

Somerset West and Taunton Council

Full Council – 15 December 2020

Somerset EV Charging Strategy

This matter is the responsibility of Executive Councillor Peter Pilkington (Climate Change)

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1 Executive Summary / Purpose of the Report

- 1.1 A Somerset EV (Electric Vehicle) Charging Strategy has been produced by consultants WSP on behalf of the five Somerset Councils and Exmoor National Park Authority, working in partnership. The Strategy explores a number of issues around EV charging, evidences and assesses different options, and recommends how the Somerset local authorities should work in partnership moving forwards in order to deliver and enable an EV charging network to come forward at pace to support our carbon neutrality ambitions. The Strategy considers the range of constraints presented by the electricity network, the predominantly rural nature of the area and areas without sufficient off-street parking provision, as well as the opportunities presented by Council assets and planning policy for new Local Plans. It recommends approaches to take with regards to charge point types in different locations, funding and delivery models to use in different circumstances, and on-going governance arrangements to aid partnership working through delivery. The Strategy has been produced in consultation with internal and external experts including Western Power Distribution (WPD). This report summarises some of the key points and recommendations arising from the Strategy and recommends that the Strategy is adopted and brought forward into the Council's Carbon Neutrality and Climate Resilience Action Plan.

2 Recommendations

- 2.1 That the Somerset Electric Vehicle Charging Strategy is adopted and brought forward into the Council's Carbon Neutrality and Climate Resilience Action Plan.

3 Risk Assessment

- 3.1 'Climate Change Planning' is identified on the Council's Corporate Risk Register as having a score of '9' (Impact = '3', Probability = '3'), with the entry identifying that there is a risk associated with not achieving carbon neutrality by 2030. Development of this Strategy puts the Council in an informed position to be able to maximise the role of EVs in helping to achieve that target locally and mitigate some of that risk. However, the risk of not achieving carbon neutrality by 2030 will remain, and the Strategy

highlights quite how extreme the adoption of EVs might have to be to realistically reach carbon neutrality by 2030. As noted in the committee report supporting the CNCR Action Plan, we should be under no illusions as to how difficult achieving that target will be. Both the CNCR and Climate Emergency Strategy highlight the importance of EVs to our ability to make significant progress towards our carbon neutrality target and identify production of the EV Charging Strategy as an action. Adoption of and subsequently delivery against the EV Charging Strategy will further help to mitigate this risk.

- 3.2 There are risks to the Council involved with delivery of charge points themselves. The Strategy identifies the broad risks associated with different delivery models that need to be weighed up against the benefits (including revenue generation) in each case. The report proposes the establishment of joint working groups between the Somerset authorities to help ensure that opportunities for collaboration and economies of scale are taken, links into related topics covered by the Somerset Climate Emergency Strategy are considered, as well as to ensure a consistent and coherent charging network is developed across Somerset. There is a risk that taking our own path could result in these opportunities not being taken and the resulting customer experience not being as good as it could be, though there are potential benefits to doing so also.
- 3.3 EVs themselves are not without risks associated with them. They reduce direct and indirect Greenhouse Gas (GHG) emissions (particularly when combined with a renewable/low carbon electricity source), and reduce air quality issues associated with the emission of nitrogen dioxide compared to petrol and diesel vehicles. However, they do not eradicate GHG emissions (associated with the production and disposal of the vehicles), or air quality issues (some pollutants and particulate matter does continue to be emitted from road, tyre and break sources for instance). However, the climate and air quality benefits of encouraging a switch to EVs over traditional internal combustion vehicles is great enough that this residual risk is worth taking. EVs are an important part of the solution for mitigating transport emissions nationally, and are likely to play an increased role in a predominantly rural area. However, EVs are not the panacea for this mitigation, and any strategy to encourage uptake of EVs should therefore also be accompanied by a strategy to reduce the need to drive and to reduce personal vehicle miles travelled as well as increase availability and use of public and shared transport modes. Both the CNCR and Somerset Climate Emergency Strategy contain outcomes and actions associated with this.
- 3.4 Other alternative fuels for vehicles already exist (e.g. hydrogen) and more will likely develop in future years. Therefore electric vehicles are not necessarily the only way to achieve our targets, but it is a proven and increasingly established technology. The UK Government's independent advisor, the Committee on Climate Change, clearly identifies the important role that EVs must and will play in achieving net zero by 2050, nationally. The Strategy explores different options for different types of vehicles and advises accordingly.
- 3.5 There have also been social and environmental risks documented associated with the extraction of minerals used in the production of batteries used in EVs. However, similar social and environmental risks are often associated with mineral extraction for use in conventional internal combustion engine vehicles, and this does not affect the fact that EVs are an important part of the answer in achieving our carbon neutrality targets. These are issues of great importance that the Council should be aware of and seek to avoid when sourcing new EVs itself. The Council should also use its position of influence to lobby Government to address these issues within the supply chain.

4 Background and Full details of the Report

Context

- 4.1 Local authority data on Carbon Dioxide (CO₂) emissions, produced by the Department for Business, Energy and Industrial Strategy (BEIS) shows that in 2018, 3.3MtCO₂ was produced in Somerset. Of this 3.3MtCO₂, 1.5MtCO₂ (46%) resulted from the transport sector (0.4MtCO₂, 53% in SWT district). This is compared to the UK total of 28% from transport. The main source of emissions from this sector is the use of petrol and diesel in road transport. This is primarily down to the rural and dispersed nature of much of the county, poor public transport connectivity and presence of major through-routes on the strategic road network. A significant element of this is the M5 motorway, which contributes 12% of all CO₂ emissions in Somerset (and nearly 18% of all CO₂ emissions in SWT district).
- 4.2 Somerset is a rural county with a dispersed population. This has meant that public transport has historically struggled to remain viable in both financial terms and journey times for many parts of the county. Sustainable modes such as walking and cycling are often unattractive options or not possible for much of the population outside of the main towns, which need to travel significant distances to access jobs and services. Therefore, personal vehicle movements account for a significant amount of these carbon emissions.
- 4.3 The Committee on Climate Change Net Zero Report:
- Identifies that the roll out of EVs is one of the core measures necessary to meet the net zero target by 2050, but that a serious accelerated take-up of technologies is required through the 2020s to facilitate the electrification of transport;
 - It recommends that the ban on new fossil-fuelled vehicles from sale needs to be brought forward from 2040 to 2035, with an earlier-still switchover being desirable – Government has since advised that it will bring this date forward;
 - It recommends that the Government must continue to support strengthening of the charging infrastructure including for those without access to off-street parking;
 - It highlights the scale of the gap between leaders such as Norway (where 47% of new vehicles were plug-in electric in the 12 months to September 2018) and the UK where the same figure was just 2%. The factors impacting this are wider than simply infrastructure (primarily tax and other incentive related), but the infrastructure element is important to facilitating strong growth in EVs and is something where local government is identified as having an important role;
 - It recognises the constraints of the electricity grid and the need to strengthen this to cope with more EVs and meet demands through renewable generation;
 - It suggests that “electric cars and vans will reach parity with petrol and diesel vehicles on a social basis during the 2020s and that charging infrastructure should be developed in a way that enables a rapid transition to EVs. By 2030, at least 1,200 rapid chargers near major roads and 27,000 chargers around local towns and regions are likely to be required to meet current service levels. Although this would provide good coverage, further installations will be required after 2030, to keep pace with the increasing size of the electric vehicle fleet as the stock turns over.”;
 - It suggests that “to reach net-zero emissions by 2050 it will be necessary for HGVs to move away from combustion of fossil fuels and biofuels to a zero-emissions solution (e.g. hydrogen, battery vehicles). Given the current evidence on lead-times for infrastructure and the time taken to turn over vehicle stocks, the government will need to make decisions how HGVs will be decarbonised in the second half of the 2020s. This will necessitate small-scale trial deployments of hydrogen HGVs in a

variety of fleets prior to this, in the UK or elsewhere. As HGVs need to travel internationally, the eventual choice is likely to need to be consistent with equivalent decisions made elsewhere in Europe.”

- 4.4 Taking account of the above, and considering the more exacting target to work towards carbon neutrality by 2030 that we have set locally, facilitating the transition to electric vehicles (EVs) has been identified as a priority outcome for the transport workstream of the Climate Emergency Strategy: *“By 2030, carbon emissions generated on Somerset’s roads are reduced through the change to electric vehicles, ultra-low emission commercial vehicles and an overall reduction in road use (no. of miles travelled)”*.
- 4.5 In addition to this, the energy workstream of the Somerset Climate Emergency Strategy recognises the need to facilitate the electrification of transport, including through the scaling up of charging infrastructure, but notes potential concerns around capacity constraints of the electricity grid in Somerset which might be a barrier.
- 4.6 As a result, a key action identified in the Somerset Climate Emergency Strategy and SWT’s CNCR Action Plan is to produce a Somerset EV Charging Strategy with a view to tackling barriers, identifying and making the most of opportunities, and aiding the proliferation of EVs in Somerset. The Somerset local authorities (SWT, Sedgemoor, South Somerset and Mendip district councils, Somerset County Council, and Exmoor National Park Authority) jointly commissioned WSP to produce this strategy.

Summary

- 4.7 The Strategy provides a basis for the Somerset local authorities to:
- Develop and deliver specific projects on their own land and assets as appropriate, informed by the best way to futureproof investment, maximise opportunities and benefits;
 - Influence investment in the grid and work to release capacity in the grid by WPD;
 - Set policies and guidance and allocate specific sites for charge point development through Local Plans and other means;
 - Lobby Government and others on what prerequisites are required in order to proliferate EVs in Somerset; and
 - Understand what their role should be on delivering charge points going forward.
- 4.8 The Strategy paints a picture of what the future of mobility might look like, with connected, automated, electric (and alternative fuel) and shared vehicles. It considers what the role of EVs will be, concluding that the greatest carbon reductions from transport emissions in Somerset can be made from tackling longer distance trips, with EVs playing a leading role. They are also identified as having an important role in reducing harmful local air pollution from nitrogen dioxide. Public charge points are identified as key to reducing range anxiety and signalling confidence in the emerging market. Whilst only 5% of charges are made at publicly available charge points, in time, this may shift as residents of areas with no off-street parking (and who are therefore more likely to be dependent upon such charge points) take up EVs.
- 4.9 Concerns are often raised around capacity constraints within the local electricity grid. Individual charge points can have the potential to overload secondary substations if there is a cluster of chargers in the same street or estate, if demand is not managed. However, the report identifies that, although grid reinforcements may be necessary in

some locations, some demand can be deferred through “smart charging”, increasing demand diversification, by deferring the load, and reducing the load during the times at which the network is busiest (peak demand). Western Power Distribution (WPD) has been effectively engaged in the production of the strategy and has also produced its own charging strategy for its network area. As such, WPD do not perceive the grid to be a major constraint to the proliferation of EVs in Somerset. Furthermore, this Strategy will be used by the Somerset authorities to continue engaging with WPD and influencing their future business plan for network upgrades.

- 4.10 The Strategy explores the role and potential of alternative fuelled vehicles (including hydrogen and biofuel) as well as different forms of Ultra Low Emission Vehicles (ULEVs), (including Battery Electric Vehicles (BEVs) and Plugin Hybrid Electric Vehicles (PHEVs). It concludes that there is significant scope for EVs to play the lead role with cars, taxis and vans. EVs may play a role for buses in Somerset in the future, though hydrogen and bio-methane are also options worth exploring. A number of different technologies are being explored with HGVs, including BEVs, overhead charging, and hydrogen. E-bikes and e-scooters are identified as offering real opportunities to tackle emissions from shorter to medium journeys, though public charging points are not expected to be necessary beyond those necessary for sharing schemes.
- 4.11 The Strategy assesses different charge point types and where and when they should be used:

Charge point type	Power output	Uses
Domestic socket	2.4kW	Not recommended (for occasional use by visitors or a back-up)
Slow	3.7kW	Home
Standard	7.4kW	Home and long stay destination
Fast	11-22kW	Short stay destination
Rapid	20-50kW	Short stay destination and on route
Ultra-rapid	100kW+	Short stay destination and on route

- 4.12 Alternatives to the “traditional” charge point were also considered, including inductive charging, mobile charging, vehicle to grid (V2G) and battery swap. Such alternatives should be monitored, but are not considered to currently be mainstream options. Experiences, ideas and options from other countries are also considered.
- 4.13 Issues around on-street charging are explored and options are weighed up for charge point types (including freestanding, lampposts, cable covers, cable ducts and other emerging options) depending on circumstances, and supplements this with the results of a trial in Oxford. This will enable the authorities to be better informed about how best to tackle on-street charging in necessary areas going forwards. Areas that will likely need to rely on on-street charging and which are projected to have high demand for EVs going forwards are identified in maps to help the authorities begin to target and prioritise future action.
- 4.14 Different delivery approaches available to the Councils for installing charge points on Council assets have been considered, ranging from public ownership to concessionary models to fully funded revenue share models. Examples of how different models have

been employed by Councils in different locations are given, and the strategy identifies the advantages and disadvantages of each. Recommendations are then made for the approach to take for different circumstances. The primary initial role for the Somerset authorities is to attract public sector grant funding combined with private sector investment, to help develop the network. The table below summarises the different delivery approaches and recommended circumstances for use.

Delivery approach	Summary	Potential Income	Potential Risk	Recommended circumstance for use
Public ownership	All costs borne by Council, back office and operation outsourced for fixed fee.	Highest ↑	Highest ↑	<ul style="list-style-type: none"> • Council depots
Concessionary – publicly funded	All costs borne by Council, operation and maintenance outsourced for agreed period under profit share arrangement.	↑	↑	<ul style="list-style-type: none"> • N/A
Concessionary – public/private funded	Part funded by public and private sectors, operation and maintenance outsourced for agreed period under profit share arrangement.			<ul style="list-style-type: none"> • Council offices • On-street • P & R sites • Public car parks
Fully funded – revenue share	All costs borne by private sector, long term lease/licence.			Lowest

Forecasting

4.15 The Strategy looks at existing ULEV registrations, publicly available charge point infrastructure, and local electricity grid capacity constraints in Somerset. It then considers planned charging infrastructure projects (including DC Share and SWT’s Community Charge Point Fund amongst others), and factors in outputs from engagement with key stakeholders and the results of the recent public EV survey*.

* It should be noted that the EV Survey was produced by the graduate officers employed on the Somerset Local Government Graduate Scheme (Amy Maggs – now employed at SWT, Izzie Jeffrey – previously at SWT, and Stacey Tizzard) and appreciation and kudos for this element should go to them. The survey ran for 2 weeks in June and received a total of 1,034 completed responses, making it very successful and robust.

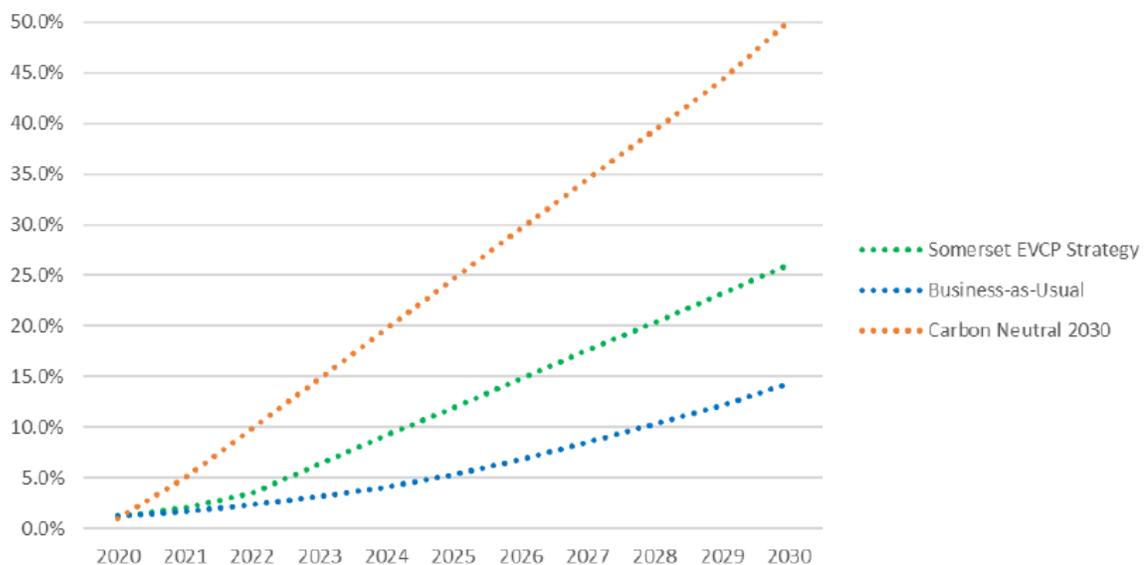
4.16 Three scenarios were modelled for forecasting EV uptake in the county using WSP’s *EV:Ready* tool: 1) Business as usual; 2) Carbon Neutral 2030; and 3) Somerset EV Charging Strategy. The forecasts account for a number of factors in determining

localised variations in EV uptake, these include:

- Propensity to register an EV – socio demographics and consumer attitudes based on the latest version of Experian’s Mosaic UK (Generation 6 datasets);
- Car ownership – based on ONS data by household; and
- Reliance on on-street parking – based on the typical property types of the predominant mosaic group at a postcode level.

4.17 The graph output is reproduced below for information. In summary, the Business as usual scenario would result in approximately 12.4% of car km travelled in 2030 being EV. The Carbon Neutral 2030 scenario assumes a number of unlikely interventions are made, predominantly at the national level, and leads to approximately 50% of car km travelled in 2030 being EV. Following through the recommendations of the Somerset EV Charging Strategy is expected to result in around 25% of car km travelled in 2030 being EV.

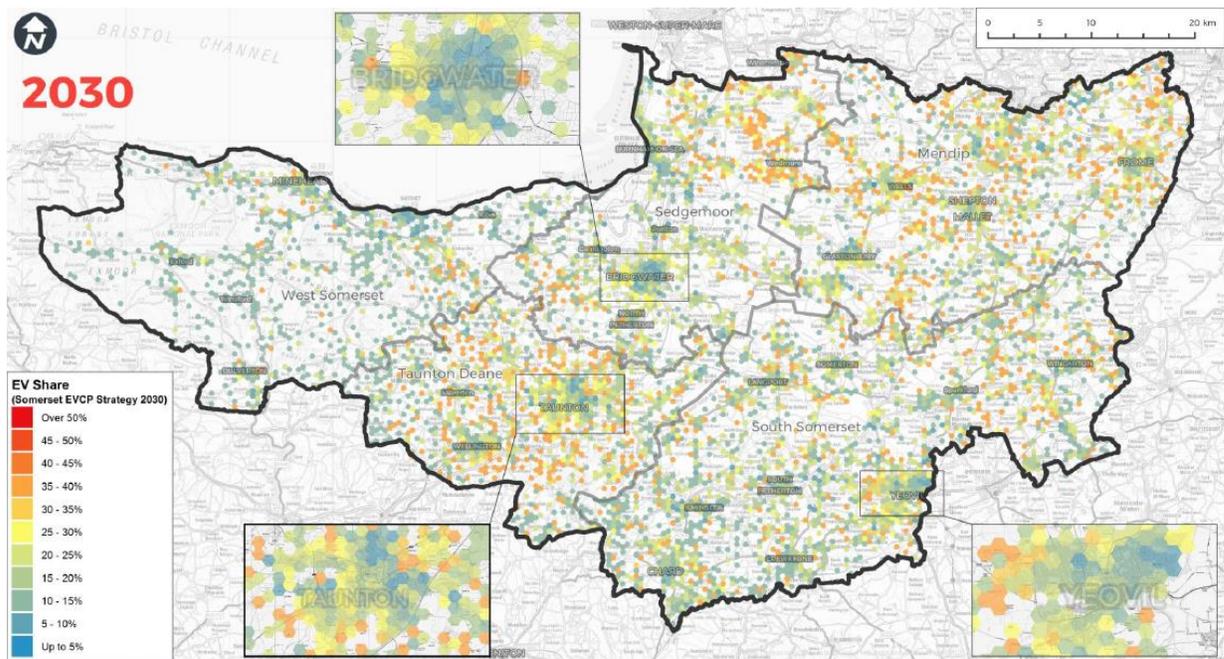
Figure – Proportion of total car km in Somerset that are EV



4.18 The CNCR Action Plan includes a section which focuses on EVs, and an indicative routemap of potential actions. That routemap includes reference to working towards an EV target by 2030, and states that that target will be evidenced by the EV Charging Strategy. It is recommended that the CNCR target should be to “work towards 25% of car km travelled in Somerset in 2030 being EV”.

4.19 In addition, the Strategy includes maps which demonstrate how these scenarios for EV uptake are forecast to be distributed across Somerset by 2030, accounting for localised variations in consumer profiles, socio-demographics, availability of off-street parking, vehicle ownership and vehicle sales and turnover. The reproduction below shows the percentage of all vehicles which are EV in 2030, assuming delivery against the recommendations of the Strategy. Each hex represents a cluster of postcodes and households, to provide a clear view of the variations in uptake across the County. Areas not covered by a hex feature no, or very few, households.

Figure – Somerset EVCP Strategy (2030) - % EV of total vehicles



4.20 Competing influences of propensity for switching to EV, car ownership levels, and reliance on on-street parking, serves to create a nuanced picture of EV ownership across the County, as areas with high propensity towards EV ownership are often partly offset by also being areas of lower car ownership and greater reliance on on-street parking. In Somerset however, as on-street parking generally presents less of an issue than in other parts of the UK, individuals' propensity for EV uptake and variations in vehicle ownership levels have a greater bearing on localised uptake. In broad terms, the areas of higher forecast uptake in Somerset are projected to be focused around the Taunton area, Burnham-on-Sea and the northern portion of Sedgemoor District, and the wider areas around Frome and Yeovil. EV uptake is forecast to be slower in the West of the County.

4.21 The Strategy identifies the total number of EVs predicted in each scenario and uses this to indicatively identify how many publicly available charge points might be needed in each scenario. This element of the forecasting is based on a large number of assumptions and as such should be used with caution, but it provides a useful context for the scale of public charging infrastructure that might be needed, and how this changes with each scenario. It is important to note that the majority of public charge points would likely be delivered on private land such as at supermarkets, retail destinations, and other publicly accessible locations, rather than delivered directly by the public sector.

Figure – Indicative public EV charge point (EVCP) requirement in each scenario in 2030

District	Business as Usual		Somerset EV Strategy		Carbon Neutral 2030	
	EVs	Public EVCPs	EVs	Public EVCPs	EVs	Public EVCPs
Mendip	13,500	160-200	23,500	280-350	45,000	550-680
Sedgemoor	11,500	140-170	21,500	260-320	46,500	560-700
South Somerset	14,000	170-210	28,000	340-430	65,500	800-1000
Somerset West & Taunton	11,000	130-170	22,500	280-340	55,500	680-840
SOMERSET TOTAL	50,000	600-750	95,500	1160-1440	212,500	2590-3220

4.22 The table above identifies that assuming delivery against the recommendations of the Strategy, there could potentially be 22,500 EVs registered in Somerset West and

Taunton district by 2030, indicatively requiring 280-340 publicly available charge points. For context, the Strategy notes that in Q1 2020, there were a total of 392 ULEVs registered in the district. In July 2020, there were 32 public charge points in the district (see <http://maps.dft.gov.uk/ev-charging-map/>). Due to the large number of assumptions involved in these forecasts, it is not recommended that we set a target in relation to specific numbers of charge points.

Recommendations

4.23 The Strategy identifies a total of 24 recommendations for the Somerset local authorities to take forward. Many of these fit with and begin to flesh out actions identified in the Council's CNCR Action Plan, some are new and will need to be brought forward into the CNCR as part of the plan's iteration.

4.24 The recommendations can be summarised as follows:

- Lead by example:
 - 1) Undertake a review of Council fleet;
 - 2) Install charge points at Council depots with associated driver awareness and training;
 - 3) Install charge points at Council offices.
- Lobby Government and industry:
 - 4) Urge Government to bring forward the ban on sales of new petrol and diesel cars and vans to 2030 or earlier (note, that the Government has now confirmed that this will happen);
 - 5) Urge Government to further reduce the costs of electric vehicle purchase, leasing and ownership compared to petrol and diesel vehicles;
 - 6) Explore additional local incentives (e.g. marketing and promotion, differential parking permits and car park charges, local scrappage schemes and zero emission zones);
 - 7) Support research and innovation in EVs in Somerset.
- Home charging:
 - 8) Adopt planning policy to ensure that every new home with a parking space has a smart EV charge point (model policy is included within the strategy);
 - 9) Promote the OLEV EV Homecharge Scheme;
 - 10) Promote home charging share schemes such as Zap-Home;
 - 11) Provide guidance on use of cable covers and cable ducts for on-street charging;
 - 12) Bid to the OLEV On-street Residential Chargepoint Scheme to install on-street charge points in priority locations (with Firepool a suggested opportunity);
 - 13) Adopt design standards for on-street chargers to enable and manage private sector roll-out.
- Workplace charging:
 - 14) Adopt planning policy to require charge points in new workplaces (model policy included within the strategy);
 - 15) Promote the OLEV Workplace Charging Scheme;
 - 16) Promote the Energy Saving Trust fleet reviews;
 - 17) Promote workplace charging share schemes such as Zap-Work
- Other destination charging:
 - 18) Adopt planning policy to require charge points in other non-residential developments (model policy included within the strategy);

- 19) Develop charging hubs at both Taunton P&R sites;
- 20) Install charge points in council owned public car parks (primarily 22kW points capable of smart charging, but 7kW where sufficiently long enough dwell time allows, in line with the priority ranking included within the strategy);
- 21) Encourage stakeholders to deliver public charge points at other key destinations (e.g. supermarkets and train stations);
- 22) Engage with tourist destinations and explore tourism opportunities associated with EV;
- 23) Consider potential to integrate EV charging with other energy and transport services as part of new Mobility Hubs;
- On route charging:
 - 24) Engage a private sector supplier to deliver rapid charge points, where there are gaps in provision including town centres near taxi ranks (Minehead an explicit example).

Conclusion

- 4.25 In conclusion, the strategy provides a holistically thought through strategy for how the Council should work with its partner authorities to develop an EV charge point network across Somerset. It will enable the Council to take advantage of the opportunities presented by our assets, whilst futureproofing investment and maximising benefits; engage with and influence investment in the local electricity grid by WPD; ensure the New Local Plan sets appropriate policies; lobby Government and others to bring forward other actions; and effectively understand what our role should be in delivering the network.

RECOMMENDATION – That the Somerset Electric Vehicle Charging Strategy is adopted and brought forward into the Council’s Carbon Neutrality and Climate Resilience Action Plan.

Delivery

- 4.26 The Council is well-placed to hit the ground running with many of the strategy’s recommendations due to the inclusion of many of the recommendations within the CNCR Action Plan, and the general focus that the Plan has on EVs. The Council’s involvement in the DC Share project, experience of the Community Charge Point Scheme, and advanced nature of explorations to install charge points at Deane House and other locations means that we are resourced, informed and aware to begin delivery relatively quickly.
- 4.27 Having said this, it is important that we have the end-user in mind and take opportunities to achieve economies of scale etc. moving forwards. Therefore it is important that we now continue to work closely with the other Somerset authorities on delivery.
- 4.28 A delivery focused workshop was held on 24th September 2020, facilitated by WSP and attended by officers from each of the authorities relevant to future delivery of many of the above recommendations. As a result of this, the Strategy includes reference to an intention for an EV working group to be established within the wider Somerset Climate Emergency response governance structure, reporting to a transport working group. The Strategy recommends that an EV lead from each authority sits on that working group, bringing in wider officer support and expertise where needed to ensure that EV work across the authorities is coordinated, links to wider climate and energy workstreams and that there is an overall responsibility for maintaining momentum and

delivering on the recommendations of the Strategy. It also suggests that a stakeholder forum of key external stakeholders and delivery partners could also be established, to help guide delivery of the strategy. For example, this could include Highways England, EV users, local EV businesses, and others.

4.29 Discussion of this item at Scrutiny Committee on 4th November 2020 prompted the Committee to recommend that further detail is added to this “delivery” section of the committee report on how the strategy will be delivered in SWT before the report is considered by Full Council (see below):

4.30 Upon adoption of the Somerset EV Charging Strategy, the Strategy recommendations will be brought forward into the CNCR Action Plan. These will be split across the four timescales of the CNCR. The Action reference numbers referred to in the second column are taken from the Indicative Action Plan to 2030 (appendix 1 to the CNCR):

Strategy Recommendation	CNCR Action	Commentary / Update on progress
1) Undertake a review of Council fleet	Already identified in action 77 and 200.	Fleet review has already begun (independent of EST) and procurement of 2 x electric pool vehicles is already progressing with the remainder of the pool car fleet to transition following formal procurement.
2) Install charge points at Council depots with associated driver awareness and training	Already identified through actions 66 and 202	Officers are investigating installation of Solar PV and battery storage at the DLO depot. Once installed, this would help to service charging of vehicles and at this stage installation of EV charge points will be pursued.
3) Install charge points at Council offices	Already identified in actions 48 and 66.	In process of leasing 2x parking bays at Deane House for installation of 50kW rapid charge points. Expected to be operating towards the end of Q1 2021 and will be accessible to the public 24/7.
4) Urge Government to bring forward the ban on sales of new petrol and diesel cars and vans to 2030 or earlier	N/A	The Government has now confirmed that it will bring the ban on sale of new petrol and diesel vehicles forward to 2030.
5) Urge Government to further reduce the costs of electric vehicle purchase, leasing and ownership compared to petrol and diesel vehicles	New – can become an “Immediate” action.	We can lobby Government in response to their confirmation about the 2030 ban by referring to the need to really step up policies and action on reducing the cost differential so that there can be a just transition on EVs.
6) Explore additional local incentives (e.g. marketing and promotion,	Already identified in actions 78, 203, 204 and 213.	Actions already refer to incentives for staff and lower income groups as well as general promotional communications. Actions also refer to revising the Parking

differential parking permits and car park charges, local scrappage schemes and zero emission zones)		Strategy for Taunton to incentives EVs. Additional local incentives will continue to be considered as the CNCR iterates.
7) Support research and innovation in EVs in Somerset	Already identified in action 38 and 94.	The DC Share Pilot supports research and innovation in EVs here in Taunton and may assist us in securing further such opportunities. Actions already refer to fostering innovation in the low carbon / sustainability sector. The Gravity Smart Campus near Bridgwater is positioning itself to focus on R&D in relation to future mobility including EVs.
8) Adopt planning policy to ensure that every new home with a parking space has a smart EV charge point	Already identified in action 67.	Adoption of any new local planning policy will be a few years away due to Local Plan production processes. In the meantime, a draft of “Climate Positive Planning” has been published referring to the EV Charging Strategy standards and SCC travel planning guidance, which is being updated to refer to the Strategy standards.
9) Promote the OLEV EV Homecharge Scheme	New – could be included in a revision to action 203.	A communications campaign is already proposed as a short-term action. This recommendation will inform development of that campaign.
10) Promote home charging share schemes such as Zap-Home	New – could be included in a revision to action 203.	A communications campaign is already proposed as a short-term action. This recommendation will inform development of that campaign.
11) Provide guidance on use of cable covers and cable ducts for on-street charging	New – could be included in actions 17 and 72.	This action is primarily the responsibility of SCC as the Highways Authority. However, the District-wide Design Guide and Taunton Garden Town Public Realm Design Guide could make appropriate reference in consultation with the Highways Authority.
12) Bid to the OLEV On-street Residential Chargepoint Scheme to install on-street charge points in priority locations	Already identified in actions 199 and 324.	This action is primarily the responsibility of SCC as the Highways Authority. The CNCR already identifies the need to work with partners to deliver public charge points across the district in line with the EV Charging Strategy, but it could be made more explicit to work with SCC to develop on-street chargepoint proposals for priority areas and bid to OLEV accordingly as a short-term action. There is potentially an opportunity to install on-street charge points in the Firepool development

		which will be explored. The OLEV ORCS is also available for local authorities to use towards installing charge points in public car parks, and an application is currently being prepared for this purpose.
13) Adopt design standards for on-street chargers to enable and manage private sector roll-out.	New – could be included in actions 17 and 72.	This action is primarily the responsibility of SCC as the Highways Authority. However, the District-wide Design Guide and Taunton Garden Town Public Realm Design Guide could make appropriate reference in consultation with the Highways Authority.
14) Adopt planning policy to require charge points in new workplaces.	Already identified in action 67.	Adoption of any new local planning policy will be a few years away due to Local Plan production processes. In the meantime, a draft of “Climate Positive Planning” has been published referring to the EV Charging Strategy standards and SCC travel planning guidance, which is being updated to refer to the Strategy standards.
15) Promote the OLEV Workplace Charging Scheme	Already identified in action 201.	Identified to be pursued in years 2-3.
16) Promote the Energy Saving Trust fleet reviews	New	Could be included in a revision to action 201.
17) Promote workplace charging share schemes such as Zap-Work	New	Could be included in a revision to action 201.
18) Adopt planning policy to require charge points in other non-residential developments	Already identified in action 67.	Adoption of any new local planning policy will be a few years away due to Local Plan production processes. In the meantime, a draft of “Climate Positive Planning” has been published referring to the EV Charging Strategy standards and SCC travel planning guidance, which is being updated to refer to the Strategy standards.
19) Develop charging hubs at both Taunton P&R sites.	Already identified in actions 51, 53 and 199.	The development of charging hubs at the P&R sites could be explored as part of work to put the P&R service on a financially sustainable footing and to explore the transition of the P&R service to alternative/electric fleets. However efforts in this regard have been stalled by COVID with patronage of the service down significantly. Re-procurement of the P&R service provider is to re-start in the New Year.

20) Install charge points in council owned public car parks.	Already identified in actions 47, 48 and 199.	In process of leasing 2x parking bays at Deane House and 2x parking bays at Blackbrook Leisure Centre for installation of 50kW rapid charge points. Expected to be operating towards the end of Q1 2021 and will be accessible to the public 24/7. In addition to this, we have recently invited expressions of interest from prospective charge point suppliers through a nationally recognised procurement framework to tender to investigate the suitability and, where appropriate, to supply charging points at multiple car parks throughout the district.
21) Encourage stakeholders to deliver public charge points at other key destinations (e.g. supermarkets and train stations).	Already identified in action 199.	A more explicit action(s) could be identified.
22) Engage with tourist destinations and explore tourism opportunities associated with EV	New	Could be included in a revision to action 199.
23) Consider potential to integrate EV charging with other energy and transport services as part of new Mobility Hubs	Already identified in action 336.	Action already exists to explore mobility hubs. More explicit reference to EVs is necessary as part of this.
24) Engage a private sector supplier to deliver rapid charge points, where there are gaps in provision including town centres near taxi ranks.	New – could be included in action 199.	The CNCR already identifies the need to work with partners to deliver public charge points across the district in line with the EV Charging Strategy, but it could be made more explicit to work with private sector suppliers to deliver rapid charge points in priority locations.

4.31 Action 199 of the CNCR is referred to in multiple places in the above table. This action states “*Work with partners to deliver additional public charge points across the district in line with the Somerset EV Charging Strategy*” and is identified as a short-term action (years 2-3).

4.32 We have begun the process for delivering charge points to our Council-owned car parks, and we are due to re-launch the Community Charge Point Fund in the New

Year. Beyond this, the Council is unlikely to be directly involved with delivery of charge points in the district, which are far more likely to be delivered by other organisations (SCC in the case of on-street charge points, and the private sector in the case of rapid charge points, electric forecourts and destination charge points). However, the Council has a role to play in enabling and encouraging the delivery of these charge points in the right places at the right time.

- 4.33 The EV Charging Strategy helps us to know where the greatest demand for EVs is likely to occur, where is likely to be more reliant on on-street charging, and where rapid charge points already exist. We will use this information to inform engagement with SCC and private sector partners when enabling and encouraging delivery of charge points around the district. However, our immediate focus will be on delivery in our own car parks and on the specific actions identified as “immediate” in the CNCR and in the table above.

5 Links to Corporate Strategy

- 5.1 Addressing climate change is identified as the Council’s primary objective in the Corporate Strategy and provision of EV charging points is explicitly given as an example. The Somerset EV Charging Strategy picks up on and will influence delivery against many of the other objectives across all four strategic themes of the Corporate Strategy.

6 Finance / Resource Implications

- 6.1 The Somerset EV Charging Strategy is an evidence document and it sets out recommendations for our approach to delivering an EV charging network in Somerset. It does not set policy in itself, and does not commit the Council to any specific actions. It will inform the delivery of the Council’s CNCR Action Plan and future reviews. Future project development arising from the recommendations of the Strategy will be subject to business case development and approval and be the responsibility of the Council’s Climate Service to fund from established and future budgets.

7 Legal Implications

- 7.1 There are no direct legal implications associated with the adoption of the strategy and it being brought forward into the CNCR Action Plan. However, there may potentially be legal implications associated with delivery of charge points themselves, particularly where private sector partners are being sought as part of a concessionary or fully funded delivery approach, but such implications would be considered as projects are developed.

8 Climate and Sustainability Implications

- 8.1 The Somerset EV Charging Strategy is identified as an action within both the Council’s CNCR Action Plan and the Somerset Climate Emergency Strategy. The production of this strategy and delivery of charge points are intended to directly lead to carbon reductions from the most significant source of CO₂ emissions in the district. The report clearly identifies the important role that EVs will need to play in achieving our carbon neutrality target.

9 Safeguarding and/or Community Safety Implications

- 9.1 The strategy itself has no safeguarding or community safety implications. Risks in

delivery, for instance associated with vandalism of charge points will need to be considered and addressed as projects are developed and progressed. EVs present a potential risk to those with visual or hearing impairments in that they are much quieter than petrol/diesel cars, however, such risks are beyond the scope and implications of the strategy.

10 Equality and Diversity Implications

- 10.1 An Equality Impact Assessment (EqIA) has been produced to accompany the Somerset EV Charging Strategy (see Appendix B). Officers within the Council with an overview of the Equalities function, who have experience of identifying impacts on those with protected characteristics have been consulted for this initial identification of potential impacts. The assessment identifies at a high level where there is potential for negative, neutral and positive outcomes as a result of the Strategy recommendations depending on the detail as subsequent projects develop.
- 10.2 The Strategy itself makes recommendations on actions to take, though the detail of what, how, where and when is not determined by the Strategy, and will evolve as specific projects are developed. Having said that, the strategy will provide guidance on how these questions are answered during project development. The CNCR Action Plan already incorporates a number of potential actions of a similar nature to some of those recommended by the Strategy, though the Strategy recommends additional actions and provides more detail to others. The CNCR has previously been assessed for equalities impacts, identifying in general terms the likely impacts on different groups in the round, rather than on an action-by-action basis.
- 10.3 At this stage it is difficult to understand specific impacts and no significant negative impacts are identified. Generally, actions were expected to have broadly positive outcomes, but would require further assessment and wider external consultation in relation to delivery plans of some of the actions where an individual or group would see or experience a direct physical change as a result of an action.

11 Social Value Implications

- 11.1 There are multiple co-benefits including social and health benefits associated with enabling growth of EVs in the district. The strategy recommends delivery models for use by the Councils in different circumstances, but does not set detailed criteria for procurement of any private sector partners to follow. Social value will need to be considered as projects develop and procurement exercises are designed.

12 Partnership Implications

- 12.1 The strategy has been produced in partnership between the Somerset authorities and has involved close engagement with stakeholders. As set out in the delivery section of the report, above, the intention is to continue working closely with partners across Somerset in delivery.

13 Health and Wellbeing Implications

- 13.1 EVs present an opportunity to reduce air quality issues associated with nitrogen dioxide in comparison to traditional petrol and diesel vehicles. However, they are just a part of the puzzle in terms of tackling air quality issues and in reducing CO₂ emissions. EVs continue to emit particulate matter from road use, tyre and brake wear for instance. EVs also continue to perpetuate a sedentary, personal travel mode. As such

it is essential that the Council continues to make strides on delivering active travel infrastructure and supporting and encouraging our communities to make active choices, particularly for shorter trips. The CNCR Action Plan identifies a number of actions in this regard.

14 Asset Management Implications

- 14.1 The strategy considers a number of Council assets, particularly our public car parks, and recommends how and in what priority these can be utilised to deliver charge points. Specific asset management implications will need to be considered as site specific projects are developed.

15 Data Protection Implications

- 15.1 The strategy includes no personal data. A public EV survey was conducted in June 2020, and was fully GDPR compliant. The strategy refers to this survey and includes aggregated and summarised outputs, but no responses are directly attributable to individuals.

16 Consultation Implications

- 16.1 The strategy has been informed by key stakeholder engagement, including with electricity Distribution Network Operators, Highways England, community energy groups, community EV driving groups and businesses as well as internal officers. It has also been influenced by the public EV survey referred to above. The strategy itself has not been consulted upon, but it is primarily technical in nature. As noted in the consultation reports supporting the CNCR Action Plan and Somerset Climate Emergency Strategy, the overwhelming response to consultation on early drafts of these documents was to 'stop talking about what you *could* do and asking us what we think, and tell us what you are *going* to do and get on with it'. Therefore, no public consultation is proposed on the strategy, and instead it will enable us to get moving on delivering against it.

17 Scrutiny Comments

- 17.1 During the discussion at Scrutiny Committee, the following points were raised:-
- Councillors praised the report and its balanced account of the benefits of EV Charging, and it was commented that it was felt worth proceeding with but would not be the whole solution.
 - Councillors expressed a wish that that this Strategy was translated into a plan for action, and officers confirmed if approved these measures would be programmed into the Councils Carbon Neutrality and Climate Resilience Plan.
 - It was commented that only 22% of EV Charging points would be placed in the SWT area, despite this being the largest geographic district in the County.
 - Further information was sought on the trends relating to private car ownership and the placing of points where cars would be owned and not travel to. Officers confirmed that the locations were based on propensity and would not be the final locations. The purpose of the Strategy and the Councils role would be as an enabler in the delivery.
 - It was raised that there was Government grant funding in this area that the Council needed to pursue e.g. EV Charging points in SWT staff car parks.

- It was commented that the Delivery section of the report needed further refinement before this went to Full Council, to better reflect the need for a further spread of points in the rural centres.

17.2 The Scrutiny Committee **RECOMMENDED** to the Executive to;

- 1) That Executive recommend to Full Council that the Somerset Electric Vehicle Charging Strategy is adopted and brought forward into the Council's Carbon Neutrality and Climate Resilience Action Plan.
- 2) Requested that the Report to Full Council contains more detail on how the Strategy will be delivered in the SWT area.

18 Executive Comments

18.1 During the discussion at Executive Committee, the following points were raised:-

- Councillors were delighted to see the report coming forward.
- Councillors highlighted that not all charging points would be council led but it was a good document to assist in the implementation process.
- Councillors queried how and where the charging points would be installed. *Council owned car parks would be looked at and then work with other partners to encourage and enable delivery of destination and on-street charge points in other locations across the district. The Strategy would inform these conversations, but the Council would almost certainly not be the body delivering these.*
- Concern was raised on areas that had very limited or lack of off-street parking.
- Concern was raised on other types of fuel being introduced in the future. *It was noted that the report considered alternative fuels including the role that hydrogen is currently expected to play. Working to bring forward EVs is seen as a least regret option.*
- Councillors queried how could planning policy be changed to implement all the positive parts of the document. *The Climate Positive Planning document discussed in the previous item refers to how we can use existing planning policies to ensure EV charge points in new development. More explicit reference in planning policy would be explored through the new Local Plan, although it was noted that the Government has consulted previously on amending Building Regulations to make charge points a mandatory requirement.*
- Councillors wanted all local areas to be included and encouraged to take part. *Officers would liaise with local town/parish councils and chambers of commerce etc to assist them.*
- Councillors queried how payment would be made for the charging points. *There are several apps available to make payments.*

18.2 The Executive Committee **RECOMMENDED** to Full Council;

- 1) That the Somerset Electric Vehicle Charging Strategy is adopted and brought forward into the Council's Carbon Neutrality and Climate Resilience Action Plan.

Democratic Path:

- **Scrutiny – Yes**
- **Executive – Yes**
- **Full Council – Yes**

Reporting Frequency: Once only**List of Appendices**

Appendix A	Somerset EV Charging Strategy
Appendix B	EqlA of the Somerset EV Charging Strategy

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