

ITEM No ...6...

REPORT TO: CITY DEVELOPMENT COMMITTEE – 9 SEPTEMBER 2019
REPORT ON: UPDATE ON PROMOTION OF ELECTRIC VEHICLES IN DUNDEE
REPORT BY: EXECUTIVE DIRECTOR OF CITY DEVELOPMENT
REPORT NO: 299-2019

1 PURPOSE OF REPORT

- 1.1 To provide an update on progress in promoting uptake of electric vehicles within the city and region.

2 RECOMMENDATION

- 2.1 It is recommended that the Committee:
- a notes the progress made to date on deployment of electric vehicles and charging infrastructure; and
 - b delegates the Executive Director of City Development to implement the projects set out in Section 5 of the report in conjunction with other relevant services, subject to confirmation of funding.

3 FINANCIAL IMPLICATIONS

- 3.1 Funding for these initiatives has predominantly been provided by Transport Scotland and other external funders as set out in the report.

4 BACKGROUND

- 4.1 Dundee City Council first introduced Electric Vehicles (EVs) in 2011 with the deployment of 4 vehicles and 4 chargers to a single site and since then has continued to grow the numbers to be at the forefront of this technology. These were initially introduced to help the Council reduce the overall environmental impact of its transport activities and Electric Vehicles have continued to play a key part in reducing our CO₂ levels while contributing to improving the air quality in the city.
- 4.2 Dundee City Council has successfully secured substantial funding in recent years to help install the infrastructure and grow the number of electric vehicles in the city. This has been through a number of sources as detailed below with over £8.5 million being secured to date.

Year	Funder	Purpose	Value
2012/2014	Transport Scotland	Infrastructure	£321,000
2016	Office of Low Emission & Transport Scotland	Infrastructure	£1,962,000
2017	Office of Low Emission & Transport Scotland	Infrastructure	£618,500
2018	Transport Scotland	Infrastructure	£436,000
2014/2018	Transport Scotland	Electric Vehicles	£430,451
2019	Office of Low Emission/Transport Scotland/European Union Fund	EV Multi-Storey Car Park Project	£1,750,000

Year	Funder	Purpose	Value
2019	Transport Scotland	Infrastructure and vehicles	£2,490,000
2017	Transport Scotland	Drive Dundee Electric Marketing	£45,000
2018	Transport Scotland	Infrastructure Staff	£25,000
2019	Innovate UK	On-Street Pop Up Chargers	£550,000
Total			£8,627,951

- 4.3 To date Dundee has one of the highest concentrations of Battery Electric Vehicles of any city in the UK with the DCC fleet having the most EVs of any local authority in the UK. Dundee has also engaged in this area with a number of local partners as well as also working closely with the local taxi industry to promote the introduction of electric vehicles into the fleet with the current known numbers in the city are included in the table below.

Organisation	EVs
Council Electric Vehicles	101
Dundee Uni Electric Vehicles	9
Dundee & Angus College Electric Vehicles	9
NHS	26
Dundee Chamber of Commerce	1
Dundee Electric Taxis	131

The charging infrastructure in the city has continued to grow since it was first introduced in 2011 with a mixture of Council only and publically available chargers being installed by the Council. All partners have also had infrastructure installed which is again a mix of private and public use. To date this investment has delivered the following charging estate and outputs shown below:

50kw Rapid Charging Units	28
22kw Fast Charging Units	25
7kw Fast Charging Units	37
Charging Sessions	191,512
Power used (kwh)	1,560,800
Estimated electric miles	5,462,800

- 4.4 The Scottish Government recently announced the target of “phasing out the need for new petrol and diesel cars by 2032”. According to the Department for Transport there were 8,869 electric vehicles registered in Scotland at the end of 2018, however this only equates to 0.3% of cars in Scotland despite this being a 55% increase on the 2017 figures. So to meet the anticipated 36 million electric cars that are expected on the roads in the UK by 2040 there will need to be a substantial increase in the charging infrastructure as well as models of vehicles available.
- 4.5 In July 2006 Dundee was declared an Air Quality Management Area following detailed modelling and published an Air Quality Action Plan in January 2011. The recently ratified monitoring data for 2017 showed further improvements in both NO₂ and PM₁₀ within the city. The monitoring at automated locations with at least 5 years data show the majority of sites have improving trends.
- 4.6 2018 saw the opening of three charging hubs across the city which were vital to not only support the current levels of electric vehicle use in the city but provide potential owners with confidence that they can make the switch to an EV knowing that they will have access to a reliable and sufficient network. The importance of these charging hubs is illustrated by Dundee’s statistics revealing that 51% of housing in the city do not have driveways which recently lead to the hubs being described during a UK government forum as “*Globally significant*” in the advancement of e-mobility infrastructure.

*Princes Street Hub



The current charging infrastructure available to the public is in the following locations: Princes Street Hub, Lochee Hub, Queen Street Hub, Greenmarket Car Park, Dundee Ice Arena, Gellatly Street Car Park, Whitfield Centre, The East and West Area Housing Offices, Olympia Car Park, South Tay Street, Dock Street and Nethergate.

- 4.7 It is difficult to accurately identify the number of publically owned electric vehicles in the city due to current recording methodology, however, there are currently around 850 users (815 public and 35 business) users registered for free parking in the city which gives an indication of significant levels of ownership in the city.
- 4.8 One of the most significant transport sectors to adopt electric vehicles in Dundee has been the Taxi industry with 18% of all taxis presently 100% electric. This transition to e-mobility has been achieved by progressive policy changes and continued council/taxi trade engagement. The taxi industry in Dundee has been an inspiration to all other cities in the UK embracing this new technology to become a major contributor to Dundee’s improving air quality.

- 4.9 2016 saw the launch of the Drive Dundee Electric campaign, this was aimed at the residents and businesses of Dundee to inform them of the benefits of EVs as well as provide a focal point for support and guidance to potential users. The campaign has proved successful to date and uses social media and a website to keep users up to date with all local developments as well as organising various events in the city to promote.



- 4.10 Dundee City Council has received significant recognition for their work in the electric vehicle arena and have picked up the following national and international awards as well as being highly commended in a number of others:

2013 – COSLA Bronze Award – Towards a low Carbon Fleet;
2015 – Low Carbon Vehicle Partnership – Low Carbon vehicle Operator of the Year;
2015 – Green Fleet – Gary McRae EV Champion;
2015 – Green Fleet – Public Sector Fleet of the Year;
2017 – OSCAs – Environment & Sustainability;
2018 – Energy Savings Trust – Ultra Low Emission vehicle infrastructure Fleet hero;
2018 – Energy Savings Trust Ultra Low Emission Fleet Hero;
2018 – Energy Savings Trust – Fraser Crichton – Unsung Fleet Hero; Ultra Low Emission Fleet
2018 – World Electric Vehicle Association – E-visionary European City.
2019 – Scottish Transport Awards – Contribution to Sustainable Transport



5 FUTURE PROJECTS

- 5.1 Dundee is recognised as one of the UKs and Europe's leading cities in relation to the deployment of electric vehicles and the designing and building of a charging infrastructure that not only meets the current needs but will cope with the significant increase in vehicles over the coming years.

- 5.2 A long-term programme of creating additional charging stations will be required. 2019/20 will see the delivery of a further 3 charging hubs based at multi storey car parks in the city centre funded through a LCTT project. Each of these hubs will allow for the charging of 20 cars at a time and will incorporate innovative Dynamic Load Management utilising a master and slave set up. These sites will also feature solar canopies on the roofs of the car parks with a battery storage solution on-site to help reduce the overall cost of the electricity. These hubs are designed to support visitors and commuters to the city during the day and then be available for local residents to park overnight. For context, there are around 5,500 car-parking spaces controlled by the City Council across Dundee.
- 5.3 Dundee City Council received an Offer of Grant for Switched on Towns & Cities from a Transport Scotland Challenge Fund of £2,498,097 in May 2019 following a competitive process. This funding is for the Dundee Partnership and is to cover the period 2019-2022.

A summary of the main projects included within the bid are detailed below and further reports will be brought to committee during the project with additional information:

- approximately 95 vehicles across the partnership;
 - additional depot charging for partners with some publically available;
 - additional charging hub in the North of the city;
 - trial of residential parking/charging at council premises out of hours;
 - development of intelligent app for booking of charging spaces and links with other mobility services across the Council;
 - continued development of utilising Council assets out of hours for use by partners or members of the public; and
 - Project Management staff.
- 5.4 Dundee City Council will continue to develop its internal charging infrastructure at a variety of depots and buildings that will support the increased number of electric vehicles within the internal fleet. This will be funded through current and future grant funding.
- 5.5 Dundee City Council are part of a successful consortium who have been offered a grant of £3.036 million from Innovate UK to develop a Clean Streets EV Infrastructure Toolkit Demonstrator project. The project is lead by Urban Foresight's Dundee Office and will be delivered through Dundee's Mobility Innovation Living Lab, it includes Plymouth Council, Urban Electric and Co-wheels Car Club. Funding of £550,000 has been allocated to Dundee City Council for the installation of the pop up chargers within the city (from 1st April 2020), this will fund between 6-9 hubs with up to 6 chargers at each location (specific sites to be identified and agreed over next 6-9 months).

6 POLICY IMPLICATIONS

- 6.1 This report has been subject to an assessment of any impacts on Equality and Diversity, Fairness and Poverty, Environment and Corporate Risk. There are no major issues.

7 CONSULTATIONS

7.1 The Council Management Team were consulted in the preparation of this report.

8 BACKGROUND PAPERS

8.1 None.

Robin Presswood
Executive Director of City Development

Author: Fraser Crichton

Dundee City Council
Dundee House
Dundee

NHG/FC/KM

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