

**South Ayrshire Council**

**Report by Depute Chief Executive and Director  
of Housing, Operations and Development  
to Cabinet  
of 25 April 2023**

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**Subject: Electric Vehicle Charging Infrastructure Investment in Ayrshire**

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**1. Purpose**

1.1 The purpose of this report is to update Cabinet on the findings from the Ayrshire Public Electric Vehicle Charging Business Case and the proposed next steps.

**2. Recommendation**

**2.1 It is recommended that the Council:**

**2.1.1 notes the findings from the Ayrshire Public Electric Vehicle Charging Business Case including the identification of a new concession contract as the preferred delivery mechanism for expansion of the public vehicle charging network;**

**2.1.2 notes the Head of Roads - Ayrshire Roads Alliance (EAC/ SAC) will develop and enter into an Inter Authority Agreement with North Ayrshire to govern the specification, procurement, implementation and operation of the proposed concession contract; and**

**2.1.3 requests that officers provide a further update report on completion of 2.1.2 above, prior to the procurement of the proposed concession contract.**

**3. Background**

3.1 As part of the Council's ambition to achieve net zero carbon emissions by 2024, options for new delivery models to increase the provision of Electric vehicles (EV) infrastructure and support the uptake of EVs have been explored. Further details are provided in [Appendix 1](#).

**4. Proposals**

4.1 The next steps for the overall EVI programme would be as follows, with timescales estimated at this stage:

<b>Next Steps</b>	<b>Timescale</b>
Approval of the Ayrshire Public Electric Vehicle Charging Business Case within each of the three Ayrshire Councils	March 2023
The three Ayrshire Councils enter an Inter Authority Agreement to progress with the EVI programme	Q3 2023
Submit the business case proposal to Transport Scotland and apply for funding of £3,200,000 for project delivery	Q3 2023
Public consultation, where required, for key sites	Q3-4 2023
Final feasibility work on site infrastructure (including grid connection) and capital works requirements for the selected locations	Q4 2023
Development of tender documentation to procure a commercial private partner. Transport Scotland has already allocated funding for Council staff and consultancy time to cover this stage. Thereafter, overseeing contract	Q3-4 2023
awards and monitoring contractual delivery will be required. This will include ensuring commercial partners deliver to time and budget, dealing with problems and issues, and reporting on progress (including quarterly progress updates to SFT and Transport Scotland).	
Commercial private partners in place and commencement of capital works for new EVI and the replacement of existing assets (capital installations is expected to be a three year programme)	Q3 2024

4.2 It is recommended that one of the Ayrshire authorities act as the lead authority for the next phase of the programme. It is proposed that East Ayrshire Council undertake this role, given their current role in undertaking procurement activity for multiple authorities via the Ayrshire Roads Alliance.

4.3 The business case proposes a completely new operating model for the delivery of a public EVCI network, in the context of a dynamic, fast-moving sector reflecting a range of variables including battery range, charging type and speed, and continued innovation in charging provision. The business case, at this stage, is designed to establish the key principles to significantly expand our public EVCI network in a financially sustainable way which will be further developed and finalised through the proposed Inter Authority Agreement. A further update would be brought to Cabinet prior to commencing procurement of the concession operator.

## **5. Legal and Procurement Implications**

5.1 Officers would engage with internal and external legal advisors for the next stage of this EV Infrastructure project.

5.2 There are no procurement implications arising from this report.

## **6. Financial Implications**

- 6.1 The Council is investing significantly in the journey to net zero, taking action on climate change and addressing the Climate Emergency. The Ayrshire Public Electric Vehicle Charging Business Case is a precursor to accessing external funding. The total capital costs required for funding are approximately £5,400,000. This will be met through private sector investment, grant funding from the Scottish Government and through operational cashflow. By maximising private sector investment, whilst ensuring an attractive rate of return, the grant requirement is optimised to approximately £3,200,000

## **7. Human Resources Implications**

- 7.1 Resources required for delivery of the project are expected to be met from a mixture of existing resources and external funding available.

## **8. Risk**

### **8.1 *Risk Implications of Adopting the Recommendations***

- 8.1.1 There are no risks associated with adopting the recommendations.

### **8.2 *Risk Implications of Rejecting the Recommendations***

- 8.2.1 Rejecting the recommendations will have a negative impact in the achievement of the following strategic outcomes within the service improvement plan for Ayrshire Roads Alliance: by failing to suitably develop the fleet and public EV charging network and will impact the ability to meet nationally set targets for zero emissions vehicles and impact on the councils target of Net zero by 2024.

## **9. Equalities**

- 9.1 The proposals in this report have been assessed through the Equality Impact Assessment Scoping process. There are no significant potential positive or negative equality impacts of agreeing the recommendations and therefore an Equalities Impact Assessment is not required. A copy of the Equalities Scoping Assessment is attached as [Appendix 2](#).

## **10. Sustainable Development Implications**

- 10.1 ***Considering Strategic Environmental Assessment (SEA)*** - This report does not propose or seek approval for a plan, policy, programme or strategy or document otherwise described which could be considered to constitute a plan, programme, policy or strategy.

## **11. Options Appraisal**

- 11.1 An options appraisal has not been carried out in relation to the subject matter of this report.

## **12. Link to Council Plan**

- 12.1 The matters referred to in this report contribute to Priority 1 of the Council Plan: Spaces and Places/ Moving around and the environment (Outcome 1).

### 13. Results of Consultation

- 13.1 There has been public consultation and stakeholder engagement for this business case has taken place through engagement with targeted stakeholders, public/business surveys, and a webinar for non-domestic tenants and local community groups. The resident and business surveys which were open from 31st March 2022 to 2nd May 2022, provided essential insights that enabled the demand modelling in the Economic Case to be tailored to Ayrshire. In total, there were 70 responses from the businesses survey and 450 responses from the residents' survey.
- 13.2 Consultation has taken place with Councillor Bob Pollock, Portfolio Holder for Economic Development, and the contents of this report reflect any feedback provided.

### 14. Next Steps for Decision Tracking Purposes

- 14.1 If the recommendations above are approved by Members, the Depute Chief Executive and Director of Housing, Operations and Development will ensure that all necessary steps are taken to ensure full implementation of the decision within the following timescales, with the completion status reported to the Leadership Panel in the 'Council and Leadership Panel Decision Log' at each of its meetings until such time as the decision is fully implemented:

<i>Implementation</i>	<i>Due date</i>	<i>Managed by</i>
Electric Vehicle Charging Infrastructure Investment in Ayrshire	31 March 2025	Head of Roads – Ayrshire Roads Alliance

**Background Papers:** South Ayrshire Council Electric Vehicle Strategy February 2021

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**Date:** 14 April 2023

## Electric Vehicle Charging Infrastructure Investment in Ayrshire

### Further Background Information

- 1.1 As part of the Council's ambition to achieve net zero carbon emissions by 2024, options for new delivery models to increase the provision of Electric vehicles (EV) infrastructure and support the uptake of EVs have been explored. Utilising external funding a 'pathfinder' business case, jointly undertaken with East and North Ayrshire Councils, has been prepared which provides recommendations on the scope, locations, delivery model and funding arrangements for a significant expansion of the public EV charging network in Ayrshire.
- 1.2 In tandem, a new, four-year £60 million fund for local authorities was launched by the Scottish Government, with £30 million provided by Transport Scotland to support the roll out of an enhanced vehicle charging network. The proposal in the Ayrshire pathfinder business case were developed to align with funding to maximise the potential for leverage of external funding as part of our emerging plans.
- 1.3 Four Commercial models have been identified as options for delivery of the new electric vehicle chargers at scale and pace. The preferred mechanism is the model where the EV network would be leased via a concession contract to an experienced commercial operator.
- 1.4 In order to advance to the next stage of this project, an inter Authority Agreement would be entered into between the three Ayrshire councils, setting out the proposed governance processes and arrangements for the specification, procurement, development, delivery, operational and monitoring stages of the project, with a further update to Cabinet prior to any procurement of the concession contract.
- 1.5 Within the Scottish Government guidelines, as set by the Programme for Government (2019), the Council are required to ensure that all new fleet cars and vans are zero emission from 2025 with all new HGVs zero emission from 2030. As part of the route map to achieve this target, the Council's first Electric Vehicle (EV) Strategy (2021-25) was approved in May 2021, the aim of which is to increase the number of EVs being used throughout South Ayrshire by creating a robust network of EV charge points.
- 1.6 As of January 2023, the Council has installed 36 publicly accessible EV charge points throughout South Ayrshire (9 rapid and 27 destination charge points), utilising approximately £740,000 funding provided through Transport Scotland's local authority installation programme. However, Transport Scotland's current full-subsidy funding model for electric vehicle charging investment is ending.
- 1.7 Scottish Futures Trust (SFT) is a multi-disciplinary centre of expertise working in collaboration with both the public and private sectors, to help plan, fund and deliver future infrastructure. Transport Scotland and SFT published a joint Electric Vehicle Charging Infrastructure Report in July 2021, which highlighted the progress made in delivering publicly available EV charging infrastructure and the challenges and opportunities associated with significantly expanding the public charging network to support the growing demand for EVs. One of the report's key findings related to identifying opportunities for greater private sector investment and involvement in EV charging infrastructure in the short to medium-term through partnership

approaches with local authorities to provide a sustainable and long-term delivery proposition for a public electric vehicle infrastructure network.

- 1.8 In October 2021, SFT sought expressions of interest from local authorities to undertake a business case to explore alternative delivery models for public EV charging through private sector investment. North Ayrshire Council was successful in our joint application and received £75k funding towards the development
- 1.9 In January 2022, Scottish Government published its draft vision for Scotland's Public Electric Vehicle Charging Network. A new, four-year £60 million fund for local authorities was launched, with £30 million provided by Transport Scotland to support private sector investment, while maintaining the benefits of an integrated, consumer focused network that actively encourages public transport and active travel choices.
- 1.10 The proposals in the Ayrshire wide business case were developed to align with the £60 million fund to maximise the potential for leveraging external funding for the anticipated proposals for expansion of our electric vehicle charging network. A further key aspect was to ensure that business case principles were underpinned by the need for a 'just transition' ensuring EV infrastructure is available in rural, remote and more deprived areas, and not limited to commercially attractive locations only.

### **Business Case**

- 1.11 Mott MacDonald Limited were appointed to develop the business case, which was completed in December 2022. The business case sets out how North, East and South Ayrshire Councils could work together to expand the EV charging infrastructure network to meet projected EV demand over the next three to four years.
- 1.12 In consultation with key stakeholders, the objectives for the Ayrshire EV business case were developed with the following key outcomes:
  - Usable – the public EVI network will give people access to a technologically advanced, well maintained, reliable network.
  - Equitable – the EVI network will work for everyone. It will adopt the 'Place Principle' and community wealth building principles to achieve better outcomes for people and communities. It will ensure that the islands and rural areas are not left behind, acting as a catalyst for local economic development.
  - Viable – it will be commercially viable and will attract private sector investment.
  - Connected – It will promote the use of public transport and active travel as people's first choice in line with the National Transport Strategy, especially as part of trip chaining.
- 1.13 The business case sets out proposals for collaborative delivery, between the three Councils and the market, by blending required public investment for EVI with commercial EVI investment. It proposes a viable investment programme which could enable the Ayrshire local authorities to work with commercial suppliers to increase EV charge points from an existing 126 publicly funded and managed charge points, to an estimated 433 across Ayrshire. Table 1 below highlights the

number of proposed and existing charge points across the three Ayrshire Council areas emerging from the study:

**Table 1: Summary of Total Proposed EVCI to be Procured**

	<b>No. of proposed Residential (7kW)</b>	<b>No. of proposed Destination (22kW)</b>	<b>No. of proposed Rapid (50kW)</b>	<b>Total proposed charge points</b>	<b>Total existing &amp; proposed charge points</b>
<b>South Ayrshire</b>	<b>69</b>	<b>35</b>	<b>7</b>	<b>111</b>	<b>137</b>
East Ayrshire	58	31	2	92	146
North Ayrshire	39	53	12	104	150
<b>Total</b>	<b>166</b>	<b>119</b>	<b>22</b>	<b>307</b>	<b>433</b>

1.14 ARA forecast EV infrastructure requirements, which includes both public and privately owned EVCI, is summarised below:

**Table 2: South Ayrshire 2025 Forecast Requirement**

	<b>Low Scenario</b>	<b>Central Scenario</b>	<b>High Scenario</b>
Residential (Slow)	79	142	234
Destination (Fast)	64	126	185
Rapid	33	60	83
<b>Total EV Sockets</b>	<b>176</b>	<b>329</b>	<b>502</b>

1.15 The business case proposes 137 EVCI for South Ayrshire through a mix of dual socket AC posts and ‘single socket’ DC. The forecast indicates that on-street residential chargers form the greatest number within the forecast within the 329 total EV sockets required as per the central scenario by 2025. In relation to the 2025 forecast, the Council’s 137 EV devices would make up over half the total EV socket requirement in the low scenario forecast in 2025 (176 EV sockets) and the private sector (e.g. operators such as Pod Point, Instavolt, Gridserve) would be expected to provide the balance.

1.16 A desktop exercise was carried out to confirm the potential locations for the proposed EVCI – the proposed locations are detailed in [Annex 1](#). An EV Optimisation tool was used to analyse each local authority area based on an established methodology. The suggested sites generated were then reviewed and modified based on a range of considerations including:

- Aim for 99% of Ayrshire properties without off-street parking to be within a 10-minute drive of a charge point;
- Five-minute walking catchments have been assumed to residential chargers where off-street parking is limited to help deliver the ‘equitable’

and ‘usable’ objectives. However, for rural locations, local provision will be dependent given the need to meet the ‘viable’ objective;

- Scottish Index of Multiple Deprivation (SIMD) – ensure Transport Scotland’s EVCI vision is met through the Just Transition and ensure EVCI are available in a range of demographic areas;
- Existing petrol stations – where the private sector may develop existing petrol stations into future rapid charging sites;
- Existing supermarkets and retail parks – where destination and rapid charging could be provided by the private sector;
- Trunk roads – proximity to well-trafficked routes through the region, where the private sector is likely to develop rapid charging hubs;
- Placemaking criteria – use the placement of EVCI to promote high streets and town centres, such as within public car parks; and
- Public Transport and Active Travel – proximity to public transport and active travel infrastructure

1.17 Recommendations for EVCI locations within each local authority mostly focus on providing destination charging at car parks owned by the councils at schools, leisure centres or near high streets. Rapid charging has only been recommended where market failure could exist in more rural locations.

1.18 The proposed list of site locations at [Annex 1](#) will require further investigative work and detailed site surveys will be undertaken and the list of locations will be robustly reviewed to ensure suitability. Public consultation will also be carried out to inform the public of the plans to introduce more EVCI in Ayrshire and the locations will be finalised thereafter.

1.19 The estimated capital investment required to deliver the above network is summarised below:

**Table 3: Summary of Total Proposed EVCI Capital Costs (excluding ongoing transaction and maintenance costs)**

	Total Proposed EVCI Estimated Cost	Estimated Grid Connection Costs	Estimated Total Capital Cost
<b>South Ayrshire</b>	<b>£1,225,600</b>	<b>£355,800</b>	<b>£1,581,400</b>
East Ayrshire	£905,600	£170,800	£1,076,400
North Ayrshire	£1,356,800	£532,800	£1889,600
<b>Total</b>	<b>£3,488,000</b>	<b>£1,059,400</b>	<b>£4,547,400</b>



- 1.20 These cost estimates are based on £8,580 for 7kW AC chargers, £8,910 for 22kW AC chargers and £46,760 for 50kW DC chargers. Grid connection cost estimates are variable depending on the proposed EVCI location and the associated power output.
- 1.21 The full programme costs are approximately £5.4million, which includes the capital costs above alongside other items such as maintenance and transaction costs. It is proposed that this would be met through private sector investment, grant funding from the Scottish Government and through operational cashflow (the income generated from the Council’s existing portfolio of charge points and newly installed EVCI). By maximising private sector investment, whilst ensuring a viable rate of return for an operator, the grant requirement is optimised to approximately £3.2 million. This would then inform an application to Transport Scotland’s national £60 million fund. Transport Scotland has been kept apprised of our pathfinder work and is anticipated to welcome an application for the 100% grant funding requirement. The breakdown of funding requirement is presented in the table below:

**Table 4: Funding Sources**

<b>Funding Source</b>	<b>Value £, based on 2022 prices</b>
Capital funding (grant requirement)	£3,200,000
Private Investment	£2,000,000
Operational cashflow available for funding	£200,000
<b>Total Upfront Investment Requirement</b>	<b>£5,400,000</b>

- 1.22 It should also be noted that the proposed concession contract includes passing the operation and maintenance of the Council’s existing EVCIs to the new commercial private partner. In return, the Council will no longer be responsible for the operation and maintenance cost for the EVCIs. Therefore, the cost for electricity bills, repairs, maintenance contracts and most importantly the capital cost for the replacement of the Council’s existing aging EVCI assets would be passed to the commercial private partner.
- 1.23 There are a number of variables that can affect the cost of EVCI installation including civil works, grid connection and wider grid upgrades, therefore the above capital costs are estimated at this time and would be subject to a full procurement exercise.

### **Operating Model**

- 1.24 As noted above, there is a strong case for continued local authority intervention in the UK EVCI market. This is driven primarily by local authority targets to achieve Net Zero by 2045 (for Scotland), with the transition away from internal combustion engine vehicles to electric vehicles being a key component of the strategy to deliver this. However, surveys also show that the current lack of charging infrastructure is the main barrier to consumer adoption of EVs, with 43% of respondents citing this as their primary deterrent in a recent Scottish study. At the same time, the combination of potentially high initial investment costs and uncertain user demand present barriers to fully private sector led expansion of the EV infrastructure

network. There is a role for public sector intervention to address market failure and stimulate the required expansion of EV charging infrastructure.

1.25 The business case identified four potential commercial models to consider for the delivery of an expanded network, ranging from fully private-sector-led, fully public-sector-led, and two public-private partnership hybrids. These are summarised below:

**Table 5: Commercial Model Options**

	<b>A – Privately owned and operated</b>	<b>B – Privately operated only</b>	<b>C – Privately operated with risk share</b>	<b>D – Public sector owned and operated</b>
Approach	Private sector ownership and operation of network	Public sector ownership with private sector operation	Public sector ownership with private sector shared-risk/revenue operation	Public sector ownership and operation of network
Existing and new EVCI asset ownership	Private	Public (concession model)	Public (concession model)	Public
Loss making assets	Bundled with profit-making assets	Bundled with profit-making assets	Bundled with profit-making assets	Public
Operator	Private	Private	Private	Public
Risk to LA	No	No	Yes	Yes
Revenue stream to LA	No	No	Yes	Yes
Tariff setting	Private	Private / Public	Private / Public	Public

- **Model A** assumes that the private sector would own and operate all existing and new assets, giving them greatest control over tariff setting and charger locations.
- **Model B** assumes that the public sector would ultimately own all existing and new assets, but that the network would be leased via a concession model to a private sector operator who receives all revenue but assumes all asset and operating risk.
- **Model C** is the same as Model B, except that the public sector also enters into a risk and revenue sharing agreement with the operator (as part of the terms of the concession), receiving a level of income for assuming a level of operating risk.
- **Model D** assumes that the public sector would own and operate all existing and new assets, giving them full control over tariff setting and charger locations.

1.26 The models were qualitatively assessed with weighted scoring in relation to affordability, social outcomes, risk allocation, contestability, procurement,

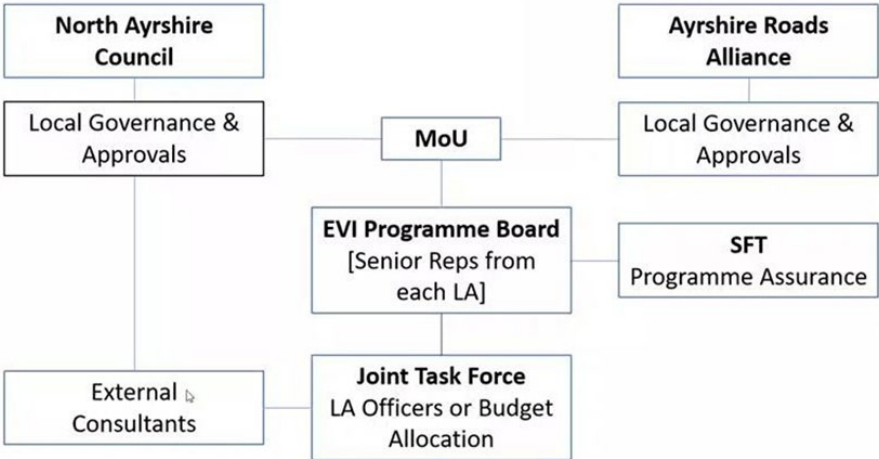
resources and revenue. Although any of the models could potentially be viable, Model B scored the highest and is the recommended option. In selecting Model B, all capital investment requirements (besides the element which would be grant funded), future revenues, management, maintenance, repairs running costs and the main capital and revenue risks would all be the responsibility of the commercial sector for the duration of the contract, and therefore there is no further financial burden on the Council. In addition, the ability to leverage in private sector funding is expected to improve the prospect of a successful grant funding application to Transport Scotland. [Annex 2](#) provides further detail on assessment scoring of the four different models.

- 1.27 The concession contract is expected to be for a duration of 20 years. In years 11,12,13, the EVCI assets will undergo a replacement programme which the operator will be responsible for financing and implementing. Once the concession contract ends, it is expected that we would procure for another concession contract and within that there will be a requirement to replace the existing EVCIs and the end of the useful life.

**Tariffs**

- 1.28 Electric vehicle charging has been free to the public since its introduction in South Ayrshire to encourage drivers to convert from traditional petrol and diesel vehicles. As the number of EVs has now increased significantly, particularly since 2020, a tariff is now needed to manage the cost of electricity and maintenance associated with EV charger use. Currently the costs of public EV charging units is unbudgeted for with costs met by ARA.
- 1.29 There is not currently a tariff set for EV charge points in South Ayrshire Council, however a tariff is being developed and is expected to be introduced during 2023. North Ayrshire Council’s tariff equates to 5.4p per mile for Destination charge points and 8.6p per mile for Rapid charge points
- 1.30 The business case recommends a new tariff be implemented across the three Council areas for price synergies and consistency within the region. The updated tariff would be determined at procurement stage, informed by the need to set a rate which continues to enable and incentivise EV uptake, but which reflects the costs of electricity used and a share of the wider operating costs of the network.

**Figure 1. Proposed Procurement and Development Organogram**



- 1.31 SFT has commissioned legal advisors Burness Paul to prepare an Inter Authority Agreement template, as a pro forma that can be used by other organisations seeking mutual delivery of EVI Pathfinder projects. This would set out the proposed governance process for the specification, procurement, development, delivery, operational and monitoring stages of the project. The draft Inter-Authority Agreement and associated Memorandum of Understanding has been reviewed by Legal Services, who would continue to provide advice as discussions progress further with Ayrshire Roads Alliance in finalising the details of the document.

**G.3 South Ayrshire**

**G.3.1 Destination Chargers (7kW to 22kW)**

Table G.11: South Ayrshire Council – List of Proposed Destination Charger (7kW to 22kW) Sites

Ref.	Site	Post Code	X Coordinate	Y Coordinate	Location	EVCP	Max kW Output	Primary Substation	Comment
D1	Annbank Primary School, Mossblown	KA6 5DZ	240574	624467	Off-Street	1	22	Drumley	Average 22kW utilisation used
D2	Ayr Academy, Ayr	KA8 0SZ	235135	621446	Off-Street	1	22	Mill Street	Rapid EVCP assumed provided by private sector in Ayr. Average 22kW utilisation used
D3	Barns Crescent Car Park, Ayr	KA7 2BW	233606	621478	Off-Street	2	7	Mill Street	Rapid EVCP assumed provided by private sector in Ayr. Average 7kW utilisation used
D5	Beach Road Car Park, Troon	KA10 6SG	232494	632409	Off-Street	2	7	Troon	Average 7kW utilisation used
D6	Belmont Academy, Ayr	KA7 3SN	234418	619980	Off-Street	1	22	Glengall	Rapid EVCP assumed provided by private sector in Ayr. Average 22kW utilisation used
D7	Braehead Primary School, Ayr	KA8 9PJ	235178	622657	Off-Street	1	22	Heathfield Rd Ayr	Rapid EVCP assumed provided by private sector in Ayr. Average 22kW utilisation used
D8	Citadel Leisure Centre, Ayr	KA7 1JB	233272	622285	Off-Street	2	7	Mill Street	Rapid EVCP assumed provided by private sector in Ayr. Average 7kW utilisation used
D11	Crosshill Community Centre, Crosshill	KA19 7RJ	232791	606568	Off-Street	1	22	Maybole	Average 22kW utilisation used
D12	Dalmilling Primary School, Ayr	KA8 0PD	236059	622694	Off-Street	1	22	Old Bridge Road	Rapid EVCP assumed provided by private sector in Ayr. Average 22kW utilisation used
D13	Forehill Primary School, Ayr	KA7 3JU	235333	620734	Off-Street	1	22	Glengall	Rapid EVCP assumed provided by private sector in Ayr. Average 22kW utilisation used
D14	Heathfield Primary School, Ayr	KA8 9DR	234959	624118	Off-Street	1	22	Heathfield Rd Ayr	Rapid EVCP assumed provided by private sector in Ayr. Average 22kW utilisation used
D15	Kincaidston Primary School, Ayr	KA7 3YN	234739	619399	Off-Street	1	22	Glengall	Rapid EVCP assumed provided by private sector in Ayr. Average 22kW utilisation used
D16	Kingcase Primary School, Ayr	KA9 2DG	235034	624540	Off-Street	1	22	Heathfield Rd Ayr	Rapid EVCP assumed provided by private sector in Ayr. Average 22kW utilisation used
D17	Main Street, Dundonald	KA2 9HL	236595	634410	On-Street	1	22	Riverside	Average 22kW utilisation used
D19	Marr College, Troon	KA10 7AB	233223	631399	Off-Street	1	22	Troon	Average 22kW utilisation used
D20	Maybole Community Campus, Maybole	KA19 8BP	229242	609674	Off-Street	2	7	Maybole	Average 7kW utilisation used
D21	Maybole Town Hall, Maybole	KA19 7BZ	230026	609879	Off-Street	1	22	Maybole	Average 22kW utilisation used
D22	Muirhead Activity Centre, Troon	KA10 7AZ	233766	631653	Car park	2	7	Troon	Also serves nearby housing. Assumed 7kW utilisation
D23	New Road Car Park, Ayr	KA8 8HE	234044	622802	Off-Street	1	7	Mill Street	Rapid EVCP assumed provided by private sector in Ayr. Average 7kW utilisation used
D24	Newton Primary School, Ayr	KA8 8JL	234217	622442	Off-Street	1	22	Mill Street	Rapid EVCP assumed provided by private sector in Ayr. Average 22kW utilisation used
D25	Old Street Car Park, Girvan	KA26 9EY	218661	598163	Off-Street	2	7	Girvan	Average 7kW utilisation used
D26	South Beach Road Car Park, Troon	KA10 6EF	232186	630791	Off-Street	2	7	Troon	Average 7kW utilisation used
D27	Southcraig School, Ayr	KA7 2ND	234140	620438	Off-Street	1	22	Mill Street	Rapid EVCP assumed provided by private sector in Ayr. Average 22kW utilisation used
D28	St John's Primary School, Ayr	KA8 0JB	234445	622324	Off-Street	1	22	Mill Street	Rapid EVCP assumed provided by private sector in Ayr. Average 22kW utilisation used
D29	Tarbolton Primary School, Tarbolton	KA5 5QD	243056	627077	Off-Street	1	22	Drumley	Average 22kW utilisation used
D31	The Carrick Centre, Maybole	KA19 7DE	229897	610041	Off-Street	1	22	Maybole	Average 22kW utilisation used
D33	Whittleys Activity Centre, Ayr	KA8 9RW	235866	623000	Car park	2	7	Old Bridge Road	Also serves nearby housing. Assumed 7kW utilisation

Source: Mott MacDonald

**G.3.2 Rapid Chargers(50kW)**

Table G.12: South Ayrshire Council – List of Proposed Rapid Charger (50kW) Sites

Ref.	Site	Post Code	X Coordinate	Y Coordinate	Location	EVCP	Max kW Output	Primary Substation	Comment
D4	Barrhill Memorial Hall	KA26 0PP	223210	582338	Car park	1	50	GIRVAN	Limited rapid charger provision, Average 50kW utilisation assumed.
D9	Coylton Shops, Coylton	KA6 6PH	240669	619819	Off-Street	1	50	DRUMLEY	Limited rapid charger provision, Average 50kW utilisation assumed.
D10	Crosshill Community Centre, Crosshill	KA19 7RJ	232791	606568	Off-Street	1	50	MAYBOLE	Limited rapid charger provision, Average 50kW utilisation assumed.
D18	Main Street, Dundonald	KA2 9HE	236558	634552	On-Street	1	50	RIVERSIDE	Limited rapid charger provision, Average 50kW utilisation assumed.

Ref.	Site	Post Code	X Coordinate	Y Coordinate	Location	EVCP	Max kW Output	Primary Substation	Comment
D30	Tarbolton Primary School, Tarbolton	KA5 5QD	243056	627077	Off-Street	1	50	DRUMLEY	Limited rapid charger provision, Average 50kW utilisation assumed.
D32	Tron Swimming Pool, Tron	KA10 6XQ	232103	631258	Off-Street	2	50	Tron	Limited rapid charger provision, Average 50kW utilisation assumed.

Source: Mott MacDonald

### G.3.3 Residential Chargers (<7kW)

Table G.13: South Ayrshire Council – List of Proposed Residential Charger (<7kW) Sites

Ref.	Site	Post Code	X Coordinate	Y Coordinate	Location	EVCP	Max kW Output	Primary Substation	Comment
R1	Main Street, Barrhill	KA26 0QP	223453	582150	On-street	2	7	Pinwherry	On A714 but enough space.
R2	Main Street, Ballantrae	KA26 0NA	208411	582488	On-street	2	7	Pinwherry	On A77 but serves some properties
R3	Arran Avenue, Ballantrae	KA26 0NT	208313	582828	Car park	2	7	Pinwherry	Limited locations for parking
R4	Hyslop Crescent, Colmonell	KA26 0SE	214910	585990	On-street	2	7	Pinwherry	Parking bays on road
R5	Willow Drive, Girvan	KA26 0DE	218720	596712	On-street	2	7	Girvan	Moved into marked parking bays
R6	Piedmont Road, Girvan	KA26 0DS	218781	597054	On-street	2	7	Girvan	Moved into marked parking bays
R7	Henrietta Street, Girvan	KA26 9AN	218371	597540	On-street	2	7	Girvan	On A77 but serves many properties without driveways
R8	Kerr Court, Girvan	KA26 0BP	218802	597386	On-street	2	7	Girvan	Many shared parking areas
R9	Arran Court, Girvan	KA26 0EG	219007	597276	On-street	2	7	Girvan	housing estate with shared parking areas
R10	Dalrymple Street, Girvan	KA26 9BG	218543	597604	On-street	2	7	Girvan	Potentially busy street
R11	Troweir Road, Girvan	KA26 9EB	218973	598135	On-street	2	7	Girvan	on-street parking bays.
R12	Montgomerie Street, Girvan	KA26 9HS	218764	598348	On-street	2	7	Girvan	Potentially high demand - many properties without off-street parking.
R13	Main Street, Dailly	KA26 9SB	226971	601576	On-street	2	7	Girvan	Potentially limited on-street space
R14	Main Street, Straiton	KA19 7NF	238143	604911	On-street	2	7	Lethanhill	Potentially limited on-street space
R15	Main Road, Kirkoswald	KA19 8HY	223932	607534	Car park	2	7	Maybole	Car Parking at side at road
R16	Kirkoswald Road, Maidens	KA26 9NS	221352	607932	Car park	2	7	Girvan	Appears to be a turning circle of some kind
R17	Patna Road, Kirkmichael	KA19 7PJ	234316	608946	On-street	2	7	Maybole	Potentially too restricted
R18	Murray Gardens, Maybole	KA19 7AZ	230039	609435	Car park	2	7	Maybole	Potentially too restricted. Limited space as on a hill.
R19	Carrick Street, Maybole	KA19 7DN	229849	609891	On-street	2	7	Maybole	Now one-way street so improved opportunities for on-street charging.
R20	Ladywell Road, Maybole	KA19 7BE	230070	609786	Car park	2	7	Maybole	Limited potential sites - hilly location with no off-street parking.
R21	Minnoch Crescent, Maybole	KA19 8DW	229656	610322	Car park	2	7	Maybole	housing estate with shared parking areas
R22	Kennedy Drive, Dunure	KA7 4LT	225478	615757	On-street	2	7	Maybole	Narrow streets, some with driveways
R23	Kincaidston Drive, Ayr	KA7 3YL	234844	619228	Car park	2	7	Glengall	residential car park
R24	Sorrel Drive, Ayr	KA7 3XP	235120.9524	619115.2959	Car park	2	7	Glengall	housing estate with shared parking areas
R25	Goukscroft Park, Ayr	KA7 4DS	232728	619328	Car park	2	7	Glengall	housing estate with shared parking areas
R26	Heather Park, Ayr	KA7 3XJ	235203	619271	Car park	2	7	Glengall	housing estate with shared parking areas
R27	Fenwickland Avenue, Ayr	KA7 3QD	234495	619624	On-street	2	7	Glengall	
R28	Trefoil Place, Ayr	KA7 3XG	235119	619443	Car park	2	7	Glengall	housing estate with shared parking areas
R29	Wood Park, Ayr	KA7 3SL	234786	619805	On-street	2	7	Glengall	Large amount of housing without off-street parking
R30	Lorne Terrace, Hillhead	KA6 6JX	242041	619743	On-street	2	7	Drumley	
R31	Kyle Crescent, Coylton	KA6 6NP	240765	620062	Car park	2	7	Drumley	housing estate with limited parking

R32	Southfield Park, Ayr	KA7 2NU	234150	620244	Car park	2	7	Mill Street	Marked bays on street
R33	Hillfoot Road, Ayr	KA7 3LF	235064	620369	On-street	2	7	Mill Street	Parking bays on road
R34	Glencairn Road, Ayr	KA7 3HJ	234940	620708	On-street	2	7	Mill Street	
R35	Orchard Avenue, Ayr	KA7 3EJ	234643	620831	On-street	2	7	Mill Street	
R36	Bellevue Crescent, Ayr	KA7 2DP	233541	621169	On-street	2	7	Mill Street	side street with no off-street parking
R37	Ballantine Drive, Ayr	KA7 2RG	233943	620793	On-street	2	7	Mill Street	side street with no off-street parking
R38	Fairfield Road, Ayr	KA7 2AU	233311	621431	On-street	2	7	Mill Street	
R39	Charlotte Street, Ayr	KA7 1DZ	233426	621910	On-street	2	7	Mill Street	Plenty of options on-street
R40	Campbell Court, Ayr	KA8 0SE	235344	621804	On-street	2	7	Mill Street	side street
R41	Elba Street, Ayr	KA8 0DQ	234146	622136	On-street	2	7	Mill Street	
R42	York Street, Ayr	KA8 8AN	233520	622483	On-street	2	7	Mill Street	Range of potential locations in vicinity
R43	Princes Court, Ayr	KA8 8HX	234085	622615	Car park	2	7	Mill Street	Flatted development
R44	Thomson Street, Ayr	KA8 9QB	235484	622862	On-street	2	7	Heathfield Rd Ayr	
R45	Campbell Street, Ayr	KA8 9AR	234391	623126	On-street	2	7	Heathfield Rd Ayr	Narrow street
R46	St George's Road, Ayr	KA8 9HN	234623	623131	On-street	2	7	Heathfield Rd Ayr	
R47	Low Road, Ayr	KA8 9SB	236308	623177	Car park	2	7	Old Bridge Road	
R48	Oswald Road, Ayr	KA8 8LT	234170	623563	On-street	2	7	Heathfield Rd Ayr	Street not well overlooked.
R49	Annpit Road, Ayr	KA8 9BZ	234565	623771	On-street	2	7	Heathfield Rd Ayr	
R50	Moor Park Crescent, Prestwick	KA9 2NL	235333	624138	Car park	2	7	Heathfield Rd Ayr	
R51	Arcon Court, Mossblown	KA6 5BT	240034	625000	Car park	2	7	Drumley	Narrow streets, some with driveways
R52	Rowanbank Road, Prestwick	KA9 1DS	236115	625215	On-street	2	7	Heathfield Rd Ayr	
R53	Marina Road, Prestwick	KA9 1QZ	234728	625607	On-street	2	7	Heathfield Rd Ayr	Narrow street
R54	Bank Street, Prestwick	KA9 1PT	234927	625615	On-street	2	7	Heathfield Rd Ayr	Limited on-street parking
R55	Blackford Crescent, Prestwick	KA9 2LW	236107	626175	Car park	2	7	Monkton	
R56	Shawfarm Place, Prestwick	KA9 1JQ	235773	626394	Car park	2	7	Monkton	
R57	Kirk Street, Prestwick	KA9 1AU	235155	626486	On-street	2	7	Monkton	
R58	Shawfarm Gardens, Prestwick	KA9 2GZ	235645	626579	Car park	2	7	Monkton	Risk of abuse from adjacent Prestwick Airport
R59	Beechwood Road, Tarbolton	KA5 5RF	243380	627134	On-street	2	7	Drumley	Some properties have driveways
R60	Bank Street, Troon	KA10 6AL	231664	630905	On-street	2	7	Troon	
R61	Ailsa Road, Troon	KA10 6DB	231216	631021	On-street	2	7	Troon	
R62	Gilles Street, Troon	KA10 6QH	232629	631382	On-street	2	7	Troon	Street could be too narrow, but plenty of tenement properties.
R63	Buchan Road, Troon	KA10 7BT	233581	631621	On-street	2	7	Troon	
R64	Main Street, Loans	KA10 7EX	234543	631677	On-street	2	7	Troon	Main St could be too narrow.
R65	Main Street, Symington	KA1 5QG	238264	631532	On-street	2	7	Monkton	Side road off Main St
R66	Hawthorn Place, Troon	KA10 6QA	232721	631802	On-street	2	7	Troon	
R67	Logan Drive, Troon	KA10 6QF	232845	631840	On-street	2	7	Troon	Most properties in vicinity do not have off-street parking. Sufficient on-street space.
R68	Burnfoot Avenue, Troon	KA10 6RE	232584	632296	Car park	2	7	Troon	Outside Barassie Primary School, limited on-street parking. Communal parking area more suitable.
R69	Castleview, Dundonald	KA2 9JB	236365	635090	Car park	2	7	Riverside	Limited on-street parking, suggest using the nearby car park
R67	Logan Drive, Troon	KA10 6QF	232845	631840	On-street	2	7	Troon	Most properties in vicinity do not have off-street parking. Sufficient on-street space.



### Assessment Scoring

Based on the above scoring parameters, the following table presents a high-level scoring assessment of the four commercial models against the objectives.

*Table Commercial model scoring – weighted results*

Objective	A – Privately owned and operated	B – Privately operated only	C – Privately operated with risk share	D – Public sector owned and operated
Affordability	3	2	2	1
Social outcomes	1	3	3	3
Risk allocation	3	3	2	1
Contestability	1	3	3	2
Procurement	2	2	1	3
Resources	3	3	2	1
Revenue	1	1	2	3
<b>Weighted avg score</b>	<b>2.07</b>	<b>2.57</b>	<b>2.29</b>	<b>1.86</b>
<b>Normalised score</b>	<b>0.81</b>	<b>1.00</b>	<b>0.89</b>	<b>0.72</b>

Source: Mott MacDonald

The following observations can be drawn from these assessment results:

- Model D scores lowest, for though it would give the local authority maximum control over the implementation and operation of EVCI network and would potentially maximise revenue, it would also fully expose the authority to the significant commercial uncertainties of this emerging market, while requiring a level of capital investment and back-office resource commitment that many authorities are not best placed to generate and sustain.
- Model A scores second lowest. The fully market led approach is better placed to effectively handle market uncertainties and while shielding the local authority from commercial risk, but the downside is that it is also less likely to deliver a socially equitable network (as loss making locations would be unlikely to proceed) and while the considerable up-front investment could also prove commercially unviable to the private sector. Private ownership of the underground connections would also potentially reduce the long-term contestability and adaptability of the network.
- The two hybrid models provide an opportunity to combine the respective strengths of models A and D, with the combination provided by model B – ‘privately operated only’ – resulting in the highest score. This model retains local authority ownership of all assets with no exposure to capital risks, which are covered by a combination of private sector concessionaire investment and grant subsidy. This gives the public sector control over chargepoint specifications, locations and, to some degree, tariffs, while allowing the private sector to handle all commercial risks in return for collecting all revenue. Model C is similar but with revenue share to the local authority, but this is in exchange for exposure to financial downside risks which could potentially outweigh revenue gains if realised (and which local authorities may be less well placed to manage than EV charging organisations who have greater capability to forecast future demand). This model therefore scores lower than Model B.



## South Ayrshire Council Equality Impact Assessment Scoping Template

Equality Impact Assessment is a legal requirement under the Public Sector Duty to promote equality of the Equality Act 2010. Separate guidance has been developed on Equality Impact Assessment's which will guide you through the process and is available to view here: <https://www.south-ayrshire.gov.uk/equalities/impact-assessment.aspx>

Further guidance is available here: <https://www.equalityhumanrights.com/en/publication-download/assessing-impact-and-public-sector-equality-duty-guide-public-authorities/>

The Fairer Scotland Duty ('the Duty'), Part 1 of the Equality Act 2010, came into force in Scotland from 1 April 2018. It places a legal responsibility on Councils to actively consider ('pay due regard to') how we can reduce inequalities of outcome caused by socio-economic disadvantage, when making strategic decisions. See information here: [Interim Guidance for Public Bodies](#) in respect of the Duty, was published by the Scottish Government in March 2018.

### 1. Policy details

Policy Title	Electric Vehicle Charging Infrastructure Investment in Ayrshire
Lead Officer (Name/Position/Email)	Kevin Braidwood, Head of Roads - Kevin.Braidwood@ayrshireroadsalliance.org

**2. Which communities, groups of people, employees or thematic groups do you think will be, or potentially could be, impacted upon by the implementation of this policy? Please indicate whether these would be positive or negative impacts**

Community or Groups of People	Negative Impacts	Positive impacts
Age – men and women, girls & boys	No	Yes
Disability	No	Yes
Gender Reassignment (Trans/Transgender Identity)	No	Yes
Marriage or Civil Partnership	No	Yes
Pregnancy and Maternity	No	Yes
Race – people from different racial groups, (BME) ethnic minorities and Gypsy/Travellers	No	Yes
Religion or Belief (including lack of belief)	No	Yes
Sex – gender identity (issues specific to women & men or girls & boys)	No	Yes
Sexual Orientation – person's sexual orientation i.e. LGBT+, lesbian, gay, bi-sexual, heterosexual/straight	No	Yes
Thematic Groups: Health, Human Rights & Children's Rights	No	Yes

**3. What likely impact will this policy have on people experiencing different kinds of social disadvantage? (Fairer Scotland Duty). Consideration must be given particularly to children and families.**

Socio-Economic Disadvantage	Negative Impacts	Positive impacts
Low Income/Income Poverty – cannot afford to maintain regular payments such as bills, food, clothing	N/A	N/A
Low and/or no wealth – enough money to meet Basic living costs and pay bills but have no savings to deal with any unexpected spends and no provision for the future	N/A	N/A
Material Deprivation – being unable to access basic goods and services i.e. financial products like life insurance, repair/replace broken electrical goods, warm home, leisure/hobbies	N/A	N/A
Area Deprivation – where you live (rural areas), where you work (accessibility of transport)	No	Yes
Socio-economic Background – social class i.e. parent’s education, employment and income	N/A	N/A

**4. Do you have evidence or reason to believe that the policy will support the Council to:**

General Duty and other Equality Themes Consider the ‘Three Key Needs’ of the Equality Duty	Level of Negative and/or Positive Impact (High, Medium or Low)
Eliminate unlawful discrimination, harassment and victimisation	No adverse impact identified. Low
Advance equality of opportunity between people who share a protected characteristic and those who do not	No adverse impact identified. Low
Foster good relations between people who share a protected characteristic and those who do not. (Does it tackle prejudice and promote a better understanding of equality issues?)	No adverse impact identified. Low
Increase participation of particular communities or groups in public life	No adverse impact identified. Low
Improve the health and wellbeing of particular communities or groups	No adverse impact identified. Low
Promote the human rights of particular communities or groups	No adverse impact identified. Low
Tackle deprivation faced by particular communities or groups	No adverse impact identified. Low

**5. Summary Assessment**

<p><b>Is a full Equality Impact Assessment required?</b> (A full Equality Impact Assessment must be carried out if impacts identified as <b>Medium and/or High</b>)</p>	<p><del>YES</del></p> <p><b>NO</b></p>
<p><b>Rationale for decision:</b></p> <p><b>This work does not directly impact on service delivery. If future work leads to amendments in policy then the need for a full Equality Impact Assessment will considered.</b></p>	
<p><b>Signed :</b> Kevin Braidwood <b>Head of Roads</b></p> <p><b>Date:</b> 28 February 2023</p>	