

TOWN AND COUNTRY PLANNING ACT 1990

**Appeal by Bristol Airport Limited concerning land at North Side Road, Felton,
Bristol, BS48 3DY**

**DEVELOPMENT OF BRISTOL AIRPORT TO ACCOMMODATE 12 MILLION
PASSENGERS PER ANNUM**

Appeal Reference APP/D0121/W/20/3259234

SUMMARY

PROOF OF EVIDENCE

of

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1. INTRODUCTION

- 1.1. This is a summary of my full proof of evidence ([BAAN/W1/1]), which sets out my relevant qualifications and experience.

2. THE CLIMATE CRISIS AND ITS IMPACTS

- 2.1. In the 2015 Paris Agreement the UK committed to “[holding] the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels”.
- 2.2. The difference between 1.5°C and 2°C has been established by IPCC scientific review and documented in the Special Report on Global Warming of 1.5°C, known as “SR1.5”. There are compelling reasons to pursue 1.5°C in terms of reduced risk of harm to vulnerable populations, food security, water supply, and loss of unique and valuable ecosystems. I set out in detail what the science shows these harms will be, including in the UK.

3. THE UK’S CLIMATE COMMITMENTS

- 3.1. The key to limiting temperature rise is limiting the total cumulative amount of CO₂ released into the atmosphere. SR 1.5 sets out a range of global carbon budgets. I set out the global and UK carbon budgets associated with a ‘likely’ chance of staying below 2°C and explain how these budgets are derived. The UK’s Paris-compliant budget totals less than eight years of emissions at the UK’s current output.
- 3.2. This is an important context in which to understand the current domestic policy situation in the UK. The Climate Change Act 2008 (“CCA 2008”) created a series of short-term, legally-binding carbon budgets in five-yearly blocks. These ‘mini’ budgets in fact represent a much lower level of ambition than would be

necessary if the UK were to meet its “well below 2°C” and “pursue 1.5°C” commitments. Given this scientific reality, the UK’s carbon budgets need to be understood as the absolute minimum that needs to be adhered to, recognising that this level of ambition, if mirrored globally, would put the Paris temperature commitments beyond reach.

- 3.3. The UK’s emissions came down sufficiently to meet the first three short-term budgets, however, we are currently *off* track for meeting the fourth and fifth budgets.
- 3.4. In December 2020, the CCC published its Sixth Carbon Budget Report (6th CBR), which requires a reduction of 78% below 1990 levels of all UK energy emissions, including emissions from international aviation. While the 6th carbon budget refers to the period 2033–37, it has implications for the preceding decade. Steps must be taken in the immediate short-term to facilitate the almost 4/5th cut in emissions by the mid-2030s. This is especially true of sectors such as aviation that have long lead times for development and penetration of new technology. The CCC itself has made this clear.
- 3.5. The Net Zero obligation and the 6th carbon budget rely on negative emissions technologies. Given the enduring technical uncertainties and moral hazard posed by these technologies, it is essential to achieve as much as possible through reducing or preventing emissions. This provides a further important context for decisions that increase heavily carbon-emitting activity.
- 3.6. To meet the 6th carbon budget and ‘net’ zero by 2050 target, the 6th CBR gives detailed sector-level policy recommendations. **The CCC is clear that constraining aviation demand is now essential to delivering the required emissions reductions.** The CCC still envisages around 23MtCO₂ per year being emitted by UK aviation in 2050, but this reflects a limitation on demand to 25% passenger growth by 2050 (against 2018), compared with unchecked growth which is forecast to reach 65% in the same period.

- 3.7. The CCC assumes that this 25% passenger growth will be offset by efficiency improvements to allow the overall budget to remain viable. **Significantly, the CCC specifies in its advice to government that this growth should only be achieved with *no* net expansion in UK airport capacity.** This approach to airport capacity necessarily carries over into the periods of the Fourth and Fifth Carbon Budgets.
- 3.8. In the absence of the closure of significant existing airport capacity, there should be no new airport expansion. Consequently, the proposal to expand Bristol airport goes directly against the unequivocal advice from the CCC.

4. GENERAL ISSUES IN AVIATION EMISSIONS

- 4.1. Emissions from UK aviation were around 38MtCO₂ in the last full pre-COVID year (2019), or 9.3% of the UK's total CO₂ emissions from energy use. To achieve the requisite emissions reduction by 2050, the CCC's Balanced Net Zero pathway ("BNZP") has aviation emissions peaking in the mid-2020s before a gradual decline to around 61% of pre-COVID levels by 2050.
- 4.2. I give an overview of the EU ETS and the UK ETS and explain why there are fundamental problems with counting on either to deliver the kind of emissions reductions required of the aviation sector to meet the requisite climate and statutory targets.
- 4.3. From 2021 international aviation emissions are to be 'offset' via emissions removals projects administered through the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). The CCC is explicit in its 6th CBR that "the CORSIA scheme is not currently compatible with the Paris Agreement or the UK's path", and "under current rules, credits under CORSIA should not contribute to meeting the carbon budgets". The principal problems with CORSIA relate to the lack of enforceable governance structures for offset credits

and sustainable fuels, and lack of verifiability of emissions reductions or removals. It would be grievously misleading to suggest that CORSIA offers any prospect of genuine or verifiable emissions reductions.

- 4.4. Equity is another strong reason for strict adherence to the CCC's advice in the BNZP that there should be no net expansion of UK airports.

5. ASSESSMENT OF THE PROJECT'S CARBON EMISSIONS

- 5.1. The Appellant has significantly underestimated the level of greenhouse gas ("GHG") emissions that will be caused by the proposed expansion and has downplayed the impact of those GHG emissions, as a result of:

- 5.1.1. Disregarding any quantitative assessment of non-CO₂ emissions;
- 5.1.2. Falling foul of the 'Predict and Provide', the 'Drop in the Ocean' and the 'Fly local' Fallacies.
- 5.1.3. Incompatibility with the CCC's BNZP: I calculate and compare the Airport's projected emissions in the 'with expansion' case to the CCC's BNZP for aviation. Bristol Airport's aviation emissions would need to be reduced by 38% by 2050 to stay within the BNZP, whereas the 'with expansion' forecast is for a reduction of only 6% (29ktCO₂). **The expected 2050 emissions level at Bristol Airport is a sixfold underachievement against the reductions required by the CCC's pathway for aviation.**
- 5.1.4. Overstated Influence over Scope 3 Emissions.
- 5.1.5. Impact on Local Carbon Budget: **By 2040 the additional emissions from the proposed expansion (if extrapolated for the five-year budget period 2038–2042) consume 82% of a five-year budget for North Somerset Council.** In my view, this is a far more appropriate comparison of the significance of aviation emissions than comparing with the national total.

6. BAL'S PROPOSAL TO BE A "NET ZERO" AIRPORT

6.1. The Appellant's Draft Carbon and Climate Change Action Plan ("CCCAP") contains a number of suggestions and assertions that warrant criticism.

6.1.1. It premises achieving 'net zero' emissions (by 2030) almost entirely on use of emissions credits through the UK ETS and offset credits through CORSIA. Both of these systems are unable to deliver verifiable reductions in absolute cumulative emissions.

6.1.2. It misrepresents the CCC's suggestion that 25% passenger growth could be compatible with the UK achieving its climate goals, failing to acknowledge the crucial caveat that this should only be achieved with no net expansion of UK airport capacity.

6.1.3. Increasing capacity will increase emissions – that much is uncontested by the Appellant. It is clearly perverse to argue, as does the CCCAP, that by increasing emissions one creates an even greater 'opportunity' to reduce those emissions.

6.1.4. The CCCAP makes generalised references to sustainable aviation fuels infrastructure. The flaws in reliance on sustainable aviation fuels are canvased in detail in Finlay Asher's proof of evidence.

6.2. Very little, if any, weight can sensibly be given to the CCCAP as a way of addressing or mitigating Bristol Airport's emissions.

7. HEADLINE CONCLUSIONS

7.1 Bristol Airport's proposal to expand to 12 million passengers per year entails an incontrovertible increase in aviation emissions from the airport over the next two decades. At every level, and by every reasonable measure, the proposed expansion runs counter to the UK meeting both its domestic and international climate change obligations.

- 7.2 To increase emissions in the near to medium term runs completely counter to the Government's forthcoming net-zero legislation. The proposal goes against the CCC's own UK aviation pathway to align with its BNZP, whereby emissions from aviation are to be reduced in the near and medium term through demand management. The BAL proposal directly contravenes the CCC's clear statement that the BNZP should be achieved with no net expansion of UK airport capacity.
- 7.3 The expansion flouts the UK's obligations as a signatory to the Paris Agreement, under which the country has committed to deliver emissions reductions that embody its 'highest possible ambition'.
- 7.4 Proceeding with the project would make a mockery of the high-profile acknowledgement by Somerset's five councils of the "climate emergency". Now is certainly not the time for a development that, on its own, would wipe out a 'Paris-compliant' carbon budget for the local authority area.
- 7.5 Whether it is on the basis of policy or maths, this proposal is completely inappropriate for the huge climate and ecological challenges we are facing in the twenty-first century. It is akin to pouring yet more fuel on an already out-of-control fire.

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