

TRAFFORD COUNCIL

Report to: Executive
Date: 22 November 2021
Report for: Decision
Report of: Executive Member for Environment and Regulatory Services

Report Title

Electric Vehicle (EV) Charging Points in Trafford – Update Report

Summary

This report provides updated information to Members relating to the rollout and options associated with the introduction of EV charge points across Trafford.

Recommendation

The Executive is recommended to:

- a) Note the outcome of the GMCA Contract with Be.EV (Iduna) relating to EV charge points in Trafford.
- b) Approve the approach for the rollout of EV charge points in Trafford as outlined in the report.
- c) Approve in principle the entering into of leases with Be.EV for rollout of EV charge points across Trafford and delegate authority to the Corporate Director of Place to finalise the terms of the leases.
- d) Delegate authority to the Corporate Director of Place, in consultation with the Corporate Director for Governance and Community Strategy and the Director of Finance and Systems and relevant Executive Members to enter into negotiations and agree future investment opportunities for rollout of EV charging points and hubs through JV or other partnership vehicle.
- e) Delegate authority to the Corporate Director of Governance and Community Strategy to complete any documents required to give effect to the proposals contained in this report.

Contact person for access to background papers and further information:

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Background Papers: None

Implications:

Relationship to Policy Framework/Corporate Priorities	Improving Public Health Improving Air Quality Improving Road Safety Green and Connected
Relationship to GM Policy or Strategy Framework	Air Quality Management Clean Air Plan Environment Plan
Financial	The report sets out the proposed options for the provision of EV charge points across Trafford. The accelerated rollout will be financed under lease arrangement with Be.EV (Iduna) under the existing procurement undertaken by TfGM. This covers both the capital investment and ongoing running costs and provides a 10% to 20% profit share depending on site. The profit share may need to be used to offset any loss of car parking income at certain sites, and charging options are being considered to mitigate any effects here in order to maximise the net income benefit to the Council and generate savings. Going forward options are being evaluated to identify the best risk/reward model for the Council for further roll out of EV, this includes the potential to develop a JV Partnership and/or direct investment in EV charge points – these carry additional cost risk but with potentially higher returns. There is £500k included in the capital programme approved by Council in February 2020, plus any external funding sources which may be available.
Legal Implications:	No legal implications from this report. Legal will need to be involved with sign off of the lease with Be.EV (Iduna).
Equality/Diversity Implications	Not Applicable
Sustainability Implications	Improving availability and access to EV charge points will lead to a more sustainable mode of transport and environment
Carbon Reduction	The introduction of EV Charge points contributes to the Clean Air Plan approved at Council in July 2021. Transition to electric vehicles will contribute to a positive net reduction of carbon within Trafford
Resource Implications e.g. Staffing / ICT / Assets	Not Applicable
Risk Management Implications	Not Applicable
Health & Wellbeing Implications	There are wide ranging health through less use of conventional vehicles and therefore air quality will improve.
Health and Safety Implications	The air quality will become cleaner through the implementation of the measures described in this report therefore improving health and safety.

1.0 Background

- 1.1 In March 2020 the Executive was updated on Trafford's suggested approach to EV charging and agreed to exploring the market further through a soft market testing exercise.
- 1.2 An update report was brought to the Executive in December 2020 seeking approval to soft market test and look at procurement options for rolling out EV charge points across Trafford.
- 1.3 The electric car market has continued to grow during the last 12 months and road transport is still a major contributor to the UK's greenhouse gas emissions. Reducing emissions from road transport remains a significant challenge and has now been stretched for the UK to reach net zero emissions targets by 2050 to 2035.
- 1.4 Greater Manchester and Trafford Council have since approved the Clean Air Plan and Zone (CAZ) at Council in July 2021. The Clean Air Plan includes proposals for a GM-wide Clean Air Zone, which is anticipated to launch on 30 May 2022, alongside more than £120m government funding to support local businesses upgrade to cleaner, compliant vehicles so they can travel in the Zone without incurring a daily charge.
- 1.5 The transition and demand to use and charge EV vehicles therefore is likely to increase significantly in the short to medium term.

2.0 Electric Vehicle Charging Soft Market Test and GMCA EV Strategy

- 2.1 During early 2021 Trafford Council with the assistance from STAR procurement reviewed the procurement options following the soft market testing of Expressions of Interest from known EV infrastructure providers. Providers were asked to outline their potential models for expanding the EV charging infrastructure for public use.
- 2.2 Also in 2021 GMCA launched the GM EVCI Strategy which is a sub-strategy of the GM Transport Strategy 2040 (GMTS 2040). It sets out objectives for EVCI which follow from the GMTS 2040 and should be considered alongside and read in conjunction with GMTS 2040 and the "Right Mix" vision for at least 50% of all trips to be made by active travel and public transport by 2040.
[Electric Vehicle Charging Infrastructure Strategy \(ctfassets.net\)](https://www.gmca.gov.uk/transport/evci-strategy)
- 2.3 Whilst there was appetite for the EV market, developing a procurement strategy that would be future proofed and aligned with the GMCA strategy procurement model would have potentially become complex. The ambition is to improve the EV charging experience by having a fully interoperable public charging network across Greater Manchester that has a leading and recognisable brand that exists across GM.
- 2.4 The initial focus for investment by GM for the next 3 years will be to provide a blend of EV Charging Infrastructure (EVCI) that prioritises meeting the demand likely to be generated by the most polluting vehicles transitioning to EVs as part of the Clean Air Plan Objectives. The three areas of focus is the taxi trade, EV Car Clubs and trials of small number of EV community based charging hubs.

- 2.5 Delivery of Trafford's EV infrastructure is currently being managed by TfGM on behalf of all the Greater Manchester Local Authorities. GM has appointed an EV Charging Infrastructure Service Provider (EVCISP) to deliver a range of EVCI solutions through a 7-year EVCI contract to expand, upgrade, re-brand and maintain the existing publicly owned EVCI.
- 2.6 The EVCI contract managed by TfGM involves two phases; the first phase involves the transition and rebranding from GMEV to Be.EV including the upgrade of 118 old GMEV fast chargers to new fast charge points (which is now complete) and the delivery of the Early Measures project delivering 24 new rapid charging points across 22 sites (including 1 site which is a dedicated taxi charge point)
- 2.7 As a result of the fast developing market and through the transition from GMEV to Be.EV by GMCA, Trafford now has the opportunity to utilise the appointed EVCISP to accelerate the introduction of EV charge points that aligns with the GM strategy within Trafford without the need to procure in isolation.

3.0 Acceleration of the EV Charge Point Infrastructure through Be.EV

- 3.1 Be.EV (Iduna) was appointed by Transport for Greater Manchester (TfGM) to roll out EV charging infrastructure across the region. Be.EV works closely with TfGM, the 10 Greater Manchester Local Authorities and other national bodies.
- 3.2 Trafford has been in dialogue with Be.EV in order to explore delivery options that will accelerate the rollout of EV across Trafford and to explore income and investment opportunities. The following are options that are being explored
- (i) **Supplier Owned Infrastructure:** the supplier (Be.EV) will be responsible for meeting the purchase/installation costs as well as the ongoing operation and maintenance costs and the supplier will own the EV Chargers i.e. no financial outlay for the third party (Trafford) granting the lease. The third party will be responsible for granting the lease / providing the land for Be.EV to install, maintain and use the EV Chargers.
 - (ii) **Publicly Owned Infrastructure** the local authority would pay for the capital costs and an ongoing maintenance fee in respect of the EV Chargers and would own the EV Chargers. Be.EV would supply, install and maintain the EV Chargers.
 - (iii) **Joint Venture:** the local authority and Be.EV both invest direct equity in a special purpose vehicle. The local authority would invest on similar terms to Be.EV (Iduna) and any other private sector investor, mitigating subsidy control/state aid issues by ensuring that they are investing as a market economic operator.
- 3.3 Under these models, all EV Chargers will use the Be.EV brand and customers will have the same unified brand experience.
- 3.4 To accelerate the rollout it is recommended to enter into a lease arrangement initially with a view to exploring the Publicly Owned Infrastructure and JV model to enable Trafford to receive a return on any potential investment. This option requires no capital investment from Trafford.

3.5 Trafford has £500k in the existing approved capital programme to invest and support the rollout of EV charging infrastructure.

4.0 Placement of the Be.EV Charging Infrastructure

4.1 Be.EV have conducted a desktop exercise, using their site location tool, and visited a number of the sites to ensure Trafford has a widespread and fair rollout of EV chargers across the Borough.

4.2 In partnership with Trafford Council, Be.EV have identified a number of sites that would be suitable for the development of EV charging infrastructure. The deployment of this infrastructure is a key part of your Clean Air Strategy and 2040 transport vision, and will incentivise residents to drive a positive change to the environment

4.3 Across Trafford it is proposed to deploy a mix of Fast, Rapid and Ultra-rapid chargers:

	kW	Time to charge (80%)	Typical location
Fast	7kW – 22kW	1 – 6 hours	Day long/overnight charging
Rapid	43kW+	20 – 60 min	Short stay locations
Ultra-rapid	100kW – 350kW	5 – 10 min	EV charging hubs

Table 1

4.4 Parking arrangements are a critical constraint that may require innovative placement of apparatus, especially if locations are selected where there is currently no off-street parking and pavement parking is prevalent.

4.5 Be.EV have utilised a mapping tool that identifies where residential frontages to park a car off road are limited and hence may require a hub to be located within close proximity to their premises. This then allows properties without driveways to have ready access to locally placed EV charge points within a 10 minute walk. This is required to ensure that there is a balanced amount of affordable and accessible infrastructure available for all those who may require it.

4.6 The mapping and site location tools available will allow Trafford and Be.EV to identify potential sites for local charge points where there is demand from a household without a driveway.

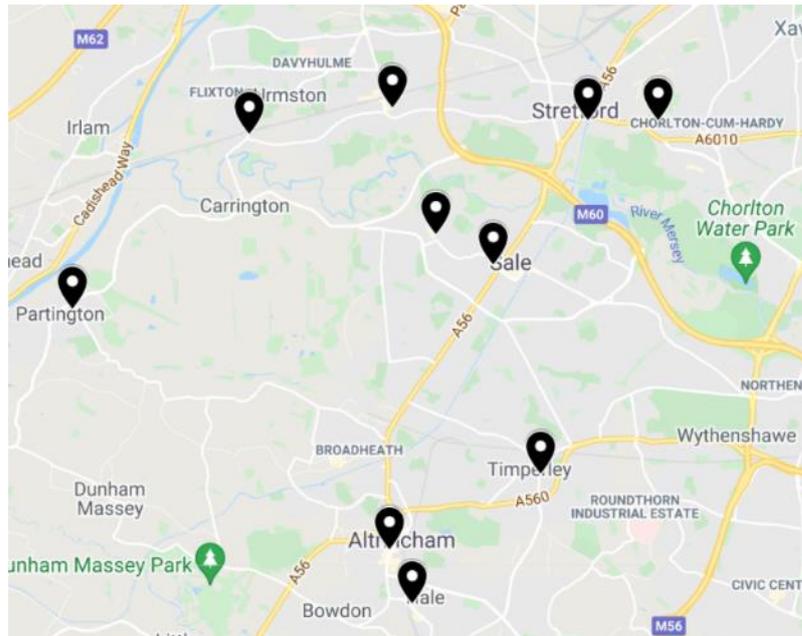


Map 1 - Ashton upon Mersey area



Map 2 – Ayres Road Area, Old Trafford

- 4.7 Map 1 illustrates a car park and streets in the Ashton upon Mersey area – that are within 10minute walking distance to potential EV charge points / mini hub
- 4.8 Map 2 illustrates properties in and around Ayres Road, Old Trafford with low probability of a driveway hence will need a local hub to charge their electric vehicle much like having access to a local petrol station.
- 4.9 Map 3 and Table 2 illustrates the proposed rollout for Phase 1 in Trafford: **Appendix A** details the locations and reason for choice.



Map 3 – proposed Phase 1 rollout

Ward	Rapids	Fasts	Total
Altrincham	3	3	6
Ashton on Mersey	0	3	3
Bucklow St Martins	2	2	4
Flixton	2	2	4
Hale	0	3	3
Longford	2	2	4
Sale	3	3	6
Stretford	2	2	4
Timperley	2	2	4
Urmston	8 ultra-rapids	0	8
TOTAL	24	22	46

Table 2 – Proposed Chargers in Wards

User experience & membership

- 4.10 The chargers will be branded Be.EV, as part of the unified network in the North, and have access to 8000+ members who will benefit from a reduced tariff and incentivised membership packages.
- 4.11 Be.EV recently conducted a Be.EV membership survey in June 2021, which returned over 1,370 responses (a 27% response rate). This survey gave insight in to charging habits, membership demographics, charging experience and recommendations going forward.

- 4.12 Highlights of the survey results regardless of whether a driver has access to home or workplace charging (66% of members surveyed have this access), they found that 96% of the members surveyed use the Be.EV network at least once a month. The behaviour pattern observed is that nearly everybody is using the public network for top-up charging and based on the convenience of use.

5.0 Funding / Financial Considerations

- 5.1 Grant funding is readily available and support for any funding application will be incorporated in the development of options as outlined in 3.2. Funding for example is available from OZEV and Innovate UK and other suitable government grants are likely to become available as a result of recent announcements. These grants however, require elements of match funding and the £500k already identified in the capital programme will be able to support this requirement should it be needed.
- 5.2 The Be.EV proposal for phase 1 as contained in this report will be funded by Be.EV including equipment, civils, power upgrades and ongoing operations. An estimate of the cash equivalent cost of this investment by Be.EV is of the order of £3.6million.
- 5.3 If the supplier owned infrastructure is accepted as the route to rollout Phase 1 then Be.EV have offered Trafford BC a range of net profit share which will range from 10-20% depending on the utilisation of a charger on a site. For example a hub, a busy location such as Regent Road would attract 20% profit share per unit whereas quieter locations would attract 10%. This is without any capital investment from Trafford
- 5.4 If Trafford were to invest in the infrastructure via options identified in 3.2(ii) and 3.2(iii) this net profit share would increase. These investment options require further development once future sites have been identified and future rollout options are agreed.
- 5.4 As above there is a potential opportunity to realise increased revenue with capital investment from Trafford. Future opportunities and financial considerations will be developed for future phases to be rolled out which will utilise our capital allocation of £500k.

6.0 TfGM Considerations

- 6.1 There is currently still only a small network of Greater Manchester Electric Vehicle (GMEV) charge units introduced by Transport for Greater Manchester (TfGM) across Greater Manchester (GM). The EV charging infrastructure is spread throughout the Greater Manchester districts with the next phases looking at taxi rank facilities. TfGM EV taxi rank proposals are located at Ashfield Rd Sale, The Quadrant Urmston & Trafford Wharf Rd.
- 6.2 Transport for Greater Manchester will continue to install, operate, maintain and collect any subsequent revenue from the new EV charging posts that they install.
- 6.3 Following the engagement of Be.EV by GMCA / TfGM in 2021 the 10 Districts including Trafford can now use the TfGM EV contract to install a seamless infrastructure model and Trafford have been in dialogue with TfGM to ensure a joined up approach to the rollout of EV infrastructure across Trafford.

6.4 Trafford will therefore continue to work with TfGM to support the GM work alongside this proposal.

7.0 Rolling out EV Charging across Trafford - Timescales

7.1 Typically from site agreement it takes three months to install an operating network. If power upgrades are necessary, which will be the case on some of the Trafford sites, Be.EV will continue to install chargers taking up current power capacity and alongside that will develop additional capacity at the substations to deliver the scale of infrastructure.

7.2 Subject to approval of this report and approach to delivery, Phase 1 of this proposal would be undertaken in Jan-March 2022.

7.3 The Office for Zero Emission Vehicles (OZEV) provides grant funding to install such infrastructure. Trafford will look to apply for funding to help with the costs of procurement and installation of on-street charging points for residential use were we are able to.

7.4 It is anticipated that there will be future funding opportunities that will support the rollout of EV charge point infrastructure that we can utilise and apply for.

8.0 Procurement

8.1 As contained in the report it is proposed to utilise the existing contract that GMCA / TfGM have commissioned with Be.EV to rollout additional apparatus in Trafford as the contract has been awarded to allow Districts to enter into their own lease arrangements.

8.2 STAR procurement are currently reviewing the contract and the lease option to allow the accelerated rollout to progress

8.3 Future options to enter into a JV or public owned model will be explored to ensure Trafford can maximise its income opportunities from this project.

9.0 Conclusions

9.1 The accelerated rollout of EV infrastructure to support increased demand as the transition from using fuel to electric vehicles is ever more important following approval of the Clean Air Plan in 2021.

9.2 Due to the engagement of Be.EV by GMCA / TfGM and the procurement options now available via this route Trafford has an opportunity to develop delivery options and rollout a wider network of EV charge points with a potential income stream.

9.3 The phasing of the rollout will see a marked increase in charge points in 2021/22 with a potential for further rollouts on a larger scale thereafter

9.4 There is the potential to scale up the income potential by investing more capital and rolling out a wider EV network of charge points especially if a joint procurement exercise is able to be developed.

10.0 Other Options

10.1 A range of initiatives and options are suggested to be explored further as included within this report and in the report of December 2020.

10.2 The other alternative is that we decide not fit EV Charging units within Trafford and rely on TfGM and / or private initiatives to do it. However, this would not support the Council's clean air initiatives or ambition to accelerate EV rollout in Trafford.

11.0 Consultation

11.1 Consultation with stakeholders, partners and members will be ongoing as part of the development and delivery of the project.

REASONS FOR RECOMMENDATION

To inform and seek approval from members to utilise the Be.EV contract awarded by GMCA/TfGM to rollout additional EV infrastructure in Trafford and allow the Corporate Director of Place to develop a model for a joint funded or public owned infrastructure relating to EV that has the potential to raise revenue.

Key Decision Yes

If Key Decision, has 28-day notice been given? Yes

Finance Officer Clearance	PC
Legal Officer Clearance	TR

CORPORATE DIRECTOR'S SIGNATURE



To confirm that the Financial and Legal Implications have been considered and the Executive Member has cleared the report.

APPENDIX A – EV SITE PROPOSALS - PHASE 1

Proposal 1 *includes mapping (removed from other proposals due to size)*

Altrincham – Regent Road Car Park, WA14 1RY

Regent Road Car Park is being redeveloped and will re-open in spring 2022 with 50% more public parking spaces. The development, known as Chapel Square, will include 70 apartments and a 223 space public car park.



Solution for Phase 1

Install x3 Rapid Chargers & x3 Fast Chargers (12 bays), with infrastructure for additional units in Phase 2, following usage increase demonstrated from our demand modelling tool.

Solution for Phase 2

Install x3 Rapid Chargers & x3 Fast Chargers (12 bays)

Total 24 bays

Proposal 2

Ashton on Mersey - Greenbank Road Car Park, M33 5PH

Small car park near residential and retail locations.

Solution for Phase 1

Install x3 Fast Chargers, with potential to develop into a mini hub in the future as demand increases.

Total 6 bays

Proposal 3

Bucklow St Martins – Partington Central Road Car Park, M31 4EL

Council owned car park in central Partington, beside Partington Shopping Centre.

Solution for Phase 1

Install x2 Rapid Chargers & x2 Fast Chargers (8 bays), with infrastructure for additional units in Phase 2, following usage increase demonstrated from our demand modelling tool.

Solution for Phase 2

Install x2 Rapid Chargers & x2 Fast Chargers (8 bays)

Total 16 bays

Proposal 4

Flixton - Flixton Road Car Park, M41 6JF

Well located car park next to Flixton train station, local retail units and Flixton Park.

The site has an existing Be.EV Fast charger, and a soft dig area for additional units to serve the communities EV charging requirements.

Solution for Phase 1

Install x2 Rapid Chargers & x2 Fast Chargers (8 bays), with infrastructure for additional units in Phase 2, following usage increase demonstrated from our demand modelling tool.

Solution for Phase 2

Install x2 Rapid Chargers & x2 Fast Chargers (8 bays)

Total 16 bays

Proposal 5

Hale – Victoria Road Car Park, WA14 9AF

Busy car park in the centre of Hale, beside Hail train station.

Solution for Phase 1

Install x3 Fast Chargers & with infrastructure for additional units in Phase 2 if demand is high.

Total 6 bays

Proposal 6

Longford - Longford Park Car Park, M21 9LF

Car park beside Longford Park, Longford Health & Fitness club and Longford Athletic club.

Solution for Phase 1

Install x2 Rapid Chargers & x2 Fast Chargers (8 bays), with infrastructure for additional units in Phase 2, following usage increase demonstrated from our demand modelling tool.

Solution for Phase 2

Install x2 Rapid Chargers & x2 Fast Chargers (8 bays)

Total 16 bays

Proposal 7

Sale - Oaklands Drive Car Park, M33 7NS

Large open car park which has the potential to be transformed in to a charging hub for the local community. We appreciate the number of nearby homes without off-street parking that would benefit from local charging infrastructure.

Solution for Phase 1

Install x3 Rapid Chargers & x3 Fast Chargers (12 bays), with infrastructure for additional units in Phase 2, following usage increase demonstrated from our demand modelling tool.

Solution for Phase 2

Install x3 Rapid Chargers & x3 Fast Chargers (12 bays)

Total 24 bays

Proposal 8

Stretford - Lacy Street Car Park, M32 8LS

Well utilised car park in across from Stretford Mall, with existing Be.EV infrastructure.

Solution for Phase 1

Install x2 Rapid Chargers & x2 Fast Chargers (8 bays), with infrastructure for additional units in Phase 2, following usage increase demonstrated from our demand modelling tool.

Solution for Phase 2

Install x4 Rapid Chargers (8 bays)

Total 16 bays

***Note: this will need to be developed in line with Stretford Masterplan proposals**

Proposal 9

Timperley - Thorley Lane Car Park, WA15 7BJ

Well located car park in Timperley, near busy row of shops and substation on site.

Solution for Phase 1

Install x2 Rapid Chargers & x2 Fast Chargers (8 bays), with infrastructure for additional units in Phase 2, following usage increase demonstrated from our demand modelling tool.

Solution for Phase 2

Install x2 Rapid Chargers & x2 Fast Chargers (8 bays)

Total 16 bays

Proposal 10

Urmston - Atkinson Road Car Park, M41 9QN

Small, well located car park near the centre of Urmston, with potential to be developed into a mini charging hub.

Solution

Develop an 8 bay EV charging hub with a dynamic load balancing system, which will effectively give 8 satellite charging points a charging experience of 75kW up to 300kW each. The chargers are single bay units powered by three power banks, which could be supported by an onsite battery storage option.

Future HUB proposals

The image below shows a simple design of what this site and others could look like in the near future. We believe this is the future of ultra-rapid charging, where customers have an enjoyable and sustainable charging experience.

