

### **Note on the GM Electric Vehicle Charging Infrastructure Strategy**

Availability of and access to charging infrastructure is recognised as a critical barrier to the adoption of Electric Vehicles (EVs). As part of the public conversation on GM Clean Air Plan 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 to provide a clear vision, objectives and strategic principles to inform a delivery plan for the deployment.

This draft strategy has been written with guidance from District officers sitting on the EVCI working group. Comments have also been sought from both the Energy Saving Trust and Electricity North West.

The EVCI Strategy is a sub-strategy of the GM 2040 Transport Strategy, where a range of sub-strategies are due to be produced this calendar year, including a Streets for all sub-strategy.

EVs need to be considered within a framework for the decarbonisation of transport based on reducing overall need to travel, shifting journeys to active travel and sustainable modes and then for those remaining journeys, switching to ultra-low emission vehicles and cleaner fuels.

The vision within the strategy is to “to be an exemplar city region for enabling the electrification of transport in the context of a smart, integrated, sustainable mobility network. By 2030, Greater Manchester’s residents and businesses and visitors to the region, who choose to travel by car or LGVs, will be able to use electric vehicles with the confidence that they will be able to conveniently recharge them (via public or private charging points); and in doing so will help to improve air quality and reduce carbon emissions across the conurbation.”

The strategy objectives are:

- to establish a financially sustainable, publicly accessible EVCI network, scalable to growth in demand and flexible to changes in vehicle technologies.
- to clarify GM’s requirements for a future public and privately funded and delivered EVCI network that supports the accelerated transition to EVs among businesses, residents, and visitors; whilst minimising car dependency and private car ownership.
- to establish a clear set of priorities for the expansion of the publicly funded section of the EVCI network, focused on supporting the delivery of GM’s Clean Air Plan and 2038 carbon neutral target by accelerating the transition to EVs for the most polluting vehicles.
- to provide a clear set of EVCI network strategic principles and delivery criteria for publicly funded EVCI to highlight the types of infrastructure and charging locations that will be supported in principle by TfGM and GM local highway authorities.
- to attract and shape private sector investment in the EVCI network by providing more clarity on GM’s priorities and how TfGM and Local Authorities will work with private sector EVCI providers and operators; with the ultimate aim of establishing a mature, commercial EVCI market.

The three main themes are that:

- There is need to ensure that an under provision of EVCI is not prohibiting the transition to EVs and the need to encourage and accelerate the transition to EVs to meet net-zero carbon targets especially in light of the Nov. 2020 Government announcement of the ban of the sale of new petrol and diesel cars by 2030 and hybrids by 2035.
- There is also a 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 from the private sector. Longer term, there is a 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 for EVCI beyond 2025 and therefore there is a need for flexibility to change investment priorities and a need for regular review and monitoring of market developments to ensure that the EVCI network continues to meet with demand.

In terms of deployment of publicly funded EVCI, the priority will be projects which support the CAP and 2038 net zero carbon ambitions by aiding the accelerated transition to EVs for the most polluting vehicles; providing opportunities for those businesses most affected by the CAZ to transition to EVs and supporting those who would find it most difficult to transition to EVs due to home charging constraints.

The most sustainable solution for transport and energy systems overall is for publicly funded EVCI hubs or mini-hubs of varying power requirements and scales to correlate with destination dwell times and charging behaviours. Initial investment will provide a blend of EVCI that prioritises meeting the demand likely to be generated by the most polluting vehicles transitioning to EVs to support achieving air quality and carbon targets.

For those unable to charge at home, proposed alternatives include:

- Developing and expanding EV car club offer (aligned to the E-Hubs trial project)
- Developing community charging hubs
- Engaging with employers to encourage more workplace charging
- Destination charging including park and ride sites

The programme of planned additional Electric Vehicle Infrastructure will be included on a sub-site of TfGM.com dedicated to electric vehicles. This sub-site will also include an online map to facilitate better co-ordination of requests from residents for on-street charging locations. This map will allow residents to 'pin-drop' suitable locations and will provide other useful data on EV take up.