be WCC aim that people are one step further and confident to drive an EV rather than transition.
20d	Proposals don't deliver the strategy	Noted, the strategy is specifically to deliver LEVI funded EVCI only.
20e	Replace ruralism with social and economic inequalities	Noted, whilst the strategy does identify ruralism as an issue to be addressed as detailed in Objective 4: Equitable it also recognises social, economic inequalities separately.
20f	This strategy will form part of the Local Transport Plan 5. It therefore is a document with a significant status with regard to transport planning which is not reflected in the strategy as written.	LTP 5 guidance is currently not available, however it is anticipated the EVCI strategy will be a key document for LTP5.
20g	The strategy does not obviously appear to take account of best practice from other areas and would benefit from this.	WCC has reviewed and taken account of best practice in the compilation of the EVCI strategy with input from key partners including the DfT/OZEV's support body Energy Saving Trust (EST). As part of this work WCC is part of a consortium with other Midlands Authorities in which best practice is routinely discussed and shared.
20h	Strategy excludes the vast majority of housing in the city which do not have off road parking	The Strategy specifically seeks to deliver EVCI in locations without off-street parking – ensure this is made clear in the strategy.

Ref	Comment	WCC Response
20i	No support for businesses LGVs and EV vans excluded from strategy	LGVs are included Whilst this EV strategy's focus is primarily intended for those without dedicated off-street parking, the resulting EVCI may also be utilised by other EV drivers such as Light Goods Vehicles (LGVs)., plus visitors, tourists, non-residential commuters, taxi & private hire and commercial car.
		Business transition to EV is beyond of the scope of this strategy. However, LGVs and fleet vehicles will be able to access the EVCI. WCC will continue to identify opportunities to support EV transition for other sectors as and when they arise.
20j	Strategy should be reviewed sooner than 2029, as is currently planned	Noted. This phase 1 strategy and has been developed with delivery of the LEVI project which has as expected implementation period of around 5 years hence the given timelines.
20k	2.1.1: The term "Environmentally Sustainability" is not consistent with the preferred term used in the Objective (paragraph 2.2.2) and in other parts of the strategy – "Environmental Benefits." The	Review Objective 1 (Paragraph 2.2.2) Noted, and considered. The objective will remain as Environmentally Sustainable to encompass both GHG reduction and air quality improvement as per DfT's <u>TAG unit A3 environmental impact appraisal</u> .
	primary reason to objective to deliver EVCI is to meet the UK's Net Zero obligations for climate change. The secondary effect, but no less important, is also to reduce emissions of Nitrogen Oxides and other pollutants from internal combustion engine powered vehicles and thereby reduce air pollution.	
201	3.2 – There is no mention of air pollution, instead its included in social factors 3.3.2. We recommend moving but retain the social-geographic element into Paragraph 3.3.2 though.	Consider moving air pollution to Paragraph 3.3.1 instead of in Paragraph 3.3.2. However, retain social geographic element in Paragraph 3.3.2.

Ref	Comment	WCC Response
20m	Suggest remove reference to the Annual Status Report. We would recommend a further paragraph to emphasize the fact that EVCI are key measures to improve the air quality written into the draft Air Quality Action Plans for Bromsgrove, Wyre Forest and Worcester City. The delivery of the LEVI Strategy and Capital Infrastructure and Delivery funding is key to improving air quality by up to 45% in these areas.	Noted and Agree.
20n	The implementation of EVCI strategy as part of WCCs Net Zero actions will also reduce air pollution across the County. EVs are key delivery measures in the draft Worcester City Air Quality Action Plan (AQAP) 2025-2029	Noted – consider add this text: EVs are key delivery measures in the draft Worcester City Air Quality Action Plan (AQAP) 2025-2029 possibly at Paragraph 3.3.2.
200	3.3.2 There is evidence that low-income communities tend to be both disproportionately exposed to unsafe air pollution levels and more vulnerable to serious health impacts (see Global air pollution exposure and poverty Nature Communications).	Agree.
20p	However, there are other factors that contribute to mortality and morbidity from poor air pollution and we suggest the reference to socio-geographic factors is either removed or listed along with other risk factors	Consider removal.
20q	WRS would suggest also the strategy is linked to the Worcestershire County Council's Public Health's Health Protection Strategy 2024-2029 Priority 4, Objective 9: Build community resilience through improvements in local Air Quality.	Consider.

Ref	Comment	WCC Response
20r	5.2.1 and 5.6.1 – both refer to the term "emission," but no source pollutant is specified. Please specify if this is CO2 or a different pollutant to avoid confusion.	Noted, we will amend the document to ensure that it refers to the source pollutants, being nitrogen oxides (NOx), particulate matter (PM) and CO2, whilst also recognising that, CO2 is categorized as a greenhouse gas rather than a conventional air pollutant.
20s	5.6.1 – CO2 isn't an air pollutant, it is a greenhouse gas. Please could you avoid mixing climate change and air quality messaging.	Emissions here are not GHG emissions but Tail pipe emissions. Both Air Quality and climate change are issues that will be negatively impacted by tail pipe emissions and therefore transition to EV will have a positive impact on both aspects. Consider separate heading for Air Quality and GHG Emissions or possibly just need to include 'tailpipe' preceding emissions as this does not exclusively relate here to GHG's.
20t	7.1.3 – this is not a statement for the strategy but is a statement. Active travel uptake as a priority of what? Needs better explanation, not the objective of this strategy surely but maybe policy/strategy of the County Council? If active travel is a priority which policy objective does it link to?	Noted – review 7.1.3.
20u	Within 1.3, the strategy states that 'In relation to this EVCI, there will also be common ground in how we approach privately owned residential chargepoints e.g., on a person's drive and what is and is not acceptable from the perspective of WCC as a Highways Authority.' This text needs to be clearly linked to Appendix 3, which discusses County's support for home charging. Currently the statement in 1.3 could be interpreted negatively.	Noted – make reference to appendix 3 at 1.3.

Outside of current scope of strategy however, the comments are noted for delivery of chargepoints.

Ref	Comment	WCC Response
21	How is health & wellbeing promoted?	Whilst EV's can contribute to improved health & wellbeing, this is not the intended purpose of this strategy therefore there will be no planned health and welling promotion linked directly to LEVI.
22	Don't neglect ICE	The purpose of this iteration of the Strategy is to ensure the delivery of LEVI funded EVCI.

Ref	Comment	WCC Response
23	Charging for other forms of e transport (bikes scooters etc)	Whilst we can seek to align EVCI with other e-transport opportunities, this is largely outside the scope of LEVI.
24	Other issues raised included not encouraging people concreate over their front gardens	WCC do not intend this strategy to encourage residents to concrete over front gardens – ensure this is reflected in the strategy.

Comments concerning the procurement of a chargepoint operator

Ref	Comment	WCC Response
25	Evidence based responses to avoid empty statements that don't reflect experience in deploying solutions at scale - asking for case studies can be a great way of achieving this. with regards to tenders	Agreed, as part of seeking a provider to install and operate the EVCI we will be requesting evidence to ensure and give confidence that the proposals can be delivered.
26	Proposals for 5% Gross Revenue Share or similar. Can penalise the consumer depending on the definition. Councils making extra profit when energy prices rise. recommend instead altering revenue share to profit share % or a revenue share in the form of a set pence/KWh.	The overall purpose of a revenue share is to ensure the successful management of the LEVI project and resulting contract. There is no intention to use the project as an income generation scheme. Specialist consultancy support and soft market testing is being utilised to ensure the most appropriate financial model is utilised in this project.
27	The highest credible number of sockets the Supplier commits to deliver to ensure the largest provision. Note that overweighting this factor this will result in installing cheaper quality options (less power/less public). Suppliers should be asked to state a minimum number of sockets	Agreed, the socket offering will form only part of the decision behind appointing an operator.
28	completed the online survey but that only covered very limited information and gave no opportunity for comment on the draft strategy.	An online survey was provided alongside an opportunity respond via email. This opportunity was promoted this with the District Councils directly and via traditional and social media.

Ref	Comment	WCC Response
29	Difference behaviour between EV motorists and ICE drivers	WCC has considered the drivers needed for EV vehicles in identifying a right charger right place philosophy in selection of EVCI and location. Other behavioural differences impacting EVCI are outside the scope of this strategy.
30a	What is the case for a commercial arrangement with a CPO? Where was this decision made? Why is this not part of the public survey?	The requirements of the LEVI funding have dictated a number of decisions for the consortium of authorities involved. WCC and other members of the consortium recognise the resource and expertise to operate an EV charging network does not exist internally. This coupled with the requirement to bring in private investment from the market, dictates the commercial arrangement.
30b	Is there potential for commercial case which does not require public funding?	Paragraph 6.3.6 of the draft EVCI Strategy sets out that "To finance the required EVCI, WCC have identified a public-private commercial partnership as it offers the most flexible approach using a concession model." WCC will seek opportunity to utilise government funding as capital investment and retain some control over deliverables whilst transferring the risks including from installation, operation, and maintenance to the service provider.
31	Worcester City's Air Quality Action Plan. will it deliver the step change in EV adoption to improve air quality to safe levels?	Noted, whilst the strategy may assist with Worcester City's Air Quality Plan, this is not the intended aim of the strategy. Transition to EVs across the city will require a multifaceted approach of which WCC can only play a small part.
32	The suggested KPIs for the contract for the CPO don't fully reflect the stated objectives for LEVI or for the strategy.	The KPI's listed in Appendix 4 were intended for management of the resulting contract only. To avoid confusion, they will be removed.
33	You are keen to hear from industry around best practice and how to solve some of these challenges – over the last four years I have worked with over 120 councils around Electric Vehicle Infrastructure at national, county, district, borough and city level and would welcome the chance to meet in a Teams call to share these insights with you on a no obligation basis. Please let me know if you have some availability over the next few weeks and I'd be happy to arrange this. test project in North Durham has many similarities to Worcestershire, given the mix of urbanity and rurality and is an excellent example of utilising government funding and our investment to achieve that equitable roll out.	As part of the process in accessing the LEVI funding, WCC is working with MC and a consortium of other authorities that have engaged in soft market testing to establish what can be delivered by the industry and gather feedback on best practice, challenges including sharing information to help shape the resulting tender opportunity that will arise as part of this process.

Ref	Comment	WCC Response
34	We would like to see Air Quality monitoring using low-cost sensors (LCS), integrated into the charging infrastructure. LCS capable of measuring PM2.5 and compliant to BSI PAS 4023:2023 ("Selection, deployment and quality control of low-cost air quality sensor systems in outdoor ambient air – Code of practice") often utilise Internet of Things (IOT) technology, would complement the charge point operator concession contract.	WCC is not aware of EVCI that integrate LCS to monitor air quality. Most EVCI is likely to be post or wall with little free space for customisation. As this will be outside of the requirements of LEVI, this will be reliant on the goodwill of the operator. Once an operator has been appointed this can form part of discussions.
35	10.1.7 It is noted that the oversight and delivery of the 15-year contract is internal to WCC. WRS would welcome a wider engagement with District Council representatives to ensure the equity and fairness of the delivery of EV charging infrastructure.	Noted, Via Midlands Connect, there has been significant amount of work undertaken in gauging the number of chargepoints required in each district and throughout the wider consortium, (developed from the requirements of LEVI funding) this numbers will end up as minimum deliverables in the specification for tender. District Councils have been involved in looking at numbers and possible suitable types of locations that were identified by the consultancy support and in addition, they have been given the opportunity to propose additional locations to satisfy particular local political and social needs. Actual site selection will rely heavily on the operators and where they can realistically deliver according to availability of / distance from connection points, grid constraints and the commercial ROI required for the operator; final veto will remain with WCC.
36	(ibid.) reference in footnote 12 highlights the potential need for upgrading of lamppost infrastructure. Generally, we would support the moving of lamppost next to the carriageway to rationalise street clutter, particularly for disabled people. This should ideally be within 0.5m of the kerb line.	Noted, however it is beyond the remit of this consultation to secure the upgrading and moving of lampposts and as such the use of lamppost charging will not be a focus of for WCC.

