# SOUTH HOLLAND DISTRICT COUNCIL

**Report of:** **Deputy Leader Councillor Malcolm G Chandler and Executive Director - Strategy and Governance (Monitoring Officer) Executive Manager People & Public Protection Phil Adams**

**To:** **Cabinet Tuesday, 15 January 2019**

**(Author:** **Ryan Pack Graduate Trainee)**

**Subject** **Electric Vehicle Charging Stations**

**Purpose:** To consider proposals for the introduction of Electric Car Charging points across a number of locations within the district. The report provides the background, identifies the sources of funding available against which to bid and highlights approach, issues and costs associated with the supply, installation and running of electric vehicle charging points.

**Recommendation(s):**

1) That the Council applies for the Office of Low Emission Vehicles On-Street Parking Grant, which will cover up to a maximum of £7,500 or 75% of associated costs per installation.

2) It is recommended the Council also applies for an additional 25% of funding through private sector electric vehicle installers so that the cost of installation is fully funded.

3) That if these funding bids are unsuccessful that the Growth reserve is used for the costs associated with purchase and installation of 7 units across the district as set out in Appendix 3, of the report.

4) That Cabinet initially sets it charging rate at 0.30p per kWh at its charging stations based on external advice received.

5) That the Council pursues the construction of these seven electric vehicle charging stations in the following locations:

    - Vine Street (Spalding): Fast charging unit
    - Victoria Street (Spalding): Fast charging unit
    - Priory Road (Spalding); Fast charging unit
    - Pinchbeck Library and Community Hub (Pinchbeck): Fast charging unit
    - Curlew Centre (Sutton Bridge): Fast charging unit
    - Fishpond Lane (Holbeach): Fast charging unit
    - West Street (Crowland): Fast charging unit

6) That the outcome of the consultation process on the associated Car Parking Order, undertaken in accordance with the Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996, be submitted to the Leader and Cabinet and that after any necessary responses to the consultation have been issued the Leader determines whether or not to approve the Car Parking Order with or without amendments.

1.0 **BACKGROUND**

1.1 There are currently 16,500 charging points available in the UK. In total, South Holland has five charging stations at four different locations within the district, these are currently located in private business, at the following locations:

- Spalding
- Holbeach
- Long Sutton

The only public charging points in the district are located at Springfields Outlet Shopping & Festival Gardens and at the offices of Canebuzo. A table of these sites and regional comparison can be found under Appendix 1.
A recent report by Emu Analytics found that the UK needs an additional 83,500 charging points by 2020 in order to keep up with the rising demand for electric vehicles.

1.2 **Current Electric Vehicle Ownership:**

1.2.1 South Holland currently has 100 electric vehicles registered within the district based on statistics acquired from the Department for Transport.
This makes it the sixth highest for ownership amongst the seven districts in Lincolnshire.
A full comparison can be found under Appendix 1.

1.2.2 Ownership of electric vehicles has increased each quarter since Q1 2015 according to statistics acquired from the Department for Transport.
The building of charging stations will therefore help support current owners and promote electric vehicle ownership amongst South Holland residents, while making us a more attractive place for our visitors.
Success can be measured by an increase in new electric vehicle registrations within the district due to greater promotion of electric vehicles and improved facilities.

1.3 **Current Availability of Funding For Charging Stations:**

1.3.1 As per the previous report to Cabinet, the Office of Low Emissions Vehicles (OLEV) on-street parking fund remains the most viable funding option for South Holland District Council; based on the amount the council can claim and the support the fund is given from the private sector. Whilst this is an 'On-Street' fund it will fund off-street sites where there is public access.

1.3.2 This scheme would allow the building of fast charging units at no cost to the council, with up to £7,500 being available to cover both the unit itself and its installation through OLEV and the other 25% being covered by private sector companies.

1.3.3 This is currently the only central government grant fund aimed specifically at local authorities.

1.4 **Future funding opportunities**

1.4.1 In July, central government unveiled their new plans for electric vehicle funding as part of their new industrial strategy, known as The Road to Zero. This strategy followed the passing of the Automated and Electric Vehicles Act, which gave the government greater

powers in creating strategic charging points across the country.

1.4.2 The strategy pledges £400 million investment in charging infrastructure through the EV Charging Infrastructure Investment Fund. It is currently unclear if local authorities will be able to have access to this fund, as private investors.

1.4.3 The new strategy pledges a further £4.5 million in grant funding for an On-street Residential Scheme (ORCS) until 2020. This funding is intended for local authorities to roll out infrastructure support on publically owned residential streets. It is not currently clear how this funding differs from current opportunities, as specific details have yet to be announced.

1.4.4 The Road to Zero strategy also announced no further funding would be given to "destination chargers." These are defined as charging stations where users would typically spend more than an hour charging their car. Whilst the government recognises the importance of these areas for those who do not have access to off street charging, the strategy states that there is current sufficient private sector investment in these areas. The strategy instead favours the use of "top up" charging points, areas where residents are able to partly charge their vehicles, rather than fully charge them.

1.4.5 The strategy also pledges to support destination chargers at train stations in England, although no clear details of this are present within the strategy. Spalding train station currently has no electric vehicle chargers and its owner has not installed any charging units at any other stations within their franchise.

1.5 **Type of charging station:**

1.5.1 Fast chargers include all electric vehicle charging stations which can deliver a charge between 7 kWh (which would fully charge a vehicle in 3-5 hours) and 22 kWh (which can fully charge an electric vehicle in 1-2 hours). Throughout this process the council has been committed to getting the fastest possible chargers in the proposed locations and this has been discussed with installers on numerous occasions. Further tests are however needed to establish the exact amount of charge at certain sites, which would allow us to establish how quickly these fast charging stations would be able to full charge a car (though this may vary, based on model and battery age).

1.5.2 Rapid chargers, which can charge some electric vehicles up to 80% in 30-40 minutes, would require potential capital investment in the region of (£24,500 per unit), however rapid chargers do not attract grant funding at this time. In addition these units would require a substantially stronger electric current, which would also incur additional infrastructure costs, if available (a rapid charger requires over twice the electrical current as a high end fast charger). At this time it's proposed not to install any rapid at any of our sites, but cabinet may wish to in the future, if new grant funding was made available and infrastructure allowed.

1.5.3 Fast charging stations are slower than Rapid charging units, with their intended use being mainly for residents to charge their vehicles overnight. This is also the intended use of any chargers installed through the on-street vehicle charging grant.

1.5.4 Several sites which have been looked at could not support rapid charging, this is due to the limited power supply currently available to the site.

1.5.5 Slow charging stations would take between 7-12 hours to deliver a full charge, making them unviable for use in public car parks based on both speed and the number of vehicles that could be charged in a day.

## 1.6 Emerging technology changes

1.6.1 Technology surrounding electric vehicle charging is a constantly emerging field, with the recent industrial strategy pledge £40 million toward research and development programmes by summer 2018.

1.6.2 This is on top of the £106 million set to be invested in vehicle batteries and low carbon technology. Whilst not directly related to charging, battery technology advances may change the way vehicles are charged.

1.6.3 As charging units are constantly evolving, the council should consider the longevity of charging units if it intends to invest capital in them, as emerging technologies such as wireless charging and high power charging may become the new normal in a few years' time (although there are currently no plans to support councils in installing these technologies by central government ).

1.6.4 It is recommended that the council considers the impact of new technologies when deciding the scale of the project.

## 1.7 Locations:

1.7.1 In order to receive funding through the On-street parking fund, locations must meet certain criteria whilst also fulfilling viable technical specifications which would allow charging stations to be supported. These are listed below:

- Located within a residential area
- To have an electricity supply, capable of producing enough current to charge an electric vehicle.
- A port where this electricity can be accessed (such as a feeder post) is near the proposed parking bays

1.7.2 A total of 43 locations were considered across the district. Several sites, which had previously been agreed to have subsequently been removed from the proposal. These were due to various factors including but not limited to:

- The availability of parking
- Ownership of land
- The accessibility of a suitable electrical power supply. This includes sites which could not host either a fast or rapid charger

1.7.3 It is considered that the council looks again at those market towns which cannot currently support electric vehicle charging stations as part of any future proposals involving the expansion of electric vehicle charging infrastructure in the district

1.7.4 There are also several non-council sites, where operators may consider building charging stations. These operators have either indicated or begun rolling out charging stations nationally. These sites are not considered as they are private land and therefore would be

unable to receive any form of government funding.

1.7.5 Some of these non-council sites may build charging stations in the near future as per the Automated and Electric Vehicle Act 2018. Site owners may be compelled to provide electric vehicle charging under section 10 (large fuel retailers etc. provision of public charging points) regarding requirements being imposed on large fuel retailers.

1.7.6 Major fuel retailers such as BP and Shell have increased their commitment to electric vehicle charging, with both rolling out charging units programmes and the purchase of charging unit installers.

1.7.7 Shell anticipates a significant roll out of 150kw chargers at 30 locations by the end of March 2019. It is unlikely that this initial roll out will target South Holland sites, with new sites being in areas with high electric vehicle ownership or in cities.

1.7.8 The following sites have been considered suitable in this initial roll out. Not all of these sites are owned or controlled by the District Council

- Vine Street (Spalding)
- Victoria Street (Spalding)
- Priory Road (Spalding)
- Pinchbeck Library and Community Hub (Pinchbeck)
- Curlew Centre (Sutton Bridge)
- Fishpond Lane (Holbeach)
- West Street (Crowland)

1.8 **Use of parish car parks**

1.8.1 As a result of discussions with partners the use of parish and town councils car parks has been discussed in order to expand the number of appropriate sites within our main residential areas.

1.8.2 The following parish council sites were considered:

- Pinchbeck
- Sutton Bridge
- Crowland
- Long Sutton
- Donnington

1.8.3 Sites that were found to be appropriate can be found detailed in Appendix 2-B.

1.8.4 If the District Council wishes to proceed with the construction of electric vehicle charging stations on land not in the council's ownership , then it will have to enter into legal agreement/s to do so.

1.8.5 Legal services have also advised that there will be potential financial implications of any agreement made between the district and parish council which will require budgetary provision.

1.8.6 As previously agreed by Cabinet, whilst Parish sites will not be enforced by the District Council, it may be possible to offer support to help the parish with enforcement in an

advisory role.

1.8.7 A parish council has enquired whether the Council would offer any form of financial incentive in order to host a charging station and it is considered that the Council should not support this approach.

1.9 **Initial costs:**

1.9.1 The initial costs that the council will be charged for are:

- The costs of the charging unit itself
- The cost of installation

1.9.2 The on-street parking scheme covers up to £7,500 of the capital costs, which are defined as:

- Purchase of the unit
- Purchase of electrical components
- Cost of civil engineering work
- Hardware cost of installation
- Labour cost of installation

1.9.3 A breakdown of these costs in relation to fast units can be found under Appendix 3.

1.9.4 Installers contributions:

Funding for fast charging stations is available from suppliers, who would be willing to cover up to 25% of the additional costs, not covered by the Office of Low Emissions Vehicles funding.
This funding is available regardless of whether we charge or create free to use charging stations.
Without receiving the 25% cover from installers, it would cost the Council between £1,690 to £1,800 (after the application of the on street parking fund) per fast charging station.
The maximum that can be part-funded per unit through the On-Street parking fund is £7,500.
There are also several potential additional costs, mainly associated with the installation of these charging stations. These will be included within the grant funding but are not limited to:

- Additional groundwork
- Signage upgrade work

1.9.5 The council may fail to gain funding through this scheme if the area is deemed to have suitable off street parking provisions for residents. This is because residents with enough off street parking currently available, would be able to charge their electric vehicles within their own properties.

1.9.6 The cabinet must decide, in the event the bids to the office of Low Emissions Vehicles/providers are unsuccessful, whether it funds electric vehicle charging infrastructure through its own capital budgets.

1.10 **Payment for use:**

1.10.1 A table of the current cost of using an electric vehicle charging station in England can be found in Appendix 3.The charging units will be built without the capacity to take physical payment e.g. coins, as this will prevent the units becoming targets for damage.

**1.11 Ongoing costs:**

1.11.1 Through back office software, the council will be able to see how many kWh's each charging stations uses. This will therefore help the council calculate the cost of electricity per month, used by the charging station.

1.11.2 Vine Street is currently metered, meaning that usage of the charging stations would dictate the cost of utilities. This will be reflected in our charging mechanism.

1.11.3 The amount of electricity used by the charging station would also be dependent on the types of electric or hybrid vehicles that use the charging station and the amount of time per vehicles that the charging station is in use.

1.11.4 There is no funding available from central government to cover the potential loss of revenue from the conversion of car park spaces to electric vehicle only spaces. This is a risk associated with the construction of charging stations, mitigated by the growing number of electric vehicles within the district, suggesting a growing demand for public infrastructure. The proposal is that council will include the cost of a parking space within the price structure. Initially this means that there will be a potential drop in income from the reduction in use of these two spaces, particularly in Vine Street car park, while uptake in electric car use increases. It should be noted that the charging stations will allow for the charging of two vehicles at any one time.

1.11.5 One electric vehicle charging unit installer recommends that public charging stations be made free to use, but there is no contractual obligation for us to do this and it will not affect the council's ability to gain funding.

1.11.6 The council should retain the right to change the rate we charge per kWh at any time, in order to remain market competitive and to reflect any rises in the retail price index (RPI).

1.11.7 It is recommended that the council charge initially 0.30p per kWh at its charging stations. This is based on the current market rate for charging vehicles, which can be seen in Appendix 3.

**1.9 Enforcement:**

1.9.1 Enforcement of electric vehicle charging stations within council owned car parks will be covered through the council's standard enforcement policy.

1.9.2 For charging units located on parish land, the council may offer support to the parish council in preventing the misuse of electric vehicle spaces. Any agreement between the District and Parish council would include terms agreeing that parish councils prevent the misuse of these spaces in their car parks.

**1.10 Maintenance:**

1.10.1 Each unit installed through the on-street parking fund will have a warranty of three years. This includes all component parts that may be damaged.
Maintenance is not covered through the central government scheme but is normally obtained through procurement with the charging station supplier.
These costs have been included within our charging mechanism once the initial three years cover has expired, however this may not be fully recovered in the early years and revenue budget provision will required to support this.

1.13.2 After the third year of being under warranty, the council may take out an extended warranty for a further two years at the cost of £140 per annum or £12 a month per unit. These costs will be included in our charge rate.
Warranties cover parts and labour costs
This agreement does not cover either accidental or criminal damage to the charging units. This instead will have to be covered by the council, further details of this can be found under 1.15.If usage is low a further additional cost will be incurred.

**1.11 Installers**

1.11.1 This will be undertaken through a procurement process.

**1.12 Insurance:**

1.12.1 If accidental or criminal damage occurs, the council would be unable to claim any costs for repair back through its maintenance agreement or through its insurance due to the level of the excess and the full cost will fall to the Council.

**1.13 Planning provisions:**

1.13.1 Electric vehicle charging stations under certain circumstances can be defined as “permitted developments” meaning that they do not require planning permission.

1.13.2 The only site which may require planning permission is for West Street (Crowland), however the council is already seeking to work alongside Lincolnshire County Council Highways.

**1.14 Consultation**

1.14.1 In order to allow the use of electric vehicle charging stations within South Holland car parks, alterations have to be made to the current car park order. This process is set out under Local Authorities’ Traffic Orders (Procedure) (England and Wales) Regulations 1996. This consultation is due to finish on 11th January 2019.

1.14.2 The initial results of the consultation, will be informally presented to Cabinet during its meeting on the 15th January 2019. It is proposed that cabinet will consider the consultation at its meeting and recommend any final decision to be made by the Leader of the council, following formal responses to consultees.

**2 OPTIONS**

2.1 The Cabinet should consider if it wishes to apply for the On-Street parking fund /Installers

Funding.

2.1.1 The Cabinet should consider whether to agree the locations listed within the report and in addition could allow for additional stations to be built across the district in its own car parks in the future, or if towns or parish councils seek said installations.

2.2 That Cabinet considers if it wishes to pursue fast chargers in the event that it is not successful in securing funding from the Office of Low Emission Vehicles.

2.3 Do Nothing.

2.1.1 **REASONS FOR RECOMMENDATION(S)**

2.1.2 Commitment to "Work together with partners and local communities to improve the quality of Public spaces to be cleaner, greener and safer." From South Holland District Council's corporate plan.

2.1.3 To enable residents to access suitable charging provision.

2.1.4 Current availability of funding means that charging stations can be constructed with no direct cost to the council in the case of fast charging stations or at a subsidised rate in the case of rapid charging units.

2.1.5 Continual growth of electric vehicles in the district means that the council needs to respond to growing and changing demand to its car parks.

2.1.6 To increase South Holland's share of electric vehicle chargepoints within Lincolnshire.

2.1.7 Commitment to central government strategy regarding alternatives to petrol and diesel based travel.

2.1.8 To enable the council to make the necessary legal changes to the councils car parking order, to allow electric car charging accessible to does that need to use them.

## 3 EXPECTED BENEFITS

3.1 An increase in the number of electric vehicles registered within the district

3.2 Continued usage of the electric vehicle charging stations throughout the district.

3.3 Improved air quality within the district through reducing the number of vehicle emissions

3.4 Encouraging electric vehicle users to visit our market towns by making them more accessible to electric vehicle users

## 4 IMPLICATIONS

In preparing this report, the report author has considered the likely implications of the decision - particularly in terms of Carbon Footprint / Environmental Issues;

Constitutional & Legal; Contracts; Corporate Priorities; Crime & Disorder; Equality & Diversity/Human Rights; Financial; Health & Wellbeing; Reputation; Risk Management; Safeguarding; Staffing; Stakeholders/Consultation/Timescales; Transformation Programme; Other. Where the report author considers that there may be implications under one or more of these headings, these are identified below.

4.1 **Carbon Footprint / Environmental Issues**

4.1.1 Charging stations would promote the use of greener alternatives.

4.1.2 Improved air quality within South Holland district through lessening the amount of emissions in the district.

4.2 **Legal & Constitutional**

4.2.1 The council would need to enter into a binding legal agreement with a parish council where an installation is occurring on their land.

4.2.2 Enforcement matters will need to be fully considered once the service is up and running but is contingent upon suitable amendments to the Car Parking Order.

4.3 **Contracts**

4.3.1 The council would be entering into a contract with a procured supplier this would be a legally binding agreement.

4.3.2 This process of tendering for a contract should be dealt with by the contracts and procurement team.

4.4 **Corporate Priorities**

4.4.1 Commitment to “Work together with partners and local communities to improve the quality of public spaces to be cleaner, greener and safer.”

4.5 **Crime and Disorder**

4.5.1 Charging stations will be covered by the council’s insurance policy but the level of excess is such that any costs will need to be borne in full by the Council.

4.6 **Equality & Diversity/Human Rights**

4.6.1 The equalities impact assessment relating to the introduction of electric vehicle charging infrastructure in car parks can be found under Appendix 4.

4.7 **Financial**

4.7.1 Any future submissions for funding regarding for electrical vehicle points may be affected as the council would have to declare that it has previously taken government funding. Specifically this may affect the council’s ability to receive the workplace charging grants

from OLEV.

4.7.2 Appendix 3 provides the full financial detail and appraisal regarding the delivery of electric vehicle charging stations, in summary:

| | |
|---|---|
| Cost of Installation: | £3,800 per unit |
| Legal Fees | Costs currently unknown |
| Loss of Income | Approx £912 per annum* |
| Maintenance | Approx £245 per annum* |

*To be covered by charge

If usage is lower than anticipated there will be a cost to the council in terms of loss of car parking income and funding required for maintenance.

4.7.3 For three years the Council will be committed to the provision of these services and beyond that there is no clawback of grant, however relocation is possible if necessary at the Councils cost.

4.8 **Staffing**

4.8.1 Staff would have to be trained in learning the back office software for management of the charging stations

4.8.2 Those in charge of performance management would also need to be trained in accessing the data in order to monitor its performance.

4.9 **Stakeholders / Constitution / Timescales**

4.9.1 Parish councils who host these charging stations would be stakeholders due to the use of their land.

4.9.2 Timescales for this project would further have to be extended based off of the need to write up and form agreements with the relevant parish councils.

4.9.3 The results of the Car Parking consultation will need to be considered.

## 5 WARDS/COMMUNITIES AFFECTED

5.1.1 Holbeach Town

5.1.2 Spalding St Johns

5.1.3 Pinchbeck and Surfleet

5.1.4 Sutton Bridge

5.1.5 Crowland and Deeping St Nicholas

## 6 ACRONYMS

6.1.1 OLEV: Office of Low Emissions Vehicles

| Background papers:- | None |
|---|---|

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**Key Decision:** **N**

**Exempt Decision:** **N**

**This report refers to a Discretionary Service**
**Appendices attached to this report:**

| | |
|---|---|
| **Appendix 1** | **Current availability of electric vehicle charging stations in South Holland and the surrounding region**<br>**Charging infrastructure currently available in South Holland**<br>**Ownership of electric vehicles in South Holland and Lincolnshire per quarter** |
| **Appendix 2** | **List of sites evaluated and list of proposed acceptable sites.** |
| **Appendix 3** | **Financial**<br>- **Current costs across England for use charging stations**<br>- **Private sector electric vehicle installer usage costs breakdown** |
| **Appendix 4** | **Equalities Impact Assessment** |