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6th September 2024

Transport Infrastructure Planning Unit
Great Minster House
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Email: FutureLuton@lutonrising.org.uk

Your Ref: TR020001

Dear Sir/Madam

**London Luton Airport Expansion Project (Reference Number TR020001)**

## 1. Response to Secretary of State letter published on the 23rd August 2024

1.1 The Applicant is responding to the letter from the Secretary of State published on the 23rd August 2024 requesting comments on representations received in response to the 2nd August consultation.

2.1 The Applicant has provided comments on representations made by Hertfordshire County Council (HCC) and North Hertfordshire District Council (NHDC) and Natural England in Table 1 below. Further representations were made by other interested parties to which the Applicant has no further comments.

3.1 On the 29th August 2024, the Secretary of State requested further information on the potential implications of the recent judgement by the Supreme Court in R *(on the application of Finch on behalf of the Weald Action Group) v Surrey County Council and others [2024] UKSC 20 ('Finch')1* in relation to the Proposed Development. The Applicant's response is appended to this letter.

Table 1. Applicant's response to representations made by Interested Parties

| Interested Party | Applicant's response |
|---|---|
| Hertfordshire County Council and North Hertfordshire District Council | The Applicant has set out its position with regards to the HCC and NHDC representations in its response to the Secretary of State's letter dated 2nd August 2024.<br><br>The Applicant maintains its position that the junction designs are acceptable against relevant design standards and are appropriate for the DCO application stage of the development. Further discussions would take place with HCC and NHDC as part of the detailed design stage and changes can be secured during this process. Alternative proposals can be brought forward and a mechanism for delivering alternative arrangements is described in the Outline Traffic Related Impacts Monitoring and Mitigation Approach (OTRIMMA) **[TR020001/APP/8.97]**, which is secured by Requirement 30 of the draft DCO **[TR020001/APP/2.01]**. Both the TRIMMA process and the |

| Interested Party | Applicant's response |
|---|---|
| | protective provisions in the DCO give the local highway authority approval rights over the detailed design of the highway works, so their interests are already adequately protected.<br><br>As stated in previous correspondence, further engagement was sought by the Applicant with officers at HCC on revised terms for the proposed side agreement in May 2024. With reference to the monitoring of traffic in rural vehicles in Hertfordshire, a further request has been made to HCC to engage on this point and a meeting is being arranged.<br><br>The Applicant anticipates agreement can be reached on this matter and will provide a further update on progress on 20 September 2024 when providing an update on the position reached with Network Rail and the Train Operating Companies. |
| Natural England | The Applicant accepts that the area labelled as "*Candidate Area for Chilterns Area of Outstanding Natural Beauty (AONB) Boundary Review*" in Figure 14.7 **[REP4-037]** has not originated directly from Natural England. As Natural England point out they do not have fixed boundaries yet and have not published the Candidate Areas. However, during scoping and preparation of the assessment and examination of the Application, Natural England and other consultees have requested that these "Candidate Areas" are taken into account.<br><br>Therefore, the Applicant used the information available at the time which was the relevant search area. The Applicant thanks Natural England for confirming that the areas immediately to the east of the Order Limits were correctly considered as a Candidate Area, and therefore the correct areas were considered appropriately in the relevant application documents particularly Appendix 14.9 **[APP-107]** which takes this potential Candidate Area into account and remains robust.<br><br>Nothing in the update provided by Natural England changes the conclusions of the Environmental Statement, nor the potential change to these conclusions should this area become designated as part of the National Landscape in the future, as reported in the sensitivity test at Appendix 14.9 **[APP-107]**.<br><br>As this potential designation remains speculative the Applicant maintains their position discussed during examination that this should be given no weight in the decision to grant development consent **[REP6-066]**. All relevant planning authorities agreed that limited weight should be given to this matter. |

Please do not hesitate to get in touch should you have any further comments or questions.

Yours sincerely,

[redacted]

[redacted]
Head of DCO Programme

# Appendix A - Response to request for information regarding any potential implications of Finch v Surrey County Council on Luton Rising's Greenhouse Gas Assessment

# Contents

# 1 INTRODUCTION

## 1.1 Context

1.1.1 This document has been prepared in response to a 'request for information' issued on the 29th of August 2024 by the Secretary of State for Transport seeking information from the Applicant that it considers relevant in relation to the implications of the judgment in R (on the application of Finch on behalf of the Weald Action Group) v Surrey County Council and others [2024] UKSC 20 (Finch) for the Proposed Development.

1.1.2 On 20 June 2024 the Supreme Court handed down judgment in the case of Finch on the reporting of indirect greenhouse gas (GHG) emissions in environmental impact assessment (EIA). This was a split decision with the judgment of the majority given by Lord Leggatt. The judgment determined that in carrying out an EIA of a project for the extraction of oil, the authority was required to assess, as an indirect effect of the project, the environmental effects of greenhouse gas emissions arising from the ultimate combustion of the oil once refined and used as fuel.

1.1.3 Lord Leggatt expressed the essential question raised by the appeal as follows (para 4):

*"This appeal raises a question about whether the greenhouse gas ("GHG") emissions which will occur when oil extracted from an oil well, after being refined, is burnt as fuel must be included in the EIA required before development consent may be given for the extraction of the oil. The answer to this question depends on whether, for the purpose of the applicable legislation, the effect on climate measured by the GHG emissions that will occur upon combustion of the oil is an effect of the project on climate."*

1.1.4 The competent authority, Surrey CC, had ultimately accepted as sufficient an environmental statement that assessed only direct releases of greenhouse gases at the project site over the lifetime of the Horse Hill project and contained no assessment of the impact on climate of the combustion of the oil produced. Importantly, Lord Leggatt also recorded the following, as established in the High Court (para 7):

*"… It is also agreed that it is not merely likely, but inevitable, that the oil extracted will be sent to refineries and that the refined oil will eventually undergo combustion, which will produce GHG emissions. It is not disputed that these emissions, which can easily be quantified, will have a significant impact on climate. …"*

1.1.5 At section 9 (paras 65-100) Lord Leggatt considers "What are the 'effects of a project'". He considers the concept of 'causation' more generally and then goes on to consider causation in the context of environmental impact assessment, as follows (para 72):

*"… The question is: on the assumption that the project goes ahead, what possible future effects on the environment will constitute "effects of the project" which (if significant) must therefore be assessed? The EIA Directive answers that question by imposing the test of whether the effect is "likely". …"*

1.1.6 Lord Leggatt accepts (para 73) that the term 'likely' can have more than one meaning, but he goes on to make clear (para 74) that:

*"Whatever the precise meaning of the term, to determine that a potential effect is "likely" requires evidence on which to base such a determination. If evidence is lacking so that a possible future occurrence is a matter of speculation or conjecture, then a rational person would not feel able to judge that it is "likely". Such agnosticism is not the same as judging the event to be unlikely. It reflects a belief that there is too little knowledge on which to base a judgment."*

1.1.7 Importantly, he adds this caveat (paras 77/78):

*"77. ... Conjecture and speculation have no place in the EIA process. Thus, if there is insufficient evidence available to found a reasoned conclusion that a possible environmental effect is "likely", there is no requirement to identify, describe and try to assess this putative effect. This criterion must also govern, where a possible effect is regarded as "likely", the nature and extent of the assessment of the effect.*

*78. There is here an area of evaluative judgment involved in determining the scope of an EIA. Judging whether a possible effect of a project is likely and capable of assessment may, depending on the circumstances, be a matter on which different decision-makers, each acting rationally, may take different views."*

1.1.8 It was important, therefore, in the Finch case that there was no uncertainty about the relevant facts. The Supreme Court made clear that "It is known with certainty that the extraction of oil at the proposed well site in Surrey - which is the activity giving rise to the requirement to carry out an EIA - would initiate a causal chain that would lead to the combustion of the oil and release of greenhouse gases into the atmosphere." (para 79). It was not necessary, therefore, to consider what was meant by "likely" because it was an agreed fact that, if the project went ahead, this chain of events and the resulting effects on climate are not merely likely but inevitable.

1.1.9 There then follows (paras 83-92) a discussion as to what is a direct and what is an indirect effect of a project. Lord Leggatt concluded (para 90) that the 'downstream' combustion effects of the Horse Hill project are properly regarded as 'indirect effects'.

1.1.10 Lord Leggatt later deals with the 'floodgates' argument raised in the first instance judgement of Holgate J. Lord Leggatt's judgement is set out in full below as it contains important relevant implications:

*"119. The judge was clearly concerned that, if it were to be accepted that combustion emissions are environmental effects of the extraction of the oil, then this would have "ramifications far beyond the legal merits of the present challenge as they relate to the production of crude oil" (para 4). ... Holgate J was clearly worried that, if all the GHG emissions generated from these activities had to be assessed, the EIA process would be unduly onerous and unworkable.*

*120. In my view, this concern was misplaced. Recognising that combustion emissions are effects of producing crude oil does not open floodgates in the way the judge feared. ...*

*121. Oil is a very different commodity from, say, iron or steel, which have many possible uses and can be incorporated into many different types of end product used for all sorts of different purposes. ... Such effects will depend on innumerable decisions made "downstream" about how the steel is used and how products made from the steel are used. This indeterminacy regarding future use would also make it impossible to identify any such effects as "likely" or to make any meaningful assessment of them at the time of the decision whether to grant development consent for the construction and operation of the steel factory.*

*...*

*123. But that is not the position here. The oil produced from the well site will not be used in the creation of a different type of object, in the way that a component part is incorporated - along with many other different and equally necessary components - in manufacturing a motor vehicle or aircraft. Refining the oil is simply a process that it inevitably undergoes on the pathway from extraction to combustion. Nor is there any element of conjecture or speculation about what will ultimately happen to the oil. It is agreed that it will inevitably be burnt as fuel. And a reasonable estimate can readily be made of the quantity of GHGs which will be released when that happens."*

1.1.11 Thus the finding in Finch that the refining and combustion of the oil caused 'downstream' effects that were 'inevitable' obviated the need in that case for any judgement on whether or not such effects were 'likely'. As Lord Leggatt stresses, however, "… the EIA process does not require that attempts be made to measure or assess putative effects which are incapable of such assessment."

1.1.12 Later in his judgment Lord Leggatt makes the following points on the 'intermediate steps' argument that found favour in the Court of Appeal (para 134):

*"… If there is a clear and inexorable causal path from event X to event Y, then Y is an effect of X. The number of intermediate steps along the way, the nature of those*

*steps and the fact that Y occurs far away from X does not alter or affect that conclusion."*

However, he later adds this important caveat (para 138) to the approach:

*"... There are, however, potential reasons why the view might reasonably be taken that it was not necessary to include an assessment of such impacts in the EIA. One would be that there was insufficient information available on which to make a reasonable assessment of the relevant impacts. Another potential reason would be that, so far as it was possible to judge, such impacts were not themselves likely to be significant."*

1.1.13 Thus in addition to the 'insufficient information' to make a reasonable assessment argument, there is a second argument for not including an assessment in an EIA where it is possible to judge that the effects would not be significant.

1.1.14 It is within this overall context that the Applicant responds to the Secretary of State's request for information.

## 1.2 Overview

1.2.1 In the current application, London Luton Airport Limited ("the Applicant") is seeking Development Consent for the expansion of London Luton Airport ("the Proposed Development"). In this response the Applicant considers the potential implications of the Finch judgment in the context of the following issues and, where appropriate, provides other environmental information in response to the Secretary of State's request:

a. The inclusion of greenhouse gas emissions from inbound flights as a result of the Proposed Development.
b. The inclusion of greenhouse gas emissions from 'well-to-tank' activities as a result of the Proposed Development.
c. The impact of indirect surface access emissions.
d. The impact of greenhouse gas emissions from increased employment because of economic growth deriving indirectly from growth at the Airport.
e. The impact on the Applicant's Green Controlled Growth (GCG) Framework, including on the Limits and Thresholds proposed within GCG.

# 2 AVIATION EMISSIONS FROM INBOUND FLIGHTS

2.1.1 As noted above, the Finch judgment held that there was a need to assess all likely direct and indirect significant effects of a project, save that "only effects which evidence shows are likely to occur and which are capable of meaningful

assessment must be assessed"[1] and that "in principle, all likely significant effects of the project must be assessed, irrespective of where (or when) those effects will be generated or felt".[2]

2.1.2 In the Environmental Statement, Chapter 12 Greenhouse Gases **[REP3-007]** the Applicant assessed greenhouse gas emissions from aircraft for flights between London Luton Airport and a destination airport. The following elements of such an air traffic movement are considered:

a. Landing take-off cycle (LTO): the LTO cycle considers emissions from aircraft during descent to, and ascent from London Luton Airport below 3000ft as well as during taxiing activities at London Luton Airport[OBJ]

b. Cruise, climb and descend (CCD): CCD considers only greenhouse gas emissions from aircraft departing London Luton Airport above 3000ft to within 3000ft of the destination airport[3].

2.1.3 In essence, the objective is to include the emissions of air traffic movement from its airport of origin to its airport of destination. The return (inbound) movement is not included in the calculation as this is counted as emissions of the airport / nation from which it is departing. This avoids either double counting (i.e. both airports / nations counting both legs of a return movement) or zero counting (i.e. each airport / nation counting both legs of a return flight against the other airport / nation).

2.1.4 This practice is consistent with the calculation of emissions in the UK carbon budgets and the trajectories in the Jet Zero Strategy. By convention, the Applicant has included the landing emissions at London Luton Airport as a proxy for those at the destination airport and, to avoid double counting, has not then included the landing emissions at the destination airport.

2.1.5 When assessing aviation emissions at a national and international level it is accepted practice to model emissions based on volumes of aviation bunker fuel consumed. If every nation accounts for the use of its own bunkered fuel used on outbound flights then this avoids the double counting of aviation emissions between different countries and provides a more accurate account of global aviation emissions. The UK has aligned with this approach when estimating aviation emissions and, as stated above, only includes emissions from departing flights in both the UK carbon budgets and in the scenarios presented for UK aviation in the Jet Zero Strategy.

2.1.6 The approach taken by the Applicant, including reporting emissions from inbound aircraft in the descent phase of LTO into London Luton Airport, is also consistent with other recent airport projects approved by the Secretary of State.

[1] *Finch* at [167].
[2] *Finch* at [93].
[3] Emissions from the inbound descent LTO phase into the airport are used as a proxy for emissions from the descent phase into the destination airport. This approach therefore accounts for equivalent emissions from a full journey between the airport and the destination airport. On this basis the term 'outbound' flights are used to represent all aviation emissions reported in the ES.

2.1.7 To understand the significance of greenhouse gas emissions from a project on the climate, IEMA guidance[4] on assessing the significance of greenhouse gas impact, states emissions from a project should be contextualised against a relevant carbon budget. The UK carbon budgets reflect the aviation emissions from departing international aircraft and this is also the basis upon which aviation emissions were calculated for the Jet Zero Strategy. Thus, not only is excluding inbound flights considered current practice for calculating aviation emissions, but excluding inbound flights from the GHG assessment also allows for the magnitude and future trajectory of aviation emissions from the Proposed Development to be contextualised against UK carbon budgets and the scenarios presented in the Jet Zero Strategy. This is the approach taken in the Environmental Statement, Chapter 12 Greenhouse Gases. This approach is also consistent with the recent decision by the Secretary of State for Housing, Communities and Local Government and by the Secretary of State for Transport on the appeal relating to London City Airport, where the Secretaries of State noted that this is a widely adopted approach which has been used in a number of airport expansion proposals and endorsed by the High Court[5].

2.1.8 Furthermore, the assessment of greenhouse gas emissions presented in the Environmental Statement has applied the greenhouse gas impact significance test set out in the Airport's National Policy Statement (ANPS)[6]. The ANPS test states (Paragraph 5.82) that "Any increase in carbon emissions alone is not a reason to refuse development consent, unless the increase in carbon emissions resulting from the project is so significant that it would have a material impact on the ability of Government to meet its carbon reduction targets, including carbon budgets."

2.1.9 For the reasons set out above, therefore, it would not have been appropriate to include inbound emissions when applying the ANPS test because the test is directly linked to the impact on carbon budgets, and the methodology in relation to flights which is embedded within them.

2.1.10 To contextualise the impact of both inbound and outbound emissions against a carbon budget represents a challenge as there is no single budget available against which to undertake a meaningful assessment.

2.1.11 The Applicant does acknowledge however that while it may be inappropriate to include the emissions of inbound flights and, indeed, difficult to contextualise emissions from both inbound and outbound flights, it is possible to calculate and report these emissions. To do so the Applicant has considered it a reasonable approach simply to double the emissions reported in the Applicant's Environmental Statement, which (as above) accounts for outbound flights. For

[4] Assessing Greenhouse Gas Emissions and Evaluating their Significance 2nd Edition, IEMA, February 2022
[5] Town and Country Planning Act 1990 – Section 78 Appeal made by London City Airport Limited, Application reference: 22/03045/VAR https://assets.publishing.service.gov.uk/media/66c33ed4057d859c0e8fa728/24-08-19_-_LONDON_CITY_AIRPORT__HARTMANN_ROAD__SILVERTOWN__LONDON_E16_2PX_-_App_No_3326646.pdf
[6] Airports National Policy Statement, Department for Transport, June 2018 https://assets.publishing.service.gov.uk/media/5e2054fc40f0b65dbed71467/airports-nps-new-runway-capacity-and-infrastructure-at-airports-in-the-south-east-of-england-web-version.pdf

information, therefore, Table 12.18 from the Greenhouse Gases Chapter **[REP3-007]** has been recreated in Table 1 below to include greenhouse gas emissions for both outbound and inbound flights.

Table 1. Aviation Emissions (excluding WTT) (tCO2e)

| | 2019 (baseline) | 2025 (Peak operation) | 2027 (Year of capacity for assessment Phase 1 | 2039 (Year of capacity for assessment Phase 2a) | 2043 | 2050 |
|---|---|---|---|---|---|---|
| Future baseline (outbound only) | 1,123,074 | 956,738 | 885,838 | 610,027 | 460,150 | 293,989 |
| Future baseline (inbound and outbound) | 2,246,148 | 1,913,476 | 1,771,676 | 1,220,054 | 920,300 | 587,978 |
| Core planning case (outbound only) | 1,123,074 | 1,014,704 | 1,010,984 | 930,022 | 881,398 | 574,926 |
| Core planning Case (inbound and outbound) | 2,246,148 | 2,029,408 | 2,021,968 | 1,860,044 | 1,762,796 | 1,149,852 |
| Net impact (outbound only) | 0 | 57,966 | 125,146 | 319,995 | 421,248 | 280,937 |
| Net impact (inbound and outbound) | 0 | 115,932 | 250,292 | 842,496 | 842,496 | 561,874 |

# 3 WELL TO TANK EMISSIONS

3.1.1 Well-to-tank (WTT) emissions are the greenhouse gas emissions produced during the process of extracting, refining and transporting fuel before it reaches its point of use. WTT emissions are separate from emissions arising from the direct combustion of the fuel.

3.1.2 In line with the reporting requirements set out in the ANPS, emissions were quantified and reported in the Applicant's Environmental Statement, Chapter 12 Greenhouse Gases **[REP3-007]** for four key emissions sources:

a. **Construction** – emissions resulting from the construction phase of the proposed expansion, largely around the provision of a new terminal and additional aprons.

b. **Airport Operations** – emissions resulting from ground-based operations at the airport, primarily from the consumption of energy (electricity and other fuels) at the airport and by third-party operators, the use of vehicles, fire testing, aircraft engine testing, use of de-icer and refrigerants etc.

c. **Surface Access** – emissions from travel to and from the airport by passengers and staff.

d. **Aviation** – emissions from aircraft including:

   i. Landing take-off cycle (LTO): the LTO cycle considers emissions from aircraft during ascent from, and descent to London Luton Airport below 3000ft as well as during taxiing activities at London Luton Airport. Again, noting that emissions during the aircraft descent phase into the airport is used as a proxy for emissions from airport descent at destination airports therefore accounting for emissions for a total journey.

   ii. Cruise, climb and descend (CCD): CCD considers only greenhouse gas emissions from aircraft departing London Luton Airport above 3000ft to within 3000ft above the destination airport.

3.1.3 In order to respond to the request for information, WTT emissions have been calculated for each of the four emissions sources above. A comparison has then been made between the emissions presented in the Environmental Statement and the same emissions uplifted to include the WTT emission to present the variation.

3.1.4 In addition, following the approach in the Environmental Statement, emissions including the WTT emissions, have been contextualised against national carbon budgets. It should be noted that including total WTT emissions in a comparison against UK carbon budgets is a highly conservative approach as in reality a high proportion of WTT emissions in the supply chain will occur as a result of the production, refining and transportation of fuels outside of the UK. These emissions would not therefore be accounted for in UK carbon budgets.

3.1.5 Furthermore, it is by no means clear that these emissions are new and additional to UK or global emissions. If the fuel from the additional aircraft movements included in the Environmental Statement for an expanded London

Luton Airport could not be used for operations from that airport, many movements would simply be displaced to other airports, whether in the UK or overseas. Indeed, there is no evidence that petroleum production in (say) Saudi Arabia and / or petroleum refinement in (say) Rotterdam will be materially, if indeed at all, changed by the expansion of London Luton Airport.

3.1.6 Thus, the Applicant does not accept that, to use the language of Finch above, it is 'inevitable' that the well to tank emissions calculated below are a net addition to either UK or global emissions.

## Methodology to include WTT emissions alongside the existing GHG assessment

3.1.7 To provide the Secretary of State with an assessment of WTT emissions, the Applicant has calculated the WTT emissions from the four sources above and sets out this assessment below. An assessment of WTT emissions with inbound flights has also been included.

## Construction

3.1.8 Within the assessment for the construction phase of the Proposed Development, WTT emissions have been quantified for:

e. Transport of construction materials
f. Worker transport
g. Plant usage
h. Consumption of grid electricity.

3.1.9 In each case, the relevant WTT emissions factor, taken from the 2024 DESNZ Conversion Factors dataset[7], was applied to estimate these upstream emissions. The direct emissions reported in the existing assessment and presented in the ES Chapter, have been re-quantified using the relevant factor from the 2024 DESNZ dataset to maintain consistency.

3.1.10 Table 2 below shows the magnitude of WTT emissions; they amount to 15.9% of the construction emissions reported in the Environmental Statement chapter.

**Table 2** Construction emissions (WTT assessment)

| Variable | Lifetime GHG emissions (tCO2e) |
|---|---|
| Construction emissions reported in ES Chapter 12 | 880,924 |
| Construction emissions, including WTT emissions | 1,021,164 |

[7]Greenhouse Gas Conversion Factors for Company Reporting 2024, DESNZ/DEFRA

| Variable | Lifetime GHG emissions (tCO2e) |
|---|---|
| WTT emissions | 140,240 |
| Percentage increase when including WTT emissions | 15.9% |

3.1.11 To contextualise emissions from construction including the WTT emissions, Table 3 presents construction emissions with WTT against the UK carbon budgets

Table 3. Construction emissions including WTT relative to UK national carbon budgets

| Budget period | Years | UK carbon budget | Lifetime Construction emissions | Percentage of carbon budget | Variation against ES |
|---|---|---|---|---|---|
| 4 | 2025-2027 | 1,170,000,000 | 147,092 | 0.013% | +0.002% |
| 5 | 2028-2032 | 1,725,000,000 | 0 | 0% | 0 |
| 6 | 2033-2037 | 965,000,000 | 623,193 | 0.064% | +0.009% |

3.1.12 The inclusion of total WTT emissions for construction does not have a material impact on the outcome greenhouse gases assessment presented in Chapter 12 of the Environmental Statement. The impact of emissions from construction remains Minor Adverse, Not Significant. As noted previously, this is considered an over-estimate as only a proportion of these WTT emissions relate to the UK carbon budget and it is not 'inevitable' that they are a net addition to emissions either in the UK or globally.

### Airport Operations

3.1.13 Within the Airport Operations category, WTT emissions have been quantified for the following sources:

a. Consumption of grid electricity
b. Consumption of other natural gas
c. Consumption of other fuels (assumed to be gas oil).

3.1.14 As with the Construction emissions described above, the relevant WTT emissions factor from the 2024 DESNZ dataset was applied to the existing activity data. Projections of future grid emissions factors were updated in line with current UK Government forecasts.

3.1.15 Future WTT emissions factors for grid electricity are not explicitly shown in government projections but have been proportionally applied to future generation and transmission and distribution (T&D) losses at the same rate as the 2024 factors.

3.1.16 Table 4 below shows the magnitude of WTT emissions for Airport Operations; they amount to 10.7% of the Airport Operations emissions reported in the Environmental Statement chapter.

**Table 4** Airport Operations (WTT assessment)

| Variable | Lifetime GHG emissions (tCO2e) |
|---|---|
| Airport Operations emissions reported in ES Chapter 12 | 143,284 |
| Airport Operations emissions, including WTT emissions | 158,656 |
| WTT emissions | 15,372 |
| Percentage increase when including WTT emissions | 10.7% |

3.1.17 To contextualise emissions from Airport Operations, including the WTT uplift, Table 5 presents Airport Operation emissions with WTT against the UK carbon budgets.

Table 5. Airport Operations emissions including WTT relative to UK national carbon budgets.

| Budget period | Years | UK carbon budget | Lifetime Airport Operation emissions | Percentage of carbon budget | Variation against ES |
|---|---|---|---|---|---|
| 4 | 2025-2027 | 1,170,000,000 | 42,080 | 0.004% | 0.00035% |
| 5 | 2028-2032 | 1,725,000,000 | 49,939 | 0.003% | 0.00028% |
| 6 | 2033-2037 | 965,000,000 | 27,633 | 0.003% | 0.00028% |

3.1.18 The inclusion of WTT emissions for Airport Operation does not have a material impact on the outcome greenhouse assessment presented in Chapter 12 of the Environmental Statement. The impact of emissions from Airport Operations remain Minor Adverse, Not Significant. As noted previously, this is considered an over estimate as only a proportion of these WTT emissions relate to the UK carbon budget and it is not 'inevitable' that they are a net addition to emissions either in the UK or globally.

### Surface Access

3.1.19 The methodology behind the Surface Access GHG assessment presented in Chapter 12 of the Environmental Statement **[REP3-007]** is described in more detail in Appendix 12.2 GHG Methodology and Data [APP-082].

3.1.20 Transport data in kilometres for different transport modes was provided for all types of travel, for the baseline year of 2019 and the key dates of 2027, 2039 and 2043 as these represent the initial year of Phases 1, 2a and 2b respectively.

3.1.21 Annual transport data for each of the intervening years was interpolated based on passenger and staff numbers, and numbers of aircraft movements.

3.1.22 Emissions factors were taken from the DESNZ dataset, with additional decarbonisation assumptions for car, bus, rail, LGV and HGV transport being applied in line with the UK Government's Transport Decarbonisation Plan[8].

3.1.23 WTT emissions factors, taken from the 2024 DESNZ dataset, were additionally applied within this methodology, and the resulting increase in emissions noted.

3.1.24 Table 3 below shows the magnitude of WTT emissions; they amount to 22.2% of the Surface Access emissions reported in the Environmental Statement chapter.

Table 6 Surface access (WTT assessment)

| Variable | Lifetime GHG emissions (tCO2e) |
|---|---|
| Surface Access emissions reported in ES Chapter 12 | 3,312,967 |
| Surface Access emissions, including WTT emissions | 4,049,873 |
| WTT emissions | 736,905 |
| Percentage increase when including WTT emissions | 22.2% |

[8] Decarbonising Transport: a better, greener Britain, Department for Transport, July 2021 https://www.gov.uk/government/publications/transport-decarbonisation-plan

3.1.25 To contextualise emissions from Surface Access, including the WTT uplift, Table 7 presents Surface Access emissions with WTT against the UK carbon budgets.

Table 7. Surface access emissions including WTT relative UK national carbon budget.

| Budget period | Years | UK carbon budget | Lifetime Surface Access emissions | Percentage of carbon budget | Variation against ES |
|---|---|---|---|---|---|
| 4 | 2025-2027 | 1,170,000,000 | 748,711 | 0.064% | 0.012% |
| 5 | 2028-2032 | 1,725,000,000 | 1,143,221 | 0.066% | 0.012% |
| 6 | 2033-2037 | 965,000,000 | 891,216 | 0.092% | 0.017% |

3.1.26 The inclusion of WTT emissions for Surface Access does not have a material impact on the outcome greenhouse assessment presented in Chapter 12 of the Environmental Statement. The impact of emissions from Surface Access remains Minor Adverse, Not Significant. As noted previously, this is considered an over-estimate as only a proportion of these WTT emissions relate to the UK carbon budget and it is not 'inevitable' that they are a net addition to emissions either in the UK or globally.

## Aviation

3.1.27 The methodology behind the aviation GHG assessment presented in Chapter 12 of the Environmental Statement **[REP3-007]** is described in more detail in Appendix 12.2 GHG Methodology and Data [APP-082].

3.1.28 The EMEP/EEA aviation emissions calculator[9] was used to estimate emissions for each make and model of aircraft to each regional destination. Emissions for a single flight were divided into a LTO cycle, and a CCD phase.

3.1.29 Assumptions around decarbonisation measures described within the Jet Zero Strategy were applied within the GHG assessment as appropriate. These include:

a. Improvements in aircraft and airspace management efficiency.

b. Adoption of zero emission aircraft including hydrogen or electric powered aircraft.

[9] EMEP/EEA Aviation Emissions Calculator, 2023 https://www.eea.europa.eu/publications/emep-eea-guidebook-2023/part-b-sectoral-guidance-chapters/1-energy/1-a-combustion/1-a-3-a-aviation.3/view

c. Uptake of sustainable aviation fuels (SAFs).

3.1.30 The uptake of SAFs is of particular relevance to the issue of WTT emissions, since the Jet Zero strategy assumes an overall lifecycle emissions reduction from the use of SAFs of between 67% and 75% compared to regular aviation fuel. The GHG assessment applied the more conservative 67% emissions reduction figure for SAFs.

3.1.31 According to the DESNZ dataset for 2024, aviation fuel has WTT emissions 20.8% higher than the direct emissions from combustion in aircraft engines.

3.1.32 Table 8 below shows the magnitude of WTT emissions; they amount to 20.8% of the aviation emissions reported in the Environmental Statement chapter, Chapter 12.

Table 8 Aviation 'outbound flights' (WTT assessment)

| Variable | Lifetime GHG emissions (tCO2e) |
|---|---|
| Aviation emissions reported in ES Chapter 12 | 21,859,936 |
| Aviation emissions, including WTT emissions | 26,411,581 |
| WTT emissions | 4,551,645 |
| Percentage increase when including WTT emissions | 20.8% |

3.1.33 Table 9 below shows the magnitude of WTT emissions when considering both inbound and outbound flights; they amount to 20.8% of the aviation emissions when including both inbound and outbound flights.

Table 9 Aviation emissions (inbound and outbound) flights including WTT

| Variable | Lifetime GHG emissions |
|---|---|
| Aviation emissions reported in ES Chapter 12, (doubled to include inbound flights) | 43,719,872 |
| Aviation emissions, including WTT emissions (doubled to include inbound flights) | 52,823,162 |

| Variable | Lifetime GHG emissions |
|---|---|
| WTT emissions (doubled to include inbound flights) | 9,103,290 |
| Percentage increase when including WTT emissions (doubled to include inbound flights) | 20.8% |

3.1.34 As discussed previously there is no suitable carbon budget to meaningfully contextualise the combined total emissions impact from both outbound and inbound flights. Both the UK carbon budgets and the scenarios presented in the Jet Zero Strategy only account for emissions from outbound flights in line with current practice for aviation carbon accounting to avoid double counting of aviation emissions between airports and in some instances countries. No further contextualisation of direct aviation emissions has therefore been provided.

3.1.35 In the Environmental Statement, outbound aviation emissions (excluding WTT) were contextualised against the emissions pathway for Scenario 2 (High Ambition) as described in the Jet Zero Strategy. This pathway does not include WTT emissions, so it is not appropriate to compare uplifted aviation emissions including WTT against it.

3.1.36 Instead, the WTT emissions from the supply of aviation fuel can be contextualised against the UK's 4th, 5th and 6th carbon budgets, in line with the approach taken for the emissions from Construction, Airport Operations and Surface Access.

3.1.37 To contextualise WTT emissions from aviation, Table 9 presents these emissions against the UK carbon budgets. Note that direct emissions from the combustion of aviation fuel remain contextualised against the Jet Zero pathway for Scenario 2 (High Ambition) as presented in the Environmental Statement, Chapter 12.

Table 10 10: Aviation WTT (outbound only) emissions relative to UK national carbon budgets

| Budget period | Years | UK carbon budget | Aviation WTT emissions | Percentage of carbon budget |
|---|---|---|---|---|
| 4 | 2025-2027 | 1,170,000,000 | 631,558 | 0.054% |
| 5 | 2028-2032 | 1,725,000,000 | 958,080 | 0.056% |
| 6 | 2033-2037 | 965,000,000 | 832,928 | 0.086% |

3.1.38 The inclusion of WTT emissions for aviation does not have a material impact on the outcome of the greenhouse gas assessment presented in Chapter 12 of the Environmental Statement. The impact of emissions from aviation remains, Minor Adverse, Not Significant. As noted previously, this is considered an over-estimate as only a proportion of these WTT emissions sit within the UK carbon budget. For completeness, aviation emissions for both outbound and inbound flights, when including WTT emission have been contextualised against the UK carbon budgets.

3.1.39 As previously noted, direct emissions from combustion of aviation fuel have been contextualised against the Jet Zero High Ambition Scenario. Since Jet Zero does not include WTT emissions, these emissions have been contextualised against national carbon budgets.

Table 11 Aviation WTT (inbound and outbound) emissions relative to UK carbon budget

| Budget period | Years | UK carbon budget | Aviation WTT emissions | Percentage of carbon budget |
|---|---|---|---|---|
| 4 | 2025-2027 | 1,170,000,000 | 1,263,116 | 0.11% |
| 5 | 2028-2032 | 1,725,000,000 | 1,916,160 | 0.11% |
| 6 | 2033-2037 | 965,000,000 | 1,665,856 | 0.17% |

3.1.40 Well to tank emissions, when contextualised against national carbon budgets, are considered to have a Minor Adverse, Not Significant impact and therefore don't change the conclusion of the Environmental Statement. As discussed, inclusion of all WTT emissions when contextualising against national carbon budgets is a conservative approach as not all WTT emissions relate to UK carbon budgets and it is not 'inevitable' that they are a net addition either in the UK or globally.

### Total emissions

3.1.41 Aggregating the above figures provides total emissions figures with and without WTT emissions for the Core Planning Case.

3.1.42 Table 12 below summarises WTT emissions from all sources; they amount to 20.8% of the total emissions reported in the Environmental Statement chapter.

Table 1212 Total emissions (WTT assessment)

| Variable | GHG emissions without WTT | Lifetime GHG emissions WTT (tCO2e) | Variation in emissions with inclusion of WTT |
|---|---|---|---|
| Construction | 880,924 | 140,240 | 15.9% |

| Variable | GHG emissions without WTT | Lifetime GHG emissions WTT (tCO2e) | Variation in emissions with inclusion of WTT |
|---|---|---|---|
| Airport operation | 143,284 | 15,372 | 10.7% |
| Surface Access | 3,312,967 | 736,905 | 22.2% |
| Aviation | 21,859,936 | 4,551,645 | 20.8% |
| Total | 26,197,111 | 5,444,162 | 20.8% |

3.1.43 When considering total emissions from the Proposed Development uplifted to include WTT, the impact of the Proposed Development is not considered so significant that it would have a material impact on the ability of Government to meet its carbon reduction targets, including carbon budgets. The overall impact of the Proposed Development remains Minor Adverse, Not Significant.

# 4 THE IMPLICATIONS OF *FINCH* FOR INDIRECT SURFACE ACCESS EMISSIONS

## 4.1 Overview

4.1.1 In accordance with the requirements of the EIA Regulations, the Environmental Statement, Chapter 12 Greenhouse Gases **[REP3-007]** reported on the assessment of likely significant effects of Greenhouse Gas (GHG) emissions arising from the Proposed Development. This assessment included emissions arising over the lifecycle of the Proposed Development during construction and operation including direct emissions arising from activities within the Order Limits (as shown in Figure 2.1 of the Environmental Statement [APP-144]) and indirect emissions from activities outside the Order Limits (e.g. transport of materials to site, embedded carbon in construction materials, and the treatment and disposal of waste).

4.1.2 Specifically for surface access, the Environmental Statement identified and assessed the impact of the change in GHG emissions for surface access trips directly associated with the operation of London Luton Airport – i.e. for passenger, staff and freight trips to and from the airport.

4.1.3 The only likely significant effect of GHG emissions for surface access identified in the ES was from these direct GHG emissions. Any change in indirect surface access GHG emissions was not significant, and so no further information or assessment was required or provided. Throughout the examination process, no issues were raised with this methodology either by the Examining Authority or by Interested Parties.

4.1.4 As described in paragraphs 3.1.19 to 3.1.26, additional information related to WTT surface access emissions has also now been provided.

4.1.5 However, due to the focus in the Finch judgment on indirect effects, the Applicant has considered whether further information on indirect surface access emissions would be helpful to the Secretary of State in the context of Finch.

4.1.6 The Applicant considers there to be two primary ways in which indirect surface access GHG emissions could potentially change as a result of the Proposed Development, as follows:

a. the increase in airport-related trips on key routes to and from the airport could result in changes to vehicle routing for non-airport traffic to avoid congestion; or

b. where additional highway capacity has been provided by the Proposed Development, this could result in induced trips of non-airport traffic, due to the increased ease by which those trips can be made.

4.1.7 More information on these potential causes of changes to indirect GHG emissions and any implications for the conclusions of the Environmental Statement are set out in the sections that follow.

## 4.2 Changes in vehicle routing

4.2.1 The strategic transport modelling used to inform the assessment was developed using the relevant Department for Transport (DfT) guidance, including TAG Unit M3.1 - Highway Assignment Modelling.

4.2.2 Section 4.2 of the Strategic Modelling: Highway Local Model Validation Report, included as Appendix E1 of the Transport Assessment Appendices – Part 1 of 3 (Appendices A – E) [APP-200] details the geographic coverage of the model, and how this accords with the guidance from TAG Unit M3.1

4.2.3 Specifically, TAG guidance requires the geographic coverage to allow for the strategic re-routeing impacts of interventions. This has therefore been reflected in the development of the networks and zoning system for the CBLTM-LTN modelling suite. Network and zoning detail is greatest in Luton Borough and the surrounding districts (Central Bedfordshire, North Hertfordshire, St Albans District and Dacorum), and gradually reduces with distance from this area.

4.2.4 The geographic coverage and level of detail within the model is therefore sufficient to account for any strategic re-routeing impacts of the Proposed Development.

4.2.5 Central to how non-airport trips might re-route in future is the level of demand in the future baseline scenarios.

4.2.6 To develop the future baseline scenarios, information related to future committed land-use developments, DfT growth projections and committed infrastructure schemes were included in the strategic modelling to assure building a robust baseline to compare against when assessing the airport expansion scenarios.

4.2.7 The additional traffic generated by the airport expansion would result in traffic re-routeing through the network trying to find the perceived optimum route within the modelled network. However, with the proposed mitigation package changes do not necessarily mean an increase, and could also decrease trip lengths, therefore lowering emissions.

4.2.8 For public transport assignments, the demand modelling assumes no changes in bus/train trip length, rather additional demands on existing services and lines.

4.2.9 For highway re-routeing, extensive outputs were prepared and reported in the application, namely in the Strategic Modelling Forecasting Report included within the Transport Assessment Appendices – Part 2 of 3 (Appendix F) [APP-201] considering changes in trip lengths between Do Minimum and Do Something scenarios for vehicle trips.

4.2.10 Table 5.3 of the Strategic Modelling Forecasting Report, reproduced below as Table 13, shows the forecast change in vehicles-kilometres between the future baseline with and without airport expansion. It is worth noting that the strategic model covers a very large area in terms of network, with more detailed network representation within the "simulation" area, and further calibration and validation around the airport area. This is a standard practice for strategic models and in accordance with DfT guidance.

Table 13. Forecast Change in Vehicle-kms between TAG-based "Without" and "With" Expansion

| Period | District | 2027 | 2039 | 2043 |
|---|---|---|---|---|
| AM Peak Hour (08:00 to 09:00) | Luton | -0.4% | 1.4% | 3.2% |
| | Central Bedfordshire | 0.3% | 0.4% | 0.9% |
| | North Hertfordshire | 0.3% | 1.1% | 2.2% |
| | St Albans | 0.1% | 0.1% | 0.4% |
| | Dacorum | 0.3% | 0.4% | 0.6% |
| | **Simulation Network** | **0.1%** | **0.3%** | **0.8%** |
| Interpeak Hour (between 10:00 to 16:00) | Luton | 0.4% | 2.0% | 3.4% |
| | Central Bedfordshire | 0.2% | 0.7% | 1.0% |
| | North Hertfordshire | 0.4% | 1.0% | 1.8% |
| | St Albans | 0.0% | 0.2% | 0.5% |
| | Dacorum | 0.2% | 0.3% | 0.4% |
| | **Simulation Network** | **0.2%** | **0.4%** | **0.8%** |
| PM Peak Hour (17:00 to 18:00) | Luton | 0.3% | 1.4% | 2.4% |
| | Central Bedfordshire | 0.6% | 0.3% | 0.7% |
| | North Hertfordshire | 0.7% | 0.8% | 1.8% |
| | St Albans | 0.4% | 0.2% | 0.7% |
| | Dacorum | 0.4% | 0.9% | 0.3% |
| | **Simulation Network** | **0.4%** | **0.3%** | **0.6%** |

4.2.11 The total vehicle-kilometres (i.e. the distance travelled by all traffic in the model) is the main output from the surface access modelling that is utilised within the GHG assessment. As GHG emissions are assessed at an aggregate level against the UK's national carbon budgets, only the total change in vehicle-km as a result of the Proposed Development is relevant to the GHG assessment, rather than the change in any individual district.

4.2.12 Table 13 shows that the total changes are negligible overall within the simulation area with all forecast increases to be less than 1%. The effects in terms of GHG emissions are therefore not likely to be significant. Not assessing these effects further is entirely consistent with the approach in Finch.

## 4.3 New highway capacity provided by the Proposed Development

4.3.1 The Applicant is proposing to provide additional highway capacity in certain locations, as set out in the proposals for Off Site Highway Works provided as Appendix A of the Transport Assessment Appendices – Part 1 of 3 (Appendices A – E) [APP-200]. These works are referred to as Mitigation Type 1 (MT1) within the Outline Transport Related Impacts Monitoring and Mitigation Approach (TRIMMA) **[REP10-036]** and would be delivered in accordance with the process set out in the TRIMMA.

4.3.2 The purpose of this additional highway capacity is to mitigate the impact of the Proposed Development on the local and strategic highway networks. The works proposed do not seek to go beyond mitigating the identified impacts, and so do not result in a significant betterment or enhancement of highway capacity above and beyond that required to account for the additional trips to and from the airport. The Proposed Development therefore does not provide significant additional highway capacity that could be taken up by additional non-airport trips. The TRIMMA process allows Highway Authorities to propose an alternative solution in the same MT1 location. The terms of the TRIMMA state that any alternative accepted by the Applicant would need to be proportionate and mitigate the impacts of the Proposed Development.

4.3.3 The TRIMMA also allows for additional junction capacity enhancements at alternative locations to be put forward by members of the ATF Steering Group, referred to as Mitigation Type 2 (MT2) proposals. However, such proposals would need to meet the principles defined in paragraph 4.2.2 of the TRIMMA in order to be considered for funding. These principles include the need for the proposals to be evidenced, necessary and fairly and reasonably related to the Proposed Development. MT2 interventions therefore could not be used to provide significant additional highway capacity that is not intended to mitigate the impacts of airport traffic.

4.3.4 Where other highway capacity improvements are proposed by local highway authorities, they are accounted for within the Future Baseline scenarios as appropriate.

4.3.5 The strategic transport model used to assess the impact of Proposed Development includes a fully multi-modal demand model. The demand modelling processing is therefore able to account to a degree any change in

induced traffic, both in the Future Baseline and With Development scenarios. The analysis provided in the TA comparing the changes produced by the demand model, in terms of total vehicle-km across the network, were negligible.

4.3.6 The Applicant therefore considers that no further assessment of the change in GHG emissions arising from new highway capacity provided by the Proposed Development is required, as the effects are not likely to be significant, which is consistent with the approach in the *Finch* judgment.

## 4.4 Conclusion

4.4.1 After reviewing the Finch judgment and the Applicant's approach to modelling and assessing the change in surface access emissions associated with the Proposed Developed, the Applicant does not consider that Finch requires the assessment of any other effects associated with surface access which have not already been addressed in the Environmental Statement or the additional information provided herein.

4.4.2 The conclusion therefore remains that direct emissions associated with travel to and from the airport by passengers, staff and freight are the primary GHG impact of the Proposed Development. Indirect surface access emissions, either from changes to vehicle routing, or as a result of providing new highway capacity, are considered to be negligible.

4.4.3 Overall, emissions from Surface Access remain Minor Adverse, Not Significant, as reported in paragraph 12.11.46 of the original ES **[REP3-007]**. This conclusion also remains unaffected by the additional information provided on WTT surface access emissions.

# 5 THE IMPLICATIONS OF FINCH WITH REGARD TO GREENHOUSE GAS EMISSIONS FROM INCREASED EMPLOYMENT BECAUSE OF ECONOMIC GROWTH DERIVING INDIRECTLY FROM GROWTH AT THE AIRPORT.

5.1.1 The Applicant has considered the greenhouse gas emissions from increased employment because of economic growth deriving indirectly from growth at the airport in light of the decision in the Finch judgment.

5.1.2 The direct economic effects from growth at the London Luton Airport, in terms of direct on-site employment and the GHG emissions arising from this economic activity are included within the assessment of emissions from Airport Operations.

5.1.3 Indirect and induced economic effects were estimated from consideration of input-output tables and the derivation of appropriate multipliers. Although these are reported in terms of additional employment and GDP, it is not possible to distinguish the activities that this economic activity would relate to nor the extent to which they would result in additional carbon emissions. As such, these effects are incapable of assessment. The decision in Finch supports the Applicant's position that such an assessment is not required as there is no clear

causal pathway and there is "insufficient information available on which to make a reasonable assessment of the relevant impacts"[10].

5.1.4 Similarly, while the wider economic effects of the Proposed Development were also presented in the assessment, it is similarly not possible to assess the additional carbon that may be generated from business productivity effects or incremental tourism as this would depend on the specific activities of the businesses concerned or the specific tourist attractions visited deriving indirectly from growth at LLA. As such, these effects are also considered incapable of assessment.

5.1.5 A further consideration in assessing these effects is that the economic effects, other than business productivity effects deriving from incremental business travel, are presented in gross terms at the local level. However, at the wider level, there would be displacement of activity to other airports if London Luton Airport remains constrained. At the local level, it is not possible to distinguish the extent to which these wider effects would be truly additional or represent, to some degree, displacement from other activities in the wider economy. Hence, the net effect on carbon emissions simply cannot be estimated. Not assessing such unknowable effects is consistent with the approach in Finch.

# 6 THE IMPLICATIONS OF *FINCH* ON THE GREEN CONTROLLED GROWTH (GCG) FRAMEWORK

6.1.1 GCG is an innovative new framework that has been developed by the Applicant to address concerns expressed by stakeholders on the environmental impacts of the Proposed Development. It is considered to be one of the most far-reaching commitments to managing environmental effects ever voluntarily put forward by a UK airport.

6.1.2 Placing the Applicant's commitment to environmental sustainability at the very centre of the expansion proposals, it is proposed that growth authorised by the DCO will be managed through the GCG Framework **[REP11-013]**, within environmental Limits defined based on the outputs of the EIA that forms the basis of the application for development consent. The Applicant believes that such an approach is unique for a major infrastructure project in the UK.

6.1.3 These environmental Limits have been secured in four key areas of environmental impact associated with the Proposed Development. These four areas were included within the GCG Framework on the basis that these are the environmental topics of greatest concern to stakeholders, that the extent of environmental effect in these four areas will be correlated with the growth of the airport, and that these effects are under the direct control or influence of the Airport Operator.

6.1.4 Greenhouse gases are one of the environmental topics included within the GCG Framework. However, as set out in Paragraphs 3.4.23 to 3.4.30 of the GCG Explanatory Note **[REP11-011]** aviation emissions are excluded from GCG, as such emissions are controlled at a national and international level. As such, while this note considers the implications of Finch on the assessment of aviation

[10] *Finch* at [138]]

emissions associated with the Proposed Development, these have no impacts on the GCG Framework.

6.1.5 The GCG Framework also applies controls on greenhouse gas emissions associated with airport operations and surface access. Paragraphs 3.1.13 – 3.1.26 of this note considers WTT emissions associated with these activities. However, whether or not WTT emissions are taken into account as part of the EIA of the proposed development, such emissions are not within the direct control or influence of the Applicant or Airport Operator. As such, the GCG does not include WTT emissions and they could not meaningfully be included.

6.1.6 The Applicant therefore considers that there are no implications of the Finch judgment for the GCG Framework.

# GLOSSARY AND ABBREVIATIONS

| Term | Definition |
|---|---|
| ANPS | Airports National Policy Statement |
| ACRP | Airport Cooperatives Research Programme |
| CAA | Civil Aviation Authority |
| CBC | Central Bedfordshire Council |
| CCC | Committee on Climate Change |
| CCR | Climate Change Resilience |
| CCRA | Climate Change Risk Assessment |
| CIRIA | Construction Industry Research and Information Association |
| DCO | Development Consent Order |
| DMRB | Design Manual for Roads and Bridges |
| EIA | Environmental Impact Assessment |
| ES | Environmental Statement |
| GCG | Green Controlled Growth |
| ICAO | International Civil Aviation Organisation |
| ICCI | In-combination Climate Change Impacts |
| IEMA | Institute of Environmental Management and Assessment |
| LBC | Luton Borough Council |
| LLAOL | London Luton Airport Operations Limited |
| LBMP | Landscape and Biodiversity Management Plan |
| NHDC | North Hertfordshire District Council |
| NPPF | National Planning Policy Framework |
| NPPG | National Planning Practice Guidance |
| NPS | National Policy Statement |
| PEIR | Preliminary Environmental Information Report |
| PINS | Planning Inspectorate |
| PPCE | Probabilistic Projections of Climate Extremes |
| RCP | Representative Concentration Pathway |
| SuDS | Sustainable Drainage Systems |
| TRIMMA | Transport-Related Impacts Monitoring and Mitigation Approach |
| UKCP18 | UK Climate Projections 2018 |