#### READING BOROUGH COUNCIL

### REPORT BY DIRECTOR OF ENVIRONMENT & NEIGHBOURHOODS

TO: STRATEGIC ENVIRONMENT, PLANNING AND TRANSPORT COMMITTEE

DATE: 2 JULY 2018 AGENDA ITEM: 12

TITLE: ELECTRIC VEHICLE CHARGING PROJECT

**LEAD** 

COUNCILLOR: COUNCILLOR PAGE PORTFOLIO: STRATEGIC ENVIRONMENT,

**PLANNING & TRANSPORT** 

SERVICE: REGULATORY WARDS: BOROUGHWIDE

**SERVICES** 

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ENVIRONMENTAL HEALTH OFFICER

#### PURPOSE OF REPORT AND EXECUTIVE SUMMARY

1.1 The report sets out the outcome of a successful bid to the Department of Environment, Farming & Rural Affairs (DEFRA) and the details of the project which aims to encourage the uptake of Electric Vehicles (EV) and pilot new electric charging infrastructure in areas of the Borough with no off-street parking.

## 2. RECOMMENDED ACTION

- 2.1 That the Committee endorses the actions and set out in paragraph in 4.6 and Appendix
- 2.2 That spend approval for the project up to the value of the bid be delegated to the Head of Planning, Development and Regulatory Services in consultation with the lead member for Strategic Environment, Planning & Transport.

#### 3. POLICY CONTEXT

- 3.1 The Government published the Clean Growth Strategy last year in which it announced its intention to:
  - End the sale of new conventional petrol and diesel cars and vans by 2040.
  - Spend £1 billion supporting the take-up of ultra-low emission vehicles (ULEV), including helping consumers to overcome the upfront cost of an electric car.
  - Develop one of the best electric vehicle charging networks in the world.
- 3.2 Alongside this, the Government has been working towards publishing an acceptable plan to tackle roadside Nitrogen Dioxide  $(NO_2)$ . The latest plan, which was amended following Client Earth's most recent legal challenge, has recently been published for consultation.

- 3.3 The Council's draft Local Plan, which will be subject an Examination in Public in the Autumn includes a requirement for all new development to include EV charging for at least 10% of the parking spaces provided.
- 3.4 The Council does not currently have an Ultra Low Emission Vehicle policy or specific policy covering the approach to infrastructure development in the Borough, however it is hoped that this project will enable these to be developed.

#### 4. THE PROPOSAL

- 4.1 The Council was able to bid to DEFRA in December 2017 for EV funding because the Borough has an Air Quality Management Area (AQMA) that was declared before March 2017 and, in addition, currently marginally exceeds predicted roadside NO<sub>2</sub> on one stretch of road identified by DEFRA.
- 4.2 The Council's analysis of the sources of nitrogen dioxide carried out in 2013, showed that cars account for 55% of vehicle  $NO_2$  emissions (40% Diesel, 15% petrol). This is the single largest contribution to locally produced  $NO_2$  emissions. The current Air Quality Strategy and Action Plan focuses on delivering transport based solutions, which can help to deliver improvements at source.
- 4.3 There are a range of barriers to EV uptake, many of which are not controllable by the Council. For example:
  - Cost and variety of new vehicles
  - Availability of certain vehicle types such as hackney carriages
  - Lack of knowledge
  - Lack of charging infrastructure
  - Mindset, there has yet to be a largescale cultural shift towards EV's
  - Range anxiety
  - Fear of obsolescence/resale
- 4.4 However, one area that the Council can have some influence is by demonstrating that EV can be practical, by delivering pilot projects on EV infrastructure in areas that would normally be considered to be technically difficult, such as to those households that do not benefit from off street parking. This could result in the acceleration of the uptake of EV's and a resultant reduction in  $NO_2$ , particulates and  $CO_2$  as conventional diesel and petrol vehicles are replaced.
- 4.5 Reading has a higher than average percentage of households living in terraced properties (33%). A high proportion of these properties will not have access to off-street parking, making charging an electric vehicle very challenging for around 13,700 households in the town.
- 4.6 In April 2018, the Government wrote to the Council announcing it had been successful in its bid for EV funding and had been awarded £100,000 to deliver its proposal.
- 4.7 The project is split into a number of work packages which are outlined in detail in Appendix 1. In summary, the work packages include a survey of areas to assess suitability; residents' survey to identify demand; pilot scheme(s) involving the installation of EV charge points; evaluation of the pilots and education and advertising to promote EV as a viable solution for residents.
- 4.8 It is hoped that in addition to providing residents with evidence of a tested solution, it will enable the Council to test and validate potential market solutions (e.g. lamppost EV charging), as well as feed into policy making which will help shape Reading's Ultra Low Emission future.

- 4.9 On the 22 March 2018, the Government issued a ministerial direction requiring 33 local authorities to undertake a feasibility study into reducing NO<sub>2</sub> levels in specific areas or stretches of road. Reading was one of the authorities named and has been working towards meeting the Government's challenging deadline of producing the feasibility by 31 July 2018. The feasibility is split into a number of parts at which the Council must submit completed reviews or assessments. These include:
  - Part 1 Understanding the Problems
  - Part 2 Developing a long list of measures for addressing the exceedances
  - Part 3 Assessing deliverability/feasibility and delivering a short list
  - Part 4 Evidencing the short list measures to identify options that could bring forward compliance.
  - Part 5 Setting out a preferred option

At the time of this report, only Part 5 remains to be submitted. Due to the resource intensive nature of this work, the EV project has had to be put on hold until after the feasibility has been submitted on 31 July.

- 4.9.1 As part of the feasibility study, officers are working with the taxi trade to fit a telemetric device to 30+ vehicles (Hackney and Private Hire vehicles). The aim of the study is to determine the most frequently used routes and the most frequently used rest areas which will then inform what charging infrastructure is required and where it is best sited.
- 5.0 Other Options Considered
- 5.1 The Council has a comprehensive Air Quality Action plan which sets out mechanisms for reducing air pollution, which are primarily improvements to the road network and delivery of public transport options.
- 5.2 The Office for Low Emissions Vehicles (OLEV) currently offers funding for residents who may be considering buying an EV and funding towards charging infrastructure. The Council could therefore refer residents to OLEV and not offer further support. However, this is likely to create additional issues, as each application would need to be considered, surveys carried out etc. The project aims to create a consistent, considered and tested approach to new charging infrastructure which could result in quicker uptake of EV vehicles by residents.
- 6. CONTRIBUTION TO STRATEGIC AIMS
- 6.1 In relation to the Council's Corporate Plan 2016 -2019 the following themes are appropriate:
  - Keeping the town clean, green, safe and active.
  - Proving the infrastructure to support the economy.
- COMMUNITY ENGAGEMENT AND INFORMATION
- 7.1 The project has a number of work packages, which includes a residents' survey and publicity.
- 8. EQUALITY IMPACT ASSESSMENT
- 8.1 Under the Equality Act 2010, Section 149, a public authority must, in the exercise of its functions, have due regard to the need to—
  - eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;
  - advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
  - foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

8.2 No group will be adversely affected by the introduction of these schemes.

#### 9. LEGAL IMPLICATIONS

- 9.1 No decision is required in respect of this report.
- 9.2 Any contracts or services procured as a result of the implementation of the project will have due consideration of the Council's Standing Orders.

### 10. FINANCIAL IMPLICATIONS

10.1 DEFRA have awarded revenue grant of £100,000. An estimated breakdown of spend in the next two financial years is detailed below.

	2018/19 £000	2019/20 £000	2020/21 £000
Employee costs (see note1) Other running costs Capital financings costs	£40,000	£60,000	
Expenditure	£40,000	£60,000	
Income from: Fees and charges (see note2) Grant funding (specify) Other income	£40,000	£60,000	
Total Income:	£40,000	£60,000	
Net Cost(+)/saving (-)			

### 10.2 Risk Assessment

10.3 The revenue grant is monitored and the Council must update DEFRA on its progress. If insufficient progress is made or the project is not run within the governance structure outlined in the bid, there is a risk that DEFRA may challenge the provision of the funding.

## 11. BACKGROUND PAPERS

- 11.1 Air Quality Action Plan 2016
- 11.2 Draft Local Plan
- 11.3 Air Quality Report to SEPT 19 March 2018

## Appendix 1

# Work Package 1 (Area Survey):

Timeline: March 2018 - July 2018

Preliminary data shows that 276 streets within Reading have permitted on street parking. The area survey will survey the suitability of each of these for provision of EV infrastructure in terms of:

Desk Study + Site Investigation

Collect and collate available data

- Interrogate street lighting database and survey data for all locations to assess location of column (kerbside or rear of footway) over 10000 columns.
- Assess suitability of street lights due to signage or other as yet unknown factors.
- Consider location in terms of locality to Air Quality Management Area (AQMA)
- Any other power sources available that do not require major works.
- Any other factors that might prevent or make parking near column an issue

## Prepare Report

Prepare report identifying suitable locations for installation of EV charge points

## Work Package 2 (Residents Survey):

Timeline: July 2018 - October 2018

Survey design & data collection

Employ contractor to design and distribute survey to approximately 10,000 residents.

Collect and collate feedback from survey.

# Reporting

Processing and analysis of data and preparation of report.

# Work Package 3 (Pilot Study):

Timeline: October 2018 - March 2019

Using OLEV funding each charge point could be installed for a cost of circa £250, enabling an estimated total of 240 EV charge points to be installed.

- Using the output from the surveys identify the best locations for the pilot study.
- Follow procurement rules as necessary to employ a contractor for installation of EV charge points.
- Install infrastructure
- Monitor usage and evaluate satisfaction of residents participating through follow up survey.
- Prepare final project report.

## Work Package 4 (Publicity):

Timeline - March 2018 to March 2019

Because the survey may not capture everyone that lives where there is no off street parking and is interested in purchasing an EV we plan to carry out a publicity campaign in parallel with the project. This will comprise of the following:

Press releases and advertisements.

- Bus backs: 30 buses for 4 weeks, covering all routes in Reading
- Radio advertising: for a two week campaign (70, 30 second spots across all shows on Heart)
- Online advertising: Boosted social media
- Leaflets to distribute to car dealerships and residents groups. A5 leaflet,
- Flag: to support events held at dealerships and residents groups.