Inver	clyde	AGENDA ITEM NO: 13			
Report To:	Environment and Regeneration Committee	Date:	1 September 2016		
Report By:	Corporate Director Environment, Regeneration & Resources	Report No:	ERC/ENV/RG/16.283		
Contact Officer:	Robert Graham	Contact No:	711058		
Subject:	Electric Vehicle Charging Infrastructure Project Update No.1				

1.0 PURPOSE

1.1 The purpose of this report is to update the Committee with regard to the installation and operation of the Electric Vehicle Charging Infrastructure and to consider the introduction of a flat fee charge for these facilities.

2.0 SUMMARY

- 2.1 On 27 May 2014 Transport Scotland offered Inverclyde Council a grant for the supply and installation of Electric Vehicle Charging Infrastructure with connection to its associated back office facility, to a total value of £78,000.
- 2.2 Inverclyde Council was granted funding to install 6 charging points.
- 2.3 It is a requirement that the infrastructure is maintained in a serviceable condition and is available for use for at least 3 years from the point of installation, unless given specific permission otherwise by Transport Scotland or the Office for Low Emission Vehicles.
- 2.4 A further offer of grant of £11k for an additional electric charging point has been accepted from Transport Scotland.

3.0 **RECOMMENDATIONS**

- 3.1 That the Committee note the progress on the installation and operation of the Electric Vehicle Charging Infrastructure;
- 3.2 That the Committee note the acceptance of a grant offer of £11k to install an additional Electric Vehicle Charging point and the conditions associated with the offer; and
- 3.3 That the Committee agree to the provision of the Electric Vehicle Charging facilities free of charge until a further review in April 2017.

Robert Graham Head of Commercial & Environmental Services

4.0 BACKGROUND

- 4.1 On 27 May 2014, Transport Scotland offered Inverclyde Council a grant for the supply and installation of Electric Vehicle Charging Infrastructure with connection to its associated back office facility up to a total value of £78,000.
- 4.2 A condition of the grant is that the installation is maintained in a serviceable condition and is available for use for at least 3 years from the point of installation, unless given specific permission by Transport Scotland or the UK Office for Low Emission Vehicles.
- 4.3 Inverclyde Council was granted funding to install 6 charging points.
 - 1 No. Rapid Triple Charger (50kW). Three phase;
 - 4 No. Fast Chargers (22kW) Three phase; and
 - 1 No. 7 kW Charger. Single phase.

Two of the 22kW chargers are being funded by the Office for Low Emission Vehicles (OLEV).

- 4.4 The offer specified that the 50kW charging unit should be sited in Gourock.
- 4.5 Transport Scotland has entered into a contract with Charge Your Car Ltd (CYC) to provide a single Back Office for the whole of Scotland to manage the EV charging infrastructure as part of the programme. It is critical for the performance of each charging unit in operation and the system overall to be able to communicate with the Back Office to activate the unit and record transactional data.

Back Office costs are currently being met by Transport Scotland until March 2017.

- 4.6 Transport Scotland is working with CYC on a national strategy in respect of tariffs which would allow hosts to levee a tariff from April 2017, if they so wish. Transport Scotland have asked that the Council keep the charge points free of charge until at least April 2017 while the low carbon vehicle market is in its early stages. They further advise that many Authorities currently intend to keep the charge points free even after April 2017, as it supports their wider sustainable transport and improving air quality ambitions.
- 4.7 It is understood that The Moray Council are the only Scottish Council who charge for the use of Electric Car Chargers at a flat rate of £3.80 per session to all users.
- 4.8 The electricity cost to fully charge an electric vehicle is between £2 and £3 for a typical range of 100 miles. This compares with a petrol/diesel vehicle which costs between £9 and £13 for the equivalent

This compares with a petrol/diesel vehicle which costs between £9 and £13 for the equivalent mileage.

- 4.9 The charging units are sited at the following locations:-
 - 1 No. x 50kW charging unit Kempock Street Public Car Park, Gourock;
 - 1 No. x 22kW charging unit Port Glasgow Public Car Park adjacent to Health Centre;
 - 1 No. x 22kW charging unit Cargill Centre Public Car Park, Kilmacolm;
 - 1 No. x 22kW charging unit Cathcart Street Public Car Park, Greenock;
 - 1 No. x 22kW charging unit A78 Wemyss Bay; and
 - 1 No. x 7kW charging unit Pottery Street depot, Greenock.

5.0 UPDATE

5.1 A number of factors delayed the installation/operation of the charging units however all units are now in full operation.

5.2 The uptake has been varied across the various sites as detailed below:

Description	Actual usage No. Charging		Annual projected	
	kWhr	Sessions	current costs	
A78 Wemyss Bay *	583	126	£89.49	
Kempock St, Gourock	2095	221	£427.72	
Cathcart St, Greenock *	2910	383	£445.70	
Fore St, Port Glasgow *	2722	460	£417.84	
Bridge of Weir Rd, Kilmacolm	2644	202	£405.87	
Total	10,954	1,392	£1,786.62	

- 5.3 The above sites marked thus * represent a full 12 months usage.
- 5.4 As advised above additional funding of £11k has been provided by Transport Scotland for the installation of a further 22kW charging point.
 It is proposed to install this unit in the Waterfront Car Park, Greenock.
- 5.5 A condition of the award is that the charging point should be provided free of charge for a minimum period of 12 months.
- 5.6 Detailed examination of the empirical data from the above sites indicates that a number of electric vehicles are at times not drawing electricity and are therefore using the charging points for parking purposes only. To eliminate this abuse it will be necessary to promote a Traffic Regulation Order to put a

To eliminate this abuse it will be necessary to promote a Traffic Regulation Order to put a time limit on the electric charging points.

6.0 IMPLICATIONS

Finance

- 6.1 All capital costs will be contained within the total grant available. Details of the revenue estimated costs are as detailed in Appendix 1.
- 6.2 Within Appendix 1, it should be noted that the costs of the Maintenance/Annual Safety checks and the Warranty Plan for the initial 3 years were included at the procurement stage. Should the Council wish to levy a charge then these costs will need to be reviewed on expiry of the 3 year period. This will add approximately £3.00 per session to the operating costs detailed in Appendix 1.
- 6.3 Also included in Appendix 1 below is an estimated allowance for vandalism/impact damage. To date no costs have been incurred however this estimate has a significant effect on the potential revenue costs and the subsequent recharge fee.
- 6.4 Site 6, detailed in Appendix 1, is located in the Roads Depot in East Hamilton Street and is mainly for the use of Inverclyde Council with only occasional use by the public/visitors to the depot. The revenue costs of this charging point will be contained within the Service's budget.

6.5 Financial Implications:

See Appendix 1 for a breakdown of the estimated revenue costs.

One off Costs

Cost Centre	Budget Heading	Budget Years	Proposed Spend this Report £000	Virement From	Other Comments
Electric Vehicle Charging Infrastructure	Grant Income Charging	16/17	(11)		Maximum grant available £11,000
	Equipment & Installation Costs	16/17	11		

Annually Recurring Costs/ (Savings)

Cost Centre	Budget Heading	With Effect from	Annual Net Impact £000	Virement From (If Applicable)	Other Comments
Electric	Ongoing	TBA	5.2		These costs include
Vehicle	Revenue				back office costs
Charging	Costs				currently met by
Infrastructure					Transport Scotland
	Recharge	TBA			
	Income		(5.2)		Income generated
					from EV charging
					rates.

Legal

6.6 Legal and Property Services are supportive of the content of this report.

Human Resources

6.7 This report has no implications for Human Resources.

Equalities

6.8 Siting of the charging units will ensure that spaces will comply with DPPP standards

Repopulation

6.9 This report has no impact on repopulation.

7.0 CONSULTATIONS

- 7.1 The Head of Legal & Property Services has been consulted on this report.
- 7.2 The Chief Financial Officer has been consulted on this report.

Appendix 1

Electric Vehicle Charging

Cost Breakdown

Cost Breakdown	Site 1	Site 2	Site 3	Site 4	Site 5	Public Sites	site 6	Notes
		Port			Wemyss	Chee	Roads	
	Gourock	Glasgow	Kilmacolm	Greenock	Bay		Depot	
Annual (Revenue) Costs								
3G sim	108	108	108	108	108	540	108	£27/quarter 5gb data
Electrical Energy	600	450	450	450	200	2,150	50	1 vehicle usage per day full charge
Maintenance/annual safety check	inc	inc	inc	inc	inc	0	inc	3 year plan, 48hr response
Warranty Plan	inc	inc	inc	inc	inc	0	inc	
Vandalism/impact damage	500	500	500	500	500	2,500	500	at engineer rates
Annual Costs (excluding Back Office and ongoing maintenance beyond year 3)	1,208	1,058	1,058	1,058	808	5,190	658	
Back Office Costs								
								based on £0.30 per transaction & 363
Transaction Fee	109	109	109	109	109	545		charges pa. 2.95% of value of
Banking Fee	35	35	35	35	35	175		transactions
Merchant Fee	18	18	18	18	18	90		1.5% of value of transactions
Annual Back Office Costs	162	162	162	162	162	810	0	
Total Annual Costs	1,370	1,220	1,220	1,220	970	6,000	658	
Proposed Charge: Income to be recovered						6,000		
Transactions (363 transactions, 5 s	sitos)					6,000 1,815		
11a15actions (505 transactions, 53	51103/					1,010		Excluding Back
Fee per vehicle charge						3.30		Office Costs 2.86