

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

March 2023



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

March 2023



# About the Committee

The Committee was established on 23 June 2021. Its remit can be found at:  
[www.senedd.wales/SeneddClimate](http://www.senedd.wales/SeneddClimate)

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Current Committee membership:



**Committee Chair:  
Llyr Gruffydd MS**  
Plaid Cymru



**Janet Finch-Saunders MS**  
Welsh Conservatives



**Huw Irranca-Davies MS**  
Welsh Labour



**Delyth Jewell MS**  
Plaid Cymru



**Jenny Rathbone MS**  
Welsh Labour



**Joyce Watson MS**  
Welsh Labour

The following Member attended as a substitute during this inquiry.



**Heledd Fychan MS**  
Plaid Cymru

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## Chair's foreword

Wales has always been a land of pioneers, from the industrial revolution to the discovery of the Higgs boson. But when it comes to electric vehicles, Wales is lagging behind. Our report on the Welsh Government's strategy for promoting EVs has revealed a disappointing lack of progress, broken promises, and a worrying lack of ambition. As a Committee, we believe urgent action is needed to address these issues and put Wales back on track in the transition to a greener future.

The Welsh Government's October 2021 'Action Plan' aimed to increase the uptake of EVs in Wales and reduce carbon emissions. However, Wales currently has the lowest number of public charging devices and rapid/ultra-rapid devices per 100k population in Great Britain.

As a Committee, we are deeply committed to supporting the Welsh Government in achieving its climate targets and creating a greener Wales. However, the lack of progress on EVs is unacceptable. As a Committee, we are disappointed that two years on from the 2021 Action Plan, the Welsh Government has failed to even start to make progress on several key actions. The Welsh Government must urgently prioritise the delivery of the Action Plan to accelerate the transition to electric vehicles. A robust EV infrastructure in Wales would have significant benefits, such as reducing air pollution, supporting the local economy, and helping Wales achieve its climate targets.

Our report provides a clear roadmap for improving Wales' EV infrastructure and accelerating the transition to electric vehicles. We hope the Welsh Government will heed our recommendations and urgently address the broken promises and inadequate progress in promoting EVs in Wales.

We want to express our sincere thanks to everyone who contributed to our inquiry. We are grateful for the valuable insights, expertise, and opinions shared by stakeholders, experts, and members of the public who engaged with us throughout the inquiry.



**Llyr Gruffydd MS**

Chair, Climate Change, Environment, and Infrastructure Committee

## Recommendations

**Recommendation 1.** 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..... Page 16

**Recommendation 2.** 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..... Page 16

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**Recommendation 4.** 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..... Page 19

**Recommendation 5.** 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..... Page 19

**Recommendation 6.** 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. .... Page 19

**Recommendation 7.** 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. .... Page 19

**Recommendation 8.** 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. .... Page 27



**Recommendation 9.** 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..... Page 27

**Recommendation 10.** The Welsh Government should work with stakeholders to develop guidelines for best practice in placing public charging infrastructure. .... Page 27

**Recommendation 11.** 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. .... Page 27

**Recommendation 12.** 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. .... Page 27

**Recommendation 13.** The Deputy Minister should provide an update on the comments from EVA Cymru that infrastructure is in place in only 3 of the 21 locations identified by TfW as expecting new infrastructure under Action 3. .... Page 27

**Recommendation 14.** 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. .... Page 32

**Recommendation 15.** The Welsh Government should explain why the review of building regulations was not delivered in 2022, as committed to under Action 5. .... Page 32

**Recommendation 16.** 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. .... Page 32

**Recommendation 17.** 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.

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**Recommendation 18.** 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. ....

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**Recommendation 19.** The KPI for Action 7 - 'Increase public awareness' - should be revisited to make it more granular and measurable. ....

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**Recommendation 20.** 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. ....

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**Recommendation 21.** 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.

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# 1. Introduction

**1.** The Committee on Climate Change's (CCC) advice report: The path to a Net Zero Wales (2020) notes surface transport is Wales' third largest emissions source. Its progress report: Reducing emissions in Wales (also published in 2020) describes surface transport emissions as 'virtually flat' since 1990. Car emissions fell 9% between 2008-18, while vehicle kilometres increased 13%, "reflecting a real-world efficiency improvement".

**2.** The CCC highlights the importance of Electric Vehicle (EV) transition but says this alone isn't enough: Decarbonising emissions from Wales' vehicles will require take-up of low-carbon technologies, low-carbon fuels and efficiency improvements for petrol and diesel vehicles, along with behaviour change to reduce travel demand and shift journeys onto lower- carbon modes of transport.

## The Committee's approach

**3.** On 11 January 2023, the Committee held a one-day inquiry into the Welsh Government's EV charging strategy and action plan. The Committee received oral evidence from:

- Malcolm Bebbington, Head of Future System Strategy - SP Energy Networks
- Dr Paul Bevan - Electric Vehicle Association (EVA) Cymru
- Professor Liana Cipcigan - Electric Vehicle Centre of Excellence, Cardiff University
- Olly Craughan, UK Head of Sustainability - DPD Group
- Benjamin Godfrey, Director of Distribution System Operator - National Grid
- Dr Neil Lewis, Manager - Carmarthenshire Energy; TrydaNi; Charge Place Wales Ltd, and the Community Energy Sector's Car Club
- Geoff Ogden, Chief Transport Planning and Development Officer - Transport for Wales
- Roisin Willmott, Director of Wales and Northern Ireland and Planning Aid England - Royal Town Planning Institute (RTPI)

- David Wong, Senior Innovation and Technology Manager - The Society of Motor Manufacturers and Traders (SMMT) EV Group

4. Written submissions that supported the Committee's work are available on the Committee's [internet pages](#).

## EV policy in Wales and the UK

### UK policy

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5. In July 2021, the UK Government published Decarbonising Transport: A Better, Greener Britain, which includes commitments to ban the sale of new petrol and diesel-only cars and vans by 2030. All new cars and vans must be zero tailpipe emissions by 2035. A year later, the UK Government consulted on proposals to require all new L-category vehicles (mopeds, motorcycles etc.) to be zero emission by 2035.

6. The UK Government's EVs Charging Infrastructure strategy (October 2022) includes 6 "strategic pillars" and says the UK Government "will continue to work closely with the Scottish and Welsh Governments as they take forward their strategies".

7. The UK Government, through its Office for Zero Emission Vehicles (OZEV), provides grants and funding to support the uptake of EVs and the development of charging infrastructure. Some funding applies UK-wide, like the On-Street Residential Chargepoint Scheme. Other funding sources, like the Local EV Infrastructure (LEVI) pilot funding, are England only.

8. An EV Chargepoint Grant opened on 1 April 2022, providing up to 75% towards the cost of installing EV smart charge points at domestic properties across the UK. A Workplace Charging Scheme is also available.

### Welsh Government policy

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9. The Welsh Government's Net Zero Plan acknowledges "the primary policy levers supporting the uptake of EVs in Wales are retained by the UK Government." However, several Welsh Government policies underpin EV charging infrastructure rollout.

10. The Net Zero Plan commits to "accelerate the uptake of zero-emission cars and vans" and describes this as "one of the most important actions" needed to

achieve Wales' net-zero targets. The Net Zero Plan references the Welsh EV charging strategy and action plan.

**11.** Planning Policy Wales (2021) says Wales should ensure transport infrastructure adapts to innovations like EVs and make progress on zero-emission road transport. The National Development Framework, Future Wales: the national plan 2040, says planning authorities should take “a strategic approach” to EV charging and “where appropriate develop policies in their development plan and specific local requirements”.

**12.** Llwybr Newydd: the Wales transport strategy 2021 provides a framework for transport decarbonisation. The Welsh Government consulted on the new National transport delivery plan: 2022 to 2027 during autumn 2022. Llwybr Newydd supports the vision for EV charging, restates the commitment to amend building regulations, and reflects the targets set in the EV charging action plan.

## 2. The EV Charging Strategy

**13.** The Welsh Government published the EV Charging Strategy for Wales in late 2021. It notes that Wales has the lowest EV uptake in Great Britain and the lowest number of charge points. It says engagement with existing and prospective EV owners shows “an overall lack of charging facilities and issues with the quality of the charging experience have been key concerns”. The strategy's vision is 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.”*

**14.** In its joint written submission with Transport for Wales (TfW), the Welsh Government said its focus during the first year since the publication of the EV Charging Infrastructure Strategy and its accompanying Action Plan “has been on setting out how the Strategy and Action Plan will be delivered in practice”. It explained, “A key element of this work has been to consider the case for Welsh Government intervention to maximise the potential of the EV charging market”. The Welsh Government said that:

*“we, as the Welsh Government, alongside TfW and the local authorities, have delivered essential planning and scoping work and invested in strategically located charging infrastructure in the first year of publishing the Strategy and its Action Plan. Our actions to date will put the public sector and private sector in a good stead to deliver the acceleration of EV charging infrastructure rollout.”*

**15.** In its written submission, the Welsh Government said that its “immediate tasks” for the next six months include:

- The development of a “detailed deliverability plan for the next 1-2 years, “setting out the critical path, key tasks and activities, as well as funding requirements and key milestones”;
- “to engage with public and private sector organisations to encourage and support the accelerated delivery of charging infrastructure across Wales, and to identify the likely public sector interventions”;
- “to form a public-private sector working group; and

- to establish a governance structure”.

**16.** The Welsh Government said it would “ensure progress is monitored and evaluated frequently in the short term to meet the aims of the Strategy and Action Plan. This will ensure it remains relevant in this rapidly developing market”.

### **Is the strategy still fit for purpose?**

**17.** EVA Cymru supported the strategy, which recognised the vital role EVs will play in the decarbonisation of transport and set out a positive statement of intent. However, it suggested that the strategy should be revisited in light of changes since publication in patterns of EV usage and the growth in commercial EVs.

**18.** The WLGA believed the strategy had helped identify the state of EV charging infrastructure and outlined what was necessary to improve it. However, it agreed with EVA Cymru that several significant changes, including the reduction of incentives for purchasing EVs, necessitated reconsidering the strategy.

**19.** EVA Cymru said that the vision set out in the strategy was good, but the question of whether it can be achieved is trickier, and drivers cannot be confident today in traversing across Wales. Malcolm Bebbington, from SP Energy Networks, stated that the timescales for achieving the strategy's 2025 vision are challenging. Benjamin Godfrey, from National Grid, agreed that the strategy is ambitious but pragmatic. According to Geoff Ogden from TfW, there are indications that user confidence is increasing, with positive feedback coming through sources such as Zap-Map. However, he also agreed that more could be done to create confidence, such as sharing good news stories and visibility of the deployment of charging infrastructure.

### **What is missing from the strategy?**

**20.** Olly Craughan of DPD Group discussed the strategy's lack of consideration for commercial vehicles. DPD Group is decarbonising its fleet quickly and had nearly 3,000 EVs across the UK. The RHA also strongly supported the aim to decarbonise commercial vehicles but noted there was no reference to lorries or coaches in the strategy.

**21.** The WLGA highlighted that whilst equality issues are mentioned in the strategy, they are not explored in depth. The availability of EVs to many households will be limited until the second-hand market grows, and home charging tends to benefit higher-income households with driveways and garages. Dr Neil Lewis stated that 40% of people don't have off-road parking, which makes

it difficult for them to access charging for their EVs at an affordable rate. Professor Cipcigan also felt strongly that the strategy should better reflect the need to deliver equality and social justice.

### **Is there sufficient capacity in TfW and local authorities to deliver the strategy?**

**22.** According to the WLGA, local authorities face several challenges, particularly in transport. In addition to maintaining the highways and associated structures, local authorities are responsible for active travel projects, implementing a 20mph speed limit, collaborating on bus service reform and transport integration, and managing winter services. Local authorities have limited resources, and recruiting staff with the required skills is difficult, especially in the face of higher wages in the private sector and the loss of staff to TfW as it expands.

**23.** Geoff Ogden, from TfW, stated that he believed there were no significant issues with the powers and resources available to TfW and local authorities. However, he noted that it was important for all parties to work together collaboratively. He referred to a new operating model at TfW, which included a team dedicated to EVs, as a positive step.

### **Our view**

It is possible to say that, based on the ratio of EV users to chargers, Wales is progressing well. But we know the starting point is extremely low, with very few users on the road in Wales. In its strategy, the Welsh Government states the number of fast chargers needed across Wales will increase to between 30,000 to 55,000 by 2030. At least a tenfold increase in chargers is required to meet this target.

Nothing in the strategy or Action Plan suggests that the Welsh Government has a grip on this issue or how the strategy can deliver anything near the numbers required. Of course, we recognise that the private sector will drive the rollout of charging points, but the Welsh Government has an important leadership role to play. It can clearly do better in this role. For example, five of the nine Actions in its Action Plan were not delivered. During our inquiry, we heard time and again from key stakeholders in the public and private sectors that they were in the dark about progress and were waiting for something to happen. This is not acceptable.



The Committee is concerned that the strategy may fail to achieve its vision that, by 2025, all users of electric cars and vans in Wales will be confident they can access EV charging infrastructure when and where they need it. While several witnesses expressed optimism about the strategy in principle, others pointed out that several factors must be addressed to increase driver confidence. These include access to charging points, the resilience and accessibility of those points, and the availability of information about the chargers. One of the critical challenges facing the strategy is the need to adapt to changing patterns of EV usage and the growth of commercial EVs. Although the strategy was useful when it was published, technology in this policy area is moving so quickly that it is already out of date. A plan for one or two 50kw rapid chargers on the SRN every 20 miles may have been worthwhile when the strategy was published, but it is now inadequate.

The Committee notes that the strategy does not include freight and commercial vehicles or bus and coach. We are generally satisfied with the scope of the EV charging strategy and believe that the transition for other types of vehicles will comprise particular challenges. An EV charging strategy that focuses on cars and vans is a good starting point, and we expect it to broaden its scope in the coming years as the charging strategy develops. In the meantime, other policy documents must ensure that a focus is kept on decarbonisation for other types of vehicles. We note that the roads review said that a plan for freight is being developed. We believe decarbonisation should be considered as part of the plan. The National Transport Delivery Plan mentions a Transport Decarbonisation Programme, which will support the decarbonisation of buses, and taxis and private-hire vehicles. We would be grateful for an update on the development of this work.

Local authorities face significant challenges in implementing the Welsh Government's EV strategy. A lack of resources and difficulties recruiting staff with the required skills have resulted in less progress than is desirable. This makes the role of TfW and effective joint-working and collaboration with other partners even more critical. We are disappointed by the lack of progress against actions in the Action Plan that would facilitate such working methods. We will discuss this in detail in later chapters.

Several witnesses noted that the strategy needs to address questions about equality and social justice. We agree that the strategy should be reconsidered with these issues in mind, particularly considering the Welsh Government's commitments to ensuring a "just transition" to net zero.

**Recommendation 1.** 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.

**Recommendation 2.** 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.

**Recommendation 3.** The Welsh Government should ensure that the EV Charging Strategy takes into account questions of equality and social justice.

### 3. The EV Action Plan

**24.** The EV Charging Strategy for Wales Action Plan was published in October 2021 and sets out actions to be implemented up to 2030 with “targeted action” continuing “depending on the prevailing conditions at the time”. It describes three outcomes, each with actions required to achieve the strategy’s vision. The specific outcomes and their associated actions are considered in detail in chapters 4-6.

**25.** The WLGA said that the Action Plan had set out “a fairly ambitious list of targets, with KPIs, to try and bring greater coordination to the roll out of EV charging points which was happening in an ad hoc way, driven by commercial considerations”. It felt that considerable progress had been made against several of these actions, but “there is still much to be done”. Dr Neil Lewis believed the Action Plan was a worthy document when launched but needs to be updated.

#### The Action Plan’s Key Performance Indicators (KPIs)

**26.** Professor Cipcigan and EVA Cymru agreed that the Action Plan would benefit from developing more detailed KPIs or intermediate targets. Professor Cipcigan suggested that clear sub-actions with associated deadlines could support the overall KPI delivery. These could include:

*“sub-actions for local authorities to plan charge points installation where needed and provide suitable tools and expertise to assist them in achieving these plans.”*

**27.** Geoff Ogden of TfW said the KPIs are currently appropriate but must be revised to look to the future. EVA Cymru believed the KPIs should “be revisited to ensure they reflect the rate of growth of EVs and the urgency of transport decarbonisation required to meet Wales’ Net Zero aspirations”.

**28.** EVA Cymru also encouraged the Welsh Government to consider a more open approach to highlighting the progress against the strategy and the Action Plan.

#### Our view

We were disappointed that the Welsh Government had completely failed to deliver many of the Actions in the Action Plan and by the lack of progress towards achieving others.

Five of the nine actions were not delivered according to the timescales in the Action Plan. No explanation has been given for why the actions were not delivered on time. In several cases, the Welsh Government has indicated in written evidence that it will *now* consider whether or how to progress certain actions, months after the deadline for them to be delivered has passed. The lack of progress undermines the credibility of the Action Plan and calls into question the Welsh Government's commitment to it.

The Deputy Minister should explain why there has been so little progress against the Action Plan. If the Deputy Minister believes that any of the Actions or KPIs are no longer fit for purpose, he should bring forward changes to the Action Plan and new KPIs.

We note the Deputy Minister has said that a "detailed deliverability plan for the next 1-2 years, "setting out the critical path, key tasks and activities, as well as funding requirements and key milestones" will be prepared in the first half of 2023. We are concerned that the instinct of the Welsh Government is to create another plan or strategy rather than focusing on delivery. We can see this from the lack of progress on the Action Plan. The Welsh Government must now focus on delivery. The Deputy Minister should clarify how the "deliverability plan" will relate to the action plan.

We believe that the Welsh Government should address, as a matter of urgency, the five actions they failed to meet. It should then review the Action Plan, including the remaining four actions, and consider what new measures need to be included in a new iteration of the Plan. This should happen within six months of the publication of this Report. The work should also be used to inform the "deliverability plan".

One specific problem identified by contributors is the lack of granularity in the KPIs. This makes it difficult to measure progress, particularly for actions one and seven, which are to be delivered in the longer term. To address this issue, the Welsh Government should develop more specific KPIs and set clear sub-actions with associated deadlines to support overall KPI delivery.

There is a lack of transparency about the progress made against the strategy and the Action Plan. The strategy contains a commitment that the KPIs in the Action Plan "will be monitored and reviewed annually to help track progress towards better charging infrastructure". There has been no sign of a review of the KPIs. There has yet to be any information published about progress against the KPIs other than in the written evidence provided by the Welsh Government

to this Committee, which would not have been published had this inquiry not been undertaken. The issue of transparency needs to be addressed as a matter of urgency.

We expect the Welsh Government to deliver on its commitment to review the KPIs annually. The outcome of the review should be published. Furthermore, we expect the Welsh Government to publish regular updates on progress against the KPIs.

**Recommendation 4.** 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.

**Recommendation 5.** 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.

**Recommendation 6.** 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.

**Recommendation 7.** 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.

## 4. Action Plan Outcome 1 - Total charging provision

### Action 1 - Charging infrastructure

- 29.** Wales has the lowest number of public charging devices and rapid/ultra-rapid devices per 100k population in Great Britain.
- 30.** David Wong, from the SMMT EV Group, stated that there are approximately 2,400 chargers in Wales, 6.4% of the total 37,000 chargers in the UK. He believed that Wales was performing better than the UK average in terms of the ratio of chargers to users. However, he acknowledged that the current EV ratio in Wales is very low compared to other parts of the UK, with about 11,500 battery electric vehicles and 7,800 plug-in hybrids as of September 2022. He noted that the UK had reached a million plug-in registrations by the end of 2022.
- 31.** EVA Cymru stated that the Welsh Government's strategy does not align with the expected growth in demand for EVs. The strategy, which calls for one single rapid charge point every 20 miles on the strategic road network, does not provide sufficient assurance for EV drivers that there will be enough chargers in place when they need them. EVA Cymru suggested re-evaluating the strategy to see if fewer, more reliable hubs with faster chargers would better serve the demand.
- 32.** The WLGA commented that while progress had been made in rolling out charging points, there had been delays in connecting them to electricity supplies and concerns over reliability, payments and access issues.
- 33.** David Wong said that while Wales is not far behind its target of seven to 11 cars per charger by 2025, the focus should be on ensuring that the chargers are in the right places and of the correct type.
- 34.** DPD was concerned about the lack of progress in expanding the UK's public EV charging infrastructure. The construction of more electric hubs throughout Wales' Road network must be a top priority, as this would allow for the use of heavier vehicles for longer journeys.
- 35.** According to the Institution of Civil Engineers, some progress was being made against this Action, with EV charging points beginning to appear on the trunk and local road networks at railway stations, rest areas, petrol refilling stations, supermarkets, farm shops, and prestige hotels. However, there were

concerns about the availability of chargers, their cost, and the time it takes to charge a battery.

**36.** SP Energy Networks said it would like to see plans within its geographical licence area at an early stage, such as for the rollout of EV charge points. This could be reflected in its investment plans, “ensuring that we are not a blocker to progress”.

**37.** The WLGA emphasised that EV demand should not be based solely on current ownership levels and that areas serving low-income communities should not be overlooked. While providing charging points is important, it should not undermine the objective of increasing active travel and reducing car usage.

**38.** SP Energy Network said it had prepared forecasts across various scenarios for EV use up to 2050. According to its projections, the area of Wales it serves will see a significant increase in EVs to 99-284,000 by 2030. It explained that its network planning process considers the growth of EVs by forecasting their growth until 2050 using legislative targets, stakeholder input, and credible forecasts. To assist with more localised planning, the company had developed EV-specific forecasting tools, such as the innovation project “EV-Up,” which uses spatial, demographic, and socioeconomic data to forecast the likelihood and timing of EV adoption.

### **Charging infrastructure and land-use planning**

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**39.** The Institute of Historic Building Conservation recognised the need for adequate levels of charging infrastructure but emphasised that care should be taken in the historic built environment to ensure that the infrastructure changes have due regard to context and quality.

**40.** Living Streets Cymru cautioned that infrastructure to accommodate EVs should not encroach upon public spaces that are supposed to be for use by people for other purposes, such as leisure.

**41.** The British Parking Association recommended that there should be a greater emphasis on locating suitable land to build multi-modal transport hubs with EV charging facilities. These hubs can then be outfitted with energy generation (and storage), micro-mobility vehicles, and secure cycle storage, all of which contribute to the Welsh Government's goal of modal shift.

**42.** According to the WLGA, the Welsh Government and TfW had worked closely with local authorities to promote funding available via the UK Government's On-

Street Residential Charging Scheme (ORCS) in 2022. The Welsh Government had helped successful bids from several local authorities by meeting the 25% match funding requirement. Consultants were brought in to provide software that helped identify potential eligible locations, and local authorities used local knowledge to select specific sites.

## Action 2 - Optimisation of energy provision

**43.** Electricity network operators, regulated by the UK Government and Ofgem, are responsible for power supply. The Welsh Government's strategy and Action Plan note the need to work with Distribution Network Operators (DNOs) and Ofgem. National Grid and SP Energy Networks are the DNOs operating in Wales, covering south and north Wales, respectively.

**44.** The Action Plan discusses working with DNOs and others to "maximise the availability of power for charging vehicles". It commits to establishing a "connections group" to report in the "current financial year" (2021/22).

**45.** According to the WLGA, grid capacity is a significant issue across Wales, particularly in rural areas. Local authorities have reported waiting months for DNOs to connect their charge points, resulting in substantial delays.

**46.** EVA Cymru believed the broader energy infrastructure is both a facilitator and a barrier to the development of EV charging infrastructure. Charge Point Operators had been unable to invest due to a lack of grid capacity in some instances. On the other hand, the market has been able to invest in significant amounts of charging infrastructure where grid capacity exists. This had led to an "uneven distribution of charging capacity across Wales". EVA Cymru said, "Whilst the longer term systemic issues need to be addressed, we would encourage Welsh Government to explore opportunities to continue to progress this action". This could be accomplished through localised interventions - such as supporting the deployment of battery-augmented charging in key rural locations on major routes and incentivising charging hubs alongside renewable energy generation projects.

**47.** According to Malcolm Bebbington from SP Energy Networks, significant investments are being made to create additional grid capacity, including a green recovery programme to deliver 21 MW of EV chargers on 25 trunk roads, which is due to be commissioned this year. According to Benjamin Godfrey from National Grid, one of the critical challenges and opportunities for the distribution network is to link the right amount of generation to bring on new demand, such as for EVs.



He highlighted National Grid's experience in south Wales, where it connected over 300 MW-worth of connected capacity every year and brought in new capacity.

**48.** SP Energy Networks agreed that network capacity is crucial in enabling the EV charger rollout and that the network landscape is changing quickly. To accommodate expected growth in EVs, SP Energy is investing in the capacity and capabilities of the network. The RII0-ED2 price control (1 April 2023 to 31 March 2028) will be a critical time, when the company aims to invest £615m to create additional capacity and tools for its customers. It said the investment will help enable up to 250,000 EVs on its Welsh network by 2028.

**49.** Benjamin Godfrey, from the National Grid, talked about the company's recent price control determination and their submitted business plan that sought £6.7 billion to invest in the network to provide more capacity for EVs and heat pumps in the UK. He stated there was uncertainty about when the capacity would be required and in which locations, which led to the regulator bringing down the level of investment. Benjamin Godfrey expressed the need to continue working with local authorities to develop local area energy plans and provide a consistent understanding of investment forecasts.

**50.** The WLGA suggested that generating renewable energy locally is an attractive option as it reduces the loss of energy experienced in long-distance transmission, creates local economic opportunities, and guarantees that the electricity used for EVs is coming from green sources. However, the connection costs to the grid can undermine the viability of more remote sites.

### **Action 3 - Enhanced rapid charging provision**

**51.** The Welsh Government and Tfw have committed to deliver rapid charging every 20 miles on the Welsh strategic road network by 2025. Sites will be identified using "analysis of evidence and spatial data".

**52.** EVA Cymru said that a lack of rapid charging on key routes across Wales continues to represent the most significant barrier to the uptake of EVs:

*"Since the strategy's launch, we have seen just 53 new Rapid Chargers in key locations across Wales. Whilst this rate of growth is the highest in the UK (33% in comparison to 22% in England, for example) it is from a very low base and is reflective of historic under-investment. Rapid charging infrastructure*

*remains far lower in Wales than the rest of the UK (1 per 15,000 people in Wales versus 1 per 11,000 people at the UK level)."*

**53.** EVA Cymru welcomed TfW's plans to add new rapid charging infrastructure in under-served locations but was concerned that the programme is moving too slowly and is unambitious. They explained:

*"Of the 21 locations published by Transport for Wales as expecting new infrastructure under this action only 3 are in place."*

## **Evidence from the Welsh Government and Transport for Wales**

**54.** On Action 1, the Welsh Government said it had "collaborated closely with Transport for Wales, Local Authorities and the private sector to start delivering a baseline infrastructure across Wales, and to identify future opportunities that will support different charging needs".

**55.** The Welsh Government said it had "invested just over £26 million in the delivery of charging infrastructure at public locations in Wales since 2019" but recognised that "Significant further investment will be required to meet projected levels of EV uptake and demand". Since the publication of the EV Charging Strategy in 2021, the installed charging infrastructure in Wales had increased from 21 charge points per 100,000 residents to 39 charge points per 100,000 residents.

**56.** On Action 2, the Welsh Government said that, along with TfW and local authorities, it had been "collaborating with the Distribution Network Operators (SP Energy Network and National Grid) to maximise the availability of power for EV charging".

**57.** The Welsh Government and TfW said they have also collaborated with the DNOs in developing tools "that model the electricity network and its constraints and help pinpoint constraints on the grid where investment is most likely to lead to significantly improved opportunities for EV infrastructure development".

**58.** The Welsh Government said that:

*"Going forward, we will look at the creation of a connections group that can help maximise the availability of power for charging EVs even further; and help realise the benefits as described in the Action Plan."*

**59.** Finally, in relation to Action 3, the Welsh Government said that TfW had been leading a project to deliver 17 rapid EV charging points on the Strategic Road Network. This was 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”. Selected sites were “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”.

**60.** The Welsh Government said, “Completion of this project in the first quarter of 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.” It concluded:

*“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.”*

## Our view

### **Action 1 - Charging infrastructure**

We were told that the Welsh Government is progressing well towards achieving its target of seven to 11 cars per charger by 2025. However, we agree with contributors that the most important indicator of performance is that the chargers that have been deployed are in the right place, are the right type, and are working correctly.

As we set out earlier in this report, the Welsh Government's forecasting assumes that the number of fast chargers needed across Wales will increase to between 30,000 and 55,000 by 2030. Nothing in this Action explains how infrastructure provision will be ramped up in the next seven years to meet the expected demand. In Chapter 2, we recommended that the KPI for Action 1 should be revisited to be more granular – it should include targets for each year. This will enable progress to be monitored and ensure the approach is more transparent.

The Action Plan states that the “Ultra Low Emissions Vehicle Transformation Fund (ULEVTF) will be used to kick-start initiatives and promote collaboration within delivery groups.” The “Wales infrastructure investment strategy: project pipeline December 2022” confirms that the ULEVTF has been allocated around £35m for 2023-24 and 2024-2025. We would be grateful for further details of the

specific actions in relation to EV charging infrastructure that the ULEVTF will be used to fund.

The evidence suggests that while adequate levels of charging infrastructure are needed, care should be taken in the historic built environment. The Welsh Government should work with stakeholders to develop guidelines for best practice in placing public charging infrastructure.

The Welsh Government has worked closely with local authorities to promote funding available via the UK Government's On-Street Residential Charging Scheme (ORCS) in 2022. We note that Welsh Government funding will no longer be able to be used to make up the 25% of the funding not covered by a grant under the scheme. We would be grateful for further information from the Deputy Minister about discussions with the UK Government about this issue. The Deputy Minister should provide details of any assessment the Welsh Government has made of the impact of this decision.

### **Action 2 - Optimisation of energy provision**

A lack of grid capacity continues to be a significant issue, particularly in rural areas. This has resulted in substantial delays in connecting charge points and an uneven distribution of charging capacity across Wales.

Action 2 commits to "Establishing a connections group to support cross-sector coordination and create synergies across infrastructure investment programmes", and the KPI is for the Group to report in the financial year 2021/22. The Group was not established, and the Welsh Government's paper says only that it will "look at" creating a group which should have reported two years ago. The Welsh Government should have been more forthcoming in explaining in its written submission why this Action had not been delivered. The Deputy Minister should now establish the Group in the next few weeks and provide the Committee with an explanation for the delay to date.

This Action is essential as it will enable a longer-term understanding of forecast demand, which can be reflected in the investment plans of DNOs. The Welsh Government should fulfil the commitment in the Action Plan and establish the connections group within the next few weeks.

### **Action 3 - Enhanced rapid charging provision**

The Welsh Government told the Committee that the first quarter of 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”. There is still a considerable amount of work to be done to achieve the target in the Action Plan. We would be grateful for confirmation from the Deputy Minister that this target is on track to be achieved.

Although we welcome this, contributors to our inquiry suggested that emphasis should be given to multi-rapid-charging hubs delivered at key strategic locations on the road network. The Committee notes that the Welsh Government considers this a “baseline charging infrastructure”. As this Action is due to be delivered two years ahead of the target, it should be updated to ensure it is fit for purpose and reflects demand.

We note the comments from EVA Cymru that, of the 21 locations identified “by Transport for Wales as expecting new infrastructure under this action only 3 are in place”. We would be grateful for an update from the Deputy Minister on progress on this issue.

**Recommendation 8.** 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.

**Recommendation 9.** 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.

**Recommendation 10.** The Welsh Government should work with stakeholders to develop guidelines for best practice in placing public charging infrastructure.

**Recommendation 11.** 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.

**Recommendation 12.** 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.

**Recommendation 13.** The Deputy Minister should provide an update on the comments from EVA Cymru that infrastructure is in place in only 3 of the 21 locations identified by TfW as expecting new infrastructure under Action 3.

## 5. Action Plan Outcome 2 - Quality outcomes

### Action 4 - Welsh quality standards

**61.** The Welsh Government has said it will seek to influence the UK Government's charging standards and supplement them where necessary. Action 4 commits to deliver a “National Quality Standard to be used in public sector procurement by the end of 2021”.

**62.** EVA Cymru broadly supported the objective of developing a Welsh Quality Standard. It recognised the need for alignment with UK-level National Quality Standards and, therefore, the dependency on progress at a UK level. However, it encouraged the Welsh Government to engage on “Wales-specific requirements (such as bilingual signage, customer experience, and support) that do not compromise system and data interoperability or discourage investment in Wales”.

### Action 5 - Regulatory facilitation

**63.** The Action Plan commits to reviewing building regulations to support home and workplace charging provisions. The Action Plan discusses a review of permitted development rights. The KPI in relation to this Action is for a “review of policy and regulations by 2022 and updates made where appropriate”.

**64.** The WLGA noted that for England only, the 2021 edition of Part S of the Building Regulations 2010 has already set out requirements for infrastructure for EV charging. EVA Cymru said that building regulations in Wales currently lag behind both Scotland and England in terms of requiring EV charging in both domestic and commercial properties:

*“In Scotland, a standard (7kW) charge point must be provided for each residential building with at least one parking space and a ratio of 1:10 for every non-residential building. England has in place similar requirements and these regulations also extend to substantial renovations.”*

**65.** Living Streets said that EV charging points “should be located off-street, for example in car parks at leisure centres, community facilities, shopping centres, train stations, or housing estates. If this is not possible, charging points should be located on the road in well-designed build-outs”. They added that:

*“A degree of local authority oversight is needed to deliver these changes in an inclusive manner. We would be very concerned if, for example, Permitted Development Rights were extended in terms of unleashing unprecedented levels of street clutter and worse conditions for pedestrians.”*

**66.** SP Energy Networks said it would welcome the introduction by the Welsh Government of arrangements to notify DNOs when customers have Low Carbon Technologies, including EV chargers, installed in their homes. This will allow DNOs to focus their investment programme “on areas with high uptake and ensure that customers do not face supply or safety issues”.

## **Action 6 - Partnership and collaboration**

**67.** The Action Plan commits to establishing a ‘Chargepoint Operator Working Group’, which will involve “private, public, not-for-profit and community organisations” to determine locations for charging infrastructure. Amongst other things, the Group will advise on quality standards and other emerging initiatives. It was to be established in 2021, led by the Welsh Government and involving local planning authorities, charge point operators and community organisations.

**68.** According to the WLGA, the Welsh Government had engaged with charge point operators to discuss their plans, but a group was yet to be formed. EVA Cymru believed that establishing a Charge Point Operator working group would be a key mechanism for achieving the objectives of the EV charging strategy. The Institution of Civil Engineers echoed this.

**69.** DPD also supported this measure saying, “Collaboration between government and the private sector is paramount to speed up the improvement of the UK's EV charging infrastructure”.

## **Evidence from the Welsh Government and Transport for Wales**

**70.** On Action 4, the Welsh Government said it had commissioned external expertise to develop National Standards for EV Charging Infrastructure in Wales. An online guide will include best practice recommendations for safe, accessible, and reliable public EV charging in Wales. The Standards “have been created for use by public sector organisations, community enterprises, and delivery partners involved in the installation of EV charging infrastructure in Wales”. The National Standards' recommendations are only legally binding if explicitly stated.

**71.** The Standards “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”. The Welsh Government confirmed that the Standards had yet to be published when it submitted its written evidence but would be published shortly after.

**72.** In relation to Action 5, the Welsh Government said it intends to consult on draft amendments to Building Regulations during the first half of 2023. It said it would “work with the electricity industry to facilitate a further review of the Welsh Government policy and regulations to support EV 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”. It added that it planned to review “Permitted Development rights in view of industry alignment” to address inconsistencies in development control and its application across the UK.

**73.** On Action 6, the Welsh Government said that “accelerated rollout of EV charging infrastructure across Wales will require cross collaboration and buy-in from a wide range from stakeholders, from Chargepoint Operators (CPOs) to residents”. It is “planning to develop a programme-level communication and stakeholder management plan”. It said it was “planning to establish a charge point operator group, as described in the Action Plan, within the next six months”.

**74.** The Welsh Government said that “the private sector is expected to provide the majority of the investment required to deliver EV charging in Wales” but noted that it “currently has little insight into specific private sector plans”. It said, “some engagement has already taken place, but we need to understand how much charging the private sector will deliver, where, and by when”.

**75.** The Welsh Government said that TfW has started to scope “the potential of an in-house service desk to facilitate all aspects of EV charge point delivery and management”. It added that “there is a strong opportunity across both the public and private sector for an integrated, consistent set of support functions, potentially covering installation, maintenance, management and customer services that could reduce the barriers to delivery”.



## Our view

### **Action 4 - Welsh quality standards**

Contributors to the inquiry emphasised the importance of a National Quality Standard to guide public sector procurement partners and enable charge point operators to invest in a consistent and interoperable network in Wales. The Standard will contribute to achieving a dependable, safe, and simple payment platform that is also bilingual.

Action 4 committed the Welsh Government to deliver a National Quality Standard for public sector procurement by the end of 2021. The Standard was not online when the Welsh Government submitted its written evidence in early 2023. It is unclear when the Standard was completed and whether local authorities are using it. The Deputy Minister should clarify why this Action was delivered late and explain when local authorities began using the Standard.

### **Action 5 - Regulatory facilitation**

Action 5 commits to a review in 2022 of building regulations “to support the provision of home and workplace charging across Wales for both refurbishment and new build projects.” This Action has not been achieved, although the Welsh Government has said it intends to consult on draft amendments to Building Regulations during the first half of 2023. The Deputy Minister should explain why the Action was not delivered according to the timescale in the Action Plan.

We recommend that the Welsh Government accelerate the review of policy and building regulations to support EV uptake. The Welsh Government should work closely with local authorities and stakeholders to ensure that the rollout of charging infrastructure is coordinated, does not impede other much-needed development, and avoids creating street clutter. The review 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.

### **Action 6 - Partnership and collaboration**

Action 6 commits to establishing a charge point operator working group in 2021. Despite being a key mechanism for achieving the strategy's objectives, the Group has not yet been established. This lack of action is a cause for concern, as collaboration between the Government and stakeholders, particularly in the

private sector, is essential to speed up the deployment of the EV charging infrastructure.

The Committee would like the Deputy Minister to explain why the Action was not delivered according to the timescale in the Action Plan.

The Welsh Government should fulfil the commitment in the Action Plan and establish the charge point operator group within the next few weeks.

We were interested in the Welsh Government's comments about the plans in TFW for an in-house service desk to facilitate all aspects of EV charge point delivery and management. We would be grateful for an update on the development of this proposal, including whether it will be reflected in a revised Action Plan or associated KPIs.

**Recommendation 14.** 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.

**Recommendation 15.** The Welsh Government should explain why the review of building regulations was not delivered in 2022, as committed to under Action 5.

**Recommendation 16.** 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.

**Recommendation 17.** 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.

**Recommendation 18.** 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.

## 6. Action Plan Outcome 3 - Localised benefits

### Action 7 - Increase public awareness

**76.** The Action Plan commits to working with public and private sectors to raise public awareness of EV charging infrastructure and provide consistent, accessible information.

**77.** The WLGA noted that while there is increasing evidence of charge points around Wales, there has been little publicity. Geoff Ogden, from TfW, spoke about the need for improvement in communication and engagement about the Strategy and Action Plan and EV policy more generally. He referred to the challenge of effectively consulting around EV chargers across the UK and the need to be clear on why they are engaging and what they hope to achieve.

**78.** The WLGA highlighted the importance of communication plans being developed alongside the rollout of charging points to ensure that sources of information are well signposted. Professor Cipcigan identified a wide variation in public awareness of EVs and the associated infrastructure rollout. She believed that a more targeted campaign in raising awareness is required to ensure equity of access to information in disadvantaged areas.

**79.** EVA Cymru said it had not seen significant progress against this action point. It suggested that TfW had been unable to deliver against this priority due to a lack of resources or strategic direction. It added that:

*“since the launch of the strategy in October 2021 there have been 108 news stories published by Transport for Wales of which only one relates to Electric Vehicles and none relate to public Electric Vehicle Charging infrastructure or this strategy.”*

### Action 8 - Encourage investment opportunity and innovation

**80.** The Action Plan identifies a “significant opportunity for developing economic activity for Welsh business in the deployment of infrastructure to address the needs of decarbonisation”. A supply chain and opportunities review was to be completed by the end of 2021.

**81.** The WLGA emphasised the importance of maximising the potential economic benefits by developing local service and supply chains with appropriate certification and training instead of relying solely on external companies.

**82.** The WLGA noted that Wales had not received its “fair share” of UK Government grant funding in the past. The Welsh Government had collaborated with the WLGA and local authorities to support successful bids to OZEV’s On-Street Residential Charging (ORCS) programme, with the Welsh Government covering the remaining 25% of costs. However, the UK Government would require private sector investment in future bidding rounds. The WLGA was commissioning work to attract private sector investment for charging infrastructure development. The WLGA acknowledged that investment in EV charging infrastructure varied across Wales and depended on authorities’ success in funding submissions and grid capacity in an area.

**83.** David Wong, SMMT EV Group, believed that the delivery of public charging infrastructure should be led by the private sector, not the Government using public money. The Government should use targeted spending to create investable propositions for the private sector. According to David Wong, this can be achieved through four measures: mixed high-low utilisation blocks in long-term tenders, modified contracts for differences, an anticipatory demand-led approach to sizing up the best places to install chargers, and adequate support for local authorities in planning and overseeing the delivery of chargers.

**84.** David Wong suggested mixed high-low utilisation blocks to ensure private sector investment in both commercially attractive and commercially unattractive areas. Modified contracts for differences can guarantee commercial operators a return in commercially unattractive places until the market matures.

## **Action 9 - Create synergies**

**85.** This Action aims “to identify locations where renewable generation coupled with energy storage can assist in providing power for the charging network”. It gives the example of community renewable energy projects powering rural charging hubs. It says the Welsh Government will work with TfW and local authorities to support multi-modal transport integration. It gives a 5-year timescale, saying charging infrastructure will be “considered in all relevant new and emerging local and regional development plans, starting 2021”.

**86.** The WLGA emphasised the importance of spatial planning “to look for opportunities to co-locate charge points with renewable energy generation”. This was a vital issue, as ensuring EVs run on clean energy is vitally important to the decarbonisation agenda.

## Evidence from the Welsh Government and Transport for Wales

**87.** On Action 7, the Welsh Government said that:

*“EV charging infrastructure presents a crucial opportunity in how we can transform the way people travel as we transition towards decarbonisation. Our aim is to work in partnership with the private and public sector, to develop a communications strategy which provides consistent, transparent and accessible information to consumers and the wider public.”*

**88.** On Action 8, the Welsh Government recognised the need for a Wales-specific EV charging infrastructure procurement model “to support local authorities to deliver charging infrastructure”. A proposed procurement Framework was being developed by Welsh Government and is due to be available in early 2023.

**89.** The Welsh Government explained that it and TfW had “provided funding, guidance and technical support to local authorities to deliver On-street Charging and Destination Charging facilities across Wales”. Furthermore, it had “worked closely with the Office for Zero Emission Vehicles (OZEV) to promote their grant schemes to local authorities for the installation of charging infrastructure; our intervention will help 18 out of the 22 Welsh local authorities deliver approximately £3 million of on-street charging infrastructure throughout Wales within financial year 2022-23 and leverage just under £2.5 million of UK Government funding to Wales”.

**90.** In relation to Action 9, the Welsh Government said it had commissioned a co-location tool to assess the opportunity for the co-location of renewables with EV charging infrastructure. The tool “aims to appraise opportunities for the use of renewables within EV charging sites”. It explained that “installing behind-the-meter renewables at EV sites has the potential benefits of providing zero or low carbon electricity to EVs, and reducing demand on electricity networks, particularly in constrained areas”.

## Our view

### **Action 7 - Increase public awareness**

Action 7 includes several sub-actions in relation to public awareness, including awareness of the strategy and Action Plan and keeping stakeholders and the public updated with the progress and implementation of the Action Plan. We

believe communication will be crucial to building public confidence in transitioning to EV, and the Welsh Government must do more, including regularly publishing progress reports against the actions and KPIs.

The KPI for this Action is “Enhanced public confidence in electric vehicle charging, moving Wales from the innovator stage to early majority stage of market maturity by 2030”. As we set out in Chapter 3, certain KPIs included in the Action Plan would benefit from being more granular. This is one such KPI. It is difficult to see how the Welsh Government can measure progress against this KPI, and we believe it should be revisited.

### **Action 8 - Encourage investment opportunity and innovation**

The KPI for Action 8 is to “Complete a supply chain and opportunities review by end of 2021” and “Establish a programme to realise opportunities for innovation and investment”. The Deputy Minister should clarify why this Action was not delivered on time.

Contributors to the inquiry felt that this Action could help address the uneven distribution of investment in EV charging infrastructure across Wales. Investment varies across the country - it depends on several factors, including local authority funding submissions and grid capacity and may, in some areas, result in inadequate charging infrastructure. We believe the Welsh Government should take steps to progress this Action within the next six months.

### **Action 9 - Create synergies**

Action 9 commits that charging infrastructure will “be considered in all relevant new and emerging local and regional development plans, starting 2021.” It is unclear from the evidence provided by the Welsh Government what progress has been made against this Action. We would be grateful for a detailed update from the Deputy Minister.

Contributors to the inquiry spoke about the need for more work in spatial planning to co-locate charge points with renewable energy generation. The WLGA emphasised the importance of ensuring EVs run on clean energy. In its evidence, the Welsh Government said it had commissioned a tool to assess the opportunity for the co-location of renewables and EV charging infrastructure. The Deputy Minister should explain the tool's status and whether it is currently in use.

**Recommendation 19.** The KPI for Action 7 – ‘Increase public awareness’ - should be revisited to make it more granular and measurable.

**Recommendation 20.** Page 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.

**Recommendation 21.** 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.

## Annex 1: List of oral evidence sessions.

The following witnesses provided oral evidence to the committee on the dates noted below. Transcripts of all oral evidence sessions can be viewed on the [\*\*Committee's website\*\*](#).

Date	Name and Organisation
12 January 2023	<p><b>Dr Paul Bevan,</b> Electric Vehicle Association (EVA) Cymru</p> <p><b>Professor Liana Cipcigan,</b> Electric Vehicle Centre of Excellence, Cardiff University</p> <p><b>Olly Craughan, UK Head of Sustainability,</b> DPD Group</p> <p><b>David Wong, Senior Innovation and Technology Manager,</b> The Society of Motor Manufacturers and Traders (SMMT) EV Group</p>
12 January 2023	<p><b>Goeff Ogden, Chief Transport Planning and Development Officer,</b> Transport for Wales</p> <p><b>Roisin Willmott, Director of Wales and Northern Ireland and Planning Aid England,</b> Royal Town Planning Institute (RTPI)</p>
12 January 2023	<p><b>Malcom Bebbington, Head of Future System Strategy,</b> SP Energy Networks</p> <p><b>Benjamin Godfrey, Director of Distribution System Operator,</b> National Grid</p> <p><b>Dr Neil Lewis, Manager,</b> Carmarthenshire Energy, and also representing TrydaNi; Charge Place Wales Ltd, and the Community Energy Sector's Car Club</p>



## Annex 2: List of written evidence

The following people and organisations provided written evidence to the Committee. All Consultation responses and additional written information can be viewed on the [\*\*Committee's website\*\*](#).

Reference	Organisation
<b>EVC 01</b>	Welsh Government and Transport for Wales
<b>EVC 02</b>	SP Energy Networks
<b>EVC 03</b>	DPD Group
<b>EVC 04</b>	Individual
<b>EVC 05</b>	Individual
<b>EVC 06</b>	The Road Haulage Association (RHA)
<b>EVC 07</b>	Individual
<b>EVC 08</b>	Electric Vehicle Association (EVA) Cymru
<b>EVC 09</b>	Institution of Civil Engineers (ICE)
<b>EVC 10</b>	Home Builders Association
<b>EVC 11</b>	British Parking Association
<b>EVC 12</b>	Institute of Historic Building Conservation
<b>EVC 13</b>	Professor Liana Cipcigan
<b>EVC 14</b>	Living Streets Cymru
<b>EVC 15</b>	Living Streets
<b>EVC 16</b>	Individual
<b>EVC 17</b>	Welsh Local Government Association (WLGA)