Aviation emissions are growing. This is true both in actual terms, as traffic growth continues to outpace improvements in aircraft efficiency, and as a share of total UK emissions, given the trend of decarbonisation in the rest of the economy. Heathrow is already the UK’s biggest single source of carbon, and responsible for the highest level of emissions of any airport globally for international passenger flights.

Meeting our legal commitments on climate change

The UK’s Climate Change Act was introduced in 2008 with strong cross party support, and commits us to making emissions cuts of 80% by 2050. While aviation is currently not included in carbon budgets (with the exception of domestic flights), the Act requires the sector to be fully included as soon as possible. In the meantime carbon budgets for all other sectors have been tightened to take account of aviation emissions.

The Committee on Climate Change (CCC), the Government’s statutory advisers, have said that given the limits of emissions cuts achievable by other sectors, aviation emissions can be no higher than 37.5 Mt in 2050 – equivalent to their level in 2005 and representing about a quarter of the total allowable UK emissions by 2050. This would allow passenger growth of around 60%. But figures from both the Airports Commission and the Government indicate that emissions will overshoot this level even without expansion, and will be higher still with a new runway.

The Airports Commission claimed Heathrow expansion could, in theory, be compatible with achieving the aviation target needed to achieve the Climate Change Act, if most of the maximum ‘permitted’ 60% growth is utilised by a third runway. But this would require restricting growth elsewhere within the sector, for example by significantly increasing the tax on tickets, or by imposing planning constraints on regional airports. The Government has yet to put forward any proposals along these lines, however, and the Aviation Strategy published for consultation in July indicates that the Government supports plans for growth at all UK airports.

The NPS does not address CO₂ emissions from aircraft

The draft NPS has almost nothing to say on the issue. The nature of the document is to set out recommendations for measures within Heathrow’s power to implement, such as low-carbon building materials and on-site electric vehicles. The 97% of emissions associated with flights are not addressed. Heathrow Airport itself makes a nod towards this problem in its ‘Heathrow 2.0’ report, which refers to the possibility of the third runway being ‘carbon neutral’ for flights. But details about what this might mean are scant and when pressed, the airport has indicated that this is currently only an aspiration.
“Only 2.5% of the total fuel used by aviation is likely to be from alternative sources, even by 2050”

Can’t we rely on international measures?

Both the existing Aviation Policy Framework and the Aviation Strategy proposals indicate a preference for aviation emissions to be addressed through international measures. In theory this makes sense. But in reality, the recent proposal from the UN's aviation body falls a long way short of what is required. First, the scheme is based on offsetting, an approach that the CCC advises should not be relied on in the long term since the scale of effort required to tackle climate change will result in an increasing scarcity in the supply of high quality offset credits. Second, the scheme's goal – to keep net emissions at 2020 levels – cannot deliver the scale of reductions needed to stabilise global temperatures. And third, there are significant uncertainties about the scheme's implementation. It won't begin until 2021, and won't be mandatory for the majority of states until 2026. And while carbon markets generate a wide range of emission reduction units for purchase, with some projects having more environmental integrity than others, the question of which offsets will be eligible under the UN's aviation scheme are yet to be decided.

Can biofuels solve the problem?

The only possible means of powering an aircraft without fossil fuels – namely liquid biofuel – is beset with difficulties. Biofuels are not zero carbon. Both the production and transportation of these fuels themselves require energy, and as biofuels can compete with food crops for land use, the search to increase available agricultural land can lead to deforestation. Accounting for these impacts, many biofuels have been found to result in higher emissions than fossil fuels. Government policy now favours producing fuel from waste, but this is by nature limited in supply, and already in demand from sectors such as road transport. Only 2.5% of the total fuel used by aviation is likely to be from alternative sources, even by 2050, the Government predicts.

We need to take responsibility at a national level

In March 2010, a judge ruled that it was ‘untenable in law and common sense’ to try to divorce the issue of Heathrow expansion, and of aviation policy more widely, from the requirements of the Climate Change Act, and the Government was told it would need to review its policy. Yet this key question – how to ensure that Heathrow expansion is compatible with meeting legal climate change commitments – has not been answered. In fact, it's barely been asked.

The consultation on the Aviation Strategy indicates that the Government does not plan to consider its emissions policy for aviation until 2018, potentially after the Heathrow NPS has been voted through Parliament: in other words too late.

An effective climate change policy for aviation, demonstrating how compliance with the Climate Change Act will be achieved, must be presented, and made available for public and expert scrutiny, before any vote on the Airports NPS takes place. In the absence of such a policy, we urge MPs not to support the NPS.