

**Response from the Aviation Environment Federation to the Environmental Audit Committee inquiry into the implications for Government commitments on carbon emissions, air quality and noise should the Airport Commission's recommendation of a third runway at Heathrow Airport be adopted.**



3<sup>rd</sup> September 2015

**Executive Summary**

- A new runway would have significant impacts in terms of climate change, air quality and noise. We urge the Committee to consider in relation to each of these issues both whether the Commission has identified the appropriate benchmark, and whether the mitigations it proposes to achieve that benchmark are realistic. Our own assessment concludes that the Commission's proposed mitigations are neither sufficient nor deliverable.
- In relation to both climate change and air quality for which legal frameworks exist, the Commission has conducted 'sensitivity testing' on the basis of which it argues that the impacts can theoretically be mitigated. But it remains for Government to assess what package of policy measures would be required in each case to deliver the required mitigation, and the feasibility and cost of delivering these policies.
- In relation to noise, the Commission proposes a number of mitigations and makes a series of important assumptions. But without a clear policy or legal steer in terms of acceptable impacts it is a question of judgement whether these mitigations are adequate to limit both health and annoyance effects. It remains for Government therefore both to conduct an assessment of whether the Commission's modelling and mitigations are realistic and to consider whether the impacts would be acceptable.
- Overall, we urge the Committee to recommend that the Government avoid making a premature decision on airport capacity, and to remain open minded until this important work is undertaken.

1. We warmly welcome the opportunity to provide evidence on the Committee's investigation of whether the mitigations proposed by the Airports Commission in relation to the noise, air pollution and climate change implications of a new runway are realistic and appropriate to the scale of the environmental challenges that the expansion would pose.
2. The Aviation Environment Federation (AEF) is the principal UK NGO concerned exclusively with the environmental impacts of aviation. Supported by individuals and community groups affected by the UK's airports and airfields or concerned about

aviation and climate change, we promote a sustainable future for aviation which fully recognises and takes account of all its environmental and amenity effects. As well as supporting our members with local issues, we have regular input into international, EU and UK policy discussions. We have contributed evidence both in writing and in person to the EAC in the past, and engaged with the Airports Commission throughout its work programme, including being called to give evidence on climate change to a panel of commissioners in July 2013. At the UN we are the lead representative of the environmental umbrella organisation ICSA, which is actively engaged in the current talks aimed at agreeing global climate measures for aviation.

3. Our view is that the Airports Commission has not set out an effective framework of environmental mitigations for a third runway at Heathrow and that the Government must conduct its own review of what measures would be required, how feasible they are, and what the costs of these measures would be, before reaching a decision on the Commission's recommendation to expand. While we appreciate that the Committee's investigation focuses on the recommended expansion option, the need for an effective mitigation framework would also apply to any decision to build a second runway at Gatwick.
4. The Commission has stated that it hopes its analysis, including on the environmental impacts of its proposal, will facilitate the passage of an aviation National Policy Statement or Hybrid Bill, which could cement Government approval of the Commission's recommendation. But it is the responsibility of the Government to consider whether a sufficiently robust set of environmental mitigations can be delivered if expansion goes ahead, not least given the limited scope of the Airports Commission's terms of reference which focus on the issues of connectivity and passenger demand in the context of maintaining "the UK's position as Europe's most important aviation hub".
5. AEF has submitted detailed evidence to the Commission in relation to each of the issues under consideration by the EAC, namely carbon emissions, air quality and noise, though it is on climate change that we feel we have taken a particular lead among environmental organisations in pushing the Commission for better evidence and answers than were originally presented. In this submission we consider each of the issues in turn, beginning with a summary both of relevant Government policy and of the Airports Commission's proposed mitigations and moving on to consider the questions outlined in the EAC's terms of reference. In relation to climate impacts we provide some comment on the detail of the Commission's proposed mitigations, while in relation to air quality and noise, we believe the local authorities and local communities respectively are best placed given their local knowledge to take the lead on commenting in detail on the feasibility of the Commission's proposals. The Committee's final question, regarding how the Government should proceed in the context of its commitments on sustainable development, is dealt with separately at the end of our submission.

## Carbon impacts

### *Government policy*

6. Government policy on climate change must deliver the 80% economy-wide emissions cut enshrined in the UK Climate Change Act. The Act treats emissions from international aviation and shipping differently from those of other sectors, on the basis that the accounting methodology for these emissions will be influenced by discussions that are still ongoing about their potential inclusion in international carbon markets or the imposition of alternative international 'market based measures' such as carbon charges. At present, emissions from international aviation are not therefore included in carbon budgets.
7. Nevertheless:
  - The Act requires that (i) emissions from these sectors should be included as soon as possible, and (ii) in the interim they must be taken into account in the setting of carbon budgets for other sectors.
  - The Government's legislated carbon budgets reflect the need for emissions from aviation to be included in the long term by setting aside 'headroom' for them in line with the Committee on Climate Change (CCC)'s recommendation that emissions from aviation in 2050 should not exceed their level in 2005 – 37.5 MtCO<sub>2</sub>. This recommendation is often referred to as the 'carbon cap'. In the past, Government policy has referred specifically to the need to ensure that aviation emissions do not exceed the level of the carbon cap though there is no specific commitment to it under current policy.
  - The Government's statement in 2012 on the treatment of aviation and shipping emissions under the Climate Change Act specifies that "Government reaffirms its overall commitment to the 2050 target and recognises that emissions from international aviation and shipping should be treated the same as emissions from all other sectors, in order to reach our long-term climate goals."<sup>1</sup>
8. The Aviation Policy Framework indicates that the Government's preference is for aviation emissions to be tackled primarily through European or international policy measures. Current Government forecasts indicate, however, that aviation CO<sub>2</sub> emissions will breach the maximum level that CCC regards as compatible with the Climate Change Act, even without the addition of new runways and – importantly – even on the assumption that aviation is in future included in an effective global carbon market. In June 2015<sup>2</sup> the CCC advised Government to draw up an action plan by the end of 2016 for meeting the recommended planning limit of 37.5 MtCO<sub>2</sub>. The Government response to these recommendations is due by 15<sup>th</sup> October.

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<sup>1</sup>[http://www.aef.org.uk/uploads/Government\\_decision\\_on\\_aviation\\_shipping\\_and\\_carbon\\_budgets.pdf](http://www.aef.org.uk/uploads/Government_decision_on_aviation_shipping_and_carbon_budgets.pdf)

<sup>2</sup> Table A.1 recommendation 19, 'Reducing emissions and preparing for climate change: 2015 Progress Report to Parliament: Summary and recommendations'

[https://www.theccc.org.uk/wp-content/uploads/2015/06/6.738\\_CCC\\_ExecSummary\\_2015\\_FINAL\\_WEB\\_250615.pdf](https://www.theccc.org.uk/wp-content/uploads/2015/06/6.738_CCC_ExecSummary_2015_FINAL_WEB_250615.pdf)

### *Mitigations proposed by the Airports Commission*

9. Without mitigation in addition to aviation's inclusion in a global carbon market, UK aviation CO<sub>2</sub> emissions with a third runway at Heathrow are forecast by the Airports Commission to be 43.3 Mt by 2050, 15.5% above the CCC's recommended planning assumption of 37.5 Mt. We consider it a significant and notable gap, therefore, that none of the Commission's proposed conditions for a third runway at Heathrow addresses its climate change impact. The Commission has nevertheless conducted forecasting of aviation emissions and has considered the demand case for a new runway under the theoretical case whereby a carbon cap is imposed in line with the requirements of the Climate Change Act (while not making any recommendation on whether this is desirable).
10. The Commission argues that demand in the South East is strong enough to justify a new runway even if the sector's emissions were capped at 37.5 Mt. But the conclusion rests on an assumption that is not spelled out that demand (and therefore emissions) from other airports would fall to create the necessary headroom for expansion at Heathrow. We have previously argued both that the Commission's finding was meaningless in the absence of any proposals on how the carbon cap could be achieved at a national level, and that the available evidence suggested that the measures that would be required to achieve the cap while building a new runway would not in practice be feasible to deliver.
11. The Commission responded not with concrete policy proposals but with a 'carbon policy sensitivity test'<sup>3</sup> that sets out, at a high-level, theoretical carbon reductions that could collectively reduce emissions to the level of the carbon cap. We provide comments on this paper below.

#### Are the indicative policies and proposed mitigations set out in the Airports Commission's recommended option realistic and achievable?

12. No. Our analysis suggests that there remains a significant task in demonstrating whether the Commission's recommended option can be compatible with achievement of the Climate Change Act.
13. The Airports Commission's modelling has shown both that in the absence of new policy action (a) even without airport expansion, aviation emissions are set to exceed the level of the carbon cap and that (b) building a new runway would put the target still further out of reach so require an even more challenging level of policy action. The Commission's forecasts for CO<sub>2</sub> emissions both with and without new capacity are considerably lower than the latest Government forecasts, as a result, they say, of assuming larger aircraft on average than in the DfT figures. The Government will need to consider whether or not this reforecasting is robust but it is important to note that

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<sup>3</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/439679/economy-carbon-policy-sensitivity-test.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/439679/economy-carbon-policy-sensitivity-test.pdf)

the scale of the carbon challenge for policymakers would be higher than anticipated by the Commission if the Government's assumptions were retained.

14. The Commission has conducted modelling of both 'carbon traded' forecasts (the baseline figures, which assume that international carbon trading is extended to aviation but that emissions may exceed 37.5 Mt) and 'carbon capped' forecasts, which assume that additional measures are imposed alongside the introduction of aviation into a carbon trading system. In order to model the effect of a carbon cap under various runway options, the Commission assumes an increase in the price of carbon sufficient to limit emissions to 37.5 Mt. The results of this analysis were published in November 2014 and indicated that with a third runway at Heathrow the carbon price would need to increase from around £5 today to £634 under its 'Assessment of need' scenario (the one subsequently regarded as the main forecast) – around 3 times higher than the currently forecast price of £196 per tonne.
15. Since carbon market experts regard it as implausible that such a price would ever materialise, and following pressure by AEF for the Commission to consider more realistic mitigation options, a paper was published alongside the final report that provides a threefold 'policy sensitivity test' for how the carbon cap could be achieved with a Heathrow North West runway in operation. We recently published analysis of these tests as part of a paper titled 'The Airports Commission's final report – has it closed the carbon gap?'<sup>4</sup> and reproduce the relevant section below.

- (i) **Increase the carbon price from the £196 currently predicted for 2050 to £334.** In the modelling, this reduces anticipated aviation emissions from 43.3 to 41 Mt CO<sub>2</sub>. But there is no explanation of how this would be achieved. Including aviation in international carbon markets at all is still under negotiation.
- (ii) **Increase biofuel uptake** from the 2.5% of aviation fuel by 2050 anticipated by the Department for Transport to 5.6% (for the Heathrow North West runway). This, the Commission says, could reduce emissions by a further 2.3 Mt (so to 38.7 Mt), but would require two kinds of policy intervention:
  - *Government investment in biofuel demonstration plants;* these are assumed to receive public subsidy of 25% in the cost of setting up the plant (the price of which has now been shown to be higher than Government previously estimated). Clearly there would need to be Government appetite for action, available public funds, and private investment for this option to be forthcoming.
  - *The introduction of mandatory biofuel usage;* this measure accounts for the majority (4.6%) of the total estimated increase in biofuel use. But so far it has been strongly resisted by the aviation industry given the extra costs it would represent.
- (iii) **Mandate airline operational measures**

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<sup>4</sup> <http://www.aef.org.uk/uploads/The-Airports-Commission%E2%80%99s-final-report-%E2%80%93-has-it-closed-the-carbon-gapFINAL.pdf>

This final measure, the Commission says, could reduce emissions by 1.2 Mt, bringing the total level, even with a third runway, down to the carbon cap of 37.5 Mt. While emissions reductions through ‘operational measures’ often focus on more direct routing the Commission, to its credit, admits that future air traffic efficiencies will be hard if not impossible to come by while at the same time allowing for an increase in traffic. Instead, therefore, the Commission’s proposals relate to:

- **Enforcing lower cruising speeds.** This, the Commission says, would result in an increase in airline costs. It seems likely, therefore, to face industry opposition. The feasibility and cost of any necessary enforcement measures are not considered and we are not aware of any examples of governments so far successfully implementing such a measure.
- **Lower-carbon powering of airfield taxiing (such as shifting to electric power)**  
This would require aircraft to switch off at least one of their engines once on the ground and to use electric power, one engine, or towing.
- **Reductions in ‘contingency fuel’ carried by airlines for safety reasons.** This would have the aim of reducing aircraft weight and therefore fuel burn. Interestingly, both this measure and a reduction of fuel burnt during taxiing are anticipated by the Commission to be zero cost for airlines. But this raises the question of why they are not taking place in any case given airlines’ strong commercial interest in reducing fuel cost. Government would need therefore to identify what the current barriers are to their implementation and what it would take to remove them.

Overall, while the Commission’s work on policy measures helps to move the debate out of the realm of theory, it falls a long way short of being able to describe any credible means of bringing emissions down to a level consistent with the Climate Change Act while building a new runway. The questions of how the price of carbon can be raised to £334 per tonne, and of whether the proposed policy interventions on biofuel and operational improvements are politically and commercially feasible, remain to be answered.

What are the implications of adopting or not adopting those policies and mitigations for wider Government policy?

16. Should the anticipated measures not be realised, the Airports Commission’s own forecasts indicate that aviation emissions will significantly overshoot the maximum level that can be accommodated while meeting the requirements of the Climate Change Act.

Do realistic and achievable alternatives to those policies and mitigations exist, should the Government adopt the recommended option?

17. Prior to the publication of the Commission’s ‘carbon policy sensitivity test’ AEF undertook analysis to help highlight the scale of the policy challenge in making airport expansion compatible with climate legislation. We argued that we could see only two means through which Government could intervene to limit emissions – either by

significantly increasing ticket prices (through taxation) or by imposing retrospective planning restrictions to cap activity at regional airports. While these options appear far more certain in terms of delivery than those considered by the Commission, we have argued that both are likely to be politically toxic. We can see no politically palatable means of effectively restricting emissions to the level of a carbon cap if a third Heathrow runway is built.

## **Air quality impacts**

### *Government policy*

18. As in the case of climate change, the Government's approach on air quality is bound by delivery of legal duties. The Air Quality Standards Regulations 2010 transposed into UK law the requirements of the European 2008 air quality directive (Directive 2008/50/EC), which sets legally binding limits for concentrations of major air pollutants that impact public health. While the UK is currently compliant with some of these limits, it remains persistently in breach of the requirement that annual mean NO<sub>2</sub> may not exceed 40µg/m<sup>3</sup>, with sites along major roads both in central London and in the Heathrow area recording breaches every year. The UK is required to meet these limits 'in the shortest time possible'. In April this year, the UK Supreme Court ruled on a case brought against the UK Government by legal campaign group Client Earth, that the Government's current policy plan to meet legal air quality limits that came into force in 2010 by 2030 was inadequate and that new policy must be drawn up by the end of this year.
19. The Airports Commission quotes the National Planning Policy Framework as indicative of Government policy on air pollution, namely that: "Planning policies should sustain compliance with and contribute towards EU limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and the cumulative impacts on air quality from individual sites in local areas."
20. Nevertheless, the Commission developed its own 'test' against which, it argues, the air quality impacts of expansion should be considered. This is not that the UK must be compliant with EU air quality regulations by the time the runway is built (as was the case in 2009 when the Government announced the environmental limits accompanying its support for a third runway with the Environment Agency proposed to assess compliance). Instead, the Commission proposes that "New capacity should only be released when it is clear that air quality at sites around the airport will not delay compliance with EU limits." The Commission's proposed objective does not require that the limits are met but only that the Heathrow area should not be responsible for the most serious breach. In particular, the Commission argues that if, by 2030, there is anywhere in London where air quality is worse than at Heathrow then the airport cannot be held responsible for delaying compliance with the legislation. The Commission appears to pin its hopes on sites on the Marylebone Road continuing to record exceptionally bad air quality.

21. We do not consider this a sound test of the airport's sustainability and note that Alan Andrews of Client Earth, the successful litigant in the court case mentioned above, has argued that "If the Government makes a decision based on this test, it would be vulnerable to legal challenge."<sup>5</sup> Even if the Commission's proposed mitigations to deliver its air quality objective were realistic and achievable, therefore, we do not believe that they would deliver sufficient improvement to meet the legal requirement reflected in Government policy.
22. The Commission had earlier set itself an appraisal objective for its shortlisted scheme 'To improve air quality consistent with EU standards and local planning policy requirements.' None of the schemes however passed this test with the appraisal concluding that a new runway at Heathrow would have an 'adverse' to 'significantly adverse' impact on air quality. The scheme would worsen air quality (in terms of annual mean NO<sub>2</sub> concentrations) at about 47,000 properties, the Commission estimates.

#### *Mitigations proposed by the Airports Commission*

23. The Commission does not set out a clearly defined policy package to be delivered either by the Government or the airport in order to bring air pollution even to the level required by its own proposed test, let alone to within legal limits, and does not set out by whom mitigation should be enforced. But ensuring that the Heathrow area does not, following expansion, record NO<sub>2</sub> levels that are even higher than those on the Marylebone Road will require effective mitigation, the Commission states, such that "Local and national Government will need to work together with the scheme promoter to develop a robust set of mitigations to manage both background and airport demand."<sup>6</sup> The Commission's analysis includes a number of potential actions, therefore, described as sensitivities, that may result in air quality slightly better than in the baseline forecast.

#### Are the indicative policies and proposed mitigations set out in the Airports Commission's recommended option realistic and achievable?

24. While we do not in this response provide detailed comment on the feasibility of individual mitigations proposed, we note that the Commission's own analysis raises questions about the deliverability of the measures it suggests.

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<sup>5</sup> <http://www.standard.co.uk/news/transport/air-quality-test-in-heathrow-report-is-flawed-10360822.html>

<sup>6</sup> Section 9.82, Airports Commission Final Report, July 2015

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/440316/airports-commission-final-report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/440316/airports-commission-final-report.pdf)



What are the implications of adopting or not adopting those policies and mitigations for wider Government policy?

25. Should the possible improvements associated with measures considered by the Commission fail to materialise, the Commission's modelling suggests that the Heathrow area could, with expansion, have the worst air quality in London. But even if all the mitigations were successful, our understanding is that the Commission's prediction is that the Heathrow area would continue to significantly breach the EU legal limit for NO<sub>2</sub> of its annual mean not exceeding 40 µg/m<sup>3</sup>. The mitigation options, the Commission says, could collectively reduce NO<sub>2</sub> by 2.4 to 3.6 µg/m<sup>3</sup>. But the unmitigated forecast is as high as 48.7 µg/m<sup>3</sup> (or 47.4 without expansion).<sup>7</sup>

Do realistic and achievable alternatives to those policies and mitigations exist, should the Government adopt the recommended option?

26. Our view is that a Heathrow runway should not be sanctioned until the area is compliant with legal standards for air quality. We have yet to see a mitigation plan that can deliver this objective through realistic and achievable means.

## **Noise impacts**

### *Government policy*

27. The Government sets no national targets or limits for acceptable levels of aviation noise, and unlike both climate change and air quality, there are no legal benchmarks in relation to noise impacts. We regard the Government framework for aviation noise management as wholly inadequate.
28. Relevant aspects of Government policy in relation to the Commission's work include however:
- Recognition that night flights are particularly problematic, particularly in relation to health impacts<sup>8</sup>. The Government sets night flight restrictions for Heathrow, Gatwick and Stansted in terms of both movement numbers and a Quota Count.<sup>9</sup>
  - The high level objective "to limit and, where possible, reduce the number of people in the UK significantly affected by aircraft noise"<sup>10</sup>

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<sup>7</sup> Table 9.4, Airports Commission Final Report, July 2015  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/440316/airports-commission-final-report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/440316/airports-commission-final-report.pdf)

<sup>8</sup> Aviation Policy Framework Sections 3.34 and 3.35 <https://www.gov.uk/government/publications/aviation-policy-framework>

<sup>9</sup> <https://www.gov.uk/government/publications/night-flying-restrictions-at-heathrow-gatwick-and-stansted-airports>

<sup>10</sup> <https://www.gov.uk/government/publications/aviation-policy-framework>

- Continued use of the 57dB LAeq 16 hour contour as the average level of daytime aircraft noise marking the approximate onset of significant community annoyance<sup>11</sup>
- The Noise Policy Statement for England which includes the aim to “avoid significant adverse impacts on health and quality of life”<sup>12</sup>
- The Government’s aim to “to promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development.”<sup>13</sup>

*Mitigations proposed by the Airports Commission*

29. The Commission’s proposed noise mitigations and limits are highlighted in the Executive Summary to the main report and include:
- A ban on scheduled night flights between 11:30pm and 6 a.m.
  - A legally binding (but not defined) noise envelope
  - Compensation for anyone losing their home at full market value plus an additional 25% and reasonable costs
  - A requirement that more than £1 billion should be spent by Heathrow Airport on community compensation
  - A new aviation noise charge or levy to be introduced by Government (the level of which is not defined)
  - Establishment of a community engagement board, with an independent chair
  - The establishment of an ‘independent aviation noise authority’ with a statutory right to be consulted on flight paths and other operating procedures

Are the indicative policies and proposed mitigations set out in the Airports Commission's recommended option realistic and achievable?

30. We are aware that opposition has already been expressed by the aviation industry to the imposition of a night flight ban, and that Heathrow has yet to commit to it, having argued in the past that night flights were economically essential. The other measures, broadly, we regard as potentially feasible though there are numerous ways in which they would need to be strengthened in order, we consider, to be effective.
31. Some of the relevant mitigations have, however, been assumed in the Commission’s modelling rather than spelled out. In particular:
- (a) The Commission’s findings in relation to the scale of the noise impact have been shown to be very sensitive to assumptions about the location of flight paths,

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<sup>11</sup> As above

<sup>12</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69533/pb13750-noise-policy.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69533/pb13750-noise-policy.pdf)

<sup>13</sup> 8<sup>th</sup> July 2015, response to Parliamentary Question <http://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2015-07-08/6239/>

such that a particular airspace configuration is effectively a form of mitigation assumed by the Commission to take place. Whether or not this can be delivered – not least given that a number of recent trials of flight path changes have had to be abandoned early after strong local opposition – remains to be considered.

- (b) In addition, the basis for the assumptions made by the Commission about improvements in aircraft technology is unclear. The feasibility of delivering these should also, we consider, be scrutinised by Government.

What are the implications of adopting or not adopting those policies and mitigations for wider Government policy?

32. Our view is that the Government’s policy on aviation noise is effectively meaningless as a benchmark for assessing whether the mitigations are effective in limiting noise from Heathrow as it lacks any quantifiable targets or limits.
33. We would question however whether the Government’s aim “to promote good health and a good quality of life through the effective management of noise” can be considered to have been satisfied by the Commission’s analysis, given that it indicates for example that:
- Notwithstanding its assumptions on flight path and technological improvements, 320,700 people would be exposed to noise for the first time under the recommended option<sup>14</sup>
  - Daytime noise is predicted to increase with expansion compared with a no new runway baseline
  - A night flight ban that covers only 6.5 hours of the night would have a far smaller benefit in terms of health than an 8 hour ban<sup>15</sup>
  - With a third runway, communities currently benefitting from half a day’s respite would have this reduced to a third of the day

*Do realistic and achievable alternatives to those policies and mitigations exist, should the Government adopt the recommended option?*

34. We have long argued that the Government should set quantifiable targets in relation to acceptable noise levels, against which mitigation can be tested in terms of effectiveness. The most robust recommendations for the protection of public health of which we are aware are those of the World Health Organisation (including its European office). Adoption of these recommendations even as long term targets would require a new level of ambition in terms of mitigation and it is very hard to envisage how

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<sup>14</sup> 2050 carbon capped forecast, 55 Lden, ‘minimise total’ option  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/372488/noise--local-assessment.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/372488/noise--local-assessment.pdf)

<sup>15</sup> Section 14.22 Airports Commission Final Report, July 2015  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/440316/airports-commission-final-report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/440316/airports-commission-final-report.pdf)

expansion at an airport that already exposes far more people to unacceptable noise than at any other airport in Europe could be compatible with achieving these WHO limits.

What steps should the Government should take in these areas to reach its decision in a way that is consistent with its commitments on sustainable development?

35. The Sustainable Development Goals to which the UK and other UN members are likely to sign up this month refer to the eradication of global poverty and also to the shift towards low carbon economies. They include the requirement for example to 'promote wellbeing for all at all ages' to 'ensure sustainable consumption and production patterns' and to 'take urgent action to combat climate change'.
36. While the Commission has made a demand case for expansion, whether or not there is a strong strategic and economic case in the context of sustainable development commitments remains a question for Government. In particular, while the Commission has undertaken some preparatory work in relation to what the environmental impacts of a new runway may be it remains for Government both to review and validate this evidence (which in some cases has been prepared in a way that departs from Government methodology) and to consider whether an effective and deliverable set of environmental mitigations can be developed in relation to these impacts. This work must, we consider, be completed before any decision on a new runway is reached.
37. In the case of climate change, we recommend that the Government needs to assess whether there is a realistic prospect of limiting UK aviation CO<sub>2</sub> emissions to 37.5 Mt if a new runway is built, what the implications of this would be, including for other UK airports, and what package of policy measures would be implemented to deliver it. In the case of air quality, the Government must assess what measures are required to meet not the Commission's recommended test but the requirements of EU law if a new runway is built. And in the case of noise, the Government must consider whether a new runway is compatible with the Noise Policy Statement, particularly with respect to avoiding significant adverse impacts on health and quality of life, with a thorough review of the deliverability of the Commission's plans including the precise location of flight paths.
38. Finally, for the Government to take a decision on airport capacity that reflects its commitments on sustainable development, it will need to consider a number of issues that fall outside the scope of the Committee's inquiry, but which it may be worthwhile flagging. These include:
  - Consideration of the strength of the economic case, once all costs as well as benefits are considered. The figure of £147 billion benefit associated with a new Heathrow runway that has been quoted by Howard Davies and widely reported in the press, is in fact based on analysis that (a) the Commission's own expert advisers have said should be treated with caution as it appears to be based on

double counting and questionable assumptions and (b) takes no account of environmental or surface access costs. The Commission's cost benefit analysis gives an entirely different picture, with a Heathrow North West runway generating only £1.4 billion if carbon emissions are limited to the level of the cap. Our recent briefing on 'The Airports Commission's economic fudge' sets out our concerns on this.<sup>16</sup>

- Consideration of other impacts, such as public safety. The Commission's analysis indicates that a new Heathrow runway would generate a 60% increase in risk, equivalent to a frequency of one crash in 16 years. Yet it gives only the most cursory treatment to this issue in its commentary and provides no consideration of necessary mitigation to limit the risk to local communities (such as adjusting flight paths or moving people out of the area), or of what the costs of this might be.

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<sup>16</sup> <http://www.aef.org.uk/uploads/Economic-impact-of-expansion-under-a-carbon-cap-FINAL.pdf>