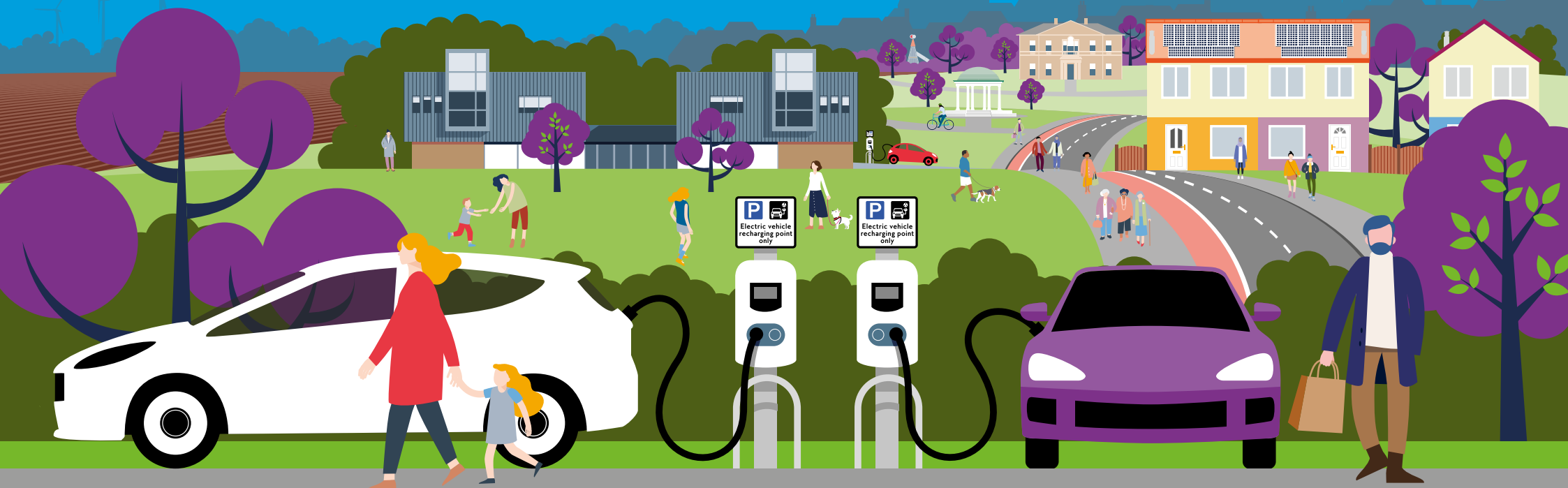


ROTHERHAM PUBLIC ELECTRIC VEHICLE CHARGING INFRASTRUCTURE STRATEGY

2024 - 2027

March 2024



www.rotherham.gov.uk



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FOREWORD

In South Yorkshire, Rotherham has been at the forefront of public electric vehicle (EV) charging infrastructure installation. From the first two chargers to go live in 2015 we have sought funding to expand the network at every opportunity. The Covid-19 pandemic caused a temporary halt to new installations, however we are now on course to increase this number significantly in the coming months with a total of 96 charging points at 21 locations across the Borough.

This Strategy demonstrates our commitment to provide a high-quality public network ahead of need that supports and accelerates the transition to electric vehicles. To guarantee the best result for residents, we will continue to directly own our core charging network but also continue to be open to public and private partnerships. This allows us to plan how the network will grow, set tariffs, makes us directly accountable, and enables us to deliver next generation chargers as quickly as possible with the community in mind.

As a local authority we are uniquely positioned to provide strategically located charging infrastructure that will support residents, commuters, fleets and through traffic to conveniently and affordably recharge. Keeping ownership of a core network we can set user tariffs ensuring that we have control over one of the critical factors in delivering a charging network for all.

As part of Rotherham's Local Plan, we require businesses to provide public charging facilities where they allow public access to their car park, for example at supermarkets. Similarly, all new homes are required to provide EV charging facilities.

We recognise that battery and charging technology will change rapidly as we approach the 2050 national net zero carbon emissions target. As a result, the Council remains open to new opportunities, and this is why we have set a short 3-year review period. What we do will be guided by the best available information within the constraints of statutory and practical limits.

This Strategy examines where we are at present, looks at where we would like to be in the future and how we will get there. It sets out the principles by which the Council will deliver and manage its infrastructure and how it will engage with residents, businesses and other stakeholders throughout Rotherham and South Yorkshire. It will also examine and explain the practical difficulties of meeting the expectations of all concerned parties.



THE VISION

A vision for Electric Vehicle Charging in Rotherham

As part of its recognition of the climate emergency, the Council has set a target to cut greenhouse gas emissions across the Borough of Rotherham to Net Zero by 2040. Reaching net zero, where carbon emissions are balanced by those taken out of the air, is a significant challenge and emissions from transportation such as diesel and petrol cars account for a large portion of Rotherham's carbon emissions. According to figures released by the Department for Energy Security & Net Zero (formerly Department for Business, Energy & Industrial Strategy or BEIS) in 2021 approximately a quarter of carbon emissions in Rotherham are attributable to transport via cars, taxis, motorcycles, and vans. The transition to electric vehicles will provide a cleaner alternative where public transportation or active travel is not appropriate. The provision of EV charge points is a vital component of this transition and as such this Strategy supports this aspiration.

The vision

By 2040, the majority of Rotherham residences are within a ten-minute walk (approximately 800m) of a publicly available charge point and are confident that they can access this infrastructure as and when they need it regardless of ability.

The Council will achieve this through the following interim targets:

- 95% of residences to be within 3 miles of a Council owned public charge point by 2025.
- 95% of residences to be within 1.5miles of a publicly available charge point by 2030.

- 95% of residences to be within a ten-minute walk (approximately 800m/0.5miles) of a publicly available charge point by 2040.

The Council owned charge point network will complement and enhance the private sector offer to provide access to a system of charge points across the Borough including varied types of chargers to meet demand. Charging units controlled by the Council are specified to meet PAS1899 accessibility standards and all new installations will provide a minimum number of fully accessible charging bays or nearby alternatives.

Its users should benefit from a transparent and consistent pricing structure, and offer a variety of payment types.

Throughout this Strategy “publicly available” refers to charge points owned by the Council or other public-sector bodies such as SYMCA, private sector charge points enabled via concessionary arrangements, or charge points delivered and supported by the Council for public use without Council ownership e.g., community schemes or those supported by Parish Councils. This change in terminology within the Council's targets reflects the governments expectation of the need for private sector investment and operation as demand increases and limited availability of appropriate Council owned land.

POLICY CONTEXT

The EV charging Strategy exists within a rapidly changing policy environment.

Path to net zero emission vehicles by 2035

On 28 September 2023, the government set out the path for all new cars to be zero emission by 2035, aiming to provide clarity to manufacturers while safeguarding UK jobs. The Department for Transport indicates that there will be a demand for 300,000 charge points installed by 2035 nationally to meet this target. This tracks the government's net zero target of 2050, but not Rotherham's target of net zero by 2040.

The zero-emission vehicle (ZEV) mandate applies to England, Wales and Scotland from January 2024. The ZEV mandate includes annual targets for the sale of zero emission cars and vans and requires 80% of new cars and 70% of new vans sold in Great Britain to be zero emission by 2030, increasing to 100% by 2035. The 2035 end of sale date puts the UK in line with other major global economies, including France, Germany, Sweden, and Canada. The Climate Change Committee suggests that this mandate will allow for over half of all vehicles on the UK's roads by 2035 to be ZEV. This mandate became law on 3rd January 2024. However, projections on forward demand within the Borough are not clear cut and may not reflect overall national trends.

Latest industry figures, show that throughout 2023 17% of new cars sold were zero emission, and more affordable used EVs are now appearing on the market with estimated sales of 90,000 used EVs between quarter 1 and quarter 3 of 2023. Used EVs now constitute almost 2% of the total UK market.

As of 1st January 2024, the Department for Transport estimates that there are now 53,677 public charge points nationally, in addition to charge points installed in homes, where most charging takes place.

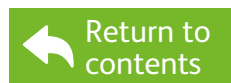
Public Charge Point Regulations 2023

The Public Charge Point Regulations came into force on the 24th November 2023 and are designed to improve consumer confidence. They do this by setting a number of standards required of charge point operators. For example, setting a minimum standard of network availability to 99%, ensuring live status data is available online, setting standards for installation and transparency of pricing. All chargers of 8kW and above deployed after 24th November 2024 are also required to accept card payment within a year. Operators also have a responsibility to offer payment roaming by 24th November 2025.

The Council will ensure these regulations are adhered to when managing and specifying new infrastructure throughout the Borough.

Planning Policy

In addition to the national policies and strategies published by the government, the Council has a set of adopted policy documents that reference clean, low-carbon fuels and their potential to contribute to published targets. This is an active strategic path that the Council has followed for several years. Each year the Council receives many planning applications from developers. The Council applies policies in the Local Plan and the further detailed requirements in Supplementary Planning Documents (SPD) when granting planning permission.



POLICY CONTEXT

The Rotherham Local Plan Core Strategy states:

By placing an emphasis on creating safe and sustainable communities the Core Strategy looks to ensure that development respects and enhances the distinctive features of Rotherham and develops a strong sense of place. It supports the use of renewable energy technologies and the creation of safe and attractive places to live, work and visit. The Core Strategy also sets the infrastructure required to deliver the Borough's Strategy and how this will be delivered.

The Local Plan Sites & Policies document has a number of specific policies that are particularly relevant to this Strategy.

Schemes (must) take into account good practice guidance (now SPD) published by the Council including transport assessment, travel plans and compliance with local Residential and Commercial Parking Standards to ensure there is a balance struck between access for motor vehicles and the promotion of sustainable access.

Policy SP26 (d) states:

Proposals for services should include sustainable refuelling infrastructure.

Policy SP30 regarding Motorway Service Areas states:

These policies acknowledge the need to provide for the refuelling of vehicles utilising low-emission/-carbon technologies and this is reinforced by The Rotherham Transport Strategy:

Theme 19: *To work to improve the efficiency of vehicles and reduce carbon emissions and to improve air quality, especially in designated areas.*

The Town Centre Parking Strategy incorporates a statement supporting future expansion of the charging facilities by both the public and private sectors.

Establishing a network of EV chargers demonstrates that the Council actively supports the transition to low-emission, low-carbon vehicles. This is of great importance in the drive to achieve net zero in 2040 following the declaration of a climate emergency. There is a likelihood that simply swapping fossil fuels for renewables will not address the issues around highway capacity and congestion, as well as impose a considerable burden on the electrical generation and supply network. For this reason, the Council will continue to invest in green energy generation on its own estate and pursue policies that promote sustainable transport in addition to supporting shift to EVs.

POLICY CONTEXT

Supplementary Planning Documents (SPD)

The Air Quality and Emissions SPD sets out the minimum number of chargers required to be installed at each type of development. In addition, the Transport Assessments, Travel Plans and Parking Standards SPD sets out EV charging requirements for parking spaces. Together, this policy approach requires that all new build dwellings (houses or apartments) must be provided with chargers as specified, as must all new build factories or offices. Where car parking is open to the public such as new supermarkets or leisure uses, these are required to provide a percentage of EV charging spaces within their car park. This allows people to charge their vehicle whilst doing other things such as shopping. This has been successful in providing additional charging opportunities across the Borough, and we expect this to continue in future. Facilities to expand provision are conditioned as part of the planning approval process in most cases.



OUR CURRENT CHARGING NETWORK

The publicly available charging network in Rotherham was initiated in 2015 with the installation of two chargers, one at Drummond Street public car park in the town centre and the other at the Advanced Manufacturing Park at Waverley. These chargers were funded by the government's Local Sustainable Transport Fund.

Rotherham, along with Sheffield, was mandated by government to implement a Clean Air Zone in 2017 and to enable quick progression, grant funding through the CAZ Early Measures Fund was given to both authorities. In Rotherham, we decided to implement a project to install public chargers on Council owned sites with solar photovoltaic (PV) panels and battery storage to offset some of the load on the electricity grid. By September 2019, Rotherham had installed 32 public charge points, covering 10 locations along with significant arrays of solar PV as well as 30 charge points for Council staff and fleet charging. The supply contract included all grid connections as well as 10 years maintenance and back-office operation.

In October 2023 Cabinet also approved the installation of charge points at 7 new sites across the Borough which when commissioned will further expand the Council's charge point network. This work is ongoing and is due to be completed by the end of 2024, resulting in 96 charge points at 21 locations across Rotherham.

Alongside its ambitions for public charge points, the Council approved its fleet replacement programme in March 2023, which includes investing in the transition of 64 fleet vehicles to EV.

The existing (blue) and planned (yellow) charge point locations are shown in the map below.

Network of EV charging sites commissioned by Rotherham Council – Existing and proposed extent

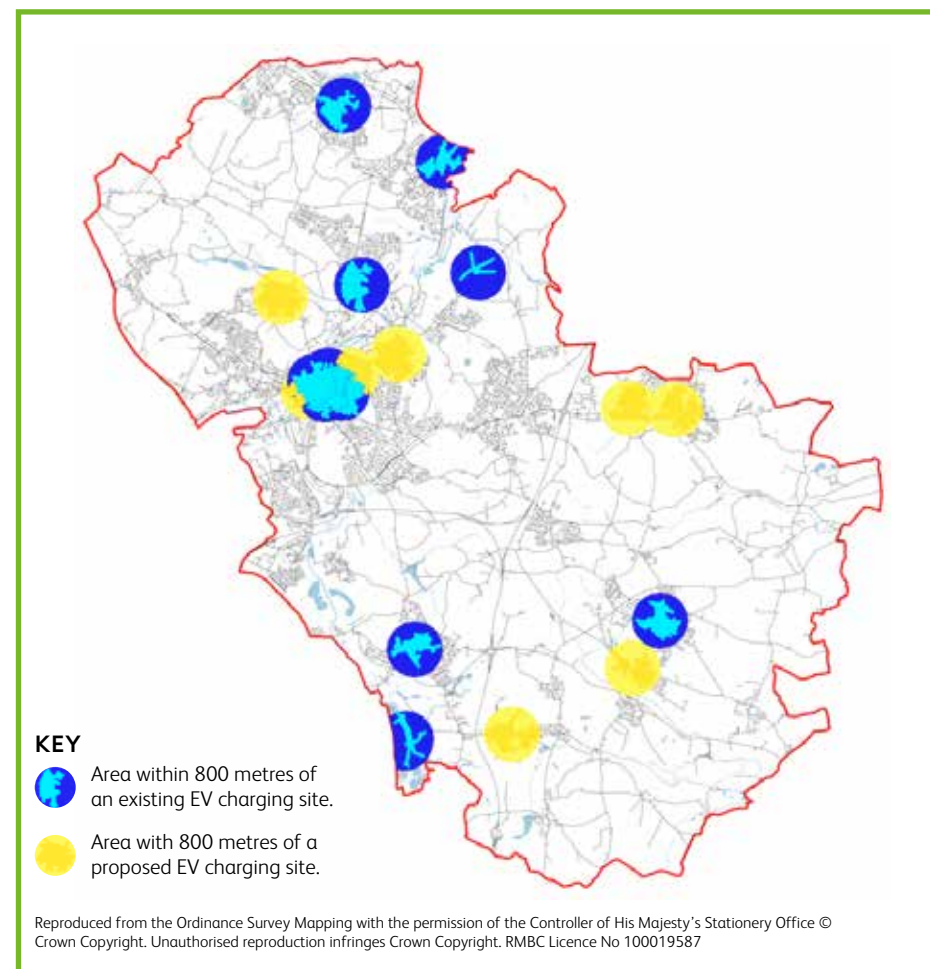


Figure 1: Locations of existing (blue) and planned (yellow) charge points across the Borough.

OUR CURRENT CHARGING NETWORK

Solar PV and Battery Storage

A solar PV array and battery storage was installed at Wellgate Multi-storey car park to provide a source of renewable energy to the charge points installed. At this site solar PV is used to supply electricity to the chargepoints via battery storage to increase capacity at peak demand.

Figure 2: Wellgate multi-storey car park charge point



After an initial period during which the chargers were set to supply charging at no cost to customers (funded by government grant) we moved to a system of pricing that reflected the cost of electricity from the Council's supplier as well as the costs of administering the system.

As a local authority we are uniquely positioned to provide strategically located charging infrastructure that will support residents, commuters, fleets and through traffic to conveniently and affordably recharge. Keeping ownership of a core network we can set user tariffs ensuring that we have control over one of the critical factors in delivering a charging network for all.

Site selection for the present charging network was based on a number of criteria including destination charging that is providing an opportunity to charge at locations whilst other activities are being carried out. That may be shopping in the town centre, visiting the library or one of the country parks.

Further considerations include servicing residential properties. The below table shows each charging location and the numbers of properties serviced by them.

OUR CURRENT CHARGING NETWORK

EV Charging Site	Status	No. of properties within 10 min walk time
Clifton Museum Car Park	Existing	1,411
Dinnington, Constable Lane	Existing	1,255
Douglas Street, Rotherham	Existing	600
Drummond Street Car Park	Existing	794
Rawmarsh JSC	Existing	2,086
Rother Valley Visitor Centre	Existing	0
Rother Valley Watersports Centre	Existing	0
Scala Car Park, Rotherham	Existing	49
Swallownest, Aston JSC	Existing	1,313
Swinton, Walker Street	Existing	594
Thrybergh Country Park	Existing	19
Wath-upon-Dearne Library	Existing	1,171
Wellgate M/S, Rotherham	Existing	264
Clifton Park, Doncaster Road	Planned	1,953
Greasborough Library	Planned	1,962
Kiveton Park Library	Planned	1,644
Maltby Leisure Centre	Planned	1,603
Maltby, Laburnum Parade	Planned	1,401
Mowbray Gardens Library	Planned	2,060
North Anston, Greenlands Park	Planned	1,024
Riverside House, Main Street	Planned	462
Total		21,665

Figure 3: EV charge points locations, their status and number of properties within a 10-minute walk time. Approved planned works includes seven selected sites plus one reserve.

This means that the existing and planned Council owned network will result in a coverage of approximately 18% of residential properties throughout Rotherham.

Alongside the Council owned provision, public sector partners such as the South Yorkshire Mayoral Combined Authority also operate infrastructure throughout the Borough for public use. These are often in locations which support the bicycle to train commute such as at rail stations and other transport provision sites. The Council will continue to collaborate with SYMCA to enhance and support delivery of a cohesive EV charging infrastructure network.



OUR CURRENT CHARGING NETWORK

Types of EV Charge points

There are different types of chargers which meet differing needs.

Slow chargers in general are supplied for overnight or long stay charging whilst rapid or ultra rapid charge points may serve destinations or short stay parking arrangements.

Type	Charger	Approximate time to full charge	Compatibility
Slow	3 to 8kW	Residential, workplace, long dwell time parking	All popular UK plug-in cars / vans
Fast	8 to 49kW	Destination charging, medium dwell-time parking e.g., shopper / visitor attraction parking	Most. Some vehicles restricted at higher charge rates
Rapid	50 to 149kW (higher speeds only to approx. 90% state of charge)	Short term visitor parking, charging only purpose	Most. Higher charge rates generally only accessible by newer vehicles.
Ultra-rapid	150kW+ (higher speeds only to approx. 90% state of charge)	En-route charging, taxi / private hire, charging only purpose	Most. Higher charge rates generally only accessible by newer and higher specification vehicles.

Figure 4: Types of EV charge points. Dwell time refers to length of time a car would normally stay at a specific location.

Users

The following types of user may require access to the Council's public charge point network:

- Private users.
- Taxis and private hire vehicles (PHVs).
- Local authority and other public sector fleets.
- Commercial fleets including Light Goods Vehicles.
- Car clubs.

HGV's, buses and coaches are not considered as part of this Strategy as they have differing technical requirements. The Council is already working with SYMCA to roll out a programme of EV buses funded by the Department for Transport's Zero Emissions Bus Regional Area Funding (ZEBRA), beginning with the electrification of the Rawmarsh depot though this forms part of a separate workstream. These buses are scheduled to be in operation in Spring 2024.

OUR CURRENT CHARGING NETWORK

Partnership Working

To achieve net zero by 2040, and to create a cohesive and complementary charging network, it is important that the Council regularly engages with its stakeholders and works in partnership. There are many interested parties, and these might include but are not limited to:

- Residents.
- The South Yorkshire Mayoral Combined Authority and our partner Authorities.
- Electrical Distribution Network Operator, Northern Powergrid.
- Charge point operators.
- Government bodies (e.g., Department for Transport).
- Independent support bodies like Energy Savings Trust, BSI.
- Regional and local transport boards.
- Businesses.



ASPIRATIONS FOR THE FUTURE

Recognising that most residents will wish to charge their vehicles at or near their homes, we need to find a charging solution for those people without off-street parking spaces. Those with garages or driveways will have to fund their own installations as government grants are no longer available through OZEV.

Terraced streets which have no off-street parking present a problem for EV owners. In the region of 20% of Rotherham's housing stock is terraced and without off-street parking.

Properties with off-street parking can normally easily install a 7kW home charger that will allow them to recharge an EV at home. However, properties without off-street parking can't install a home charger and would not be permitted to trail wires across the footway or install their own charging equipment in the highway.

S162 of the 1980 Highways Act provides a very specific and defined 'Penalty for placing rope, etc. across highway'.

"A person who for any purpose places any rope, wire or other apparatus across a highway in such a manner as to be likely to cause danger to persons using the highway is, unless he proves that he had taken all necessary means to give adequate warning of the danger, guilty of an offence and liable to a fine."

The Council has considered a number of options to resolve this issue and these are outlined below:

On street residential schemes

There are a number of residential style charging points which are adjacent to the roadside. Lamp post charging relies on the lighting column being next to the road so that charging cables don't stretch across footways causing an obstruction. In line with best practice, Rotherham Council has undertaken a programme to move lighting columns to the back of the footway. This reduces street clutter improving visibility for drivers and making more space on footways for pedestrians, wheelchairs, pushchairs and the visually impaired. The cabling for streetlights can generally only support charging of between 3–5kW which is less than the 7kW delivered by a home charger. They can be appropriate for charging vehicles overnight but long stay at charge points may result in additional issues where demand exceeds availability. The additional load on the electricity supply would mean that some streets would need to have upgrades costing from tens to hundreds of thousands of pounds. The installation of on-street chargers would usually be accompanied by dedicated bays meaning that parking for those without an EV would become more difficult – controls will also become necessary to ensure EVs are moved once charged to allow others access to charging equipment. Some councils have installed chargers without dedicated bays and this appears to work well whilst demand is low. On balance the very low probability of recovering the investment and the installation paying for itself probably precludes installations of this type being solely in the ownership of the Council. However, public – private partnerships are being investigated for this type of infrastructure using funding designed specifically for this purpose though a number of challenges will need to be resolved first.

ASPIRATIONS FOR THE FUTURE

Dedicated charging hubs

They are a potential answer to the problem. The Council is considering the installation of grouped chargers in locations to serve those areas without off-street parking. This would provide a service that allows most users to charge up fully overnight using 7kW chargers with average motorists needing to do this once or twice a week. These will be targeted at locations within 10 minutes' walk of significant numbers of properties without off-street parking.

Existing Council car park chargers

By the end of 2024, the Council aim to have almost 100 public charge points in Council car parks that are managed and maintained at our expense. These are estimated to service over 20,000 Rotherham households within a 10-minute walk time. This provision will continue to offer charging at a competitive market rate, open to all. Where opportunities occur, we will expand provision to meet demand.

Reliance on private sector provision

EV charging infrastructure represents an opportunity in the market for many businesses, especially those with existing parking areas or are customer facing. Installation at sites such as supermarkets and other businesses can benefit customers, staff and their business performance. For example, the large oil companies who provide the petrol, diesel and gas filling stations, are all looking at a change to provision of electric charging forecourts, to the extent that they have been engaged in actively buying charging assets and back-office systems. Many other private companies are also taking the opportunity to invest in EV charging infrastructure and developing innovative new technological insights. As super rapid charging becomes more common and battery technology changes, the private sector will be the source of a great deal of the required capital. As the Council is unlikely to be able to aspire to the level of investment required, it is better not to try to compete in this area but to serve the inevitable niche market that will arise from legacy first and second-generation electric vehicles that cannot support the fastest rates of charging. Similarly, a reliance on private sector provision may not result in a network which meets local need. A combination of both public and private infrastructure is therefore the preferred option to deliver a network which can ensure better outcomes for residents and businesses.

Workplace charging may also provide some of the charging capacity within the Borough in the future. Where companies provide charging facilities and allow staff to charge their vehicles during the workday, this is often a convenient and cost-effective alternative to charging at a public site, especially where subsidised by the employer.

ASPIRATIONS FOR THE FUTURE

Predicting future demand

It is not possible to fully predict the demand for EV infrastructure in the future. However, we can be informed by models developed by government and other bodies such as Transport for the North and analysis undertaken by Council and Combined Authority officers.

We aim to ensure that 95 % of residential properties in the Borough are no more than 0.5 miles from the nearest Council owned or commissioned public charge point by 2040. A current project funded via the South Yorkshire Mayoral Combined Authority should provide the regional context and data to support this approach in the next financial year.

We are currently examining the case for additional local charging hubs to provide for those without residential off-street parking. Delivery will depend on funding availability, though the Council does own many garage sites that are either under-used or partially derelict. A change of use to a charging hub would present an opportunity to improve the area but may be constrained by safety issues such as not being well frequented or not visible from the main road.



COMMERCIAL NETWORKS

The Council is at the beginning of its journey when considering commercial fleet EV charging infrastructure provision. However, the Council recognises that a consistent and reliable network will also have benefits for economic growth and tourism and that engagement with this sector will form an important part of its Strategy.

In line with the British Vehicle Rental and Leasing Association's (BVRLA) Fleet friendly pledge the Council will endeavour to:

- Consider fleet operators and drivers in our charging infrastructure plans.
- Engage with the fleet sector to understand their EV charging requirements.
- Provide fleet focused EV charging information and guidance by 2027.

A number of planned sites, included within the Council's implementation plan already consider the use of taxis and other commercial enterprises however further consultation is required to confirm the implementation needs of the commercial fleets within Rotherham and whether the Council can practically deliver infrastructure to meet these needs.



OUR COMMITMENTS

As the government has recently produced a [national strategy](#) for the delivery of EV charging our plans for implementation of the Strategy should be regarded as provisional. The government's Strategy sets out the aims for nationwide charging provision, and has provided the Local EV Infrastructure Fund (LEVI Fund). National data such as the User Survey undertaken by **ZapMap**, shows that the demand for Rapid chargers is growing more quickly than for Fast chargers. **ZapMap** found that in 2019 the number of Fast charge points grew by 27% but the number of Rapid chargers grew by 43%. This probably reflects the impatience of drivers with slower charge times, as well as the preference of at home charging for those that are able to do so and the increased demand for destination charging.

“By 2040, the majority of Rotherham residences are within a ten-minute walk time of a publicly available charge point and are confident that they can access this infrastructure as and when they need it regardless of ability.”

The Council will achieve its vision through the following interim targets:

- 95% of residences to be within 3 miles of a Council owned public charge point by 2025.
- 95% of residences to be within 1.5 miles of a publicly accessible charge point by 2030.
- 95% of residences to be within a ten-minute walk time (800m/ approximately 0.5mile) of a publicly accessible charge point by 2040.

Targets are set at 95% to account for site specific land and electricity constraints which may prevent installations in the short term.

By implementing this Strategy the Council commits to:

- Installing charge points that are matched to likely time spent at a location, keeping ahead of demand - this is ongoing.
- Installing rapid chargers at suitable locations to support the conversion of taxi and private hire vehicles to EV.
- Continuing to examine the case and opportunities for residential charging hubs and other interventions for those without off-street parking. Initial research of potential sites is underway and funding opportunities sought.
- Investigating means of incorporating solar photovoltaics into projects, in view of the additional load that EV charging will place on the electricity grid, whilst continuing to work with Northern PowerGrid. This has already been done at some sites around the Borough.
- Ensuring that the network is adequately funded to enable effective maintenance, and when required, expansion.
- Working with its partners to complement commercial networks to provide a more robust system of available charging locations for its residents, workforce and visitors.
- Working towards a consistent approach to charging and payment options where technology allows.
- Ensuring that the location and accessibility of new public charge points take into account the needs of disabled drivers. The Council will use PAS 1899:2022 EV – Accessible Charging – Specification to ensure this where site limitations do not constrain its use.

OUR COMMITMENTS

- Working to improve the quality of data provision and analysis locally.
- Developing its communication plan to improve residents and visitors access to up to date information regarding Council charge points and their status.
- Consulting with different user types throughout the lifetime of this Strategy.
- To improve the security of Council charge points by ensuring all sites are covered by CCTV, Smartwater forensic marking, and by working with South Yorkshire Police and other partners to increase prosecution of vandalism.
- Developing a policy for installing EV charge points in the Council's existing social housing stock.
- Reviewing this Strategy within 3 years so that the latest technological and demand changes can be better taken into account.

At present it is not possible to say exactly where chargers will be installed, however through a process of ongoing consultation and promotion we will keep in touch with residents and interested parties. As planning applications are made to the Council, we will make conditions on developments that provide charging infrastructure in new homes, workplaces and public destinations. These costs will be borne in full by the developers, leaving the Council to utilise funding in areas where off-street charging is not a readily available option.



EQUALITY CONSIDERATIONS

Provision of on street solutions such as lamp post charging, could result in access issues and localised conflicts. Although it should be noted that no-one has a right to park on the highway, on street solutions may pose a particular issue where parking space is already at a premium and prioritising EV users' access would only further disadvantage those who are unable to buy an EV or do not wish to. It is important that the Council ensures that any public provision in the highway remains open to the public, and that we cannot and should not allow EV charging points to be a privatization of parts of the highway for individual residents.

Similarly, a 7kW charger adds significant demand to the grid capacity in an area and where infrastructure is not already capable of supporting additional infrastructure, this could lead to an inequitable distribution across the Borough. This, along with the physical limitations relating to lamp post provision and health and safety concerns such as trailing cables is why the Council has chosen to take a hub approach to its public charging provision. The Council will continue to learn from other local authorities and make reference to guidance by the Department of Transport as and when it is issued.

The standard BSI PAS 1899:2022 is a specification for accessible EV charge points and includes information relating to the spacing of the charge points as well as the information provided and the general environment of the charge points themselves. The Council will use the detailed requirements within this standard to ensure its infrastructure meets the needs of the majority of its residents. There are challenges where new infrastructure is retrofitted into existing car parks, where space and car park arrangement may make fully meeting this standard difficult.



CHALLENGES AND LIMITATIONS

Security

Vandalism is a major concern for the EV charging network throughout Rotherham. To date, vandalism and cable thefts pose a particular challenge and have impacted on the availability of the Council's public charging network in recent years. Whilst this is generally out of the Council's control there are a number of interventions being undertaken to reduce the risk of vandalism occurring by improving the likelihood of crime detection and subsequent prosecution of those individuals responsible. The Council is already working closely with South Yorkshire Police and Community Safety teams on this matter and commits to ensuring CCTV coverage, Smartwater forensic marking and signage to all new infrastructure installed. Monitoring of this issue will also continue throughout the period of this Strategy.



Site Constraints

The primary reason for discounting sites for EV charge point infrastructure installation is insufficient electrical grid capacity at the selected location. The power demand for charge points is not insubstantial and enhancements are often costly with long timeframes for delivery. The Council can only install electric charge points at locations where land is available, and the grid connection is feasible.

There might also be physical constraints within the highway i.e., being able to find physical space for both charging equipment and for the standing vehicle without compromising provisions for access (i.e., passing along, or taking access from, the highway).

Site constraints might also mean that PAS1899:2022 cannot be fully met. In these cases, information will be available on the Council's website so that users can make an appropriate decision in advance of visiting the charge point.

Funding

The funding environment for EV charging infrastructure comes with delivery criteria which may constrain where and for whom EV charging infrastructure is installed.

CHARGING TARIFFS

Tariffs are designed to provide a sustainable network which in the longer-term funds its running costs and provides for replacements and renewals. It is important that prices aren't subsidised to the extent

that the local market is distorted, and private sector investment is discouraged. The Council commits to undertaking an annual review of pricing of its own charges to ensure these remain appropriate.

SITE IDENTIFICATION

In addition to any pre-determined criteria, the Council will consider the following when selecting suitable locations for EV charge points:

- Space available on land in Council ownership or long-term lease and full control.
- Favourable grid connection.
- Number of residential properties within a 10 minute walk time, especially those without off-street parking.
- Promotes public transport e.g., 'park and ride'.
- Promotes active travel e.g., to enable 'park and walk'.
- Encourage local economic development.
- Well-lit and monitored for security.
- Avoids development of green space.
- Coincides with existing community services e.g., village and parish halls.

Excluding at the larger hub sites e.g., at the planned Drummond Street site, where possible sites will be selected away from those that already exist within the network. This will allow better network coverage across the Borough and avoid competition whilst demand is low.

Prioritisation will be based on the number of criteria met and whether consideration needs to be given for a specific funding source.

CONCLUSIONS

The Council aspires to achieve a net zero Borough by 2040. The use of EVs instead of petrol or diesel cars forms one part of the way in which this ambition will be achieved. However, available evidence indicates that there will not be an even take up of EV use across the country or within Rotherham. Those people with off-street parking will predominantly choose to charge at home whilst everyone else will have to use public charging networks. These may be provided by the private sector, but the Council will continue to develop a programme of charging hub provision to place chargers equitably across the Borough where technical factors allow.

Much of what we do will have to be carefully monitored and evaluated to make sure we spend any funding we get as effectively as possible. Considerable care must be taken to support social equity, especially as transport is an area which already limits opportunities for some. This can be achieved by considering all aspects of charger installation, from procurement of local goods and services wherever possible to appropriate pricing of charging owned by the Council.

The carbon benefits of EV charging are interlinked with the decarbonisation of the UK electricity system. Whilst there are already considerable carbon benefits from a switch to this form of low carbon transport, these carbon savings will be enhanced as the National Grid decarbonises. The Council will also consider installing photovoltaics wherever possible to mitigate the expected increased use of grid energy, reduce costs and support energy resilience.

Electric vehicle charging is a fast-moving area of technology. Battery technologies will undoubtedly improve leading to increased range capacity and charging speeds. The Council will continue to monitor

technological developments and demand, making sure that public money is wisely invested.

It is extremely important that EV charging infrastructure is seen as part of a much wider sustainable transport strategy which emphasises the benefits of active travel (cycling and walking) for shorter journeys and the use of public transport. Whilst electric vehicles are less polluting, they still have the capacity to cause congestion and community severance. Transport poverty is a significant issue within the Borough. Improved public transport and improved facilities for walking, wheeling, and cycling are also required in addition to facilitating the shift to EVs. As such, this Strategy should be viewed in the context of the wider Rotherham Transport Strategy. Electric vehicles are but one piece of the puzzle that will make up a greener, cleaner Rotherham.



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