

Transport and Environment Committee

10.00 am, Tuesday, 17 March 2015

Delivery of the Local Transport Strategy 2014-2019: Priorities for Installing On-Street Electric Vehicle Charging Points in Edinburgh

Item number	7.7
Report number	
Executive	
Wards	All.

Executive summary

This report seeks approval for prioritising the installation of on-street vehicle charging points in Edinburgh. This will be part of the implementation process of the Local Transport Strategy 2014-2019.

The report also seeks authorisation for a scheme to pilot on-street electric vehicle charging points in the Marchmont and Sciennes area, to identify demand and any issues, such as parking and streetscape, associated with their operation.

Links

Coalition pledges	P50 , P51
Council outcomes	CO18 , CO22 , CO26
Single Outcome Agreement	SO2

Delivery of the Local Transport Strategy 2014-2019: Priorities for Installing On-Street Electric Vehicle Charging Points in Edinburgh

Recommendations

- 1.1 It is recommended that Committee:
 - 1.1.1 notes the current location of publicly available charging points;
 - 1.1.2 approves the priorities for installing on-street vehicle charging points in Edinburgh, as set out in this report; and
 - 1.1.3 authorises the Director of Services for Communities to proceed with preparations for a pilot of on-street electric vehicle charging, in partnership with Transport Scotland and report back in summer 2015 with details of locations, estimated cost, parking charges for bays used for charging, together with a detailed plan and programme.

Background

- 2.1 In late 2013, there were approximately 878 ultra low emission vehicles registered in Scotland, of which 75 were in Edinburgh. By September 2014, the number in Edinburgh had increased to 121. At a national level, the Scottish Government has an objective of the almost complete decarbonisation of transport by 2050, initially commencing with a move to electric vehicles. However, other low emission technologies, such as hydrogen fuel cells, are also likely to play a part in this process.
- 2.2 The City of Edinburgh Council has declared five Air Quality Management Areas as the result of concentrations of Nitrogen Dioxide (NO₂), largely generated by internal combustion engines. Encouraging the use of electric vehicles in Edinburgh would help reduce the local emission of air pollutants and greenhouse gases from road transport.
- 2.3 To date, Transport Scotland has given financial support for the provision of public electric vehicle charging points primarily at off-street locations, such as Council premises, higher education campuses and commercial sites. It has also prioritised the overnight recharging of electric vehicles at home and has made funding available, through the Energy Savings Trust, for this.

- 2.4 Transport Scotland has not prioritised, or funded, the installation of on–street charging points. To progress these facilities will require action at the local level.

Main report

3.1 The provision of on–street charging points is a Class 30 development under the Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2014. This Class is not covered by an Article 4 direction in any part of Edinburgh, as alternative processes to protect the streetscape have been put in place. The Council therefore has permitted development rights to install its own electric vehicle charging points, to provide a public service.

3.2 The City of Edinburgh Council’s Local Transport Strategy 2014-2019, section 5, “Protecting our Environment” has objectives:

To contribute to Edinburgh’s carbon emissions targets through a range of transport related measures.

To reduce pollutant emissions in order that the city meets statutory Scottish air quality standards.

3.3 An action to assist in the implementation of Local Transport Strategy 2014-2019, policy **Env 2**, is the preparation of a set of priorities for the location of electric vehicle charging points.

3.4 In response to requests from Edinburgh residents and businesses, priorities for on-street charging points have been developed. The Council’s resources will be applied to providing on–street electric vehicle charging points in the following order of priority:

- 1) A pilot of on–street charging, to commence in 2016, consisting of a number of on–street charging points in the Marchmont-Sciennes area, serving both public and car club bays.
- 2) Charging points at bays for use by plug–in car club vehicles.
- 3) On–street charging for electric buses on services that serve Edinburgh’s Air Quality Management Areas.
- 4) In areas not already served by the public charging points, shown in the Appendix: charging points for all plug–in cars and vans.

- 3.5 The first priority is to pilot on–street charging of plug–in vehicles in an area of high density development where off-street charging is currently not possible. This type of area is also most likely to be in or near an Air Quality Management Area. Once results of the pilot area are known, the provision of charging points at bays for car club vehicles offers a chance to reduce the environmental impact of that type of car use. Charging points for on–street charging of buses is the next priority, as they would assist in reducing emissions from buses serving the Central Air Quality Management Area. The fourth priority is to fill in the geographic spread of charging points, to encourage the general use of electric vehicles.
- 3.6 Transport Scotland has indicated that it would be willing to be a partner, with the Council, in such a pilot scheme. The pilot will allow the identification of issues that arise from the operation of on–street charging points, together with its impacts on parking, streetscape and electric vehicle use. The pilot will be preceded by a local consultation on the location of charging points within the pilot area.
- 3.7 It is proposed that the pilot, in the Marchmont and Sciennes area, will involve installing several on-street charging points, between adjacent parking and car club bays. This area has a high proportion of flat/tenements and households with two or more cars. Compared to single car households, it has been found that households with multiple cars have a higher tendency to replace a conventional vehicle with an electric one.
- 3.8 When parking spaces are allocated to the charging of electric vehicles, there is the risk that the spaces may be occupied by conventionally powered vehicles. Traffic Regulation Orders will therefore be needed to reserve these spaces for plug–in electric vehicles.
- 3.9 The introduction of the pilot scheme will be supervised by a Project Board, which will include representatives of Transport Scotland and Council staff from the South Neighbourhood, Environmental Health, Parking, Streetscape and Strategic Planning.
- 3.10 In the event that any Pay and Display spaces are needed for the location of charging points, in the pilot area, it is anticipated that Committee will be asked, in summer 2015, to agree the parking charge and duration of stay for plug–in vehicles. The impact of the parking charges and duration applied in the pilot area will be covered in a subsequent progress report to Committee. There will be no charge made for the electricity used by plug–in vehicles in the pilot scheme.
- 3.11 The process of putting a Traffic Regulation Order in place requires a minimum of six months, it is therefore anticipated that the pilot will commence during the second half of 2016. The pilot will involve monitoring of the use of the on-street charging points, to obtain information on operational issues and the demand for charging.

- 3.12 It is anticipated that the electricity supply infrastructure to the charging points in the pilot scheme can be installed within the timescale for a Traffic Regulation Order.
- 3.13 Committee will receive a report on progress during summer 2015. This will set out the area to be covered by the pilot and will give details of the geographic spread of the on-street charging points. It will also set out a detailed plan and programme. It will also cover the estimated costs involved in the pilot scheme.
- 3.14 It is proposed that the next priority will be to install charging points at car club bays across Edinburgh, to facilitate the use of plug – in cars by car club operators.
- 3.15 The third priority area will be to provide electric power for the bus and taxi fleets serving Edinburgh, as this will contribute to improving air quality in the city's Air Quality Management Areas. The main bus operators are already upgrading their fleets to include vehicles which incorporate hybrid and electric technology. The Council will actively encourage and facilitate operators in those endeavours.
- 3.16 The fourth priority will be on-street charging for cars and vans, in those parts of Edinburgh furthest away from the public charging points currently available. These charging points are plotted on the map attached as an Appendix.

Measures of success

- 4.1 Establishment of a successful pilot of on-street charging in the Marchmont and Sciennes area, with charging point use at a rate similar to current charging points available elsewhere in Edinburgh.

Financial impact

- 5.1 The costs of the planned pilot scheme and potential funding sources will be reported to Committee during summer 2015.

Risk, policy, compliance and governance impact

- 6.1 If the recommendations in this report are not accepted the impact would be:
- a reduced ability to meet the targets in the Council's Local Transport Strategy 2014-2019; and
 - a reduction in progress in meeting air quality targets.

Equalities impact

- 7.1 If authorised, the provision of on-street electric vehicle charging points will promote the use of low emission electric vehicles and thereby reduce the emissions of air pollutants from road traffic. This will reduce the adverse health impacts of these pollutants.
- 7.2 To mitigate the impact of social inclusion arising from encouraging a form of private motoring, the planning stage of the installation project will identify means of avoiding the negative impact on public transport, walking and cycling.
- 7.3 To mitigate the impact on mobility impaired car users, the planning stage of installing on-street electric vehicle charging will consider needs of people with mobility difficulties who need to use plug -in cars.

Sustainability impact

- 8.1 The impacts of this report in relation to the three elements of the Climate Change (Scotland) Act 2009 Public Bodies Duties have been considered, and the outcomes are summarised below. Relevant Council sustainable development policies have been taken into account and are noted as Background Reading later in this report.
- 8.2 The proposals in this report will reduce carbon emissions because it will encourage the uptake of plug-in electric vehicles, which can use electricity from renewable sources.
- 8.3 The proposals in this report will increase the city's resilience to climate change impacts because on-street charging points offer a dispersed pattern of supplying renewable energy. The dispersal will reduce the risk of electric vehicles being unable to obtain any power in the event of disruption by climate change impacts.
- 8.4 The proposals in this report will help achieve a sustainable Edinburgh because prioritising the locations for on-street electric vehicle charging points to areas of demand is likely to increase use of low emission vehicles.

Consultation and engagement

- 9.1 The draft Local Transport Strategy 2014-2019, including Policy **Env 2**, was the subject of a public and stakeholder consultation.
- 9.2 The location of on-street charging points, in the pilot area agreed with Transport Scotland, will be the subject of a local resident and stakeholder consultation.

Background reading/external references

Local Transport Strategy 2014–2019:

http://www.edinburgh.gov.uk/downloads/file/878/local_transport_strategy_2014-2019

Climate Change Framework:

http://www.edinburgh.gov.uk/downloads/file/2027/city_of_edinburgh_council_climate_change_framework_2007

Sustainable Edinburgh 2020:

http://www.edinburgh.gov.uk/info/20142/sustainable_development_and_fairtrade/841/sustainable_edinburgh_2020

Transport 2030 Vision:

http://www.edinburgh.gov.uk/downloads/download/120/transport_2030_vision

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Links

Coalition pledges	P50 - Meet greenhouse gas targets, including the national target of 42% by 2020. P51 - Investigate the possible introduction of low emission zones.
Council outcomes	CO18 - Green – We reduce the local environmental impact of our consumption and production. CO22 - Moving efficiently – Edinburgh has a transport system that improves connectivity and is green, healthy and accessible. CO26 - The Council engages with stakeholders and works in partnership to improve services and deliver on agreed objectives.
Single Outcome Agreement	SO2 - Edinburgh's citizens experience improved health and wellbeing, with reduced inequalities in health.
Appendices	Map of Public Charging Points in Edinburgh, As At December 2014.

APPENDIX

MAP OF PUBLIC CHARGING POINTS IN EDINBURGH, AS AT DECEMBER 2014

