BCC City-Wide EV Charging Strategy

15th December 2021

Birmingham City Council is committed to reducing the city's emissions, of which transport is a key contributor.

- In response to the Climate Crisis, Birmingham City Council (BCC) declared a climate emergency in 2019 and has committed to reaching net zero carbon emissions in the early 2030s.

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- A third of Birmingham's CO_2 emissions come from transport, the highest of any sector.[1]

11.5 million

- There are over 11 million vehicle miles travelled per day in Birmingham, the vast majority of which are by car.[2]

Decarbonisation of transport will require a rapid switch to electric cars and vans, alongside significant modal shift away from private vehicle use to public transport, shared mobility, walking & cycling.

- **To enable the uptake of electric vehicles, a comprehensive public EV charging network across Birmingham will be needed.**
- This network must be accessible to all of Birmingham's residents and serve the needs of all key user groups within the city, including:
  - taxis (hackney carriages and private hire vehicles)
  - car clubs
  - commercial fleets
  - residents without off-street parking.
- In partnership with ESB Energy, the Council has already taken steps to begin expanding the public charging network with plans to deliver 394 fast and rapid charge points by 2022, as Phase 1 of EV Charge Point Strategy to 2032.

This city-wide EV charging strategy provides information on:

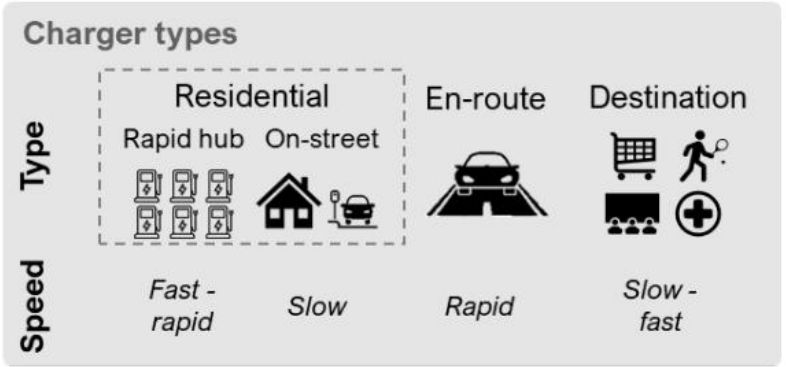
- **How much** EV charging infrastructure will be needed by 2030?
- **Where** should this infrastructure be deployed?
- **What timeframe** should this infrastructure be deployed over?

[1] UK Local Authority CO_2 Emissions https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2018
[2] UK Department for Transport 2019 https://roadtraffic.dft.gov.uk/local-authorities/141

Strategy focus - the deployment of fast & rapid hub chargers supported, where necessary, by innovative on-street solutions

Delivering a 'Charge-and-Go' Model

- The strategy prioritises **fast & rapid chargers deployed in hubs**, with innovative on-street solutions deployed in challenging areas (e.g. space and grid constraints)
- This model is the most **compatible with modal shift** away from private car use towards shared vehicles, taxis and private hire vehicles.
- Fast & Rapid hubs will be **deployed at strategic sites** such as public car parks , public parks and public land.



Ensuring city-wide coverage

- The strategy **aims to ensure the widest possible access to charging infrastructure in Birmingham**.
- Areas expected to have the highest demand for charging across key user groups (see vehicle scope) will be prioritised in the short term (to 2025) with comprehensive rapid charging across Birmingham by 2030.

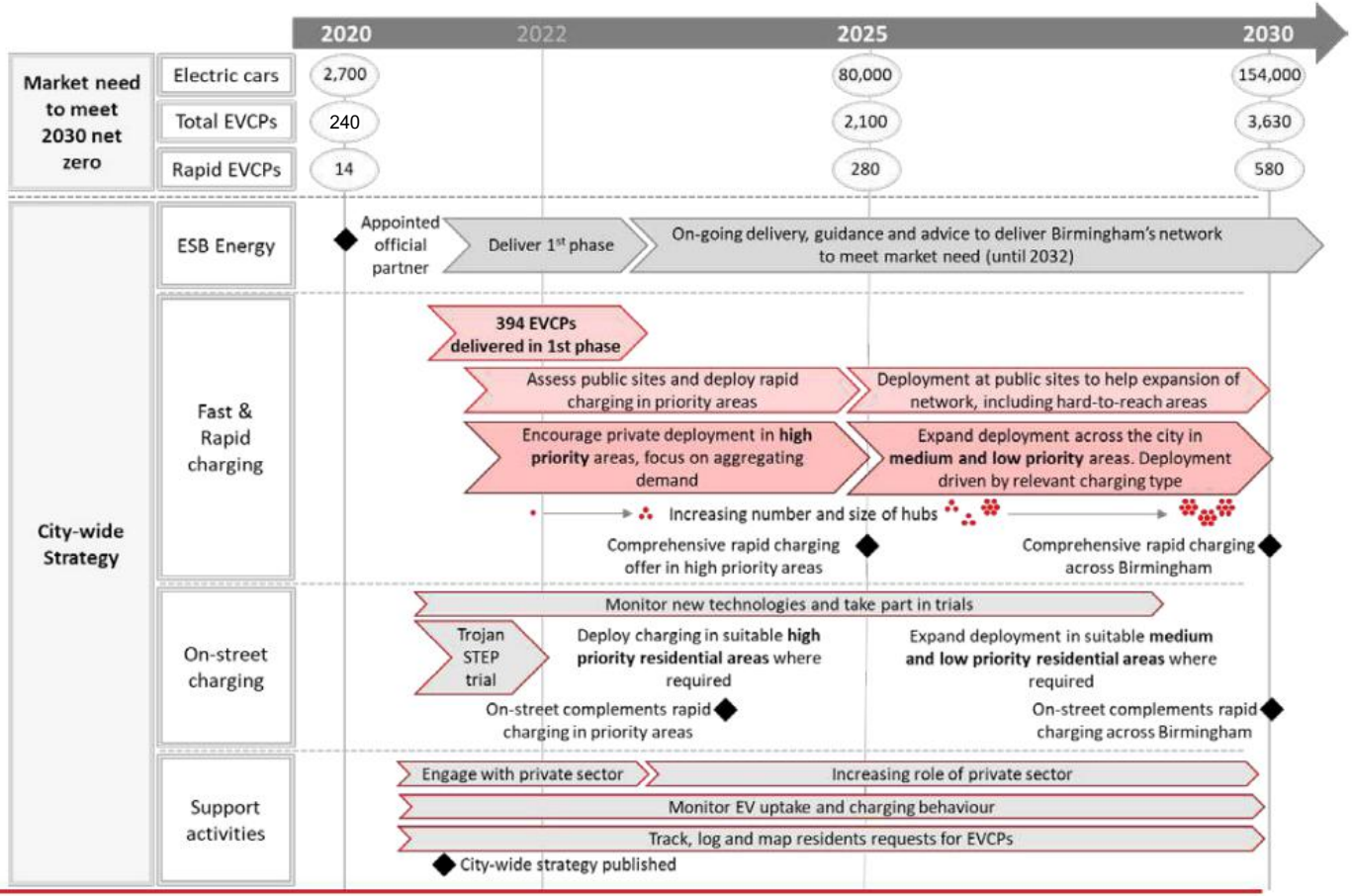
Communication and Public Consultation

- We will continue to engage with the public through established channels (eg BeHeard) to ensure we understand charging needs and barriers to use, such that the strategy remains adaptable to future opportunities.

Roadmap for delivery

This roadmap shows the focus of Birmingham City Council's actions over the next decade.

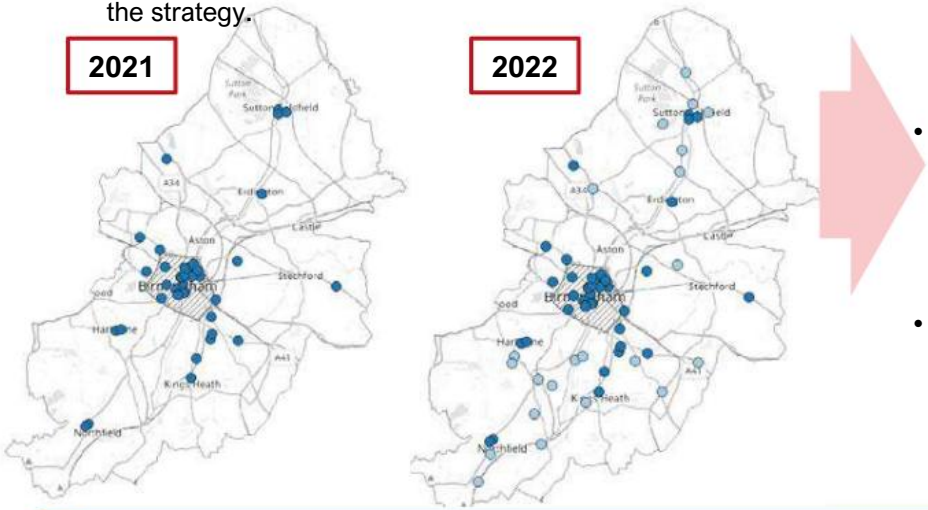
It is expected that private sector deployment will continue alongside Council activities, deploying a portion of the city's future EV charging network.



Areas of high projected demand have been identified and will be prioritised for deployment of EVCPs

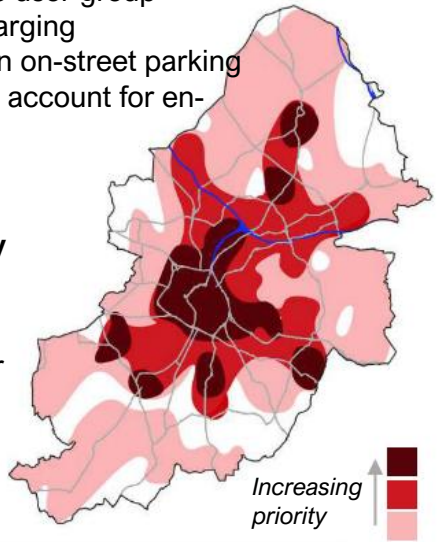
Current & Planned Deployments-394 EVCPs

- Deployment of fast & rapid charging infrastructure, largely based on strategic site availability & grid assessment..
- Charge points delivered by ESB, BCC's procured charge point network development partner until 2032 and co-developer of the strategy.



City-wide EV charging network- 3,600 EVCPs

- Priority areas for rapid hub deployment have been identified based on the density of:
  - **Taxi ranks**, as a high mileage user group
  - **Amenities** for destination charging
  - **Residential** with a reliance on on-street parking
  - **Traffic flow** on local roads to account for en-route charging
- The figure on the right shows areas of high projected demand and therefore the **highest priority areas for deploying charging infrastructure**.
- Areas of low grid capacity & lower demand are less likely to be suitable for rapid hubs; the Council will instead prioritise these areas for innovative on-street charging solutions.



Sites planned to be deployed by Nov 2021

Sites planned to be deployed by Sept 2022 – locations will be subject to site assessment and more sites will be targeted than shown

The first set of ESB charge points currently being deployed, where there is highest demand.

- Currently working across 65 sites (Highway, public car parks, public parks and public land) - including Aston, Sparkhill, Northfield, Saltley/Alum Rock, Erdington, Handsworth, Bordesley, Bournville & Selly Oak.
- By end of Dec 2021- minimum fully commissioned:
  - 9 x 50 kW rapid chargers-9 EVCPs
  - 27 x 22 kW fast chargers- 54 EVCPs
- By April 2022 – 45 Rapids & 90 fast.

- Key focus of EVCP Strategy approved by Cabinet - Use of public land; for residential areas that have low electric grid capacity, coupled with limited off-street parking on-going public consultation to gauge local community intent to inform key areas of demand; authority to access grants to roll out emerging and innovative EV charge point solutions in line with ECVP Strategy.
- Focus on Communications – BCC webpage, Birmingham Connected (PR, FAQs, EVCP maps of installed charge points, Be-Heard & Corporate Communications

Site Name	No. 50 kW	No. 22 kW
Navigation Street Car Park	4	2
Dudley Street Car Park	2	2
Jewellery Quarter Car Park	0	6
Millennium Point Car Park	0	6
Snow Hill station Car Park	0	3
Aston Street	0	1
Harborne High Street	0	1
Temple Row	0	1
Moseley Village Car Park	0	1
Kings Heath High Street	2	1
Bristol Road South	0	1
Margaret Street	0	1
Manor Road, Sutton Coldfield	1	1

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