

We oppose the proposed development on the grounds that it is unproven and unlikely that it can proceed without endangering compliance with UK decarbonisation targets, thereby exacerbating climate change; also that efforts to comply are likely to be so expensive as to undermine the economic case for the development.

In particular, to the extent that expansion of flight and passenger numbers will rely on the development of alternative fuels, including so-called Sustainable Aviation Fuel, there is no evidence that such fuels will be available within the time frame of such expansion. Indeed evidence points in the opposite direction.

In support of this view we submit two documents, and ask that the applicant be challenged on the technical and financial viability of such fuels coming into use in sufficient quantities. These documents are:

(1) "Net Zero Aviation Fuels - resource requirements and environmental impacts", a policy briefing by the Royal Society, February 2023.

(2) "The reality of waste-derived fuels: up in the air", authored by Dr. Andrew Rollinson in 2021 for GAIA (Global Alliance for Incinerator Alternatives).

The Royal Society report includes an estimation that biofuels sufficient to satisfy current UK jet fuel demand would require at least half of all agricultural land in the UK. Other fuels are discussed but their use is very speculative.

The use of waste as a source for jet fuel is similarly subject to questions about available feedstock, but also its technical viability, toxic byproducts, and cost. Dr Rollinson is an acknowledged expert in pyrolysis and gasification (the technologies most often advanced to make SAF), having previously designed such systems for other purposes.

Without reasonable certainty that fuels can be made available to decarbonise UK aviation, there is no justification for the disturbance and environmental impacts the Northern Runway project will lead to.