Belfast City Council

Subject:	Electric Vehicle Study Visit 3rd - 8th February 2019
Date:	25th January 2019
Reporting Officer:	Nigel Grimshaw, Strategic Director of City & Neighbourhood Services
Contact Officer:	Clare Mc Keown Sustainable Development Manager

Restricted Reports				
Is this report restricted?	**Yes**		**No**	X
If Yes, when will the report become unrestricted?				
After Committee Decision				
After Council Decision				
Some time in the future				
Never				

Call-in				
Is the decision eligible for Call-in?	**Yes**	X	**No**	

1.0	**Purpose of Report**
1.1	To inform members of an invitation to the Sustainable Development Manager to participate in a 100% funded study visit to examine world-class electric vehicle infrastructure and associated smart technology in California. The study visit will also examine the wider role of City Authorities in promoting the uptake of electric vehicles (EV's). The invitation is from the UK Consulate General in California.
2.0	**Recommendations**
2.1	The Committee is requested to; • Recommend that the Sustainable Development Manager accepts the invitation on 3rd - 8th February recognising that Officer knowledge of state of -the- art charging infrastructure and smart digital technology will be important in the future transition to the smart low carbon economy in Belfast. The study visit also presents an opportunity to connect with main UK funders and lead technologists in this field.

	• Note that the FCO Consulate General in San Francisco previously invited the Lord Mayor to an International Conference on Climate Change, hosted by Michael Bloomberg which she was unable to attend. The Californian office remain very keen to connect to Belfast, to facilitate city partnerships and business opportunities on the low carbon agenda between Belfast and cities on the West Coast of the USA.
3.0	**Main report**
	The Californian Example
3.1	The state of California was recognised internationally for its early adoption of EV infrastructure, vehicle to grid technology and support for pioneering smart battery capacity. The State set an ambitious target of 20% of vehicles to be ultra-low by 2025, and has put incentives in place to meet this target. The state works closely with the electricity and utility companies, vehicle manufacturers, battery storage companies, universities, innovation hubs and SME's to support this transition. As a direct result it has attracted those at the pioneering end of the industry to Silicon Valley and the entire Californian region has become a mecca for electric vehicle car manufacturers and pioneers in this industry.
	Background and developments on EV Infrastructure in Belfast City
3.2	Like mobile phones, EV's and EV charging infrastructure has undergone transformative change since their early introduction a decade ago. The EV infrastructure introduced in Belfast in 2013, which was recognised as one of the best in Europe at the time is nearly obsolete. Commercial operators were slow to move into the market given the absence of a payment mechanism, so there has been no incentive to upgrade the existing charging system.
3.3	However this will change soon, NI government departments are examining the change in legislation needed to introduce a payment mechanism for public charge points (currently it is not possible to charge users for the electricity in charge points) In parallel, electricity network providers now recognise the role EV consumers play in helping manage the demand and supply of electricity in the market and are putting incentives in place to attract them.
3.4	The SD Manager was responsible for working in partnership with the original ecar team within the Department for Infrastructure to establish the first EV infrastructure in the City and on the Councils estate. Recently the SD Manager worked with a collaborative public

	sector partnership on a competitive 100% funded EU INTERREG 5A £9m EV charging infrastructure bid. If this bid is successful it will bring a new generation of state -of the- art rapid charge points to the city, border regions of ROI and Highlands of Scotland. In parallel to this BCC and Department for Infrastructure are exploring opportunities for the funding of charging infrastructure on our estate and in the city with OLEV and INNOVATE UK. DoI and BCC are also working with Belfast MET to bring the first generation of hydrogen buses powered from curtailed renewable energy to Belfast.
3.5	Understanding the most appropriate EV infrastructure and the correct incentives to put in place is particularly important in Belfast given that the transport sector is the largest contribution to CO2 emissions here. 66% of commuters still use a diesel or petrol car for their daily commute, much higher than the average UK city. If we want to make a big impact on CO2 emission reductions and subsequently improve air quality, it's important to encourage those commuters to shift to cleaner transport and one key factor will be by providing reliable, easily accessible and state of the art EV charging points.
	Business opportunities in smart technology
3.6	The growth of new EV technology is creating jobs locally in the manufacture and design of the charging infrastructure and the smart digital technology that supports it. For example, the casing and components in the first generation of charge points in this city were manufactured entirely within 100 miles of Belfast, this is highly exportable technology. Local electronic companies such as Electro Automation, Evermore, Jordan CPS, and CCP Gransden are moving into this new EV market place, diversifying products and securing inward investment creating a new generation of clean tech jobs. EV infrastructure and battery storage is also an area where CSIT, QUB and UU Engineering departments and companies in our Innovation Factory are active.
	Invitation, draft itinerary and delegation.
3.7	The draft itinerary outlines meetings with City Sustainability Officials in San Francisco, San Diego and Los Angles and the associated Utility providers who are working in partnership in those states at the forefront of the EV transition. The itinerary also includes meetings in Silicon Valley with smart clean tech businesses e.g. Chargepoint at the forefront of the energy transport nexus and the BMW Innovation Centre. The delegation will also visit Stanford University to meet with the Precourt Centre who specialise in incentives on

	behaviour change .In Los Angeles and San Diego there will be meetings with the Clean-tech Incubation Hubs and EIN who are at the forefront of development of hydrogen vehicle technology. **Delegation**
3.8	The UK delegation will be comprised of a mixture of representatives working in the transport energy nexus and those at the forefront of this industry in the public sector across the UK .The delegation will comprise: (1) Government officials from the Office of Low Emission Vehicles (OLEV) London (2) UK City Officials working on EV Infrastructure, interface with utilities etc. (3) Innovate UK, who are funding innovation of EV's infrastructure of £40M for cities in this area (4) Specialised businesses working on the market development of EV and supporting infrastructure (5) Academics from Oxford and Cambridge Universities working in this field.
3.9	By agreeing to the visit, there is an opportunity for the SD Manager to network with and learn from a unique group of experts working on and funding the next generation of electric vehicles infrastructure in cities and bring that learning back to Belfast.
3.10	A full report on the study visit will be compiled and shared with the relevant teams across the Council including SDSG, Fleet Management Unit, Smart Cities Team and external bodies including Department of Infrastructure E-CAR team etc. This report will also outline any opportunities identified for Council and the city to be involved with going forward.
	<u>Financial & Resource Implications</u>
3.11	All costs associated with travel to the US and internally between all cities, and associated accommodation and food costs will be met by the British Consulate in San Francisco.
	<u>Equality or Good Relations Implications/Rural Needs Assessment</u>
3.12	None associated with this report.
4.0	**Appendices – Documents Attached**
	Appendix 1 - Draft itinerary – is available on request