



Belfast City Council

Report to:	Strategic Policy and Resources Committee.
Subject:	DfT 'Plugged in Places' Electric Vehicle Charging Infrastructure Framework.
Date:	18 June 2010.
Reporting Officer:	Mrs. Suzanne Wylie, Director of Health and Environmental Services (ext. 3260).
Contact Officer:	Alastair Curran, Sustainable Development Manager (ext. 3309)

Relevant Background Information.

The 2008 DoENI State of the Environment Report highlights that road transportation is the 2nd largest source of carbon dioxide (CO₂) emissions within Northern Ireland, as well as being a key source of air pollutants such as nitrogen dioxide (NO₂) and particulate matter (PM₁₀) in urban areas. In 2004, Belfast City Council declared four air quality management areas across the city for predicted exceedences of nitrogen dioxide and particulate matter health-based objectives principally associated with road transport, as part of its statutory obligations prescribed under the Air Quality Strategy for England, Scotland, Wales and Northern Ireland and Part III of the Environment (Northern Ireland) Order 2002. Council subsequently published an Air Quality Action Plan for Belfast in 2006 and continues to work with partner organisations including the Department for Regional Development Roads Service and Translink, etc. in order to meet the air quality objectives in the respective compliance years.

In developing its 2008-2011 Corporate Plan, the Council committed to reduce the city's impact on climate change and improve air quality under the strategic theme of 'Better Care for Belfast's Environment - a clean, green city now and for the future'. Council also adopted primary performance indicators of '% reduction in greenhouse gas emissions from Council premises' and 'Number of monitored exceedences of EU and UK air quality standards within Belfast'.

On 16 April 2009, the then UK Secretaries of State for Transport and Business jointly announced the UK's Strategy for Ultra Low Carbon Vehicles. The document provides an overview of government's activities for the next 5 years in terms of research, demonstration and incentives for consumers and industry. The strategy includes a reference to £250m of consumer incentives designed to stimulate the take up of electric and plug-in-hybrid vehicles, scheduled to become commercially available across the UK from 2011 onwards.

Government has recognised however, that an electric vehicle charging infrastructure framework will have to be developed in advance of the introduction of monetary incentives to consumers. This is to be delivered via the Department for Transport (DfT) Office for Low Emission Vehicles (OLEV) 'Plugged-In Places Infrastructure Framework', which is designed to support the creation of a critical mass of vehicle recharging infrastructure in 3-6 lead cities or regions of the United Kingdom ahead of the introduction in January 2011 of a 'point of purchase' consumer incentive scheme offering up to £5,000 of the cost of eligible electric, plug-in hybrid and hydrogen cars. Government has stated that zero emission vehicles (ZEV) can help to improve the environment by reducing emissions of carbon dioxide and ambient air pollutants. Accordingly, DfT has made infrastructure framework funding of £30m available between 1 April 2010 and 31 March 2013 to support up to 50% of eligible costs. Indicatively, funding will be spread equally over the three-year period.

The Department of Environment for Northern Ireland (DoENI) and Department for Regional Development (DRD) elected jointly to convene a Northern Ireland consortium in order to submit a regional bid to OLEV. DoENI approached the Council regarding participation in the bid and Chief Officers recommended that the Sustainable Development Manager should represent the Council on the consortium in order to help develop and submit an 'Expression of Interest' to OLEV.

Key Issues.

In order to comply with the OLEV application schedule, the Northern Ireland consortium was required to submit an Expression of Interest by 1 June 2010. OLEV intends to shortlist Expressions of Interest by 30 June and then work with successful consortia to develop their final applications for submission by 30 September. The Northern Ireland consortium presently includes DoENI, DETI and DRD, along with Newry, Derry, Enniskillen, Omagh, Armagh and Belfast Councils, energy generators, the Utility Regulator, educational establishments, vehicle manufactures and recharging infrastructure companies. Sub-groups have been convened to develop technical, marketing, IT, public sector procurement and supply chain aspects of the bid.

The Northern Ireland consortium has submitted 3 recharging infrastructure scenarios to OLEV as part of its Expression of Interest;

- Belfast and Belfast-Dublin link (linking the North/South corridor to vehicle recharging projects installed already in Ireland) – overall project cost £1.3 million requiring consortium funding of £0.9 million.
- Belfast, Belfast-Dublin link, Newry and one other city – overall project cost £1.7 million requiring consortium funding of £1 million.
- Belfast, Belfast-Dublin link, Newry, Derry, Enniskillen, Armagh and Omagh - overall project cost £2.0 million requiring consortium funding of £1.3 million.

DoENI has indicated that it expects matched funding to be provided by central government and commercial consortium partners. The Director of Legal Services considered the Council's capacity to contribute financially towards the capital cost of the Northern Ireland bid and concluded that the Council has no legal vires to do so since it has no statutory function in relation to transport. He suggested however, that in extraordinary circumstances, the Council could seek sanction from DoENI to make a financial contribution towards the project.

At this time, DoENI has requested that Councils consider:-

- The purchase of electric vehicles for their fleets.
- The provision of sites and parking spaces for the location of electric vehicle charging points at sites owned by Councils.
- Engaging with local businesses to encourage the use of electric vehicles.
- The potential funding of non-capital costs, e.g. local research into the vehicle usage, project management and reporting costs.

Presently, the global electric vehicle market is in its infancy and therefore, the types of vehicles available are limited. Moreover, commercial electric vehicles typically carry a significant price premium, which would be unlikely to be completely offset by their lower running costs over the operational life of the vehicle. For example, diesel panel vans typically retail at around £20,000 whereas a comparable rechargeable variant can cost in excess of £60,000. Rechargeable cars are expected to cost from around £23,000 (inclusive of the government purchase incentive) when launched in 2012 / 2013, however, the Council operates relatively few cars. The Council does operate a number of smaller panel vans and consequently, there may be an opportunity to migrate towards rechargeable variants of these vehicles when they are launched in summer 2011, assuming that purchase or lease costs are not prohibitive.

Public electric vehicle charging points are typically of a bollard type construction; around 20 cm in diameter and 1.5m high. Wall mounted versions are also available for internal building use. They generally operate at 240 volts / 20 amps and access to the charging socket is controlled via a RFID chip issued to registered users. Electric vehicle recharging times are typically around 6-8 hours for a full charge providing a range of up to 100 miles however, public charging sites are designed principally to deliver a top-up charge. In order to ensure that availability of charging points is maximised, a dedicated parking space is generally provided for each charging point. Public charging points retail currently at around £5,000 per unit.

Resource Implications.

Financial.

The Strategic Policy and Resources Committee is advised that the Council may be invited to contribute financially towards the non-capital costs of the Northern Ireland consortium bid. Clearly this is something that the Council would need to consider carefully in the current financial climate. Members are advised therefore, that a further detailed report will be provided to the Committee should specific financial or other resource contributions be sought from the Council.

Human Resources.

It is proposed that the Sustainable Development Manager will continue to represent the Council on the Northern Ireland consortium and associated working groups.

Asset and Other Implications.

The Council may be invited to provide locations and dedicated parking spaces for the siting of electric vehicle charging infrastructure at its premises.

At this point, the Council is being asked to endorse submission of a Northern Ireland application to OLEV and to authorise the continued participation of the Sustainable Development Manager on the consortium in order to support project research and proposal development. It will be made clear to the lead government departments that endorsement does not commit the Council to any financial contribution. Members are advised that if the Northern Ireland consortium bid is successful in securing DfT / OLEV funding, it is anticipated that the project will commence from the 2011/2012 financial year.

Recommendations.

The Committee is requested to:

- Authorise the Council's continued participation in the Northern Ireland consortium via the Sustainable Development Manager;
- Agree to support an application by the consortium to DfT / OLEV;
- Authorises officers to continue to research the feasibility of purchasing zero emission rechargeable vehicles and providing charging points at Council owned sites.

Decision Tracking

The Sustainable Development Manager will bring further reports back to the Committee if and as the project develops, particularly where there are resource implications for the Council.

Key to Abbreviations

DfT - Department for Transport.
DoENI - Department of Environment for Northern Ireland.
DRD - Department for Regional Development.
DETI - Department of Enterprise, Trade and Investment.
OLEV - Office for Low Emission Vehicles
RFID - Radio frequency identification.
ZEV - Zero emission vehicle.

Documents Attached

N/A