

Cynulliad Cenedlaethol Cymru  
Pwyllgor yr Economi, Seilwaith a  
Sgiliau  
Ddatgarboneiddio trafnidiaeth  
EIS(5)DT15  
Ymateb gan Institution of Civil  
Engineers Wales Cymru

National Assembly for Wales  
Economy, Infrastructure and Skills  
Committee  
Decarbonisation of Transport  
Evidence from Institution of Civil  
Engineers Wales Cymru

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## About you

Institution of Civil Engineers Wales Cymru

## Your opinion

- 1. Are the transport emissions reductions targets, policies and proposals (set out in Prosperity for All: A Low Carbon Wales) achievable and sufficiently ambitious?**

Yes

### 1.1 Please outline your reasons for your answer to question 1

The targets, policies and proposals are ambitious, and challenging, but they are achievable with Welsh Government Leadership. The Welsh Government needs to look to deliver the renewal and construction of civil engineering assets through the adoption of a Welsh led system for rating infrastructure projects based on their overall contribution to the economic, environmental, and social aspects of decarbonising the Welsh transport infrastructure.

A few points to consider: first the Welsh Government is not fully responsible for these matters as not all transport policies are devolved matters but remain with the UK Government. Additionally, transport is only one source of greenhouse gas emissions and that the drive to deliver a low or zero carbon Wales will require effective action in other areas. Furthermore, whilst modern vehicles are more efficient/less polluting, total emissions from road transport are similar today to what they were in 1990 (the baseline).

Specifically commenting on some of the main issues:

Target zero emission bus, taxi and private hire fleet by 2028.

2028 is only 9 years away and, given that buses and taxis have a long operating life, this target might be considered ambitious. The need to deliver modal shift is recognised and governments (Welsh and local government) can help by making grants, loans and other incentives available to bus and taxi operators.

Transport sector emissions in 2020 will be 14% lower than the baseline.

2020 is only a year away. There is little that can be done at this stage to reduce transport emissions by 14%.

Transport sector emissions in 2030 will be 43% lower than the baseline.

2030 is only 11 years away. Given the lack of progress to-date, it will be very difficult to achieve a reduction of this magnitude (43%). The average life of a private car is reportedly about 13 years.

Policy 46 Increasing Active Travel.

This is considered to be a good policy, but people value the comfort and convenience of the private motor car and many / most consider cycling to be unsafe on today's crowded roads. The government will need to deliver more and better (safer) infrastructure and facilities for walking and cycling (which should not be limited to those making utility journeys).

Policy 47 increasing travel by rail

This is also a good policy. Apart from an obvious missing circular route, Wales has a reasonably good rail network (there are however some notable gaps) and an ambitious and capable operator in Transport for Wales. The renewal of aged rolling stock, improved passenger information and ticketing and service improvements (journey time and frequency) will help achieve this target providing the fares do not rise excessively.

Policy 48 increasing travel by bus.

This too is a good policy and is supported but there is much to be done as we understand that patronage is falling, and the bus is generally considered to be an option of last resort. Much might be achieved through improved information and ticketing and the introduction of quality bus partnerships.

Policy 49 use land planning policy to promote sustainable travel and reduce the need to travel.

This too is a good policy, but it will be slow to take effect. The built environment too needs to be improved too. There is a need to be active rather than passive.

Policy 50 increasing the proportion of vehicles that are electric and ultra-low emission.

This is a good policy, but it must be recognised that electric cars are expensive and that they have a limited range at the moment. These disadvantages need to be addressed if people are to be persuaded to abandon traditional petrol and diesel driven cars – together with easy access to charging points. (see next point).

Policy 51 plan for and invest in EV charging infrastructure.

This needs urgent attention. Government and key employers may have a part to play. The burden should not fall entirely on the taxpayer.

Policy 52 aiming to reduce the carbon footprint of buses to zero by 2028.

This is another good policy, which can be tackled through the renewal of vehicle fleets.

Policy 53 aim to reduce the carbon footprint of taxis and private hire vehicle to zero by 2028.

This is also another good policy but perhaps a challenging target given the number of taxis and PHVs in everyday use.

Policy 54 reduce transport emissions.

A basic but important policy. We need to encourage people to travel less and to use more sustainable forms of transport.

Proposal 12 working to achieve modal shift from car dependency to sustainable forms of transport.

This is a sound proposal but there is a need for more action and less words. Government departments must set a good example.

Proposal 13 significantly increasing modal share of active travel for short journeys.

This is a sound proposal requiring substantial behavioural change. More, better and safer facilities are required, particularly for cycling. Significant investment in the infrastructure (linked to positive Active Travel policies are required).

Proposal 14 piloting activity to promote the use of zero and low emission vehicles.

It will be important for government and major companies to take the lead and set a good example.

Proposal 15 promote the decarbonisation of private sector fleets in Wales.

This is supported, early adopters can set a good example

**2. Is the Welsh Government's vision for the decarbonisation of transport sufficiently innovative, particularly in terms of advocating new technologies?**

No

## **2.1 Please outline your reasons for your answer to question 2**

Currently the Welsh Government does not do enough to advocate new technologies. If Wales was to adopt a system for the ranking of projects, significant and relevant innovation could be recognised and rewarded. Currently Wales does not have a process which recognises and encourages breaking barriers to decarbonised performance improvements allowing the promotion of solutions that are scalable and potentially transferable to other infrastructure sectors. We need from the Welsh Government a rating system that recognises that making real progress toward conditions of decarbonisation requires the overhaul of existing infrastructure, replacing old components and materials with those that improve decarbonisation performance.

In addition, there is no mention of hydrogen powered vehicles, (Wales had strong, demanding targets in this area in the past), of inductive charging or of pay as you go motoring.

### **3. What action is required, and by whom, to achieve the targets, policies and objectives?**

The Welsh Government, potentially through the office of the Future Generations Commissioner, needs to lead by acknowledging that decarbonisation is two-fold: minimise emissions that may contribute to increased short- and long-term risks; and ensuring that infrastructure projects are resilient to short-term hazards or can adapt to altered long-term future conditions. Decarbonisation may be considered as being Emissions and Resilience. The Welsh Government needs to give strong, firm leadership and encouragement (carrot and stick).

### **4. How should the new Wales Transport Strategy reflect the actions needed to decarbonise transport?**

If the Welsh Government were to introduce two questions to the project teams for all transportation based projects the journey to a better Wales may have begun. These questions could be:

- a. Has the project team undertaken a life-cycle carbon assessment on their project using recognised and accepted methodologies, data sources and software?
- b. Has the project team demonstrated that it has worked to clearly demonstrate that it reduces carbon emissions?

The new Wales Transport Strategy should facilitate changing the modal split away from the use of cars and increased walking and cycling together with the increased use of [sustainable] public transport systems.

**5. Do you have any other points you wish to raise within the scope of this inquiry?**

Examples of best practice around the world should be examined and, if appropriate, adopted, For example, in California projects are classified with regard to reducing greenhouse emissions as Levels of Achievement:

- a. Improved: Utilised a Life-cycle carbon assessment.
- b. Enhanced: At least a 10% greenhouse gas reduction
- c. Superior: At least 40% greenhouse gas reduction
- d. Conserving: Carbon neutral (The completed project does not produce any net carbon emissions i.e. a 100% reduction)
- e. Restorative: Net carbon negative (The completed project sequesters more carbon than it produces)