

Report

To:Climate Change and Sustainability CommitteeDate:29 November 2023Report by:Executive Director, Community and Enterprise Resources

Subject: Electric Vehicle Charging Infrastructure (EVCI)

1. Purpose of this Report

- 1.1. The purpose of the report is to: -
 - Provide an update on the status of the Electric Vehicle Charging Infrastructure (EVCI) network across South Lanarkshire and the City Region

2. Recommendation(s)

- 2.1. The Committee is asked to approve the following recommendation(s):
 - (1) the contents of the report relating to the current EVCI network and the proposed next steps to expand to meet future demand.

3. Background

- 3.1. The Scottish Government has pledged to phase out the need for new petrol and diesel cars and vans across Scotland by 2032. The National Transport Strategy 2 Delivery Plan and Climate Change Update as published in December 2020 contains several specific proposals to deliver these commitments. The UK Government has also pledged to end the sale of new petrol and diesel cars (excluding some hybrids) from 2035, noting a recent change from the previous 2030 commitment.
- 3.2. The Council has been installing and operating public EVCI for many years with the first chargers installed and operational in 2010. The development of a network of chargers throughout the council area has been mainly funded through Transport Scotland's annual ChargePlace Scotland (CPS) grant, although other sources of funding have been utilised in recent years. 80 charge points were also provided as part of Project PACE during 2020/21.
- 3.3. Our focus thus far has been on the introduction of charging hubs with the aim of all residents in South Lanarkshire to be living within a short distance of a hub with multiple charge points. To date the council has installed 153 publicly available dual outlet charge points across multiple hubs throughout the area.
- 3.4. Locations can be found at the following website <u>www.chargeplacescotland.org</u> and Appendix 1 also provides more detail.
- 3.5. In 2021, the Department for Transport wrote to all Local Authorities advising them of the On-street Residential Chargepoint Scheme. This is an initiative available for Local Authorities to bid for funding to provide on-street electric vehicle charging points in residential streets.

- 3.6. Investigations identified several locations for the introduction of on-street EVCI and funding was awarded. 12 On-street residential points have now been installed throughout the Council area. The use of these on-street charge points will be monitored to determine the level of demand for such infrastructure.
- 3.7. The current EVCI numbers for all public charge points across South Lanarkshire are summarised in the below table.

Dual Outlet	Dual Outlet Fast	Dual Outlet	Total
Standard (7kW)	(22kW) Charge	Rapid (50kW)	
Charge Points	Points	Charge Points	
72	43	38	153

4. Tariff

- 4.1. During the early phases of implementation there was an expectation by Transport Scotland that there would be no tariffs for the users of any EVCI. This was to help support a wider uptake of electric vehicles.
- 4.2. Whilst the initial provision of this electricity at no cost aided the initial move to electric vehicle use, continuing to cover the costs of the electricity consumed along with ongoing maintenance costs created an unsustainable pressure on Council budgets. In November 2022, a tariff for the use of the EVCI network was introduced to cover the costs associated with operating the network.
- 4.3. The charging tariff was initially set at £0.27 per kWh for use of the slow/fast chargers and £0.40 for use of the rapid chargers. A £30 overstay fee which is applied to the rapid chargers after 60 minutes was also introduced. This tariff was introduced to cover electricity, maintenance, back office transactions and replacement of units at end of life.
- 4.4. With the option to charge their car for free removed, charging habits changed and those with the ability to home charge or charge less did so. This has led to a significant reduction in charge point usage both in terms of the number of charging sessions and the energy drawn.
- 4.5. This along with increasing electricity and back office costs had an impact on the potential estimated annual revenue generated. Continuing with this tariff would not have provided enough income to plan for end-of-life replacement or provide any capital to invest into the expansion of the network or cover the ongoing operating costs. An expected increase in electricity cost by 60% from the then £0.21 per kW to £0.33 per kW would have resulted in the network running at a financial loss.
- 4.6. A revised charging tariff of £0.40 per kW for the use of standard / fast chargers and £0.70 per kW for rapid chargers was subsequently introduced on 2 May 2023. The overstay fee remained the same at £30 for exceeding 60 minutes while using a rapid charger. The revised tariff is also reflective of the tariff in place at neighbouring authorities and remains under review.

5. Usage

5.1. The below charts detail the usage of the EVCI network since June 2022. Note the significant reduction in usage since the introduction of the tariff in November 2022.





5.2. In the last 12-month period, the EVCI has delivered energy enabling vehicles to travel 10,072,696 miles. This is based on an average of 3.5 miles per kW.



5.3. In the last 12-month period, the EVCI has resulted in a reduction of CO2 exhaust emissions of 2,230,095 kg. The average CO2 emissions per car has been taken from <u>https://www.nimblefins.co.uk/average-co2-emissions-car-uk</u>



- 6. Electric Vehicle Charging Strategy and Expansion Plan
- 6.1. In 2022/23 Transport Scotland launched the Electric Vehicle Infrastructure Fund (EVIF) to support the expansion of the network. This funding will be provided over a 4-year period with funding for the 2022/2023 financial year allocated to developing a strategy and expansion plan. The strategy identifies future infrastructure requirements, locations for new charge points and commercial options to achieve this.
- 6.2. South Lanarkshire Council together with the 7 other Local Authorities that form the Glasgow City Region (GCR), has pooled resources to develop individual strategies which feed into a regional report.
- 6.3. This report sets out how South Lanarkshire Council need to invest in EVCI to meet projected demand over the next three-to-four years. The potential EVCI expansion would see an increase in EVCI from an existing 185 publicly <u>and</u> privately provided charging devices, to 1,283 by the end of 2026. This a very ambitious target, but one that is important to strive towards.
- 6.4. It is estimated that that 331 charge points will be installed by independent providers without any intervention from the public sector leaving 767 charge points required to be installed as part of this programme. The cost to provide the 767 charge points is estimated to be in the region of £12m.
- 6.5. Private sector financing is likely be central to the business case as affordability constraints will make it challenging for the public sector to finance the extensive implementation of charge points.
- 6.6. The commercial model the council chooses to implement will generate capital and operating costs as well as operating revenue. The commercial model determines how these costs and revenues are distributed across public and private sector parties.

- 6.7. Over the last 6 months a Senior Officers Group has been guiding the next steps in terms of the GCR network expansion. This included the interpretation of feasibility reports, assessment of risk, skills and resources available, financial matters, and engagement directly with the private sector.
- 6.8. The conclusion from this group is a clear recommendation to explore a collaborative concessionary model across GCR. This approach is expected to receive wider City Region support during the autumn period.
- 6.9. In a concession model, the public sector and private sector share the legal rights and responsibilities of owning the charging infrastructure. This includes owning the physical charging points, related equipment, and any associated assets. The level of ownership and therefore risk the public sector keeps would be determined within the contractual agreement.
- 6.10. The private sector takes responsibility for the day-to-day functioning and management of the charging infrastructure. This encompasses various tasks such as considering pricing tariffs, ensuring regular maintenance, handling technical support, and expanding the infrastructure as needed.
- 6.11. The concession model allows local authorities to have a strong say in EVCI locations, ensuring that all communities can access charge points, and not just allowing the market to pick the most profitable areas. A portfolio of sites can be identified with higher use sites being used to cross subsidise lower use sites which can help enable a comprehensive network across the city region.
- 6.12. The proposed next steps are therefore to explore a collaborative concessionary model and that the City Region and Senior Officers' Group will:-
 - Actively engage with other city regions and localities that have already established joints local authority models to fully inform the process and the resources they required to establish their model.
 - Engage with Transport Scotland to explore the use of the Electric Vehicle Infrastructure Fund (EVIF) to establish the proposed approach; and
 - Work with Scottish Futures Trust and Transport Scotland to identify the specific skills (legal, procurement, financial) and resourcing that will be required to develop such a commercial model and set out options of where these could be secured.

7. Employee Implications

7.1. The expansion of the charge point network as outlined in the strategy and expansion plan will require significant employee resources. To minimise this impact, it is likely that partnership with other Glasgow City Region authorities will continue and will be kept under review.

8. Financial Implications

8.1. This report does not currently set out any specific financial implications, but to expand the network as necessary, private sector investment will be required to supplement any available national government funding. This situation will be a key consideration of the City Region officers group as the project progresses to the next steps.

9. Climate Change, Sustainability and Environmental Implications

9.1. The transition from petrol / diesel vehicles to electric vehicles will provide a significant benefit in terms of climate change, sustainability, and environmental implications.

10. Other Implications

10.1. There are no significant risks associated with this report.

11. Equality Impact Assessment and Consultation Arrangements

11.1. This report does not introduce a new policy, function or strategy or recommend a change to an existing policy, function, or strategy and therefore, no impact assessment or consultation arrangements are required.

David Booth

Executive Director (Community and Enterprise Resources)

16 November 2023

Link(s) to Council Values/Priorities/Outcomes

<u>Values</u>

- Focused on people and their needs.
- Accountable, effective, efficient, and transparent
- Ambitious, self-aware, and improving
- Fair, open, and sustainable

Priorities

- We will work towards a sustainable future in sustainable places.
- We will work to recover, progress, and improve.

Outcomes

- Good quality, suitable and sustainable places to live.
- Thriving business, fair jobs and vibrant town centres
- Caring, connected, sustainable communities.
- People live the healthiest lives possible.
- Inspiring learners, transforming learning, strengthening partnerships

Previous References

• Executive Committee 13 September 2023 – Parking – Penalty Charge Notices

List of Background Papers

None

Contact for Further Information

If you would like to inspect the background papers or want further information, please contact: -

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		Dual Outlet Dual Outlet Dual Outlet		
Location	Town	Rapid (50kW)	Fast (22kW)	Standard (7kW)
Location	10011			
EVCI Hubs				
Carlisle Road	Abington	3	1	0
	Abington	-		
Kirkstyle Car Park	Biggar	0	0	1
Coatshill Avenue	Blantyre	1	1	1
Green Street	Bothwell	0	0	1
Bridge Street	Cambuslang	2	5	3
Cambuslang Gate	Cambuslang	0	0	1
Newton Station Park &		<u> </u>	0	0
Ride	Cambuslang	0	0	2
Carluke Lifestyles	Carluke	0	0	1
Carluke Park and Ride	Carluke	0	0	2
Carnwath Road	Carluke	1	2	0
Park Street	Carluke	0	2	0
John Mann Car Park	Carnwath	1	0	2
Carstairs Community	- · · ·	_	_	
Hall	Carstairs	0	0	2
Coalburn Leisure	A U			
Centre	Coalburn	1	1	1
Bellstane Ave Car			0	0
Park	Crawford	2	2	0
Smugglers Brigg Rd	Crossford	1	1	0
Braehead Car Park	Douglas	0	0	1
Ally McCoist Centre	East Kilbride	0	0	2
Calderglen Country Pk	East Kilbride	1	2	1
Calderwood				
Community Hall	East Kilbride	0	0	2
Civic Centre	East Kilbride	0	0	4
James Hamilton				
Heritage Loch	East Kilbride	2	0	0
John Wright Sports		_		
Centre	East Kilbride	2	1	2
Old Mill Road	East Kilbride	2	4	1
Village Theatre	East Kilbride	0	0	1
Chatelherault	Ferniegair	4	2	3
Chatelherault Station	Ferniegair	0	0	2
Forth Main Street	Forth	1	1	0
Bothwell Street	Hamilton	0	0	4
Brandon Street	Hamilton	0	0	2
Duke Street Multi				
Storey Car Park	Hamilton	0	0	7
Hamilton Palace				
Sports Ground	Hamilton	0	1	0
Keith Street	Hamilton	1	0	0
Low Park Museum	Hamilton	1	0	1

Montrose Crescent	Hamilton	1	0	2
Bernards Wynd	Lanark	0	0	1
Kildare Road	Lanark	3	1	0
Lanark Lifestyles	Lanark	1	2	0
Lanark Park and Ride	Lanark	0	0	1
McNeill Street	Larkhall	2	3	0
Q&A Car Park,				
Caledonian Road	Larkhall	0	0	1
Langdykeside	Lesmahagow	0	2	0
Caledonia Avenue	Rutherglen	0	0	2
King Street	Rutherglen	0	2	2
Regent Drive Car Park	Rutherglen	2	2	0
Common Green	Strathaven	0	0	1
Station Road Carpark	Strathaven	0	2	0
Strathaven Park	Strathaven	3	2	0
Old Mill Road	Uddingston	0	1	0
On Street Residential				
Glenfruin Road	Blantyre	0	0	1
Jedburgh Street	Blantyre	0	0	1
Lindores Drive	East Kilbride	0	0	1
Seymour Green	East Kilbride	0	0	1
Falkland Place	East Kilbride	0	0	1
Fairhill Avenue	Hamilton	0	0	1
Nevis Avenue	Hamilton	0	0	1
Ratho Park	Hamilton	0	0	1
Chaple Street	Hamilton	0	0	2
Hunters Way	Kirkmuirhill	0	0	1
Landemer Drive	Rutherglen	0	0	1
		38	43	72