

CABINET

Date of Meeting	Tuesday, 17 th December 2019
Report Subject	Initial Roll Out of Electric Vehicle Charging Points in Flintshire
Cabinet Member	Deputy Leader of the Council and Cabinet Member for Streetscene and Countryside
Report Author	Chief Officer (Streetscene and Transportation)
Type of Report	Strategic

EXECUTIVE SUMMARY

There has been a significant increase in electric vehicle ownership over the last 5 years with many businesses and public sector organisations now investing heavily in electric vehicles. This is in response to Government policy as well as the wider drive to reduce carbon emissions, costs and develop sustainable travel options.

Despite advancements in both national and regional policy, the installation of associated charging infrastructure has not kept pace with the rapid increase in the number of electric vehicles now appearing on UK roads. It is therefore essential for the Council to extend the availability of Electric Charging Points (ECP's), to support future tourism in the County, residential development and wider business growth.

Following Cabinet's approval of an Electric Charging Point Strategy in October 2018, the Council, in partnership with Cadwyn Clwyd, commissioned a feasibility study to identify the most suitable and economically viable locations to introduce the first phase of charging points across the County.

The purpose of this report is to seek Cabinet approval to fund 8 ECP priority sites, identified as a result of the above study.

RECOMMENDATIONS

1	That Cabinet approves a bid for WG capital funding to install Electric Charging Points at 8 priority locations, which have been identified as a result of the County-wide feasibility study.
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REPORT DETAILS

1.00	EXPLAINING THE STRATEGIC DEVELOPMENT OF ELECTRIC VEHICLES AND CHARGING INFRASTRUCTURE
1.01	The environmental impacts of climate change, the rising cost of petrol and diesel, Government penalties and targets imposed for carbon emissions and the need to promote green travel make environmental responsibility a priority for the Council.
1.02	In recent years, there has been a significant increase in the demand for electric vehicles (EVs) in the UK, from 3,500 in 2013 to more than 130,000 in 2017. There has also been a marked increase in the number of pure-electric and plug-in hybrid models available in the UK. This, coupled with Central Government's recent move to accelerate the shift to Low Carbon Transport through the cessation of petrol and diesel car manufacturing by 2040, has further stimulated the uptake of EV's. The move to low carbon transport options is also well routed within Welsh Government Policy and the Environment (Wales) Act stipulates an 80% reduction in carbon emissions by 2050.
1.03	Despite advancements in both National and Regional policy, the installation of associated charging infrastructure has not kept pace with the rapid increase of EV's now appearing on UK roads and it is essential for the Council to support and progress the installation of ECP's to ensure their availability to support tourism, residential and wider business sector growth.
1.04	Due to the risks associated with investment in this rapidly developing sector, in October 2018, Cabinet approved the Council's strategy to adopt the role of an 'enabler' to facilitate the implementation of EVC's rather than assuming the role of a direct provider. This approach eliminates the risk of the County being burdened with outdated / superseded infrastructure whilst also facilitating the Council to enter in to long term lease agreement with specific suppliers thus providing long term income potential. A copy of the report to Cabinet is enclosed within Appendix 1 for reference.
1.05	To accommodate both existing and forecasted demands for EV's and the associated charging infrastructure, the Council has been working in collaboration with Welsh Government (WG), Denbighshire County Council and the Consultant Jacobs, who were appointed to review the current position in the region, under WG's 'Smart Living' Programme. The aim of the scheme, known as the 'Demonstrator Project' was to assess the current 'state of play' across both Council's, in relation to EV's and the local charging infrastructure.
1.06	There are currently just under 23,000 EV charge-point locations throughout the UK. In Wales, the current figure lies at 697 which equates to just 3.1% of the UK's share. A total of 199 EV vehicles are currently registered within the County of Flintshire with a total of 8 publicly accessible charging points at 3 locations:

	<ul style="list-style-type: none"> • At the A55 services in Holywell, • At the Beaufort Park Hotel in Mold. • Two other facilities at Tesco Car Park in Holywell. 																																																		
1.07	<p>In 2018, Flintshire County Council were successful in obtaining grant funding through Cadwyn Clwyd for a study to identify:</p> <ul style="list-style-type: none"> • The most suitable locations for ECP installations; • The associated costs and options for on-going delivery at each location; • The management and demand for ECP's in rural areas. 																																																		
1.08	<p>As a result of the above funding, the Council commissioned Urban Foresight to undertake a feasibility study on the potential installation of ECP's across the County - through the WG sponsored LEADER programme.</p>																																																		
1.09	<p>As a result of the above assessment process, the following 8 sites have been identified as immediate priorities;</p> <p>Phase 1 Priority Sites:</p> <table border="1"> <thead> <tr> <th>Site</th> <th>Ward Type</th> <th>Location Type</th> <th>Suggested Chargers</th> <th>High-level cost</th> </tr> </thead> <tbody> <tr> <td>Griffiths Square, Mold</td> <td>Urban</td> <td>Residential / Town Centre</td> <td>2x 7kW dual-outlet charger</td> <td>£4,119*</td> </tr> <tr> <td>Richard Heights, Flint</td> <td>Urban</td> <td>Residential / Local Centre</td> <td>1 x 7kW fast dual outlet</td> <td>£2,855*</td> </tr> <tr> <td>Castle Street, Flint</td> <td>Urban</td> <td>Tourism / Residential / Leisure</td> <td>2 x 7kW fast dual outlet</td> <td>£4,863*</td> </tr> <tr> <td>Pierce Street, Queensferry</td> <td>Urban</td> <td>Local Centre</td> <td>2 x 7kW fast dual outlet</td> <td>£4,688*</td> </tr> <tr> <td>Bridge Street, Shotton</td> <td>Urban</td> <td>Residential / Local Centre</td> <td>2 x 7kW fast dual outlet</td> <td>£4,250*</td> </tr> <tr> <td>Tower Gardens, Holywell</td> <td>Service</td> <td>Public / Local Centre</td> <td>1x 22kW semi-rapid dual outlet charger</td> <td>£9,675</td> </tr> <tr> <td>Precinct Way, Buckley</td> <td>Urban</td> <td>Local Centre</td> <td>1 x 22kW semi-rapid dual outlet</td> <td>£11,027</td> </tr> <tr> <td>Pavilion Leisure Centre, Flint</td> <td>Urban</td> <td>Leisure Centre / Local Centre</td> <td>1 x 22kW semi-rapid dual outlet</td> <td>£10,348</td> </tr> <tr> <td colspan="3">Total high-level cost</td> <td></td> <td>£51,824</td> </tr> </tbody> </table>	Site	Ward Type	Location Type	Suggested Chargers	High-level cost	Griffiths Square, Mold	Urban	Residential / Town Centre	2x 7kW dual-outlet charger	£4,119*	Richard Heights, Flint	Urban	Residential / Local Centre	1 x 7kW fast dual outlet	£2,855*	Castle Street, Flint	Urban	Tourism / Residential / Leisure	2 x 7kW fast dual outlet	£4,863*	Pierce Street, Queensferry	Urban	Local Centre	2 x 7kW fast dual outlet	£4,688*	Bridge Street, Shotton	Urban	Residential / Local Centre	2 x 7kW fast dual outlet	£4,250*	Tower Gardens, Holywell	Service	Public / Local Centre	1x 22kW semi-rapid dual outlet charger	£9,675	Precinct Way, Buckley	Urban	Local Centre	1 x 22kW semi-rapid dual outlet	£11,027	Pavilion Leisure Centre, Flint	Urban	Leisure Centre / Local Centre	1 x 22kW semi-rapid dual outlet	£10,348	Total high-level cost				£51,824
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1.10	<p>The type of charging point provided at each location will take into consideration the individual nature of the likely usage. For example; a charging facility within a town centre would require a ‘rapid charging’ capability whereas by contrast, a charging facility serving an ‘end destination’ may only require slow charging capabilities, due to the expected time for which the visitor is anticipated to stay.</p> <p>Technologies currently under development include: increasingly powerful ‘Ultra-rapid’ charge points, improvements in battery life and capacity, wireless inductive charging and ‘pop-up’ EV chargers that retract when not in use.</p>
1.11	<p>Following identification of the above priority locations, the Council will bid for funding via the ‘Office for Low Emission Vehicles’ (OLEV). The OLEV funding stream allows local authorities to receive funding towards the costs of installing on-street residential charge points for plug-in electric vehicles. This grant scheme will cover up to 75% of capital costs of procuring and installing the charge-point with the remaining 25% being funded via the individual Council.</p>
1.12	<p>In September of this year, FCC was also successful in receiving funding under the ‘benefits to the local economy’ grant. The criteria pertaining to this award of funding permits Council’s to utilise funds for projects that provide a benefit to the local economy. It is therefore proposed to fund the Council’s 25% (£51,824) contribution via the use of this funding stream.</p>
1.13	<p>In order to demonstrate the Council’s commitment to developing a strategic EV network and in order to stimulate Private Sector investment (as defined within the authority’s approved strategy to act as an ‘enabler’), it is proposed, in the first instance, to accelerate the above ‘immediate priority sites’ for progression. Not only will the progression of the identified sites provide a much needed boost to the authority’s existing charging infrastructure, the visible presence of ECP’s will have a positive effect on public awareness and display the authority’s outward commitment to climate change and future vision for a zero carbon future as defined within Central and Welsh Government legislation.</p>
1.14	<p>Following the installation at the locations detailed above, the installation and management of further charging points may be progressed by adopting either a secular approach (whereby the authority prioritises charging infrastructure solely within the County) or via a ‘Pan Wales’ Transport For Wales (TFW) branded network.</p>
1.15	<p>Flintshire County Council have been working closely with Welsh Government in order to explore the benefits of adopting a regional approach. Whilst a regional strategy has yet to be developed, it is essential that local authorities and partners work collaboratively when considering the requirements of a regional EV strategy, for which the following initiatives may be considered;</p> <ul style="list-style-type: none"> • Integrating low emission transport into a range of local authority policy areas: e.g. air quality, planning, parking and taxi licensing;

	<ul style="list-style-type: none"> • Performance standards for a local authority’s own vehicles and their contractors; • Targeting and supporting taxis and car club fleets which have high usage and visibility; • Demonstration and promotional activities to increase awareness; • Providing incentives, such as free or reduced cost parking • The adoption of a coherent regional operating model for charge-points to achieve a publically accessible network.
1.16	Not only does a regional approach recognise the relationship between cross-border travel movements and sustainability of local economies, it would also have the advantage of injecting a much needed element of consistency and availability of charging infrastructure. Should a standardisation of the region’s EV charging network be achieved, there is no doubt that this will be the catalyst required to increase local confidence, thus providing a much needed boost to EV ownership across the region.
1.17	Until such time as a regional approach is adopted, it is proposed that the initial daily management of the 8 ECP’S will be achieved by means of a provisional tender, which may provide financial benefit to the Council for both the infrastructure and the land on which the facility is situated. Upon the adoption of a regional strategy referenced above, the Council will then seek to achieve a single tender, thus having the benefit of distributing associated maintenance and revenue costs across the region.
1.18	Should implementation of the immediate priority sites be approved, it is essential that usage data is carefully monitored and reviewed. This will allow the Council to understand if there is a requirement for additional infrastructure at existing sites, whilst also assisting in the identification and prioritisation of further charging locations across the County and the region as a whole.

2.00	RESOURCE IMPLICATIONS
2.01	The Council will be required to fund 25% of the total project cost under the ‘benefits to the local economy’ grant.
2.02	Operating costs/income levels will be subject to the outcome of the tender.

3.00	IMPACT ASSESSMENT AND RISK MANAGEMENT		
3.01	<p>Ways of Working (Sustainable Development) Principles Impact</p> <table border="1"> <tr> <td>Long-term</td> <td>Positive – The move to low carbon transport options aligns itself with the long</td> </tr> </table>	Long-term	Positive – The move to low carbon transport options aligns itself with the long
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	<p>term aspirations of The Environment (Wales) Act, The Well-Being of Future Generations (Wales) Act & The Air Quality Standards (Wales) Regulations. The concept is also strongly endorsed within the Council's Council Plan under the priority of a 'Green Council' for which is reinforced by the Council's approach to integrated and sustainable transport.</p>
Prevention	<p>Positive – The introduction of EV charging points will reinforce the Council's commitment to climate change whilst also facilitating a vision for a zero carbon future as defined within Welsh Government legislation. Implementation of the required infrastructure will also boost the Council's status as a 'key player' within the region thus reducing the risk of public abandonment in terms of tourism, residential and business growth.</p>
Integration	<p>Positive – The adoption of electric vehicles is key to the success of a sustainable, integrated transport network.</p>
Collaboration	<p>Positive – Implementation of charging infrastructure will provide an opportunity for FCC to work with local authorities across the region in order to standardise the provision of charging infrastructure, operating models and maintenance.</p> <p>The nature of this approach recognises the importance of strategic cross-border movements to the local economy in terms of commuter movements, business and tourism.</p>
Involvement	<p>Positive – completion of studies thus far demonstrates the Council's engagement with key stakeholders both cross border and within Welsh Government.</p>
<p>Well-being Goals Impact</p>	
Prosperous Wales	<p>Implementation of the required infrastructure will boost the Council's status as a 'key player' within the region thus reducing the risk of public abandonment in terms of tourism, residential and business growth.</p>

	Resilient Wales	Positive - The adoption of electric vehicles is key to the success of a sustainable, integrated transport network.
	Healthier Wales	Positive - The adoption of electric vehicles for use on the highway network has obvious benefits to air quality through the reduction of Co2 emissions. This will also greatly assist the Council to achieve decarbonisation targets set within Central and Welsh Government legislation.
	More Equal Wales	Positive – Improved air quality will benefit the Council’s most deprived communities, often associated with densely populated areas. Implementation of the infrastructure will also benefit tourism, residential and business growth.
	Cohesive Wales	Positive – The visible presence of EV charging points within the County will have a positive effect on public awareness whilst displaying the Council’s outward commitment to climate change.
	Vibrant Wales	Positive – The implementation of much needed EV charging infrastructure will improve EV uptake thus improving the quality and sustainability of the natural environment whilst providing benefits to the local and regional economy in terms of tourism, residential and business growth.
	Globally Responsible Wales	Positive - the introduction of EV charging points will reinforce the Council’s commitment to climate change whilst also striving to achieve a zero carbon future as defined within Central and Welsh Government legislation.

4.00	CONSULTATIONS REQUIRED/CARRIED OUT
4.01	With Cabinet Member.

5.00	APPENDICES
5.01	Appendix 1: Strategic Development of Electric Vehicles and Charging Infrastructure.

6.00	LIST OF ACCESSIBLE BACKGROUND DOCUMENTS
6.01	Urban Foresight - Electric Vehicle Charging Point Feasibility Study for Flintshire.

7.00	CONTACT OFFICER DETAILS
7.01	<p>Contact Officer: Anthony Stanford, Transport Manager. Telephone: 01352 704817 E-mail: anthony.stanford@flintshire.gov.uk</p>

8.00	GLOSSARY OF TERMS These are provided corporately on the Infonet (link) and maintained by the Executive Office
	<p>EV– Electric Vehicle:</p> <p>Hybrid Vehicle: A vehicle which utilising both electricity and conventional energy sources e.g. petrol or diesel.</p> <p>Council’s Approved Strategy: An agreed approach to act as an ‘enabler’ rather than a direct provider of electricity charging points and facilitates the upgrade of the existing electricity supply network at economically viable locations on the highway network and other key locations.</p> <p>The Environment (Wales) Act: Sets targets to achieve 80% reduction in carbon emissions by 2050.</p> <p>The Well-Being of Future Generations (Wales) Act: A legal framework for improving social, economic, environmental and cultural well-being of current and future generations in Wales.</p> <p>The Air Quality Standards (Wales) Regulations: Requires the implementation of measures to improve air quality at any location at which national standards are not met.</p> <p>Leader Study: LEADER is a fund for rural areas in Wales and aims to explore innovative new approaches and experimental technologies to tackle poverty, create jobs and drive sustainable economic development. It is part of the Welsh Government Rural Communities – Rural Development Programme (RDP) 2014 – 2020, which is financed by the Welsh Government and European Agricultural Fund for Rural Development (EAFRD).</p> <p>Office for Low Emission Vehicles (OLEV) Fund: Funding stream allows local authorities to receive funding towards the costs of installing on-street residential charge points for plug-in electric vehicles. This grant scheme will cover up to 75% of capital costs of procuring and installing the charge-point with the remaining 25% being funded via the individual Council.</p>