

## RIBBLE VALLEY BOROUGH COUNCIL REPORT TO COMMUNITY SERVICES COMMITTEE

Agenda Item No. 6

meeting date: TUESDAY 13 MARCH 2018  
 title: ELECTRIC VEHICLE CHARGING REPORT  
 submitted by: J. HEAP – DIRECTOR OF COMMUNITY SERVICES  
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### 1 PURPOSE

- 1.1 To inform the Committee about the potential installation of electric vehicle charging points in the Council's car parks.
- 1.2 Relevance to the Council's ambitions and priorities:
- Community Objectives – To sustain a strong and prosperous Ribble Valley.
  - Corporate Priorities – To ensure best use of council resources in the provision of parking.

### 2 BACKGROUND

- 2.1 Electric vehicles are now integral to the Government's policies for climate change and transport. This was highlighted most recently by the Industrial Strategy white paper which identified clean growth and mobility as two of the four 'Great Challenges' facing the UK economy.
- 2.2 In addition, the Government has also announced a target to ban the sale of diesel and petrol engine cars and vans after 2040.
- 2.3 Research indicates that there are currently over a thousand owners of electric vehicles in Lancashire and this figure is expected to rise to around 10,000 within the next 18 months to 2 years.
- 2.4 There are several types of charging points available, that offer varying rates of charge –
- 3kW – slow charging points that take between 6-8 hours to fully charge;
  - 7-22kW – fast charging points that take between 3-4 hours to fully charge;
  - 43, 50 or 120kW – rapid charging points that can provide an 80% charge in approximately 30 minutes.
- 2.4 There are currently only three charging point locations available to the public within the Ribble Valley, all of which are sited in the Langho area.

LOCATION	CURRENT PROVISION	CHARGE SPEED
Hackings Caravan Park, Old Langho	1	7kW
Northcote Hotel, Langho	2	7kW
Mytton Fold Hotel, Langho	1	7kW

2.5 The table below shows the current quantity of charge points operated by or on behalf of nearby district Councils.

AUTHORITY	CURRENT PROVISION		
	QUANTITY	CHARGE SPEED	CHARGING POLICY
Blackburn with Darwen	0	N/A	N/A
Burnley	0	N/A	N/A
Chorley	2	7kW	Free but pay for parking
Craven	0	N/A	N/A
Fylde	0	N/A	N/A
Hyndburn	1	43kW	Free
Lancaster	0	N/A	N/A
Pendle	0	N/A	N/A
Preston	4	7kW	Free but pay for parking
Rossendale	0	N/A	N/A
South Ribble	0	N/A	N/A
West Lancashire	1	7kW	£1.50 per hour and pay for parking
Wyre	0	N/A	N/A

2.6 The current level of provision in the county is very poor and of the districts that directly adjoin the Ribble Valley, only Hyndburn and Preston currently provide charge points.

### 3 Proposal

3.1 Discussions have taken place with two companies regarding the provision of electric vehicle charge points; E.ON and UK Recharge.

#### **E.O.N:**

3.2 The energy company E.ON are the market leader for electric vehicle charging in Denmark and Sweden, which are the most developed markets in Europe. They are currently expanding into other north European countries and are looking for potential sites in the United Kingdom. As part of this, they have offered the Council the opportunity to be a pilot site for their operations here.

3.3 E.ON has offered a full solution which includes all installation, future maintenance and management of the charge points. They may ask for a small, as yet unspecified

contribution towards the capital cost of the works but will fund the remainder of the installation and then all future maintenance for the lifespan of the charge points.

- 3.4 They consider that 7kW charge points will be obsolete commercially within the next two years and wish to install 22kW posts so that they are future proofed and can ensure they are able to cater for the demands of the ever evolving technology. This would also mean that the Council would have the fastest charge points in the Ribble Valley, and with the exception of Hyndburn, of all the Lancashire District Councils.
- 3.5 Drivers would be charged by E.ON to use the facility either by using an app or a pre-registered key fob. E.ON would be responsible for the energy usage but would receive the income generated from drivers using the charge points. They have indicated that they would share these profits with the Council if usage reached a sufficiently high level.
- 3.6 The Council could offer either free parking whilst vehicles were charging or could require drivers to pay for parking whilst charging took place.
- 3.7 If the project was deemed to be unsuccessful then E.ON would either remove the infrastructure or look for alternative solutions to encourage usage. They have stated that the posts would be maintained on a 12 hour call out basis.

#### **UK Recharge:**

- 3.8 UK Recharge are the installers of a product manufactured by a separate company and administered by a third party. Their offer also requires the involvement of 3 separate parties – the manufacturer, supplier and payment platform. They propose to install 7kW charge points, although, as mentioned above, research suggests that these will not be commercially viable within approximately 2 years.
- 3.9 Whilst they have offered income generating options, these require either full funding or match funding to install the equipment and ongoing costs.
- 3.10 UK Recharge has currently yet to provide a quotation or any budget costings for the works involved to undertake this project.

#### **Proposed Locations:**

- 3.11 E.ON has proposed the installation of five charge points at Chester Avenue Car Park and three at Railway View Car Park.
- 3.12 Chester Avenue is the largest long stay car park with 107 bays and is sited next to the bus/rail interchange. Providing charge points at this car park would encourage people to make more use of sustainable travel, as it would provide the opportunity to drive to the car park and then use bus or rail services for long distance journeys.
- 3.13 Railway View is the biggest short stay car park with 81 pay and display bays and is centrally located, within close proximity to the town centre amenities. It would also assist in encouraging Council staff take up of electric vehicles by having charge points sited next to the Council Offices.
- 3.14 A parking duration survey was undertaken by the Council over a 7 day period during the week commencing 8<sup>th</sup> January 2018, in order to determine the usage of these car parks.

The data obtained provided accurate usage figures as standard ticket data does not incorporate stays by long stay permit and disabled badge holders.

- 3.15 The table below shows occupancy data obtained from the survey, which indicates the level of usage at these car parks.

CHESTER AVENUE CAR PARK	
Average Occupancy (Mon – Fri)	60%
Average Occupancy (Sat – Sun)	22%
Peak Occupancy (Mon – Fri)	94%
Peak Occupancy (Sat – Sun)	73%
RAILWAY VIEW CAR PARK	
Average Occupancy (Mon – Fri)	37%
Average Occupancy (Sat – Sun)	32%
Peak Occupancy (Mon – Fri)	77%
Peak Occupancy (Sat – Sun)	91%

**Potential Benefits:**

- 3.16 To provide several fast charge points within the Ribble Valley would show the Council to be progressive and leading by example. It would also generate a significant amount of positive publicity for the Council by displaying both innovation and its commitment to renewable technologies.
- 3.17 E.ON’s charge points would enable the Council to offer the fastest charge points within the Ribble Valley and all neighbouring authorities except for Hyndburn. They have also offered to help future proof the charge points by installing additional ducting in the car park which would make any future additional installations easier.
- 3.18 The charge points would provide a service to residents and to regular visitors to the Ribble Valley, but it would also be an opportunity to attract additional visitors to the area and specifically to Clitheroe town centre. The average charge period would require the user to spend time in the town centre whilst they wait.
- 3.19 The current level of provision in the region, particularly to the north of the Ribble Valley is poor and Clitheroe could act as a staging post for tourists travelling through the Borough to the Forest of Bowland and further afield to the Lake District and Yorkshire Dales.
- 3.20 Charge points also increase the viability of Clitheroe as a retail destination as this would provide an advantage over other town centres and retail parks that have yet to provide their own.
- 3.21 There are financial advantages for businesses that have vehicle fleets, such as lower employer National insurance contributions and company car tax for employees. The

provision of charge points within the Ribble Valley would increase the viability of local businesses making this transition.

- 3.22 Encouraging the take up of electric vehicle use would reduce emissions in the Ribble Valley, therefore improving air quality and reducing local air pollution. Reducing carbon dioxide generated from road transport will also help combat climate change.
- 3.23 Electric vehicles are also considerably quieter than traditional petrol or diesel cars, meaning that noise pollution would be reduced as a result of lower engine and transmission noise.

#### **Potential Constraints:**

- 3.24 Existing parking bays would need to be utilised for the charge points and would have to be designated solely for that purpose. However, the parking duration survey indicates that even at the times of highest usage, both car parks would still have parking bays available if the proposed number of bays had been removed from general usage.
- 3.25 As E.ON would be responsible for all capital and revenue costs associated with the project, they require that they should receive any profit generated from the charge points. They have however, stated that if the levels of profit were to exceed a yet to be determined level then they would be willing to share these profits with the Council.
- 3.26 The Council would need to determine the charging policy for the bays, whether it offered them free of charge whilst charging or apply the standard parking tariffs to these bays. The cost to charge a vehicle is estimated at between £1 to £2 so the required pay and display tariff of between £0.70 to £2.60 should not act as a substantial deterrent to those wishing to charge their vehicle.
- 3.27 The charge point infrastructure would remain the property of E.ON for the lifespan of the posts and as such the Council would not have the freedom to move between suppliers for these bays. However, it would not be restricted with any of its other parking bays and would be able to install charge points there using companies of its choosing.
- 3.28 Upon the end of the lifespan of the post, suggested to be around 10 years, the Council would have the choice of taking on responsibility for the post or requiring E.ON to either remove or replace it. It is likely that the technology will continue to develop at a fast pace and as such, E.ON may look to change or upgrade their infrastructure during that time.

#### **4 CONCLUSION**

- 4.1 The project would provide an opportunity to identify demand, monitor the development of the technology and put the Council in a good position to adapt as the market develops.
- 4.2 UK Recharge's proposal would offer income opportunities but these would need to be mitigated by the requirement for an initial capital investment and the responsibility for ongoing maintenance. Also, whilst 7kW charge points are currently widespread, it is likely that these will need to be replaced within the next few years in order to retain the car parks as viable locations for charging.
- 4.3 The offer made by E.ON would enable the Council to utilise the services of a large scale company who would be responsible for the financial risk associated with the project,

allowing the Council to offer a service to the public with no financial risk, using what is an emerging technology.

- 4.4 The Council would have full access to all usage data which would help identify how successful the charge points were and any associated trends, giving a clear picture to help determine the need for any further investment in this type of project.

## 5 **RISK ASSESSMENTS**

5.1 The approval of this report may have the following implications:

- Resources – The project would be managed and financed by the E.ON, who may require an initial financial investment from the Council. The reduction in parking bays would potentially limit income at times of high usage, but the parking duration survey indicated that this would not currently be relevant.
- Political – It would show the Council to be progressive and innovative, with a commitment to using and encouraging renewable technologies.
- Reputation – This project should only enhance the reputation of the Council.
- Equality & Diversity – The installation of charge points would provide people with electric vehicles with a viable means of charging their vehicles at a faster rate than what can be offered as from domestic supply. This project may also encourage people who are considering purchasing an electric vehicle to change from more traditional vehicles.

## 6 **RECOMMENDED THAT COMMITTEE**

- 6.1 Ask officers to obtain detailed information relating to E.ON's proposal and upon receipt of this, submit a further report to this Committee.

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For further information please ask for Neil Yates, extension 4528

REF: Neil Yates Community Services 26.02.18