AGENDA SUPPLEMENT



Committee - CABINET

Date & Time - Tuesday, 15 January 2019 at 10.00 am

Venue - Council Chamber, Council Offices, Priory Road,

Spalding

Membership of the Cabinet:

Councillors: The Lord Porter of Spalding CBE (Leader), C N Worth (Deputy Leader), M G Chandler (Deputy Leader), T A Carter, A Casson, P E Coupland, R Gambba-Jones, C N Johnson, C J Lawton and G J Taylor.

No substitutions permitted. Quorum 3.

Note: Cabinet reports may be referred to Council or Scrutiny Panels. They

should therefore be kept for future reference during the current

committee cycle.

Persons attending the meeting are requested to turn mobile telephones to silent mode

Democratic Services Council Offices, Priory Road Spalding, Lincs PE11 2XE

Date: 11 January 2019

AGENDA

8. Electric Vehicle Charging Stations – 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 (report of the Deputy Leader and the Executive Manager People and Public Protection).

(Pages 259 -286)

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) onstreet 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 FeesCosts currently unknownLoss of IncomeApprox £912 per annum*MaintenanceApprox £245 per annum*

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

^{*}To be covered by charge

6 ACRONYMS

6.1.1 OLEV: Office of Low Emissions Vehicles

Background papers:-	None				
Lead Contact Officer					
Name and Post:	Ryan Pack Graduate Trainee				
Telephone Number Email:	ryan.pack@breckland-sholland.gov.uk				
Key Decision:	N				
Exempt Decision:	N				
This was art refers to a Discretionary Comples					

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 Charging infrastructure currently available in South Holland 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 - Current costs across England for use charging stations - Private sector electric vehicle installer usage costs breakdown
Appendix 4	Equalities Impact Assessment

Appendix 1:

Current availability of electric vehicle charging stations in South Holland and the surrounding region

Name	Type of authority	Amount of charging points	Difference to SHDC	Amount of electric vehicles per charging station
South Holland	District	5	N/A	20
North Kesteven	District	1	-4	175
South Kesteven	District	8	+3	28
Boston	District/Borough	4	-1	17
East Linsey	District	11	+6	15
West Linsey	District	3	-2	54
Lincoln	District	17	+12	6
Fenland	District	2	-3	N/A
Peterborough	Unitary	22	+17	N/A
King's Lynn and West Norfolk	District/Borough	13	+8	N/A
Total		86		

Charging infrastructure currently available in South Holland

Name of	Location	Private or public	Cost to use	Notes
charging point		point		
Canebuzo	Long Sutton	Public	Free to use	
FESA UK Itd	Spalding	Public		Only available
				within business
				hours
Absolute Zero	Spalding	Private	N/A	Site has
				restricted access
				and is most likely
				only available at
				set times
Springfields	Spalding	Public	Free to use	Free to use but
Outlet Shopping				user must pay for
& Festival				parking. Location
Gardens				also has two
				charging stations

Electric Vehicle ownership within Lincolnshire

Region/Local Authority	2018 (Q2)	2017	2016	2015	2014
Lincolnshire	1006	857	597	352	187
South	225				
Kesteven		182	124	74	29

East Lindsey	168	142	103	64	42
North	175				
Kesteven		144	120	60	38
West Lindsey	162	132	77	42	25
South Holland	100	91	68	37	16
Lincoln	103	92	56	42	20
Boston	70	71	47	31	15
Position of	6th	5th	5th	6th	6th
South Holland					
within County					
(out of 7)					

[Source: Department for Transport]

Appendix 2:

Appendix 2-A: Location list

Suitable locations

Name	Area	Feasibility	Council owned	Does the site receive enforcement?	Notes
Vine Street	Spalding	Yes	Yes	Yes	Site feasibility check performed and supplier is satisfied that the site could support charging units.
Pinchbeck Library and Community hub	Pinchbeck	Yes	No	Unknown	Site feasibility check performed and supplier is satisfied that the site could support charging units.
Curlew Centre	Sutton Bridge	Yes-Recommended for two charging stations given the large amount of onsite parking available	No	Unknown (some enforcement may come from the centre during opening hours but this would have to be clarified)	Site feasibility check performed and supplier is satisfied that the site could support charging units.
Fishpond Lane	Holbeach	Yes	Yes	No	Site feasibility check performed by council officer. Check with supplier happening imminently.
West Street	Crowland	Yes (dependent on changes to current parking arrangement)	No	No	Site feasibility check with supplier happening imminently.
Victoria Street	Spalding	Yes	Yes	Yes	Site feasibility check performed and supplier is satisfied that the site could support charging units.
Priory Road	Spalding	Yes	Yes	N/A	Whilst the site has yet to receive a feasibility check from a supplier, officers indicate that a charger could be feasibly installed at this site.



SOUTH HOLLAND DISTRICT COUNCIL FINANCIAL COMMENTS & APPRAISAL

THIS DOCUMENT PROVIDES THE FINANCIAL IMPLICATIONS IN RESPECT OF THE ATTACHED REPORT

FROM: Ryan Pack

REPORT: Electric Vehicle Charging Stations REPORT DATE: Cabinet 15th January 2019

Option 1: Recommended model for seven fast charging units funded through the Office of Low Emissions On street Parking Grant at 0.30p a kwh.

Option one relates to purchase and construction of seven fast charging units. All seven fast charging units would be applicable to receive grant funding if approved by the Office of Low Emission Vehicles.

	Year 1	£ Year 2	£ Year 3	£ Year 4
	2018-19	2019-20	2020-21	2021-22
Revenue				
Income		-		
Use of electric vehicle charging station (at	(£10,516)	(£10,726)	(£10,940)	(£11,158)
0.30p per kwh with a 2% increase per year				
based on RPI changes)				
Costs				
Commission (0.19p per charging event)	£431	£431	£431	£431
Utility costs (0.20p per kwh with 2%	£7,010	£7,150	£7,290	£7,430
increase per year based on RPI changes)				
Extended Warranty	£245	£245	£245	£245
Loss of car parking income	£912	£912	£912	£912
Total Income -	(£10,516)	(£10,726)	(£10,940)	(£11,158)
Net (Surplus)/Deficit	(£1,918)	(£1,988)	(£2,062)	(£2,140)

	Year 1
	2018-19
Capital	
Charging units	
Fast Units	£12,600
Fast installation	£14,000
Applicable grants	
Grant funding for fast units	(£12,600)
Grant funding for fast unit installation	(£14,000)
Total Capital	£0

Option 2: <u>Model for seven fast chargers, with no funding from Office of Low Emissions on Street</u> <u>Parking Grant at 0.30p a kWh.</u>

Option two relates to if the council wishes to construct seven fast units through its own capital budget. This option is relevant in the event that all sites are unsuccessful and the council wishes to pursue the construction of charging infrastructure throughout the district.

	Year 1	£ Year 2	£ Year 3	£ Year 4
	2018-19	2019-20	2020-21	2021-22
Revenue				
Income		-		
Use of electric vehicle charging station (at	(£10,516)	(£10,726)	(£10,940)	(£11,158)
0.30p per kWh with a 2% increase per year				
based on RPI changes)				
Costs				
Commission (0.19p per charging event)	£431	£431	£431	£431
Utility costs (0.20p per kWh with 2%	£7,010	£7,150	£7,290	£7,430
increase per year based on RPI changes)				
Extended Warranty	£245	£245	£245	£245
Loss of car parking income	£912	£912	£912	£912
Total Income -	(£10,516)	(£10,726)	(£10,940)	(£11,158)
Net (Surplus)/Deficit	(£1,918)	(£1,988)	(£2,062)	(£2,140)

	Year 1
	2018-19
Capital	
Charging units	
Fast Units	£12,600
Fast installation	£14,000
Total Capital	£26,600

Option 3: <u>Model for seven fast charging units funded through the Office of Low Emissions On street Parking Grant at 0.25p a kWh.</u>

Option one relates to purchase and construction of seven fast charging units. This option is if Council wish to charge at the lower rate of 0.25pence per. All seven fast charging units would be applicable to receive grant funding if approved by the Office of Low Emission Vehicles.

	Year 1	£ Year 2	£ Year 3	£ Year 4
	2018-19	2019-20	2020-21	2021-22
Revenue				
Income		-		
Use of electric vehicle charging station (at	(£8,764)	(£8,939)	(£9,115)	(£9,290)
0.25p per kWh with a 2% increase per year				
based on RPI changes)				
Costs				
Commission (0.19p per charging event)	£431	£431	£431	£431

Utility costs (0.20p per kWh with 2%	£7,010	£7,150	£7,290	£7,430
increase per year based on RPI changes)				
Extended Warranty	£245	£245	£245	£245
Loss of car parking income	£912	£912	£912	£912
Total Income -	£8,764	£8,939	£9,115	£9,290
Net (Surplus)/Deficit	(£166)	(£201)	(£237)	(£272)

	Year 1
	2018-19
Capital	
Charging units	
Fast Units	£12,600
Fast installation	£14,000
Applicable grants	
Grant funding for fast units	(£12,600)
Grant funding for fast unit installation	(£14,000)
Total Capital	£0

Option 4: <u>Model for seven fast chargers, with no funding from Office of Low Emissions on Street Parking Grant at 0.25p a kWh.</u>

Option two relates to if the council wishes to construct seven fast units through its own capital budget. This option is if Council wish to charge at the lower rate of 0.25pence per. This option is relevant in the event that all sites are unsuccessful and the council wishes to pursue the construction of charging infrastructure throughout the district.

	Year 1	£ Year 2	£ Year 3	£ Year 4
	2018-19	2019-20	2020-21	2021-22
Revenue				
Income		-		
Use of electric vehicle charging station (at	(£8,764)	(£8,939)	(£9,115)	(£9,290)
0.25p per kWh increasing 2% per year				
based on RPI changes)				
Costs				
Commission (0.19p per charging event)	£431	£431	£431	£431
Utility costs (0.20p per kWh with 2%	£7,010	£7,150	£7,290	£7,430
increase per year based on RPI changes)				
Extended Warranty	£245	£245	£245	£245
Loss of car parking income	£912	£912	£912	£912
Total Income -	£8,764	£8,939	£9,115	£9,290
Net (Surplus)/Deficit	(£166)	(£201)	(£237)	(£272)

	Year 1	
	2018-19	
Capital		
Charging units		

Fast Units	£12,600
Fast installation	£14,000
Total Capital	£26,600

Notes:

How electric vehicle charging works:

On average it takes 16 kWh's to fully charge an electric vehicle, with variables including the age of the battery, model of car and charge currently within the battery. The speed at which these 16 kWh's can be delivered is dependent on the available current from the power source of the charging stations. Anything which has a current between 7kWh's and 22kwhs would be considered a fast-charging unit whereas a rapid unit is any charge between 42kWh's and 50 kWh. The stronger the current available, the quicker an electric vehicle is able to receive 16kwhs. Fast units deliver this charge slower than rapid units and this is reflected in the time it takes for an electric vehicle to charge. Both fast and rapid units use the same amount of electricity, the only difference being that the power source for a rapid unit has a stronger current, which allows electricity to be transferred quicker.

In order to make electric vehicle charging, cost effective for the council, it is proposed that the council offsets the cost of utilities through what it charges users. This is done by ensuring that the price per kWh sold to users is higher than what the council currently pays its utility provider.

Income:

It is proposed that the council charges 30 pence or 25 pence per kWh for users on any of its fast electric vehicle charge stations. Several elements have been considered in order to reach this figure. This charge has been considered against both local and national charges to use electric vehicle charging infrastructure. A comparison of this can be found in table A. below. As per previous discussions, the council wishes to charge users to use electric vehicle charging infrastructure and retains the right to change this charge at any time (dependent on terms of the agreement with its supplier). Whilst the council retains the freedom to charge what it wishes for the user of the electric charging units, it must offer a price which is competitive as other units within market towns are currently free to use. If the council does not charge competitively, then it risks losing custom to its units.

Costs:

Utility costs have been calculated to be inflated in comparison to what the council currently pay for its utility supplies. Current council utility bills vary between 14-18 pence per kWh. The attached Proforma lists utility costs as 20 pence per kWh, in order to accommodate for utility costs of parish councils. It is proposed that parish sites are used to host South Holland Council charging units, which would be powered by nearby parish buildings. The district council would then reimburse the parish council for the utilities used by the charging stations (this will be calculated through either backroom programmes to do directly with the charging unit or through a metered connection being made to the charging unit). This will be calculated per parish council and will be replayed to them at an agreed time e.g. monthly, quarterly, annually.

Commission costs are based on what is currently charged by electric vehicle installer Chargemaster. In the event that the council wishes to go with a different installer, these costs would change.

The attached Proforma B also includes utility price increases based on current Retail Price Index trends (of 2% growth per year). The council will be able to offset the increased utility prices by increasing what it charges customers, to ensure that the units do not operate at a loss.

Loss of car parking income:

The above Proforma B includes loss of car parking income specific to one site (Vine Street). This is due to the limited size of the site, as the removal of two parking spaces for non-electric vehicles, will have a much greater impact on the car park. The calculation for this loss of income can be seen in the below.

- 300 days per year
- 2 car parking spaces out of normal use
- Usually fully occupied-assumption 8 hours peak hours
- Less potential income from electric car parking 4 hours
- Average hourly car park rate £0.38 per hour
- Lost income 4 hours x 2 spaces x £0.38 x 300 days = £912.00

This loss may however change as electric vehicle ownership levels increase in the district, resulting in the space being filled more. Any electric vehicle which uses the space will still have to pay normal parking chargers in council owned car parks.

Infrastructure:

There are currently seven sites proposed as being suitable for electric vehicle charging infrastructure. The Council may wish to apply for grant funding through the Office of Low Emission Vehicles on-street parking grant. The council would be able to apply for this grant on sites where it wishes to install a fast charging station. The government are not currently willing to fund any rapid chargers through this or any associated schemes, as it does not currently fit their strategic goals, set out in their low emissions vehicles strategy.

It is recommended that the council apply for this grant at all relevant car parks. However, due to the terms of the grant, there is no guarantee that a bid would be successful at all sites. This would be due to some sites not meeting the correct criteria such as a lack of off-street parking available to residents.

Polar Users:

Polar users are monthly subscribers to the POLAR network, the UK's biggest public charging network. It links over 6,500 public charging points, giving EV drivers a convenient and reliable nationwide charging system which is the name of the supplier used by Chargemaster. POLAR users receive the benefit of having the amount they pay on POLAR charging units capped (at 9 pence per kWh). A further breakdown of this can be found in the table below. Current estimates show that there are 100 POLAR users currently registered in Lincolnshire. In Lincolnshire, there are currently 901 registered electric vehicles with 95 registered in South Holland. This is an associated risk of joining the POLAR charging scheme, it is a contractual condition of using Chargemaster as an installer and by extension, receiving funding from them.

Income	
Use of electric vehicle charging station (at	£1.63
0.09p per kWh)	
Costs	

Commission (0.19p per charging event)	0.19
Utility costs (0.20p per kWh)	£3.20
Total Income -	£1.63
Net (Surplus)/Deficit	-£1.76

Table A: Current cost of use for commercial electric charging stations in England

Network name	Charge	Additional costs
Polar Instant	£1.50 per hour	£1.20 administrative charge
Polar Plus	9p per kWh	£7.85 monthly membership fee
Charge Your Car	Not set costs (charged at either a flat rate or per kWh used)	£20 yearly membership fee
POD Point	Free	Free
GeniePoint	30p per kWh	£1 connection fee
InstaVolt	35p per kWh	None
Ecotricity	30p per kWh	None
Plugged in Midlands	10.8 per kWh	£7.85 monthly membership fee
EV Driver	25p per kWh	£5 one time membership fee
GMEV	Free	£20 annual fee and £1 connection charge
Source West	Free	£20 annual fee and £1 connection charge
Recharge	Free	£20 annual fee and £1 connection charge
Energise	Free	£20 annual fee and £1 connection charge
New Motion	20-25p per kWh	30-35p connection charge

Rates are based off of 22kWh charging station

Considered By:

Date:

This appraisal is valid for 1 month from issue date.			
If there are changes to the original report it may invalidate this document & must be reviewed by			
Finance.			
Page 1 of 2			

PROFORMA B

Detail

Financial Services Comments

Assuming that the electrical charging stations can be installed at no cost to the Council (Options 1 & 3), with operating costs being covered by projected customer revenue, on the basis of the assumptions presented this bid should therefore be cost neutral factoring in the potential loss of car

park income. If the Council is unsuccessful in obtaining this external funding (Options 2 & 4), there is a risk that this will be a pressure on the Council's capital programme.

Financial Risk

Not being able to obtain adequate grant funding, creating a pressure on the Council's capital programme. Potential reduction in income due to POLAR subscription usage.

This appraisal is valid for 1 month from issue date. If there are changes to the original report it may invalidate this document & must be reviewed by Finance.		
//2018 Page 2 of 2		



South Holland District Council

Equality Impact (Initial Analysis)

Civil Enforcement Off-Street Parking Places Order 2018

1. Name and description of policy/service/function/strategy

South Holland District Council Civil Enforcement Off-Street Parking Places Order 2018. An amendment to the existing Car Parking Order to allow for electric vehicle only parking spaces.

Is this a new or existing policy? Existing

2. Complete the table below, considering whether the proposed policy/service/function/strategy could have any potential positive, or negative impacts on groups from any of the protected characteristics (or diversity strands) listed, using demographic data, user surveys, local consultations evaluation forms, comments and complaints etc.

Equality Group	Does this policy/service/function/strategy have a positive or negative impact on any of the equality groups? Please state which for each group	Please describe why the impact is positive or negative. If you consider this policy etc. is not relevant to a specific characteristic please explain why
Age	Neutral	Age is not a determinant in the amendments of this Order as car parking spaces for non-electric vehicles will still be widely available within the car parks.
Disability	Neutral	Disability is not a determinant in the amendments of this Order as no disabled car parking spaces will be removed/changed to electric vehicles only.
Race	Neutral	Race is not a determinant in the amendments of this Order as car

		parking spaces for non-electric vehicles will still be widely available within the car parks.
Gender Reassignment	Neutral	Gender reassignment is not a determinant in the amendments of this Order as car parking spaces for non-electric vehicles will still be widely available within the car parks.
Religion or Belief	Neutral	Religion or belief is not a determinant in the amendments of this Order as car parking spaces for non-electric vehicles will still be widely available within the car parks.
Sex	Neutral	Sex is not a determinant in the amendments of this Order as car parking spaces for non-electric vehicles will still be widely available within the car parks.
Sexual Orientation	Neutral	Sexual Orientation is not a determinant in the amendments of this Order as car parking spaces for non-electric vehicles will still be widely available within the car parks.
Pregnancy and Maternity	Neutral	Pregnancy or maternity are not a determinant in the amendments of this Order as car parking spaces for non-electric vehicles will still be widely available within the car parks.
Marriage and Civil Partnership	Neutral	Marriage and civil partnership are not a determinant in the amendments of this Order as car parking spaces for non-electric vehicles will still be widely available within the car parks.
Carers	Neutral	Carers are not a determinant in the amendments of this Order as car parking spaces for non-electric vehicles will still be widely available within the car parks.
Other Groups (e.g. those from deprived (IMD*) communities; those from rural communities, those with an offending past) *(IMD = Indices of multiple		

deprivation)	

3. What equality data/information did you use to inform the outcomes of the proposed policy/service/function/strategy? (Note any relevant consultation who took part and key findings)

It is considered that by creating parking spaces for electric vehicles only, users of electric vehicles will be able to access the spaces to charge their vehicles. A risk of not doing this, is that non electric vehicles could use these spaces and block access to charging infrastructure.

If there are any gaps in the consultation/monitoring data, how will this be addressed?

Statutory consultation on the alternations proposed to the order are being undertaken and all representations and objections will be considered before the recommendations are made to Cabinet in 2019.

4. Outcomes of analysis and recommendations: Please check one of the options.

a)	No major change needed: equality analysis has not identified any potential for discrimination or for negative impact and all opportunities to promote equality have been taken	X
	If you have checked option a) you can now send this form to the Lead Offic and your Neutral Assessor for sign off	er
b)	Adjust the proposal to remove barriers identified by equality analysis or to better promote equality.	
	If you have checked option b) you will need to answer questions b.1 and b.	2
c)	Adverse impact but continue	
	If you have checked option c) you will need to answer questions c.1	
d)	Stop and remove the policy/function/service/strategy as equality analysis has shown actual or potential unlawful	

- b.1 In brief, what changes are you planning to make to your proposed policy/service/function/strategy to minimise or eliminate the negative equality impacts?
- b.2 Please provide details of whom you will consult on the proposed changes and if you do not plan to consult, please provide the rationale behind that decision.

c.1 Please provide an explanation in the box below that clearly sets out your justification for continuing with the proposed policy/function/service/strategy.

Signed (Lead Officer): Ryan Pack

Graduate Trainee

Date completed: 09th January 2019