

**ECONOMY, INFRASTRUCTURE AND SKILLS COMMITTEE
WRITTEN EVIDENCE
EVIDENCE SESSION ON DECARBONISATION OF TRANSPORT
WEDNESDAY 27 NOVEMBER 2019,**

Purpose

The purpose of this paper is to provide evidence to the Economy, Infrastructure and Skills Committee on decarbonisation of transport in Wales.

Response

Background

Legislation

Following the declaration of a climate emergency, Welsh Government has accepted the Committee on Climate Change's recommendation to increase Wales' 2050 emissions reduction target and have asked them to provide further advice next year on how this will affect the interim targets and carbon budgets already set in legislation. We will ask the National Assembly to amend Wales' statutory decarbonisation pathway towards the end of 2020.

The legislation provides national, Wales-level targets and carbon budgets. There is no statutory target or carbon budget for transport or any other emissions sector. However, Prosperity for All: A Low Carbon Wales, our plan for Wales's first carbon budget (2016-20), identifies 2020 and 2030 targets for each sector and estimates of each sector's carbon budget based on the UK Committee on Climate Change recommend pathway. For transport this means:

- Emissions in 2020 14% lower than the 1990 baseline (and 11% lower than in 2016)
- Emissions in 2030 43% lower than the 1990 baseline
- An estimated carbon budget of 31.9 MtCO₂e (14.4% of the Welsh total)

Reducing CO₂

At 6.7 MtCO₂e, transport accounted for 16% of Welsh emissions in 2017, and is our third largest GHG emitting sector, following the power sector and the business and industry sector. Although vehicles are increasingly efficient, we are also travelling more, so overall transport emissions in Wales have not seen a major reduction since the 1990 baseline, declining by 5% to 2017. In 2017, Welsh Transport Sector emissions decreased by 2% compared to 2016.

Transport emissions are a result of two factors – how much we travel and the carbon emitted in undertaking that travel. The policies and proposals that we set out in transport pathway of Prosperity for All: A Low Carbon Wales address both of these factors within the context of global efforts to reduce greenhouse gas emissions and recognising that many of the levers required to effect significant change lie elsewhere.

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Road transport accounts for 86% of transport emissions in Wales. Since 2009, EU legislation has set mandatory emission reduction targets for new cars. Targets for vans were introduced from 2011 and CO₂ emission standards for heavy-duty vehicles entered into force in August 2019. Average new car CO₂ emissions in the UK were 124.5 g CO₂/km. From 2021, phased in from 2020, the EU fleet-wide average emission target for new cars will be 95 g CO₂/km. This has driven manufacturers to launch new battery electric models in order to meet the emissions regulations. The UK Government has pledged to pursue a future approach that is at least as ambitious as the current arrangements for vehicle emissions regulation. The UK Government should ensure that future emissions targets for manufacturers are set at sufficiently demanding levels.

The UK Government has set a target for 2040 for no new conventional petrol or diesel cars and offers grants to assist towards the purchase price of electric vehicles. The UK CCC view is that this policy is not sufficiently ambitious and should be brought forward to 2035 at the latest and should include a minimum electric drive range for hybrid vehicles. We will work with the UK Department for Transport to encourage more ambitious actions going forward.

The achievement of our decarbonisation pathway for transport is dependent on consumers purchasing electric vehicles rather than those powered by internal combustion engines. Uncertainty exists around actual future rates of adoption but is likely to be heavily influenced by the comparative costs of electric vehicles with internal combustion engine vehicles. Subsidies and vehicle taxes can significantly influence consumer decisions and create a market for electric vehicles. We urge the UK Government to keep this mix of incentives under review to ensure that the uptake of electric vehicles continues to increase at a level consistent with the achievement of decarbonisation targets.

Policy shift

Modal shift

Tackling our ingrained over-dependency on cars and enabling a shift to more sustainable forms of travel such as active travel and public transport will be challenging. Traffic volume in Wales has increased by 33% over the period from 1993 to 2018, reaching a peak of 29.4 billion vehicle km in 2018¹. The vast majority of that traffic, 94% was accounted for by cars and taxis (22.9 bvk) and vans (4.9 bvk). This proportion has been stable for at least the last 20 years. Local bus services covered just under 1 bvk 2017/18, enabling 99.9 million passenger journeys. Rail passenger journeys have increased year on year since 1995-96, reaching a high of 31.0 million in 2017-18². Although not directly comparable, 1.3 bn passenger km were undertaken on TfW Rail services in 2018/19³.

¹ Road traffic: 2018 (Welsh Government, August 2019)

² <https://gov.wales/sites/default/files/statistics-and-research/2019-04/rail-transport-april-2017-to-march-2018-824.pdf>

³ This figure doesn't include other service in Wales such as GWR but does include some TfW services in England.

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The UK CCC in recent advice to Government on achieving Net Zero by 2050⁴ suggests the need for more ambitious targets set for demand reductions through switching to walking, cycling and public transport, reducing car mileage by 10%. Modal shift from cars to public transport, walking and cycling offer substantial further co-benefits for air quality, congestion, more active and healthy lifestyles, and safer, stronger communities.

Active Travel

Since December 2018, all local authorities have plans in place for integrated active travel networks for the 142 largest settlements in Wales. In 2018 the Active Travel Fund was established to create these networks. Over the last two financial years we have seen a significant increase in the funding available to create and improve active travel infrastructure. For 2019/20, with an in-year capital boost, we have allocated over £44m to local authority active travel schemes in Wales, equating to around £14 per head. In addition to this, we are currently investing around £1.75m in walking and cycling training and promotion per year and this will increase to around £1.9m next year.

We are working with partners on the further development of a robust evaluation and monitoring framework for active travel. This will include the consideration of meaningful targets.

Planning Policy

The latest edition of Planning Policy Wales (PPW) was issued in December last year and gives increased emphasis to sustainable transport, including ensuring the location and design of new development reduces the need to travel and prioritises walking, cycling and public transport. PPW aims to ensure new development creates the right environments and infrastructure to make it easier for people to walk and cycle. It fully integrates the provisions of the Active Travel Act with the planning system and requires provision for active travel to be an essential component of development schemes. A new policy is introduced on creating well-designed, people orientated streets. The policy is aimed at ensuring new development improves the quality of place and creates safe, attractive streets where people want to walk, cycle and enjoy, and children can play. Another new policy encourages the use of Ultra Low Emission Vehicle (ULEVs) by stipulating a minimum of 10% of non-residential car parking spaces are required to have EV charging points.

We are currently consulting on a draft of the National Development Framework (NDF), which builds on this and proposes focusing growth on our large towns and cities, identifying national and regional growth areas, and doing so in a way that sustains good public transport services. It sets out the need to shape urban growth

⁴ <https://www.theccc.org.uk/wp-content/uploads/2019/05/Net-Zero-The-UKs-contribution-to-stopping-global-warming.pdf>

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to support towns and cities that are compact, with higher density and mixed use development in accessible locations, such as public transport nodes and corridors.

Wales Transport Strategy

Transport decarbonisation and a recognition of the sustainable transport hierarchy, will be a key pillar of the new Wales Transport Strategy, to be published in 2020. We have also set out that a new, more ambitious Low Carbon Delivery Plan will be developed for 2021 drawing together actions from across all actors in Wales.

Modal Case Studies

Our Commitments

Rail and Metro - What we have done so far

Our investment programme in the Wales and Borders Rail Service will bring about a step-change improvement for users. By December 2023 an extra 285 (29%) more services every weekday will be operational. The acquisition of new rolling stock will improve the environmental performance of the railway in Wales.

The investment in the South Wales Metro will bring about a significant increase in the number of seats available for the morning and evening peak travel periods by 2023. For example, 600 more seats towards Cardiff in the morning peak 90 minutes from Merthyr Tydfil and 1,000 more seats from Cardiff to Merthyr Tydfil in the evening peak 135 minutes.

Our North Wales Metro will integrate all transport modes to deliver the modern, high quality, transport system that is fundamental to achieving our sustainability and climate change objectives and connect people to jobs and services. This will include improvements to public transport to and within Deeside Industrial Park and the wider Deeside Enterprise Zone and station improvements.

What we need to do further

Transport for Wales are currently undertaking studies in conjunction with the Welsh Government, the Welsh Office and local authorities to develop plans for the ambitious Swansea Bay Metro scheme, which will provide better connectivity within South West Wales.

We will also now roll out the Metro integrated transport concept to other key employment hubs across North Wales including Wrexham, Rhyl/Prestatyn/St Asaph/Abergele, Colwyn Bay/Conwy/ Llandudno and the Menai area.

We continue to press UK Government to fund the development and delivery of an ambitious, realistic, and equitable rail investment programme for Wales.

<https://gov.wales/sites/default/files/publications/2019-09/a-railway-for-wales-the-case-for-devolution.pdf>

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Bus and Taxi/Private Hire Vehicles- What we have done so far

Reversing the decline in bus patronage is a key priority for the Welsh Government. Between December 2018 and March 2019 we consulted on the Improving Public Transport White Paper, which set out proposals for improving the legislative framework for how local bus services are planned and delivered.

Over 60 electric buses will soon be operational in south Wales following successful bids to the Office of Low Emission Vehicles' Ultra Low Emission Bus Scheme. The operation of these buses will offer useful insights into practical delivery issues and public perceptions as well as reducing air pollution.

What we need to do further

The Bill is just one part of a wider process of reform that we are undertaking in relation to the delivery of better bus services in Wales, which will contribute to our ambition of a high quality, low carbon, multi-modal and integrated public transport network, which meets the needs of the travelling public.

We are also now engaged in scoping out the financial, technical and engagement measures for the next steps to deliver on our ambition for zero emission buses.

We are developing a vision document, delivery plan and governance structures to progress the work of reforming the provision of Taxi and Private Hire Vehicles. This will include the key themes of how we achieve air quality improvements and decarbonisation of the fleet.

Public Sector Fleet decarbonisation - What we have done so far

There is a proposal in Prosperity for All: A Low Carbon Wales that all new cars and light goods vehicles in the Public Sector fleet are ultra-low emission by 2025 and where practicably possible, all heavy goods are ultra-low emission by 2030. We have begun to investigate the feasibility of this proposal by funding fleet reviews and EV charging feasibility studies among a number of Public Bodies.

For example, our Smart Living Programme and Welsh Government Energy Service have successfully supported the Gwent group of Public Bodies. Results of their fleet reviews present a strong business case for some vehicle switching to electric vehicles immediately, and significant switching proving cost effective within the period to 2025. The Public Bodies are now working together to develop a detailed delivery plan. Additionally, our EV charging infrastructure support has led to successful applications to Office of Low Emission Vehicles (OLEV) funding pots.

What we need to do further

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The work with the Gwent group of Public Bodies has generated lessons learned, emerging themes and methodological challenges which we will share with other Public Bodies who will shortly be embarking on similar work. We are exploring how we use our networks and support mechanisms most efficiently to support other Public Bodies to build their business cases and delivery plans for fleet transformation, and to successfully access UK Government funds.

Electric Vehicle Charging - What we have done so far

A key benefit of electric vehicles to consumers, in addition to lower running costs, is the ability to charge at a variety of locations including for many, home charging. Nevertheless, a comprehensive network of electric vehicle chargers covering all parts and using appropriate technology is necessary for the large scale uptake of battery electric vehicles in Wales.

We set out our approach to ensuring the roll out of EV charging in response to this Committee's recent inquiry. There are now over 900 publicly accessible chargepoints connectors in Wales⁵, up from 670 as at April 2019. We are working with Transport for Wales and the wider public sector in Wales to increase the number of electric vehicle chargers in Wales. This includes the provision of rapid chargers on the strategic road network utilising the £2m budget commitment. The scope of this work has now been expanded to lever in private sector funding for rolling out electric vehicle chargers at railway stations, and chargers at public car parks. Expanding the scope of the scheme should result in a much higher number of installations. We are also liaising with the Distribution Network Operators in Wales to understand the best way to deploy EV charging infrastructure.

What we need to do further

We have committed to developing a Charging Strategy for Wales in 2020 which will scope out the context for further Welsh Government intervention in the provision of electric vehicle charging infrastructure. As part of this work, we are also encouraging the take-up of OLEV (Office of Low Emission Vehicles) grants.

We will take forward a more comprehensive approach to the requirement of charging points for new residential and new non-residential buildings through amendments to the Building Regulations.

The decarbonisation of some sectors of transport represent greater technical challenges. Decisions on the viability of Hydrogen as an alternative for battery electric heavy duty vehicles will be needed within a decade. We are supporting innovation and the assessment of opportunities for adopting low and zero emission hydrogen fuelled vehicles.

⁵ Data from www.Zap-Map.com

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Funding

The increased urgency to address climate change has influenced the allocation of budgets with major new investments in bus travel and active travel, low emission vehicles, North Wales Metro and the Wales and Borders rail service. These investments support our transport decarbonisation aims of shifting to more sustainable modes of travel, which deliver co-benefits in terms of health and wellbeing, and promoting the electrification of transport.