


Title of proposed EIA	Electric Vehicle Charging Point Strategy
Reference No	EQUA714
EA is in support of	New Function
Review Frequency	Two Years
Date of first review	01/10/2023
Directorate	Inclusive Growth
Division	Transportation and Connectivity
Service Area	Transport Infrastructure Projects
Responsible Officer(s)	 Sylvia Broadley
Quality Control Officer(s)	 Naomi R Coleman
Accountable Officer(s)	 Philip Edwards
Purpose of proposal	Adoption of the Electric Vehicle Charging Point Strategy
Data sources	Survey(s); Consultation Results; relevant reports/strategies; Statistical Database (please specify); relevant research
Please include any other sources of data	
ASSESS THE IMPACT AGAINST THE PROTECTED CHARACTERISTICS	
Protected characteristic: Age	Wider Community
Age details:	<p>There is no adverse impact on any particular age group as a result of expanding the EV charging network in Birmingham.</p> <p>Supporting the use of electric vehicles will have a positive impact in terms of reduced vehicle emissions and improved air quality – a positive, particularly for young and elderly age groups who are more adversely affected by air pollution. As an example, children in pushchairs and at walking height to vehicle exhausts are particularly exposed to pollutants such as diesel particulates which cause respiratory conditions. This strategy will support a reduction in this type of exposure.</p> <p>Pavement charging options which would entail trailing cables have been discounted within this strategy due to the potential to cause trip hazards/obstruction, which could be of particular concern to more elderly age groups, and parents with pushchairs.</p>
Protected characteristic: Disability	Wider Community
Disability details:	<p>Research by Motability identifies that by 2035, up to 1.35 million disabled people in the UK will be wholly or partially reliant on public charging infrastructure. The Motability scheme enables a person in receipt of a state provided mobility allowance to use all or part of their allowance to lease a new vehicle with insurance, road tax, servicing, tyres and breakdown cover all included. A number of Electric Vehicles are already available through the Motability scheme and this is likely to increase significantly going forward. Therefore the expansion of the EV charging network within Birmingham will have a significantly positive impact on disabled people.</p> <p>The City-wide Electric Vehicle Charging Strategy includes specific considerations around the provision of charging points to ensure access for Birmingham's disabled residents and visitors. These considerations include appropriate height of charge points, accessibility around the charge point area and minimisation of trip hazards. Technologies and innovative charging solutions that have actively considered accessibility for disabled people with mobility and/or dexterity impairments will be prioritised.</p> <p>The specific design considerations for each charging site will be determined by the EVCP type and location; however, ensuring that each chargepoint is designed in a way that considers all those using the space around the EVCP as well as the EVCP itself is critical to accessibility of the future charging network. In designing the EVCP infrastructure, our partner ESB Energy will adhere to best practice principles; for example, those outlined in London's electric vehicle charge point installation guidance and Government's upcoming accessibility standards, expected in 2022.</p> <p>Key considerations for disabled access include minimum parking bay length, width and space between bays to ensure adequate space, kerb height, and chargepoints being of a height suitable for wheelchair users. While it will not always be possible to adapt all bays to ensure adequate space (e.g. in bays not previously designed for disabled access in off-street car parks), ESB Energy and Birmingham City Council will ensure that access is provided in sufficient bays to meet the needs of Birmingham's disabled residents and visitors.</p> <p>There will be no loss of blue badge parking bays as a result of the first phase of EVCP roll-out. Any subsequent installation of charging points will also ensure that there is no net loss of blue badge parking bays, even if relocation of spaces is required at any point.</p>

	<p>Blue badge holders remain able to park for free in any available on-street pay and display parking space in the city. It is not possible to indicate figures for loss of standard on-street parking spaces as a result of installing charge points as the identification of sites and the number of charge points required are yet to be determined. The strategy sets out principles for a long-term partnership with ESB Energy to accommodate EV market demand and support wider transport policy objectives.</p> <p>The wider aim to effect significant modal shift away from private car usage and ownership will support prioritisation of road space and parking space for those who rely most on car use, particularly those with mobility needs.</p>
Protected characteristic: Sex	Not Applicable
Gender details:	There is no evidence of a positive or negative impact on this group as a result of the proposal.
Protected characteristics: Gender Reassignment	Not Applicable
Gender reassignment details:	There is no evidence of a positive or negative impact on this group as a result of the proposal.
Protected characteristics: Marriage and Civil Partnership	Not Applicable
Marriage and civil partnership details:	There is no evidence of a positive or negative impact on this group as a result of the proposal.
Protected characteristics: Pregnancy and Maternity	Wider Community
Pregnancy and maternity details:	<p>Supporting the use of electric vehicles for essential car trips will have a positive impact in terms of reduced vehicle emissions and improved air quality this will have a positive health impact during pregnancy, when evidence shows that air pollution can be harmful.</p> <p>Design of charging infrastructure will avoid trailing cables and potential obstacles which could otherwise have been problematic when pushing a pram/pushchair or if there are mobility difficulties chased by pregnancy.</p>
Protected characteristics: Race	Not Applicable
Race details:	There is no evidence of a positive or negative impact on this group as a result of the proposal.
Protected characteristics: Religion or Beliefs	Not Applicable
Religion or beliefs details:	There is no evidence of a positive or negative impact on this group as a result of the proposal.
Protected characteristics: Sexual Orientation	Not Applicable
Sexual orientation details:	There is no evidence of a positive or negative impact on this group as a result of the proposal.
Socio-economic impacts	<p>Air pollution in Birmingham has been shown to affect areas of the city with higher levels of deprivation. The strategy will improve the availability, accessibility and affordability of electric vehicles when needed for essential car journeys. At the same time the strategy supports the overall aims of the Birmingham Transport Plan to effect modal shift away from private car ownership and usage. This will improve air quality and levels of noise pollution for those communities most affected by air pollution.</p> <p>The City-wide EV Charging Strategy has a key focus on enabling the widest use of publicly accessible charge points. Therefore the Council, with ESB Energy, are investigating charge point solutions for residential areas, where there is low grid capacity, coupled with the challenges of residential areas of high-rise flats and terraced housing where there is limited or no off-street parking no off-street parking. This requires more innovative solutions that are 'fit for purpose' within those residential areas.</p> <p>It should be noted that this equality assessment is focussed on the delivery of a charge point network, not the vehicles themselves so does not address the potential inequality of affordability of car ownership.</p>
Please indicate any actions arising from completing this screening exercise.	<p>Ongoing investigation into innovative charging options as these arise.</p> <p>Ongoing application of best practice principles regarding charge point accessibility for disabled users.</p> <p>Ongoing identification of charging point sites, with no net loss of blue badge parking spaces.</p>
Please indicate whether a full impact assessment is recommended	NO
What data has been collected to facilitate the assessment of this policy/proposal?	<p>Extensive data collection and modelling was undertaken for the EV Charge point strategy , including demand modelling, EV uptake scenarios, location identification, EV vehicle sales, and technology choice.</p> <p>Information regarding Disabled EV drivers was gathered from the following articles/research reports:</p> <p>https://uk.motor1.com/news/461244/disabled-drivers-struggle-ev-network/</p> <p>https://www.ridc.org.uk/sites/default/files/uploads/Research%20Reports/ElectricCars/RiDC_ElectricCars_Report.pdf</p>

Going Electric? Research report into the accessibility of plug-in electric vehicles

Research Institute for Disabled Consumers surveyed the RiDC consumer panel, Disability Motoring UK and local disability networks regarding Consumer knowledge of, and attitudes towards electric vehicles (2019)

<https://www.motability.org.uk/motability-news/accessible-ev-charging-user-engagement-findings-published/>

Data		Source
TEMPPro Trip End Data	The data used here is taken from the Trip End Model Presentation program (TEMPPro) provides datasets for vehicle trips across the UK, which are approved by the Department for Transport and used widely for traffic modelling. https://www.gov.uk/government/publications/tempro-downloads	
Reliance on On-Street Parking	Element Energy's off-street parking model was used to estimate the number of vehicles with access to off-street parking, with remaining vehicles being entirely reliant on on-street charging. The model is based on 2011 Census data on accommodation type broken down by number of cars and vans registered at each dwelling, and car and van ownership, at output area (OA) level. ^[1] ^[2] Estimates for the share of different household types with access to off-street parking were taken from a study conducted by the RAC Foundation ^[3] and used to determine the share of households and vehicles with access to off-street parking.	
Traffic Flow	Traffic flow was taken from road traffic statistics published by the Department of Transport showing annual average daily flow data (AADF) for traffic flow along major roads in the UK. https://roadtraffic.dft.gov.uk/downloads	
Amenities and Taxi Ranks	Data on the locations of amenities and taxi ranks are open source, retrieved from OpenStreetMap through GIS software.	

[1] ONS. CT0876: Accommodation type (excluding caravans or other mobile or temporary structures) by car or van availability. (2011)

<https://www.ons.gov.uk/peoplepopulationandcommunity/housing/adhocs/009575ct08762011census>

[2] Nomis. KS404UK: Car or van availability. (2014)

<https://www.nomisweb.co.uk/census/2011/ks404uk>

[3] Bates & Leibling. Spaced Out – Perspectives on parking policy. (2012)

<https://www.racfoundation.org/research/mobility/spaced-out-perspectives-on-parking>

Consultation analysis

Adverse impact on any people with protected characteristics.

Could the policy/proposal be modified to reduce or eliminate any adverse impact?

How will the effect(s) of this policy/proposal on equality be monitored?

What data is required in the future?

Are there any adverse impacts on any particular group(s)

No

If yes, please explain your reasons for going ahead.

Initial equality impact assessment of your proposal

Consulted People or Groups

Informed People or Groups

Summary and evidence of findings from your EIA

The purpose of this proposal is for Birmingham City Council to adopt the publicly accessible City-wide Electric Vehicle (EV) Charge Point Strategy (2021-2032). The strategy includes the existing initial roll-out of 197 EV fast and rapid chargers (394 charge points) in strategic locations, to kick-start the 'charge and go' approach of the strategy, across the city centre and within local communities, followed by the ongoing deployment of publicly accessible charge points until 2032. A key focus of the strategy is on enabling the widest use of public accessible charge points, therefore they will continue to be placed at strategic points, whilst also targeting the use of innovative charge point technologies to be installed in accessibility-challenged areas where there is low electric grid power coupled with residential areas of high-rise flats and terraced housing where there is limited or no off-street parking.

The proposals within the City-wide EV Charging Strategy, will have no overall negative impact on any of the protective characteristics. They will have a positive impact for all citizens due to the increased public amenity provided by the network of charging points.

Supporting the use of electric vehicles will have a positive impact in terms of reduced vehicle emissions and improved air quality as well as reduced noise pollution. This in turn, will have a positive impact on all citizens, but particularly young, elderly and pregnant citizens who are more adversely affected by air pollution.

QUALITY CONTORL SECTION

Submit to the Quality Control Officer for reviewing?

Quality Control Officer comments

Decision by Quality Control Officer

Submit draft to Accountable Officer?

Decision by Accountable Officer

Date approved / rejected by the Accountable Officer

Reasons for approval or rejection

Please print and save a PDF copy for your records

Julie Bach

Person or Group

Content Type: Item

Version: 35.0

Created at 21/06/2021 11:46 AM by  Naomi R Coleman

Last modified at 04/10/2021 02:56 PM by Workflow on behalf of  Philip Edwards

No

Approved.

Proceed for final approval

Yes

Approve

04/10/2021

Content with analysis

Yes

Close