

Written evidence submitted by Paul Groves (ASS0033)

This submission responds to the Transport Select Committee's consultation of **Airlines and airports: recovery in the UK aviation** sector, under the headings of:

SUSTAINABILITY, and REGIONAL AND GLOBAL CONNECTIVITY

SUMMARY

Background

1. Our family involvement and longevity with aviation is much more than those now deciding on the issues of aviation, most of whom will also not be involved for the duration to see this through by 2050. They will have moved on to other employment, or retired.
2. Consequently these research and comments are NOT from any objection to aviation (quite to the contrary) but rather from a realisation that we cannot continue to adversely affect the planet, and that current efforts and so-called plans will just NOT ensure that aviation plays its part in achieving Net Zero by 2050, and certainly not before then as is necessary.

Aviation and Climate Change

3. Unfortunately the Government aviation plans for aviation are 'pie in the sky' and WON'T ENSURE OR EVEN ENABLE the achievement of Aviation Net Zero by 2050, or earlier by 2035 as is necessary for Aviation to play its part in limiting global warming to 1.5 degrees from pre-industrial levels.
4. David Shukman the BBC Science Editor says that we need to HALVE emissions by 2030, however Government plans globally show that emissions will RISE between now and 2030. He went on to say that Government and those with the levers of power must enforce structural change at COP26 and not just tinker around the edges. Unfortunately UK Government plans for Jet Zero and SAF, without aviation constraint as determined by the CCC, are "just tinkering around the edges".and will lead

to an increasingly difficult problem for our children, grandchildren and successors....which may well end in disaster for the planet and for them.

SUSTAINABILITY

Sustainable Aviation Fuel

5. The area of land required to grow enough crops to produce biofuels to power an unconstrained increase in flying, and meet our other needs, would be vast. If it is proposed to use only 50% SAF, then still requires an increase of 1000 times current usage. But extensive production of SAF will compete with growing food, of which the world needs an ever-increasing amount for an ever-increasing population, disruption of existing uses of food waste as animal feedstock etc, and with increasing Climate Change we mustn't be clearing or burning down forests for more agriculture.
6. Bio-fuel would require 5,000 times the area of Heathrow just in terms of land to grow sufficient Sustainable Aviation Fuel to replace the (pre-pandemic) amount of aviation fuel just used by Heathrow, and that is without any aviation expansion or consideration of the energy and emissions for growth and production of bio-fuel.

Jet Zero plans for electric and/or hydrogen powered aircraft.

7. For a Sustainable Future, much emphasis is being placed on electric vehicles, and now electric trucks and planes. This is a vital part of the government's Net Zero strategy. However there are enormous challenges which unfortunately will NOT be overcome by 2050.
8. To replace the global fleet of 25,000 commercial aircraft by 2050, which will take 25 years just to manufacture, we must have suitable new electric or hydrogen aircraft (starting at say 200 seats and more than 1000 mile range) designed, proven and certified for manufacture in the next 4 years, but that is nowhere near being the case. Current plans are for an "up to 20 seater" electric plane being able to fly for example to Scottish islands by 2027.

9. China is controlling the sourcing and processing of Lithium for batteries and vehicles.
10. Professor Rob Miller of Cambridge University Whittle Laboratory has made representation regarding aviation to the All Party Parliamentary Engineering Group, and on the BBC says "there needs to be a fundamental lowering of aviation emissions" and "radical changes in airport infrastructure" for electric charging and/or hydrogen. "We need to get to 1980s levels of emissions by 2030", and "many ideas will fail".
11. Leading and reputable consultants McKinsey and Co and others, advise that it will take around 20 years to develop new concept "blended wing" (i.e. passengers all sit in a huge delta wing, rather than in today's tubes or cylinders) commercial aircraft with enough capacity for hydrogen fuel and maybe able to travel 1000 miles with say 200 passengers, and that of course wouldn't be able to cross the Atlantic. And even from having been developed, proven and certified, then it will take 25 years to replace the global fleet of 25,000 commercial planes, and that is without considering further time to produce any additional aircraft for aviation expansion.
12. The high level of uncertainty attached to all of Jet Zero's technical solutions (which is accepted in Jet Zero itself) means that there needs to be an immediate introduction of demand management measures (including taxes) to manage demand downwards in the next 10 years is vital to limit the amount of emissions that will need to be removed in future.

Emissions Trading or Offsetting

13. Emissions Trading or Offsetting does not 'drive down' emissions. The UK ETS and CORSIA are inadequate methods to meaningfully offset aviation emissions.
14. In terms of emissions trading, there is also the issue that this will be for carbon emitted today and for example trees planted shortly, but it will take a long time (maybe 20 years?) for those trees to grow and photosynthesise significant amounts of carbon. Many trees will not make it, strangled by others, drought etc. So there is a substantial lag between carbon emitted today and CO2 compensation not effective for some time, maybe 20 years.

REGIONAL AND GLOBAL CONNECTIVITY

15. Plans are being promoted by airports across the UK to expand capacity by 65% but the CCC says that this must be limited to 25% growth overall up to 2050, and without building any new runways.
16. A Heathrow 3rd runway would add 260,000 flights per year, or an additional 700 per day, over their current cap of 480,000 per year or more than 50% growth at Heathrow alone. To stay within CCC climate and emissions limits, this would require constraint or even closing one or more regional airports, so working against the Government's "levelling up" policy for the regions, i.e. promoting growth of business and employment in the regions and not always in the southeast.
17. Another UK measure should be to make it illegal to fly internally for journeys less than 600 miles, as is being planned for France, with exceptions for remote communities and emergency flights. This would severely limit domestic flights to and from Heathrow and the wider world.
18. The travelling public is rejecting journeys via hub airports with 2 or more stops. So to respond to the question of Regional and Global Connectivity, this must be achieved by direct flights from the regions direct to global destinations, rather than via a Heathrow hub.

GOVERNMENT ACTION

19. There are already big increases in public understanding and calls for Climate Action. This will increase in future, such that current Government actions and plans will prove to be ever more insufficient.
20. With COP26 in November and the Government's claims of "Climate Leadership", Government needs to take the advice of Greta Thunberg and their own Climate Change Committee, and limit aviation expansion across the UK to 25% by 2050, that is about 1% per annum from pre-pandemic levels."

--- End of Summary ---

INTRODUCTION.

By way of introduction, my family and I have a background steeped in aviation, with my father a 40 year pilot who came from growing up on a farm in Australia (on The Queen Mary as a troop ship across the Atlantic) to be a Lancaster pilot in WWII, surviving that when 55,000 or half didn't and then flying as a commercial pilot based back in Australia, Indonesia, Switzerland, Beirut, Heathrow, Gatwick and Stansted. Two cousins and my son have had long careers at British Aerospace, Rolls-Royce aero-engines and Airbus, and after university I was a graduate ILS (Instrument Landing System) engineer conducting and writing up an ILS trial with the CAA.

Also I have various friends and neighbours who are or have been BA aircrew, including Barbara Harmer who was the only female pilot of Concorde and for 10 years, but who sadly died of cancer aged 57.

During periods of the '80s, '90s and some of the '00s I travelled extensively on business, but have realised that this is not sustainable. In the last 5 years I have dramatically reduced this, flown only 3 times in total to business conferences or meetings somewhere in Europe, cancelled plans for a retirement mixed here and abroad, and this is despite half of my immediate family living in Australia. If I can do this, so can others and we have to change our ways.

Our family involvement and longevity with aviation is much more than those now deciding on the issues of aviation, most of whom will also not be involved for the duration to see this through by 2050. They will have moved on to other employment, or retired.

So my research and comments are NOT from any objection to aviation (quite to the contrary) but rather from a realisation that we cannot continue to adversely affect the planet, and that current efforts and so-called plans will just NOT ensure that aviation plays its part in achieving Net Zero by 2050, and certainly not before then as is necessary.

Remember what happened about the tobacco industry's strong promotion of smoking not causing cancer. They were eventually found out. That will also be the case for aviation vested interests, by which time they will have retired or

moved on leaving us, our children and grandchildren with an increasingly difficult climate problem.

What vested interests? The Jet Zero CEO is Emma Gilthorpe, also COO of Heathrow Airport and Heathrow Airport is 90% owned by foreign investors from China, Singapore, Qatar, Spain and Canada, who have no interest in what's best for the well-being of our citizens, only in their own profits.

The ONLY way is by limiting the growth in aviation.

This response focuses on the following 2 sections of your Transport Select Committee enquiry

Sustainability

- The aviation sector's progress on reducing emissions to support the Government's aim to achieve net zero greenhouse gas emissions by 2050; and
- Maintaining a competitive UK aviation sector while ensuring the UK can achieve net zero greenhouse gas emissions by 2050.

Regional and global connectivity

- Connectivity between the regions and nations of the UK, including the steps that the Government can take to support regional connectivity
- Re-establishing global connectivity to support the Government's Global Britain agenda

SUSTAINABILITY

The Government's approach to reducing emissions and achieving Net Zero aviation by 2050 falls into 3 areas:

1. Sustainable Aviation Fuel.
2. Jet Zero electric and/or hydrogen powered aircraft.
3. Emissions trading,

Unfortunately these are 'pie in the sky' and WON'T ENSURE OR EVEN ENABLE the achievement of Aviation Net Zero by 2050, or earlier by 2035 as is necessary for Aviation to play its part in limiting global warming to 1.5 degrees from pre-industrial levels.

We have seen increasing recent occurrence of wildfires in Greece, Turkey, southern France, Algeria, California, Siberia, even the UK, and in the last year or so in Canada and Australia, and floods in Europe including Germany with 200 deaths, the UK, Turkey, Bangladesh, Pacific Islands and other low-lying areas. This might in future include London, requiring redevelopment of the Thames Barrier. Just today, the Environment Agency reports that London sea levels may rise by 9 to 11 inches by the 2050s.

And a week ago the BBC has reported that there will be 3 to 7 times more wildfires, droughts and floods in the lifetime of our children than in the lifetime of their grandparents, which means in a 50 year timespan.

"Global Citizen Live" broadcast on the BBC two weeks ago had environmentalists and other concerned individuals, including David Shukman the BBC Science Editor saying that we need to HALVE emissions by 2030, however Government plans globally show that emissions will RISE between now and 2030. He went on to say that Government and those with the levers of power must enforce structural change at COP26 and not just tinker around the edges. Unfortunately UK Government plans for Jet Zero and SAF, without aviation constraint as determined by the CCC, are "just tinkering around the edges".and will lead to an increasingly difficult problem for our children, grandchildren and successors which may well end in disaster for the planet and for them.

Others and I have spent considerable time and effort researching and responding to such consultations, and seriously curtailed our flying, and we need Government action to ensure that everyone else does the same.

Sustainable Aviation Fuel.

Usage of SAF (Sustainable Aviation Fuel) currently accounts for only 0.05% of aviation fuel used and yet the Government claims that it will be widespread in future, requiring an increase of 2000 times by 2050. There are huge uncertainties about the potential for scaling up SAF production and associated infrastructure development, such that SAF cannot reasonably be relied upon to the extent proposed in Jet Zero. The area of land required to grow enough crops to produce biofuels to power an unconstrained increase in flying, and meet our other needs, would be vast. If it is proposed to use only 50% SAF, then still requires an increase of 1000 times current usage. But extensive production of SAF will compete with growing food, of which the world needs

an ever-increasing amount for an ever-increasing population, disruption of exiting uses of food waste as animal feedstock etc, and with increasing Climate Change we mustn't be clearing or burning down forests for more agriculture.

As an example, McDonalds already claims to recycle all its used cooking oil for use in its own delivery trucks. If other similar organisations do the same, where will there be sufficient significant amounts for SAF? Secondly, this is a priority need solely for the aviation industry so the aviation industry should meet the full cost of developing and deploying SAF. It should not be borne by the taxpayer as there are more effective uses of public funds to mitigate the climate crisis and adapt to its unavoidable impacts. A small minority of the UK population take the majority of flights while a significant proportion of the population does not fly at all in any given year. The cost of developing SAF should be borne by those who will use SAF.

Bio-fuel would require 5,000 times the area of Heathrow just in terms of land to grow sufficient Sustainable Aviation Fuel to replace the (pre-pandemic) amount of aviation fuel just used by Heathrow, and that is without any aviation expansion or consideration of the energy and emissions for growth and production of bio-fuel.

Jet Zero electric and/or hydrogen powered aircraft.

It has taken 25 years to manufacture the current global fleet of 25,000 commercial aircraft. So to replace them by 2050 we must have suitable new electric or hydrogen aircraft (starting at say 200 seats and more than 1000 mile range) designed, proven and certified for manufacture in the next 4 years, but that is nowhere near being the case. Current plans are for an "up to 20 seater" electric plane being able to fly for example to Scottish islands by 2027.

There is a high level of uncertainty attached to all of Jet Zero's technical solutions, which is accepted in Jet Zero itself.

Professor Rob Miller of Cambridge University Whittle Laboratory has made representation regarding aviation to the All Party Parliamentary Engineering Group, and on the BBC says "there needs to be a fundamental lowering of aviation emissions" and "radical changes in airport infrastructure" for electric charging and/or hydrogen. "We need to get to 1980s levels of emissions by 2030", and "many ideas will fail". "And we as individuals will need to decide on the impact to the environment and manage the amount of flying that we do".

That will only occur with taxes and financial incentives for individuals to act appropriately.

For a Sustainable Future, much emphasis is being placed on electric vehicles, and now electric trucks and planes. This is a vital part of the government's Net Zero strategy. However there are enormous challenges which unfortunately will NOT be overcome by 2050.

In the below extract from the following very recent Wired article of 5th October 2021, <https://www.wired.co.uk/article/cornwall-lithium>, aside from the difficult science of exploration in Cornwall, they note

Lithium in Cornwall is likely an order of magnitude, i.e. 1/10th the concentration in water sources of Lithium found in South America. And China is controlling the sourcing and processing of Lithium for batteries and vehicles.

An extract from the article says

"TODAY, BY THE time you turn on the ignition of an electric car, the lithium-powered battery under the hood is likely to have already travelled around the world a few times. The battery elements are sourced from around the globe: lithium travels from South America or Australia, is sent to battery manufacturing facilities in places like China or Germany, then shipped to car manufacturers in its final form.

Data paints a grim picture of electric batteries' current footprint. Vehicle consultancy Berylls Strategy Advisors estimates that manufacturing an electric car battery emits up to 74 per cent more CO₂ than producing an efficient conventional car if it's made in a factory powered by fossil fuels. According to Carbon Brief, around half the emissions from battery production come from the electricity used to manufacture and assemble them.

Lithium is one of the lightest elements in the periodic table, so transporting it is "neither here nor there in the overall equation of the energy needed to produce the chemicals for car batteries," says Frances Wall, professor of applied mineralogy at the Cranborne School of Mines. She says that the real issue is the security of the supply. "The only people that are really processing lithium, even if it's mined in South America or Australia, it's been going off to China for the next stage of processing,"

she says. “It’s not the miles of shipping that is the problem, it’s the fact that you are sending it away to China, which could then choose to sell it to someone else.” She argues that we will only be able to control the environmental footprint – and supply chain – if we have a local ecosystem to produce batteries in the UK.

Last year the European Commission forecast that Europe would need 18 times more lithium in 2030 against the current supply in order to meet demand for electric vehicle batteries. By 2050, it will need 60 times as much.

The Commission expects the European Battery Alliance, a public and private investment, to “mobilise at scale” and “lead to 80 per cent of Europe’s lithium demand being supplied from European sources by 2025”. In the UK, a “green energy plan” is set to end the sale of new petrol and diesel cars and vans by 2030, ten years earlier than previously planned.

To support this, the British Government is investing £1.3 billion in a network of electric charging points and will be providing more than £1 billion in subsidies for the purchase of new electric vehicles and for battery production. Without localised battery production, manufacturers could face hefty EU tariffs within the next three years. In July, a House of Lords committee report urged ministers to secure the supply of these raw battery materials and build gigafactories to make batteries.

This means that Cornish Lithium and British Lithium have a little over four years to set up a viable commercial operation to meet growing demand. This is a hefty task: setting up a mine in locations like Australia or South America, where there is a proven supply of precious metals like lithium, can take an average of a decade, according to Rich Crane.

The battery gigafactories needed to process the supply are also unevenly distributed: China has 156, Europe has 22 and the US has 12, according to data from analysts at Benchmark. The Öko-Institut, a German research and consultancy institution, expects global demand to reach 220 gigafactories by as early as 2050. For now, the UK has none. After years of speculation (and brief hope that Tesla would set up a gigafactory here rather than in mainland Europe), Nissan has emerged with a plan to be the first. The car manufacturer has pledged to set up the UK’s first large-scale battery gigafactory in Sunderland, which will have capacity for

9GWh, producing batteries that will power “tens of thousands” of Nissan Leafs. At the time of writing, the gigafactory, which is owned by investor Envision AESC, has yet to be built and the company was unable to provide any details as to the logistics involved in the construction and sourcing of materials for the batteries it plans to produce.

Even if UK companies start extracting lithium and producing batteries, Wall says it’s important to make sure the metals don’t end up going to waste, and that old batteries are recycled. She hopes that European legislation, which could require a percentage of electric batteries to be recycled, could help to create a domestic market for battery recycling. “We need so much more lithium, for heaven’s sake let’s not go and mine it and chuck it all away again,” she says.

Back in the Cornish hills, the extraction companies hope that making raw materials and gigafactories public investment priorities will propel their expansion plans onward. The next step is to hire the people needed to scale up, says Cornish Lithium’s Lucy Crane. “At the moment we employ 21 people down here in Cornwall, we’re all really technical, a lot of us have got master’s degrees, and we’ve got PhDs,” she says. “That’s not necessarily a route that’s open to people who might have grown up in Camborne.” She’s passionate about providing careers for those in the local community as operations step up. And at the moment, it can’t happen fast enough: “The timeline for when we need to produce lithium is so short, we need to start producing the stuff yesterday.”

Even this article is suggesting, "The Commission expects the European Battery Alliance, a public and private investment, to “mobilise at scale” and “lead to 80 per cent of Europe’s lithium demand being supplied from European sources by 2025” In the context of everything else they say, that seems highly unlikely by 2025!

This means that we cannot rely on electric planes to any great extent, and may have to depend on green hydrogen.

However, leading and reputable consultants McKinsey and Co and others, advise that it will take around 20 years to develop new concept "blended wing" (i.e. passengers all sit in a huge delta wing, rather than in today's tubes or cylinders) commercial aircraft with enough capacity for hydrogen fuel and maybe able to travel 1000 miles with say 200 passengers, and that of course

wouldn't be able to cross the Atlantic. And even from having been developed, proven and certified, then it will take 25 years to replace the global fleet of 25,000 commercial planes, and that is without considering further time to produce any additional aircraft for aviation expansion. And there are still the major issues of developing sufficient hydrogen storage and distribution at airports etc.

And we have the issues of major ramp-up of SAF, it competing with agriculture for food production, disruption of agricultural and food-waste supply chains, and we mustn't be clearing or burning down forests.

So the government's SAF and Jet Zero targets are impossible and "pie in the sky" and the ONLY way is by limiting the growth in aviation.

Emissions Trading and Offsetting.

Emissions trading or offsetting is a way for one sector, say Aviation, to soak up environmental benefits hard gained in other sectors, so reducing the overall benefit for society and the planet as a whole.

As advised by the IPCC, we must make actual emissions reductions by 2030, yet Jet Zero proposes an increase.

Climate scientists on the IPCC and the CCC warn that we must make radical cuts to emissions in the next 10 years in order to have any realistic prospect of reaching net zero by 2050, yet Jet Zero proposes an increase. It is deeply irresponsible to propose allowing aviation emissions to increase up to 2030 and such a policy would contradict the government's new target of cutting UK emissions by 78% by 2035. There are no special reasons to allow the aviation industry to increase its emissions while all other sectors must reduce them. Jet Zero presents no evidence to suggest that other sectors could reduce emissions by more than 45% to compensate for aviation's increased emissions.

Offsetting does not 'drive down' emissions. The UK ETS and CORSIA are inadequate methods to meaningfully offset aviation emissions. There is very little risk of 'carbon leakage' from domestic UK flights or flights from the UK to EU destinations, so the ETS as currently constructed will not reduce emissions. The CCC specifically rejected counting CORSIA offsets towards the UK's 2050 net zero trajectory. Greenhouse gas removal (GGR) technologies are nascent

and the timescale for their scaling up is very uncertain, such that they cannot reasonably be relied upon to the extent proposed in Jet Zero.

Jet Zero talks a lot of what developments "could" occur in future: However with the critical need for aviation to respond to the climate emergency NOW and achieve Net Zero by 2050 and preferably by 2040, we need scenarios and developments that "can" and "will" occur and with approximate and reasonable timescales. NONE of this is given, just "pipe dreams" on what "might" occur. Jet Zero itself says: "There is significant uncertainty surrounding the abatement potential, uptake and costs of the measures described in this document and therefore these scenarios should be seen as illustrative pathways rather than forecasts." In reality, there is no realistic scenario or forecast in which technological and fuel developments can, on their own, make flying net zero by 2050.

The high level of uncertainty attached to all of Jet Zero's technical solutions (which is accepted in Jet Zero itself) means that there needs to be an immediate introduction of demand management measures (including taxes) to manage demand downwards in the next 10 years is vital to limit the amount of emissions that will need to be removed in future.

Offsetting should not be used to count towards reaching net zero. As advised by the CCC in the 6th Carbon Budget. Offsets are at best an addition, not an alternative, to controlling emissions in the next 10 years.

In terms of emissions trading, there is also the issue that this will be for carbon emitted today and for example trees planted shortly, but it will take a long time (maybe 20 years?) for those trees to grow and photosynthesise significant amounts of carbon. Many trees will not make it, strangled by others, drought etc. So there is a substantial lag between carbon emitted today and CO2 compensation not effective for some time, maybe 20 years.

Aviation has to accept responsibility reduce its emissions and contribute in line with other sectors to achieving Net Zero by 2050.

The urgent nature of the climate emergency and the need to radically reduce emissions in the next 10 years means that there should be ANNUAL reviews of the aviation industry's emissions and the extent to which they are (or are not) reducing. Government strategy should rapidly adapt if emissions are not reducing at all or not reducing fast enough.

REGIONAL AND GLOBAL CONNECTIVITY

In December 2020 the Government's own Climate Change Committee (CCC) advised that to reach Net Zero use of carbon by 2050 and so save the planet for our children, grandchildren and successors, then expansion of aviation needs to be curtailed. Plans are being promoted by airports across the UK to expand capacity by 65% but the CCC says that this must be limited to 25% growth overall up to 2050, and without building any new runways. A Heathrow 3rd runway would add 260,000 flights per year, or an additional 700 per day, over their current cap of 480,000 per year or more than 50% growth at Heathrow alone. To stay within CCC climate and emissions limits, this would require constraint or even closing one or more regional airports, so working against the Government's "levelling up" policy for the regions, i.e. promoting growth of business and employment in the regions and not always in the southeast.

But the CCC recommendations are being ignored, which will lead to an increasingly difficult problem for our children, grandchildren and successors which may well end in disaster for the planet and for them.

As the Climate Change Committee has advised, demand management measures (including taxes), including an immediate halt on all airport expansions, are essential to control aviation emissions in the next 10 years.

As per the following BBC article, France has commenced moves to ban all internal flights of less than 2 1/2 hours, when an alternative rail journey exists.

<https://www.bbc.co.uk/news/world-europe-56716708>

Another UK measure should be to make it illegal to fly internally for journeys less than 600 miles, with exceptions for remote communities and emergency flights. This would severely limit domestic flights to and from Heathrow and the wider world.

The travelling public is rejecting journeys via hub airports with 2 or more stops. Convenience, time, efficiency, reduced noise and emissions, and greater connectivity are considered more important.

For some time the world has been and is now more rapidly turning away from aviation via hub airports, to point-to-point, made possible by the development of new long range aircraft types.

According to McKinsey and Co, "other factors favouring point-to-point post pandemic include environmental concerns (passengers will perceive they are causing fewer carbon emissions by flying aboard just one, fuel efficient aircraft).

Long-range twin-engined aircraft, point-to-point are more fuel (and emissions) efficient on a personal basis than landing and taking off again two or three times via hubs. Taking off and climbing with 80 to 250 tons of aircraft, fuel, baggage and passengers to a 35,000ft cruising altitude is particularly fuel and environmentally costly.

Other city-pair routes proposed include from the US direct to Rome, Madrid and other further European cities without needing to fly via a hub, and Birmingham, Manchester, Glasgow and Edinburgh direct to mid USA or Middle Eastern and further destinations for example India and China.

So to respond to the question of Regional and Global Connectivity, this must be achieved by direct flights from the regions direct to global destinations, rather than via a Heathrow hub.

GOVERNMENT ACTION

There are already big increases in public understanding and calls for Climate Action. This will increase in future, such that current Government actions and plans will prove to be ever more insufficient.

With COP26 in November and the Government's claims of "Climate Leadership", Government needs to take the advice of Greta Thunberg and their own Climate Change Committee, and limit aviation expansion across the UK to 25% by 2050, that is about 1% per annum from pre-pandemic levels."

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