

BOROUGH OF KETTERING

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Report Originator	Shirley Plenderleith – Head of Public Services	<i>Fwd Plan Ref No:</i> -	
Wards Affected	All	28 th November 2017	
Title	ELECTRIC VEHICLE CHARGING PROJECT		

1. PURPOSE OF REPORT

- 1.1 This report sets out the Council's plans for developing electric vehicle charging infrastructure to support health improvements and sustainable travel, and describes the main challenges and benefits for the local authority.

2. INFORMATION

Background

- 2.1 Road traffic in our urban centres and areas near busy roads produce air pollution that can have a significant impact on the health of the general population, with those having underlying health conditions being most at risk. There are two main pollutants of concern produced by combustion engines - Nitrogen Dioxide (NO₂) and Particulate Matter (PM) vehicle exhaust emissions - with diesel exhaust emissions in particular contributing most to the air pollution problem.
- 2.2 Unlike the smoke and smog problems of the past, NO₂ and PM are invisible, leading to a perception that the air is "clean". However, particulate matter is so fine that it is inhaled deep into the respiratory tract and, in the case of very fine particles and NO₂ may transfer into the blood stream. A range of health problems are attributed to exposure to high levels of nitrogen dioxide and particulate matter, the most obvious being respiratory conditions, asthma and coronary heart disease, but evidence is now also showing a strong association with cancer, strokes, low birth-weight babies and even childhood cognitive development. These health conditions impact both on quality of life and life expectancy.
- 2.3 Public Health England has included an indicator in the Public Health Outcome Framework relating to air quality. The indicator is a summary measure of the impact on death rates of long term exposure to man-made particulate air pollution. The indicator underlines the scale of the health impact. In Northamptonshire, Kettering has the second greatest number of pollution related attributable deaths after Northampton according to figures from the Department of Health.
- 2.4 NO₂ and particulates, together with other air pollutants, have been set an upper air quality limit value that the general population should not be exposed to in order to protect public health. These limits are legally binding through EU and

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UK law. Continued failure to meet the limit values will put the UK Government at risk of legal action being taken against it under European law, with the further risk of any fine imposed on the UK Government being passed down to local authorities if their action, or in-action, has contributed to the limit value being exceeded. Legal action has already been taken against the UK Government by Client Earth for the continued breach of the limit values in both the European Courts and UK Supreme Court.

- 2.5 There are no areas within Kettering Borough that currently exceed the air pollution upper limit values (expressed as an annual mean) and therefore no associated declaration of Air Quality Management Areas (AQMA). However, with the district expanding, it is likely to be only a matter of time before the cumulative impact of this development and associated traffic pollution exceeds the upper limit values. Even without an Air Quality Management Area (AQMA) given the health impacts of air pollution locally, it would seem prudent and right to take steps to protect public health.
- 2.6 Generally it is accepted that traffic-related emissions are the main reason why people are exposed to levels of air pollution which can damage health, however, society and the economy is structured around the effective and efficient movement of people and goods. The challenge is to reduce emissions, without adversely impacting on the economy and our need to travel. Conversely, there is also an opportunity for local communities and economy to benefit from the innovation and activity that will lead us to a low emission future.
- 2.7 Sustainable, low emission travel in and around our borough will make it a cleaner, safer, healthier place to live and work, and support its economic growth. The use of low emission vehicles, in particular electric vehicles, is part of this low emission future.
- 2.8 Electric Corby is Corby Borough Council's project to provide a low emission future – providing electric charging points across the borough in publically accessible locations to provide consumer choice around sustainable travel and support economic growth. <http://www.electriccorby.co.uk/>

There are currently 17 charging locations in their borough which were secured through an early Government grant – Plugged in Places – in 2013.

- 2.9 Kettering currently has four locations where there are electric charging points, though only three locations are publically available. These have been privately funded.
- Newlands Shopping Centre, Gold Street, Kettering
 - Renault Dealership (Richard Sanders Ltd), Brunel Close, Kettering
 - Holiday Inn Express, Rockingham Road (A43), Kettering
 - Euro Garages/Starbucks, Rockingham Road (A43), Kettering

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Working towards a Low Emission Future

2.10 The Council is taking a two pronged approach to improving health and encouraging sustainable travel:

- Developing planning policy that requires all developments to take responsibility for air pollution and reduce traffic emissions – this policy will set standards around the provision of electric vehicle charging infrastructure, in addition to improving access to public transport, the opportunities for walking and cycling etc.
- Installing public and workplace vehicle charging infrastructure subject to grant funding

2.11 In 2017 The Office of Low Emission Vehicles (OLEV) launched a Government funding package for local authorities to encourage installation of electric vehicle infrastructure. This only applies to workplace charging and publically accessible on-street charging in residential areas.

2.12 Nationally, the UK Government is to ban the production of new petrol and diesel cars and vans from 2040. This together with, for example, announcements by car manufacturers such as Volvo that they will only manufacture petrol-electric hybrid vehicles going forward, will support the public shift towards electric vehicles.

2.13 The table in **Appendix 1** shows the cumulative number of plug-in car and van registrations in Northamptonshire (Q4 2011 to Q1 2017). Whilst uptake is low, with electric vehicles representing a very small proportion of car users, it is on the increase. This is likely to increase faster due to a shift in the car industry toward electric vehicles

2.14 Kettering has one of the highest number of vehicles purchased in the region and the installation of additional charging points will only support this uptake. It is thought that the 241 users in 2017 will be in the majority home chargers or charge at their workplaces or at chargepoints outside of the borough. Some of the vehicle users in Kettering have already advised this is their usual charging pattern and have asked for more local charging to be provided.

3. CONSULTATION AND CUSTOMER IMPACT

3.1 The Council has been working with Podpoint, a national supplier of electric charging infrastructure to assess the feasibility of installing charging infrastructure in the Borough

3.2 The project will have two phases – Kettering town will be considered in the first phase given that this has the highest population, and associated higher urban traffic volumes than other areas in the borough. This will also support the Town Centre Strategy.

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- 3.3 The A6 towns will be considered as part of the second phase, benefitting from the learning of the first phase. In addition, however, planned public realm improvements in Burton Latimer in 2018/19 may provide an opportunity for several charging points to be installed as part of this work, with the capital costs potentially being borne by section106 monies and/or wind farm community funding.
- 3.4 The provision of the charging points in both phases will depend on the overall cost and available grant funding. The cost is determined by the availability of existing power supplies, the amount of groundworks required and permissions from other parties such as Northamptonshire County Council for on street points.
- 3.5 Where residents are going to be affected by the installation, for example, of on street charging points in residential areas, there will need to be some public consultation.
- 3.6 The electric vehicle users' community are also an important source of information on the proposed locations, to ensure the locations used are suitable.

4. POLICY IMPLICATIONS

- 4.1 The development of planning policy is being undertaken with the support of the Joint Planning Unit (JPU) for North Northamptonshire. This regional approach will provide more opportunity for the infrastructure to develop across the region and encourage regional sustainable growth.

5. FINANCIAL RESOURCE IMPLICATIONS

- 5.1 As outlined above the current Government funding is not intended to cover public car parks so it is possible that the Council may need to support funding from within its existing budgets for these locations. Conversations with the Government funding team have indicated that there may be some funding available for public car parks near to residential streets as funding uptake by local authorities has been low. This will be explored further with the team. If funding is not available the likely capital costs for charging points in our Kettering car parks is likely to be in the region of £5,000. There are unlikely to be any maintenance costs for the first three years, thereafter upgrades and repairs may be required.
- 5.2 At current energy prices, a full charge that provides between 60-120 miles depending on the vehicle type will cost approximately £4. Tariffs for charging will need to be considered as part of the project. Initially, a lower charging tariff could be considered to encourage use and support the public shift towards

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electric vehicles. There is an opportunity in future to generate an income from the use of the charging points.

- 5.3 One option is to install a workplace charging infrastructure near to the Municipal Offices. The provision of charging will provide more opportunity for the Council to support a low emission future. In addition, it will provide more options for staff commuting to work, and will support staff recruitment and retention. This approach may enable the Council to look at using electric or fleet vehicles in future.

6. HUMAN RESOURCE IMPLICATIONS

- 6.1 There are no Human Resources implications at this time.

7. LEGAL IMPLICATIONS

- 7.1 The procurement of suppliers is being considered as part of this project
- 7.2 The future enforcement of any charging points/ bays will need to be managed to ensure that they are only used by electric vehicles for appropriate amounts of time. For example, in town charging points tend to be used for “top up” charging rather than the overnight charging that you would expect in on-street residential locations.

8. RECOMMENDATION

- 8.1 The Research and Development Committee is asked for its view on the approach set out in this report.

Background Papers: None

Previous Minutes/Reports: None

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Appendix 1

Table showing a breakdown of the purchase of electric vehicles in Northamptonshire by local authority district

Authority	2011 Q4	2012 Q4	2013 Q4	2014 Q4	2015 Q4	2016 Q4	2017 Q1
Corby	0	1	3	17	39	61	67
Daventry	1	4	5	29	62	100	111
East Northamptonshire	0	2	5	27	56	74	81
Kettering	2	3	9	29	82	209	241
Northampton	0	3	15	49	129	177	182
South Northamptonshire	0	118	91	107	153	290	344
Wellingborough	0	2	4	20	29	50	59
Northamptonshire (total)	3	133	132	278	532	961	1,085