



The countryside charity
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By electronic submission to the
Examining Authority

15 May 2024

Dear Sir/Madam,

**Application by Gatwick Airport Limited for an Order Granting Development Consent for the
Gatwick Airport Northern Runway Project**

**Interested Party Reference number: 20044812 – Written material to amplify points made at the
Issue Specific Hearing on Climate Change**

Summary as in excess of 1500 words

CPRE Sussex has set out its opposition to the proposal in earlier submissions and adds here material relevant to climate change. The Applicant is relying on the government and the Jet Zero Strategy to deal with climate change matters when Flight Path to the Future makes clear that Government expects the airports to meet their climate change commitments as a condition for expansion. We argue that the technologies in the Jet Zero that would enable aviation to meet its climate commitments are in too early a stage of development to be able to deliver net zero by 2050, that the roadmap for doing so looks for a demand reduction not an increase. Further, a recent judicial review points out the difficulties of relying on nascent and pilot technologies to address climate commitments because the risk of delivery failure is so high that the SoS's ability to make and soundly evidenced decision can easily be compromised. We believe the proposal should not be recommended for the DCO applied for.

Background

Climate change and development pressures in Sussex are already very high. High temperatures, heatwaves, drought and flooding conditions, water supply and the compounding impacts of wastewater treatment issues, and coastal erosion all threaten the health and wellbeing of Sussex residents, the tranquillity of its landscapes, its dark skies and its wildlife. There is a substantial evidence base on this topic which can be found, for example, in the various evidence reports that underpin the UK Climate Risk Assessments (see below signature for examples). These Sussex events are in line with what would be expected as the climate changes. In fact, some of the changes are happening much earlier than expected by experts. And in other parts of the world the pace of change is fast enough to cause serious concerns that the world is in uncharted territory as far as the climate and everything associated with it is concerned.

In our submissions of the 12 March 2024 and 19 April 2024, we set out the CPRE Sussex position that (a) the proposed development of a new runway is outside the scope of “making best use” (b) runs counter to other aspects of policy on aviation and (c) it is over-reliant on new technologies that

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are not yet available at scale and will not be for some time. Without these technologies any expansion will not meet climate change obligations to reach net zero by 2050. This is why we agree with the Climate Change Committee on the expansion of aviation and not the UK Government who have treated prospective technological developments as being the basis for statements related to policy (as in the report: *Jet Zero Strategy – One Year On*). We also believe the greenhouse gas emissions due to the proposals total impacts have been understated due to the way surface transport emissions have been estimated. Given the delays now planned for any ban on fossil fuel vehicles this is even more likely to be the case.

We have also raised concerns on housing capacity and delivery of upgraded infrastructure for wastewater management. We have set out our views on some conditions that might, notwithstanding our opposition to the proposal as a whole, be included within an Order should one be granted.

Context for this submission

The Applicant stated at the Hearing that it was possible to rely on the Government - the Secretary of State (SoS) - to ensure aviation would not breach net zero commitments should technological and market measures fail to reduce aviation's emissions of greenhouse gases. They appeared to use the *Jet Zero Strategy* to offer reassurance that this could be done with the implicit assumption that all the policies and approaches therein would be delivered in full and in a timely fashion.

However, a 3 May 2024 judgment by Mr Justice Sheldon (*Friends of the Earth and others v UK Government*) has pointed up the various difficulties, in this case for the SoS in relation to the Carbon Budget Delivery Plan, in placing too much reliance on such matters as the delivery of nascent or pilot scale technologies and approaches as set out in *Jet Zero*. The judgement is relevant as the policy positions and approaches set out in *Jet Zero* and in the Plan are very similar if not identical.

The Applicant appeared reluctant at the Hearing to accept the need to account fully for the emissions of surface transport and, importantly, to apply a multiplication factor to aviation emissions to account for the effects of non-carbon dioxide emissions from aircraft despite the need for such information to determine the relevance of the proposals in relation to climate change commitments. This is important as inclusion of such a factor could push Gatwick greenhouse gas emissions over the threshold for being grounds for refusal.

Amplification of CPRE Sussex points made at the Issue Specific Hearing on Climate Change

Flight Path to the Future (Ministerial Forward) states "Our ultimate goal is nothing less than guilt-free, zero emission flying." It also states on p45 "The Government is clear that any expansion of any airport must meet its climate change obligations to be able to proceed."

These statements make clear the government recognises that aviation emissions are a problem as they are not currently guilt free and that expansion is only possible if climate commitments are met by the airport.

The Government's hope, and in this case the Applicant's as well, is that the high ambition scenarios set out in the *Jet Zero Strategy* and in the sister *One Year On* report will deliver net zero in aviation (and thus meet important aspects of climate change obligations) and this ambition is expressed through numerical, graphical and diagrammatic material in these documents (for example the emissions trajectory on p11 of the *Jet Zero Strategy* and the roadmap on p18 of *One Year On*). Even under the high ambition scenarios aviation is left with residual emissions amounting to a significant proportion of the total (perhaps as much as 40%). The Government appears to expect that about

37% of emissions reductions might come through system efficiencies and new fuels (such as pilot scale technologies linked to Sustainable Aviation Fuels and nascent technologies such hydrogen and other zero-emission approaches) and no less than about 64% from market or behavioural mechanisms and other nascent technologies (such as capture of carbon dioxide from the atmosphere). The recent High court decision to allow judicial review of the Government Climate Delivery Plan points up the problems associated with trying to make lawful decisions on the basis of nascent and pilot technologies because the risks of delivery failure are so high and difficult to quantify in a well-evidenced manner.

The *One Year On* report sets out a roadmap of how aviation might achieve net zero which may be helpful to the ExA as the Jet Zero Strategy material alone does not do this given the residual emissions left at 2050.

The roadmap assumes a small amount of growth – consistent with the government’s view of what constitutes “making best use” (see CPRE Sussex material submitted previously) and importantly includes a more substantial demand reduction element linked to higher prices. So, the roadmap’s expectation is that demand will fall not rise as projected elsewhere by, say, DfT modelling based on a more “Business As Usual” perspective. This calls into question the need for a new runway at Gatwick as the Applicant could still grow their business, as they set out in their proposals, without the need for a second runway and such an approach (no second runway) would be consistent with the roadmap.

The roadmap in other senses is not dissimilar to material in the Jet Zero Strategy, relying too much on nascent technologies or ones that cannot be scaled up in a timely manner or behavioural approaches or market mechanisms that have yet to be developed and tested for effectiveness. For example, although the Government’s ultimate goal is “zero emission flying” and much is made of zero-emission possibilities being developed by start-ups such as ZeroAvia and by more established companies in some industry reports (that are not all freely available in the public domain), it seems that the very earliest a hydrogen-fuelled zero-emission aircraft of the type used at Gatwick might possibly begin to be available seems to be the mid-2030s. This could mean, given the lifetimes of modern aircraft and economic restraints on the ability to replace the global fleet with new aircraft, that general deployment of zero-emission flight will not occur until some time after 2050 when net zero needs to be achieved.

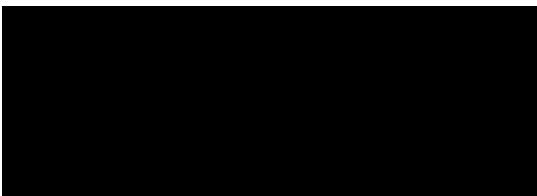
There are uncertainties and thus risk associated with other elements of the roadmap, for example in relation to Sustainable Aviation Fuels and the savings in greenhouse gas emissions that result from life-cycle analysis of the supply chain for these fuels. We have set out some of these in the earlier CPRE Sussex submissions. The capture of carbon dioxide (or other greenhouse gases) from the atmosphere at scales that would be needed by aviation is difficult to assess but the latest view from the Global Carbon Capture Institute on their website is that there are: “41 projects in operation, 26 under construction and 325 in advanced and early development”. It has taken some 10 years for this sector to move up to 41 from 16 projects. Several major projects, including some in the UK, have been abandoned due to the withdrawal of public-sector funding.

We recognise the difficulties the Applicant faces in putting forward a major proposal at a time when concerns over climate change are making the need for technological change urgent. The problem is, in the view of CPRE Sussex, that the application is to expand the operations of a sector that is behind the curve on the innovation needed to see atmospheric levels of greenhouse gases stop rising and fall. Granting the DCO now will increase the risk from the adverse impacts of climate change for us all. These risks need to be lessened by sustainable decisions not increased. CPRE Sussex’s view, based on the evidence, is that granting this DCO at this time would not be in the public interest and that the recent judgement by Mr Justice Sheldon makes it difficult for the SoS to

make such a decision given the similarities that exist between material underpinning Jet Zero and that underpinning the aviation aspects of the Carbon Budget Delivery Plan.

Additionally, CPRE Sussex argue that given the pace of environmental change and doubts over the delivery of technological progress, the sustainable approach is one that errs on the side of caution and does not recommend that the DCO be granted. The benefits to the people, and wildlife of Sussex of such an approach would be considerable. There would be less noise and visual intrusion from aircraft over Sussex's highly valued nationally important landscapes such as the South Downs National Park, the High Weald Area of Outstanding Natural Beauty, Ashdown Forest and the many other valued heritage and wildlife sites elsewhere in Sussex that sit under or near flight paths. From the health and wellbeing perspective there would be less noise over built-up areas and better sleep for residents and less overheating of homes and less chance of water supply issues linked to hot weather and high rainfall or flooding. There would be less congestion of surface transport routes and fewer infrastructure failures such as those due to landslips. Above all there would be fewer emissions of greenhouse gases and this would make it more likely that the UK would be able to meet its policies on net zero and its international commitments linked to the Paris Agreement and to the outcome of COP28 in particular. As the supermarket chain says "Every little helps".

Yours faithfully,



Prof Dan Osborn,
Chair, CPRE Sussex.

New references not previously submitted

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Note: Prof Osborn signs this letter in his role as Chair CPRE Sussex. He has considerable professional experience in environmental risks from previous employment with the UK Research Councils and work done on UK Climate Change Risk Assessments. Currently, he is editor in chief of an scientific journal.