

An aerial photograph of Gatwick Airport's northern runway and taxiway. The runway is a long, straight concrete strip with white markings, including the number '26' and 'L'. Several aircraft are visible on the taxiway and runway. In the foreground, a large white Airbus A380 is taxiing. To its left, a smaller white and red aircraft is also taxiing. Further back, another white and red aircraft is visible. The surrounding area includes green grass, taxiway lights, and airport infrastructure like buildings and a control tower in the distance.

YOUR LONDON AIRPORT
Gatwick

Our northern runway: making best use of Gatwick

Preliminary Environmental Information Report

Appendix 15.3.1: Summary of Stakeholder Scoping Responses - Climate Change and Carbon

September 2021

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1 Introduction

1.1 General

- 1.1.1 This document forms Appendix 15.3.1 of the Preliminary Environmental Information Report (PEIR) prepared on behalf of Gatwick Airport Limited (GAL). The PEIR presents the preliminary findings of the Environmental Impact Assessment (EIA) process for the proposal to make best use of Gatwick Airport's existing runways (referred to within this report as 'the Project'). The Project proposes alterations to the existing northern runway which, together with the lifting of the current restrictions on its use, would enable dual runway operations. The Project includes the development of a range of infrastructure and facilities which, with the alterations to the northern runway, would enable the airport passenger and aircraft operations to increase. Further details regarding the components of the Project can be found in the Chapter 5: Project Description.
- 1.1.2 This document provides the summary of stakeholder scoping responses for climate change and carbon for the Project.

2 Summary of Stakeholder Scoping Responses for Climate Change and Carbon

Consultee	Date	Details	How/where addressed in PEIR
Charlwood Parish Council	30 September 2019	Growth of the airport has facilitated substantial growth in aviation's greenhouse gas emissions, making a significant contribution to climate change.	Historic growth of the airport is not considered within the PEIR. Chapter 15 of the PEIR considers and quantifies the GHG emissions arising from the Project, and the associated changes in energy, surface access and aviation emissions.
Crawley Borough Council	30 September 2019	The assessment of climate change and carbon should include as a key element the Government's commitment to achieving an emissions' reduction target of 100% by 2050, (as set out in the Climate Change Act 2008 (2050 Target Amendment) Order 2019). This amendment should be included as a key piece of legislation in section 7.9.8, as well as any further guidance Government on aviation and emissions. This assessment should also consider the impact of other airport expansion projects. Given the importance of reducing greenhouse gases, CBC considers that all greenhouse gases in aviation emissions, and not just CO2 as proposed in paragraph 7.9.73, should be assessed.	Section 15.2 (Chapter 15 of the PEIR) provides details of the Climate Change Act 2008, including the 2019 change to a 100% reduction in GHG emissions on the 1990 baseline. This section also includes other legislation and policy of relevance. The Aviation 2050 strategy (Department for Transport, 2018) reviews the climate change policies detailed in the Aviation Policy Framework (Department for Transport, 2013). This document has recently undergone public consultation and, as such, does not represent currently adopted policy. Paragraph 3.87 of the strategy states that the Government agreed with the (then) Committee on Climate Change's (CCC's) advice to exclude international aviation emissions from carbon budgets but to leave 'headroom' to account for international aviation so that the whole economy is on a trajectory to achieve the 2050 Climate Change Act target. The paragraph also states that: <i>'To set a clear level of ambition for the sector, the government proposes to: accept the CCC's recommendation that emissions from UK-departing flights should be at or below 2005 levels in 2050'.</i> This has now been superseded by the Sixth Carbon Budget recommendations from the CCC, and the inclusion of international aviation within the formal adoption of the Sixth Carbon Budget. The Environmental Statement (ES) will respond to this emerging policy context as it is clarified.

Consultee	Date	Details	How/where addressed in PEIR
			<p>The assessment does not consider the aggregate impact of other airport expansion projects, but does provide context for the forecast GHG emissions arising from the Project in terms of the existing UK GHG targets.</p> <p>The assessment continues to assess CO₂ only for the aviation emission (and CO₂e for other emissions sources) in line with national reporting conventions and national targets for aviation. It is acknowledged that other non-CO₂ GHGs arise from combustion of aviation fuel, and the direct emissions of these accounts to an additional 1% in CO₂e emissions over the CO₂-only emissions. The assessment of significance, and the consideration of the context of national targets, can only be carried out in the context of the existing policy and carbon targets, and these are expressed in CO₂ for aviation emissions in the UK.</p>
Crawley Borough Council	30 September 2019	CBC considers that the increase in buildings and hardstanding on the airport as a result of existing and proposed developments (Table 4.6.1) and the Project itself, may create an urban heat island effect, and that the impact from this should be included in the ICCI assessment.	Currently we understand that Gatwick Airport does not experience a significant urban heat island (UHI), and that temperature measurements from the locality of the control tower show similar values to those from surrounding rural weather observation stations. This is based on research published in CIBSE TM49 referred to in the Scoping Report. It is not expected that the relatively small changes in hardstanding and buildings will create a new UHI effect.
London Borough of Croydon	1 October 2019	The Council has recently declared a Climate Change Emergency and is undertaking a Climate Change Commission and Citizens Assembly. While Gatwick Airport is recognised for its economic contribution to the sub-region, aviation clearly has an impact on the environment. It is for Gatwick and the aviation industry more widely to ensure that it can meet current and future climate change and emissions standards and develop Gatwick in such a way as to minimise its negative impact on the environment and climate change. Taking this forward in the Scoping Report the emphasis should be on ensuring that the proposed development is focused on sustainable growth and improves the environment for now and future generations.	Section 15.9 of PEIR assesses the magnitude of GHG emissions arising from the Project, and presents these in the context of current UK carbon targets. It also provides context on the scale of these emissions against a potential future carbon target predicated on the UK's commitment to net zero by 2050.
London Borough of Croydon	1 October 2019	The scoping report refers to a commitment to include targets to increase the sustainable mode share for passengers and staff which is welcomed. How these targets will be achieved and their role in mitigating the effects of the proposed development need to be considered. Whilst mode share targets have been indicated for 2022, in the light that the Council has declared a Climate Change Emergency, all travel will need to be sustainable in the medium to long term. Further targets should be developed and agreed looking to the medium term which is provided by the Mayor of London's Transport Strategy. This sets out a target for 80% of journeys to be by sustainable means by 2041. In light of the Mayor's objectives and the Climate Change Emergency we would strongly question the intention to increase 'on airport' parking from its current 46,700. It is considered that there are significant opportunities to increase the proportion of passengers travelling via bus and coach, along with walking and cycling access improvements to the airport. The data listed in 7.6.5 does not appear to cover these modes of transport directly.	Details on mode share is provided in Chapter 12: Traffic and Transport and Appendix 12.9.1 Preliminary Transport Assessment Report.

Consultee	Date	Details	How/where addressed in PEIR
Environment Agency	20 September 2019	<p>The production of a Flood Risk Assessment (FRA) in accordance with the planning practice guidance and National Planning Policy Framework (NPPF) is noted, this is certainly a requirement of this proposal. The FRA should incorporate the latest guidance on climate change, this aspect is referenced as part of section 7.5.15. The FRA should clearly demonstrate how the risk to flooding from both fluvial and surface water will not be increased as a result of any development on the site.</p> <p>Due to the timeline of this project, it is feasible that updated guidance could be released on factors such as climate change, flood risk extents and planning or policy guidance associated with flood risk during the development phase of this project. GAL should be prepared to implement new guidance/policy as appropriate, and this may result in changes to the baseline scenarios.</p>	<p>The FRA has shown that there is no increase in flood risk, both fluvial and pluvial, as a result of the proposed development. Further information can be found in the flood risk assessment (FRA) (Appendix 11.9.1)</p>
Historic England	1 October 2019	<p>Para 7.1.25 – potential climate change effects on the historic environment are dismissed but we would suggest that there may be some effects; e.g. climate generated change in hydrology and ground water conditions may affect archaeological preservation environments through drying out of soil or rapid changes in ground saturation.</p>	<p>These effects are considered in Chapter 7: Historic Environment of the PEIR.</p>
Horsham District Council	27 September 2019	<p>In relation to the Assessment of Significance, the meaning of paragraph 7.9.68 requires clarification. The paragraph refers to a 'qualified effect' to be compared against a national carbon budget. In accordance with the recommendations of IEMA guidance 2017, it is expected that the Project's carbon budget should be quantified and compared against an existing carbon budget. Will the fourth and fifth carbon budgets be used for that purpose? Are there regional or local budgets that can be used?</p>	<p>This terminology should have read 'quantified' not 'qualified'.</p> <p>The PEIR has quantified the emissions from the Project, and compares this to the relevant carbon budgets for the relevant periods of construction and operation for which carbon budgets currently exist.</p> <p>Some organisations have proposed carbon budgets at the Local Authority level, but these have not been formally accepted for those geographies in which GHG emissions will arise from the Project.</p>
Mid Sussex District Council	1 October 2019	<p>It is recommended that the relevance to the assessment of each policy or legislation is fully noted as part of the PEIR or ES.</p>	<p>The preliminary assessments take into account relevant policy and will continue to be taken into account throughout the EIA process</p>
Reigate and Banstead Borough Council	27 September 2019	<p>Following the adoption of the DMP, references to the “emerging Reigate & Banstead Borough Development Management Plan 2018-2027” should be amended to “Reigate and Banstead Development Management Plan (Reigate and Banstead Borough Council, 2019)” to ensure consistency with other adopted Local Plan documents. References to saved Borough Local Plan Policy Hr2B “Quality & Sustainable Development (within Horley)” also needs to be removed from the policies and legislative requirements section following adoption of the DMP.</p>	<p>The policy table 15.2.2 in the PEIR refers to “<i>Reigate and Banstead Development Management Plan 2019</i>”.</p> <p>The Local Plan Policy Hr2B is not referred to in the PEIR.</p>
Reigate and Banstead Borough Council	27 September 2019	<p>The Council notes that the justification for excluding GHG emissions from CCD stages for inward flights is that “these emissions are outside the scope of influence of the Project as the Project does not include changes to airspace...”. Given our previous comments regarding airspace modernisation, we consider that there is a need to take into consideration GHG emissions from CCD stages for inward flights.</p>	<p>A full response to a similar comment is presented in Table 15.3.1: “<i>Airspace design changes fall under a different regulatory system and process. This PEIR does not include an assessment of arriving flights as recommendations on inclusion of these are only applicable to assessments of airspace design changes. In addition, there is insufficient information on future airspace changes to allow an assessment on GHG emissions to be carried out at this stage. It is proposed to consult with CAA to discuss the scope of the assessment in the EIA process and the final ES will take into account the outcomes of consultation.</i>”</p>
Reigate and Banstead Borough Council	27 September 2019	<p>The Council would welcome clarity as to whether non-CO2 radiative forcing effects (including water vapour, contrails, NOX, etc.) will be taken into consideration in the scope of the assessment of carbon. If not this will result in a significant change in the figures presented in the final assessment.</p>	<p>The assessment is restricted to consideration of GHGs as defined by the Kyoto Protocol. It does not consider wider non-GHG effects. This is set out, along with the supporting rationale, in Paragraph 15.4.7.</p>

Consultee	Date	Details	How/where addressed in PEIR
Reigate and Banstead Borough Council	27 September 2019	In terms of the presentation of the findings, we note that Paragraph 7.9.34 of the EIA Scoping Report states that "it is proposed that the findings of the assessment of effects on climate change and carbon would be set out as a topic chapter within the ES, supported by technical appendices where appropriate". In order to understand the non CO2 radiative forcing effects, we would find it helpful if a table were included within the chapter which specifically details the non CO2 radiative forcing impact.	The assessment is restricted to consideration of GHGs as defined by the Kyoto Protocol. It does not consider wider non-GHG effects. This is set out, along with the supporting rationale, in Paragraph 15.4.7.
Surrey County Council	1 October 2019	The County Council is broadly content with the approach to the assessment of climatic impacts and carbon emissions set out in section 7.9 (pp.144-160) of the Scoping Report. However, the County Council would recommend that the assessment give consideration to the likely implications of the forthcoming report of the Committee on Climate Change (CCC), which is expected in the autumn. That report is expected to make recommendations for the aviation sector consistent with delivering the Government's recently legislated target for net zero carbon by 2050. Those recommendations are expected to be taken into account in the Government's final Aviation Strategy for 2050, and is therefore a key issue for the proposed development at Gatwick that should be factored into the assessment.	Section 15.9 of PEIR assesses the magnitude of GHG emissions arising from the Project, and presents these in the context of current UK carbon targets. It also provides context on the scale of these emissions against a potential future carbon target predicated on the UK's commitment to net zero by 2050. The final ES will respond to any changes in policy context and forthcoming carbon budgets.
West Sussex County Council		In reference to Section 3.2: It is considered that a "low growth" scenario should be added to account for the possibility the growth of the airport will be limited by climate change considerations and/or Brexit.	Forecast data have been provided by ICF and further details can be found within the Forecast Data Book provided as part of the consultation material.
West Sussex County Council		In reference to Paragraph 7.1.25: Climate change should be included as it is likely to affect the historic environment baseline over the assessment period through increased heat and rainfall undermining foundations and damaging buildings.	This point to be raised with Chapter 7: Historic Environment topic for response.
West Sussex County Council		In reference to Paragraph 7.9.8: The Climate Change Act 2008 (2050 Target Amendment)(Order 2019) should be included in the list of key legislation.	The amended Climate Change Act is referenced in the PEIR in section 15.2
West Sussex County Council		In reference to Paragraph 7.9.11: The list of Guidance Documents should include the National Adaptation Programme.	The National Adaptation Programme (NAP) is included in the Legislation section of the PEIR
West Sussex County Council		In reference to Paragraphs 7.9.15 and 7.9.18: The ICCI assessment should consider the impact of the heat island effect resulting from works proposed to 2038 (including additional concrete/hardstanding/buildings), as set out in table 4.6.1	See comment above
West Sussex County Council		In reference to Paragraph 7.9.34: The cumulative impact of the Project along with other airport projects, particularly the Heathrow expansion, should be considered.	A cumulative assessment has not been undertaken within Chapter 15 of the PEIR – see section 15.10 for explanation.
West Sussex County Council		In reference to Paragraph 7.9.39: The assessment of future impact should consider the heat island effect of increased concrete/hardstanding/buildings.	See comment above
West Sussex County Council		In reference to Table 7.9.3: This should explicitly include: <ul style="list-style-type: none"> ▪ the potential impact of increased drought/storm weather on runway surfaces through cracking; ▪ overheating in buildings; ▪ health impacts on staff during construction/operation. 	These points are discussed in Section 15.9
Waverley Borough Council		The climate change baseline presented in the scoping request report deals with increases in temperature and of greenhouse gas emissions. The area that would be affected by the development, in terms of the greenhouse gas	The study areas for the heritage assessment are described within Appendix 7.6.1: Historic Environment Baseline Report.

Consultee	Date	Details	How/where addressed in PEIR
		emissions attributed to the relevant boroughs should be included as part of the EIA. Aviation is set to be the biggest source of UK emissions by 2050. The assessment should include a cumulative impact of CO2 emissions arising from both the proposed Gatwick and Heathrow expansions and how these may impact on Waverley Borough residents and businesses as well as the environment, biodiversity and habitat.	
Tandridge District Council	30 September 2019	Paragraph 7.9.8 of the EIASR should include as key legislation the Climate Change Act 2008 (2050 Target Amendment) Order 2019. This sets out the Government's commitment in relation to carbon emission reductions by 2050 and should be central to the assessment of climate change in the ES.	The amended Climate Change Act is referenced in the PEIR in section 15.2

3 References

Climate Change Act (2008), c.27 (as amended).

Department for Transport (2013) Aviation Policy Framework.

Department for Transport (2018) Aviation 2050 - the future of UK aviation.

4 Glossary

4.1 Glossary of terms

Table 4.1.1: Glossary of Terms

Term	Description
CBC	Crawley Borough Council
CCC	Committee on Climate Change
CCD	Climb-Cruise-Descent
DMP	Development Management Plan
EIA	Environmental Impact Assessment
EIASR	Environmental Impact Assessment Scoping Report
ES	Environmental Statement
FRA	Flood Risk Assessment
GAL	Gatwick Airport Limited
GHG	Green House Gas
ICCI	In-combination Climate Change Impacts
IEMA	Institute of Environmental Management and Assessment
NAP	National Adaptation Programme
NPPF	National Planning Policy Framework
PEIR	Preliminary Environmental Information Report