

Gatwick Airport – effect of the development of a Northern Runway on Eastbourne Borough Council’s Carbon Neutrality Pledge

Introduction by Councillor Shore OBE, Chair of Eastbourne Borough Council’s Scrutiny Committee

As a result of a recent motion debated at Full Council, Eastbourne Borough Council has asked its Scrutiny Committee to consider Gatwick Airport’s claims of “committing to net zero direct emissions by 2040”. In 2013, the Borough Council supported a second runway for Gatwick airport. Since then, Eastbourne Borough Council has pledged to be Carbon Neutral by 2030.

The main question for the Council remains that, the use of Northern Runway and its resultant increase in traffic, may affect the Council’s ability to fulfil the pledge to be Carbon Neutral by 2030.

Review of literature (both from Gatwick Airport Ltd and other sources) shows widely different viewpoints, often polarised views. Our task is to gather up to date evidence at this meeting which will enable the Committee to come to an agreed statement from this Council.

While we want to fully understand the implications of the Northern Runway project – we will focus on how Gatwick Airport will achieve net zero direct emissions by 2040 given the increased flights and the effect of increased emissions on the Council’s Carbon Neutral pledge.

Questions:

1. What is the percentage of emissions from Aviation compared to total emissions?

As part of our carbon reporting, Gatwick Airport Ltd. account for the emissions created during the landing and take-off (LTO) cycle of flights using the airport. In 2021 (the latest period available), those emissions accounted for 48% of the carbon footprint attributable to Gatwick Airport Ltd. In 2019 (the year prior to the Covid-19 pandemic), those emissions were 58% of the total footprint.

2. What is the percentage of Gatwick’s emissions compared to UK wide?

For 2019 (the latest period available):

UK emissions	405 MtCO _{2e} (including GHGs from UK produced goods and services consumed by UK residents, emissions from heating from the use of fossil fuels and transport emissions generated directly by UK households) <i>Source: DEFRA</i>
Gatwick Airport Ltd. footprint emissions	734,294 tCO _{2e} – location-based Scope 1, 2 and 3 emissions
% Gatwick emissions compared to UK-wide	0.18%

3. What is the percentage of UK aviation emissions compared to the world?

For 2019 (the latest period available):

Global aviation	915 MtCO ₂ e Source: ATAG
UK aviation	39.6 MtCO ₂ e Source: Committee on Climate Change
% UK aviation emissions compared to global aviation	4.3%

4. What does the carbon neutrality measurement include – is it a globally agreed formula?

Airport Carbon Accreditation is the global carbon management certification programme for airports. It independently assesses and recognises the efforts of airports to manage and reduce their carbon emissions through 6 levels of certification: 'Mapping', 'Reduction', 'Optimisation', 'Neutrality', 'Transformation' and 'Transition'.

Airport Carbon Accreditation is also the only global, airport-specific carbon standard which relies on internationally recognised methodologies. It provides airports with a common framework for active carbon management with measurable targets. The programme is site-specific, allowing flexibility to take account of national or local legal requirements; whilst ensuring that the methodology used is robust.

Gatwick Airport is currently Level 3+ (Neutrality) accredited, which means we are required to compensate for our remaining carbon emissions that cannot be reduced by other means through offsetting, namely the purchase of carbon credits. This provides funding to projects that reduce carbon dioxide and a bespoke Offsetting Manual advises airports on choosing reliable carbon credits.

Airport Carbon Accreditation is owned and governed by Airports Council International (ACI) EUROPE in close cooperation with four ACI regions and with support of ACI World. The programme is administered independently by WSP, the environmental consultancy tasked with enforcing the strict criteria of accreditation and safeguarding the independent character of the programme's framework.

5. Are aircraft fuel emissions included in your calculations (take-off and landing)?

Partly – we account for emissions generated during landing and take-off cycles (see question 1). We do not report emissions outside of this cycle.

6. Are passenger journeys to and from the airport included in the calculations?

Yes, we account for emissions generated by passenger surface access, as well as airport staff commuting. Passenger surface access emissions in 2019 was an estimated 195,692 tCO₂e and in 2021, 28,646 tCO₂e.

7. How many flights are there currently and what is your expected increase when operating at maximum capacity?

In 2019, there were a total of 280,656 Air Traffic Movements (ATMs). In 2047, with the Northern Runway in routine use, we are projecting 386,000 ATMs.

8. Will the Utility energy level for running an airport increase?

This is a difficult question to answer without specific, detailed modelling.

GAL follows the energy hierarchy and has a comprehensive programme of demand reduction and energy efficiency for its existing assets. Future investment will include energy efficient assets and technologies, and expanding the generation of on-site energy from renewable sources. The additional buildings and facilities required to support the routine use of the Northern Runway (and increased passenger throughput) is likely to increase the demand and consumption of energy but should not necessarily result in an associated carbon emissions increase.

At the point at which we submit our application for Development Consent, we will publish our proposed Carbon Action Plan explaining our transition to net zero by 2040.

9. The carbon impact on goods being used/consumed within the airport on a daily basis (i.e. food/clothing/tax free shopping)

Again, this is a difficult question to answer without specific, detailed modelling. GAL does not currently assess the carbon footprint of Purchased Goods and Services (GHG Protocol scope 3 category 1).

The trend though across the UK's economy as a whole is a reduction in the emissions associated with the production and transport of goods.

10. What are the total carbon production emissions from the freight being handled at Gatwick?

We do not currently hold that data but expect the amount of cargo transported by flights departing and arriving at Gatwick to increase. The vast majority of our cargo is transported in the 'belly hold' of passenger aircraft and therefore we are not forecasting an increase in cargo-only flights.

The associated emissions are expected to decrease over time, in line with the UK's transition to net zero and decarbonisation of road transport.