



Gatwick Airport Northern Runway Project

Response to the Examining Authority's Written Questions –
Climate Change and Greenhouse Gases

Book 10

VERSION: 1.0

DATE: APRIL 2024

Application Document Ref: 10.16

PINS Reference Number: TR020005

Table of Contents

1	Response to the Examining Authority's Written Questions – Climate and Greenhouse Gases	1
---	--	---

1 Response to the Examining Authority’s Written Questions – Climate Change and Greenhouse Gases

1.1.1 The below table sets out the Applicant’s response to the Examining Authority’s Written Questions relating to Climate Change and Greenhouse Gases.

ExQ1	Question to:	Question:
CLIMATE CHANGE AND GREENHOUSE GASES		
CC.1.1	The Applicant IPs	<p>Response to Climate Change Committee Annual Progress Report</p> <p>Many IPs had referenced the Climate Change Committee’s (CCC) 2023 Annual Progress Report in their RRs, specifically the recommendation that <i>“No airport expansions should proceed until a UK-wide capacity management framework is in place to annually assess and, if required, control sector GHG emissions and non-CO2 effects. A framework should be developed by DfT in cooperation with the Welsh, Scottish and Northern Irish Governments over the next 12 months and should be operational by the end of 2024. After a framework is developed, there should be no net airport expansion unless the carbon-intensity of aviation is outperforming the Government’s emissions reduction pathway and can accommodate the additional demand.”</i></p> <p>In October 2023 the Government responded to the Annual Progress Report as follows <i>“We are anti-aviation emissions, not flying, and want to deliver sustainable flying for everyone to enjoy holidays, visit friends and family overseas and to travel for business. We remain of the view that our existing policy frameworks for airport planning – the Airports National Policy Statement and Beyond the horizon, the future of UK aviation: Making best use of existing runways - provide a robust and balanced framework for airports to grow sustainably within our strict environmental criteria. Our analysis in the Jet Zero Strategy continues to demonstrate that the sector can achieve net zero carbon emissions by 2050 without the</i></p>

		<p><i>government needing to intervene directly to limit aviation growth. The analysis uses updated airport capacity assumptions consistent with the latest known expansion plans at airports in the UK. Planning decision- makers and applicants should consider all relevant Government policy, including the Jet Zero Strategy, when considering airport expansion proposals. The Government has always been clear that the expansion of any airport must meet our climate change obligations. Any planning application submitted by an airport will be judged by the relevant planning authority, taking careful account of all relevant considerations, including environmental impacts and proposed mitigations. We will review our Jet Zero Strategy every five years to ensure the aviation sector is on track to achieve net zero by 2050, and, if appropriate, we will consider reviewing our policy frameworks for airport planning to ensure they remain compatible with achieving our net zero target.”</i></p> <p>The Applicant and other IPs are invited to comment on how the Government response on this issue or others referred to in their submission may affect their previous submissions.</p>
		<p>The Government’s response of October 2023 does not change the case submitted by the Applicant in the DCO Application documents. In principle, the Government response is similar to the response made by Government to consultation on the draft Jet Zero Strategy, which is cited at paragraph 6.2.36 of the Planning Statement [APP-245]. That response included:</p> <p><i>“Our analysis set out in the Jet Zero Strategy shows that the aviation sector can achieve Jet Zero without government needing to intervene directly to limit aviation growth, with scenarios that can achieve our net zero targets by focusing on new fuels and technology, with knock-on economic and social benefits, without limiting demand....</i></p> <p><i>“Furthermore, airport growth has a key role to play in boosting our global connectivity and levelling up in the UK. The Government is, and remains, supportive of airport expansion where it can be delivered within our environmental obligations. Our existing policy frameworks for airport planning - the ANPS and MBU - provide a robust and balanced framework for airports to grow sustainably within our strict environmental</i></p>

		<p><i>criteria. We do not, therefore, consider restrictions on airport growth to be a necessary measure”.</i></p> <p>The Applicant understood this position when formulating its DCO Application.</p>
CC.1.2	The Applicant	<p>Commitment to Reducing International Aviation Emissions</p> <p>Paragraph 1.4.6 of the Planning Statement [APP-245] notes that GAL strongly supports the UK Government’s legally binding net zero commitment for greenhouse gas (GHG) emissions in 2050, which includes the UK’s share of international aviation emissions.</p> <p>How is the UK’s share of international aviation emissions defined and where is this found?</p> <p>As part of the recommendations for the Sixth Carbon Budget the CCC recommended that international aviation emissions be included in that, and subsequent, carbon budget setting¹. Prior to the Sixth Carbon Budget ‘headroom’ had been allowed within the carbon budget setting process to allow for international aviation emissions. For the purposes of the Sixth Carbon Budget, emissions from international aviation and shipping will count towards the total allowable emissions within the scope of the Climate Change Act², albeit that regulations under the Climate Change Act 2008 will be required to formally include them within the UK’s net zero target and the carbon budget.</p> <p>The UK’s share of international aviation emissions is calculated and reported based on quantifying international bunker fuels. The emissions associated with use of these fuels for international aviation (and shipping) are outside the scope of national GHG inventories but are calculated, and reported, separately. It is the view of the CCC that the bunker fuel accounting methodology is sufficiently accurate to support the inclusion of international aviation emissions in the Sixth, and subsequent, carbon budgets.</p>
CC.1.3	The Applicant	<p>Carbon Action Plan and Jet Zero Trajectory</p> <p>Paragraphs 1.2.1 and 1.2.2 of the Carbon Action Plan (CAP) [APP-091] set out that the CAP is aligned</p>

¹ P15 of [The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero.pdf \(theccc.org.uk\)](#)

² <https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-78-by-2035>

		<p>with the Jet Zero Strategy but that the commitment to the Jet Zero trajectory is not contingent on the Project being consented.</p> <p>If development consent were granted should this be tied to the achievement of Jet Zero?</p> <p>It would not be appropriate or necessary to tie the Project to the achievement of Jet Zero.</p> <p>It is apparent that the Government has taken that duty and responsibility in order to meet its obligations under the Climate Change Act 2008. The Government has put in place an extensive range of measures and policies to ensure that commitment is met and is undertaking a detailed monitoring exercise to ensure it can adapt its measures and any necessary interventions in order to enforce the trajectory to Jet Zero, which is compatible with its commitment to Net Zero. Those measures are cross-cutting but are principally aimed at encouraging, enabling and enforcing airlines to achieve carbon reductions. The Government has been unequivocal that it will draw from a range of policies and market mechanisms to ensure the commitment is met, but that demand management of airports is not currently considered a necessary part of that approach. This reflects the balance that the Government has set between responding to the need for and benefits of airport capacity whilst meeting the challenges of carbon emissions. This examination can rely upon the stated commitments made by the Government.</p> <p>In its Jet Zero Strategy the Government makes this commitment:</p> <p><i>“If we find that the sector is not meeting the emissions reductions trajectory, we will consider what further measures may be needed to ensure that the sector maximises in-sector reductions to meet the UK’s overall 2050 net zero target.”</i> (JZS page 10).</p> <p>This examination does not need to doubt or seek to replace or replicate that commitment or exercise its own form of demand management.</p> <p>It should be noted that the Government is also required to prepare proposals and policies to meet carbon budgets under the Climate Change Act 2008. This provides a mechanism to ensure that government reports on how it intends to meet the carbon budgets for current and future budgetary periods.</p>
--	--	--

CC.1.4	The Applicant	<p>CAP – Approach to Revisions</p> <p>Paragraph 1.3.3 of the CAP [APP-091] notes that GAL will work closely with Government and will update the CAP if updates are required to respond to any relevant requirements from Government, including updates to the Jet Zero Strategy and associated Aviation and Climate Change policy.</p> <p>What is the process for revising the CAP? How would any revisions be approved?</p> <hr/> <p>Paragraphs 4.4.10 to 4.4.14 of the Carbon Action Plan (CAP) [APP-091] describe the Applicant's proposed approach to reviewing and updating the CAP to ensure it remains up to date and consistent with Government policy as it evolves over future years. In particular, the Applicant commits to reviewing the CAP at least every 5 years to consider whether any change in policy is so material as to require an update to the CAP and its specific commitments. By way of example, it is anticipated that the initial review will include consideration of any finalised Government policy on the meaning of 'airport operations', following a Government call for evidence held in spring 2023³. Where necessary, the definition of 'Airport Buildings and Ground Operations' (ABAGO) within the CAP (which informs certain of the commitments) would be updated to reflect that confirmed policy.</p> <p>The CAP (paragraph 4.4.13) obliges the Applicant to publish a report summarising the findings of the review of the CAP and, where applicable, the revised CAP on its website and to submit a copy of the same to the Government. For clarity, the Applicant currently envisages reporting to the department within DfT responsible for managing delivery of the Jet Zero Strategy; however, the CAP purposely uses a wider descriptor of 'Government' in acknowledgement that department roles/titles may change in the coming years.</p> <p>In circumstances where the Government considered the Applicant had not adequately addressed/incorporated any relevant updates from Government aviation and climate change policy</p>
--------	---------------	---

³ <https://www.gov.uk/government/calls-for-evidence/2040-zero-emissions-airport-target>

		<p>through the review exercise, it is envisaged they would notify the Applicant and direct such updates as necessary consistent with the Government's general obligations and responsibility to ensure the decarbonisation of the aviation sector in line with the Jet Zero Strategy and its legally binding net zero targets (see also response to CC.1.3 above). This is the same process which would need to occur in practice in the absence of the Project to ensure the Applicant plays its part in helping the Government achieve the Jet Zero strategy, and it is not considered necessary or appropriate to impose a more prescriptive process than that set out in the CAP.</p> <p>Compliance with the CAP, including in particular the review process described above, is secured through Requirement 21 of the draft DCO 2.1.</p>
CC.1.5	The Applicant	<p>GHG Emissions – Level of Control</p> <p>Figure 2.1 of the CAP [APP-091] shows the breakdown of GAL's 2019 footprint by level of control and that the majority of airport-related emissions lie outside of GAL's direct control or guidance.</p> <p>Will the Proposed Development mean that GHG emissions by level of control change? If so, please explain.</p>
		<p>No - the level of control the Applicant has over different sources of GHG emissions will be unchanged as a result of the Project.</p>
CC.1.6	The Applicant	<p>CAP – Enabling Measures</p> <p>Measures AB1 to AB23 in Table 3-1 of the CAP [APP-091] are potential enabling measures targeting airport buildings and ground operations.</p> <p>As enabling measures there is no certainty that they would lead to carbon saving. Should any or all of them not result in reduced emissions what would be the implications for the overall CAP?</p>

		<p>By way of general overview, and not specific to the individual measures referenced in this question, the Carbon Acton Plan (CAP) [APP-091] has been developed to commit to specific climate mitigation 'outcomes' at the Airport. It is these ultimate outcomes which the Applicant is committing to under the CAP, rather than any of the underlying potential measures that are separately referenced in the tables underneath each of the committed outcomes.</p> <p>Those measures have instead been included to provide examples of activities which the Applicant could draw from to ensure the outcomes are achieved, but are purposely not prescriptive to allow flexibility to ensure the most effective combination of them (or others not included in the table) are implemented, based on the circumstances and knowledge that exist at that future point in time (acknowledging the fast-evolving technological and regulatory landscape and the long-term nature of the CAP) (paragraph 1.3.2 of the CAP confirms this context). By way of further clarification, and specific to 'enabling' measures (as referenced in the question) – these are not, themselves, 'carbon saving' activities in any case, but rather measures (e.g. improved energy metering) which will allow for better data to be gathered to allow for more targeted interventions that will result in the emissions savings/reductions necessary to achieve the CAP outcomes.</p> <p>In that context, and specific to the referenced measures in this question – whilst there is no certainty that any of these measures would directly/indirectly facilitate a reduction in ABAGO specific carbon emissions, the purpose of the CAP's 'toolkit' approach is to ensure that, the Applicant is not reliant on any one of those measures having such effect and will take such steps and utilise whichever combination of measures as is necessary to achieve the committed outcome. Although it is not possible to identify at this stage what the reductions may be from any particular measure, it is reasonable to expect that this range of measures will be capable of supporting the Applicant to achieve its overall commitment, in addition to the direct measures which the Applicant has already been able to identify (see Table 3.2).</p> <p>The Applicant's Annual Monitoring Report (AMR) prepared in respect of the CAP (with the process set out</p>
--	--	---

		<p>in section 4.4 of the CAP) will ensure transparency on performance against the commitments and the steps being taken/proposed to ensure progress against/compliance with the same. Paragraphs 4.4.5 to 4.4.9 of the CAP sets out the process which would need to be followed in circumstances where the AMR indicates that insufficient progress is being made towards the outcomes (or, exceptionally, there has been a failure to achieve the outcomes), and specifically the production of an Action Plan and submission of the same to the Government. As noted in paragraph 4.4.9 of the CAP, a failure to comply with the outcomes committed in the CAP would represent an impediment to the Government’s implementation of its Jet Zero Strategy and other carbon reduction commitments. These would be matters for enforcement by Government through the governance arrangements under the Jet Zero Strategy, which (as outlined in response to question CC.1.4 above) would be the position in the absence of the Project in any case.</p>
CC.1.7	The Applicant CBC	<p>CAP – Implementation Timetable</p> <p>Table 3-2 of the CAP [APP-091] sets out direct potential measures targeting airport buildings and ground operations.</p> <p>Is the implementation timescale precise enough or ambitious enough? Is the final column (Potential Deliverable) ambitious enough? What are the consequences if the measures are not achieved?</p> <p>In response to question CC.1.6 above, the Applicant has sought to clarify the intended interaction between the potential measures listed in the Carbon Acton Plan (CAP) [APP-091] and the committed outcomes to which they relate, including the consequences/next steps were any such measures utilised and not found to have the desired effect. That same explanation applies in respect of the measures listed in Table 3-2 of the CAP and is not repeated here to limit duplication.</p> <p>Regarding the implementation timescale/level of ambition behind the measures/potential deliverables listed in Table 3-2 – again, their qualifying context noted above provides the Applicant’s principal response to these questions, particularly that there is no prescribed implementation timescale because the measures themselves are not individually committed. However, the question of timescale and</p>

		<p>ambition is pertinent to their correlative ABAGO committed outcomes under the CAP (listed in summary form in Table 5-1):</p> <ul style="list-style-type: none"> • The Applicant will achieve Net Zero for GHG emissions under its control (GAL Scope 1 and 2) by 2030. • The Applicant will achieve zero emissions for its Scope 1 and 2 GHG emissions by 2040, contributing to the UK Government’s Jet Zero ambition “for all airport operations in England to be zero emissions by 2040”. <p>Each of these commitments have defined delivery timescales which are consistent with the Jet Zero Strategy's sectoral target for airport operations to be zero emission by 2040, and indeed the Net Zero target by 2030 goes further by introducing an interim commitment which is not set out in Jet Zero.</p>
CC.1.8	The Applicant CBC	<p>CAP – Implementation Timetable</p> <p>Measure AB28 in Table 3-2 of the CAP [APP-091] is to deliver a plan for recharging infrastructure for Zero Emission Vehicle airside fleet by 2030 with recharging infrastructure to facilitate all Zero Emission Vehicle ground fleet.</p> <p>Should this be more ambitious in terms of delivering recharging infrastructure?</p> <hr/> <p>Notwithstanding the clarification provided by the Applicant above in terms of the role of the measures listed in the Carbon Acton Plan (CAP) [APP-091] by comparison to the committed outcomes to which they relate, the Applicant confirms it has a plan to transition all Gatwick vehicles to zero or ultra-low emission by 2030. This plan is already being implemented at the Airport today (independent of the Project) (with capital investment secured) and is aligned to the life of the assets (which is the most carbon-efficient way to transition). By 2030 the vast majority of the Applicant’s fleet will be electric vehicles, as such the Applicant is installing charging infrastructure to support this transition as and when the capacity is needed i.e. recharging infrastructure will be installed to meet the required charging needs as the vehicle fleet is electrified. The Applicant is also working with third parties at the airport to deliver charging</p>

		<p>infrastructure as it is required.</p> <p>A 2030 timetable is well-ahead of any Government transition for ICE vehicles and in advance of the proposed Jet Zero ambition for “airport operations in England to be zero emission by 2040” (on the basis that that will include airside vehicles).</p>
CC.1.9	The Applicant	<p>CAP – Implementation Timetable</p> <p>Measure AB29 in Table 3-2 of the CAP [APP-091] is to deliver a plan for hydrogen refuelling infrastructure by 2050 while the description states that the plan will be implemented.</p> <p>How can the Applicant be sure that hydrogen fuel will be sufficiently developed by 2050? What are the consequences for the project if the technology is not sufficiently developed?</p> <hr/> <p>As noted in responses above, and within the Carbon Acton Plan (CAP) [APP-091], the Government has committed to its Jet Zero Strategy to implement measures which will have the effect of mitigating aviation emissions, so enabling the Government to fulfil its statutory obligation to achieve its Net Zero targets. As part of this, it is recognised that the primary action to reduce emissions from aircraft will arise from government strategy at an industry scale, rather than directly through the influence of individual airport operators. Accordingly, and in line with the expectations of the Jet Zero Strategy, the role for the Applicant will be to actively support the transition to new aircraft technologies (which may include hydrogen fuel) and it is this support role which is committed to under the CAP.</p> <p>In this regard, and to answer the direct question, the Applicant cannot (nor can anyone else at this point) be sure that hydrogen fuel will be sufficiently developed by 2050. However, the Government's Jet Zero Strategy does not rely on this specific alternative fuel development and so a failure of that technological development would simply mean they would need to consider alternative measures/steps to ensure the aviation sector does not compromise its wider national Net Zero targets. Again, it is considered that</p>

		<p>would be something for the Government to manage on a national/sectoral basis, rather than specific to any one individual airport and/or, by extension, this Project.</p> <p>The Government's recent response (published 3 April 2024) to the Environmental Audit Committee's Third Report⁴ confirms the principle of the above, noting in response to a challenge about any failure of the technological measures to deliver the emissions reductions assumed (Recommendation 14):</p> <p><i>"The Jet Zero Strategy sets out details on how the aviation sector can achieve net zero without government intervening directly to limit aviation growth. DfT analysis shows that in all modelled scenarios we can achieve our net zero targets by focusing on new fuels and technology, rather than capping demand, with knock-on economic and social benefits. If we find that the sector is not meeting the emissions reductions trajectory, we will consider what further measures may be needed to ensure that the sector maximises in-sector reductions to meet the UK's overall 2050 net zero target."</i></p> <p>In order to accelerate the development of a suitable hydrogen industry, the Applicant is pursuing the following initiatives (as part of its ongoing 'business as usual' operations, and so not specific to the Project itself):</p> <ul style="list-style-type: none"> • Partnership with Metrobus to support a new fleet of hydrogen buses operating around the airport • Participation in an industry alliance with multiple industry partners. It is expected that workstreams will include exploring the hydrogen ecosystem in the UK, including the hydrogen supply chain at LGW, ground operations and aspects of advocacy. (NOTE: details of the alliance are being developed and are not yet in the public domain, so cannot be shared with the ExA for commercial reasons).
CC.1.10	The Applicant	<p>CAP – Delivery Matters</p> <p>Measures FL01 to FL08 in Table 3-4 of the CAP [APP-091] are potential enabling measures targeting</p>

⁴ <https://publications.parliament.uk/pa/cm5804/cmselect/cmenvaud/622/report.html>

		<p>aviation emissions.</p> <p>As enabling measures there is no certainty that they would lead to carbon saving. Should any or all of them not result in reduced emissions what would be the implications for the overall CAP?</p>
		<p>The Applicant refers the ExA to its response to question CC.1.6 above where the equivalent question is raised in respect of different enabling measures but where the same response applies.</p>
CC.1.11	The Applicant	<p>Sustainable Aviation Fuel – Timing of Delivery</p> <p>Measure FL04 in Table 3-4 of the CAP [APP-091] aims to reduce landing charges for Sustainable Aviation Fuel (SAF) fuelled aircraft with a timescale of 2050.</p> <p>How can the Applicant be sure that SAF will be sufficiently developed by 2050? What are the consequences for the project if the technology is not sufficiently developed?</p>
		<p>The Applicant refers the ExA to its response to question CC.1.9 above where the equivalent questions are raised in respect of the development of hydrogen fuel and to which Applicant's corresponding responses apply in general terms to this question too. However, specific to Sustainable Aviation Fuel (SAF), the Applicant would also highlight some of the recent developments/announcements in its respect which are considered to provide confidence in its development trajectory. In particular, in the Government's aforementioned recent response to the Environmental Audit Commission, it commented:</p> <p><i>"The UK will introduce a SAF mandate from 2025, requiring at least 10% of UK aviation fuel to be SAF by 2030.</i></p> <p><i>Fuel suppliers will receive awards, (in the form of tradable certificates) for the SAF they supply, proportionate to the GHG savings of their fuel.</i></p> <p><i>The mandate will introduce strict sustainability criteria to ensure SAF delivers genuine GHG emission savings. Fuels eligible for award include waste and residue derived biofuels, recycled carbon fuels and power to liquid fuels. Fuel producers will need to evidence the lifecycle emissions</i></p>

		<p><i>of their fuels to receive awards and fuels will need to deliver minimum GHG savings over fossil kerosene.</i></p> <p><i>The Government is supporting a UK industry through our £135 million Advanced Fuels Fund (AFF) which is supporting 13 first-of-a-kind projects to reach commercial scale by overcoming perceived technological and construction risks. This has set us on the path to achieve our shared ambition of having 5 plants under construction by 2025."</i></p> <p>Further, at Gatwick Airport already today the Applicant is pursuing the following SAF-related activities to support the development of a suitable SAF industry:</p> <ul style="list-style-type: none"> ▪ Continuing to support the UK Sustainable Aviation Coalition’s work on developing a SAF industry, working with the Jet Zero Council Sustainable Aviation Fuel Delivery Group, as well as advocating for more Government support. ▪ Exploring measures to support increased SAF supply, including understanding production in South / South East England ▪ Developing a programme of engagement to increase passenger awareness and understand willingness to pay for SAF ▪ Investigating the blending point at which infrastructure changes may be required ▪ Exploring partnerships to help accelerate the development of the SAF industry ▪ Investigating an evolution of the carbon charge in the Conditions of Use tariff to include a SAF incentive ▪ Considering committing to 30% SAF use in the Applicant’s corporate travel by 2030 (30 by 30 initiative - Sustainable Markets Initiative and World Economic Forum Clean Skies for Tomorrow Initiative).
--	--	--