Agenda Item 16



Report to Policy Committee

Author/Lead Officer of Report: Richard Baker

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Report of:	Executive director of City Futures		
Report to:	Transport, Regeneration ar Committee	nd Climate Policy	
Date of Decision:	13 th March 2024		
Subject:	On-street residential charge TRO consultation report	epoint scheme (ORCS) :	
Has an Equality Impact Assessment (EIA) been undertaken? Yes x No		Yes x No	
If YES, what EIA reference number has it been given? 2120			
Has appropriate consultation taken place?		Yes x No	
Has a Climate Impact Assessment (CIA) been undertaken? Yes x No			
Does the report contain confidential or exempt information?		Yes No x	
If YES, give details as to whether the exemption applies to the full report / part of the report and/or appendices and complete below:-			
"The (report/appendix) is not for publication because it contains exempt information under Paragraph (insert relevant paragraph number) of Schedule 12A of the Local Government Act 1972 (as amended)."			
Purpose of Report:			
To report details of objections and comments received following the Traffic Regulation Order (TRO) consultation for this scheme. TROs are required to enable the provision of on-street electric vehicle charging places. The report sets out the Council's response to unwithdrawn objections.			

Recommendations:

It is recommended that the Transport, Regeneration and Climate Policy Committee:

- Considers the objections to the TROs for the proposed on-street residential chargepoint scheme (ORCS) and officer responses.
- Approves the making of the Traffic Regulation Orders in accordance with the Road Traffic Regulation Act 1984.
- Notes that all objectors will be informed of the decision prior to implementation.

Background Papers:

(Insert details of any background papers used in the compilation of the report.)

Appendix A – ORCS EV chargers location plan

Appendix B – Consultation documents

Appendix C – ORCS scheme TRO consultation responses

Lea	Lead Officer to complete:-		
in respect of a indicated on th Policy Checkli been incorpora	I have consulted the relevant departments in respect of any relevant implications indicated on the Statutory and Council Policy Checklist, and comments have been incorporated / additional forms	Finance: Damian Watkinson & Andrew Craig	
		Legal: Richard Cannon	
	completed / EIA completed, where required.	Equalities & Consultation: Ed Sexton	
		Climate: Mark Whitworth	
	Legal, financial/commercial and equalities implications must be included within the report and the name of the officer consulted must be included above.		
2	EMT member who approved submission:	Kate Martin	
3	Committee Chair consulted:	Cllr Ben Miskell	
4	I confirm that all necessary approval has been obtained in respect of the implications indicated on the Statutory and Council Policy Checklist and that the report has been approved for submission to the Committee by the EMT member indicated at 2. In addition, any additional forms have been completed and signed off as required at 1.		
	Lead Officer Name: Richard Baker	Job Title: Senior Engineer	
	Date: 1 March 2024		

1. PROPOSAL

- 1.1 The Government has set a target for all new cars and vans sold in the UK to be zero emission by 2035. The Council wants to make it easier for local people to use electric vehicles (EVs), and one of the barriers to electric vehicle ownership is people not having a private driveway or garage to charge their vehicle. The scheme looks to improve inclusivity as the ability to own or operate an EV should not be influenced by where you live.
- 1.1 To increase access to electric vehicle charging points the Council has secured some grant funding from the national Office for Zero Emission Vehicles (OZEV) On-Street Residential Chargepoint Scheme towards installation of electric vehicle charging points in residential areas.
- 1.2 This local on-street residential chargepoint scheme (ORCS), is part funded from this grant and the Local and Neighbourhood Transport Programme (LaNTP). It has been developed as a pilot scheme that proposes to introduce EV charging to several on-street residential locations and at three car parks spread across the city. This is an opportunity not just to provide more EV charging opportunities but to introduce new types of EV infrastructure on-street that can be reviewed on a smaller scale prior to an anticipated larger roll-out as demand increases.
- 1.3 The proposed introduction of on-street EV charging spaces in 6 locations and in 3 residential car parks would increase the availability of charging infrastructure. This would offer residents with or who are considering using an electric vehicle and do not have access to off-street parking the opportunity to recharge at or very near their home. The on-street chargepoints will be double sockets meaning that two EVs can charge whilst parked each side of the charger and be of the 'fast' 7kW type akin to residential chargers that normally take several hours to fully charge an EV. The proposed locations are indicated in Appendix A.
- 1.4 These locations were selected for a combination of technical and democratic reasons. Requests for EV charging infrastructure can be made to the Council directly or via the Electric Vehicle (EV) Public Charger Demand Tracker on the Council website. Such requests were taken into account when selecting the roads and car parks for this project whilst also placing the facilities across a broader area where EVs are known or expected to be used, private off street parking is limited and to improve access generally across the city.
- 1.5 Technical reasons for selecting the specific on-street locations include; where there is sufficient additional capacity within the Distribution Network Operator (DNO) power supply, what side of the road the supply extends, having suitable carriageway and footway dimensions, consideration of any existing restrictions or uses and ability for the EV charger to connect to the operator's system using mobile communications.
- 1.6 The proposed on-street EV chargepoint layouts have been designed to minimise the space used and thereby reduce the impact on general on-

street parking. The EV charging spaces would typically extend for 13metres, that is two 6metre parking bays and then the EV charging island between them. Some of the proposed sites have 7metre bays depending on site considerations or to make these as accessible as possible for all users. An accessible parking place is prescribed as being a minimum 6.6metres long. These on-street chargepoints would remove road space that is currently used for general parking on a first come - first served basis, equating to up to three typical car lengths.

- 1.7 The process of designating the space on-street and in the car parks for EV charging requires that a Traffic Regulation Order (TRO) is promoted. This is done to ensure that the chargepoints are available for users. Promotion of a TRO requires a statutory procedure of consultation with statutory consultees such as the emergency services, local councillors and the public. The TROs for the on-street and car park EV charging only bays were advertised on 18th January 2024 with a three-week period allowed for objections to be submitted by the public.
- 1.8 This report includes objections and comments received during the formal consultation period.

2. HOW DOES THIS DECISION CONTRIBUTE?

- 2.1 The Council does not permit or license the charging of an EV on-street from a home address or business when the vehicle and cable is on the highway. Charging an EV at home must be done off highway so that the charging cables do not lead from a private dwelling onto, over or under the highway and cause a hazard (Highway can include the footway, carriageway or a grassed verge/ vegetation).
- 2.2 Future usage of EVs is set to increase. The Local Government Association guide 'Electric vehicles: What's going on out there?' references the Energy Saving Trust (EST):

"Energy Saving Trust (EST) have forecast the number of electric and hybrid vehicles up to 2040 that can be expected to join the UK's roads.

For context, the total number of cars on the UK's roads was 31.2 million in 2017.

By 2030, it is anticipated that there will be between approximately 8 million and 11 million hybrid or electric cars in the UK, if uptake is aligned with the Road to Zero (RTZ) targets. By 2040, the number of hybrid or electric cars could reach 25.5 million. Whilst conventional hybrid vehicles (that cannot be plugged in) will initially form many these sales, it is expected that plug-in hybrid and EVs will make up an increasing proportion as technology develops."

2.3 As of October 2023, in Sheffield there are 236 public chargepoints, 67 of which are rapid chargers. The Council operates 79 chargers (50 fast and

29 rapid – 10 of the rapid being taxi only). 'Fast' chargers provide power between 7kW and 22kW and can charge a car over several hours, 'Rapid' chargers tend to provide power at 50kW and can often charge a vehicle in less than an hour. The proposed EV charge points in the ORCS scheme would be 7kW and so take a few hours to charge an EV, depending on the vehicle. These would currently be classed as 'fast' though the definitions are changing as technology improves so this term should be used with caution. Parking Services will receive regular updates on charger usage so that the scheme can be monitored.

- 2.4 This pilot scheme can serve to aid the development of more public EV infrastructure where residents do not have access to off-street parking. The next step is underway and the Council are working with South Yorkshire Mayoral Combined Authority (SY MCA) who have submitted an application for funding from the local electric vehicle infrastructure (LEVI) fund for a much greater scope.
- 2.5 Electric vehicles have been identified as a way to reduce or decarbonise transport and as such ownership and usage of these types of vehicles will increase. Providing local facilities for residents who may wish to charge their vehicle in their neighbourhood can only further encourage the transition to EVs.
- 2.6 The project will contribute directly through its interventions to the overall strategic vision and objectives of Sheffield City Council and the Sheffield City Region.
- 2.7 The scheme supports the key policies and actions set out in the City's Transport Strategy, adopted by Cabinet in March 2019.

3. HAS THERE BEEN ANY CONSULTATION?

- 3.1 This is a pilot project for EV charging in residential areas. As it is something new for Sheffield and something that we expect there to be more of in future years it is important to provide information to the public and local representatives throughout the development of the scheme. Scheme information to date has included the following:
 - Briefing to Transport Regeneration and Climate committee members and local ward members advised of the proposals in Autumn 2023,
 - Presentation and discussion of the initial designs with the Access Liaison Group to consider any implications or issues,
 - Letter to residential frontagers regarding on-street proposals also in Autumn 2023,
 - A street news newsletter distributed in early December to over 700
 addresses that highlighted the scheme rationale and specific locations
 that have been assessed and approved by the Energy Saving Trust
 (EST) and Office for Zero Emissions (OZEV),
 - Updates to members and LACs on the scheme and forthcoming TRO,

- TRO consultation on the specific locations 18 January- 8 February 2024. Letters were sent to the over 700 addresses that received the newsletter to provide a broad awareness of the proposal. This was a wider consultation than is usual in relation to a TRO advertisement for parking restrictions.
- 3.2 The proposed Traffic Regulation Orders to introduce Electric Vehicle Charging restrictions at both on-street and off-street locations were advertised in January 2024 in the local press, by street notices put up throughout the area and by letter delivered to all affected properties and the wider area. The letter provided further information and details of how residents could comment on or formally object to the proposals (see Appendix B). The Transport, Regeneration and Climate Policy Committee, Local Ward Members, MPs and Statutory Consultees have been informed about the proposals throughout the process.
- 3.3 The Council has a legal responsibility to comply with the Local Authorities' Traffic Orders (Procedure)(England and Wales) Regulations 1996. This states that "An objection [to the making of a Traffic Regulation Order] shall be made in writing".

All Traffic Order advertisements state that objections can be made by email, as do the notices placed on street.

The Regulations stipulate that "Any person may object to the making of an order by [...] the end of the period of 21 days beginning with the date on which the order making authority [publicises the order]." However, comments and objections received after the closing date are normally added to the collation of responses and duly considered and that has been done in this case.

CONSULTATION REPONSES

- 3.3 There have been 36 responses from the public to the TRO consultation, 30 are formal objections to the scheme from residents. These objections are presented in full in Appendix C.
 - All respondents have received an acknowledgement of their comments on this consultation with further information or explanation where queries were raised. They were also offered the opportunity to withdraw their objection should the further information provided address their concerns.
- 3.4 The reasons given for objecting to the ORCS TRO included some common themes, queries and suggestions. These are summarised below for clarity with officer comments and answers.
 - Reduction in general on-street parking increasing parking stress and negatively affecting residents

This is an unavoidable consequence of introducing parking restrictions for particular vehicle types. The locations have been selected for technical and democratic reasons having then been determined as the most appropriate in these areas. The reduction in parking space for non-electric vehicles will be up to three vehicle lengths per on-street site. As a proportion of the space utilised for on-street parking in each area this change is considered a small amount in order to install infrastructure that will provide for current and future uptake of EV usage. The TRO is needed to ensure the spaces can be available for EV charging only and are not parked in by internal combustion engine (ICE) vehicles.

No-one around here has an EV / waste of money due to no EV owners and so will be empty a great deal of the day.

o In 2023, over 16% of newly registered cars were fully electric. This trend will continue since government has set targets through the Zero Emission Vehicle (ZEV) mandate, which is now law: 80% of new cars and 70% of new vans sold in Great Britain will now be zero emission by 2030, increasing to 100% by 2035. As of the first quarter of 2023, Sheffield had around 6,200 registered EVs, with an equal distribution between individuals and businesses. Cars make up 90% of all plug-ins, while lightgoods vehicles constitute most of the remainder. So it is certain that EVs are and will make up an increasing percentage of vehicles on the road. The lack of on-street charging may be a barrier to those wishing to transition to using an EV. This infrastructure should provide confidence to those looking to change their vehicle to an EV that they will have the opportunity to charge this near home. Usage will be monitored. Less well used locations may result in a review of the chargepoint restrictions and or lower the priority for an area for additional facilities as part of a future rollout of more EV chargepoints.

Concerns about impact on highways safety due to potential high demand and location of the bays

 The EV chargepoints will provide 7kW power and so will not likely provide quick charging that would result in vehicles queuing to use them. The locations have been assessed for suitable carriageway and footway widths and to ensure they would not hinder the free movement of traffic on highway.

Suggesting alternative locations nearby

 Some of the suggested alternatives are understandable e.g. Olive Grove Road instead of Slate Street but there are practical reasons for the selection of the proposed sites. On Olive Grove Road the limited DNO grid capacity was one of the critical factors why we had to choose one location over another. The narrow footway widths on the side suggested by many would also be disadvantageous.

• Requests to locate them elsewhere away from houses

 This is contrary to the aim of the scheme to provide facilities near to homes (see paragraph 1.3 of this report). The chargepoint sites were also selected to be away from direct frontages and so border house gable sides or boundary walls.

Reduce waiting restrictions to increase parking

 Existing waiting restrictions serve a purpose of promoting the free and safe movement of traffic at locations where parking or waiting would hinder this. It is not proposed to amend any existing waiting restrictions.

Nuisance to immediate properties due to comings and goings

 It is anticipated that usage of the bays will require several hours of charging and effectively this will be an informal rearrangement of who parks where in the local area.

Increased fire risk of electric vehicles

• Whilst the risks related to electric vehicle fires differ to petrol and diesel vehicles, and can be serious there is no evidence to suggest that fires in EVs are more likely to occur than in petrol or diesel vehicles. Some studies of international data have indicated that EV fires are less likely to occur than petrol or diesel fires. For example, in Norway between 2016 and 2021, proportionally, petrol or diesel vehicles were involved in 4 times more fires compared to electric vehicles. Source: Electric vehicles: costs, charging and infrastructure - GOV.UK (www.gov.uk). The ORCS scheme has been developed with and is proposed to be implemented by a specialist global EV charging company who are contracted to install, operate and manage EV infrastructure on behalf of SCC as well as the other SY local authorities. Each installation will be suitably designed and constructed to provide safe facilities following the appropriate regulations. Installation and operation of EV chargepoints in the proposed locations is consistent with others installed across the country.

Should SCC be encouraging car use at all?

 Whilst the use of sustainable and active travel modes is being promoted and a priority it is acknowledged that car usage and ownership will still form a key part of people's travel choices. Using a less polluting vehicle will aid the drive to reduce polluting emissions.

• Proposals seem disproportionate to current demand

 The locations have been selected following consideration of requests, predicted future demand, equity and availability of private off street parking. Actual demand is hard to know upfront as it may be suppressed but it will increase. The pilot scheme will be monitored for usage.

Potential for attracting anti-social behaviour

EV charging infrastructure has been the subject of vandalism and theft with removal of charging cables at some sites. However, these charging units do not have attached cables and are more akin to residential charging units where the driver supplies the detachable cable. In respect of criminality more generally, the Council will monitor whether such issues manifest and consider what action to take in due course, with regard to its relevant duties and powers. It should however be recognised that the most appropriate actions for dealing with criminality may only be available to other agencies, such as the police, and the Council may choose to make referrals for that purpose.

• Want these in nearby car parks instead of residential streets

The Council is installing EV chargepoints in residential car parks, as with this project, but government research identifies the importance of reliable charging close to where vehicles are regularly parked, for both current and future EV drivers. In order to support the transition to electric vehicles a step change in public charging provision will be needed which will almost certainly require facilities both in car parks and on street Source: Public Electric Vehicle Charging Infrastructure. Deliberative and quantitative research with drivers without access to off-street parking.

Want resident parking permits not EV bays

 The Council understands that in many residential locations the demand for on street parking exceeds supply. This is common throughout Sheffield and many urban areas where homes do not have off-street parking.

In exercising the powers to implement the proposals described in this report, the Council is under a duty to consider whether the provision of parking facilities on and off the highway is suitable and adequate (in conjunction with other matters detailed in the Legal Implications section of this report). This provision is not limited only to the availability of parking for residents with certain types of vehicles on the roads adjacent to where they live and the Council may consider other potential uses of the parking facilities available on the highway when taking into account whether what is provided is suitable and adequate. With regard to the aims of this scheme and in the context of the existing, surrounding parking facilities

which are unaffected by this proposal, this criteria is deemed to be fulfilled.

Permit schemes are operational in many areas and district centres. The current Council priorities for permit or controlled parking schemes are the areas around the city centre. Other areas may be considered for similar schemes in the future and the Council will continue to monitor the situation.

- Expected non-compliance due to existing poor parking practices and no enforcement
- The TRO will enable enforcement of the parking bays. Residents would be able to report non compliance to Parking Services.
- Construction of EV infrastructure would be intrusive and noisy
- This would be a very short term operation to provide a lasting benefit.
- Chances of being able to use one of the EV bays expected to be slim (if multiple residents wish to use at same time)
- Usage will be monitored by Parking Services. Well used locations may encourage additional facilities as part of a future roll-out of more EV chargepoints.
- Seems to offer 'private' spaces to the few who can afford EVs.
- Take up and ownership of EVs is increasing. Even if this appears to occur initially it is expected that as demand increases that there will be a turnover of vehicles parked here with many residents benefitting from the facility, including those with company / lease cars and motability vehicles.
- Frustrating to see empty EV parking spaces when parking demand for other vehicles is high and no space left on-street.
- Usage will be monitored- by Parking Services. Less well used locations may result in a review of the chargepoint restrictions and or lower the priority for an area for additional facilities as part of a future roll-out of more EV chargepoints.
- 3.5 Comments in support:
 - "Thank you for letting us know about the proposed EV charging points, which we very much support. Can you tell us which car park on Freedom Road is the proposed site?

- I am writing to express my support for this scheme which is long overdue and will make owning an electric car a more realistic possibility in the area.
 - My main worry however is over enforcement of the no parking zone around the area. I hope this is well enforced so that they are available when needed.
- Hello, last year there were reports of an EV charging point on Flodden Street in Crookes. I'm just wondering if you have a date when this is expected to come on line? I am currently having to charge my vehicle in Broomhill and walk up the hill so am excited to see a new charging point in Crookes.
- Do you have any updates on the EV charging point on Flodden Street?
 Are there any other charging points to be made available in Crookes? If there are steps to take to encourage more points let me know as we'd love one this side of Crookes.
- Today I received information in the post about the proposed charging points ... This was very helpful: thank you for that, and for the opportunity for local residents to comment. I want to say that I am broadly in support of the proposals but I would request that you monitor how much they are used and how the local on street parking is. There is risk of local dissatisfaction if the spaces are little used and there are at the same time no spaces for people to park in the area. Thanks again. I wish I could afford to now buy an electric car!"

OTHER CONSULTEES

- 3.8 South Yorkshire Police have been consulted on the TRO but no response was received.
- 3.9 No response has been received from South Yorkshire Fire and Rescue Service, the Yorkshire Ambulance Service or the South Yorkshire Mayoral Combined Authority regarding impacts on bus services though there aren't any anticipated.

4. RISK ANALYSIS AND IMPLICATIONS OF THE DECISION

4.1. Equality Implications

4.1.1 The ORCS scheme will not remove any designated disability parking as a result of the proposals. The Equality Impact Assessment (EIA) notes in the likely impacts in relation to disability that we are seeking, where practical, to make the chargepoints compliant with PAS 1899:2022 and have consulted with the Access Liaison Group to discuss the designs.

4.1.2 The (EIA) concluded that the development of a public electric vehicle charging infrastructure network contributes towards addressing health inequalities and other causes and identifiers of inequality in Sheffield. The EIA notes likely impacts in relation to: • Disability • Health • Age • Race (specifically provision of information in languages other than English, based on 2021 Census data), and • Poverty & Financial Inclusion (an aim to ensure that residents have access to market competitive tariffs).

4.2. Financial and Commercial Implications

- 4.2.1 The Final Business case (FBC) for the On-street Residential Chargepoint Scheme (ORCS) was approved by the Finance Committee in December 2023.
- 4.2.2 The ORCS grant from the Office for Zero Emission Vehicles (OZEV)/DfT offers to part-fund up to a maximum of 60% of capital costs relating to the procurement and installation of residential EV chargepoints.
- 4.2.3 The total capital cost of the project cost is £318,465 with a commuted sum of £13,800. The total OZEV grant offer funding is £84,230 for 11 (double-headed) charge points units (6 on-street, 5 spread between 3 car park locations). The remaining match funding, as well as project fees, and any associated capital costs which cannot be covered by the arrangement above, will be covered by accessing an allocation from the 2023/24 Local and Neighbourhood Transport Programme (LaNTP) for 'EV charging match-funding'.
- 4.2.4 An extension to the ORCS grant has been agreed with OZEV/EST but delivery of the scheme would need to be completed and spent by the end of the 2024/25 financial year (31 March 2025) according to the funding conditions. Any such increase will be subject to the usual formal capital approval process.
- 4.2.5 Electricity costs will be incorporated into the council's energy contract and be consistent with the other council operated EV chargers in the city. Installation and maintenance of the EV chargers will be undertaken as per the contract with the EV charging supplier. Revenue from the scheme will be retained by the council with ongoing costs funded through income from EV chargers, and when there is a deficit, this will need to be funded through existing revenue budgets. This is however very sensitive to usage scenarios and pricing policy which is why demand, income and costs should be monitored on a regular basis and adjustments made to avoid an overall deficit position. The commuted sum will assist with this and is funded through an allocation from the Local and Neighbourhood Transport Programme (LaNTP) for 'EV charging match-funding'.
- 4.2.6 Changing the proposed locations will require further consultation and a new Traffic Regulation Order to be promoted. This would add delay and risk to the delivery of the project and spend of the funding.

4.2.7 As a pilot project there is no resource to recruit additional parking enforcement staff so enforcement will be prioritised from exciting resource in line with the parking enforcement policy.

4.3. Legal Implications

4.3.1 The Vehicle Emissions Trading Schemes Order 2023 (SI 2023/1394) ("VETS Order 2023") establishes GB-wide trading schemes to replace the previous regulation of CO2 emissions from new cars and vans. The VETS Order 2023 sets up four separate GB-wide VETS that operate from 3 January 2024. These are the ZEV mandate schemes for cars and vans, and the CO2 standard schemes for cars and vans.

The ZEV mandate schemes provide for annual targets for non-ZEV registrations, decreasing yearly. The CO2 standard schemes set a baseline per-vehicle CO2 emissions target and will continue to limit emissions until all new sales are zero emission at the exhaust. These requirements have informed the development of the proposal described in this report.

- 4.3.2 The Council has the power to make Traffic Regulation Orders (TRO) under section 1 of the Road Traffic Regulation Act 1984 ('the 1984 Act') which include any provision prohibiting, restricting or regulating the use of a road, or any part of the width of a road, by vehicular traffic of any class specified in the order.
- 4.3.3 Part IV of the Act gives the Local Authority powers to designate parking places on a highway and make such provision as may appear to that authority to be necessary or expedient for regulating or restricting the use of any parking place designated by the order. In the case of the proposal detailed in this report, those powers are being used to designate electric vehicle charging only bays and restrict their use accordingly.
- 4.3.4 A TRO may be made where it appears expedient to the Council to do so for the reasons set out in section 1 of the 1984 Act this includes the avoidance of danger to people or traffic, for facilitating the passage on the road or any other road of any class of traffic (including pedestrians), preserving or improving the amenities of the area through which the road runs and for any of the purposes specified in paragraphs (a) to (c) of subsection (1) of section 87 of the Environment Act 1995 (air quality). The proposal in this report is considered to align with these purposes.
- 4.3.5 Before the Council can make a traffic order, it must consult with relevant bodies and publish notice of its intention in a local newspaper in accordance with the Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996 as well as take such steps as it considers appropriate for ensuring that adequate publicity is given to the proposed order. This includes the display of notices on street. The Council has complied with these requirements.

- 4.3.6 The Council is required to consider all duly made objections received and not withdrawn before it can proceed with making an order. Those objections are summarised and presented for consideration in this report. A full list of the objections is also appended to this report. The Council may modify an order, whether in consequence of any objections or otherwise, before it is made.
- 4.3.7 In exercising the aforementioned powers, the Council is under a duty to secure the expeditious, convenient and safe movement of vehicular and other traffic (including pedestrians) and the provision of suitable and adequate parking facilities on and off the highway per section 122 of the 1984 Act. In doing so the Council must have regard, so far as is practical, to:
 - The desirability of securing and maintaining reasonable access to premises,
 - the effect on the amenities of any locality affected,
 - any applicable national air quality strategy,
 - the importance of facilitating the passage of public service vehicles; and
 - any other matters appearing to the local authority to be relevant.

The factors relevant to the consideration of the above are presented in this report and the Council would be considered to be fulfilling this duty in implementing the proposals in this report.

4.4. Climate Implications

- 4.4.1 Sheffield has set a target to become a net zero city by 2030. In 2017, Transport emissions accounted for 26% of Sheffield emissions. 60% of journeys were being made by car, and around 40% of these were less than 1km in distance (a 10–12 minute walk). Between 2017 and 2021 (the latest year for which data is available) transport emissions in Sheffield have reduced by 15.9%, to 22% of city emissions that year, but we still need to reduce our annual transport emissions by a further 541 ktCO₂e by 2030.
- 4.4.2 Transport is a major contributor of polluting greenhouse gases in Sheffield, including carbon dioxide (CO₂) and nitrous oxide (N₂O). Air pollution contributes to 500 deaths a year in Sheffield, causing strokes, lung cancer and cardiovascular disease. The biggest cause of this pollution is transport, especially diesel vehicles. SCC has recently introduced a 'category C' Clean Air Zone, which the switch to electric vehicles will support. The scheme offers the potential for users of business vehicles which need to be charged at / near home e.g. LGV or taxi owners using the chargepoints.
- 4.4.3 We therefore also need to change how we travel from a polluting mode to a less polluting modes by increasing active travel, improving public transport to increase patronage, consolidating how good move within our city, and decarbonising the remaining vehicles by converting them to Ultra Low Carbon Vehicles (ULEV) like electric and hydrogen. Hydrogen is

- currently less likely to be as popular for cars in the near or medium future and so the councils current focus is on enabling increased uptake of electric vehicles (EVs).
- 4.4.4 Sheffield's uptake of EV's to date has been restricted by low levels of residential charging infrastructure in the city. In January 2024 (the latest year for which data is available), Sheffield has 43.3 electric vehicle chargers per 100k capita compared to a UK average of 80.1 (Electric vehicle charging device statistics: January 2024 GOV.UK (www.gov.uk). The challenge is further increased by the high number of property owners unable to install private chargers due to not having off-street parking.
- 4.4.5 The roll-out of public electric vehicle charging points will enable those without access to off-street parking to transition to electric vehicles, contributing to a just and fair transition to a low carbon world.
- 4.4.6 The full Climate Impact Assessment undertaken has determined that overall there should be a reduction in emissions. While there will be short term negative impacts in terms of installation and construction, the project will achieve emissions reductions through decarbonisation of transport and consideration in the tender of use of renewable energy and materials used in servicing and maintenance. The project will also provide economic benefits in terms of access to electric charging for residents. The visible roll out of the network also provides great opportunities for awareness raising around low carbon travel.

5. ALTERNATIVE OPTIONS CONSIDERED

- 5.1 The proposed on-street EV chargepoints have been designed to minimise the space used, look to comply with standards for accessibility where feasible and not install lots of EV equipment on footways. Placing the EV infrastructure on footways is an option but is not considered to be appropriate as this would reduce footway widths which in many residential areas are less than 2metres wide and so would introduce a hazard to pedestrians.
- 5.2 Alternative designs for on-street charging infrastructure that does not require a reduction in footways were considered. These included larger buildouts which then encourage drivers to access the chargepoint via the footway level. This would require more space and so further reduce opportunities for on-street parking. It was considered that the need to have a minimal impact to on-street space whilst also making the infrastructure as accessible as possible ruled out using a larger island or buildout.
- 5.3 The council are investigating the potential for charging EVs via streetlighting. However, there are technical issues which need to be worked through in order to understand the commercial viability as well as practical issues with the approach for the City.

5.4 The EV chargepoints have been promoted with a TRO as implementing EV infrastructure but not restricting the bays usage to EVs would likely result in these facilities not being available to those wishing to use them. However, the usage data will be reviewed and the timings and extents of the restriction may be recommended for change if it is considered that the space is being underutilised. This would be subject to another TRO process and consultation.

6. REASONS FOR RECOMMENDATIONS

- 6.1 The scheme will provide new EV infrastructure in areas where drivers wishing to charge an EV do not have access to a private driveway or an off-street facility. This could reduce inequalities and result in a greater use and uptake of EVs which can contribute to the reduction in carbon emissions and the contribute towards tackling the climate emergency.
- 6.2 This is one of the key drivers for this project nationally, supporting a move away from the use of traditional fossil fuels to cleaner technologies such as electric.
- 6.3 The development of a public electric vehicle charging infrastructure network contributes towards addressing health inequalities and other causes and identifiers of inequality in Sheffield as identified in the Equality Impact Assessment.
- 6.4 Increasing the number of public charging points for electric cars was a popular 'other' suggestion during the consultation carried out in relation to the Clean Air Zone, where in addition to the high cost of electric vehicles, the lack of electric vehicle charging points was highlighted as a key barrier to investing in cleaner vehicles.
- 6.5 The impact of the on-street spaces and infrastructure on existing parking pressures in these areas should be seen in context with the current and future benefits of the facilities as well as the small amount of space that would be needed out of the streets or car parks in each of these neighbourhoods.
- 6.6 It is therefore recommended that Committee:
 - Considers the objections to the TROs for the proposed on-street residential chargepoint scheme (ORCS) and officer responses.
 - Approves the making of the Traffic Regulation Orders in accordance with the Road Traffic Regulation Act 1984.
 - Notes that all objectors will be informed of the decision prior to implementation.

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