LowCVP submission to

Decarbonisation of transport – Wales Transport Strategy review

Executive Summary

This paper provides an outline response from the LowCVP Secretariat to consultation on the Welsh Government "Prosperity for All: A Low Carbon Wales" paper and inquiry by the Economy, Infrastructure and Skills Committee.

The LowCVP, which was established in 2003, is a public-private partnership working to accelerate a sustainable shift to lower carbon vehicles and fuels within the road sector, and to create opportunities for UK business. Around 200 organisations are engaged from diverse backgrounds including automotive and fuel supply chains, vehicle users, academics, environment groups and others. The Partnership became a not-for-profit company limited by guarantee in April 2009 and receives roughly half its funding as a direct grant from the DfT, together with funding directly from Transport Scotland and all member companies

Key points

- Welsh transport emission targets are extremely ambitious and may not be achievable in the timeframes indicated without more radical approaches and greater public support.
- The targets proposed do not yet deliver the revised Climate Change Act target for Net Zero in 2050 (UK) (-95% GHG Wales in 2050)
- Focussed policies on delivering zero emission city vehicle fleets (Bus, Taxi, PHV) rapidly are very welcome and must be complemented with significant discouragement of private vehicle use in cities/towns.
- Van fleets should be included in the zero emission urban centre transport strategy.
- Significant, rapid and visible transition to renewable transport fuels (of all types) must be made to both decarbonise transport and engage public support in the transitions needed.
- A strategic (national) approach to the energy system for transport (both generation and transmission of energy, together with the infrastructure and consumer experience) should be adopted.
- Public sector fleets should lead the transition

General points

- LowCVP's focus is primarily on the accelerated introduction of new technologies to speed the low carbon transition. Modal shift, active travel and travel reduction are important parts of the solution but LowCVP's main attention is on the introduction of low carbon, cleaner road vehicles and fuels and a holistic view of the climate impact of vehicles.
- The trajectory set out in the UK Government's Net Zero law requires urgent, aggressive and continued action. The Committee on Climate Change is proposing a more rapid

timescale for transport decarbonisation and opposition parties are pressing for even greater speed. (Delegates at the latest Labour Conference voted for a 2030 Net Zero target. While it may not be adopted as official Labour policy, the 2050 regulation could well be brought forward by a new national government.

- The economic capacity of the public and private sector to completely refresh the vehicle fleets and energy system as rapidly as needed to meet the targets is not yet in place and significant public investment will be required to support such a rapid transition.
- There remain several transport sectors (HGV, Aviation) for which the technology required for zero emissions, is not yet clear or available.
- Significant behaviour change will be needed to deliver the targets proposed
- The fastest (and least costly) route to immediate carbon reduction from transport is through low carbon fuels adoption in the existing fleet. Currently the strategy makes no mention of this option which may also provide a significant industrial opportunity for Wales through innovation and production of renewable and synthetic fuels
- The adoption of Euro VI and Euro 6d emission standards is making dramatic improvements in urban air quality and should be continued, while electrification and zero tailpipe emissions solutions gather pace.

Targets:

- The LowCVP supports the Welsh Government in aiming for the most rapid emissions reduction targets possible. Taking a lead in doing so could bring investments and wider economic benefits to Wales.
- The paper provides a target of 14% reduction for 2020 and 43% reduction for 2025. Given that 2020 is almost upon us we feel that it is highly unlikely that a significant reduction 2020 can be reached at this point and a 2020 target is rapidly becoming superfluous but may be more use as establishing a baseline if measured comprehensively.
- Achieving a 43% reduction (or even greater) in 2030 will require additional actions to those described.
- Zero emission bus, taxi and private hire fleet by 2028 is a highly ambitious objective and requires the complete renewal of all these vehicles within 8 years.
- With the (very welcome) acknowledgement of consumption emissions and obligation of “Welsh consumer emissions” the transition to battery electric vehicles should be accompanied by robust development in analysis of the carbon impact over the vehicle life cycle, including production of the battery, to ensure the shift to zero tailpipe emissions does not inadvertently increase either power industry or foreign production emissions. It would be feasible for Wales to begin to define innovative new standards for impact assessment.

Cars:

Policy 50, Increasing ULEVs

Policy 51, investing in EV charging

Norway (often vaunted as the EV capital of the world) began its policies of generous incentives in 1990, nearly 30 years ago. Their aim is for all **new sales of**, cars, light vans and urban buses to be zero emissions in 2025

In 2018, 50% of all new car sales were plug-in, this is the highest market penetration in the world. However in late 2018 the overall total car fleet was only 10% plug in vehicles. Vehicles are typically in operation for 15 or more years so without significant activity to remove older vehicles, the full transition will happen around 15 years after the point of 100% of new sales.

Welsh registrations of ULEVs is currently lagging the UK average with licensed ULEV cars only 0.3% of the current fleet (0.7% for UK) (DfT licensing statistics VEH0105, VEH0132) so encouraging greater ULEV uptake is a key priority and challenge.

Electric vehicles when assessed on a total cost of ownership, are already often price competitive with conventional vehicles. LowCVP is working with the Financing sector to aim to develop clear and comparative data to give car buyers greater transparency of the running cost savings at the point of new vehicle consideration.

Vehicle taxation structures, whilst set in Westminster, should be developed and declared over a longer time frame (fuel duty plans, treatment of Electricity as a road fuel, VED etc) in order to give clarity and stability to the market allowing longer term investment decisions in new technology. Wales could consider specific incentives for ULEVs above and beyond those implemented in central UK government.

A national (rather than local or regional) approach to incentive support, EV charging and local clean air strategies (such as low emission zones) is of significant benefit to the operators and market with simple and consistent messages. The Welsh assembly should take a strategic and broad role in setting and planning the energy and transport systems needed

Significant work has been done on the Energy infrastructure, the benefits of implementing smart charging and in planning grid investment, through the Electric Vehicle Energy Task force, reporting in November 2019. The Welsh assembly should draw on the expanding library of robust reports and assessments and aim to take a leading role in adoption of ambitious strategy and implementation of recommendations from these reports.

There is often a myopic focus on pure battery electric cars and vans which may lead to an excessive demand for infrastructure. The adoption of Plug in hybrids or range extended vehicles, if accompanied by robust fiscal measures to encourage plugging in, may offer a much more rapid and publicly acceptable, step to electrification or the majority of miles, whilst the long term infrastructure requirements are strategically planned and delivered

Buses, Taxis and PHV:

Policy 52, Zero emission bus fleet -

Policy 53, Low carbon taxi and PHV

LowCVP supports a clear target for a zero emission (urban) bus, taxi and private hire vehicle fleet and would also add urban van operations to this group. Rapid emission reduction (both pollutant and greenhouse gas) within city centres will deliver the urgent clean air requirements and provide the clean platform to encourage modal shift to public transport solutions. This will help drive awareness, technology development and readiness, and target ZEVs in the areas of worst air quality where they're most needed. With very aggressive policies the 2028 target could be achievable but will depend, in part, on the availability of vehicles and associated technologies which are likely to be produced outside Wales.

Technologies to enable sharing of vehicles (and other equipment/facilities outside the transport sector) have developed rapidly and could enable a faster transition to shared use, rather than personal ownership. This will be needed extensively if Wales is to meet the targets proposed. The more intensive use of fewer vehicles brings life-cycle benefits (fewer vehicles needed to service mobility requirements) and other opportunities (eg freeing road space from parked vehicles; community-building and social capital; widening of access to vehicles/mobility to ambitious poorer communities). Local policies should act to ensure that car sharing/car clubs adopt the cleanest possible vehicle technologies.
The use of ambitious Taxi Licensing requirements and Bus franchises can steer these sectors most quickly. There are opportunities to consider a joined up approach to the EV charging infrastructure requirements for these sectors and wherever possible silos should be avoided to enable optimum solutions to be implemented.

An aspect of transport currently missing from the strategy is the 'L' category sector (motorbikes, trikes, quadricycles) These vehicles may offer an opportunity to implement rapid electrification of several urban operations (Taxi, last mile delivery) and could potentially be established as local production and supply chain opportunities. LowCVP has been working with the MCIA (Industry body for this sector) and would welcome further discussion to look at Pilot projects perhaps complementing the "zero emission city/all electric public transport town" concept outline in the strategy. Through offering a full range of vehicle sizes, the optimum "tool for the job" can be established and utilised. These vehicles may also offer rural transport solutions for outlying areas, given the lower energy requirements and potential for longer range at lower cost.

Actions required

- (Ref Policy 48 – increasing travel by bus). LowCVP has focused efforts on defining low emission and low carbon buses and has been at the centre of designing policies to accelerate their uptake (ref: series of Green Bus Funds.) LowCVP has worked with Auckland, London and other local, regional and national authorities to help define strategies for 'greener' bus uptake and could assist in such a role for the Welsh Government.

- (Ref Policies 49/50 - Promote sustainable travel and reduce the need to travel; increase proportion of electric & other ULEVs). Electrification is an important part of the solution for road transport. (Though cars – and road transport overall - comprise a significantly lower share of national emissions for Wales than for the UK as a whole: cars/all road transport are 7.7%/11.9% of total Welsh emissions while figures for whole UK are 15%/25%).
- Local incentives can play an important role in hastening EV uptake eg access and parking benefits. The introduction of clean air zones (CAZ), particularly where charging is involved could be a significant driver of low emission vehicle uptake and contribute to improving local air quality. Licencing regulations for local taxis and private hire fleets could be an important lever to encourage low/zero emission vehicle uptake, especially if local regulators act to a nationally defined framework.
- Ensure that there is a strategically planned recharging network across Wales, involving stakeholders from automotive, energy and user communities in establishing a coherent, planned national framework. Ensure network inter-operability (if not defined by wider authorities).
- Maximise the benefits of the EV transition for the energy network and local power suppliers & distributors. LowCVP has led the UK's EV Energy Taskforce which seeks to ensure that the opportunities from vehicle electrification (such as grid balancing through V2G and storage of energy produced at domestic and local level – V2H) are maximised while the challenges of greater power demand are minimised. Road transport electrification provides opportunities at the energy grid level to store energy produced by intermittent renewable sources (particularly significant in Wales) at times of surplus and contribute to supply when there is shortage.
- Ensure car buyers are properly informed: The cost benefits of running an electric vehicle are not immediately obvious to private car buyers. Fleet and professional buyers are used to analysing the total cost of ownership but private buyers may not understand that annual fuel cost savings can exceed £1,000 (and there are advantages in tax, maintenance and in terms of local access), so may not take these into account in their purchase decisions. Information campaigns (which may be publicly funded/supported) can help to address this and other market imperfections.
- Trucks and vans: LowCVP is working to improve the evidence base for defining low carbon/low emission trucks and commercial vehicles. This is needed as a basis for applying policy levers. Short-term measures (such as adoption of technologies approved under the CV Retrofit Accreditation Scheme – CVRAS) can make a significant and speedy contribution to improving local air quality and will be driven by the adoption of CAZs. Other local measures (eg access rights, delivery time benefits) can incentivise the uptake of the best low carbon technologies and help to drive change.
- Taxis and private hire vehicles: Local incentives and regulations play a key role. Information/education targeted at driver and stakeholder communities is needed to engage them and enable acceptance and implementation of local policies. (LowCVP has produced, for example, a guide to low emission taxis and PHVs intended for this purpose.)