North Somerset Council

Report to the Executive

Date of Meeting: 21.06.2023

Subject of Report: Electric Vehicle Strategy

Town or Parish: All

Officer/Member Presenting: Councillor Hannah Young, Executive Member for Highways and Transport

Key Decision: Yes

Reason:

This Electric Vehicle Strategy will cover the entire district by providing charging provision across North Somerset. Funding will come from central government.

Recommendations

That the Executive agrees to adopt the North Somerset Electric Vehicle Strategy

1. Summary of Report

1.1 North Somerset Council declared a climate emergency in 2019 with the target of becoming carbon neutral by 2030. Whilst active travel and public transport remain the focus of our transport hierarchy, electric vehicles (EVs) will play a significant role in decarbonisation.

1.2 To date North Somerset Council have installed 24 publicly accessible charger points, most recently through Go Ultra Low West, with additional 28 charge point currently in delivery. Forecasts outline the need for 613 ‘fast’ and 30 ‘rapid’ publicly funded charge points in North Somerset by 2030. This will require a concessionary funding model in order to start working towards this it is essential to have a strategy and to access funding.

1.3 There are upcoming opportunities emerging to access grant funding to expand the North Somerset EV network through Local Electric Vehicle Infrastructure funding (LEVI). One of the requirements to successfully secure capital funding through the LEVI grant process is to have an EV strategy that covers the council area.

1.4 In December 2021 strategy development began in collaboration with Executive Members, Members, officers, and external consultants to ensure that the strategy is informed by both technical standards and is also specific to the needs of North Somerset residents.

1.5 Between February and April 2023 consultation on the strategy took place via an online survey. Feedback received resulted in the strategy being amended to clarify that a

concessionary funding model is required to ensure an equitable split of charging provision, including in rural areas.

1.6 The strategy outlines 6 key objectives:

1. To expand the network of EV charge points in North Somerset.
2. To seek private sector investment to fund a scaled-up charging network.
3. To collaborate with the Revive Network and other key organisations.
4. To influence other organisations to fill gaps in the charging network.
5. To future proof new developments.
6. To monitor the pace of EV uptake, charge point provision and government announcements.

1.7 It is recommended that the strategy is now adopted to enable detailed action planning to commence and to ensure that North Somerset is in the best position to apply for grant funding to deliver the action plan.

2. Policy

The North Somerset Electric Vehicle Strategy principally works to support the ambition of the North Somerset Climate Emergency Strategy 2019 this is further reinforced by the North Somerset Council Climate Emergency Action Plan 2022 (CEAP). Electric vehicles present an opportunity to reduce tailpipe emissions and air pollution produced by motor vehicles in our communities and along our road network. It is recognised that the greatest emissions reductions are likely to be realised through the decarbonisation of the energy grid, which is being worked on in tandem, both nationally and locally.

Electric Vehicles are also supported by the existing Corporate Plan as we look to build on the success of the work previously done to deliver a flagship electric vehicle rapid charging hub at Portishead and the delivery of a wider network of charging infrastructure across the district.

The North Somerset Electric Vehicle Strategy builds upon this plan and policies by providing the council with a guide to encouraging the uptake of Electric Vehicles through to 2030. This strategy is also critical in the future application for central government grant funding for the delivery elements of this work. In particular, the Local Electric Vehicle Infrastructure (LEVI) Capital fund, announced in March 2023 requires the council to have electric vehicle strategy in place in order to access funds.

3. Details

The North Somerset Electric Vehicle Strategy is the product of a collaborative effort made between Members, Officers, and external electric vehicle sector specialists. An electric vehicle working group established between interested members, executive members and officers from the Active and Sustainable Transport Team has overseen the development of the Strategy from the initial creation of a brief, to the formulation of the strategy by an external consultancy.

To ensure high standards within the brief, independent experts Cenex provided knowledge and advice from an early stage. The key elements of the brief included a focus on public electric vehicle charge points, links to other local and regional strategies and policy, to be data driven with benchmarking and forecasting and to identify an appropriate delivery model for North Somerset.

Through the subsequent procurement of WSP UK Limited as consultants for this piece of work, we have been able to ensure our strategy remains consistent with that of our neighbouring West of England Combined Authority who also procured their services. Likewise, that of Somerset and other neighbouring authorities in the region.

Our Electric Vehicle Working Group remained active throughout the development of the Strategy with regular updates from officers, giving members the opportunity to input to the documents at critical stages of the strategy including the baselining and forecasting of charge point requirements.

The final iteration of the strategy has delivered a clear direction for electric vehicles in North Somerset. This includes the 6 objectives noted below:

1. To expand the network of EV charge points in North Somerset.
2. To seek private sector investment to fund a scaled-up charging network.
3. To collaborate with the Revive Network and other key organisations.
4. To influence other organisations to fill gaps in the charging network.
5. To future proof new developments.
6. To monitor the pace of EV uptake, charge point provision and government announcements.

Noting that most electric vehicle drivers will charge at home off street, this strategy works to address the demand for those looking to make use of hub and on street charging provision. The key takeaway from the modelling, conducted as part of this strategy, demonstrates that by 2030 the public sector will need to have funded 613 fast and 30 rapid publicly accessible charge points in North Somerset.

Alongside the work the public sector will need to do, further charge point infrastructure is expected from the private sector in North Somerset. To achieve the ambitious targets for publicly funded charge points the strategy reflects on the need to establish a delivery model which will further incentivise the private sector to invest in areas which would otherwise suffer from market failure. A concessionary model making use of central government grant funding is demonstrated as providing a good balance between risk and control to ensure that an equitable distribution of charging is delivered across the district. Subsequent Local Electric Vehicle Charging Infrastructure (LEVI) funding from the Department for Transport, announced in March 2023, aligns to this model by requiring evidence that the funding will be used to accelerate the involvement of private sector investment through the use of this central match funding.

The concessionary model has a number of benefits for North Somerset. It is of particular importance in addressing the rurality of our district as it is likely that these locations will be less commercially viable and as such will require the public sector funding element. This model will also reduce delivery requirements and ongoing liabilities associated with this technology by outsourcing this to a charge point operator.

The strategy is considerate of how private electric vehicles are situated amongst other modes of travel which the council are striving to enable. As such the strategy recognises the active travel and public transport opportunities should remain first choice and that North Somerset will work to effectively integrate charging infrastructure with mobility hubs and car clubs, whilst ensuring we do not to impact on journeys undertaken by walking and wheeling.

4. Consultation

Upon completion of the strategy, we had the documents reviewed by Cenex, our critical friend, to ensure that the final strategy met the predetermined brief and to ensure that the strategy would meet the necessary requirement for central government funding. Cenex form part of the support body for the Local Electric Vehicle Infrastructure (LEVI) fund and will be reviewing applications.

The EV Strategy has been consulted on with the public and organisations using the e-consult platform. The consultation identified a number of key themes from respondents including that 59% of respondents viewed electric vehicle uptake as 'very important' in our efforts to decarbonise in North Somerset.

The consultation asked respondents for their input on the objectives as set out in section 3 of this report. 68% of respondents agreed that all our objectives would help encourage electric vehicle uptake, with 49% of respondents wishing to add further objectives. When analysing the free text provided with the responses, some of the key elements that were raised included financial support for vehicles and domestic chargers, along with recognition of the role that car sharing, and car clubs will play in the future of electric vehicles. These points, along with comments around accessibility and user payment methods are included in the detail of the strategy, though not explicitly stated in the overall objectives. Financial support for home chargers and or vehicles would be a central government initiative as opposed to one from a local authority.

We have been particularly keen to address the rurality of the district in the strategy. As discussed in section three, making use of a concessionary model to address market failure in our rural areas is central to this strategy. As such, a specific question regarding rurality was included in the consultation questionnaire. 57% of people noted that they were 'unsure' whether our strategy would deal with this issue, rather than agreeing or disagreeing fully. Whilst some comments noted the critical role that a concessionary model plays in ensuring the equity of charging provision for rural areas, we recognised that we could do better in explaining the role and benefits of this in more explicit terms. As such, in response to the consultation the final documentation has reworded sentences regarding how a concessionary model will specifically address the market failures expected, to explicitly draw this link.

Comments regarding equalities have been included in the equalities impact assessment and have largely focussed on national accessibility standards, including bay design, lighting and CCTV as well as preventing trip hazards or footway obstruction.

Place Scrutiny Panel have been briefed both pre & post consultation to ensure their members remain informed and have actively engaged demonstrating cross party support for the document.

5. Financial Implications

No immediate financial impacts. This strategy will be largely funded by LEVI external grant funding. We will work with private sector concessionary partners and seek their funding to maximise charging provision within this district and ensure an equitable spread of infrastructure across the district. Any funding/spend will be subject to its own decision.

The Local Electric Vehicle Infrastructure (LEVI) funding includes a capability element which will resource the council, as appropriate, for the delivery of electric vehicle charging. Our indicative allocation for the capital element of this fund is £851,000 capital and £246,820 (in addition to £54,180 already received) for capability funding. It is expected that the

concessionary partner will be expected to project manage, design and deliver this work beyond the resource funded by the central government fund.

Costs

There are no costs to the council beyond that which grant funding will support.

Funding

Funding for this work will come from central government funding. As noted in the strategy, this looks to make use of additional private sector investment through a concessionary model. The next grant funding available to North Somerset Council is Local Electric Vehicle Infrastructure (LEVI). This will include both a capital element to be used for the infrastructure and a revenue element to support resourcing.

6. Legal Powers and Implications

TROs & TTROs are likely to be used to support this work, particularly for on street residential charging. Fees for these are to be included in the capital LEVI and concessionary funding.

The council have an existing Inter-Authority Agreement for the Revive Electric Vehicle Network. This agreement between North Somerset Council, Bristol County Council, Bath & North East Somerset & South Gloucestershire Council outlines the responsibilities of the network operation. This will now be updated to include WECA and the new route to delivery through LEVI.

As part of any subsequent concessionary agreement, contracts with agreed key performance indicators will be required. Funding for this legal work will be supported by the revenue element of central government funding.

7. Climate Change and Environmental Implications

The Committee for Climate Change (CCC) Surface Transport Balanced Pathway requires 97% of the UK fleet to be electric by 2030. As mentioned in the introduction to this paper it is noted that whilst the removal of tail pipe emissions is a considerable emissions reduction, there are further environmental gains to be made as the energy generation sector decarbonises in parallel, renewable energy production in the UK currently accounts for approximately 48% of overall generation.

Air quality improvements from exhaust emissions and noise reduction are also noted as significant environmental benefits to transitioning to electric vehicles and other low emission vehicles.

8. Risk Management

The risk register for this strategy did not result in any ‘High’ risks at residual risk score stage. The central reason for this is that this strategy works to minimise residual risk. For example, whilst the inherent risk of not being able to access grant funding for this work was ‘High’, the approval of this strategy reduces this risk to a ‘Medium’ risk as it fulfils the requirement for applications.

Likewise, a high inherent risk of limited available funding to deliver the targets was identified in the risk register, the mitigation of seeking concessionary agreements with the private sector reduced this risk to a ‘Medium/High’ risk.

9. Equality Implications

Equalities Impact Assessment (EIA) has been conducted.

This has been further amended following consultation to reflect comments made and ensure that those with protected characteristics have been able to engage on this matter.

The EIA reflects on several themes which must be considered as we deliver the infrastructure arising from this strategy.

Disabled People - Whilst the strategy and subsequent actions will tackle some of the issues by addressing trailing cables and designing accessible charging bay requirements, there remain negative impacts for those with learning disabilities for example, due to the complex nature of operating some charge point infrastructure.
Reduced noise can also have an impact on those with visibility impairments.

It was noted in the consultation for this strategy that electric vehicles can be easier to drive for some people with physical disabilities.

Men & Women - Whilst this strategy is likely to have a neutral impact on both men and women, pregnant women may face additional challenges through trailing cables or where charging bays are now built accessibly. Both these are addressed in the strategy and subsequent actions.

People in particular age groups - As noted for other characteristics, some of the impacts, such as trailing cables, are addressed by this strategy and subsequent actions. However new technology can present a barrier to some, and availability of education and training will be required to support this.

10. Corporate Implications

Sustainability (This strategy directly contributes to the Climate Emergency declaration in 2019. The Climate Emergency team have been briefed).

Regeneration (The regeneration team have been briefed on the strategy. The strategy has a notable inclusion of electric vehicle tourism for North Somerset).

Local Plan (emerging document, but in particular new housing development and EV provision in residential areas)

Corporate Plan (More places where people can charge electric cars and motorcycles, encouraging people to switch to lower carbon, zero emission vehicles)

11. Options Considered

Not undertaking approving this strategy

Not approving this strategy would be detrimental to the council’s Climate Emergency Declaration objective as well as reputationally for the council regarding our communities, as

uptake in electric vehicles continues to grow. This option would also restrict our ability to apply for the central grant funding available for electric vehicle infrastructure.

Author:

Frankie Mann – Active & Sustainable Transport Manager: Frankie.mann@n-somerset.gov.uk
Cristian Fletcher – Senior Sustainable Travel & Road Safety Officer: Cristian.fletcher@n-somerset.gov.uk

Appendices:

Appendix 1 - North Somerset Electric Vehicle Strategy – At A Glance
Appendix 2 – North Somerset Electric Vehicle Strategy – Executive Summary

Background Papers:

Electric Vehicle Technical Report

Appendix 1

Introduction

Our electric vehicle (EV) strategy assesses current uptake, forecasts demand for EV charging and shows how this can be delivered.

Most EV drivers (the early adopters) currently charge at home, off-street or via a private charge point. However, this is expected to change in the coming years. **There will be greater demand for residential on-street and hub charging as more households without access to off-street parking purchase or lease EVs.**

We have a key role to play in ensuring these drivers have convenient and affordable access to charging infrastructure.

Comprehensive public charging network coverage is also needed to increase the confidence of other residents and businesses to swich to EVs. This will help with achieving the council's carbon neutrality targets.

We are a partner in the West of England's public sector-led Revive Network, and have ambitions to further expand this network across North Somerset.

Current EV uptake & charge point provision

EV uptake in North Somerset is rising quickly. **As of 2022 Q3, 2,800 electric vehicles were registered in North Somerset,** out of a total of 151,355 registered vehicles in the area, equating to 1.85% of all vehicles in North Somerset.

There are currently 92 publicly available charge points, most of which are 'slow' (up to 7 kW). There are 30 rapid and ultra-rapid charge points (above 50 kW). Some of these are part of the Revive Network and located in council car parks, while others have been deployed on private land by the private sector.

Forecast of EV uptake and charge point requirements

It is expected that EV uptake in North Somerset will rise to 7.7% of all vehicles in 2025, and 30.1% in 2030. **By 2030, this equates to around 37,509 EVs within North Somerset.**

To meet this demand, it is forecast that 1,619 fast (up to 22 kW) and 370 rapid publicly accessible charge points will be required by 2030 across North Somerset, in a mid-range scenario. These forecasts account for North Somerset's rural nature, socio-demographics and electricity grid constraints, among other factors.

The private sector is anticipated to provide a significant proportion of these publicly accessible charge points. However, we will need to intervene to fill gaps in the EV charging network that the private sector will not deliver by drawing on central government grant funding. **It is forecast that the public sector will need to fund 613 fast and 30 rapid publicly accessible charge points by 2030, see Figure 1.**

The distribution of where these gaps (darker red areas) in the network may arise is shown in Figure 2.

Figure 2 Forecast charge point market failure, notably in rural areas.

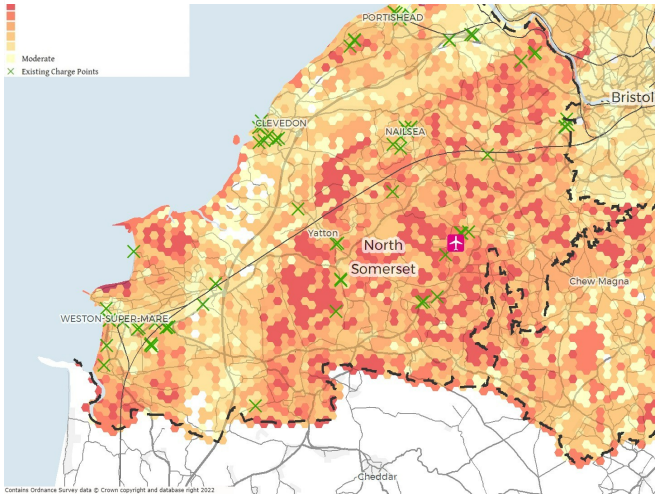

Figure 1 Forecast public sector funded EV charge point requirements

Achieving this may involve a partnership with the private sector and/or the Revive Network. Unless full grant and public sector match-funding continues to be available, concession agreement has been identified as the preferred delivery model to enable sustainable network expansion, which is suitable for our rural

Year	Charge point type	Mid-range EVCP provision
2022	Fast	51

district. Further government support is expected in 2023 to help meet the demands of charge point deployment using council resources. We will remain flexible in our model and reactive to EV uptake including exploring commercialisation models.

Integration of EVs into our NSC's transport hierarchy

While EVs have zero tailpipe emissions, they contribute to congestion, emit particulate matter from tyres and brakes and do not have the health benefits of active travel.

Residents and businesses will therefore be encouraged to only undertake a journey by private EV after first assessing options above EVs in the transport hierarchy, such as walking, wheeling, cycling or using public transport. The provision of charge points should not diminish active travel and public transport as the natural first choices.

Opportunities will also be explored to integrate EVs into mobility hubs, car clubs, bus and taxi fleets, and to increase uptake of e-bikes and e-cargo bikes.

Objectives & Actions

We have set out 6 objectives, each supported by a number of actions which show our role of leadership and facilitation and the need to work in partnership with stakeholders, such as charge point operators, National Grid, private landowners and businesses.

1. To expand the network of EV Charge points in North Somerset
2. To seek private sector investment to fund a scaled up charging network
3. To collaborate with the REVIVE Network and other key organisations
4. To influence other organisations to fill gaps in the charging network
5. To future proof new developments
6. To monitor the pace of EV uptake, charge point provision and government announcements

Appendix 2

North Somerset Electric Vehicle Strategy

Executive Summary

Introduction

North Somerset Council (NSC) commissioned WSP to develop an Electric Vehicle (EV) Strategy to enable the transition to EVs by 2030, focused on cars and vans.
We declared a climate emergency in 2019 aiming for carbon neutrality by 2030. The decarbonisation of transport in North Somerset is crucial as this sector represents 43% (as of 2019) of the area's carbon emissions, higher than the national average. EVs have a significant role to play, alongside reducing travel demand and a shift to public transport and active travel.

A key barrier to the uptake of EVs is the availability of public charging infrastructure. We have started to address this challenge as a partner in the West of England's public sector-led network, Revive.

This EV charging strategy is a step towards growing the network and preparing for the significant increase in demand for charging forecasted as the EV transition accelerates over the next decade.

The strategy provides an overview of EV charging technologies, assesses current EV uptake and existing charging provision, and forecasts EV uptake and charge point demand to 2030. It also discusses delivery models for the roll-out of charge points, alignment with the Revive Network, and the integration of EVs within our transport hierarchy.

Presently, we are focusing on facilitating the uptake of EVs, and not hydrogen fuel cell vehicles or biofuels, due to the greater maturity of the EV market for cars and vans. EVs also offer significantly greater carbon savings, after accounting for the emissions from electricity, hydrogen and biofuel generation, and full vehicle lifecycle. This is aligned with the UK Government's position and is reflected in the current availability of grant funding for charge points.

Overview of charging technologies

Different charge point technologies are appropriate for different situations. The suitability of a particular technology for a given location depends on factors such as the length of time vehicles are typically parked there, vehicle types, the category of location (i.e. private home, public car park, workplace), and the available power supply.

Most EV drivers (the early adopters) currently charge at home off-street via a private charge point on their driveway or in a garage, connected to their home electricity supply. This is typically the cheapest and most convenient option. However, proportionally, the share of charging through private home charge points relative to public charge points is expected to change in future.

Public charging includes residential on-street and residential off-street charging hubs, en-route charging (e.g. motorway services), workplace charging and destination charging (e.g. at supermarkets, leisure centres).

There will be greater demand for residential on-street and hub charging as more households without access to off-street parking purchase or lease EVs. They will rely on publicly accessible charge points to meet all their charging needs.
More people are also expected to use workplace and ‘destination charging’ as vehicle ranges extend and this type of charging provision is made increasingly available.
It is noted that active travel and public transport should continue to be prioritised as natural first choices, over driving a car, whether electric, petrol or diesel.

On-street charging technologies

Where on-street charging has been identified as the most appropriate solution for a neighbourhood or street, as opposed to off-street charging in a nearby council car park or rapid hub, North Somerset has a choice of current technologies. Each option has advantages and disadvantages, as summarised in Table i.

It is likely that a mix of solutions will be required depending on the local characteristics of the area (e.g. footway width, grid constraints, parking pressures).

Table i - Overview of current on-street technology options

Option	Impact on streets	Complexity of installation and costs	Scalability
Post-mounted or free standing bollard	High	High	Medium
Lamppost charging (dual-purpose)	Low	Medium	Medium
Rising bollards	Medium/ Low	High	Low
Lance & socket or similar "low impact" options	Medium/ Low	High	Medium
Build-outs (for post-mounted or free-standing bollards)	Medium	High	Medium/Low
Gullies (cable channels)	Low	Low	Medium

Baseline

EV uptake in North Somerset

The EV market is fast-evolving, with sales of vehicles growing rapidly. The uptake of EVs across North Somerset is increasing quickly, from a low base.

At the end of 2022 Q3, a total of 2,800 electric vehicles (including battery electric, plug-in hybrid and range extended EVs) were registered in North Somerset, out of a total of 151,355 registered vehicles. EVs therefore account for 1.85% of vehicles, lower than the UK average of 2.46%.

Existing charge points in North Somerset

To ensure that EV uptake can continue to grow, the availability of publicly accessible charge points is key.

In North Somerset, there are currently 92 publicly available charge points, including 30 rapid charge points, see Figure 2.

The majority are found in the towns and urban areas. and are slow charge points (less than 7 kW of power).

According to DfT data, when population size is taken into account, North Somerset has a below national average number of charge points, with 39.9 charge points per 100,000 people compared to the UK average of 47.7 per 100,000 people. This places NSC in the bottom 20 to 40% of local authorities nationally. However, as a benchmark, this does not factor in the availability of home off-street parking, which is likely to be higher than average in rural areas such as North Somerset.

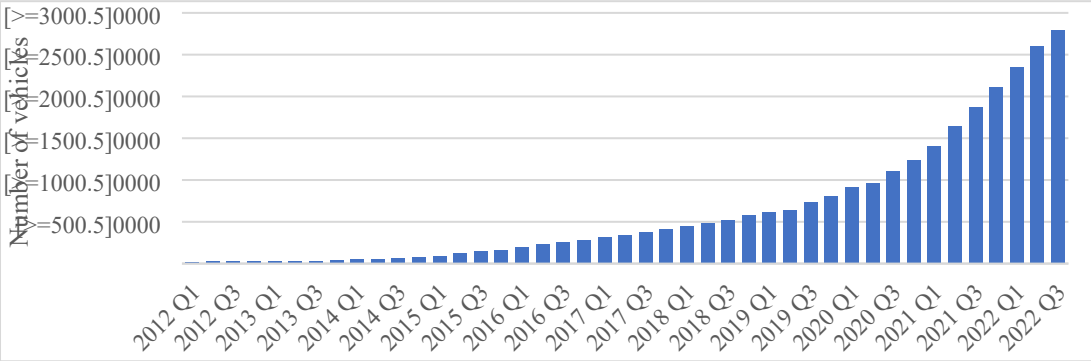

Figure 3 Total number of battery electric, plug in hybrid and range extended electric vehicles registered in North Somerset (Source: DfT Statistics)

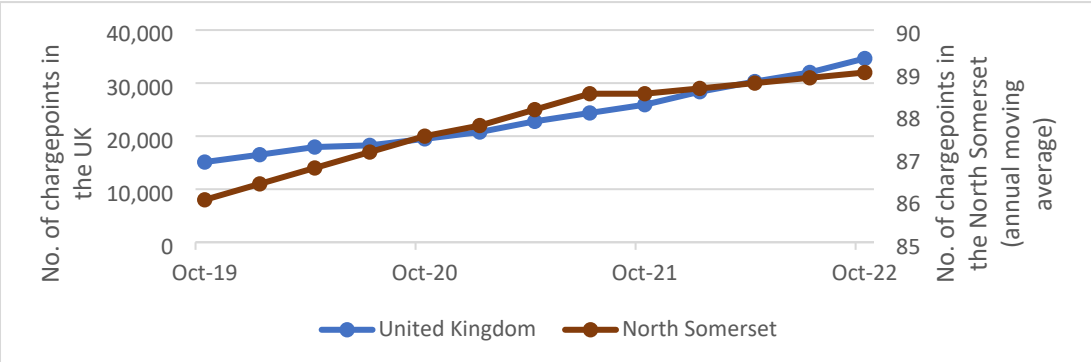

Figure 4 Number of all publicly accessible charge points

Forecast of EV uptake

It is expected that EV uptake in North Somerset will rise from 2.4% of all vehicles in the area at present (2022), to 7.7% in 2025, and 30.1% in 2030, as shown in Table ii. By 2030, there is forecast to be 37,509 EVs in North Somerset.

Table ii Forecast EV uptake by 2030

Year	2022 Actual	2022 (%) Actual	2025	2025 (%)	2030	2030 (%)
No of EVs	**2,291**	2.4%	**9,491**	7.7%	**37,509**	30.1%

The modelling used combines granular data on factors affecting EV uptake at a local level with regional and national data sets to produce a detailed forecast of the distribution of EV uptake across North Somerset up to 2030.

The competing influences of the local population propensity for switching to an EV, their car ownership levels, and the extent to which they are reliant on on-street parking, serve to create a picture of EV ownership across North Somerset. Areas with high propensities towards EV ownership are often partly offset by also being areas of lower car ownership and greater reliance on on-street parking.

Strategically, walking, wheeling and use of public transport should continue to be prioritised as natural first choices, over driving a car, whether electric, petrol or diesel, but some areas will continue to have higher car dependency.

This forecast represents the most likely level of uptake expected by 2030, as generated by the model.

On the map, white indicates areas with very low population densities where EV uptake is therefore expected to be very low. The model has been applied to the whole council area.

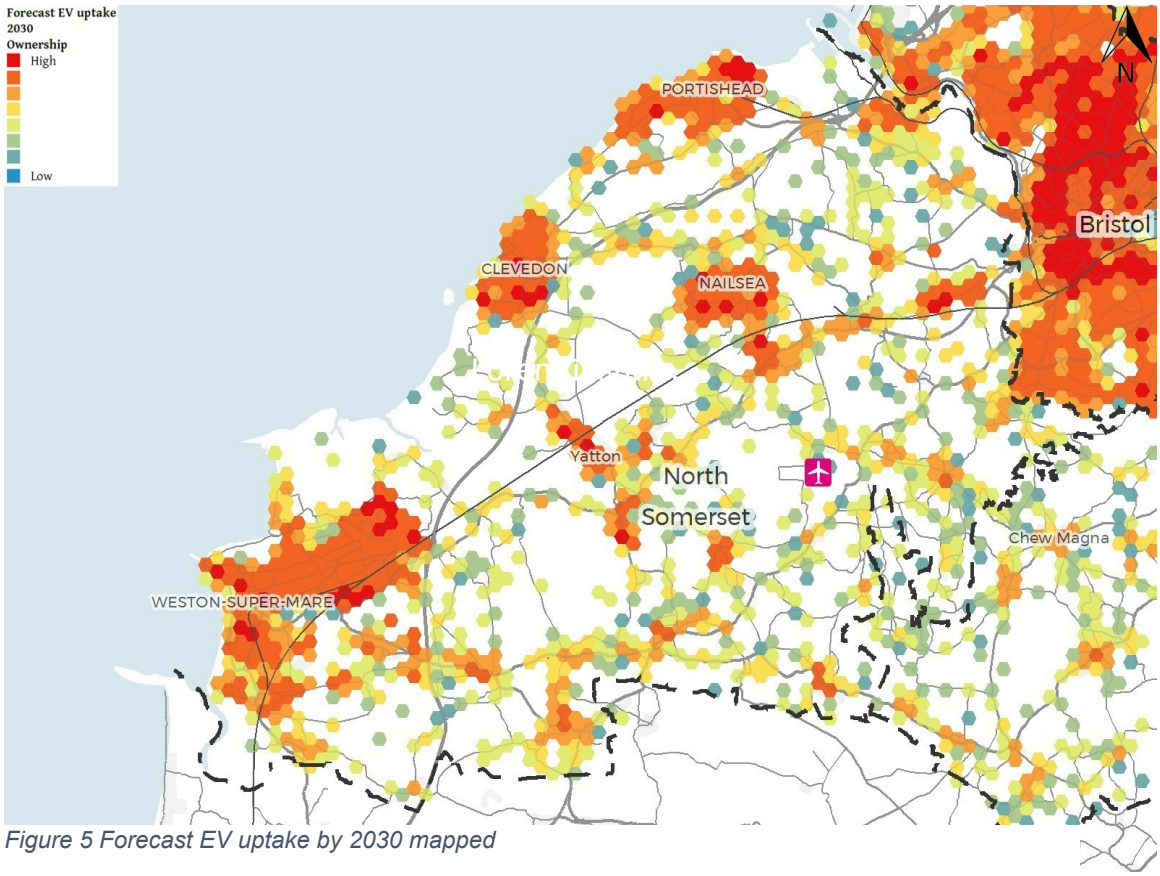

Figure 5 Forecast EV uptake by 2030 mapped

Electric Vehicle Charge Point Requirements

To meet demand from the forecasted number of EVs, there is a need for a significant ramp up in the delivery of charge points up to 2030.

By 2030, 1,619 fast and 370 rapid publicly accessible charge points are required in a mid-range scenario.

Table iii Forecast public sector funded EV chargepoint requirements up to 2030

Year	Type of charge point	Mid-range EVCP provision
2022	Fast	**51**
	Rapid	**0**
2025	Fast	**173**
	Rapid	**10**
2030	Fast	**613**
	Rapid	**30**

The forecasts are estimates, based on several assumptions, including:

- Forecast EV uptake.
- Charging habits e.g. public vs private charging, rapids vs slow charge points.
- Vehicle mileage and efficiency, ratio of Battery Electric Vehicles to Plug-in Hybrid Electric Vehicles HEVs.
- Off-street parking availability.
- Trends in vehicle and charge point technologies, e.g. range, charging rates.

Whilst the private sector will provide a proportion of the infrastructure required in North Somerset, we will need to intervene to fill gaps in the public charger network.

It is forecasted that the public sector will need to fund 613 fast and 30 rapid publicly accessible charge points by 2030, see Table iii.

Figure 4 provides a high-level indication of the distribution of where gaps in charge point provision (darker red areas) are more likely to arise.

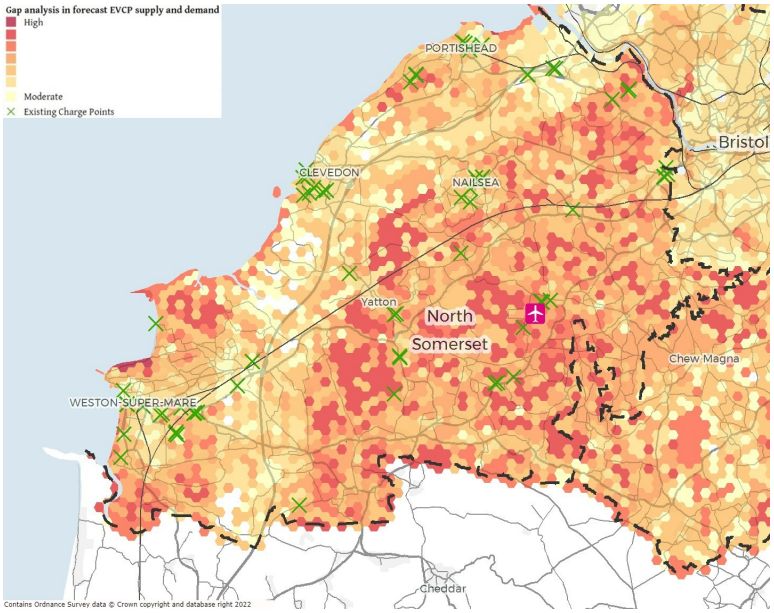

Figure 6 - Forecast charge point demand/supply gap analysis up to 2030

Delivery models for charge points

There are a range of delivery models for the rollout of charge points, as summarised below. **The Revive Network is based on the 'Own & Operate' delivery model**, supported by grant funding.

This approach has several benefits, particularly the retention of full control over the network, which gives flexibility on where charge points are located and the tariffs. However, this approach also presents the greatest risk to the council, especially where charge point utilisation rates are low, and ongoing management is relatively resource intensive.

As there is a growing appetite from the private sector to invest and reducing central Government grant funding available, **we will support the transition of the Revive Network to a concession model for residential charging,** where full grant funding is not available. This provides a good balance of risk and control and crucially will help to ensure that the spread of electric vehicle charging is equitable, particularly for rural areas.

There will remain a role for public sector involvement, especially where the commercial case at certain sites is less attractive to private sector investors, either because the utilisation is likely to be modest or the delivery costs (e.g. grid connection upgrades) are high.

Rapid and ultra-rapid charge points are more likely to attract full funding by the private sector. However, these could also be included in a broader concession agreement with slower residential charge points in order to help cross-subsidise less commercially attractive sites, particularly in rural areas.

Developing the tender documentation for a concession agreement is more resource-intensive compared to other models, but ongoing management should be less intensive compared to full public sector ownership and management. Many activities e.g. project management, can be outsourced to CPOs.

In early 2023, further details are expected to be announced by OZEV on how local authorities can access a £50m fund to help meet the cost of staff time associated with deploying charge points.

Integration of EVs into the transport hierarchy

By 2036, the aim for North Somerset and neighbouring authorities is to 'be a carbon neutral community where walking and cycling are the preferred choice for shorter journeys, and the vast majority of vehicles on the road are decarbonised and no longer powered by fossil fuels' (West of England Joint Local Transport Plan 4, 2020-2036, p7).

While EVs have zero tailpipe emissions, they still contribute to congestion, release some particulate matter from breaks and tyres and do not have the health benefits of active travel. As illustrated by Figure vii, residents and businesses should be encouraged to only undertake a journey by private EV after first assessing the options above EVs in the transport hierarchy, such as walking, wheeling or cycling.

Active travel and public transport should continue to be prioritised as natural first choices, over driving a car, whether electric, petrol or diesel.

Opportunities to incorporate EVs and charging infrastructure within other travel modes and choices will be explored.

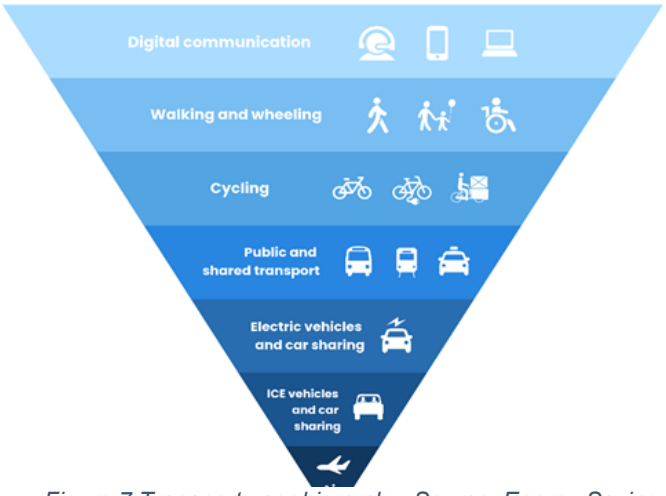

Figure 7 Transport user hierarchy. Source: Energy Saving Trust

These include:

- **Mobility Hubs** – Charging provision may be integrated into hubs and encourage multi-modal journeys.
- **Car clubs** – EVs can increase the environmental benefits of car clubs. The best charging approach (e.g. dedicated bays, using public charge points) will depend on the operator and model (e.g. back-to-base, one-way).
- **Public transport** – Electric or hydrogen buses can be integrated to fleets, with options currently being explored through the West of England BSIP.
- **Sustainable commuting initiatives** – Offering workplace charging needs to be balanced with initiatives to discourage single occupancy journeys in private cars. EVs can be used as pool cars, by the council and other organisations.
- **E-bikes, ecargo bikes and e-scooters** there is potential to grow awareness of e-bikes and e-cargo bikes among the public and business, and ensure cycling infrastructure is suitable, and facilitate the use of e-scooters where appropriate.
- **Taxis and private hire vehicles** – Engagement with drivers, incentives, and licencing policy changes can be used to accelerate uptake of EVs. Dedicated charge points are likely to be needed.

Objectives & Actions

To enable the transition to EVs by 2030 in North Somerset, a range of actions have been identified, grouped under six objectives.

OBJECTIVE 1: TO EXPAND THE NETWORK OF EV CHARGE POINTS IN NORTH SOMERSET

- Ensure there are 1,989 publicly accessible charge points in North Somerset by 2030
- Focus on ensuring equity of provision and establish good network coverage
- Deploy charge points at a mix of on and off-street locations to meet user needs
- Evaluate the technology options for on-street residential charge points
- Formalise the council's position on trailing cables
- Monitor trials of on-street residential pavement gullies and other innovative charging solutions
- Investigate how we can help taxi and private hire vehicle drivers to transition to EVs
- Align EV Charging with wider transport strategy
- Follow best practice design principles and ensure charge points are inclusive and accessible
- Review the impact of EV charging bays on parking management

OBJECTIVE 2: TO SEEK PRIVATE SECTOR INVESTMENT TO FUND A SCALED-UP CHARGING NETWORK

- Continue to maintain and expand the Revive Network work
- Seek central government grant funding
- Leverage private sector funding to scale up the network
- Through carefully defined contractual agreements with operators, ensure a high quality user experience is maintained
- Appoint multiple charge point operators to ensure tariffs remain competitive

OBJECTIVE 3: TO COLLABORATE WITH THE REVIVE NETWORK AND OTHER KEY ORGANISATIONS

- Continue to actively participate in the Revive Network
- Establish an NSC EV Working Group
- Join forums to knowledge share with other councils
- Engage with National Grid
- Coordinate with Western Gateway as they develop regional assessments of charging demand
- In partnership with Revive Network, raise awareness of the benefits of EVs, the grants available and local charge point provision

OBJECTIVE 4: TO INFLUENCE OTHER ORGANISATIONS TO FILL GAPS IN THE CHARGING NETWORK

- Promote EV tourism by encouraging accommodation providers and visitor destinations to install charge points
- Raise awareness of ‘peer-to-peer’ charging and grant funding available to community landowners (e.g. village halls)
- Encourage workplaces to install charge points for staff and fleet users
- Raise awareness of OZEV grant funding for flat-owners, renters, landlords and housing providers

OBJECTIVE 5: TO FUTURE PROOF NEW DEVELOPMENTS

- Ensure new developments have high-quality charging provision
- Keep a watching brief on central government announcements on Planning Practice guidance and Permitted Development Rights

OBJECTIVE 6: TO MONITOR THE PACE OF EV UPTAKE, CHARGE POINT PROVISION AND GOVERNMENT ANNOUNCEMENTS

- Monitor EV uptake and charge point provision
- Keep a watching brief on government announcements on new statutory obligations related to EV charging