

ABERDEEN CITY COUNCIL

COMMITTEE	City Growth and Resources
DATE	3 rd February 2021
EXEMPT	No
CONFIDENTIAL	No
REPORT TITLE	Electric Vehicle Framework for Aberdeen
REPORT NUMBER	COM/21/019
DIRECTOR	Steve Whyte
CHIEF OFFICER	Gale Beattie
REPORT AUTHOR	Anthony Burns
TERMS OF REFERENCE	3.3

1. PURPOSE OF REPORT

- 1.1 The purpose of the Report is to seek approval of the Committee to adopt the Electric Vehicle (EV) Framework for Aberdeen and to note the accompanying Evidence Base and Baseline Report.

2. RECOMMENDATION(S)

That the Committee:-

- 2.1 Approves the adoption of the Electric Vehicle Framework included as Appendix 2 of the report;
- 2.2 Refers the £675,000 capital investment required to support the 2025 delivery target for Electric Vehicle Infrastructure to the Council's Budget Setting Process in order to support a further step change in the roll out of the required infrastructure;
- 2.3 Instructs the Chief Officers – Strategic Place Planning and City Growth – to explore opportunities for external funding opportunities as well as encouraging and facilitating the entry of commercial operators into the city to support the further roll out of charging infrastructure in order to meet demands post 2025;
- 2.4 Instructs the Chief Officer – Strategic Place Planning, in consultation with the Chief Officer – Operations and Protective Services and the Chief Officer – Early Intervention and Community Empowerment, to explore opportunities to pilot on-street charging infrastructure in the city;
- 2.5 Instructs the Chief Officer – Strategic Place Planning to reflect an increasing role for the transition to electric vehicles against the policy background from both the UK and Scottish Governments to have phased out the need for new petrol and diesel cars and vans by 2030.

3. BACKGROUND

- 3.1 In 2017, the Scottish Government set out plans to phase out the sale of cars and vans powered solely by petrol or diesel by 2032. This has now been brought forward to 2032 as of December 2020 as part of the Climate Change Plan 2018-2032 update in light of the UK Government announcement in November 2020 stating that new cars and vans powered wholly by petrol and diesel will not be sold in the UK from 2030 with plug-in hybrids removed by 2035. This creates huge opportunities for a switch to lower carbon forms of transport and is likely to lead to an increased demand for Electric vehicles (EVs).
- 3.2 The [Aberdeen Local Transport Strategy \(2016-2021\)](#) recognises that EVs have an important part to play in meeting our air quality, noise and climate change targets and contains an objective “To facilitate the uptake of ultra-low and low emission vehicles as a contribution”, while, in May 2020, the Council approved the [Net Zero Vision and Infrastructure Plan](#) for the City. Reference is made in that report to setting a net zero greenhouse gas emissions target of 2045 and that electric vehicle charging infrastructure and supporting policies need to be in place to support this.
- 3.3 For its own vehicle fleet, the Council agreed, in March 2020, to a presumption in favour of buying or leasing zero emission vehicles where those options existed, rather than petrol and diesel ones.
- 3.4 All of this has triggered the need to better understand the size of the current EV market, the likely growth by 2030, what will need to be done to support this predicted growth, what opportunities exist and who needs to be involved. This has led to the development of an EV Framework for Aberdeen.
- 3.5 Using external funding from Transport Scotland, a procurement exercise was undertaken for consultancy support to develop the Framework. Development of the framework included two rounds of both public and stakeholder consultation, the first of which – in January 2020 – sought to ascertain what should be contained in any EV Framework. Feedback was then incorporated into the development of a draft EV Framework and supporting Evidence Base and Baseline report, which were then consulted upon again in September 2020, with any further comments incorporated into the final version. The Executive Summary to the Framework is attached as Appendix 1, while the full EV Framework can be found at Appendix 2. Should the Committee adopt the Framework, then both the final EV Framework document and supporting Evidence Base and Baseline report will be made publicly available via the Council’s website following the decision.
- 3.6 The framework baselines the current EV market and the policy and strategy context and uses this to predict the growth of EVs locally over both five- and ten-year periods. Three scenarios to meet these, both for 2025 and 2030 are presented (Business as Usual, Good Practice and Exemplar), with the recommendation to follow the Exemplar Scenario. It then presents the necessary minimum numbers of charge points and types required to support

this, introduces a methodology for site selection and presents a long and short list of sites as well as presenting options for charge point management and necessary complementary measures. Although it has been developed by the Council, the framework makes it clear that the Council is not expected to deliver this on its own but, rather, as a means of presenting the likely demand and opportunities that exist within the City to encourage other partners and organisations to be involved. It is intended that the Framework will be aimed at the following groups:

- Drivers of private vehicles
- Vehicle Dealerships
- Taxi operators
- Commercial drivers
- Private sector companies who have large car parks and who may want to install chargers
- Private charge point operating companies

3.7 The Framework focuses on cars and vans licenced by fleets and individuals within the Aberdeen City Council (ACC) area and covers plug-in vehicles as opposed to self-charging, fuel-cell electric and mild hybrid vehicles which have no plug-in component. It is intended to complement the existing Strategy & Action Plan for Hydrogen (2015-2025) and work already being undertaken by the Council’s Fleet Services in relation to low carbon vehicles.

3.8 The Framework will build on the work which has already been undertaken to encourage EV uptake in the city including:

- ACC has taken the lead and set an example by integrating EVs within our exclusive use Co-wheels car club fleet and continues this commitment to purchasing zero emission vehicles going forward as and when funding becomes available. Co-wheels have been and continue to be a willing partner in this endeavour and have been working with the Council to roll out more EVs on the publicly available fleet too. There are now 16 EVs on the Co-wheels Aberdeen fleet.
- The Council has been working with funders and partners since 2011 to roll out EV charge points across Aberdeen in line with Scottish Government policy. 54 EV charging units, equating to 104 charging sockets, have been installed by the Council to date. Of these, 62 sockets are publicly available. There are also many other EV charge points across the City that have been implemented by private operators.

3.9 Should the framework be adopted, the table below shows how many publicly-available chargers are installed in the City and the minimum additional numbers required to achieve the Exemplar Scenario. Based on these figures, this would require a minimum further 11 rapid chargers to be installed and a further 9 fast chargers.

Type	Total current	Total current	2021 (ACC)	2021 (non-ACC)	Additional units	Minimum Total to
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	ly installed to 2020 (ACC)	ly installed to 2020 (non-ACC)	planned installations)	planned installations)	required by 2025 to meet framework requirements	meet framework requirements
Rapid (50K W)	11	3	3	?	11	28
Fast (22K W)	13	0	4	?	9	26
Charger (7KW)	7	31	0	?	0	37
Totals	31	34	7	?	20	91

- The Exemplar Scenario includes 37 7KW chargers so the City is already exceeding that number with 38.
- Note – each charger can charge 2 vehicles at once.

3.10 Although other organisations should be encouraged to install chargers, the Council cannot control their purchasing decisions or land. Therefore, given the identified need for these chargers, it is proposed that the Council should take the lead to directly procure and install the required number of charge points required by 2025. Should other organisations install chargers as well, then this will be of extra benefit to the City. It is also recognised that, despite an indication in the Framework, it is very difficult at this stage to exactly predict how many EVs will be on the road by 2025. The Council will use the recommended shortlist as well as revisiting the long-list and site selection criteria, identified in the Framework and Evidence Base and Baseline report when deciding on appropriate sites.

3.11 Given the Council's recently approved Net Zero Vision and Infrastructure Plan, a commitment is required to commence investing in EV charging infrastructure to aid the achievement of this ambition. Should further Transport Scotland funding become available, as has been the case in recent years, this could be utilised to augment Council investment and further accelerate the roll out of the EV Framework.

3.12 After 2025, more information on the size of the EV market and the charging requirement up to 2030 will be available so it is proposed that the 2030 requirements are kept under review. Current estimates suggest that the total number of charge points required by 2030 will treble to around 266.

3.13 In addition to the numbers provided for 2025, the Framework also encourages the Council to explore a pilot, focused around provision of on-street charging infrastructure in an area of the city where, due to a lack of off-street parking, people would currently struggle to charge at home. This should be explored ahead of 2025 and, if successful, could help contribute to the total number of chargers needed by 2030. The Framework also shortlists a range of

complementary measures which should be progressed to encourage a greater EV uptake, including parking management and awareness raising. These will be explored as part of wider work currently being undertaken in these areas.

- 3.14 There is evidence to suggest an increased appetite for commercialisation of EV charging. BP recently purchased the national “Chargemaster” network and are expanding it under a new brand, BP pulse. Shell are also rolling out EV chargers across their petrol filling stations and currently converting a former petrol filling station to full EV. Other private operators, such as Ionity, Ecotricity, Tesla and Instavolt, are also starting to work with partners and landowners to install charging infrastructure across the UK. The Council should explore the opportunities that this may bring to the City.
- 3.15 In addition to recommending additional EV charge points, the framework also identifies a series of recommended complementary measures including public and business engagement, demand management tools, increased facilities alongside charge points, educational programmes, parking incentives and increased opportunities through the car club. However, as many of these are tied to other projects or will require further consideration, further work will need to be undertaken before these can be better understood.
- 3.16 Officers within the Council’s Governance function are currently in consultation with taxi and private hire operator licence holders to explore opportunities to encourage/ensure the use of alternative fuels within the implementation of licence conditions. Therefore, as the Council will be encouraging business use and taxis to use alternative fuels, the infrastructure will have to be in place to support the business use.
- 3.17 The full list of actions can be found in Appendix 1.

4. FINANCIAL IMPLICATIONS

- 4.1 There have been no financial implications involved with producing the Framework. It has been developed by consultants on the Council’s behalf, supported by funding from Transport Scotland.
- 4.2 The Exemplar Scenario to 2025, is estimated to cost around £675,000 to manage, procure and install charge points, with an estimated further investment of at least £4.15 million to achieve the 2030 scenario. It has been made very clear in the Framework that the Council is not expected to take this forward on its own but to encourage other partners, particularly private landowners, and operators, to install chargers too. However, it is recommended that the Council procures and installs the necessary number of charge points required to achieve the 2025 total, at an estimated cost of £675,000.
- 4.3 A budget will require to be identified to support the introduction of the additional infrastructure. To date, external funding has been available from a variety of sources including the Scottish and UK governments and these are options which the Council and partners will continue to explore in delivering the actions (listed in Appendix 1) within the Framework.

- 4.4 There are likely to also be costs associated with the recommended complementary measures in the Framework which again will be for both Council and partners to deliver. However, as many of these are tied to other projects or will require further consideration, further work will need to be undertaken before these can be better understood.
- 4.5 Previous funding bids have identified that having a plan, clearly showing the Council's future aspirations backed up by research, such as this Framework, is often a requirement when bidding. The Framework also informs more efficient and targeted use of funding.

5. LEGAL IMPLICATIONS

- 5.1 The Climate Change (Scotland) Act 2019 sets a national Net-Zero target for all greenhouse gases by 2045. The Council is legally obliged to contribute to the fulfilment of this national target. By encouraging a greater switch to zero emission vehicles from fossil fuelled ones, this will help to realise this target.

6. MANAGEMENT OF RISK

Category	Risk	Low (L) Medium (M) High (H)	Mitigation
Strategic Risk	Risk that the EV Framework will not align with the next Local Transport Strategy, on which work is due to start in 2021.	L	It will be the Transport Strategy and Programmes team who will also be developing this document. Thus, as we have oversight of both, we can ensure that the message is consistent across both documents. Additionally, we have stated within the EV Framework that it will be monitored and can be updated to take account of any changing circumstances in the strategic context.
	Changes at regional and national level in approach to EVs.	L	Scottish Government approved National Transport Strategy 2 in February 2020 and Nestrans are in the process of adopting their new Regional Transport Strategy. Given how recently these documents have been

	Risk that Aberdeen City's approach will run contrary to that of neighbouring Aberdeenshire Council.	L	<p>developed, it is unlikely that the national and regional approach to EVs will change dramatically.</p> <p>Aberdeenshire Officers have been part of the core project team developing this Framework.</p>
Compliance	Scottish and UK Governments make their targets more stringent and the Framework is no longer able to meet them.	M	Monitoring of the EV Framework will ensure that it remains relevant and up to date.
Operational	Other organisations are reluctant to get involved and the required number of charge points is unable to be delivered.	M	<p>Promotion of the Framework across the City to other organisations and engagement with the market in order to make them aware of the opportunities.</p> <p>The fact the Council has implemented a tariff for the use of charge points means that private companies are no longer competing against a free model.</p> <p>The Council takes a role in charge point delivery.</p>
Financial	<p>The costs of delivering the Framework are greater than the Council can afford.</p> <p>Difficulty in accessing external funding.</p>	<p>M</p> <p>M</p>	<p>The Framework recognises that the Council needs to work with external partners to deliver it.</p> <p>Having an approved framework will be useful in informing successful funding bids.</p>
Reputational	Public do not agree with content of the EV Framework and think that the Council is out	M	Two rounds of public and stakeholder consultations were conducted and their views have been incorporated within the

	of touch and not doing enough.		development of the Framework.
Environment / Climate	Scottish Government amend climate and environmental targets to make them more stringent.	M	Monitoring of the EV Framework to ensure that it remains relevant and up to date.

7. OUTCOMES

COUNCIL DELIVERY PLAN	
Impact of Report	
<p>Aberdeen City Council Policy Statement Place</p> <p>3. Refresh the Local Transport Strategy, ensuring it includes the results of a city centre parking review; promotes cycle and pedestrian routes; and considers support for public transport</p>	<p>The EV framework will sit as one of the daughter documents to the Aberdeen Local Transport Strategy and provides more detail on how to realise the EV objectives of the Local Transport Strategy (LTS). It will inform and support the uptake of EVs to help meet the carbon reduction and air quality objectives of the LTS, ensuring it is in accord with and shaped by the current context of reduced emissions.</p> <p>The EV Framework is informed by the recent Strategic Car Parking Review which contained proposed actions for improving EV provision in Council car parks. Both documents, in turn, will inform a future Car Parking Framework for Aberdeen.</p> <p>Encouragement of EVs in place of petrol and diesel cars can bring air quality benefits which help to make walking and cycling more attractive.</p>
Aberdeen City Local Outcome Improvement Plan	
<p>Prosperous Economy Stretch Outcomes</p>	<p>The proposals within this report support the delivery of LOIP Stretch Outcome 1 – 10% increase in employment across priority and volume growth sectors by 2026. The Framework contains actions around the travel needs of regeneration areas. This builds on existing work to provide EVs within such areas and helps facilitate transport improvements and therefore access improvements to enable residents to access employment.</p>
<p>Prosperous People Stretch Outcomes</p>	<p>The proposals within this report support the delivery of the following LOIP Stretch outcomes:</p> <p>4. 90% of children and young people will report that they feel mentally well by 2026.</p> <p>5. 95% of care experienced children and young people will have the same levels of attainment in</p>

	<p>education, emotional wellbeing, and positive destinations as their peers by 2026.</p> <p>6. 95% of children living in our priority localities will sustain a positive destination upon leaving school by 2026.</p> <p>7. Child Friendly City which supports all children to prosper and engage actively with their communities by 2026.</p> <p>11. Healthy life expectancy (time lived in good health) is five years longer by 2026.</p> <p>Improving access to transport will make it easier for young people to access the transport network and use it to further their opportunities. The emphasis on zero emission vehicles will also benefit the health of all citizens, both mentally and physically, while improvements to the transport network will make it easier for people to get around, which will also have a positive effect on wellbeing.</p>
<p>Prosperous Place Stretch Outcomes</p>	<p>The proposals within this report support the delivery of the following LOIP Stretch Outcomes:</p> <p>14. Addressing climate change by reducing Aberdeen's carbon emissions by 42.5% by 2026 by 2026 and adapting to the impacts of our changing climate.</p> <p>15. 38% of people walking and 5% of people cycling as main mode of travel by 2026.</p> <p>By encouraging the uptake of zero emissions vehicles, in place of fossil fuelled ones, the Framework contributes towards emissions reduction targets. Improved air quality improves conditions for walking and cycling while there is also the recognition in the framework that location of EV charge points can help discourage unnecessary car trips into the City.</p>
<p>Regional and City Strategies</p>	<p>The proposals within this report support the Strategic Development Plan, the Regional Economic Strategy, the City Region Deal and locally the Local Transport Strategy, Sustainable Urban Mobility Plan, Aberdeen City Centre Masterplan, LOIP, Air Quality Action Plan, LDP and Aberdeen Net Zero Vision and Infrastructure Plan.</p>
<p>UK and Scottish Legislative and Policy Programmes</p>	<p>In May 2019, the Scottish Government declared a 'Climate Emergency'.</p>

	<p>The Climate Change (Scotland) Act 2019 sets a legally binding Net-Zero target for all greenhouse gases by 2045.</p> <p>The National Transport Strategy was published in February 2020 and contains the four pillars of “Equality”, “Climate”, “Prosperity” and “Wellbeing”.</p> <p>The Transport (Scotland) Act 2019 provides new powers for Local Authorities, including enhanced partnership working arrangements, implementation and enforcement of Low Emission Zones and discretionary powers to introduce a Workplace Parking Levy, which are aimed at improving sustainable transport.</p> <p>The Scottish Government’s EV route map, Switched On Scotland, identifies a series of goals and enabling measures outlined across seven key areas,</p> <p>1 POLICY FRAMEWORKS Plug-in vehicles are embedded in all relevant areas of policy and advance progress on climate change, air quality, renewables, energy security and public health.</p> <p>2 MARKET DEVELOPMENT Plug-in vehicles become more desirable than fossil-fuelled alternatives.</p> <p>3 RECHARGING Targeted, convenient, and safe recharging infrastructure is deployed across Scotland to meet the changing needs of the market.</p> <p>4 SUSTAINABLE TRANSPORT Plug-in vehicles promote more sustainable transport systems rather than adding to existing problems.</p> <p>5 ENERGY SYSTEMS Scotland’s electricity grid supports market growth of plug-in vehicles and is made smarter by controlled charging and distributed energy storage.</p> <p>6 ECONOMIC OPPORTUNITY Early leadership in advancing plug-in vehicles creates jobs and makes Scottish businesses more competitive.</p> <p>7 COMMUNICATION & EDUCATION Increased awareness and confidence in plug-in vehicles encourages widespread adoption.</p>

8. IMPACT ASSESSMENTS

Assessment	Outcome
Impact Assessment	An Equalities and Human Rights Impact Assessment has been conducted as part of this report.
Data Protection Impact Assessment	Not required

9. BACKGROUND PAPERS

None

10. APPENDICES

Appendix 1 – EV Framework - Executive Summary
Appendix 2 – EV Framework

11. REPORT AUTHOR CONTACT DETAILS

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