

Committee on Climate Change Report

What is said about aviation

3rd May, 2019

Link to the report: <https://www.theccc.org.uk/wp-content/uploads/2019/05/Net-Zero-The-UKs-contribution-to-stopping-global-warming.pdf>

The Committee on Climate Change (CCC), the Government’s official advisers, published its latest report is recommending that the UK becomes ‘net-zero’ by 2050. This does not mean there will be no CO₂ emissions but those which are emitted will need to be balanced by taking carbon out of the air or burying it: “The CCC target is for ‘net zero’ because some activities, such as flying and farming, will unavoidably produce some emissions in 2050. But these will be balanced by taking carbon out of the air by growing trees or burying CO₂ under the ground”.

The Committee recognises that, because it is likely to be largely dependent on kerosene for some decades to come, aviation will not be able to carbonize in the way most other sectors will. It accepts that, even with the use of some hybrid-electric aircraft from the 2040s, aviation “would still result in emissions of 31 MtCO₂e in 2050. This is because a fully zero-carbon plane is not anticipated to be available by 2050, particularly for long-haul flights which account for the majority of emissions.”

This would allow for “a 60% increase in passenger demand above 2005 levels by 2050 (demand is currently around 30% higher).” This less than the 90% the Department for Transport is predicting.

But the report says “an additional reduction in emissions could be possible if demand were to be lower than this level.” It cites an example: “as an illustration, 20-40% above 2005 levels would imply a further saving in emissions of 4-8 MtCO₂e”. It says that although some growth in demand is expected “given a population that is anticipated to grow and rising incomes”, that demand “cannot be unfettered”:

The report says that “although technology is expected to help reduce emissions to some extent (e.g. aircraft fuel-efficiency improvements), achieving emissions reduction will require action from households.”

It suggests this could be done in two ways:

- **“Choosing to fly less.** Not everyone in the UK flies - Government surveys suggest that half of those surveyed had not flown at all in the preceding year. Those who do could replace short-haul flights with train journeys and choose to go on fewer long-haul flights.

- **“Off-setting emissions.** In the long term, households that choose to continue to fly will still be able to, but their emissions will need to be offset by removing CO2 from the atmosphere. This could be done directly by the airline, with the cost of offsets added to the ticket price.”

The report expects the price of flying to rise. A key theme of the report is that sectors like aviation which will not be able to reach zero-carbon by 2050 will be required to help pay for schemes that absorb carbon (it gives the examples of planting trees or restoring peat bogs) or store carbon (like carbon capture and storage).

The CCC is clear than any off-setting should be confined to paying for projects in the UK. It rules out paying for projects abroad, presumably because it is harder to monitor projects outside the UK.

Overall the CCC says: “Reducing emissions from aviation will require a combination of international and domestic policies, and these should be implemented in ways that avoid perverse outcomes (e.g. carbon leakage). A package of policy measures should be put in place that includes carbon pricing, support for research, innovation and deployment, and measures to manage growth in demand.”

The report is clear that, if demand management measures are put in place, they should not hurt low-income households. The Committee’s advisory group suggests a Frequent Flyers Levy might be looked at: “The advisory group also emphasised a need for greater equity due to the relatively high proportion of aviation demand from those on higher incomes. The group did not discuss policy interventions to curb demand in detail. However, one option could be to make air travel more expensive, particularly for those that contribute most to demand – for example via a frequent flyer levy (Devlin and Bernick, 2015)”. <https://www.theccc.org.uk/wp-content/uploads/2019/05/UK-Net-Zero-Advisory-Group-Chair-Report.pdf> page 14

Conclusions:

It wants to see a successful, growing aviation industry but one which emits less carbon, while recognising aviation cannot decarbonise as quickly as other sectors

It doesn’t back campaigners who want to see flying cut from current levels

It expects the price of flying to rise, since aviation will be required to help pay for schemes which absorb or store carbon

It leaves open the option of the use of fiscal measures to restrain demand but makes clear that, if fiscal measures are introduced to restrain demand, they must be as equitable as possible

It does not discuss specific airport proposals such as a 3rd runway at Heathrow. But the maximum overall growth it believes is permissible in the UK - “a 60% increase in passenger demand above 2005 levels by 2050” – for to aviation to meet its recommended CO2 levels would not rule out a 3rd runway.

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