

The Rt Hon Chris Grayling MP
Secretary of State for Transport
Great Minster House
33 Horseferry Road
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12 February 2019

Aviation 2050 – The future of UK aviation

Dear Secretary of State,

I am writing to you to provide my Committee's views on your recently published consultation, *Aviation 2050 – The future of UK aviation*.

The UK's currently legislated 2050 target is to reduce economy-wide greenhouse gas emissions by at least 80% from 1990 levels. Since the Climate Change Act became law, the UK has ratified the Paris Agreement, implying even stronger action. You will be aware that my Committee has been asked by Ministers to offer advice on the implications of the Paris Agreement for the UK's statutory framework, including when 'net-zero' emissions can be achieved. A stronger UK target would require more effort from all sectors, including aviation. We intend to provide an updated view on the appropriate long-term ambition for aviation emissions within our advice on the UK's long-term targets. We will publish our report in spring. Following that, we will write to you directly to set out the implications for the Aviation Strategy.

Our present planning assumption, which underpins the fifth carbon budget and the current 2050 target, is that UK aviation emissions in 2050 should be around their 2005 level (i.e. 37.5 MtCO₂e). Your acceptance of this planning assumption in the consultation is a very welcome step. The final white paper should further clarify that this will be met on the basis of actual emissions, rather than by relying on international offset credits.

Aviation emissions in the UK have more than doubled since 1990, while emissions for the economy as a whole have fallen by around 40%. Achieving aviation emissions at or below 2005 levels in 2050 will require contributions from all parts of the aviation sector, including from new technologies and aircraft designs, improved airspace management, airlines' operations, and use of sustainable fuels. It will also require steps to limit growth in demand. In the absence of a true zero-carbon plane, demand cannot continue to grow unfettered over the long-term.

Our analysis, and that of industry, suggests the largest contribution to reducing aviation emissions will come from new technologies and aircraft designs. Research we have commissioned jointly with your department, which was published alongside the

consultation, indicates that many of these developments are likely to be cost-effective, given their potential fuel savings. The final white paper should build on the approach set out in the Aerospace Sector Deal and Future Flight Challenge, and set out a clear strategy to ensure these technology solutions are developed and brought to market in a timely fashion.

In our recent Biomass review¹ we advised that government should not plan for high levels of biofuel use in aviation in the long-term, given uncertainty about sustainable biomass supply and cost-effectiveness. Production of aviation biofuel will likely need to be in conjunction with carbon capture and storage (CCS) to be competitive with competing uses for biomass (e.g. in industry, electricity generation, or hydrogen production). A pragmatic planning assumption would be to aim for up to 10% biofuel use in aviation in 2050. In the period to 2030 government policy should aim to develop a market for aviation biofuels produced in genuinely CCS-ready facilities, and should facilitate this by achieving more of the 2030 Renewable Transport Fuel Obligation through aviation fuels.

We welcome your proposal to ask the National Infrastructure Commission (NIC) to scrutinise the needs case for further airport expansion. The consultation paper also states other conditions must be met prior to further expansion. The work of the NIC is already consistent with the requirements of the Climate Change Act and the government's climate change commitments; the final white paper should clarify that this will continue to be the case.

We also welcome the commitment to negotiate in the ICAO a long-term goal for global international aviation emissions that is consistent with the Paris Agreement. The ICAO's current carbon policy, CORSIA, has an end date of 2035 and will need to be based on robust rules that deliver genuine emission reductions. A new long-term objective would provide a strong and early signal to incentivise the investment in new, cleaner, technologies that will be required for the sector to play its role in meeting long-term targets. This is particularly important in aviation given the long lifetimes of assets. A similar approach has been agreed for global shipping emissions in the IMO, which has set a target for greenhouse gas emissions to be at least 50% below 2008 levels by 2050.

I note that your consultation commits to regular updates of the Aviation Strategy. These regular reviews will provide an opportunity to respond to a future decision by Parliament to meet the UK's commitments under the Paris Agreement. I hope the final white paper will set more specific time-points for these reviews, and align them to developments in government climate strategy overall.

Yours,



Lord Deben

Chairman, Committee on Climate Change

¹ CCC (2018) *Biomass in a low-carbon economy*