



The Welsh Government's EV charging infrastructure strategy and action plan

Update for the CCEI Committee

January 2024

In March 2023, the Climate Change, Environment, and Infrastructure Committee submitted its report on the Welsh Government's Electric Vehicle Charging Infrastructure Strategy and Action Plan. This update restates the 21 Committee recommendations and the Welsh Government's response, and includes updates on recommendations where available.

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Introduction

Since the Welsh Government published our EV Charging Strategy in 2021, we have invested over £26 million in charging infrastructure across Wales, increasing the number of public devices by 120%, corresponding to a total of 1,465 charge points as at 1st January 2023.

Between October and December 2022, Wales had the greatest increase in total charging devices at 17.3%, and the largest percentage increase in rapid charging or above devices at 26.9% compared to all regions across the UK.

Significant further investment will be required to meet projected levels of EV uptake and demand, especially after the proposed internal combustion engine (ICE) ban and into the 2030s.

Working with our delivery partners, we want to seize the opportunity to lead by example and help build a reliable, efficient EV charging network in Wales, transforming the way residents and visitors travel. To achieve this, Welsh Government has developed a programme-level roadmap, setting out actions across five key priorities for Welsh Government and delivery partners for the next 3-5 years, pivotal to the successful acceleration of EV charging infrastructure across Wales, and meeting the defined KPIs set by the Strategy.

I thank the members of the Climate Change, Environment and Infrastructure Committee for their report on the Welsh Government's EV charging infrastructure strategy and action plan. I have set out my response to the Report's individual recommendations below.

Response to the 21 recommendations

Recommendation 1

The Committee recommends that:

The Welsh Government should revisit the EV Charging Strategy in light of the changing patterns of EV usage and the growth of commercial EVs. The Welsh Government should set a timeline for this work and consult with relevant stakeholders, including drivers and charging infrastructure providers.

Response: Accept

We recognise that, owing to the increasing uptake of electric vehicles, including battery electric vans, advancements in battery capacities and charging technology, patterns of EV usage are changing rapidly. However, we developed the EV charging strategy with this in mind and believe that the primary objectives of the strategy, increasing provision through supporting private sector roll-out and addressing gaps in the market as well as enabling longer distance travel throughout Wales, remain valid. Nevertheless, we will monitor emerging trends and seek to address specific requirements for public chargepoints where this would be useful.

As noted by the Committee, a plan for freight is being developed and we agree that decarbonisation should be considered as part of that plan. We are developing a greater understanding of potential requirements for infrastructure through engagement with experts as a signatory of the Global MoU on zero emission HDV (heavy duty vehicles), with the DfT and various fora, and are promoting Welsh participation in the Zero Emission Road Freight Trials.

Financial Implications – this work will be accommodated within existing budgets.

Update: TFW continues to monitor and adapt its delivery approach according to EV adoption rates, new innovation opportunities and changes to national standards and best practices. New information is shared through bi-monthly seminars with all Local Authorities and other public sector bodies, with Scottish Power Energy Networks (SPEN) and National Grid Electricity Distribution (NGED) via the Connections Working Group and with the commercial sector via the Charge Point Operators Working Group.

Recommendation 2

The Committee recommends that:

The Welsh Government should provide an update on the development of the Transport Decarbonisation Programme, which will support the decarbonisation of buses and taxis and private-hire vehicles.

Response: Accept

Net Zero Wales Carbon Budget 2 sets out the full range of policies to deliver carbon reductions during the period 2021 to 2025.

Welsh Government will provide an update on the Transport Decarbonisation Programme, which will support the decarbonisation of buses and taxis and private-hire vehicles, by the Autumn.

Financial Implications – None.

Update: The Minister for Economy and the Deputy Minister for Climate Change agreed to the establishment of a Task and Finish Group (TFG) to develop plans for Bus Fleet Decarbonisation and Demand Aggregation. This Group formulated recommendations in a final paper in March 2022.

We are investing in and supporting moves to invest in new green zero emission vehicles for use on the local bus services across Wales. Plans for the decarbonisation of the service bus fleet by 2035 are now nearing completion with an outline business to be completed by the end of this financial year

Fully electric buses are now in daily service in Cardiff and Newport and we have grant funded fleets of new electric buses in west and north Wales for use on the Welsh Government funded TrawsCymru network. These deployments in Wales mean we are broadly in line with other areas of the UK, in terms of percentage of the service bus fleet having been decarbonised.

- There are 14 electric buses operating on the Traws Cymru service in North and West Wales which cost Welsh Government £8.519.
- Newport Bus have purchased 44 EV vehicles funded by UK Government and with a commercial loan of £1.85m from Welsh Government. In 2023 Newport bus were awarded a grant of £6.323m from Welsh Government which will secure a further 13 buses due to be delivered early in 2024.
- Cardiff Bus have purchased 36 EV vehicles. In 2023 Cardiff Bus were awarded a grant of £8m from Welsh Government which will secure a further 19 buses, due to be delivered early in 2024.

The budget for 2023-24 is £11m but this will also cover some network reform costs and the cost of preparation for franchising.

The Deputy Minister for Climate Change has consulted on proposals for a Taxi and Private Hire Vehicles (Wales) Bill. In October 2023, the Deputy Minister published a summary of consultation responses and made an Oral Statement on the Bill.

We recognise that there are challenges for the taxi and private hire vehicle trade including: the cost of buying a ZEV, anxiety about vehicle range and the availability of charging infrastructure.

To encourage transition to zero emission vehicles, we are:

- Trialling charging points dedicated for electric taxis in key locations to try and make sure they have priority charging when they need it; and,
- Providing funding towards 44 electric taxis used for a “try before you buy” scheme in Wales

Recommendation 3

The Committee recommends that:

The Welsh Government should ensure that the EV Charging Strategy takes into account questions of equality and social justice.

Response: Accept

The Welsh Government has developed an equality impact assessment (EqIA) which looks at risks around the Welsh Government EV Charging delivery portfolio (initiatives, projects and studies) resulting in disproportionate or differential equality effects for protected characteristic groups. The EqIA has been carried out in line with the public sector equality duty in section 149 of the Equality Act 2010 (the Act). Whilst not an EqIA requirement, the report also identifies how equality issues have been integrated into the development of the EV charging portfolio to date. A copy of the EqIA report is attached.

Financial Implications – None.

Update: The modelling tool which is being used to guide investment in EVCI by local authorities is weighted towards areas which are most at risk at missing out on commercial investment. This will be implemented from the next funding round of the Ultra-Low Emission Vehicle Transformation Fund.

Recommendation 4

The Committee recommends that:

No later than six months after the publication of this report, the Welsh Government should provide the Committee with a detailed update on progress against the Action Plan; progress against the commitments it gave in written evidence (set out in paragraph 13 of this report); and progress towards the delivery of each of the recommendations in this report.

Response: Accept

Officials constructed an ambitious delivery programme supported by modelling tools, National Standards and effective relationships with key delivery partners.

TfW has been leading a project to deliver 19 rapid EV charging points on the Strategic Road Network. This is being delivered by a unique partnership whereby the network is largely funded commercially, but public funding is focused on “unlocking” sites with severe grid constraints through funding DNO works. The

location of these sites is focused in areas which are considered unlikely to benefit from purely commercial investment in the near to mid-term, yet are vital for ensuring consistency of provision across the SRN for “top up” charging en-route to key tourist and other destinations across Wales. Development is also focused on sites in public ownership, with the added benefit of providing a modest income stream from the lease with charge point operators. Sites have also been carefully selected based on the facilities nearby, including their ability to provide benefits to existing local businesses and the hospitality sector. Completion of this project in 2023 will see rapid charge points at least every 25 miles and for most of the network every 20 miles across Wales – two years ahead of the Action Plan target.

Update: All but three of the sites on the SRN have been delivered, the exceptions being those where complex third party issues have emerged.

This baseline charging infrastructure across Wales’ SRN is a major step towards providing users with the confidence that they can drive across Wales without running out of charge – and the strategy’s vision that “By 2025, all users of electric cars and vans in Wales are confident that they can access EV charging infrastructure when and where they need it.”

By January 2023, the number of chargepoints per 100,000 residents installed in Wales has increased from 21 to 47.2 (UK average is 55.3) or around 125% growth. Wales is showing the greatest increase of any UK region in both total charging provision (17.3%) and rapid charging (26.9%).

Update: The encouraging rate of growth continues, with the number of chargepoints per 100,000 residents now at 66.4, with Wales now third in the UK behind Scotland and London.

Financial Implications – None.

Recommendation 5

The Committee recommends that:

The Deputy Minister should clarify how the deliverability plan will relate to the Action Plan and reassure the Committee that the production of plans is not a substitute for action.

Response: Accept

The purpose of the deliverability plan is to set out how the strategy and action plan will be delivered in practice, to be referred to as the EV charging Infrastructure Programme (the Programme), as Welsh Government sets out to accelerate the roll-out of charging infrastructure across Wales.

The Programme focuses on the deliverability of the financial, commercial and management cases of the strategy and action plan. A copy of the Executive Summary of the Programme report is attached.

The financial case suggests a total capex cost of between £351 million to £1,550 million for On-Route and Destination charging by 2040, with no growth after that point, with £114 million to £689 million spent on On-Route charging and £236 million to £861 million on Destination charging. By this point On-Route chargepoints number 1.1 to 6.5 thousand and Destination 6.4 to 61.8 thousand, with a total of 7.4 to 68.4 thousand. Charging capacity reaches 141 to 1,165 MW, spread across 968 to 23,500 sites. This analysis is agnostic of which body is taking financial responsibility.

From a commercial perspective (and considering the considerable costs mentioned above), Welsh Government expects that most of the charging infrastructure will be delivered by the private sector. The role of Welsh Government is to facilitate private sector investments across Wales and ensure equality of access for all by focussed market interventions such as subsidies, concessions, etc. The plan for EV charging is to ensure more equitable coverage throughout the development of the network.

The Programme recommends that two elements of the delivery strategy be prioritised first (before moving on to others): the on-route network and destination / on-street charging in built-up areas. These elements will have the most short-term benefit for users in Wales, providing a strong cross-national network and catering to users who have a greater need for public charging.

The management case outlines the key considerations when delivering and managing the programme of interventions needed to facilitate and deliver the preferred network. The scale and complexity of delivering the EVCI programme necessitates a strong and effective management structure which determines how Welsh Government and delivery partners will deliver and manage the EVCI programme. This is a significant step-up from the Welsh Government resources that are devoted today.

More work and development are needed to implement the EVCI programme in the next phase, harnessing the work done to date (e.g. National Standards, early market engagement). To achieve this, a programme-level roadmap has been developed, setting out actions across five key priorities for Welsh Government and delivery partners for the next 3-5 years, to deliver successful acceleration of EV charging infrastructure across Wales, and meet the defined KPIs set by the Strategy.

5 key priorities:

1. Establish a Project Management Office (PMO) to govern delivery arrangements, set standards and monitor progress.
2. Provide support and guidance to enable local authorities (and private sector) to deliver the preferred network.
3. Engagement with the private sector to ensure we optimise the delivery of the preferred network and foster public-private sector collaboration.

4. Develop the mechanisms, knowledge and tools to deliver the preferred network.

5. Leverage the resource and mechanisms necessary to rapidly deliver the network in line with policy objectives.

Financial Implications – This work is being delivered by TfW (via the Remit letter), with support from Welsh Government.

Update:

- PMO in place in TfW, coordinating delivery projects, managing risks, governance of action groups and plans and monitoring delivery in public and private sectors.
- Local Authority support is now in place, involving monthly seminars, access to the Cenex 'NEVIS' suite of advice and guidance for delivery (including procurement plans, leases, delivery strategy optimisation) and insights into forecast BEV and charge point uptake for each local authority. This is complemented by the Preferred Network Mapping tool that aids with identifying the types of commercial models that will work in specific locations, and ensuring that funding awards are aligned to this.
- The Charge Point Operator working group was established in spring 2023 and is actively developing a portfolio of actions for individual members and public sector. The aim is to disseminate key recommendations to facilitate delivery in autumn 2023.
- Mechanisms and resources include the Preferred Network Mapping tool described above, additionally appraisal tools for renewables co-location, template leases, procurement best practices and commercial engagement strategies.

Recommendation 6

The Committee recommends that:

The Welsh Government should review the KPIs in the Action Plan. For Actions to be delivered to a longer timescale, such as Actions 1 and 7, it should aim to develop more specific KPIs, with sub-actions and associated deadlines.

Response: Accept

Welsh Government will review the KPIs in the Action Plan to ensure they are specific, measurable, achievable, realistic and timebound (SMART).

Welsh Government believes the Committee's statement that "*Welsh Government had completely failed to deliver many of the Actions in the Action Plan and by the lack of progress towards achieving others*" is an unfair evaluation of the work and results that have been completed to date. The delivery of EV charging infrastructure is not one of the Programme for Government priorities, which means the project has benefited from very limited

resources. However Welsh Government believes that it has achieved considerable progress despite this.

The complexity of delivering the strategy needs to be recognised. Key to the Welsh Government commercial strategy is the underlying principle that there can be no “one size fits all” approach to market intervention. The Welsh Government strategy sets out the need to balance actual charging needs with the goals of the preferred network, maximising return on infrastructure delivery while minimising public spending and allocating most risk to the private sector. Equality gaps in private sector investment need to be assessed on a case-by-case basis. Further, financial intervention need to be targeted and limited, considering factors such as ownership of land, the costs that will be passed on to the consumer, and the actual charging need in the area – for example, the Government could subsidise grid connection capex at key on-route sites where grid capacity is limited or there is a great distance to the nearest point of connection.

Since the publication of the strategy, Welsh Government has focused its limited resources on two key priorities: delivering a baseline charging infrastructure across Wales that gives users the confidence that they can travel across Wales without fear of running out of charge (the vision of the strategy); and developing tools and plans that will help local authorities and other delivery partners accelerate the roll-out of publicly available charging facilities across Wales.

Actions	Expected KPIs	KPIs delivered
1	1 public charge point for every 7-10 EVs by 2025	As at September 2022 (latest data available for the comparison), Wales has 1,417 public chargepoints installed, approximately 1 chargepoint for every 9 BEV. The total UK figure is 1 chargepoint for approximately every 16 BEV. Update: As at October 2023, Wales has 2,061 public chargepoints
2	Connections Group to report in the current financial year (2021)	Remains to be delivered. See response to Recommendation 12. Update: Connections group now active.
3	Network of charging forecourts across Wales at approximately 20	The installation of 19 rapid charge points at least every 25 miles and for most of the network every 20 miles across Wales will be completed in 2023 - two years ahead of the Action Plan target.

	miles across the SRN by 2025	Update: All but three charging sites across the SRN now in place (all remaining have complex third party / private sector consent requirements)
4	WG will deliver a National Quality Standard to be used in public sector procurement by the end of 2021	Welsh Government has developed National Standards for EV Charging Infrastructure in Wales. The online guide details a set of best practice recommendations for safe, accessible, and reliable public electric vehicle charging in Wales. The Standards have been developed for use by public sector organisations, community enterprises and delivery partners involved in the deployment of electric vehicle charging infrastructure in Wales. The guide has been used by local authorities and other deliver partners since January 2022, and will be published on the Welsh Government website in the next few weeks.
5	Review of policy and regulations by 2022 and updates made, where appropriate, to support EV uptake	Welsh Government will consult on draft amendments to Building Regulations during the first half of 2023. The draft amendments are to mandate the provision of EV chargepoints for each new dwelling with an associated car parking space and that every new non-residential building with more than 10 car parking spaces to have one chargepoint and additional cable routing. Welsh Government will work with the electricity industry to facilitate a further review of the Welsh Government policy and regulations to support electric vehicle charging. This will include whether any further measures can be taken to support local and regional spatial planning and a framework for strategic and local development plans. There will be a review of Permitted Development rights in view of industry

		alignment and addressing any inconsistencies in development control or the way in which it is applied across the UK. There will be ongoing engagement and collaboration with local planning authorities to support the development of local approaches.
6	Establishment of a charge point operator working group in 2021	Remains to be delivered. See response to Recommendation 17. Update: CPO group now active
7	Enhanced public confidence in EV charging, moving Wales from the innovator stage to early majority stage of market maturity by 2030.	Welsh Government is planning a communication programme that will keep stakeholders and the public updated, increasing their confidence in EV charging. Update: Benefits of EVs communicated to users via the Climate Action Wales (Green Transport Choices) website. CPO group gave talks during the Wales Climate Week 2023
8	Complete a supply chain and opportunities review by end of 2021. Establish a programme to realise opportunities for innovation and investment.	The Welsh Government Transport Decarbonisation team is working with the Business & Regions division (including Innovation and the Inward Investment teams) to identify and support innovation and private sector investment opportunities. Welsh Government is developing a new National Procurement Framework that will provide the opportunity to work collaboratively across the Welsh public sector to ensure a standard delivery model and avoid ad-hoc procurement exercises. It will help deliver wider benefits for Wales, such as the opportunity to develop a supply chain in Wales. The 19 rapid charging sites on the SRN have been carefully selected based on the facilities nearby, including their ability to provide economic development benefits to

		existing local businesses and the hospitality sector.
9	Charging infrastructure to be considered in all relevant new and emerging local and regional development plans, starting 2021.	EV charging is already covered in both Planning Policy Wales and the Future Wales. Meeting the requirement for EV charging is also a key part of the development of Local Area Energy Planning (LAEP), a pioneering approach which addresses the whole energy system.

Financial Implications – None.

Recommendation 7

The Committee recommends that:

The Welsh Government should deliver on its commitment to review the KPIs annually and publish the review's outcome. In addition, the Welsh Government should publish regular updates on progress against the KPIs.

Response: Accept in Principle

The Welsh Government recognises that monitoring the progress of EV charging infrastructure provision is a critical task to ensure the programme is on course to achieve the objectives and KPIs set by the Strategy, as well as ensure sufficient charging infrastructure is being provided to meet future EV demand.

The Welsh Government is planning to review and publish the KPIs at strategic points in time, reflecting key stages of the delivery programme and the availability of resources.

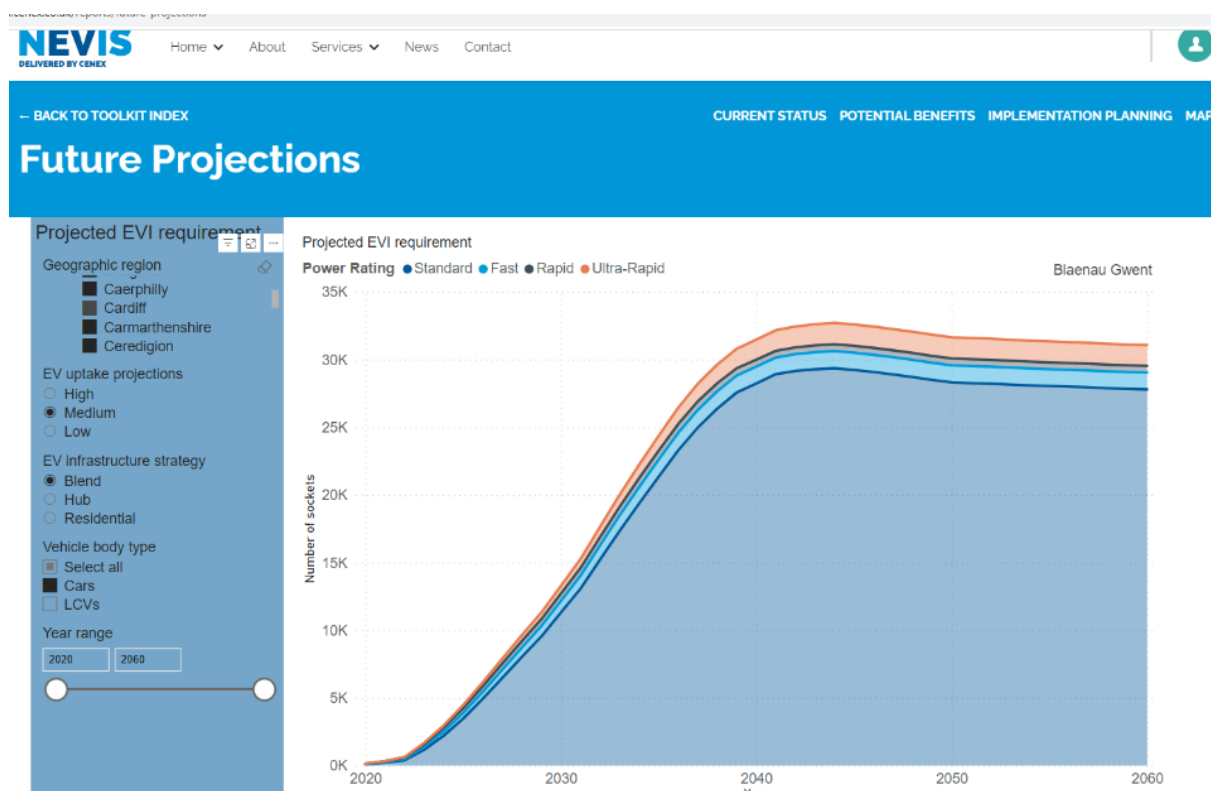
Financial Implications – this work will be accommodated within existing budgets.

Update: The Wales EV Charging Strategy published in 2021 forecast the number of EVs on the road for future years 2025 and 2030. These forecasts were made at a time when EV adoption was below 1% in Wales, as well as on the National Grid Future Energy Scenario's uppermost estimate of demand ('Leading The Way'). Based on the now reversed 2030 Internal Combustion Engine (ICE) ban it assumes no ICEs would be purchased after 2032. Furthermore, it does not fully address the Welsh Government's stretching targets for significant transfer of car trips to remote working and sustainable modes, contained within the National Transport Delivery Plan (2022-2027). Further evidence on long-term changes of

travel habits post-COVID have also become better understood in the past two years.

For the above reasons, Welsh Government provided funding to Welsh local authorities who have appointed Cenex to develop new evidence-based Welsh forecasts for EVs, which will have the following advantages:

- All local authorities have access
- Continuous updating of baseline data
- Disaggregated by each LA for each year
- Linked to forecast vehicle parc and other live datasets
- Nationally accepted standard – used by LAs in England, funded by OZEV



Picture: Illustration of projected EV charging infrastructure requirement for Blaenau Gwent using Cenex National EV Insight modelling tool (NEVIS).

Cenex are already appointed to advise local authorities and other public sector bodies on EV forecasts and strategy. Their snapshot forecasts for 2025 and 2030 will be published as updates to the 2021 Strategy and that their future updates be secured and published as new data becomes available.

Recommendation 8

The Committee recommends that:

The Deputy Minister should confirm whether the target of rapid charge points at least every 20 miles on the strategic road network is on track to be achieved and confirm when he expects the target to be met.

Response: Accept

The installation of 19 rapid charge points at least every 25 miles and for most of the network every 20 miles across Wales will be completed in 2023 - two years ahead of the Action Plan target. Refer to response to Recommendation 13 for further details.

Financial Implications – None.

Update: See response to Recommendation 6.

Recommendation 9

The Committee recommends that:

The Welsh Government should provide further details on specific actions related to EV charging infrastructure that the Ultra-Low Emissions Vehicle Transformation Fund (ULEVTF) will be used to fund.

Response: Accept

Local authorities have a crucial role to play in enabling the transition to EVs in their areas, including proactively supporting and delivering the rollout of electric vehicle chargepoints.

The purpose of the ULEV grant is to provide local authorities with government funding support to deliver publicly available EV charging infrastructure in their areas in line with the objectives of the EV charging strategy for Wales and its Action Plan.

ULEV eligibility criteria:

- **Delivery of destination charging**
Destination charging typically takes place at locations the user would otherwise already visit: retail centres, grocers, gyms, etc. The user charges at the destination car park while they visit. In locations where dwell time is longer, e.g. overnight at hotels, slow charging may be used. Most destination chargepoints (CPs) are fast, while some may be rapid, e.g. where dwell time is shorter. PodPoint has projected that 7% of all charging will take place at destinations in a fully fledged EV market. Public rapid and ultra-rapid charging – which includes hub, on-route, and some destination – makes up 45% of public charging demand by energy, as modelled by BloombergNEF.
 - **Delivery of on-street charging**
On-street charging is typically on the slower side of public charging, with vehicles often dwelling at the charger overnight. Slow and fast CPs are often incorporated into street-side lamp posts or are installed along the kerb. Tariffs
-

often range considerably, even within network. Reduced rates can be available for residents charging within their local area, for non-urban areas, and / or for network members. Modelling from BloombergNEF indicates that the majority of on-street charging takes place on slow chargers.

Welsh Government are encouraging local authorities to submit applications to the Office for Zero Emission Vehicle (OZEV) for the On-Street Residential Chargepoint Scheme (ORCS) once the scheme is launched. The purpose of the scheme is to increase the availability of on-street chargepoints in residential streets where off-street parking is not available, thereby ensuring that on-street parking is not a barrier to realising the benefits of owning an EV. Refer to response to Recommendation 11.

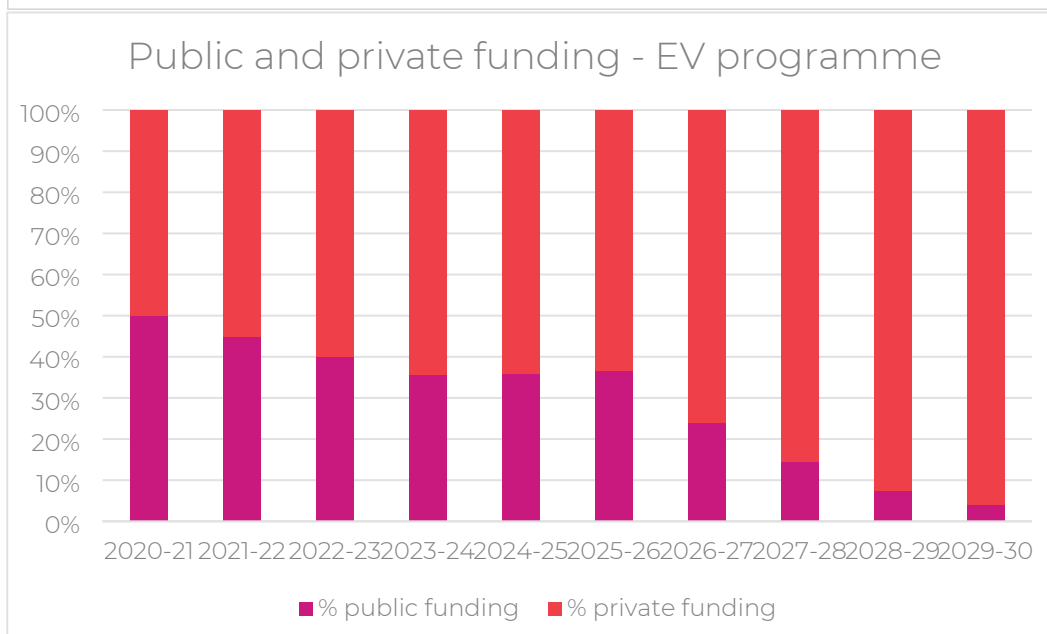
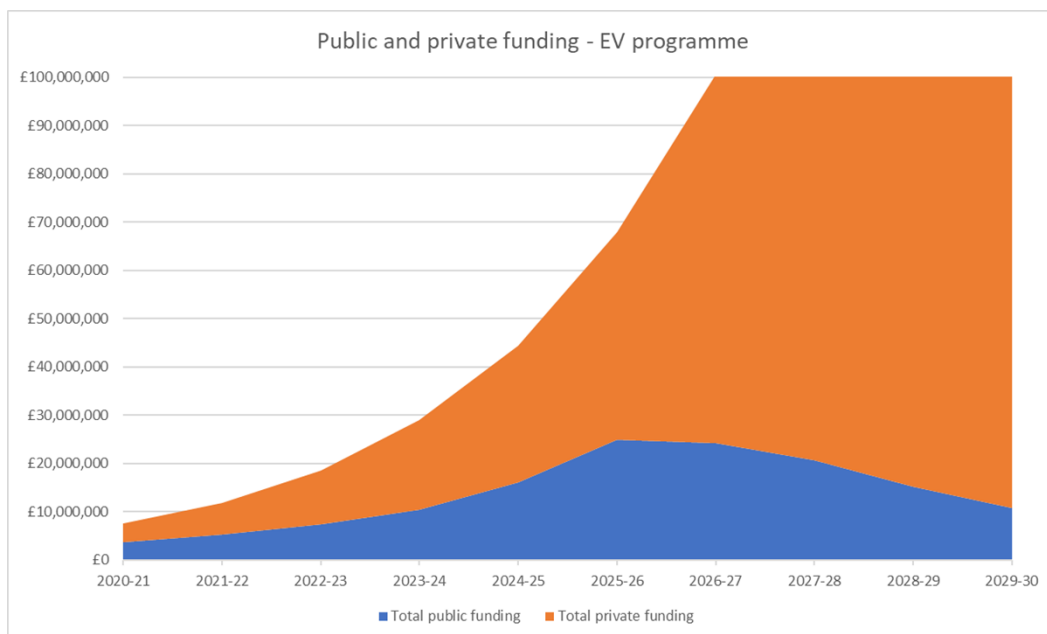
- **Delivery of hub charging facilities**

Hubs are dedicated sites, often serving multi-modal vehicle demand, sometimes with retail or industrial facilities on-site. Charging available at hubs is often rapid and ultra-rapid, with short dwell times. Hubs are sometimes used by drivers charging on-route. They are distinct from street charging and destination charging in their location and charging-focused offering. Hubs can be in remote or urban areas, but grid constraints (limiting the size of connection) and land availability can pose challenges, especially in the latter. Many hubs have charging facilities dedicated to multiple user types, e.g. taxis, fleet vehicles, buses, private cars. It can be challenging to serve different vehicle modes at one hub if their technical charging needs are unique.

- Delivery of co-location sites
- Assess the opportunity for the colocation of renewables with EV charging infrastructure.

Financial Implications – [We have allocated £8.8 million in ULEV grants for the 2023-24.](#)

[Future budget forecast – in the development of our Strategic Outline Business Case we have made assessments for future public budget requirements to meet the evident need, however the provision of this funding is not yet agreed and will remain challenging given current budget pressures. To maintain the proportion of charging facilities to EV cars on the road will require a substantial increase in infrastructure delivery over the 2020s, with the proportion of funding provided by the private sector rapidly increasing. The graphs below are illustrations of budget requirements based on assumptions in our business planning and are not agreed budget allocations and will in any case change according to the rate of uptake of EV vehicles.](#)



Total public funding (under the ULEVT fund) will remain under pressure but the private sector is expected to contribute circa £825m over this period. Transport for Wales will manage the ULEVT fund going forward, with their ability to offer expertise and project management support. This will be complemented by encouraging local authorities to include staff resource dedicated to delivery in their plans, including better engagement with the commercial sector to ensure this outside investment is realised. ULEVT has been restructured to favour projects which enable rather than compete with private sector plans.

Recommendation 10

The Committee recommends that:

The Welsh Government should work with stakeholders to develop guidelines for best practice in placing public charging infrastructure.

Response: Accept

Welsh Government has developed National Standards for EV Charging Infrastructure in Wales. The online guide details a set of best practice recommendations for safe, accessible, and reliable public electric vehicle charging in Wales. The Standards have been developed for use by public sector organisations, community enterprises and delivery partners involved in the deployment of electric vehicle charging infrastructure in Wales. Except where explicitly stated, the recommendations set out in the National Standards are not legally binding. Instead, they have been developed to form an informative best practice guide to support Wales towards its net zero carbon targets.

The recommendations cover areas including the specifications surrounding charge point design, such as speeds, planning requirements and plug connection types, as well as placement of the charge point within the surrounding environment. They also cover aspects of streetscape, including accessibility and security, energy and connection needs, operational aspects, procurement notes and emerging and future considerations. They provide solutions to avoid any obstruction of footways and safeguard travel routes. It is appreciated that not all the recommendations will be applicable in every situation as each individual charge point needs to respond to local needs and nuances, as well as regional and national policy frameworks. However, the National Standards strive to ensure that, going forward, all users of electric vehicles in Wales are confident in their ability to access charging infrastructure wherever and whenever required.

The National Standards will be published shortly.

Financial Implications – None.

Update: National Standards published and disseminated across LAs and industry.

Electric vehicle charging infrastructure: national standards | GOV.WALES

Recommendation 11

The Committee recommends that:

The Welsh Government should assess the impact of the decision to no longer allow Welsh Government funding to be used to make up the 25% of funding not covered by a grant under the On-Street Residential Charging Scheme (ORCS)

and provide information on discussions it has held with the UK Government on this issue.

Response: Accept

Welsh Government are encouraging local authorities to submit applications to the Office for Zero Emission Vehicle (OZEV) for the On-Street Residential Chargepoint Scheme (ORCS) once the scheme is launched. The purpose of the scheme is to increase the availability of on-street chargepoints in residential streets where off-street parking is not available, thereby ensuring that on-street parking is not a barrier to realising the benefits of owning an EV.

The scheme gives local authorities access to grant funding that can be used to part-fund the procurement and installation of on-street EV chargepoint infrastructure for residential needs. As demand for on-street charging infrastructure grows, Welsh Government expect the private sector to invest more to build and operate a thriving, self-sustaining public network. It is essential that local authorities facilitate commercial models being put in place to ensure networks can continue to expand and improve, to serve residents' needs. Local authorities are encouraged to explore all commercial options available to them when planning EV infrastructure.

ORCS 2023-24 applications will be eligible for 50% ORCS funding and will be required to secure 50% private match-funding. We work closely with the OZEV and agree with them about the need to ensure that private companies are contributing to chargepoints roll-out.

Financial Implications – None.

Update: As the commercial sector grows together with demand for on-street charging, increasingly EVCI can be delivered on street at reduced or minimal cost to LAs. Tfw are supporting LAs already taking this approach and looking to share learnings to roll out demonstrator projects across other areas where off-street parking is limited.

Recommendation 12

The Committee recommends that:

The Welsh Government should explain why the connections Group that it committed to establishing under Action 2 was not established according to the timeline in the Action Plan. The Welsh Government should establish the connections Group within the next few weeks.

Response: Accept in Principle

Welsh Government plan is planning to establish a Connections group in early autumn 2023 that will include Welsh Government, Tfw and Distribution Network Operators initially to scope the remit of the group. At that point, the group will identify what other parties would need to be involve. The overarching purpose of

the Connections group will be to maximise the availability of power for charging vehicles.

Officials have established a good working relationship with both SPEN and National Grid (WPD). It was felt that a robust delivery programme needed to be developed before the Connections Group is established, so that the group could be presented with a clear and agreed direction of travel.

Financial Implications – None.

Update: Connections Group established spring 2023 with encouraging attendance from DNOs, industry and LAs, and a list of actions already providing valuable assistance in delivery across all partners. These have been warmly welcomed by the DNOs. NGED have commented:

'National Grid Electricity Distribution appreciate the opportunity to work closely with stakeholder groups such as TfW. The engagement is very valuable and provides a greater level of certainty for the location and build rates for the provision of electric vehicle charging points across Wales that TfW have a direct influence on. By undertaking this engagement at an early stage, NGED are able to build these projections into our strategic planning process and ensure that we invest in our networks to help all of our customers to achieve their decarbonisation ambitions.'

Recommendation 13

The Committee recommends that:

The Deputy Minister should provide an update on the comments from the Electric Vehicle Association (EVA) Cymru that infrastructure is in place in only 3 of the 21 locations identified by TfW as expecting new infrastructure under Action 3.

Response: Accept

The SRN Rapid project included 11 sites originally (not counting Bala as the pilot site). The 21 figure reflected chargepoints for the original 11 sites and not locations.

TfW have added another 7 sites to the project, which means they are delivering 36 chargepoints on 19 sites (if we add in Bala).

A site in Conwy was removed from the project and replaced with a site in Anglesey.

TfW have already delivered 6 of the 19 locations and on track to deliver the remaining 13 locations this year, most of them by Q3 2023.

Location	Local Authority	Site Live	Updates
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Bala Pilot - Y Grŵn (Pilot Site)	Gwynedd	17/11/2021	Completed - site live Transferred ownership to SWARCO - 22/11/22
Machynlleth - Bank St	Powys	14/07/2022	Completed - site live
Crickhowell - Beaufort St	Powys	27/09/2022	Completed - site live
Newtown - Back Lane	Powys	19/12/2022	Completed - site live
Llandovery - Castle Car Park	Carmarthenshire	23/12/2022	Completed - site live
Llanybydder - CP off Teras-Yr-Osaf	Carmarthenshire	23/12/2022	Completed - site live
Dolgellau - Y Marian Mawr	Gwynedd	26/05/2023	Completed - site live
Porthmadog - Lard-yr-Orsaf	Gwynedd	26/05/2023	Completed - site live
Blaenau Ffestiniog - Diffwys	Gwynedd	26/05/2023	Completed - site live
Ammanford - Carregamman Car Park	Carmarthenshire	Q2 2023	Completed - site live
Corwen Car Park	Denbighshire	Q2 2023	Completed - site live
Welshpool - Church Street	Powys	12/05/2023	Completed - site live
Llandrindod Wells - High Street CP	Powys	19/05/2023	Completed - site live
Porthcawl - Eastern Promenade	Bridgend	Q3 2023 - TBC	Lease to be returned.
Talgarth CP	Powys	Q3 2023 - TBC	Forecast completion still Q3 2023
Newcastle Emlyn - Livestock Market CP	Carmarthenshire	TBC	Car park to be registered before wayleave can clear, then need to build a Transformer.
Craig -y -Nos	Powys - Brecon National Park	TBC	Planning required and 1MW substation to be delivered. Also wayleaves and lease to be completed
Llangurig - Blue Bell	Powys (private landlord)	TBC	Lease to be agreed.
Plas Arthur Leisure Centre	IACC	TBC	Planning required.
Colwyn Bay Princes Drive CP	Conwy		Site removed from the project by Conwy council

Financial Implications – Total project costs: £697,959. Approximately £500k of Ofgem Green Recovery funding towards the DNO costs was received for 8 of the 19 sites.

Recommendation 14

The Committee recommends that:

The Welsh Government should clarify why Action 4 was delivered late and provide an update on when the Standard was completed and whether local authorities have used it since then.

Response: Accept

Refer to response to Recommendation 10.

The development of the National Standards formed part of a portfolio of six complex and ambitious workstreams commissioned by Welsh Government and delivered by Arup between April 2022 and March 2023 that will help TfW, local authorities and other delivery partners accelerate the delivery of charging infrastructure across Wales.

The Welsh Government believes it was important to take the time required to develop strong evidence-base Standards.

Financial Implications – None.

Recommendation 15

The Committee recommends that:

The Welsh Government should explain why the review of building regulations was not delivered in 2022, as committed to under Action 5.

Response: Accept

The requirement to prioritise work meant that the consultation on the amendment of Building Regulations to mandate EV chargepoints was deferred but work has now progressed, and the consultation is due to be launched in summer 2023.

Financial Implications – £100k has been allocated to delivering the Building Regulations consultation.

Recommendation 16

The Committee recommends that:

The Welsh Government should work closely with local authorities and stakeholders to ensure the review of building regulations to support EV uptake is completed as soon as possible. The Welsh Government should provide the Committee with a timeline for completing this work. The Government should consider how the planning system can encourage or require the delivery of charging infrastructure alongside other appropriate developments such as hotels, visitor attractions, and fuelling stations.

Response: Accept

A consultation on the amendment of Building Regulations to mandate EV chargepoints is due to be launched in summer 2023.

Both Planning Policy Wales and Future Wales support the provision of EV chargepoints. Future Wales, which has development plan status, states under Policy 12: Regional Connectivity that: "Where car parking is provided for new non-residential development, planning authorities should seek a minimum of 10% of car parking spaces to have electric vehicle charging points."

Financial Implications – £100k has been allocated to delivering the Building Regulations consultation.

Recommendation 17

The Committee recommends that:

The Welsh Government should explain why a charge point operator working group was not established in 2021, as committed to under Action 6. The Welsh Government should fulfil the commitment in the Action Plan and establish the charge point operator group within the next few weeks. This group is essential to speed up the deployment of the EV charging infrastructure.

Response: Accept in Principle

Welsh Government and TfW agreed that the EV charging Infrastructure Programme (as defined in response to Recommendation 5) was a prerequisite to our formal engagement with a group of CPOs. We expect the majority of the EV charging infrastructure in Wales will be delivered by the private sector (and the UK Government agrees with this position). Our financial case modelling estimates the cost of installing all On-Route and Destination charging infrastructure in Wales to reach £351 million to £1.550 million by 2040. It was therefore crucial that we take the time to establish clear, evidenced-based priorities and actions that will enable public and private sector delivery partners to accelerate the delivery of infrastructure across Wales.

The Infrastructure Programme is now completed and TfW, with support from Welsh Government, will set up a CPO Working group in the summer 2023.

Financial Implications – None.

[Update: CPO working group now set up as detailed above.](#)

Recommendation 18

The Committee recommends that:

The Committee would like an update on the development of the proposal for an in-house service desk to facilitate all aspects of EV charge point delivery and

management, including whether it will be reflected in a revised Action Plan or associated KPIs.

Response: Accept

TfW's capacity was increased in September 2022 to oversee the implementation of the in-house service desk. TfW met with each local authority to gain a greater understanding of their EV charging infrastructure plans, issues and support requirements.

The service desk is operational and provides bilingual call out support to public and private sector EV charging delivery partners, enabling them to respond in Welsh to queries from users.

Through the service desk, TfW organises and delivers webinars on issues and topics raised by delivery partners. The first webinar on 14th April 2023 delivered a presentation on [the National EV Insight & Strategy \(NEVIS\) tools](#). This resulted in strong positive feedback which led to the decision to enable local authorities and NHS organisations to access the NEVIS tools through the service desk. The Insights toolkit provides data analysis that ensure that delivery partner organisations are equipped to deliver a clear vision, strategy and delivery plan for EV infrastructure. The Knowledge Repository toolkit will equip and resource local authorities and NHS organisations with guidance and key information for each stage of the EV infrastructure delivery process (developing strategy; delivering planning; procurement; mobilisation & installation; and operations). The service also provides a discussion group platform for sharing experience and topic ideas, encouraging collaboration and contribution.

Financial Implications – None.

Update: [All the above tools continue to be available and are continuously developed for the benefit of commercial and public sector partners.](#)

Recommendation 19

The Committee recommends that:

The KPI for Action 7 – 'Increase public awareness' - should be revisited to make it more granular and measurable.

Response: Accept

Welsh Government will review the KPI for Action 7, as part of our wider KPI review (refers to our response to Recommendation 7).

Financial Implications – this work will be accommodated within existing budgets.

Update: [Benefits of EVs communicated to users via the Climate Action Wales \(Green Transport Choices\) website. CPO group gave talks during the Wales Climate Week 2023.](#)

Recommendation 20

The Committee recommends that:

The Deputy Minister should clarify why Action 8 – ‘Encourage investment opportunity and innovation’ - was not delivered on time and take steps to progress it within the next six months.

Response: Accept

Welsh Government believes it was essential to develop a credible delivery programme and preferred network before engaging with delivery partners to discuss investment opportunities. This work took Welsh Government approximately 12 months to deliver.

Welsh Government is bringing together the Transport Decarbonisation and Business & Regions teams to explore and deliver private sector investment and innovation opportunities in the field of EVs and EV charging.

Welsh Government is building a new National EV Charging Procurement Framework that will help the development of supply chain, innovation and investment opportunities across Wales. The Framework is scheduled to be ready by the end of the summer.

TfW are working with local authorities and private sector to identify and implement innovative solutions and investment opportunities that will help resolve key issues that are currently hindering progress – e.g. on-street charging solutions.

Financial Implications – None.

Update: TfW are working with on-street charging providers to identify and disseminate information on emerging new technologies and commercial models for delivery.

Recommendation 21

The Committee recommends that:

The Deputy Minister should provide a detailed update on the progress made against Action 9 and the tool it has commissioned to assess the opportunity for the co-location of renewables and EV charging infrastructure.

Response: Accept

Welsh Government has commissioned Arup to design and create a modelling tool to assess the opportunity for the colocation of renewables with EV charging infrastructure (referred to as the ‘colocation tool’). The tool is ready and is designed for site level work which may sit within broader Smart Local Energy Systems (SLES) or Local Area Energy Plans (LAEPs).

The purpose of the tool is to appraise opportunities for the use of renewables within EV charging sites. For a given site, the tool will compare:

- Connecting the site to the electricity grid with no renewables.
- Using wind and solar canopy with any excess renewables exported to the grid.
- Using ground mounted solar and solar canopy with any excess renewables exported to the grid.
- Using wind and solar canopy with battery storage.
- Using ground mounted and solar canopy with battery storage.

The tool can also be used to compare different sites.

The colocation tool is designed to improve understanding around the following points:

- The types of EV charging sites most suitable for the colocation of renewables.
- The renewable and storage configurations most suitable for colocation with EV charging.
- High-level indication of the comparative costs of colocation.
- Where additional financial support may be required to support installation of colocation sites.

Installing behind-the-meter renewables at EV sites has the potential benefits of:

- Providing zero or low carbon electricity to EVs
- Reducing demand on electricity networks, particularly in constrained areas

Financial Implications – None.
