

The Sixth Carbon Budget and Welsh emissions targets – Call for Evidence

Background to the UK's sixth carbon budget

The UK Government and Parliament have adopted the Committee on Climate Change's (CCC) [recommendation](#) to target net-zero emissions of greenhouse gases (GHGs) in the UK by 2050 (i.e. at least a 100% reduction in emissions from 1990).

[The Climate Change Act](#) (2008, 'the Act') requires the Committee to provide advice to the Government about the appropriate level for each carbon budget (sequential five-year caps on GHGs) on the path to the long-term target. To date, in line with advice from the Committee, five carbon budgets have been legislated covering the period out to 2032.

The Committee must provide advice on the level of the sixth carbon budget (covering the period from 2033-37) before the end of 2020. The Committee intends to publish its advice early, in September 2020. This advice will set the path to net-zero GHG emissions for the UK, as the first time a carbon budget is set in law following that commitment.

Both the 2050 target and the carbon budgets guide the setting of policies to cut emissions across the economy (for example, as set out most recently in the 2017 [Clean Growth Strategy](#)).

The Act also specifies other factors the Committee must consider in our advice on carbon budgets – the advice should be based on the path to the UK's long-term target objective, consistent with international commitments and take into account considerations such as social circumstances (including fuel poverty), competitiveness, energy security and the Government's fiscal position.

The CCC will advise based on these considerations and a thorough assessment of the relevant evidence. This Call for Evidence will contribute to that advice.

Background to the Welsh third carbon budget and interim targets

Under the Environment (Wales) Act 2016, there is a duty on Welsh Ministers to set a maximum total amount for net Welsh greenhouse gas emissions (Welsh carbon budgets). The first budgetary period is 2016-20, and the remaining budgetary periods are each succeeding period of five years, ending with 2046-50.

The Committee is due to provide advice to the Welsh Government on the level of the third Welsh carbon budget (covering 2026-30) in 2020, and to provide updated advice on the levels of the second carbon budget (2021-25) and the interim targets for 2030 and 2040. Section D of this Call for Evidence (covering questions on Scotland, Wales and Northern Ireland) includes a set of questions to inform the Committee's advice to the Welsh Government.

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A submission by:

- Professor Tom Cherrett (University of Southampton)
- Mr Fraser McLeod (University of Southampton)
- Professor Tolga Bektas (University of Southampton)
- Dr Maja Piecyk (University of Westminster)
- Mr Julian Allen (University of Westminster)
- Ms Marzena Piotrowska (University of Westminster)
- Professor Adrian Friday (Lancaster University)
- Mr Oliver Bates (Lancaster University)
- Dr Sarah Wise (University College London)

As part of the EPSRC Freight Traffic Control Project (www.ftc2050.com)

A. Sector-specific questions

Question 18 (Surface transport): As laid out in Chapter 5 of the Net Zero Technical Report (see page 149), the CCC's Further Ambition scenario for transport assumed 10% of car miles could be shifted to walking, cycling and public transport by 2050 (corresponding to over 30% of trips in total):

- What percentage of trips nationwide could be avoided (e.g. through car sharing, working from home etc.) or shifted to walking, cycling (including e-bikes) and public transport by 2030/35 and by 2050? What proportion of total UK car mileage does this correspond to?
- What policies, measures or investment could incentivise this transition?

ANSWER:

Although the question refers to 'cars', the carbon implications of delivery van transport in an era of increasing e-commerce and service logistics should not be overlooked. The EPSRC-funded Freight Traffic Control 2050 project (www.ftc2050.com) considered ways in which van-based parcel delivery trips could be avoided or shifted to walking and cycling. Our research showed that parcel delivery drivers in busy city centres already spend around 60% of their round time walking from the van to the delivery addresses and within buildings and has a significant bearing on the number of vans used. The potential for using cargo cycles in urban areas has been estimated as 25% of all goods and 50% of all light goods (Cycle Logistics, 2012).

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- a) What percentage of trips nationwide could be avoided (e.g. through car sharing, working from home etc.) or shifted to walking, cycling (including e-bikes) and public transport by 2030/35 and by 2050? What proportion of total UK car mileage does this correspond to?
- b) What policies, measures or investment could incentivise this transition?

Two measures studied in the FTC2020 project related to reducing the numbers of parcel vans were:

1. Using porters or cycle couriers supported by a much-reduced number of van drivers, with parcel transfers taking place either at the roadside or via drop-off and pickup facilities
2. Parcel carriers collaborating with one another by using a single 'carrier's carrier' to consolidate goods into single vans.

On-street portering trials and further analyses indicated that:

- Vehicle driving time reduced by 35% with potential to reduce by 60% if vehicles with double the capacity were used
- Kerbside parking time reduced by 50%

Interviews with Menzies Distribution, who consolidate goods and deliver on behalf of 13 major carriers in the sparsely populated Highlands and Islands of Scotland suggested that the collaborating carriers saved themselves around 80% in associated vehicle mileage and operating costs. Transferring this approach to an urban setting, using a single carrier to deliver on behalf of five major parcel carriers working in central London indicated that time, distance and associated vehicle emissions savings of around 60% could be achieved over the current business-as-usual operations where all carriers deliver everywhere independently. The van distance and emissions savings were modelled to increase to 84% when this single carrier also employed cycle couriers for the final delivery.

From an urban authority policy perspective, city planners could improve delivery conditions by requiring building developers to make arrangements for deliveries to be made to unattended (lockers) or attended (concierge) services that are designed into multi-tenanted buildings. Consideration should also be given to allow cargo cycles to use on-street freight unloading areas.

Reference

Cycle Logistics (2012), Internal Report, www.cyclelogistics.eu