



Electric Vehicle Charging Infrastructure Update



**Green City Partnership AGM
15 July 2022**

**Richard Banks
Senior Manager- Logistics and Environment
TfGM**





Agenda

1. Background
2. GM EVCI Strategy
3. EVCI in GM
4. Tariff
5. Government Action for Chargepoints
6. Future of EVCI Study





Background

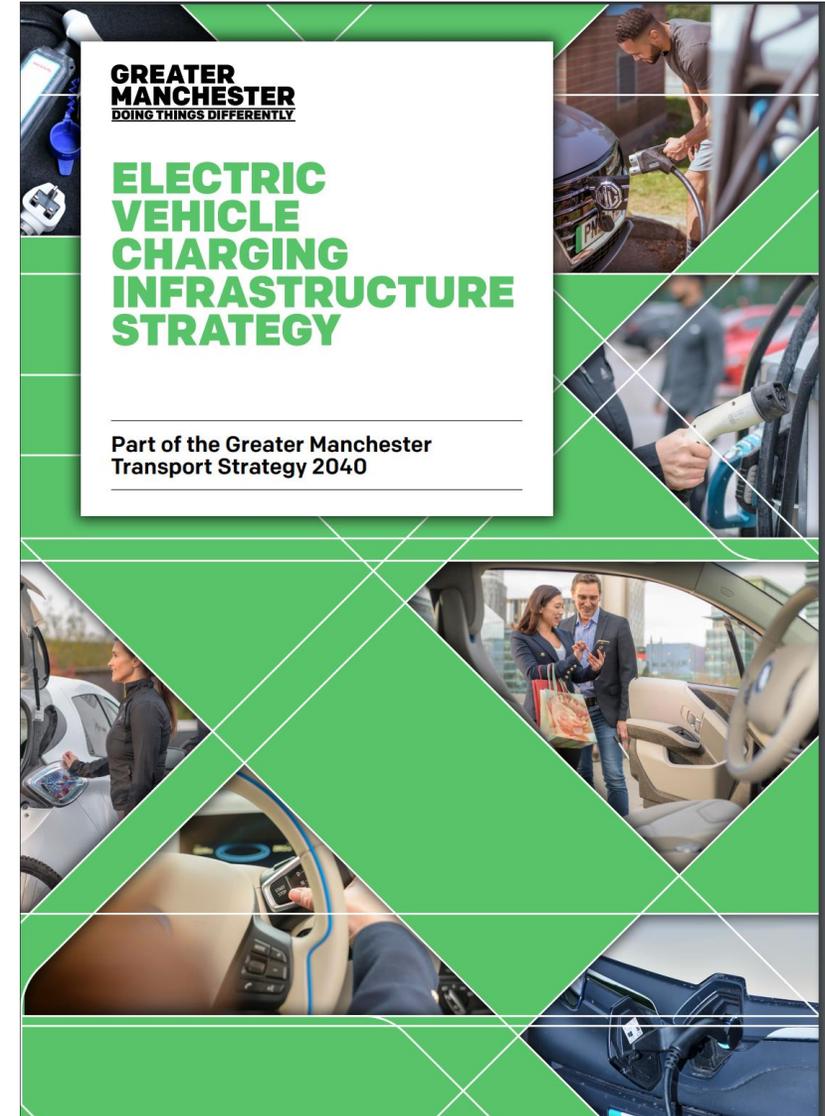
- The delivery and operation of Greater Manchester's publicly funded Electric Vehicle Charging Infrastructure is co-ordinated by TfGM to ensure a consistent and co-ordinated approach across the city region.
- TfGM established the Greater Manchester Electric Vehicle (GMEV) Network in 2013. The network offered free charging for a nominal membership fee, with the costs being absorbed by TfGM. It was decided that the network required a technological renewal and strategic expansion if it were to support the mass adoption of EVs across the region and play a central role in improving air quality.
- The transition to Be.EV commenced in June 2020, with the appointment of the new service provider Amey-Swarco from summer 2020, the publicly owned charging points have been upgraded, rebranded and included in a new network called Be.EV.
- In mid-December 2020, Amey advised TfGM of their intention to sell the Amey MAP Services (AMAPS) unit, which delivers the EV Contract, to a NewCo that has been formed by previous members of Amey's management team.
- AMAPS are now owned by Iduna Infrastructure Ltd.
- TfGM use the arrangement with AMAPS to implement 'publicly owned infrastructure' where government funds have been made available. Iduna have ambitions for 'supplier owned infrastructure' expansion (using funds raised from a bond offer) where they own the asset and come to a commercial deal with the landowner.

ELECTRIC TRAVEL



GM EVCI Strategy

- Approved by GMCA September 2021.
- Main rationale of strategy is the availability of and access to charging infrastructure is recognised as a critical barrier to the adoption of EVs.
- As part of the public conversation on GM CAP proposals, the availability of charging points was cited as a key barrier for businesses and individuals in switching to an EV.
- The requirement for appropriate vehicle charging infrastructure is even more critical given that the Government has now committed to phasing out the sale of new petrol and diesel vehicles by 2030.
- The EV Charging Infrastructure Strategy therefore aims provides a clear vision, objectives and strategic principles to inform a delivery plan for the deployment of public charging infrastructure across the city region.





Main Themes within Narrative of GM Strategy

- The need to ensure that an under provision of EVCI is not prohibiting the transition to EVs
- The need to accelerate the transition to EVs to meet net-zero carbon targets especially in light of the ban of the sale of new petrol and diesel cars by 2030 and hybrids by 2035.
- The need for public sector intervention in the short term to encourage and accelerate the transition to EVs, demonstrate commitment to EV technologies and encourage investment
- The long term need for the development of a mature commercial EVCI network in GM that allows public sector intervention to be scaled back.
- EVs and EVCI are emerging technologies that create uncertainties around accurately projecting demand and therefore there is a need for flexibility to change investment priorities
- Alternatives to home charging for those without off-street parking including EV car clubs, workplace charging, EVCI at park and ride sites.





GM EVCI Totals

Charger Type	Slow (2.3-3.7 kW)	Fast (7-22kW)	Rapid	Ultra Rapid (120-350kW)	Total
Number	15	311	93	51	470 (Circa 925 Connectors)

Zap Map Data, June 22

Be.EV network totals

Charger Type	Fast (7-22kW)	Rapid (Up to 50kW)	Taxi	E-hubs	Total
Number	118	23	1	2	144 (Circa 288 Connectors)



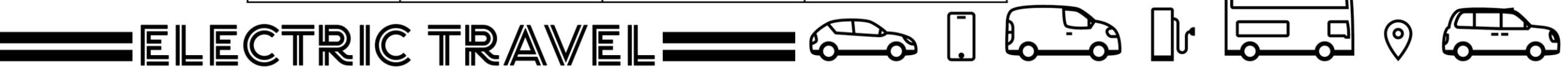


Tariff

- A tariff was introduced on the Be.EV in October 2021, as agreed by the GMCA. Setting of this tariff is a new activity for TfGM.
- TfGM has a contract with AMAPS (owned by Iduna Infrastructure) to operate and maintain the publicly owned infrastructure (POI), as part of the Be.EV network. The Chief Executive Officer, GMCA & TfGM, in consultation with the Mayor have a delegation from the Greater Manchester Combined Authority to set the tariff for the Publicly Owned Electric Vehicle Charging Infrastructure maintained by Be.EV.
- The tariff increased for the first time on 23 May in response to the energy price rise, a passthrough of 24p/kWh (20p/kWh plus 20% VAT). Public charging attracts a 20% rate of VAT.

Be.EV tariff May 2022

	Pay-as-you-charge tariff	Be.EV membership tariff	Be.EV GM taxi membership tariff
Fast Charger	£0.49 per kWh	£0.46 per kWh	n/a
Rapid Charger	£0.59 per kWh	£0.56 per kWh	£0.49 per kWh





Government action for chargepoints

- On 25 March, the Government released a range of documentation related to EV/EVCI.
- This included the UK's national strategy for EV.
- OZEV have also released response to consumer experience at public chargepoints consultation.
- Research on the future charging needs and preferences of UK drivers without off-street parking was also released.



Implications for Greater Manchester in Govt Strategy



- **Obligation that areas develop EVCI plans** – we have the strategy and website outlining programme but important to keep up to date and need to take into account charging for e-bikes etc.
- **Rapid Charging Fund** – this impacts on service areas of motorways and strategic roads but potentially a role for us to influence and advocate.
- Ascertain best approach for **GM future funding bids**
- **Building regs on new homes and non residential come into force summer 2022**, so a need to ensure that transport and planning departments are linked.
- **Payment roaming** – Be.EV aren't currently on a roaming platform. This could be industry led or eventually mandated.
- **Payment Types** – Our early rapid chargers at Etihad/Salford Royal don't have **contactless** which will be a standard. We will need to explore retrofit options.
- **Accessibility at charging points** – an area that Disability Reference Group and/or LA disability stakeholder groups could feed into.
- **Peer-to-peer charging** will see many people making their private chargepoints available to rent- does GM have a role in this facilitation?





Implications for Greater Manchester

- **On Street Charging**.....Strategy states that "Cables will not be allowed to trail across the pavement unless adaptive infrastructure is provided to accommodate them safely (e.g. gullies). Anything that creates a trip hazard does not constitute adaptive infrastructure." There are examples of underground cabling (p.42)- e.g the DoorSTEP project that TfGM will explore.
- "Chargepoints must be incorporated into existing street furniture or parking bays wherever possible." To be explored further.
- "Government will not be intervening in the destination charging sector, and will look to end direct subsidy support for home charging and workplace charging at the earliest appropriate time."
- Govt setting out funds focusing on providing EVCI for flats and on smaller accommodation businesses (such as B&Bs) – a role for GM to facilitate this?
- Likely three consultations to follow...on TROs, on the use of permitted development and on Transport Planning Practice Guides. TfGM and EVCI working group to feed into these as appropriate.





Future of EVCI in GM

- The last Public Owned Infrastructure related fund that became available was the On-Street Residential Charging Scheme Fund (ORCS), which provided grant funding for local authorities to install residential chargepoints where there is no access to off-street parking. The scheme was to install fast chargers. Alongside the LAs, TfGM identified sites that met the policies set out in the EVCI Strategy and were suitable for an ORCS bid, as per the scheme rules.
- However, a review of the operational costs highlighted that the financial case for fast chargers is not strong and there is no clear commercial route for TfGM to make a bid into this scheme on behalf of GM. A bid was not submitted as commissioning more fast chargers would place an ongoing demand on the levy /is dependent on rapid chargers generating income to offset their costs.





Future of EVCI Study

- GM needed a high level review to establish how the public sector can best influence the rollout of publicly accessible EVCI.
- The Authorities are significant landowners and as the Highway Authorities are asset rich but with limited funds for roll-out.
- How can GM maximise its assets to encourage and accelerate the transition to EVs, without creating ongoing revenue issues?





Future of EVCI Study

- Grant Thornton appointed for Study running May to July. Terms of Reference:
 - What role should Greater Manchester, including TfGM and the 10 Local Authorities, have in the roll-out of EVCI in the short (0-2 years), medium (2-5 years) and long-term?
 - How, as significant landowners and the Highway Authorities (as well as TfGM owning rapid transit stops and stations), could Greater Manchester maximise their assets to encourage and accelerate the transition to EVs?
 - How do we develop Publicly owned infrastructure that is not dependent on public subsidy?





ELECTRIC TRAVEL

electrictravel.tfgm.com

