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Radical mitigation: a new priority in the mobilities agenda?

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Research on 'carbon budgets' suggests that avoiding 'dangerous climate change' may require an ambitious reduction of certain forms of travel. Should this be a priority in the mobilities agenda?

Two degrees is a politically agreed threshold deemed to represent the level of dangerous climate change. Most nations in the world have signed agreements to stabilise the rise of global temperature below this limit, but twenty-five years after the *First* Assessment *Report* of the Intergovernmental Panel on Climate Change (*IPCC*) carbon emissions continue to grow at alarming rates. The International Energy Agency has observed that current trends are perfectly in line with a 3.5°C rise by 2040 and a 6°C rise by the end of the century.

Despite warnings about the catastrophic implications of these projections, policy documents radiate optimism about the possibility to meet the two degrees target, based largely on commitments to emissions reductions by the middle of the twenty-first century and after. However, the belief that there is still ample scope to tackle climate change, that we have the right technologies to do so, and that this is compatible with high levels of economic growth is being questioned by recent analysis showing that what matters are not so much levels of technological efficiency and emission reductions in a more or less distant future, but *cumulative* carbon emissions which could trigger a tipping point in the climate system. According to research by Kevin Anderson and Alice Bows from the Tyndall Centre for Climate Change, this means that we have a limited 'carbon budget' before the climate irreversibly enters a new dynamic. Research on carbon budgets is then reframing global warming as a short term issue in which action taken in the next ten to twenty years could be critical.

This new framing of climate change acknowledges that it is still necessary to implement new low-carbon socio-technical systems that make everyday activities such as going to work, cooking, or heating the house less energy intensive. However, this transformation of the 'supply' side of systems could take several decades and would be no substitute for a more immediate reduction in energy *demand* in the rich North of around 10% per year.

What do mobilities researchers have to say about this debate?

What policies would be needed around the world to achieve radical mitigation?

Could the figure of the low-carbon traveller become appealing enough to become dominant within one or two decades?

If this was not the case, would strict legislation involving personal carbon quota schemes for CO2 be the only realistic option for radical mitigation?

Would a strong political will to curb travel demand mean political suicide?

Further reading

Anderson A , Bows A (2011) Beyond 'dangerous' climate change: emission scenarios for a new world. Phil. Trans. R. Soc. A 2011 369 20-44

Other publications







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Annelise Avril, David Henny

