

TRAFFORD COUNCIL

Report to: Executive
Date: 14 December 2020
Report for: Decision
Report of: Executive Member for Environment and Regulatory Services

Report Title

Electric Vehicle (EV) Charging Points in Trafford – Procurement

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 soft market testing relating to EV charge points in Trafford;
- b) Delegate authority to the Corporate Director of Place, in consultation with the Corporate Director for Governance and Community Strategy and the Corporate Director for Finance and Systems to agree the final form of the procurement documents and commence the procurement exercise;
- c) Note that a further report will be brought back to the Executive on the conclusion of the procurement with a final business case and to seek approval to award the contract

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 a range of indicative financial costs and benefits for different procurement options for the provision of EV charge points across Trafford. There will be a future report to Executive containing a fully costed business case for approval based on the outcome of the procurement exercise recommended to be undertaken in this report. This will also include reference to the £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.
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
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 The electric car market has continued to grow quickly and even with the reduction in journeys during the last 6 months of the Pandemic, road transport is still a major contributor to the UK's greenhouse gas emissions, accounting for a fifth of total 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.
- 1.3 The Government through its 'build back better' campaign is looking to promote a green and clean recovery which will look to invest and accelerate the electric car market meaning that we need to be ready to tap into any available funding including the Charging Infrastructure Investment Fund to help accelerate charging infrastructure deployment.
- 1.4 Greater Manchester launched the consultation on the proposed Clean Air Plan and Zone (CAZ) on Thursday 8th October 2020 that will cover local roads across the whole of Greater Manchester from 2021. The Plan and CAZ aims to discourage polluting commercial vehicles travelling on local roads, encourage the transition to low emission vehicles and bring NO2 emissions within legal limits. Consultation

concludes on Thursday 3 December 2020. Thereafter there will be expectations that Trafford will support the target to reduce vehicle emissions in GM.

- 1.5 EV Charging and supporting the move from fossil fuel based vehicles to electrical powered vehicles is central to our commitments to achieving carbon neutrality in Trafford. Section 4A of the Trafford Carbon Neutral Action Plan (which is considered elsewhere on this Executive agenda) sets out a commitment to reduce roadside NO2 levels, discourage polluting commercial vehicles from travelling and switch to cleaner, low emission vehicles. Improving Electric Vehicle Charging Infrastructure is central to meeting this objective. Currently 19% of carbon emissions in Trafford can be attributed to road transport – the third highest contributing sector. Hence improvement in this arena is clear means of reducing the Borough's overall carbon footprint.
- 1.6 The most recent announcement by government which plans to accelerate a greener transport future through a 2-step phase-out of petrol and diesel cars with
 - 1.6.1 Step 1 seeing the phase-out date for the sale of new petrol and diesel cars and vans brought forward to 2030.
 - 1.6.2 Step 2 seeing all new cars and vans be fully zero emission at the tailpipe from 2035

This accelerated timeframe will mean that the ability to charge electric vehicles will be an increasing demand in the next 10years.

2.0 Electric Vehicle Charging Soft Market Test

- 2.1 During October 2020 Trafford Council with the assistance from STAR procurement invited Expressions of Interest from current EV infrastructure providers who were asked to outline their potential models for expanding the EV charging infrastructure for public use.
- 2.2 The purpose of the soft market test for Electric Vehicle Charging Infrastructure was to understand the appetite of the market, the type of technology available and the realistic contract procurement and investment / revenue share options for Trafford.
- 2.3 Feedback from the Trafford Council soft market test was received from 8 different providers:
 - AMP EV
 - Centrica
 - Chargemaster
 - Connected Kerb
 - Franklin energy
 - Liberty Change
 - SWARCO UK
 - TWM

2.4 This level of interest indicates there is enough appetite in the market for a project that can be procured with sufficient competitive tension to ensure a competitive response from bidders.

2.5 With a fast developing market there are a number of factors to consider when developing procurement and investment options for the EV charging choices for Trafford.

3.0 Technology available

3.1 There is a comprehensive range of technologies available and the market can supply these to suit most applications. Charging units can be low powered AC units for longer charging periods such as where overnight charging is required. Or higher powered faster charging DC units for shorter charging times at destinations such as short term car parks or district centres.

3.2 The higher powered units, while having a higher capital cost, if correctly placed are likely to attract a higher revenue from multiple charges each day.

3.3 The back office systems that are used for functional monitoring and billing will need to be considered and included in the procurement specification. Most charging operators use RDIF cards or smart phone apps, with only limited providers using contactless credit/debit card equipment.

4.0 Placement of the Apparatus

4.1 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.

4.2 In an on- street application on site hardware is connected directly to the underground electricity supply. Load balancing software is available to prevent overload and ensure energy demand is managed, however underground cable infrastructure may be substandard requiring significant cost to upgrade. If an upgrade is required it should be sufficient to cope with future demand.

4.3 Consideration of a policy that allows properties without driveways to apply for EV charging infrastructure that requires to be placed or constructed across the highway will need to be developed. This is required to ensure that there is a balanced amount of affordable and accessible infrastructure available for all those who may require it.

5.0 Contract Options.

The feedback from the soft market testing revealed that there were three distinct contract arrangements that could be developed:

5.1 All potential revenue forecasts are based on sites being selected after a satisfactory feasibility study has been carried out. The models typically look at £500k of capital investment with £100k grant funding which affords 100 EV units to be installed. Typical revenue costs include for energy costs, back office, staffing and ongoing maintenance of the assets.

- 5.2 Typical revenue running costs would be of the order of £220k - £250k p.a. for every 100 units installed. This covers energy, repair and maintenance costs and staffing. Net profit would remain steady from year 5 onwards following an initial investment in technology and setting up of the back office and would be dependent on usage of the EV chargers.
- 5.3 By scaling up the capital investment additional revenue income could be realised however, there would still be fixed revenue costs associated with energy and maintenance of the asset. Economies of scale could be made within the back office.
- 5.4 **Concession Contract** – This typically has a contract duration of 10 – 15 years. The provider arranges funding, selects locations and provides a full service for the duration of the concession.
- 5.5 The advantage of a concession contract is that it is considered low risk and investment and annual running costs are generally fully covered and managed by the contractor. The authority will receive a monthly proportion of the revenue, such as a profit share, after these costs have been recovered.
- 5.6 The disadvantages of a concession contract are that the revenue opportunity for the authority will be comparatively low, and any income often only commences after the concessionaire has recovered initial costs, which may be 5 years or more into the contract. There may be options to build in a minimum funding guarantee into the contract for the early years but this would likely reduce the profit share in later years. The locations of units are likely to be only at commercially viable locations using faster charging equipment that may attract multiple charges each day. These are the locations that GMEV are most likely to favour. Concession providers may require exclusivity which is not possible for the GMEV equipment within the authority area.
- 5.7 The potential income for the Council from a concession contract would likely only be realised from year 5 onwards. With a £500k investment this would range from £6.5k in year 6 to £143k pa maximum by year 10, depending on overall costs, usage and profit share agreements with the concessionaire.
- 5.9 **Authority Own and Operate** – This type of contract typically has a duration of 7 – 10 years. This contract would mean that the authority would pay the provider to install and then maintain the equipment and fully operate the back office.
- 5.10 The advantage with this type of set up is that the authority has full control of the asset, and full recovery of all revenues. The authority can decide what charging infrastructure goes where so can use the equipment to encourage the shift to EV's.
- 5.11 Disadvantages with this type of contract is that the authority will require a larger capital expenditure and takes full risk on delivery, running costs and income. The authority will also need to spend money on feasibility studies and will be required to set up a back office and learn new skills to manage the equipment, although the maintenance will be carried out by the service provider.

- 5.12 There is the potential for an increased revenue income to be generated from this model ranging typically between £100k - £150k p.a. for every £500k invested from year 4 onward. There may hence be a revenue budget pressure in the early years until the income levels are sufficient to recover the annual running and capital costs. Typically the revenue return would be retained by the authority rather than being shared with a contractor, but potentially comes with higher ongoing revenue costs compared to the private sector.
- 5.13 **Jointly Funded Model** – This type of contract period is typically 10-15 years. The authority and the provider share the capital investment and the revenue cost and profit.
- 5.14 The Advantage of this type of hybrid contract is that it reduces the ongoing capital cost to the authority, while providing a fully incentivised proposition for the service provider. The authority has significantly more control of the location of the assets, while the service provider expertise is fully utilised.
- 5.15 Disadvantages – The service provider will still push for only the most economically viable solution rather than those required to encourage the shift to EV. This can be addressed during the procurement process though.
- 5.16 Typical revenue share based on a 50% share model would range from £50k to £75k dependent on usage. The income and profit share however, would be dependent on the contract awarded. There may still be a revenue budget pressure in the early years until the income levels are sufficient to recover the annual running and capital costs, although this would potentially be shared with the contractor so lower overall risk.

6.0 Energy Considerations

- 6.1 A decision that needs consideration within the contract specification is who procures the energy. It is common for Authorities to wrap this into current energy agreements, so for own and operate and jointly funded options this is the suggested better option. With a concession agreement it is cleaner for it to be procured by the concessionaire.

7.0 Financial Support

Grant funding is readily available and support for any funding application will be incorporated in the contract development and bids. Funding for example is available from OLEV and Innovate UK and other suitable government grants are likely to become available as a result of recent announcements.

8.0 TfGM Considerations

- 8.1 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.

- 8.2 Transport for Greater Manchester will install, operate, maintain and collect any subsequent revenue from the new EV charging posts that they install. Districts including Trafford can use the TfGM EV charging post procurement framework should we wish to install additional units and this will be an option to consider going forward.
- 8.3 The TfGM project is looking to government to fund the installation of a further 300 brand new charging posts, spread equally throughout Greater Manchester, with 30 charging posts anticipated in each district including Trafford. Initially TfGM in close liaison with GM districts is looking at the installation of at least 24 new rapid charge posts across GM with anticipated installation being delayed due to Covid but is now anticipated to be in spring / summer 2021.
- 8.4 Trafford therefore now needs to develop a procurement model that supports the accelerated rollout of EV charge points and secure delivery options that ensures the rollout of a wider EV charge point network that meets the demand of increased electric car use in Trafford during the next 10 years.

9.0 Rolling out EV Charging across Trafford

- 9.1 Trafford now needs to consider how it wishes to rollout and support EV charge points within the Borough beyond public car parks. The models on offer by the market suppliers allows a variety of infrastructure to be installed which will allow a future revenue stream to be secured by the Council but will be dependent on Trafford's appetite for investment and risk .
- 9.2 The next steps therefore are to develop a model for procurement to ensure the right investment and return is secured based on a hybrid model of procurement.
- 9.3 Trafford will also continue to work with TfGM to support the GM work alongside this proposal.
- 9.4 Alongside this procurement exercise a guidance document will be developed that supports the implementation and installation of the infrastructure to maximise and accelerate the programme. This will also consider how to balance and support the demand from residents who do not have off street parking and EV charging abilities.
- 9.5 The Office for Low Emission Vehicles (OLEV) 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. The funding available is for 75% of the capital costs of procuring and installing the charge point and an associated dedicated parking bay. The scheme is focused on the installation of on-street charge points but will also consider applications for charge points situated in car parks owned by the Local Authority. This funding is also applicable to charge points installed on a pavement, lamppost charge points and kerb-side charge points that will be included in the guidance and procurement.
- 9.6 The maximum amount of OLEV funding that can be drawn in would be £100k in total towards the project based on their level of expected distribution of funds to local authorities.

10.0 Procurement

- 10.1 Procurement of EV infrastructure will follow the guidelines described in UKEVSE document 'Making the right connections – General procurement guidance for electric vehicle charge points'.
- 10.2 Trafford now needs to develop its procurement options that could offer potential revenue income streams and it is suggested this be further explored and proposals be presented at a future meeting.
- 10.3 At the Council meeting of the 19th February 2020 approval was given to fund additional installations of EV charge points across Trafford with £500k of capital investment expected to be funded from grants and prudential borrowing. Procurement options to be developed will seek to explore and maximise the potential for this investment, including the funding of ongoing maintenance costs, repayment of borrowing and generation of future revenues.
- 10.4 This report seeks approval to delegate authority to the Corporate Director of Place to develop and agree the final form of the procurement documents (in consultation with legal and finance) during the next 3 – 6 months.
- 10.5 It is anticipated that the procurement model, tender and contract will be developed during the next 3 months with an anticipated awarded 2 – 3 months thereafter following evaluation by STAR procurement.
- 10.6 A further report will be brought back to the Executive on the conclusion of the procurement with a final business case and to seek approval to award the contract that works best for Trafford.
- 10.7 Payback of the capital would only be realised after 5 years and is included within the range of income projections.
- 10.8 Trafford will also explore joint procurement options with other GM authorities in collaboration with STAR procurement who will be supporting the development of the contract model.

11.0 Conclusions

- 11.1 The technology associated with EV charging is developing rapidly and there is likely to be an increasing demand for EV charge points in Trafford during the next 5 to 10 years and beyond.
- 11.2 Due to the level of interest from EV suppliers and providers in this technology as a result of the soft market testing exercise Trafford has an opportunity to develop delivery options and rollout a wider network of EV charge points with a potential income stream.
- 11.3 The range of options and opportunities will need to be developed into a procurement model to support capital investment of £500k and increase the number and availability of EV charge points across Trafford.

11.4 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 with other GM authorities is able to be developed.

12.0 Other Options

12.1 A range of initiatives and options are suggested to be explored further as part of the procurement model as included within this report.

12.2 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.

13.0 Consultation

13.1 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 allow the Corporate Director of Place to develop a procurement model for a joint funded contract relating to EV charge point installation across Trafford.

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.