

Net Zero Review

Campaign for Better Transport evidence submission

October 2022

About us

Campaign for Better Transport is the national charity championing greener, fairer transport solutions for almost fifty years. Our vision is for all communities to have access to high quality, sustainable transport that meets their needs, improves quality of life and protects the environment. We work to support all sustainable transport modes, including active travel (walking and cycling/wheeling), public transport (bus, rail, light rail, tram), shared mobility (cycle and e-scooter hire, car sharing, car clubs) and vehicle electrification. Our response is based on our in-depth research, policy expertise and the view of our over 20,000 supporters.

Reaching Net Zero in transport

Transport decarbonisation is essential to reaching net zero. Despite reductions in emissions during the height of the pandemic, transport remained the main contributor of greenhouse gas emissions, producing 99 MtCO₂e in 2020 – 24 per cent of total UK domestic emissions, with cars and vans accounting for 91 per cent of domestic (land-based) transport emissions.¹ Furthermore, with road traffic now broadly back at, or exceeding, pre-pandemic levels,² transport emissions will certainly have rebounded too.

International aviation made up a further 12 per cent of the UK's total emissions from transport, and its contribution had been steadily rising pre-pandemic – in 2019, international aviation produced 36.8 MtCO₂e, more than double than in 1990.³ It is now the fastest growing source of greenhouse gas emissions in Europe. The UK has the largest air transport market and the fifth-largest domestic market in Europe after Spain, Italy, France and Germany.

It would be impossible therefore to reach net zero by 2050 without tackling emissions from transport. However, while Government policy has focused on vehicle decarbonisation, i.e. shifting towards cleaner vehicles and greener fuels, there is rich evidence that meeting the carbon reduction pathways that the Government has committed to would also require demand reduction, for both surface transport and aviation. In terms of surface transport, while accelerating the uptake of electric vehicles (EVs) is essential, the Climate Change Committee estimates that, even with a fast uptake of EVs, a traffic reduction of 17 per cent by 2050 is required to meet the balanced pathway of carbon emissions.⁴ Other analysis puts that estimate of traffic reduction required to 2035 at 25-40 per cent.⁵ In terms of aviation, there are risks that demand returns to pre-pandemic levels, wiping out gains from sustainable aviation fuel.

The Climate Change Committee therefore recommends that the Government should consider more concrete policies to manage transport and aviation demand and to encourage modal shift from cars and aviation to public transport.⁶ The House of Commons Environment and Climate Change Committee also warned that there has been too great a reliance on as yet undeveloped technologies and that the Government's current approach to encouraging modal shift is "seriously inadequate", as the UK will, on its current trajectory, fail to meet its legally binding net zero targets.⁷

Campaign for Better Transport fully supports the need to shift more passenger and freight journeys away from motor vehicles and planes to walking, cycling and public transport. To achieve this, the greener transport options should always be cheaper and more attractive than

the more carbon-intensive modes and there is a long way to go for public transport to be a viable alternative for many people. This is why we call on the Government to invest in our bus and rail services – not only to meet net zero but also to achieve a range of economic, social and environmental objectives.

The economic benefits of sustainable transport

Investing in active travel, public transport and zero emission vehicles has clear economic benefits. For example:

- Walking, wheeling and cycling generated £36.5 billion for the UK economy in 2021,⁸ while the UK market for cycling equipment and goods alone is now worth an estimated £3 billion a year.⁹
- For every £1 spent on bus revenue funding, £3.70 of economic benefits is delivered and for every £1 invested in bus infrastructure can generate more than £8 in economic benefit.¹⁰
- Bus commuters generate £64 billion of benefits to the UK economy in goods and services, and if bus services were to cease to exist, 11 per cent of commuters would have to change jobs or leave the job market completely¹¹
- Rail users boost the economy by spending a total of £133 billion per year, and for every £1 of investment on the railway system a further £2.50 of income was generated elsewhere in the UK economy.¹²
- The UK railway sector, in 2019 supported £42.9 billion of economic production (GVA) and provided 14.1 billion in tax revenues.¹³
- UK manufacturers have committed £10.8 billion in EV and battery R&D and production with a quarter of a million electric cars, vans, buses and trucks produced since 2011.¹⁴

Travelling by public transport rather than cars also reduced congestion, which is estimated to cost the economy £8 billion per year.¹⁵ People can also use their time more productively, for example by making phone calls or working using the onboard wi fi, this further boosting economic productivity.

Poorer and more disadvantaged people are more reliant on public transport – 77 per cent of jobseekers in British cities outside London do not have regular access to a car, van or motorbike.¹⁶ So improving public transport connectivity promotes social mobility by boosting access to employment. It also ensures that people can access vital public transport services more reliably. This in turn improves efficiency for these publicly-funded services. For example, a specialist health facility in Wolverhampton found that missed appointments dropped by 60 per cent after the transport and health sectors worked together to introduce a bus service.¹⁷

Manufacturing not only of electric vehicles and chargers but also of electric and hydrogen buses and trains also presents a major economic growth opportunity for UK industry.

The wider case for investing in sustainable transport

By reducing carbon emissions, harmful nitrogen dioxide and particulate matter pollution and increasing physical activity, investing in sustainable transport also has clear wider benefits, for people's physical and mental health and for their overall wellbeing:

- Increasing walking and cycling in all regions of England to that of regions with the furthest distance walked or cycled could prevent 1,189 deaths per year.¹⁸

- Increasing bus use by 80 per cent would result in reductions in air pollution valued at £28 million, while a ten per cent increase in local bus connectivity would produce a 2.7 per cent fall in employment deprivation.¹⁹
- Rail travel brought social, environmental and wider economic benefits that are worth £2.9bn per year to households (£107 per household, on average) and £1.2bn to small and medium sized enterprises.²⁰

It is clear therefore that Government funding for rail and bus services should be seen not as a subsidy but as an investment in a vital public service.

The challenges for transport decarbonisation

Public transport in particular is facing severe challenges at the moment:

- Rail is plagued by service delays and cancellations and industrial action with the labour force impacted by rising costs of living
- Rail fares have risen year upon year despite lower demand post-pandemic – with more people having the option to work from home, higher ticket costs mean that many will choose to not go into the office as often or to commute by car if they have the choice
- In the year ending March 2021, the number of bus passenger journeys decreased by 61 per cent in England, while bus service mileage decreased by 16 per cent²¹
- Bus operators are currently struggling with a combination of government recovery grants coming to an end, severe driver shortages and rising fuel costs, so communities across the country are suffering swingeing bus service cuts
- The Government allocated £1 billion of transformation funding to bus services but only 40 per cent of local authorities received a proportion of it, so authorities are unable to plug the gap.

We do need more people to switch at least some journeys to public transport if we are to meet our net zero objectives. Yet, despite ambitious Government strategies for both bus and rail reform, provision across the country is worsening. Even if people are looking to use public transport more, if their bus services are cut back and rail provision less frequent and more expensive, they will not choose to do so. If people already own a car and can afford to run a car, they are less likely to consider the public transport alternatives.

What the Government could do

The Government needs to be more ambitious and honest on what is needed to achieve transport decarbonisation. It needs to set an ambitious traffic reduction target, like the Scottish and Welsh governments have, and implement policies to promote modal shift to sustainable transport.

To promote a regular, reliable, affordable, zero-emission bus network in every village, town and city, we need to:

- Replace the numerous fragmented and competitive bus funding pots with a long-term funding settlement
- Allocate a greater proportion of bus funding towards ensuring more frequent buses and cheaper tickets
- Reallocate money away from carbon intensive transport, like road building, to buses instead
- Accelerate the move towards a zero-emission bus fleet.

For a reliable, affordable rail network which is accessible to everyone, no matter where you live, we need:

- Fairer, simpler, more affordable ticketing, with better-value flexible tickets to suit part-

time and hybrid workers

- To invest in better stations, track and rolling stock and reduce overcrowding
- To ensure train services match the timetable and when there are delays it should be simple for passengers to get compensation
- A rolling programme of rail electrification to make rail even greener and meet the UK government target of decarbonising the railway by 2040
- More rail lines and stations to connect more people to the railways with a national programme of reopenings.

To promote modal shift and rebalance the pricing signals in favour of greener transport, the Government should also:

- Stop road building and aviation expansion
- Diverting money away from road building towards public transport
- Tax aviation fuel
- Reform vehicle taxation by replacing fuel duty and Vehicle Excise Duty with a pay-as-you-drive scheme
- Ensure new developments are built with good public transport links and walking and cycling facilities
- Provide more incentives and support to boost local authorities' capacity and capability to implement sustainable transport measures and infrastructure
- Fund a scrappage schemes for older, more polluting vehicles in areas where Clean Air Zones are to be implemented

Overall, we believe that the Review should emphasise that decisions for the net zero transition enable people to make informed decisions; that town and city planning interact with investment in transport in such a way that active travel and public transport are always fully integrated; that walking, cycling, bus and rail are connected at every stage, so that the greenest travel choices and the cheapest and the most accessible. This would help us achieve net zero, promote economic growth and support people with the cost of living.

There are many examples of areas where ambitious transport policies have worked. For more information and case studies, please contact:

Silviya Barrett
Director of Policy and Research
Campaign for Better Transport
T: 07949 597 880
E: silviya.barrett@bettertransport.org.uk

References:

¹ Department for Transport (2022), Transport and environment statistics 2022, <https://www.gov.uk/government/statistics/transport-and-environment-statistics-2022/transport-and-environment-statistics-2022>

² Department for Transport (2022), Transport use during the coronavirus (COVID-19) pandemic, <https://www.gov.uk/government/statistics/transport-use-during-the-coronavirus-covid-19-pandemic>

³ Department for Transport (2022), Transport and environment statistics 2022, op. cit.

⁴ Figure A3.1.a, p. 46. Climate Change Committee (2020), The Sixth Carbon Budget: Surface Transport, <https://www.theccc.org.uk/wp-content/uploads/2020/12/Sector-summary-Surface-transport.pdf>

⁵ See for example Green Alliance (2021), Not going the extra mile: driving less to tackle climate change, <https://green-alliance.org.uk/publication/not-going-the-extra-mile/>, and Centre for Research into Energy Demand Solutions (CREDS) (2021), The role of energy demand reduction in achieving net-zero in the

UK, <https://low-energy.creds.ac.uk/>

⁶ Climate Change Committee (2022), 2022 Progress Report to Parliament, <https://www.theccc.org.uk/publication/2022-progress-report-to-parliament/>

⁷ House of Lords Environment and Climate Change Committee (2022), In our hands: behaviour change for climate and environmental goals, <https://committees.parliament.uk/committee/515/environment-and-climate-change-committee/news/173479/government-must-support-behaviour-change-to-meet-climate-targets/>

⁸ Sustrans (2022), Helping people through the cost of living crisis and growing our economy: The role of walking, wheeling and cycling, <https://www.sustrans.org.uk/media/11397/cost-of-living-report.pdf>

⁹ Urban Transport Group (2016), [New report identifies fivefold economic benefits of investing in active travel](#)

¹⁰ North East Bus Operators (2019), [Successful Buses for a Successful Region](#)

¹¹ Ibid.

¹² Railway Industry Association (2021), [The Economic Contribution of UK Rail](#)

¹³ Ibid.

¹⁴ SMMT (2022), UK Automotive invests £10.8 billion in first 'electric decade', <https://www.smmt.co.uk/2022/03/uk-automotive-invests-10-8-billion-in-first-electric-decade/>

¹⁵ https://storage.pardot.com/171932/1638407735k108tEl/2021_INRIX_Scorecard_Report.pdf

¹⁶ Institute for Transport Studies (2013), Buses and the Economy II: Survey of bus use amongst the unemployed

¹⁷ NatCen Social Research (2019), [Transport, health and wellbeing: an evidence review for the Department for Transport](#)

¹⁸ The Health Foundation (February 2021), [How transport offers a route to better health](#)

¹⁹ WPI Economics (2022), [The decarbonisation dividend](#)

²⁰ Rail Delivery Group (2021), [More than a journey: The railway's value to a fair, clean recovery for communities across Britain](#)

²¹ Department for Transport (2021), Annual bus statistics: year ending March 2021, <https://www.gov.uk/government/statistics/annual-bus-statistics-year-ending-march-2021>