

# London Luton Airport Expansion

Planning Inspectorate Scheme Ref TR020001

## Comments on Greenhouse Gas Emissions

### North Herts and Stevenage Friends of the Earth

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In our submission to the 2022 Statutory Consultation, we argued that the proposed development would have a material impact on the UK's ability to meet its carbon reduction targets, particularly Carbon Budget 6 (CB6) and the 2050 net zero target. These comments are included as an annex below. We would like to make some further comments in support of this. Our fundamental argument is that **the UK currently has no clear pathway to meeting its legally binding carbon reduction targets; until it does, it is impossible to regard any major infrastructure project that increases net carbon emissions as 'safe', in the sense that it does not jeopardise the UK's ability to meet those targets.**

In order to meet CB6 the UK needs to make very large reductions in its greenhouse gas (GHG) emissions. The carbon budget for 2035 is 193 MtCO<sub>2</sub>e p.a. compared with a 2021 baseline of 446 MtCO<sub>2</sub>e p.a. This will require deep cuts in emissions from domestic heating, surface transport and industry as well as the continued decarbonisation of the electricity supply and the development of industrial scale engineered GHG removals. It is clear from ongoing discussions in society that this is going to be extremely difficult. Each of these areas has its own specific challenges.

The proposed expansion at Luton Airport increases GHGs by nearly 0.7MtCO<sub>2</sub>e p.a. by 2039 according to the documents submitted as part of the 2022 Statutory Consultation, revised to 0.4MtCO<sub>2</sub>e p.a. in the current application (see discussion below).

The starting point has to be that any major infrastructure project that results in a net increase in GHG emissions is not consistent with Government net zero commitments. Such an increase can only be accommodated by other sectors making even deeper cuts to compensate for it, which seems implausible given the challenges they face themselves. The applicant should be required to identify evidence that the UK will be able to meet its targets even allowing for increases in GHG emissions from aviation. In our view this evidence does not exist.

The obvious source (perhaps the only credible source) to demonstrate this is the Carbon Budget Delivery Plan (CBDP) published by the Government in April 2023. However we contend that this plan gives no credible support for the following reasons:

- The Climate Change Committee (CCC) does not regard the plan as adequate to deliver CB6. In their report to parliament in June 2023 they stated '*Despite new detail from Government, our confidence in the UK meeting its medium-term targets has decreased in*

*the past year.*' (<https://www.theccc.org.uk/publication/2023-progress-report-to-parliament/#supporting-information-charts-and-data>)

- The CBDP is subject to ongoing legal challenge as to whether it complies with the Climate Change Act. (<https://friendsoftheearth.uk/climate/net-zero-strategy-2-legal-challenge>)
- In the past weeks the Government has indicated it plans to weaken some of the policies anticipated in the CBDP, such as the target for phasing out new petrol and diesel cars (<https://www.bbc.co.uk/news/uk-66871073>). This further undermines the plan's credibility.

The Government's *Jet Zero Strategy* also provides no comfort on this point (whether or not it is regarded as policy) as it only deals with the Government's aspirations for the future course of aviation emissions, not the ability of other sectors to deliver compensatory carbon reductions.

We also point out that the ETS and CORSIA do not help mitigate aviation emissions in this context. These schemes reallocate emissions from one sector to another, but the impacts net off when looking at the entire net emissions for the UK.

Government needs to produce plans and policies which meet the requirements of the Climate Change Act and provide confidence that legally-binding carbon reduction targets will be met. Until these are available we cannot assume that they will make provision for aviation emissions to increase. In the meantime the only sensible approach is to follow the precautionary principle and avoid major infrastructure projects that increase GHG emissions until it is clear there is safe headroom to do so.

### **Net Impact of the Proposal on GHG Emissions**

Between the figures supplied for the 2022 Statutory Consultation Process and the Application there has been a huge reduction in the projected impact of the proposal on GHG emissions:

#### Net Increase in GHG Emissions/MtCO<sub>2</sub>e

	2027	2039	2043	2050
Statutory Consultation	233,390	680,835	1,001,486	996,609
Application	191,055	432,494	462,157	282,244

Sources:

Table 12.29, Preliminary Environmental Investigation Report, Volume 2, Chapter 12.

Table 12.22, Volume 5 Environmental Statement and Related Documents, 5.01 Chapter 12: Greenhouse Gases (TR020001/APP/5.01).

This reduction occurs because of the assumed decarbonisation of flights following the Government aspirations set out in the *Jet Zero Strategy*. It is very important to note that (so

far as we are aware) there were no major technical developments in the year between the two reports being written; the change is purely down to a more optimistic and aggressive set of assumptions being applied in the Application that were considered inappropriate and unjustified when the PEIR was written. The authors of the PEIR quite correctly felt that it would not be prudent to anticipate technology developments that are untested and speculative; the authors of the Application documents have felt emboldened to do this by the aspirations of the Government set out in Jet Zero. The publication of the Jet Zero Strategy does not actually make these technology breakthroughs more likely to happen (you could argue that in some cases Government strategy influences investment decisions and so does make technology advances more likely; in this case the global nature of the aircraft industry and the existing desire to seek sustainable solutions make it implausible that the Strategy will actually have any material impact).

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### **Annex: Submission to the 2022 Statutory Consultation**

The Preliminary Environmental Information Report (PEIR) seeks to argue that the increase in GHG emissions resulting from the proposed expansion does not have a material impact on the Government's ability to meet its carbon reduction targets.

It compares the increase in emissions over the budget periods 2023-2027 and 2028-2032 with the '*appropriate planning assumption*' for aviation emissions proposed by the Climate Change Committee (CCC) – 37.5 MtCO<sub>2</sub>e p.a. The results are set out in Table 12.32; the increase is 2.331% and 3.691% respectively.

However this comparison gives no information about the scope for the increases to be accommodated within the CCC's proposed budget. Since the CCC budget applies to all UK aviation emissions any assessment of its ability to absorb the Luton increases needs to take account of what headroom (if any) is left from other UK aviation emissions.

In proposing the cap of 37.5 MtCO<sub>2</sub>e p.a. the CCC equated this to limiting demand to at most 25% above 2018 levels i.e. 365 Mppa (<https://www.theccc.org.uk/publication/letter-international-aviation-and-shipping/>).

To see what scope this allows for the proposed expansion in Luton we need to allow for existing UK aviation capacity. UK aviation forecasts from the Department for Transport project future capacity (expressed as million passengers p.a.) based on existing (2017) infrastructure as follows ([https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/878705/uk-aviation-forecasts-2017.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/878705/uk-aviation-forecasts-2017.pdf), Figure 7.1):

Year	Low	Central	High
2025	280	295	310

2030	295	315	330
2035	320	335	355
2040	345	360	380
2045	375	385	410
2050	395	410	435

This shows that even on low estimates the threshold of 375 Mppa is met by 2045 without new infrastructure projects. These figures exclude Heathrow expansion where the proposed North West runway, if implemented, would add around 25-30 Mppa according to the DfT report (Table 34).

This shows that by the late 2040s UK capacity will outstrip what the CCC considers an appropriate planning assumption. The proposed expansion at Luton would add an additional 3.7% of overcapacity on top of that. **We argue that this does represent a material impact on the Government's ability to meet its carbon targets by jeopardising its ability to contain aviation emissions within necessary limits.**

For the budget period 2033-2037 (the Sixth Carbon Budget) the PEIR compares the increase in emissions arising from the proposed Luton expansion with the entire UK budget, giving a figure of 0.691% (Table 12.32).

The PEIR presents this as supporting its contention that the proposed expansion does not have a material impact on the Government's ability to meet its carbon reduction targets. However there is no obvious way to define what constitutes materiality in this context. Any single infrastructure project is almost bound to have a GHG impact which is only a small proportion of the annual carbon budget for the entire United Kingdom, so by this standard almost any project would be deemed immaterial and given a green light. However the aggregate effect of enough projects of this nature would obviously breach any sensible materiality limit. For instance it would only take 10 projects of this size across the entire UK to exceed a materiality limit of 5%. **Therefore we argue that a single project that uses up over ½% of the carbon budget for the entire UK does constitute a material impact.**

The PEIR considers the 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> Carbon Budgets, but does not compare GHG increases with the Government's net zero target for 2050. This is important because while the increases from the proposed expansion are fairly flat after 2043 at about 1MtCO<sub>2e</sub> (see for example Table 12.20), the UK target continues to fall to 2050.

While there is no official target for gross emissions in 2050 the Government's Net Zero Strategy report ([https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1033990/net-zero-strategy-beis.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1033990/net-zero-strategy-beis.pdf)) gives a range of about 54-93 MtCO<sub>2e</sub>. This compares to an indicative figure in the CCC's Sixth Carbon Budget report (<https://www.theccc.org.uk/publication/sixth-carbon-budget/>) of 45-95 MtCO<sub>2e</sub>. These are all emissions which will need some GHG removal technology. On this basis the increase in GHGs arising from the Luton expansion in 2050 would be approximately 1-2% of all UK emissions. **This is further evidence that the proposals would have a material impact on the Government's ability to meet its carbon targets in 2050.**

The PEIR mentions that the UK Government assumes that the indirect impact of aviation (water vapour, contrails NOx etc) that are not included in Climate Change Act numbers is 89% of the direct impact. So for instance in 2050 the impact of expansion is an additional 808,822 MtCO<sub>2</sub>e on top of the 996,609 MtCO<sub>2</sub>e in the table above.

An important point is that these effects are short-lived and not cumulative; so the Climate Change Committee has stated that the way they should be controlled is by limiting the growth in flights, as a constant number of flights stabilises the climate impact. Here it is proposed to increase the number of flights and so increase the climate forcing impact.