



Luton Friends of the Earth

Development Consent Order by Luton Council to expand from 18 to 32 million passengers during an accelerating Climate and Nature Emergency

Climate (attended hearing on 27 Sep 2023)

Update to FoE submission - deadline 4 1 Nov 2023

emailed to LutonAirport@planninginspectorate.gov.uk Reg no 20040317

This supplementary paper contains new information since our submission on 22 Aug.

- 1) **Climate emergency: the most serious threat to humanity**
 - 2) **Aviation, targets, new oil: Climate Committee, scientists, politicians**
 - 3) **Climate emergency: urgent local action required** (hearing 27 Sep 2023)
 - 4) **Pollution and health** (hearing 28 Sep 2023)
 - 5) **Jobs – local and national economy** (Luton Rising claim answered)
 - 6) **Conclusion**
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1) CLIMATE EMERGENCY: the most serious threat to humanity

Friends of the Earth fundamentally oppose the key principle & impacts of expansion.

Your video says “the purpose of the NSIP process is to weigh local impacts against national need for such infrastructure, in a fair, open and impartial manner.”

It is our strong view, informed by science, that approving this application would have devastating adverse local impacts, and that airport expansion is against national (and international) need.

The cost of accelerating Climate impacts cannot be cancelled. Putting off action is far, far worse, as costs of the adverse impacts would not only later be unaffordable, but irreversible, and would affect the whole world.

As Inspectors for this Inquiry, you have a huge burden on your shoulders, as politicians, both national (*see 2*) and local, have proved dangerously out of touch.

Devastating climate impacts of expanding aviation (the fastest growing source of climate emissions) both locally (*see 4*) and internationally have been demonstrated.

Our thoughts go out to the millions of people who have had lives ruined by climate-related catastrophes across southern Europe and many other places worldwide.

On Sep 26, a record low was reported for Arctic Ice. 1 million sq kilometres less – 5% down on the previous low. **An amount 7 times the size of the UK is ‘missing’.**

The amount of fresh water flowing into the Atlantic is slowing the gulf stream, which could make British winters colder this decade.

King Charles' speech in France in September emphasised the world's interlinked concerns of protecting nature and sharply cutting climate emissions, which dropped slightly during Covid lockdown but have returned to damaging levels since.

CO2 is at its highest in 2 million years, when humans first evolved. The Hockey Stick graph shows the dramatic change humans have caused in a few brief years – explained by Dr Hannah Fry [1]

The EU Climate Service announced on 5 Oct that Sep 2023 was by far the hottest Sep on record -nearly 1 degree more, averaged across the world, after the hottest summer ever in the northern hemisphere – the biggest jump in any year since 1940. 2023 is on track to be the warmest year on record [2]

*The UN, and IPCC scientists from 195 countries have, since a key report in 2018, warned that the Climate Emergency is the biggest threat to humanity, and we must do all we can **to change behaviour radically as fast as possible**. 7 years, we're told, is all the time we have **to act comprehensively to prevent irreversible climate damage**. The UN says "Global action taken in the next 7 years will resonate for centuries. The world has the tools to rapidly tackle the climate timebomb, but must do everything, everywhere, all at once. All countries should bring forward Net Zero plans by a decade." Antonio Guterres urges us **to fly and drive less**.*

From a UN / Guardian youtube video:

"If we don't act now, conditions for living on Earth will get worse – fires, floods, storms, droughts, hunger, conflict, poverty, grief, anxiety. Global harvests will fail, sending food prices skyrocketing and even more people into food poverty. It could become so catastrophically hot that sea level rise would displace millions. Increased risk of disease, war and mass migration would create global chaos. But it doesn't have to be this way. Averting the worst is still possible if we act now. We need to cut carbon emissions in half by 2030, then half again by 2040, then again by 2050, and push our corporate and political leaders to act. Support organisations that lobby to eradicate fossil fuel emissions and revolutionise agriculture. Call for climate justice – a green future that benefits everyone. That way, by 2050 we could live on a world with clean air, powered by wind and sun, with more space for wildlife, a world regenerated by all of us."

*The Govt Climate Change Committee has a legal duty to monitor how the country is tackling the Climate Emergency. On IPCC scientific advice, and amid many serious warnings from the UN, it requires **swift and substantial carbon reductions**, of 45% on 1990 levels by 2030, and it says there should be **no net expansion in UK aviation**.*

Based on this array of evidence and advice, the DCO application should be rejected.

2) AVIATION, TARGETS, NEW OIL: Climate Committee, scientists, politicians

FoE suggests that the Inspectors, in interpreting planning law, consider the scientific basis behind many of the policies. **The Climate Committee advising the government is informed by thousands of scientists worldwide** who inform the IPCC (Intergovernmental Panel on Climate Change).

Giant oil and gas companies have received billions in profit since the war in Ukraine, but instead of helping the poor, are being subsidised by all of us. Responding to new North Sea oil and gas contracts, announced on 20 Sep, Lord Deben, Conservative ex-Chair of the Climate Change Committee, said ***“The government is already in court because it is not on track to meet its legal climate commitments. This announcement is a further statement of failure. The Committee gave targets, showing clearly what the government should do, in a way that was affordable, with the poorest properly protected. This was supported by the government’s own report by Chris Skidmore.”*** Lord Deben also criticised plans for new oil. New CCC Chair Chris Clark endorsed Lord Deben’s concerns. Yet since then the Rosebank oilfield has been approved.

A key CCC recommendation on aviation is: ***“there should be no net airport expansion unless the carbon-intensity of aviation is outperforming the Government’s emissions reduction pathway.”*** As we slip further behind IPCC targets, the chances of this are Zero. Yet every flight burns fossil fuels.

Jim Watson, professor of energy policy and director of UCL’s Institute for Sustainable Resources: ***“Rishi Sunak’s net zero speech is full of contradictions, and will make it harder to meet our medium- and long-term climate change targets. It also risks increasing the costs by delaying the shift away from fossil fuels and reducing the economic benefits to the UK.”***

Prof Lord Stern of Brentford, chair of Grantham Research Institute on Climate Change and the Environment at the London School of Economics and Political Science: ***“This will undermine investment and jeopardise growth ... Change will involve all firms and households, and government policy should be focused on managing that change and not postponing what is essential.”***

Mark Maslin, Climatology professor, University College London: ***“This goes against what the majority of the British people want, given their concern about climate change, and against sensible economics which show that renewable energy is much cheaper and more secure than fossil fuel energy.”***

Other countries have been looking to Britain to lead on climate. Tory Zak Goldsmith accused Sunak of a moment of shame, and dismantling the UK’s credibility on climate.

Sadik Khan, London Labour Mayor: ***“Given the urgency of climate change, this makes no sense – we need to stimulate green jobs (see 5), provide consistency for businesses, and reduce air pollution.”*** (see 4)

Saleemul Huq, director of the International Centre for Climate Change and Development, says we have to make our leaders do more.

3) CLIMATE EMERGENCY: urgent local action required

We are on course to miss our only chance to avoid dangerous global temperatures if we continue to delay carbon emission cuts. To reach Net Zero, we have to remove a lot **more** carbon than we're putting in. Every flight from Luton adds to our problems. This will not change in the next decade, so this forces us to work twice as hard for cuts in all other sectors, which can also be hard to achieve. The Climate Emergency overrides everything else, so we cannot afford to make a mistake.

“Mitigation” (Definition: preventing or reducing greenhouse gas emissions)

Local plan policy LLP6: iv. *‘Proposals for development will . . . fully assess the impacts of any increase in Air Transport Movements on surrounding occupiers and/or local environment (in terms of noise, disturbance, air quality and climate change impacts), and identify appropriate forms of mitigation in the event significant adverse effects are identified.’*

Aviation is highly destructive, and it is not possible to pay, as LR claims, for reparation.

FoE said on 27 Sep that ‘Mitigation’ in the form of carbon credits has been discredited. [3]

Much proposed technology is unproven. Positive, efficient actions using the sun's energy, such as building wind and solar near every town, and introducing electric vehicles as older vehicles 'die' should be done anyway. But materials and transport should be non-polluting, closed loop systems, and non-exploitative. Planting trees is vital, but schemes have been abused, and monoculture is bad for biodiversity.

'Mitigation' has often been an excuse for continuing to pump out climate emissions.

United Airlines says: *“unlike other airlines, we're looking beyond using carbon offsets.*

We believe carbon offsets simply don't go far enough to address the emissions caused by our operations. To achieve carbon neutrality by 2050, we aim to tackle emissions at their source.”

Luton already proposes to ignore the main source, emissions in the sky.

[A 2014 UN report said there must be a "massive shift" to renewable energy. The UK has blocked onshore wind, and disincentivised solar, for 8 years, which could have provided renewable energy where it is needed. Now the UK government is battling opposition to thousands of miles of pylons or pipelines to convey electricity from offshore wind.]

Yet Luton Rising's case relies heavily on 'carbon offsetting. On 27 Sep, LR claimed that “the vast majority (89%) of flights will be captured by offsets”. The New Economics Foundation representative asked “Is this emissions or flights?” Answer: “Emissions.”

Luton BC, LR, the operators and the airlines all have a responsibility to reduce Climate emissions. Asked at consultations, Arup and other consultants admitted that it was not possible to mitigate against the levels of climate and pollution damage proposed.

Records of extreme weather have been broken frequently in recent 2 years. How could Luton mitigate effects of the climate crisis such as killer heat, torrential rain, flooding, wildfires, and

pollution from planes at all the destinations in 30 countries that it flies to? How can cheap flights pay for the damage done? Climate change impacts do not stick to such destinations – floods or wildfires occur in many places. The only way is to cut emissions at source – by managing demand and flying less.

‘**Mitigation**’ such as compensation for noise and disturbance are totally inadequate. Double glazing cannot make up for summer disturbance or lack of sleep, which can severely affect health, say multiple witnesses.

No ‘mitigation’ is proposed for airport traffic using narrow roads from North Herts.

Correcting the imbalance

LR in its response states: *“The Examining Authority, having heard and considered all sides of the debate, will conclude whether or not the expected benefits of the proposals outweigh expected disbenefits, and recommend to the Secretary of State whether or not the application should be approved.”* [see *Balance of Harm* below]

The “debate” has been a long way from impartial, highlighted by the consultations. It has consisted of LR and Luton Council finding every way possible to counter objections and to promote expansion. The Council leader emailed all council staff, copying a letter from the CEO of its own airport company Luton Rising, urging them to talk to people and promote expansion.

The consultation questionnaires gave no ‘*No expansion*’ option. Many leading questions were designed to get answers the council wanted, so were **not impartial**, as required by the Local Government Association. It therefore **did not fulfil the statutory requirement as part of its application for a Development Consent Order**. It is within the Inspectors’ remit to correct this imbalance.

On 27 Sep, **inspectors said** that a correct balance should be found between economy, social and environmental benefits / costs. Many scientific studies show that a healthy society needs a healthy balance between economy, environment, and health & social wellbeing, to ensure a sustainable future for all.

With the urgent need to cut climate emissions, Luton’s record pollution levels in 2019 affecting health, and potential destruction of Wigmore Park (a vital noise and pollution barrier between the airport and residents as well as an important recreation area, irreplaceable County Wildlife Site and Area of Local Landscape Value), the ‘balance’ is currently skewed far too much toward economy, at the expense of health and environmental damage. This damage, often skimmed over and underrated, may be hard to ‘value’ but it is serious, and understood by many residents, such as local Wildlife Trust and Woodland Trust members, the over 3000 facebook followers of Friends of Wigmore Park, and those who read the well-informed website of Stop Luton Airport Expansion.

Balance of Harm

Further evidence of imbalance, due to the council’s obsession with the airport at the expense of a lack of democracy, is in a document submitted by FoE in April 2019, attached on 22 Aug as part of

our grounds for objection: **Material Considerations**. This lists National and Local Plan policies that have been ignored, and a **Balance of Harm**, demonstrating that the undesirable factors of expansion massively outweigh any desirable factors. **FoE referred to this when speaking on 27 Sep.**

Government loan was conditional on reducing reliance on the airport

In 2022 government loaned Luton Council £80m due to Covid income losses, **on condition that it reduce reliance on the airport**. Luton Council ignored this 'advice', borrowed over £500m and loaned it to its own company to promote airport expansion.

Over £60m has been spent on the DCO, consultants and marketing.

Luton Airport emissions

Worldwide, CO₂ emissions from **commercial flights** have risen 70% faster than the UN predicted. Carbon dioxide emitted by **airlines** increased by 32% from 2013 to 2018, according to a 2019 study by the International Council on Clean Transportation.

Luton Airport emits an estimated 2.2 million tonnes of CO₂ annually [Source: Earthbound] plus other greenhouse gases. **This would increase with expansion.**

It is not only CO₂ that fuels the climate crisis – **jets** emit hydrocarbon pollutants; jet trails turn into clouds, and water vapour in Earth's thin, vulnerable upper atmosphere cause 2-4 times the climate damage from CO₂. The Climate Committee advising government states:

"Non - CO₂ effects contribute around two-thirds of the total from aviation."

The applicant should be taking these serious effects into account, but is not.

Aviation caused **7%** of UK emissions in 2018, and **8%** in 2019 (international and domestic flights). **[4]**

A major study's authors say "To maintain liveable conditions on Earth and enable stable societies, we must do everything possible to prevent crossing tipping points."

We are already close to some, such as the death of tropical coral reefs, and loss of glaciers. **[5]**

The DCO application runs counter to all these warnings. The time for "Improving connectivity and growth in air travel" has passed. We now have the impacts of Brexit, Covid, the Russian war in Ukraine, food banks, and acute poverty due to the 'eat or heat' energy crisis. Emissions must come down dramatically to prevent a succession of tipping points and runaway climate change, and we need to **drive less**, not more.

Since Apr 2021 **all planning and carbon budgets must include impacts from planes in the sky**, not just airport ground activities, and **impacts of all transport to airports**.

The 2019 Antithesis report commissioned by Luton BC said Luton should **aim to cut emissions by 80% by 2030**. (The Tyndall Centre said this figure should be 90%.)

This process has scarcely begun, and **airport expansion would make it impossible**.

Antithesis also said that **99% of climate damage caused by the airport is not by its ground activities, but by planes in the sky (51%) and vehicles going to it (48%)**, mostly from outside the borough. LR

refers to this 99% as Scope 3. This was confirmed by another of its reports, by Ricardo, who said that Luton must **begin its Environmental Statement / Impact assessment again** - it was just a 'wish list', written by another consultant (Wood). **LR largely ignores this in its DCO application, focusing on airport ground activities.** LR has limited ability to restrict emissions from passengers arriving by car.

With expansion, travel and car spaces would increase by around 50%. Instead of multi-storey car parks, using land efficiently, parking would sprawl across Wigmore Park and fields beyond. Parking is costly, driving many to park in local roads, causing problems for residents.

People will be able to buy new diesel and petrol cars until 2035. DART would not cut road traffic. Luton Rising claims that 18.6% of passengers use it, but do not say what percentage used the airport bus in 2019. If slight modal shift were achieved (adding to crowded trains), any benefit would be **overwhelmed by more passengers flying, causing worse problems than 2019.** DART was to be in place ready to be extended to Terminal 2, before the public knew of the plan, against principles of local democracy.

A new junction would bring airport traffic from outside the area through Wigmore Park into Eaton Green Road and residential areas, **against the Local Plan**, creating a major new route to the airport, causing rat-runs past 3 schools, and about 10 new traffic lights, increasing pollution and danger.

The *National Planning Policy Framework* requires climate emissions and noise to be **reduced**, not increased. **Luton has failed to comply with Environmental Impact Assessment Regulations** because it has not assessed the greenhouse gas impacts of burning fossil fuels on the UK's Net Zero target; and **failed to follow the NPPF** by not assessing greenhouse gas emissions from flights and traffic.

Luton has done nothing to persuade the operator to cut 'ghost flights' when planes travel either empty or at far from full capacity. In a climate emergency, we consider this waste of fuel grossly irresponsible, and a poor omen for future emissions cuts.

60% of people, before the PM's climate U-turn on 20 Sep, believed that the government should be doing more to tackle climate change. Luton Airport's impacts are not only local, but worldwide, yet Luton BC / LR act as if they were exempt.

Luton's Airport Masterplan was out of date, making approval on 1 Dec 2021 of expansion from 18 to 19m passengers **invalid**. One of the 3 inspectors at the autumn 2021 Inquiry had a specific remit on Climate Change. Yet the Inquiry decision was held up unduly by the government – an insult to the Planning Inspectorate process. It is hard not to conclude that the PM, who has said he does not want to restrict flying, and has approved the Rosebank oilfield, is untroubled by the vast array of climate threats, and has allowed the expansion from 18 to 19m. We are not told of the Inspectors' conclusion.

In the face of all this, Luton Rising (with Luton Councillors as directors), replied to FoE's evidence with 22 pages of repetitive, vague and insubstantial comments.

The 'Green Controlled Growth Framework' (*APP217 section 1.7*) states that in 2032, at the end of the concession, GCG obligations would revert to Luton BC, which is unqualified to run an airport.

We are all **woefully unprepared to confront humanity's biggest threat**, and are at a loss to understand why our council seems not to be listening.

In answer to the inspectors' concerns above about balance:

Luton has **failed to balance economic benefits and environmental and social costs**.

Luton cannot mitigate against Scope 3 emissions, but is unwilling to instigate demand management, as recommended by the Climate Change Committee to meet the government's international climate commitments:

"CO₂ reductions achieved through efficiency improvements and use of sustainable fuels are less effective in also reducing non-CO₂ effects, compared to reductions in demand."

"Demand management is key to reducing non-CO₂ effects from aviation and an important option for reducing CO₂ emissions, given uncertainty in technological developments."

"Current programmes will not deliver Net Zero."

'Jet Zero strategy One Year On' states: *"Transport remains the largest emitting sector in the UK, and by 2035, aviation is expected to be one of the largest emitting transport modes."*

Also: *"It is the responsibility of Government to address carbon emissions from aircraft at national level."* Luton is 5th largest UK airport, so this is a national issue. Given the applicant's inability or unwillingness to deliver Net Zero despite its target for the town of Net Zero by 2040, we would expect the inspectors to make a recommendation to government **to refuse the application**.

Other councils have no airport to rely on. The only conclusion, we suggest, as to why Luton puts income above vital environmental & social concerns is greed, suppressing greener and more imaginative ways forward. (*see 5: Jobs and the Economy*)

On 18 Oct 2023, Luton received a well below average report from Climate Emergency UK on the town's climate efforts towards Net Zero (a score of 27%) when compared with towns across the UK. Luton scores well on biodiversity, but if airport expansion were approved, would fell 2 hectares of trees in Wigmore Park and thousands more along Airport Way if widened, exposing residents there to noise and pollution. Councils receive a lower score if they support further fossil fuel infrastructure including airports. Luton is particularly poor on transport and pollution (exceeding safe WHO guidelines) , which does not induce confidence in a plan to increase plane journeys, as the vast majority of passengers, and any extra airport staff, would arrive by road. This would add considerably to climate emissions, but also to pollution, already bad (*see 4*). **[10]**

Aviation and road transport are the fastest growing source of climate emissions.

Not to fly is the biggest single thing individuals and businesses can do to cut their carbon footprint. They need support and advice from councils and government. UK citizens want us to lead on climate. But unlike the UK, European countries have banned internal flights. Schipol is limiting flights because of pollution, noise and climate. France and Austria only permit internal flights if you cannot do the journey by train in 3 hours. The UK is the most expensive country by far for rail travel.

4) POLLUTION and HEALTH *(see 4th ground for FoE's objection, 22 Aug)*

Air pollution is a serious, direct cause of poor health leading to early death. Air pollution in Luton has returned to dangerous and often illegal pre-Covid levels. **To reduce further harm to health, Luton airport activities must be urgently reduced. Any expansion is incompatible with this.**

Luton FoE objected in Jan 2014 when Luton Council voted to double passenger numbers from 9 to 18 million. We visited every GP surgery. Unlike the council, we have no funding, and did this voluntarily because we believe it was right to do so. People we told about our plan said none would sign our petition against expansion. A quarter of Luton's GPs (about 10 out of 40) signed, concerned that it would affect patients' health. But the council ignored this and voted for the increase.

By 2019 the 18m had been achieved, in 5 years instead of 15, with no mitigation, against promises, the Local Plan and the National Planning Framework. This made Luton most polluted town in UK, according to FOUR studies (*FoE submission 22 Aug*).

These warned that it had the highest deaths from air pollution in the East of England, and dangerous levels of toxic air were putting elderly people at risk. Luton Council's report is online stating that there are 86 Luton deaths a year caused by pollution.

Even before 2013, when passengers were at 9 million a year, Luton had unacceptably high levels of poor respiratory health. For some years, every school has had inhalers for the worrying number of pupils suffering asthma. LR claims to be 'socially responsible', but this is incompatible with airport growth that brings ill health.

Polluted air stunts lung growth, leading to lifelong problems, shortening lives, leading to heart attacks and strokes. People who are ill are most likely to fall into poverty. Many low-waged people, including airport workers stressed by nightwork, breathing fumes from planes, would suffer from multiple effects of an expanded airport.

Luton Council has a target it cannot possibly meet of Zero Poverty by 2040.

The airport is the region's biggest employer, but also the town's major health hazard. Many in South Luton and Slip End have reported greasy dust coating surfaces in their homes and gardens due to planes taking off and landing above them. Around 75% of workers and passengers arrive by road. Every flight, and most vehicles travelling to the airport, add both to the global climate crisis and to people's worsening health, partly from sleep deprivation. Heathrow has a voluntary night ban – it must be possible for Luton to be a good neighbour. Yet LR will not extend flight-free hours to 11pm-6am to allow for a good night's sleep.

Luton is an overdeveloped town. Too many people drive, made far worse by those coming from outside to and from the airport. Gatwick and Stansted are in open countryside where flights and surface access cannot do the same damage, and on-street parking cannot cause a nuisance to residents.

An airport perched on a hill above a densely populated town, with the valley below acting as a reservoir for polluted air, is the wrong place for an airport. No one is calling for it to be closed, but evidence suggests demand management is essential. Other councils do not benefit financially from airports. We should not be greedy, and should be managing a decline, not an increase.

The airport is the largest polluter in the region, with a proportionate duty of care. There are several sites where NO₂ and PM_{2.5} are above or close to legal maximum. Yet legal requirements on how emission targets could be met (Environment Act and Defra Environmental Improvement Plan) do not appear in LR Env Statement Vol 5.01 7: Air Quality, or 13: Health & Community. The Defra legal target is to reduce population exposure to PM_{2.5} by 35% in 2040, + interim reduction by 22% by Jan 2028.

Five damaging pollutants must be **cut by 2030** relative to 2005 levels, including:
“Reduce emissions of nitrogen oxides by 73% [compliance with 40µg/m³ limit] and reduce emissions of sulphur dioxide by 88%.” This cannot be done by offsetting or ‘cleaner’ planes.

The Climate Change Act requires emissions **cut by at least 78% by 2035**, which includes aviation’s impact on CO₂, NO_x, NO₂, PM_{2.5}.

LR Environmental Statement on Health & Community: *“The guidance highlights how vulnerable groups are disproportionately affected by adverse impacts of transport”*.

Given the many schools and care homes, it would be advisable not to make it worse.

Luton Council followed government in declaring a Climate Emergency, and set an ambitious target of Net Zero by 2040, 10 years earlier, and **“clean air for all by 2030”**. Strangely, this target **excludes** Luton’s biggest emitter, the airport. **Why? And why is the airport complex and Wigmore not an Air Quality Management Area?**

Friends of the Earth published a report about high pollution levels in Luton (and elsewhere) on 11 Oct 2023. **[9]**

On facebook, then at Luton’s Climate Advisory Board on 17 Oct 2023, Luton’s environment officer claimed that “FoE’s figures are wrong - Luton BC has several monitoring points in the airport and roads around it. and only one or two are over the limit.”

David Oakley-Hill for FoE responded:

“I have been in touch with Mike Childs, Head of Science, Policy & Research at FoE. He confirms that these are government figures. DEFRA publishes air pollution monitoring in 1km squares. It published 2022 data in Sep 2023.

“FoE used this data to calculate the average across a neighbourhood. They matched figures to World Health Organisation levels. These are more stringent than UK air quality standards, which are quite weak.

“When you have a poor local health record, your town is in a valley that traps pollution, with planes taking off and landing above it, and too many people drive rather than walking, cycling, taking a bus or car sharing, why would you choose a lower pollution standard than much of Europe?”

“FOUR separate reports found that Luton had close to the worst air pollution in the UK in 2019, and we submitted those to the Airport expansion inquiry.

“DEFRA has a monitoring point near Junction 11, where E - W traffic is heavy and is a main route for workers and passengers travelling to the airport. Before Covid, morning peak hours showed NO₂ often at 3 or 4 times the legal maximum – highly dangerous for anyone in jammed or slow-moving traffic.

“About 5 years ago, Luton FoE took NO₂ readings at 10 points on residential roads near the airport, and got results from the lab used by FoE nationally. 2 were over legal levels and 2 or 3 were not far below. This is NOT OK.”

I also suggested that we should not be confrontational, but work together to improve Luton’s air quality rather than just monitoring how bad it is.

5) JOBS – holding back a greener, more diverse local economy

Morning airport traffic queues back up on the slip-road and on to the M1 at junction 10, causing congestion around Junction 11, near 4 schools. This affects the health of local people and those travelling through, work attendance and personal time.

The Local Government Association said that if Luton follows good practice elsewhere, it could have 1600 green (carbon neutral or positive) jobs by 2030. These jobs, across sectors, could be better paid, more lasting and secure than at the airport. We have seen no signs of new partnerships to achieve this, due to Luton’s obsession with its airport, against the advice of regional planning inspectors (22 Aug FoE submission).

No airport jobs are green, and Luton Rising’s website, authorised in private by councillors, contains claims (greenwash) about ‘green controlled growth’ only possible with unproven technology in an alternative universe.

Jobs and economic benefits have been consistently overstated. Jobs are mainly low-paid, seasonal, zero-hours contracts requiring unsocial hours. When giving itself permission in 2014 to expand from 9 to 18m passengers – reached by 2019 instead of 2028 as promised – LBC said that for every million more passengers there would be 1000 more jobs. When they reached 18m passengers, many jobs had come and gone, but there had been few extra jobs overall despite doubling passenger levels. The promise of 10,000 new jobs is highly speculative, if not laughable. Many passengers complained that the airport was not pleasant to use, as it had been when smaller.

Money spent on the airport is money not spent (except for a few community groups) for the benefit of all local residents – the main role of a local authority.

What could Luton be doing? (see 'The Good Council's Charter', FoE 22 Aug)

A presentation to Luton's Climate Advisory Board on 14 July 2022 by Aether said that to stay within the recommended carbon budget, the town would, from 2020 onwards, need to achieve average reduction of CO2 from energy (including residential, public and commercial buildings, industrial processes and transport – this includes the many airport buildings and journeys generated) of about 13% per year. How's that going?

Luton's Net Zero Strategy, hardly begun, should lead with street-by-street insulation, initiating business and community partnerships to create local green jobs, grow local food, green supply chains, wind & solar farms and panels, and promote good practice.

By now the council should have a **Climate Helpdesk**, encouraging behaviour change to cut carbon, travel less, car share, buy local, buy less (especially from the far side of the world), eat less meat, reduce waste and plastics. Perhaps the council has **not** done this as, due to huge airport emissions, they think they would be accused of hypocrisy.

FoE and other voluntary groups help with the Parks Department's tree planting to increase tree cover, aiming to give a cooling effect to the town and provide habitat. But this and other good work toward Net Zero would be a drop in the ocean, **wiped out by the impact and scale of the council's proposed airport expansion**.

A local Climate Assembly is needed, as elsewhere, to involve local people in decisions.

The Climate Crisis will get worse. Why spend £60m on a DCO instead of supporting struggling residents by insulating homes and creating green jobs for the future?

JOBS – airport growth hinders UK national economy

There is a huge disparity between what visitors to UK spend, and what UK residents spend abroad – this costs the UK economy billions every year (FoE evidence 22 Aug).

Example given on 27 Sep: Overseas residents spent £3.0 billion in the UK in Aug 2022.

UK residents (who fly abroad more than any other nation) spent £8.1 billion overseas in Aug 2022.

This is a **£5 billion loss in just one month**. [Note the difference between a million and a billion: a million seconds is 12 days. A billion seconds is 31 years.]

The comment from LR: "Competition is good for the economy." Whose?

A report by NEF (Jul 2023) finds that air travel does not increase productivity or growth, and explains why. **The annual "travel deficit" is £32 billion. [6]**

The government's Jet Zero Strategy's "focus is on addressing the impacts of aviation rather than constraining economically beneficial growth."

Therefore, given the financial disaster described above:

1) Address the impacts of aviation by including Scope 3 emissions, which cannot be mitigated against until aircraft emissions are carbon neutral.

2) Any growth that is NOT economically beneficial SHOULD therefore be constrained.

On both counts, the application should be refused.

6) CONCLUSION

In every decision, Luton should be asking:

1) Are we looking after nature? 2) Are we adding to the climate crisis?

3) Are we helping or hurting people's health & wellbeing, locally or elsewhere?

In 2018, Luton was the most polluted town and fastest growing source of climate emissions in UK (FoE 22 Aug). That is totally unsustainable and unacceptable, and cannot be repeated. The national (and international) need is not for airport expansion, but for considerably less flying. *"The only way to avoid aviation emissions is not to fly"* says the Aviation Environment Federation. [7]

Covid was supposed to be a once-in-a-lifetime wake-up call to change our dangerous habits and to respect nature. More people work from home, but must compete with plane noise. Worryingly, flights have climbed rapidly toward pre-Covid levels, and climate effects are accelerating. Permission to expand would bring Luton back to being worst polluted town, and fastest growing source of climate emissions.

Promoting expansion is a strong disincentive for individuals and businesses to change patterns of behaviour and try to cut their carbon footprint. Flying is a symbol, seen in the sky, of burning fossil fuels. But many people think in their own little bubble. We cannot rely on serious, destructive fires across southern Europe acting as a deterrent.

There is an injustice in all this: Half the population never fly, and subsidise those who do, who don't care about the damage they cause. If you fly, your biggest single source of greenhouse gas emissions each year is air travel. Is it right for a council with responsibilities to protect the health and wellbeing of its citizens to promote flying?

It will be decades before planes don't emit carbon & pollutants, and most people have electric vehicles. Anyone promoting an increase in flying is on the wrong side of history. A new report from the New Economics Foundation found that before Covid, the UK had the highest rate of passenger flights of any country in the world including even the US and China. £32 billion pounds are lost to our economy every year. Luton's doubling of passengers in 5 years was a major contributor.

NO action can be allowed that makes climate problems worse. All actions should be climate positive. The University of Bedfordshire took its money out of fossil fuel investments *"because we are committed to safeguarding a liveable climate for all"*.

The obvious conclusion is that demand must be managed to reduce flights from Luton. This includes executive jets. Since Covid, with Zoom and Teams, there is far less need to fly to meetings. Despite the Prime Minister saying there will be no new taxes on flying, we would like to see all councils giving useful advice, with incentives to cut carbon, informing residents that to

stop flying is the biggest single thing people can do to cut their carbon footprint, promoting holidays in UK, and train journeys to Europe, encouraging them to experience other cultures, visiting towns, villages, seas, lakes, mountains and countryside en route. The Climate Committee says fair funding mechanisms should be used to address price imbalances between aviation and rail, but the government has yet to cut train fares to match the rest of Europe.

When your child or grandchild asks what you did in the great warming, will you say *“I helped expand the airport?”* Or will you say *“I helped to keep flying down, inspired residents to come together to tackle the climate threat, and kickstarted training and partnerships for low-carbon, green jobs to protect your future?”*

Friends of the Earth cares deeply about the future of humanity and the millions of other species on Earth that form complex ecosystems, which we have no right to destroy. We represent, voluntarily, one of the most respected NGOs, to emphasise the threats to nature and climate highlighted by King Charles. We believe it is your responsibility to ensure that planning guidance is followed to prevent greed and excess harming progress toward tackling these major dangers for our children.

FoE comments on Biodiversity (29 Sep): *see 22 Aug submission with attachments*

We heard from LR of a plan to ‘upgrade’ 3 roundabouts in Hitchin to accommodate more traffic if the airport were expanded. Approach roads would be widened. Due to their narrowness and situation, this could mean the destruction of hundreds of trees, both mature and newly planted. This was not mentioned, nor that the Three Moorhens proposal would need to remove then replace a well-used footbridge, or anything about the disruption all this would cause, or what N Herts DC might think about these ideas.

In partnership with North Herts FoE, we object strongly to this proposal. **[8]**

We suggest that the overarching priorities for the DCO inquiry are that human activities - in this case aviation and surface transport - are fuelling a runaway climate crisis, and destroying nature’s balance, as well as harming people’s health.

This is FAR MORE important than economics – money is useless on a dying planet.

In any case, the national economy suffers from expanding aviation – see **[6]**

A key UK climate policy conference takes place in Jan 2024, following COP28, to discuss how to implement UK commitments to phase out fossil fuels and transition to a green, carbon neutral economy. It will discuss Lord Deben’s report; a challenge to the UK government’s ‘unlawful’ climate plans; and Client Earth’s report in July 2023 on its request for a judicial review in collaboration with Friends of the Earth and the Good Law Project. Given concerns that the UK is not on track to achieve targets, we suspect that decisions will be made to act more urgently on the climate emergency. We suggest that the conference could help in informing decisions about this DCO.

7) REFERENCES (full articles or relevant passages follow, with weblinks)

Deadline 4 submission

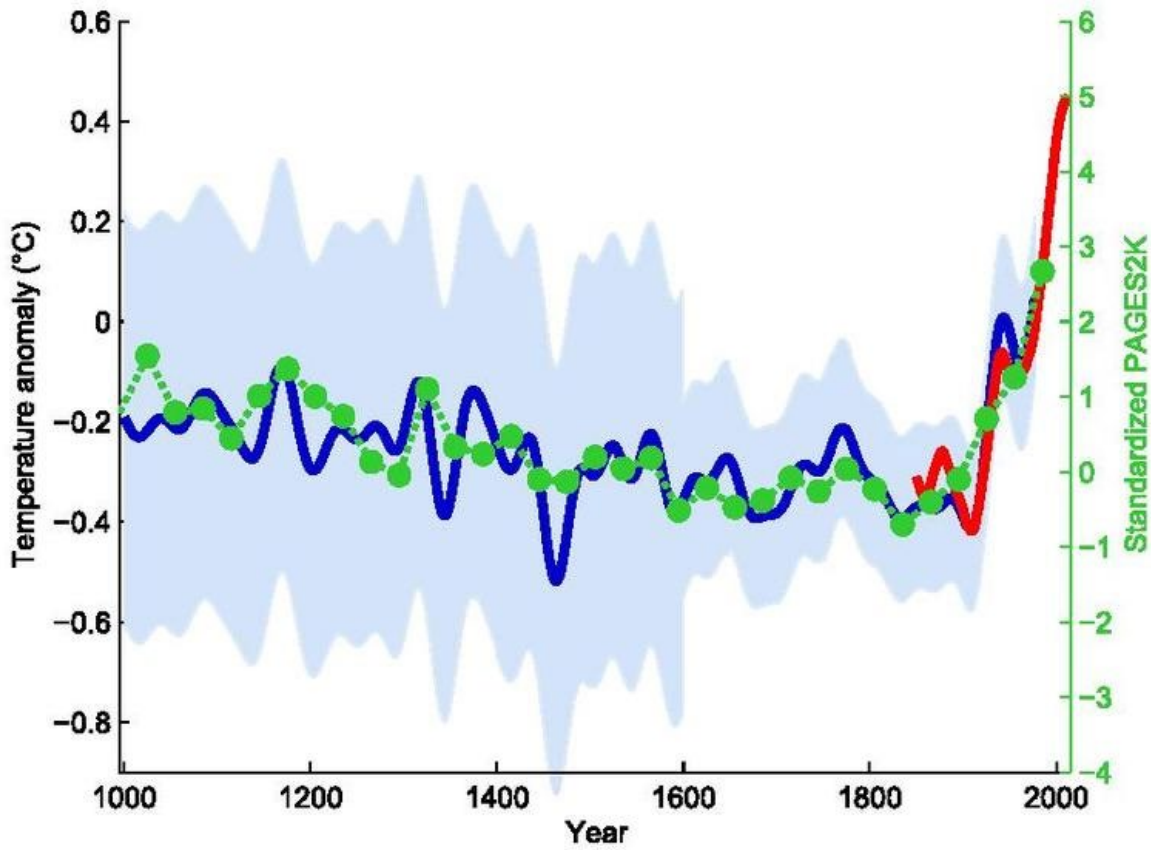
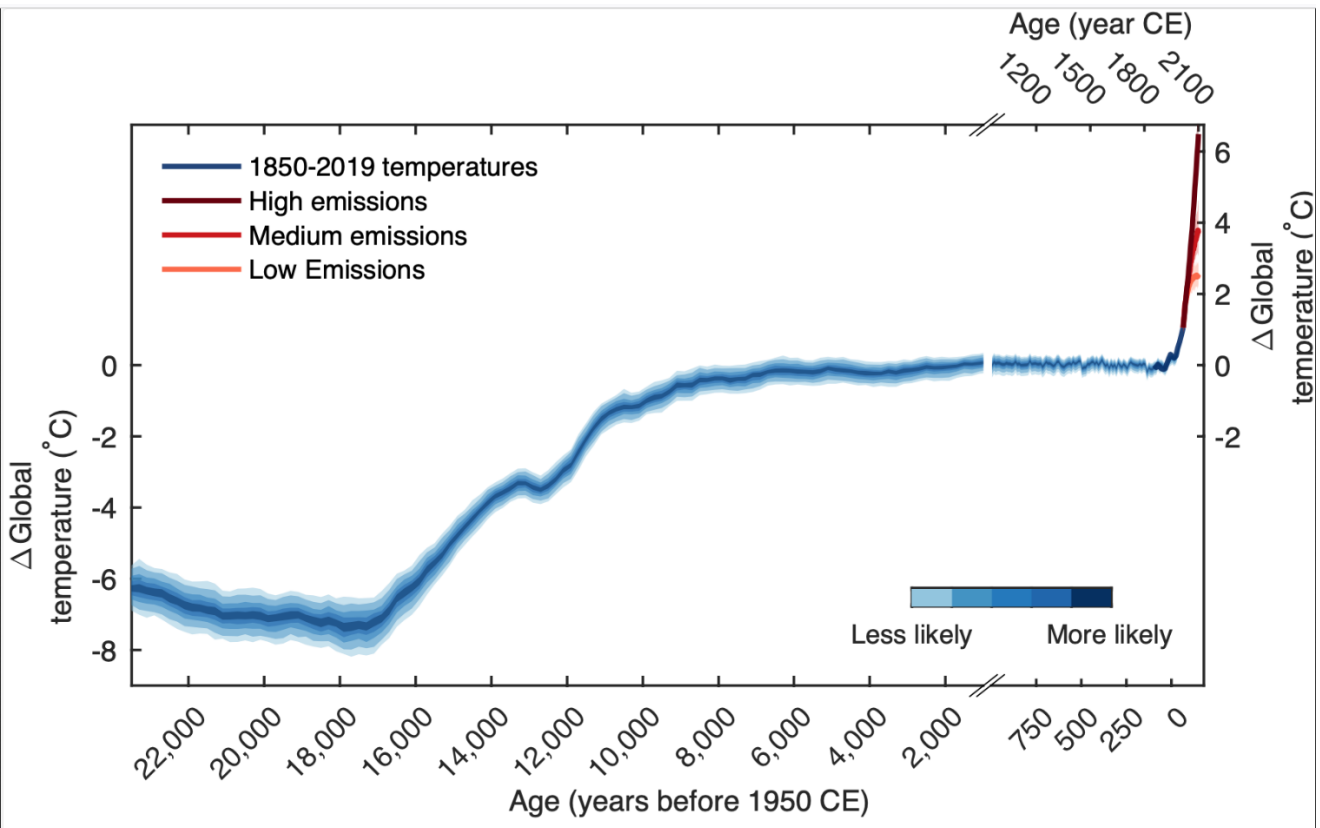
Documents or excerpts referred to in above text reproduced below -

- [1] Radio 4 Hockey stick climate graph
- [2] Radio 4 Hottest September on record
- [3] Carbon offsetting fraud (6 articles including Stay Grounded Factsheet)
- [4] Carbon emissions by aviation
- [5] 5 Climate Tipping Points
- [6] Response to LBC comment 'flying is good for the economy' – evidence to the contrary: NEF report
- [7] "Only way to avoid emissions is not to fly" – AEF
- [8] Further destruction of trees in Hitchin proposed for road widening
- [9] FoE report – Mike Childs & DOH comments to Luton's Climate Advisory Board
- [10] Climate Scorecards – Luton 27% - poor. Demonstrates Luton's lack of ability or commitment to introduce vital climate measures

- [1] BBC Radio 4 The Hockey stick graph of climate history 26 Sep 2023
<https://www.bbc.co.uk/sounds/play/m001qw93>

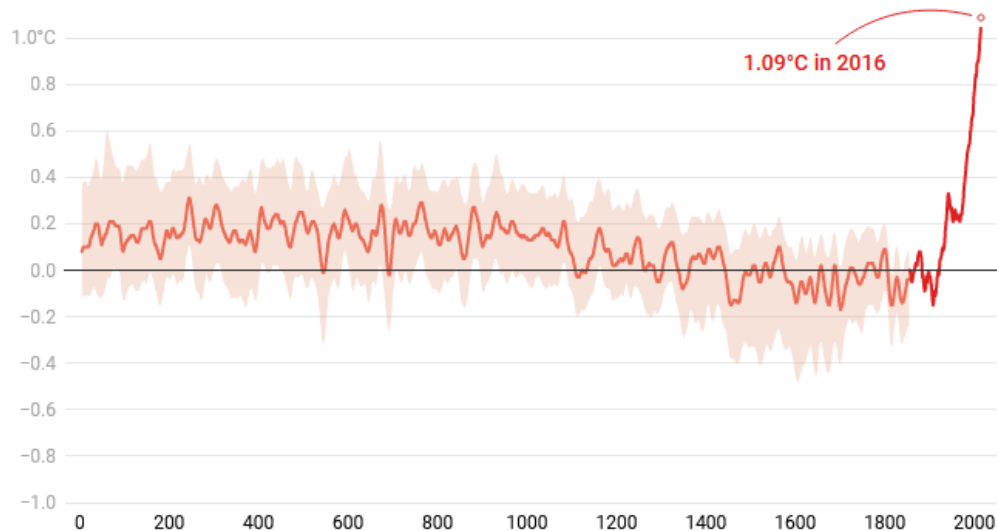
The graph below was first published in 1998 (in *Nature*) after decades of work by scientists who scaled high mountains and dived oceans to collect ice cores and corals, to reveal past temperatures over 1000 years. Ancient trees also provided data.

This graph (used in *An Inconvenient Truth*) – a long straight line, blade curving sharply upwards at the end – showing where the industrial revolution began to affect the climate, is used by the IPCC (Intergovernmental Panel on Climate Change) and holds a stark warning for humans about the man-made threat to future life on Earth.



The latest version of the "hockey stick" chart shows unprecedented warming in recent years.

Change in global surface temperature relative to 1850-1900 average



Numbers are observed from 1850–2016; for prior years, they are reconstructed using proxy records like tree rings, corals, and ice cores.

Chart: Elijah Wolfson for TIME • Source: IPCC, 2021: Summary for Policymakers • [Get the data](#)

TIME

The new report also suggests that the recent warming is not only unprecedented over the past *two* millennia, but possibly, the past *hundred millennia*—let that sink in. As the IPCC report lays bare, we are engaged in a truly unprecedented and fundamentally dangerous experiment with the one planet we know that can support us and all other known life.

[2] Hottest September on record BBC Radio 4 6pm news (5 minutes in)

<https://www.bbc.co.uk/sounds/play/m001r1zl>

Copernicus, the EU Climate Service announced on 5 Oct that Sep 2023 was by far the hottest September on record – 0.93, nearly 1 degree, higher, even though averaged across the whole world, after the hottest summer ever in the northern hemisphere. Meteorologists expect temperatures to vary by tiny fractions between years. This is the largest ‘anomaly’ of *any month of any year* in the dataset going back to 1940. 2023 is on track to be the warmest year on record – further evidence of the effect of human activities on the planet. El Nino, the weather system that goes in cycles in the south Pacific, will have influenced temperatures, but is only just beginning, so next year could be even hotter.

[3] Carbon offsetting discredited Six articles:

3 on ‘Travel Tomorrow’, one on Greenpeace website, one commissioned report (summary); one Factsheet and ‘The illusion of green flying’ summary of report from Stay Grounded website

Major airline CEO denounces carbon offsetting schemes as “fraud” 1 August 2023

https://traveltomorrow.com/major-airline-ceo-denounces-carbon-offsetting-schemes-as-fraud/?fbclid=IwAR05dXUed4TxZOTxuQzZiLa_08uMz1twZCZCToc1XUrMFcm9I9_LcaFA1JO

Scott Kirby, CEO of United Airlines, criticized industry-wide greenwashing practices related to carbon offsetting schemes while speaking at a Politico event titled “Reauthorising the Federal Aviation Administration”. [This article includes a video of Kirby speaking]

Kirby said these schemes are a “fraud” adding that most of the eco-initiatives used by airlines “are either forests that were never going to be cut down or trees that were going to be planted anyway.”

Essentially, carbon offsetting schemes allow individuals and companies to invest in environmental projects worldwide by purchasing “carbon credits”. The idea behind it is to balance out the carbon footprint, which is the total amount of carbon emissions generated by a particular entity.

As part of its “climate commitment”, United Airlines says that “unlike other airlines, we’re looking beyond using carbon offsets”, adding: “We believe carbon offsets simply don’t go far enough to address the emissions caused by our operations. To achieve carbon neutrality by 2050, we’ll aim to tackle emissions at their source.”

The US airline states that the priority areas to tackle GHG emissions are focused on sustainable fuels and “direct air capture” technology, which, it says, can do the work of 40 million trees.

Previously, international non-governmental organisations like Friends of the Earth, Greenpeace, and World Wildlife Fund-UK have criticised carbon offset projects, arguing that these schemes encourage a culture of climate pollution and are often misleading.

A 2021 paper published by the University of Queensland and University of Surrey studied 37 airlines’ communications on carbon offsets and concluded that more than 44% of airlines’ green claims mislead consumers – with some airlines, such as Air Canada and Swiss Airlines, making as many as 100% of their claims misleading.

In July 2021, Ryanair introduced carbon offsetting schemes — a “Carbon Calculator” and a “Partial Contribution” option — offering passengers an avenue to offset their flight emissions. Later on, in January 2023, the low-cost airline had to revise its carbon offset scheme after the Netherlands Authorities for Consumers and Markets (ACM) found its sustainability claims to be misleading.

“Businesses must be honest and clear about the sustainability claims they make. Even with CO2 compensation schemes, flying remains a highly polluting way of traveling. Airlines may offer CO2 compensation schemes, but they cannot give the impression that CO2 compensation will make flying sustainable,” said Edwin van Houten, director of the Netherlands ACM’s Consumer Department.

Another study [*‘Flights of Fancy’* see below] published in October 2022 and commissioned by Carbon Market Watch revealed deep holes in the effectiveness of voluntary climate action taken by eight major European airlines. Misleading claims of “carbon neutral” flying, a dependence on poor quality carbon offsets and the low cost of a tonne of CO2 that customers can pay to offset are just a few of the problems highlighted in the report.

'17 airlines accused of greenwashing' 26 June 2023

<https://traveltomorrow.com/17-airlines-accused-of-greenwashing/>

On Thursday June 22nd, more than 20 European consumer organizations including [Testaankoop](#) in Belgium and its European umbrella organization BEUC, filed a complaint with the European Commission and the Consumer Protection Cooperation Network (CPC) against 17 airlines. The organizations want action against the misleading [greenwashing](#) claims and are calling for an investigation to stop it. In cases where passengers have paid extra for a “greener” flight, the organizations are asking for refunds.

According to a study coordinated by BEUC, these claims are unfair trade practices. The companies on the list include: Air Baltic, Air Dolomiti, Air France, Austrian Airlines, Brussels Airlines, Eurowings, Finnair, KLM, Lufthansa, Norwegian, Ryanair, SAS, SWISS, TAP, Volotea, Vueling, Wizz Air.

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Whether passengers pay a 'green fare' or not, their flight still emits gases that are harmful to the climate.

Laura Clays, spokesperson for Testaankoop

“Airlines must stop giving consumers the impression that they are choosing a sustainable mode of transportation,” said Laura Clays, spokesperson for Testaankoop. “Instead, to reduce emissions, it is essential to steer consumers toward more sustainable modes of transportation. Our politicians must promote solutions that offer consumers reliable, attractive and sustainable alternatives, such as better quality long-distance train connections.”

[Data from EASA](#) reveals that air traffic is responsible for a large and ever-growing share of greenhouse gas emissions that air traffic is responsible for a large and ever-growing share of greenhouse gas emissions. According to research by Testaankoop, several airlines make it appear that passengers can “offset” or “neutralize” the CO₂ emissions of their flights. Other airlines suggest an additional contribution, for the development of SAFs (Sustainable Aviation Fuels).

These SAFs are not yet ready to be commercialized on a large scale, and European legislation sets very low targets for their share in the fuel mix (2% by 2025). Until SAFs become massively available – probably not until after the 2030s – they make up at best a very small part of aircraft kerosene tanks. Airlines hint that it is possible to fly “sustainable” or “green,” while none of the strategies employed by the airline industry can prevent greenhouse gas emissions.

Testaankoop and the other organizations are calling for a European investigation to end these misleading practices. In cases where passengers have paid extra to fly “green,” the organizations are asking for a refund. This is the case with Brussels Airlines, which charges a significant surcharge for “Economy Green.” For example, the difference between Economy and Economy Green is 30 euros for a flight from Brussels to Marrakech in September.

“Whether passengers pay a 'green fare' or not, their flight still emits gases that are harmful to the climate,” said Clays. “Technological solutions to decarbonize aviation will not become a large-scale reality anytime soon.”

Greenpeace denounces European airlines' misleading practices

In early June, a report released by Greenpeace denounced greenwashing practices by several European airlines. The environmental NGO unveiled the ugly truth behind the [green marketing](#) conducted by airlines concluding that there is little to no substance to the [claims](#) they make regarding how they will manage to curb emissions to deliver the targets agreed under the Paris Agreement — to keep global warming well below 2°C.

To be in line with the targets, European airlines would need to reduce at least 2% of flights annually by 2040. However, none of the companies analyzed has annual reduction goals for its greenhouse gas emissions, has committed to reduce flights, or pledged to fully decarbonize by 2040.

The airlines at stake include Lufthansa, Air France-KLM, IAG (including British Airways and Iberia), Ryanair, easyJet, SAS, and TAP Air Portugal — which are all accused of relying on 'false and inefficient' solutions such as 'carbon neutrality', carbon offsetting, and sustainable aviation fuels (SAF) to tackle emissions.

Greenpeace accuses Europe's airlines of greenwashing 8 June 2022

<https://traveltomorrow.com/greenpeace-accuses-europes-airlines-of-greenwashing/>

On the road towards decarbonisation, every sector is announcing measures to reduce its carbon footprint. Despite a [plethora of pledges](#) by the aviation sector, its [green commitments](#) have been called into question after a report from Greenpeace denounced [greenwashing](#) practices by several European airlines.

1. Greenwashing

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European airlines are putting up a smokescreen of false solutions that sound great, but in effect keep transport hooked on oil, distracting from their staggering emissions, lack of credible climate targets and insufficient measures to combat the impacts of flying. Even in the face of a climate emergency, airlines carry on polluting the air and hide their dirty business behind a wall of greenwashing.

Herwig Schuster, spokesperson for Greenpeace's European Mobility For All Campaign

2. KLM sued

Recently in May, environmental groups launched a legal action against KLM, on the grounds that the Dutch aviation giant was misleading the public over the sustainability of flying.

Just as the fossil fuel industry is using greenwashing to protect their licence to operate, the aviation sector is using misleading advertising to protect its licence to grow. *Johnny Whiten, lawyer at Client Earth*

3. Net-zero, SAF and tech

Greenpeace is skeptical of the concept of net-zero, which allows a polluter to continue to emit CO2 and balance the emissions out by paying someone else to hopefully save them in the future.

In the [study](#), Greenpeace cites the International Energy Agency's prediction that SAF would make up 19% of airline fuel by 2040. The problem is that it's currently much more expensive to produce SAF than regular jet fuel, even with today's elevated oil prices. To make the price go down, production needs to ramp up significantly and new types of SAF must come to the market.

The NGO further notes that currently there is still much reliance on crop-based [biofuels](#) as opposed to the forthcoming [power-to-liquids](#) or e-fuels. Moreover, airlines are said to rely heavily on future technology which is far from being commercially available. In March 2022, industry and policymakers gathered during the [Clean Aviation Forum](#) hoping to find cooperation between public and private entities to the development of efficient new technologies and fuels.

But Greenpeace believes that the sector could do much more, starting with the basics.

The EU and its leaders cannot continue to let the aviation industry get away with their false climate solutions and must bring down emissions, starting with a ban on short-haul flights and a reduction of business flights wherever reasonable train alternatives exist.

Herwig Schuster, spokesperson for Greenpeace's European Mobility For All Campaign

Commonly known as the Achilles' heel of the industry, international aviation is responsible for 3,5% of anthropogenic climate forcing, less than Russia and more than Japan, according to the [Climate Action Tracker](#).

Busted: 5 tricks the aviation industry plays on us to appear green

Herwig Schuster 1 June 2022

<https://www.greenpeace.org/international/story/54040/busted-5-tricks-the-aviation-industry-plays-on-us-to-appear-green/>

Airlines around the globe have been vying with each other on who has the greenest and shiniest announcements recently. British Airways [made headlines](#) with its plan to use sustainable aviation fuel on a commercial scale, Air France claimed to [aim for a 12% cut in emissions by 2030](#), and Ryanair has called itself "[Europe's lowest emissions airline](#)" [Compares unfavourably with Easyjet – see Chart below]

And yet, in the face of the climate crisis, something in this gleaming rhetoric leaves a bitter taste. Could an industry whose global greenhouse gas emissions have been [growing by 3.4% annually](#) over the previous decade be fooling us about its efforts to become a responsible beacon of climate protection?

Bearing in mind that climate scientists have warned that the [climate limit of 1.5°C is close to being broken](#), let's take a closer look at the green promises and climate actions of airlines – and dissect their carbon jargon!

A new report by Greenpeace Central Eastern Europe finds that there is little to no substance to the climate claims made by some of the biggest European airline groups that they will cut greenhouse gas emissions in the future. Why? Firstly because these companies mainly rely on false solutions and tricks that create a myth that aviation is green, despite the fact that [flying remains the most climate-damaging means of transportation per passenger and per kilometre](#). These are the industry's five most widely used tricks and false solutions:

1. The illusion that flying is “carbon neutral” through offsetting emissions

Globally, airlines have [pledged to become carbon-neutral \(or “net zero”\) by 2050](#). Doesn't sound too bad? Think again! The term “carbon neutral” does not actually mean cutting greenhouse gas emissions at the source. Instead, it is based on the illusion that someone can release greenhouse gases, and balance them out by capturing these emissions somewhere else in the future, e.g. through carbon offsetting schemes.

Neither planting trees nor avoiding deforestation will make a flight “carbon neutral”. Research has actually shown that [only 2% of offset projects](#) have a high probability of resulting in additional emissions reduction. Nevertheless, airlines continue to push the [illusion that we can fly carbon neutral or net-zero](#).

[Climate scientists have warned](#) that the concept of “net zero” and “carbon neutrality” is a “dangerous trap” that has “hastened the destruction of the natural world by [increasing deforestation](#) today, and greatly increases the risk of further devastation in the future”.



Abandoned aircraft sit on a flooded tarmac at the Don Muang domestic airport which has been closed for weeks due to extreme flooding in the area in Bangkok (2011). © Athit Perawongmetha / Greenpeace

2. Overemphasis on “sustainable” aviation fuel as a solution

The airline industry loves bringing up the magic word “Sustainable Aviation Fuel” (SAF) which refers to a variety of relatively new types of jet fuel based on e.g. biomass or waste intended to replace fossil fuel-based kerosene. But the problem with so-called sustainable aviation fuel is: it is not sufficiently available and/or mostly not really sustainable. While airlines present SAF as a [key lever to decarbonise](#) aviation, it only represents [0.05% of the annual jet fuel](#) needed in the EU. In 2019, SAF accounted for at most 0.1% of the total annual jet fuel consumption of airlines analysed in a [new Greenpeace CEE report](#). It's estimated that [SAF will make up only 19% of airline fuels by 2040](#) – meaning that 81% will still be fossil-fuel based kerosene.

Not to mention that crop-based biofuel or so-called agrofuel which is made from food and feed crops like palm oil are often associated with [deforestation and biodiversity loss](#).

What about renewable *e-kerosene*, synthetic kerosene made from electricity and a carbon source? It's one of the few alternative fuels that can be produced in a relatively eco-friendly way if the electricity comes from 100% renewable sources. But this is a long way from being a done deal and would need significant investment, research and development.

3. Excessive optimism that future technology will cut emissions

The aviation industry and political leaders are relying on excessive optimism for false technological solutions – and it comes with a high price: [researchers](#) have warned that “technology myths” are stalling the necessary progress in climate policy for aviation. More fuel-efficient planes are not a false solution as such, but they will not be sufficient to achieve decarbonisation in time to limit global heating below 1.5°C. Under an optimistic scenario, Greenpeace [expects an efficiency improvement](#) (energy consumption per passenger-kilometre) of only 30% by 2050 – not enough on its own to limit global heating below 1.5°C.

4. Greenwashing to appear environmentally responsible

As the world becomes increasingly invested in tackling the climate emergency, the airline industry certainly wants us to think that they are part of the solution, not the problem. We [see greenwashing everywhere in the sector](#): from [misleading communication](#) and [sponsorship of climate friendly initiatives](#) to the promotion of solutions to tackle the environmental and social shortcomings of the industry that are either wrong, insufficient, or both. There is a big discrepancy between the actual emissions reduction plans of airlines and the promotion of “green” PR by the airlines.

5. Promotion of frequent flying as a necessity and cheap way of getting around

Advertisements by airlines [pretend that there is no climate emergency](#) and no reason to reduce the number of flights. Airline advertising overwhelmingly focuses on low-cost flights, deals and promotions while evoking access to nature through flying, as found in a [new Greenpeace Netherlands report](#). The true cost of flying – the millions of tonnes of GHG emissions it causes – is not included in a low-cost fare. And let’s be honest: an individual airline ticket might be cheap, but this is only because airlines already benefit from taxpayers’ money through major tax cuts and public subsidies.



Greenpeace Netherlands campaigner Faiza Oulahsen gives a speech during the event. Greenpeace Netherlands organises a 2 day long event called “Protestival” at Schiphol Airport, the largest tax-free gas station in the Netherlands. Hundreds of activists join the activity at the airport to demand a climate action plan for the climate emergency.
© Marten van Dijl / Greenpeace

Where does this leave us?

Unfortunately for the planet and us people, airlines are currently getting away with their tricks and false solutions. Without political action to counter its growth prospects, the aviation industry could become [one of the biggest emitting sectors globally](#).

At the same time, no other means of transport in Europe has been as heavily subsidised with public money through VAT and tax exemptions, state aid, bailouts and loans, as well as research and development support. This has distorted markets for decades to the benefit of aviation above green mobility. For example, airlines are exempt from kerosene taxes and VAT on international tickets, while railway companies pay high energy taxes and rail tolls. On top of this, European airlines still receive a large proportion of their emissions allowances – permits to pollute under the EU’s Emissions Trading System – for free. There is a serious [lack of strict laws](#) to mitigate airlines’ GHG emissions – and that’s a major problem!



May 2020: activists from Greenpeace Netherlands cycle onto the runway at Schiphol Airport demanding the Dutch government regulates the billions that are being spent to support big polluting industries during the pandemic.

© Marten van Dijl / Greenpeace

What needs to happen, to bring aviation in line with the Paris Climate Goals?

1. There is no way around the need to reduce flights to achieve real-zero emissions by 2040. Greenpeace [has calculated](#) that in order to keep global heating below 1.5°C, European airlines will have to reduce their flights by 2% annually.
2. Airlines must drop the illusion of “carbon neutrality”, dispel the myth of “green flying” and stop promoting false solutions that lull everyone into a false sense of security that airlines already have their climate damage under control. Together, we can demand that the EU and European governments put a stop to greenwashing in the aviation sector: Sign this [European Citizens’ Initiative \(ECI\)](#) launched by Greenpeace, together with the New Weather Institute and 30 other partners, to ban fossil fuel ads.
3. We must stop giving away free permits to pollute and taxpayers’ money to the sector and make it pay for its pollution. It’s about time that the EU phased out all fossil fuel subsidies for the aviation sector (including for airports) and ensured that tax on kerosene is enhanced and swiftly implemented on all flights.
4. Boost rail and public transport! We have to start building a mobility system that is good for the planet and the people by phasing out fossil fuel powered transport. In doing so, we also have to ensure a just transition for workers in the aviation sector and an end to the increasing instability of working conditions – and not leave anyone behind.

Herwig Schuster is a transport expert for the European Mobility For All campaign with Greenpeace Central and Eastern Europe office, based in Austria.

Flights of Fancy - Is the voluntary climate action of airlines effective or greenwashing?

<https://carbonmarketwatch.org/flights-of-fancy/>

includes explanatory youtube video

Commissioned by Carbon Market Watch Conducted by the Öko-Institute October 2022

After receiving huge government bailouts for staying grounded during the coronavirus pandemic, airlines are now pulling out all the stops to persuade people back into flying. But now that customers are more environmentally concerned and eco-savvy than ever, the industry responsible for 2-3% of the world's carbon emissions has become ever more creative, clouded and confounding in their green claims.

We commissioned a study to look at the actions taken by the eight major European airlines to reduce their environmental impact, to understand the scale and quality of their efforts.

Here are some of the main findings:

Low visibility Airlines' reporting of voluntary actions to reduce their environmental impact was, on the whole, unclear and vague.

Economy class Airlines mainly opted for cheap, poor-quality carbon offsets.

Cheap deals The estimated cost to offset a tonne of carbon varied greatly for customers of different airlines, ranging between €9 and €30. Some customers paid four times more for their credits than an airline paid as a corporation, and one airline paid a corporate price as shockingly low as €4 per tonne of CO₂.

Off the radar Most airlines ignored the damaging impact of their non-CO₂ (nitrogen oxides and water vapour) emissions at high altitudes.

Faulty signalling Two airlines used the deceptive and misleading term 'carbon neutral' to describe flights

The greenwashing of aviation is especially dangerous at a time when emissions reductions are crucial for staying within 1.5C of warming, the maximum global temperature change that the planet can withstand without causing widespread destabilisation. By tricking consumers into thinking that they can fly with minimal consequence, airlines are showing a disregard for the safety and wellbeing of current and future generations.

Looking to the future

This report strongly demonstrates that airlines cannot be trusted to take sufficient voluntary action in covering the damage caused by their profits-over-planet nonchalance. The only option now is for governments to intervene and start properly regulating airline emissions.

Polluters pay

The EU should end the reliance on airlines' voluntary actions to mitigate the negative impacts of their emissions, by expanding the EU ETS scope to cover all flights departing and arriving in the EEA, leaving fewer uncovered emissions.

Clear skies

The EU should require clear and complete disclosure of information from airlines regarding their purchase of carbon credits, as well as any other voluntary actions they take. This can be achieved through the EU corporate sustainability reporting standards being developed by the European Financial Reporting Advisory Group (EFRAG).

End misleading advertising

The EU should also ban misleading advertisements, such as carbon neutral flights, through its review of the Unfair Commercial Practices directive.

Coming in to land

Guidance on how to make informative, rather than misleading, claims should be provided by EU regulatory bodies, for example through the European Commission's Green Claim initiative.

A closer look The information in this table was released in October 2022

Airline	All emissions offset?	Provided enough information for voluntary climate action to reliably assessed?	Customer offsetting based on CO2 and non CO2 emissions?	Estimated average offset cost of a tonne of CO2		Tonnes of CO2 offset between 2019-2021 (estimates made from limited data)	Provided evidence of offsets retired?	Low-quality offsetting projects included in portfolio
				Paid by customer	Paid by airline			
Air France	X	X	X	€30	€8	500,000	✓	✓
British Airways	X	X	✓	€12	-	365,000	X	✓
EasyJet	✓	✓	✓	-	€4	5,269,476	✓	✓
KLM	X	X	X	€16	-	203,000	✓	✓
Lufthansa	X	X	X	€17	-	150,060	X	✓
Ryanair	X	X	X	€28	-	105,855	X	✓
SAS	X	X	X	-	-	2,400,000	X	-
Wizz Air	X	X	✓	€9	-	105	X	✓

Stay Grounded <https://stay-grounded.org/green-flying-report/> Summary (full report online)
(Carbon offsets Factsheet below this summary)

The aviation industry has announced its intention to become greener in the future. This report examines the different climate strategies. Do they deliver on their promises? Is carbon-neutral growth a realistic goal?

The report "The Illusion of Green Flying" (2017) is written for people and groups that want to understand the greening strategies in order to effectively address aviation growth and climate change. Therefore, the report also describes different answers from civil society actors and needed strategies to set a limit to aviation growth.

The Illusion of Green Flying



Executive Summary

The aviation industry has announced its intention to become greener in the future. Do its strategies deliver on its promises? Is carbon-neutral growth a realistic goal?

Aviation: The Fastest Way to Fry the Planet

Aviation is by far the mode of transport with the biggest climate impact (see DIAGRAM 2). Carbon dioxide (CO₂) is only one part of the total climate impact of aviation (see DIAGRAM 1). If aviation was a country, it would be one of the TOP 10 emitters.

Emissions from aviation are rising more rapidly than any other sector of the economy. The number of aircraft and the number of passenger-kilometres flown is expected to double over the next 20 years – entailing 550 new airports or airport expansions around the world (86 in Europe alone). This could cause the greenhouse gas emissions from aviation to increase four- to eight-fold by 2050.

At the turn of the millennium, less than 5% of the world's population had ever sat in an aircraft. This goes at the expense of others: residents exposed to noise and particle pollution from the planes, local ecosystems, future generations and of those in the Global South who are already bearing the brunt of the impacts of the climate crisis.

Aviation Industry's Strategies: Green Growth or Greenwashing?

Pressure on the industry is rising. Aviation cannot anymore shirk responsibility for its contribution to the climate crisis. But how effective are the aviation's greening strate-

Innovations in Aviation Technology: Green flights would require quantum leaps in technology. Even the industry itself is now predicting that it will take at least 25 years to bring such innovation to technological maturity. And as aircrafts have a lifespan of around 25 years, energy-intensive planes are likely to remain in use until at least the 2060s.

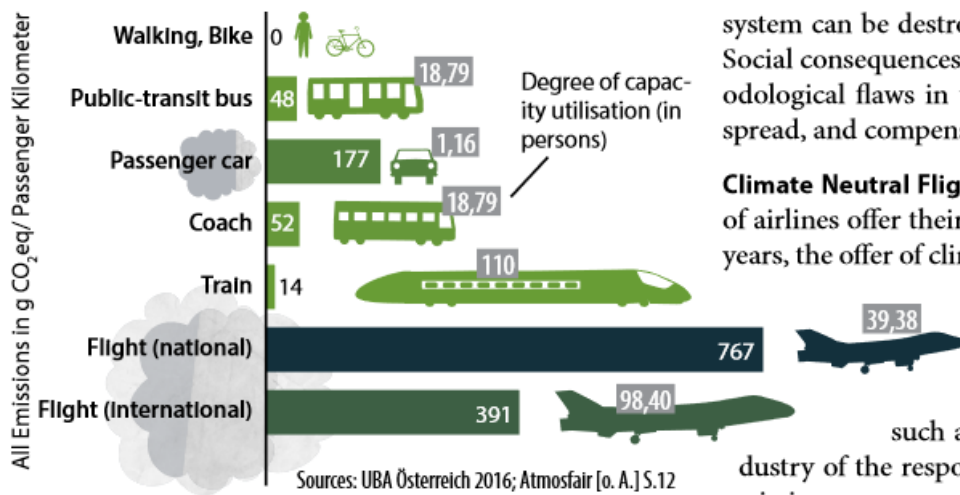
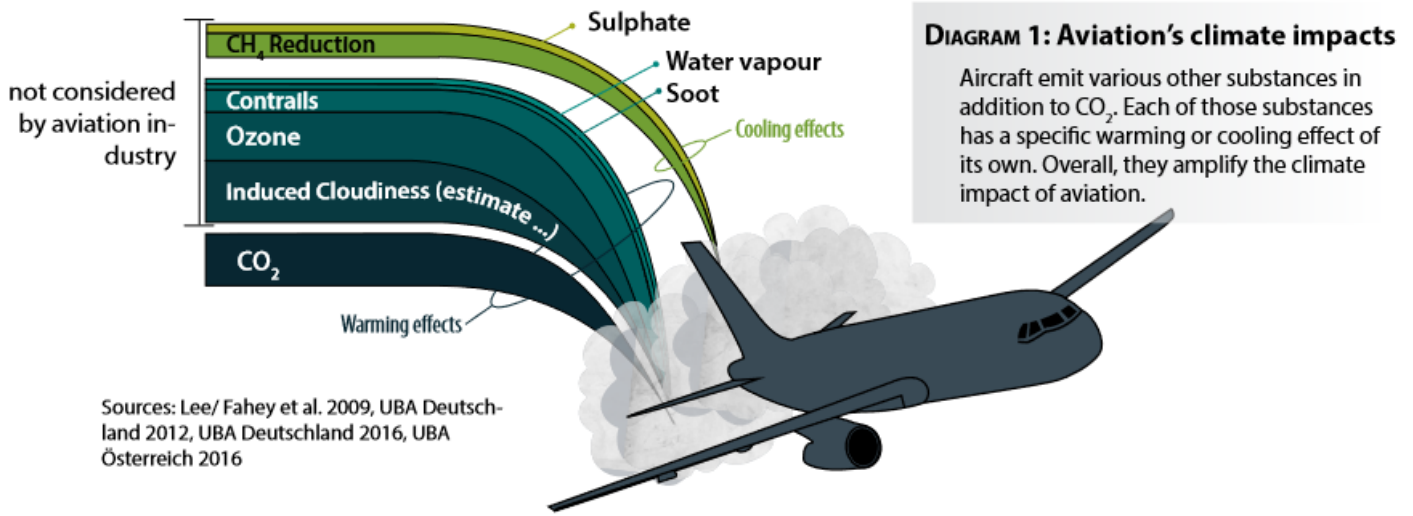
Sustainable Alternative Fuel: The ambition is to replace the highest possible proportion of conventional fuel with agrofuels. The plan is not realistic because it would consume vast portions of land and risk food supply. This also risks land grabbing and would ultimately have minimum effects on the climate.

CORSIA – the international aviation's climate strategy: In 2016, ICAO (International Civil Aviation Organisation) agreed on a market-based measure called Carbon Offsetting and Reduction Scheme for International Aviation. Through this measure, international aviation proclaims its plan of 'carbon neutral growth'. The plan relies almost entirely on offset measures: reductions of emissions from others elsewhere (see BOX).

Airport Carbon Accreditation: Airports increasingly present themselves as green, especially when they face opposition against planned expansions like new runways. They can become supposedly carbon-neutral airports via the

more shirk responsibility for its contribution to the climate crisis. But how effective are the aviation's greening strategies? The brochure 'The Illusion of Green Flying' examines the different measures:

can become supposedly carbon-neutral airports via the ACA certification scheme. For the ACA scheme, as with CORSIA, carbon offsetting is needed. An airport can call



system can be destroyed, if nature is protected elsewhere. Social consequences of the destruction are ignored. Methodological flaws in the 'replacement' of nature are widespread, and compensation often fails.

Climate Neutral Flights Offers by Airlines: Almost a third of airlines offer their customers carbon-neutral travel. For years, the offer of climate-neutral flights has helped to nurture the illusion that flying green and carbon offsetting are possible. Offers of individual credits thus prepared the way for programmes such as CORSIA, which relieve a whole industry of the responsibility for reducing greenhouse gas emissions.

DIAGRAM 2. Modes of transport compared

The diagram does not show that climate impact depends upon the route and altitude of a flight. The longer the flight, the greater the impact. However, short-distance

**What is really needed:
less air travel, not more**

upon the route and altitude of a flight. The longer the flight, the greater the impact. However, short-distance flights are particularly harmful: the emissions of the kerosene-intensive climb are disproportionately high.

itself carbon neutral even though the airport's flights, and therefore around 95% of the emissions, are not at all factored.

Biodiversity Offsetting: Airports take up large areas which can be important for biodiversity and local inhabitants. Therefore, pressure is usually big to compensate for this damage and disruption; in some cases airports are obliged by law to compensate. Compensation means that an eco-

Emissions offsetting: a modern sale of indulgences

Offset projects involve for example generating energy from methane (which is produced in large quantities in industrial livestock farming), or building hydropower plants that claim to prevent production of energy from fossil fuels. Forest conservation projects and operators of tree plantations can also sell such offset credits representing supposedly achieved emission savings for the aviation industry.

Studies show that the majority of projects miscalculate their savings. The research institute Öko-Institut investigated the effectiveness of existing offsetting projects for the European Commission and concluded that only for 2% of the offset projects it is highly likely that they resulted in actual additional emissions reduction. If for example a hydropower plant is being built anyway, or a forest is foreseen to be cut, such projects should not be eligible for selling carbon credits – which in turn allow others to pollute more.

Also, the projects which are largely located in the Global South, often lead to local conflicts or land grabbing. This is especially the case with land or forest based projects like REDD+. Ultimately, offsetting is unjust: To enable a small portion of the world to continue taking more and more flights with a clear environmental conscience, others have to reduce their greenhouse gas emissions: people whose emissions are often already very low, whose historical contribution to climate change is negligible and who are already experiencing the impacts of the climate crisis.

less air travel, not more

The brochure shows that carbon neutral growth remains an illusion, that the green strategies cause new problems and are neo-colonial, and lastly the aviation industry uses them as a trade in indulgences and a diversionary manoeuvre. The aviation industry greenwash its public image, avoiding or preventing more effective strategies that would curtail its profit. Such approaches to reduce aviation growth, however, are needed urgently to both address the climate crisis effectively and equitably.

It is therefore essential to cut aviation's privileges: Finally, taxes on kerosene, flight tickets and airport property need to be introduced. In the European Union alone, the losses in state revenue due to aviation subsidies amount to 30 - 40 billion Euros annually.

If night trains no longer run, booking train tickets for cross-border journeys becomes increasingly difficult, and the only transatlantic passenger ships are luxury cruiseliners, flying will remain the preferred option for many. It is therefore hugely important to stand up for these alternatives. At the same time, resistance against airport projects can prevent locking-in an emissions-intensive, destructive form of mobility for decades into the future.

More and more actors are building alliances to apply pressure and make the needed change together – some of the actors and needed strategies are presented in the brochure.

A brochure by: Finance & Trade Watch, November 2017

Download: www.ftwatch.at/flying_green

Contact: magdalena.heuwieser@ftwatch.at / norunway3@systemchange-not-climatechange.at



Fact Sheet 7 – Carbon Offsets from Stay Grounded website July 2023

<https://stay-grounded.org/wp-content/uploads/2022/01/factsheet-offsets.pdf>

A carbon offset is a 'unit' of greenhouse gas (GHG) emissions that is (allegedly) reduced, avoided, or removed from the atmosphere by one entity and purchased by another to try and compensate for its own emissions.

Carbon offsets play an important role in many current emission reduction plans and can be part of cap and trade schemes like in California. Based on projects that are mostly located in the Global South, offsets are being used by states and companies (mainly in the Global North) to achieve compliance. Most trades take place on dedicated carbon markets.

The aviation sector makes extensive use of carbon offsetting. The responsible UN body, the ICAO (International

Civil Aviation Organisation), has agreed upon a common scheme for international flights called CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation).

Some countries or regions have specific offset schemes for flights within their boundaries. Air travellers may also be offered to purchase offsets when they buy tickets from airlines or travel agencies, or they might even come included in their package.

Airports are also directly utilising offsets to cover ground emissions and using that as an incentive for people to use their 'Green Airport', irrespective of aircraft emissions.

WHAT THEY TELL YOU

Essential: Aviation emissions are 'hard to abate', so carbon offsets will be essential to achieve 'carbon-neutral growth' under CORSIA (2021-2035)¹ and 'Net-Zero CO₂ emissions by 2050'².

Certified: The quality of carbon offsets is guaranteed through global standards and third-party certifications.

Immediate action: Large quantities of carbon credits from valuable projects are available on the market and waiting to be funded.

Fair: As flying is so important to society and the global economy – rather than flying less – it is fair to keep increasing aviation emissions and pay to reduce emissions elsewhere, or to remove CO₂ from the atmosphere, when it is more cost effective.

Better than taxes: Offsetting is a better alternative to green regulations, like taxes and limits on air traffic growth, that reduce profit available for aviation companies to invest in new technologies and fuels.

WHAT THEY **DON'T** TELL YOU

Fundamentally flawed: Carbon offsetting does not reduce emissions. It diverts projects that are essential to achieving global climate objectives to justify further growth in air transport. Furthermore, tree planting and forest protection projects, the most popular categories, have no guarantee of permanence and cannot be scaled up globally due to the lack of available land.

Ineffective or fraudulent: Many offset projects do not meet quality standards and open the door to fraud.

Postpone action: Offsets distract from the urgent need to reduce aviation emissions to meet climate targets. They increase the risk of climate chaos, postpone action and serve as a licence to pollute.

Unfair: Carbon offsets are unjust as they justify high emissions from a wealthy minority, while grabbing resources that are essential to the majority, like land for growing food or restoring biodiversity.

Far too cheap: Carbon credits are so cheap that offsetting schemes will not reduce demand, which is essential to reduce emissions.

CORSIA

CORSIA is a global market-based scheme designed to offset the fraction of CO₂ emissions from international flights exceeding 85% of their 2019 level. It requires airlines to purchase carbon credits.

Carbon neutral growth: CO₂ emissions that will exceed 85% of baseline 2019 emissions will be offset (2023-2035).

Worldwide agreement: CORSIA offers a harmonised way to reduce emissions from international aviation, minimising market distortion³.

Carbon budget fully spent by 2030: Only a small part of emissions will be offset by CORSIA's 2035 deadline. The bulk will neither be abated nor offset causing the carbon budget of aviation to be fully spent by 2030.

Weak agreement: CORSIA is a minimal agreement for international flights only (not to mention exemptions) aimed at minimising the sector's costs. It will not be mandatory until 2027 and is not legally binding. It doesn't cover non-CO₂ emissions (2/3 of the total climate impact of aviation).⁴

3 / 6 STAY GROUNDED | Fact Sheet, July 2023 **OFFSETTING IS FUNDAMENTALLY FLAWED**

Let's compare the atmosphere with a tank being filled with CO₂ through a number of pipes, one for each economic sector. The tank is expected to overflow in less than ten years if CO₂ continues to flow at the current rate. While most of the sectors are reducing their flow rates, the aviation sector is instead continuing to increase its flow and claims that offsetting some of it will do!

There are two general types of offsetting: one is avoiding or reducing existing emissions in other sectors; and the other is removing carbon from the atmosphere. So either paying other sectors to turn down their own taps, or investing in 'sponges' to absorb CO₂ and store it in supposedly safer tanks. The issue with the first option, aviation requesting other sectors to reduce or avoid their own missions (by financing e.g. wind turbines in India) is that it consumes for itself and cancels out, emission reductions of projects that are urgently needed to meet the tough global climate targets. Worse still, this diversion is used to justify actually growing aviation emissions.

The second option, removing CO₂ from the atmosphere, cannot restore the atmosphere to a preflight state. The only 'sponge' that can be utilised today is vegetation biomass. Artificial processes like DACCS (Direct Air Carbon Capture & Storage) are only at the demonstration stage and have not yet been proven to be deployable on a large scale. Building up carbon storage in trees or other biomass is a slow process and there is no guarantee the carbon will be stored long term. It usually takes decades before significant amounts of absorbed carbon are stored in a tree. They may also fall victim to fire, drought, disease, etc. and may eventually be cut down. Another issue with planting trees is that land managed by humans is today a net global carbon emitter, due in particular to deforestation and forest fires. This will remain so for many years before the situation is possibly reversed and biomass becomes a net carbon absorber. Actions to restore or increase biomass must first compensate for its continuing destruction and aviation cannot appropriate the scarce resource of land needed for that purpose, whilst restoring biodiversity and feeding people.

United Airlines CEO, Scott Kirby: "Traditional carbon offsets are mostly about planting trees, and there's nothing wrong with planting trees, but the truth is most of those carbon offsets aren't real. Those are trees that were going to be planted anyway, or trees that were never going to be cut down. But the bigger point is that the system can't scale. If we planted every square inch of the planet that could grow trees, it would account for less than 5 months of mankind's emissions. By the way we'd all starve to death because we just covered up all of the farms."⁽⁵⁾ Faced with the climate and ecological emergencies, there is no time for half measures. There is no longer any give or flexibility in the system. All levers of action must be used. We need to thoughtfully restore ecosystems, stop deforestation and eliminate habitat destruction. We also need to replace fossil fuel power with truly renewable energy. We need to do all those things in addition to reducing emissions from aviation.

A MAJORITY OF CARBON OFFSETS ARE INEFFECTIVE OR FRAUDULENT

Not only is the very principle of carbon offsetting strongly contested but it turns out that many of the projects financed do not deliver the expected results and are sometimes even fraudulent, despite their certification by official or independent bodies. Several surveys have shown that certification is not a guarantee of quality. The criteria that projects are supposed to meet are often not met :

- The benefits of the project cannot be measured and verified;
- The project is not additional: it would have occurred anyway without the investment enabled by selling carbon credits;
- The alleged emission savings are exaggerated, resulting in the sale of millions of 'junk' credits;
- The project is not permanent or there is no guarantee that it will last as long as planned. Trees might die, burn down or be harvested prematurely and carbon be released again;
- The implementation of the project will cause indirect emissions that cancel out its benefits (Carbon leakage);
- The project's alleged emission savings are claimed by other organisations or counted in NDCs (Nationally Determined Contributions) (Double counting).

From the analysis of 1,350 wind farm projects in India under the Clean Development Mechanism (CDM), researchers concluded that more than 52% of the carbon credits issued were attached to projects that would otherwise have gone ahead and that the sale of these credits to regulated polluters had significantly increased global CO₂ emissions (6)

In 2023, an investigation by a consortium of journalists into Verra, the world's leading carbon standard for the rapidly growing voluntary offsets market, found that more than 90% of their rainforest offset credits – among the most commonly used by companies – are unlikely to represent genuine carbon reductions (7).

Even important players in the sector acknowledge that many offset projects are flawed (see above, United Airlines CEO's statement) or, like easyJet, have stopped using them.

NATURE BASED SOLUTIONS/NATURAL CLIMATE SOLUTIONS (NBS/NCS)

Nature Based Solutions refer to the sustainable management and use of nature for tackling socio-environmental challenges. Originally NBS encompassed environmental policies more broadly, whereas NCS were specifically carbon reduction but they are now pretty much used synonymously. NBS/NCS are important for mitigating climate breakdown impacts or other human-caused environmental problems, for example: reintroducing beavers to reduce flood risk; planting mangroves to absorb storm impact; flood reduction landscaping; planting to slow rainfall run-off; peat-bog, saltmarsh and wetlands restoration; etc. They can help restore biodiversity and remove carbon from the atmosphere, storing it naturally.

In principle NBS/NCS are a good thing. **However the dangers arise when they are used for offsetting emissions, particularly where they are commodified by market mechanisms and associated credits are traded and speculated upon.** Clearly NBS/NCS are something that should be encouraged as an **additional** aid to mitigating climate heating by storing carbon within Nature but not **instead** of emissions reductions allowing business-as-usual to continue.

The financialisation of nature (and its associated life support systems), assumes that it is impossible to halt destruction without putting a price on 'ecosystem services' and biodiversity, formulated by Costanza et al (1997).¹³ This approach does lead to land grabbing and biodiversity loss and might lead to species gene banking and putting nature on sale like any other commodity^{14,15} (the rarer the species, the higher the price).

Quantifying potential NBS/NCS carbon uptake from ecosystem protection or restoration and using this as

a lever to secure funding, puts the power in the hands of the finance providers. This makes any **safeguards impossible to enforce**.¹⁶ In practice, those who have the most incentive to provide funding are those who wish to offset large-scale fossil fuel emissions. At COP25, a market for natural climate solutions¹⁷ was jointly launched.¹⁸ For COP26 a group of conservation and academic organisations wrote an open letter supporting NBS¹⁹, calling for a set of principles to be observed but **did not** rule out their use as carbon offsets. Some NGOs actively promote offsetting, carbon credits and have appointed corporate partners to aid such promotion.

There is a broad scope of schemes²⁰ and application processes. NBS/NCS are also increasingly used by airports like Heathrow,²¹ who aim at achieving a "zero carbon airport by mid-2030s" to justify their growth plans and increased emissions.

NBS/NCS are not new but similar to previous measures²² like the Tropical Forestry Action Plan (1985), the Clean Development Mechanism (Kyoto Protocol) and REDD (Reducing Emissions from Deforestation and forest Degradation).

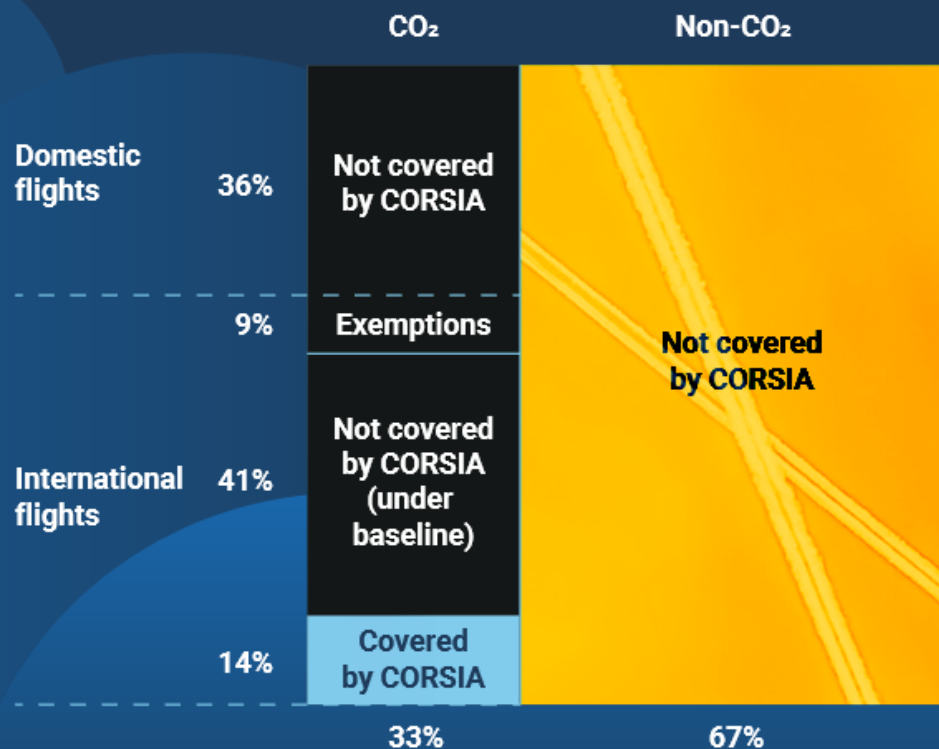
We need to **push against false solutions, however they are rebranded** – and push for real solutions that are community led and come 'from the ground up'. Enabling self-determination and rights of indigenous peoples is one of the most effective uses of 'conservation' funding but very little is spent in this way. The 'Nature and Climate' framing was seen as a step forward from 'Climate' but it is still deficient. We still want to talk about nature but as part of an ecosystem culture - 'Nature, People and Climate'.

Only 5% of the total climate impact of aviation may be covered by CORSIA in 2030

stay-grounded.org



Not only is CORSIA, the global carbon offsetting scheme for international aviation, inadequate to combat global heating but its coverage is very weak. It does not cover domestic flights, nor flights to smaller countries. Most importantly, it only covers CO₂ emissions above 85% of the level reached in 2019. This means that in total it may cover only 14% of CO₂ emissions and none of the non-CO₂ climate impacts, even though they are twice as large as that of CO₂.



Sources:
 ICCT (2020): <https://bit.ly/icct-CORSIA>
 T&E (2022): <https://bit.ly/CORSIA-coverage>

CARBON OFFSETS POSTPONE ACTION

Offsetting emissions of flights, even when based on good quality projects, is worse than doing nothing, as it only postpones real action and increases the risks for younger generations. Passengers have no incentive to reduce their flights and rethink their travel habits; they think the emissions are offset and may even travel more, falsely believing their flights are guilt-free.

Governments hide behind offsetting to avoid taking measures that will actually reduce emissions, in order to protect the economic growth of sectors that they believe are important to their countries' GDP: tourism and air transport. Finally, for airlines, carbon offsetting is an easy way out that does not significantly weigh on demand.

OFFSETTING INCREASES INEQUITY AND CREATES NEO-COLONIAL DEPENDENCIES

By giving a clear conscience to the wealthy minority who fly often, without encouraging them to take fewer flights, carbon offsetting allows air transport to continue to grow and worsen its climate impact. The sector is thus increasing the inequities between this wealthy minority – which is enjoying the present – and the vast majority, who are most exposed to the current and future consequences of global heating. By constantly postponing efforts to reduce emissions, we will be leaving all ecosystems and both present and future human generations, with a carbon debt that they will need to pay off (if at all possible) by removing massive amounts of carbon from the atmosphere whilst having to cope with increasingly harsh climatic conditions and resource shortages. It is also notable that aviation emissions are not currently being priced to set aside future money for this debt. Indeed, air travellers currently pay very little for their emissions, leaving future taxpayers and ecosystems to bear the consequences.

Since emission reduction projects are cheaper in the Global South, this is where most offset projects are located. They are a form of neo-colonialism and create new inequities between North and South. They demand to take over the management of large areas of land, usually in largely rural agrarian economy countries, and even dispossess local and indigenous peoples of their customary rights without their consent or sometimes even knowledge.

CARBON CREDITS ARE FAR TOO CHEAP

The carbon credits that can be used under CORSIA do not cost more than a few euros per tonne of CO₂, while CO₂ permits were trading at a record high of €100/tonne in February 2023 on the European carbon market (8)

The NGO Transport & Environment calculated that the impact on the cost of a Paris-New York ticket would probably not exceed €1.70 in 2030, (9) a price that is totally insufficient to influence demand and bears no relation to the cost of CO₂ for the planet. As they are so cheap, they also stifle investment in systemic transformation which would always be more expensive. Carbon offsetting serves as a means to avoid binding regulation and taxes such as frequent flyer levies, and limits on airport/airline expansion which would reduce emissions.

CORSIA: CARBON-NEUTRAL GROWTH IS A GROSSLY INSUFFICIENT GOAL

Carbon offsetting is, as we have seen, neither legitimate nor effective in reducing aviation emissions but even if it were, the sector's goal of 'carbon-neutral growth' is grossly insufficient anyway. Aiming for carbon-neutral growth 10 means offsetting only those emissions that exceed the base year emissions level. In order to avoid exceeding the Paris Agreement's 1.5°C global heating threshold, all emissions would have to be reduced by 55% by 2030. Without drastically reducing its (own) emissions, the aviation sector's carbon budget will be fully spent by 2030 (Fact sheet 06 Net Zero & Carbon Neutrality).

CORSIA: A MINIMAL AGREEMENT

The sector is self-satisfied to have obtained an international agreement – which is admittedly difficult – but the consequence is a very weak agreement that resolves nothing. Worse still, it could prevent signatory countries from taking further steps via bilateral agreements or for their domestic flights.

Even when it becomes mandatory in 2027, CORSIA will only cover 14% of global CO₂ emissions from the aviation sector but as non-CO₂ impacts are not covered (and they account for ⅓ of the sector's total climate impact), CORSIA will in fact cover just 5% of the total climate impact of aviation (See infographic).

As it is applicable only to international flights, not legally binding, open to exemptions (11), excluding non-CO₂, limited to emissions exceeding those of the baseline (85% of 2019 emissions (12) – and above all, based on the fallacy of carbon offsetting, CORSIA only adds to the sector's greenwashing toolbox.

While dangling unrealistic technological greenwash solutions to establish an image of responsibility, the aviation sector is masking its inability and unwillingness to reduce its CO2 emissions within a timeframe compatible with the climate emergency by resorting to carbon offsetting.

END NOTES & LITERATURE

- 1 IATA (Nov. 2022): <https://bit.ly/CORSIA-fact-sheet>
- 2 ICAO (7 Oct. 2022): <https://bit.ly/ICAO-net-zero>
- 3 ICAO (2023): <https://bit.ly/CORSIA-overview>
- 4 ICAO (2022): <https://bit.ly/CORSIA-FAQs>
- 5 Washington Post Live “Buttigieg and the United Airlines CEO on state and future of aviation industry”:
<https://www.youtube.com/watch?v=b9x67JN-9hQ> (quote taken from 45 - 46 mins)
- 6 Calel R. et al. (2021): <https://bit.ly/3NkAioN>
- 7 The Guardian (2023): <https://bit.ly/43CB5HA>
- 8 Carboncredits.com: <https://carboncredits.com/carbon-prices-today/>
- 9 T&E (2022): <https://bit.ly/CORSIA-coverage>
- 10 Since CORSIA was adopted in 2016, ICAO has committed in 2022 to a “long-term aspirational goal of net-zero emissions by 2050” (i.e. Carbon neutrality), but CORSIA’s ‘carbon-neutral growth’ objective remains unchanged.
- 11 Calel R. et al. (2021): <https://bit.ly/3NkAioN>
- 12 The Guardian (2023): <https://bit.ly/43CB5HA>
- 13 Costanza, R. et al (1997): https://bit.ly/Costanza_R
- 14 Banking Nature (2015): <https://youtu.be/y1EdZeRHgbM>
- 15 Paulson Institute (2020): <https://bit.ly/FinancingNature>
- 16 REDD-Monitor (2020): <https://bit.ly/redd-monitor>
- 17 IETA (2019): <https://bit.ly/NCS-Initiative>
- 18 In These Times (2019): <https://bit.ly/DivorcedReality>
- 19 NBS Guidelines: <https://bit.ly/NBSguidelines>
- 20 REDD-Monitor (2019): <https://bit.ly/ScopeSchemes>
- 21 Heathrow Media Centre (2018): <https://bit.ly/UKpeatlands>
- 22 World Rainforest Movement (2020): <https://bit.ly/WRM>
- 23 Stay Grounded (2019): <http://bit.ly/DegAvR>
- 24 Stay Grounded (2021): <https://bit.ly/JustTransitionAviation>

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[4] Climate emissions from aviation

Aviation, decarbonisation and climate change

Research Briefing for House of Commons Library 20 September, 2021- **Summary**

<https://commonslibrary.parliament.uk/research-briefings/cbp-8826/> (full report)

The aviation industry has been under long-term pressure to reduce its contribution to climate change – from governments, stakeholders and the public. This briefing paper provides an overview and analysis of UK and international policies to decarbonise the aviation sector, including market-based measures, technological solutions and demand management.

In 2019, domestic and international aviation accounted for around 8% of UK CO2 equivalent emissions. While the Covid-19 pandemic has caused an unprecedented short-term reduction in demand for air travel, many within the aviation industry expect demand to recover to 2019 levels by 2023-24 and to continue to grow thereafter, though there are uncertainties.

Decarbonising aviation and “net zero”: the challenge

Under the *Climate Change Act 2008* the UK is required to have net-zero greenhouse gas emissions by 2050. While the target does not explicitly cover emissions from international aviation and shipping, these emissions have been taken into account by setting aside “headroom” within the carbon budgets and the **Committee on Climate Change has recommended** that emissions from the UK’s international aviation be formally included in the net-zero target. In 2021, the Government set the sixth carbon budget (covering the period 2033-2037). This budget **includes international aviation and shipping emissions for the first time**.

However, **aviation is widely recognised as both one of the most carbon-intensive forms of transport and one of the most difficult to decarbonise**. This means that **aviation could well be the largest contributor to UK greenhouse gas emissions by 2050**, particularly if demand continues to grow.

Government policy and international initiatives

In July 2021, the Government published its Transport Decarbonisation Plan. This was accompanied by its Jet Zero Strategy consultation. The Transport Decarbonisation Plan consolidates a number of pre-existing policies across the transport sector, including, “Accelerating aviation decarbonisation, with a view to reach net-zero aviation emissions by 2050.” The Jet Zero Strategy meanwhile sets proposals for how the Government will achieve its net zero aviation target. It proposes policies that span five different measures that aim to:

- improve the efficiency of our aviation system
- accelerate the development and deployment of sustainable aviation fuels
- support the development of zero emission flight
- ensure we use markets to drive down emissions in the most cost-effective way
- influence the behaviour of consumer.

The UK Government, the EU and international bodies, and the aviation industry have proposed a number of initiatives to mitigate emissions from aviation, including:

- **Market-based measures** such as the United Nations CORSIA program, EU Emissions Trading System (EU ETS) and the UK ETS;
- **Measures to improve the fuel efficiency of conventional aviation** such as through changes to aircraft, air traffic management, airspace modernisation and ground operations at airports; and
- **Measures to promote the development and use of low carbon technologies** such as novel fuels (such as biofuels) and aircraft (such as hybrid-electric aircraft).

What about demand for flying?

There have also been calls for more action to limit the growth in demand for flying. Some have argued for new tax policies to discourage flying and for measures to influence individual consumer choices. At the 2020 Citizen’s Assembly on Climate Change participants “resoundingly rejected” industry projections for a future in which air passenger numbers would rise by 65% between 2018 and 2050, saying that it would be “counter-productive” for tackling climate change.

The Government and aviation industry say that there are compelling economic arguments in favour of continued growth. **But the government’s all-party Climate Change Committee disagrees. And see [6]**

[5] World on brink of five ‘disastrous’ climate tipping points, study finds Thu 8 Sep 2022

Giant ice sheets, ocean currents, permafrost regions may already have passed point of irreversible change

<https://www.theguardian.com/environment/2022/sep/08/world-on-brink-five-climate-tipping-points-study-finds>

Damian Carrington, Environment editor



The collapse of the Greenland ice cap is one of the tipping points that may already have been passed.

Photograph: Ulrik Pedersen/Getty Images

The climate crisis has driven the world to the brink of multiple “disastrous” tipping points, according to a major study. It shows **five dangerous tipping points may already have been passed** due to the 1.1C of global heating caused by humanity to date.

These include the **collapse of Greenland’s ice cap**, eventually producing a huge sea level rise, the **collapse of a key current** in the north Atlantic, disrupting rain upon which billions of people depend for food, and an abrupt **melting of carbon-rich permafrost**.

At 1.5C of heating, the minimum rise now expected, four of the five tipping points move from being possible to likely, the analysis said. Also at 1.5C, an additional five tipping points become possible, including **changes to vast northern forests** and the **loss of almost all mountain glaciers**.

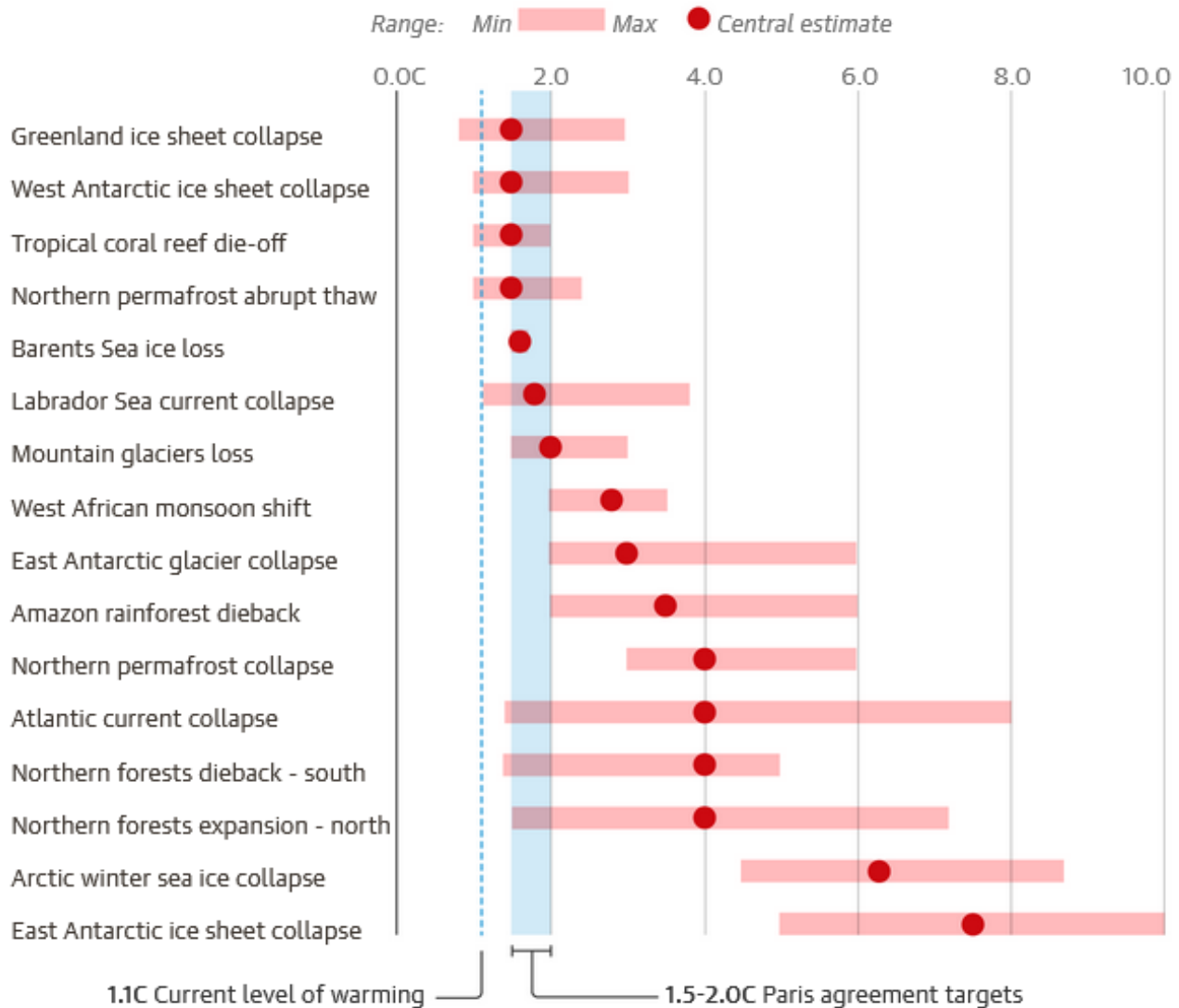
In total, the researchers found evidence for **16 tipping points**, with the final six requiring global heating of at least 2C to be triggered, according to the scientists’ estimations. The tipping points would take effect on timescales varying from a few years to centuries.

“The Earth may have left a ‘safe’ climate state beyond 1C global warming,” the researchers concluded, with the whole of human civilisation having developed in temperatures below this level. **Passing one tipping point is often likely to help trigger others**, producing cascades. But this is still being studied and was not included, meaning the analysis may present the minimum danger.

Prof Johan Rockström, the director of the Potsdam Institute for Climate Impact Research, who was part of the study team, said: “The world is heading towards 2-3C of global warming.

The risk of climate tipping points is rising rapidly as the world heats up

Estimated range of global heating needed to pass tipping point temperature



Guardian graphic. Source: Armstrong McKay et al, Science, 2022. Note: Current global heating temperature rise 1.1°C Paris agreement targets 1.5-2.0°C

“This sets Earth on course to cross multiple dangerous tipping points that will be disastrous for people across the world. To maintain liveable conditions on Earth and enable stable societies, we must do everything possible to prevent crossing tipping points.”

Dr David Armstrong McKay at the University of Exeter, a lead author of the study, said: “It’s really worrying. There are grounds for grief, but there are also still grounds for hope.

“The study really underpins why the Paris agreement goal of 1.5°C is so important and must be fought for.

“We’re not saying that, because we’re probably going to hit some tipping points, everything is lost and it’s game over. Every fraction of a degree that we stop beyond 1.5°C reduces the likelihood of hitting more tipping points.”

Recent research has shown signs of [destabilisation in the Amazon](#) rainforest, the loss of which would have “profound” implications for the global climate and biodiversity, as well as the [Greenland ice sheet](#) and the [Gulf Stream currents](#) that scientists call the Atlantic meridional overturning circulation (Amoc).

A recent report by the Intergovernmental Panel on Climate Change said the risk of triggering climate tipping points becomes high with 2C of global heating.

The analysis, [published in the journal Science](#), assessed more than 200 previous studies on past tipping points, climate observations and modelling studies. A tipping point is when a temperature threshold is passed, leading to unstoppable change in a climate system, even if global heating ends.

The nine global tipping points identified are: the collapse of the [Greenland](#), west Antarctic and two parts of the east Antarctic ice sheets, the partial and total collapse of Amoc, Amazon dieback, permafrost collapse and winter sea ice loss in the Arctic.

The assessment of the Amazon tipping point did not include the effects of deforestation. “The combination of the warming and the deforestation could bring that a lot sooner,” said Armstrong McKay.

A further seven tipping points would have severe regional effects, including the [die-off of tropical coral reefs](#) and changes to the west African monsoon. Other potential tipping points still being studied include the [loss of ocean oxygen](#) and major shifts in the Indian summer monsoon.

The scientists define crossing a tipping point as “possible” when its minimum temperature threshold is passed and “likely” beyond the central threshold estimate.

Prof Niklas Boers, at the Technical University of Munich, said: “The review is a timely update on the Earth’s potential tipping elements, and the threat of tipping events under further warming is real.”

He added that much more research was needed to narrow down the critical temperature thresholds, with current estimates remaining highly uncertain.

Prof Thomas Stocker, at the University of Bern, said: “The science on tipping points is far from done – it has barely begun – and much better models are needed to address the question [of] what warming level is critical for which tipping point.”

A special IPCC [report on climate tipping points](#) was proposed in May by the Swiss government.

Prof Tim Lenton at the University of Exeter, a co-author of the analysis, said: “Since I first assessed tipping points in 2008, the list has grown and our assessment of the risk they pose has increased dramatically.

“Our new work provides compelling evidence that the world must radically accelerate decarbonising the economy. To achieve that, we need to trigger [positive social tipping points](#).”

[6] Airport expansion does not boost UK growth or productivity – report

Response to LBC comment ‘flying is good for the economy’ – evidence to the contrary

New Economics Foundation report (Guardian)

<https://www.theguardian.com/world/2023/jul/17/airport-expansion-no-boost-productivity-growth-report>

Researchers argue that industry claims about benefits of more flights to be taken with pinch of salt

Guardian 17 July 2023

Claims that airport expansion will help grow the UK economy should be treated with scepticism, according to a report that finds air travel does not increase productivity or growth.

Declining business travel and lower wages in aviation undermine claims made by the industry for the value of increased air connections, say researchers at the New Economics Foundation.

A report by the NEF due to be published this week says that despite booming air travel in the past few decades, only one in 12 flights in 2022 was taken for business purposes – half the proportion in 2013 – while the number of associated jobs was lower than in 2007. Wages fell faster in real terms between 2008 and 2022 than in any other UK sector.

Far more passengers are flying on holiday abroad than into the UK, with the NEF report finding a **£32bn “travel deficit” in net spending between outbound and inbound tourism in 2019.**

Airports around the UK are seeking to expand, despite the recommendation of the Climate Change Committee that there should be no additional capacity to meet the country’s 2050 net zero targets.

Britain’s biggest airport, Heathrow, has permission to build a third runway, although it says the plans are under review. Last week, Gatwick submitted an application to develop a second runway for full-time use. London City, Luton and Bristol are among other airports planning to expand, while terminal redevelopment at Manchester and Birmingham will also bring more passengers.

Gatwick says its growth plans would “inject £1bn into the region’s economy every year”, while Bristol claims that extra flights will create up to 5,000 jobs in the region and provide a £430m economic boost. According to government-endorsed figures in the Airports Commission’s report, Heathrow’s runway would add £61bn in growth over six decades.

But the NEF report suggests that since the government’s previous comprehensive assessment of the economics of air transport growth, “strong evidence, grounded in government data and academic research, suggests that the economic merit of expanding the UK’s air transport sector has diminished considerably”.

It recommends that the government pause all airport expansion until it has conducted a review of the economic evidence and compatibility with policies on climate change and levelling up.

Dr Alex Chapman, a senior researcher at the NEF, said: “[The government has] let the air travel industry balloon in size, based on dangerously outdated claims that it is boosting the UK’s economy. The reality is declining business air travel, declining wages for air travel workers, declining job numbers, and declining domestic tourism spending in the UK. And that’s before you consider the rise in noise, air pollution and dangerous emissions.”

He said the beneficiaries were “the highly paid executives, the private shareholders and the wealthy minority of ultra-frequent flyers”.

[7] “The only way to avoid aviation emissions is not to fly”

– Aviation Environment Federation (Guardian) 22 Jun 2021

<https://www.theguardian.com/world/2021/jun/22/uk-aviations-carbon-plan-allows-rising-emissions-from-planes>

The UK aviation industry has [announced carbon targets](#) that allow emissions from planes to increase into the mid-2030s. It says buying carbon offsets will result in overall emissions falling compared with 2019 levels.

The move was welcomed by government ministers. But environmental groups said the industry was “trying to have its cake and eat it” and said only reducing flights would guarantee the carbon cuts needed to tackle the climate crisis. Aviation caused 7% of the UK’s emissions in 2018.

The UK’s climate change laws use 1990 as a reference year and, compared with this, the aviation industry is planning for emissions to be about double by 2030. The sector’s peak year for emissions was 2019, which is the year it has chosen to use.

The industry said sustainable aviation fuels (SAF), electric and hydrogen aircraft, and changes to flight routes to make them shorter would reduce the emissions from flying in the future. But under the sector’s plan, emissions would rise in the mid-2030s because of increasing numbers of flights. Paying other sectors to remove CO₂ from the air cuts emissions by 15% by 2030 and 40% by 2040, compared with the peak year of 2019.

But compared with the 1990 baseline, when aviation emissions were much smaller, the level of future emissions targeted by the aviation industry equates to an increase of approximately 105% in 2030 and 45% in 2040, according to Simon Evans at the Carbon Brief thinktank.

Matt Finch, at the Transport & Environment campaign group, said: “The UK aviation industry is trying to have its cake and eat it, by trying to pay its way out of its emissions addiction via offsets instead of targeting the real-world emissions cuts that increasing SAF levels and zero emission aircraft would bring.

“UK aviation is optimistically relying on removals technologies which simply do not exist in the UK currently,” he said. “The 2050 end point for UK aviation should be to get its total emissions as close to zero as possible. Instead it still plans on emitting well over half of what it does today. That is simply not ambitious.”

Cait Hewitt, at the Aviation Environment Federation, said: “To make net zero a reality we need interim targets. But the industry’s plan is to allow the emissions from aircraft not just to rebound after the pandemic but actually to continue growing, peaking in the mid 2030s.”

“Until airlines start paying for and delivering carbon capture technology, the only way to avoid aviation emissions is not to fly,” she said. “The government’s net zero aviation consultation will need to recognise the need to go beyond technology and include measures to limit aviation demand and airport capacity. It will not be OK to allow aviation demand and emissions to grow as we come out of the pandemic in the hope that future fuels and technologies will save the day.”

But Adam Morton, chair of the industry’s Sustainable Aviation group said: “The [targets are] ambitious but achievable, and require meaningful cooperation between industry and government, as well as the necessary policies and funding to ensure the UK can build a world-leading SAF industry, create new clean aircraft, and modernise British airspace.” The group said aviation provided major economic and social benefits to the UK. *But see [6] above.*

[8] Luton airport expansion: Plans to upgrade three Hitchin roundabouts to improve

traffic flow including Three Moorhens and Upper Tilehouse Street 3 Oct 2023

https://hitchin.nub.news/news/local-news/luton-airport-expansion-plans-to-upgrade-three-hitchin-roundabouts-to-improve-traffic-flow-including-three-moorhens-and-upper-tilehouse-street-202167?fbclid=IwAR3ZnwSKKlyT9tHkQQAWnh3fqbcrtB1Qbm9LQTJkpJ19Q--UB6_uWoqvalc

Facing questions from planning inspectors, Luton Rising – the airport's parent company – said its plans for Hitchin will "improve traffic flow" in the town.

But the panel of inspectors, known as the Examining Authority (ExA), warned it may not have enough information to form a view about an expanded airport's impact on Hitchin.

Jagjit Riat, a transport planner on behalf of Luton Rising, told the ExA there are three main junctions which would need work to support more passengers.

"They are existing roundabouts which are relatively constrained in terms of what we can do with them," Mr Riat said at the hearing on Thursday, September 28. We believe the highway works we are proposing enable better traffic flow through the network."

Hitchin lies between the A1(M) motorway and London Luton Airport. Transport planners simulated how traffic would behave in the region – as far away as Letchworth, Sandy, Aylesbury and South Mimms services.

In Hitchin, the junctions "requiring mitigation" include the A602 Three Moorhens pub roundabout, where the A-road and Hitchin Hill could be widened to two lanes on the roundabout approaches. The two-lane approaches to the A602 Park Way and A505 Upper Tilehouse Street roundabout could be lengthened.

[Nothing was said about the destruction of both mature and newly planted trees near the Three Moorhens pub, or the need to remove then replace a well-used footbridge, or what N Herts DC thinks of these ideas.]

The Upper Tilehouse Street mini-roundabout with Pirton Road would also see changes – with a two-lane approach to the junction for A505 Luton-bound traffic.

Elsewhere in Hertfordshire, Luton Rising's team indicated it could support "traffic calming" in Whitwell, Great Offley, Breachwood Green and Tea Green.

ExA: 'Will these works solve Hitchin's traffic woes?'

A 54-page traffic modelling document forecasts what could happen on local roads in two scenarios. The first looks at what could happen if Luton Airport remains a similar size, and very few highways works take place. In this case, planners expect drivers will make 20,257 journeys on the A505 Upper Tilehouse Street in Hitchin by 2039. **[Nothing was said about benefits of reduced traffic flows if airport traffic is reduced.]**

The second scenario looks at what could happen if Luton Airport does expand to accommodate 32 million passengers per annum (mppa) – up from today's 18mppa – and completes the highways works. The model shows the number of average daily journeys on the same stretch of road would rise to 22,083 by 2039 – a nine per cent increase.

But there is no study of what could happen if Luton Airport expands and highways works do not take place. Without this information, there are questions over whether highways "improvements" will be effective, the ExA suggested. The panel asked: "How do we know whether what you are proposing is going to solve problems?"

The ExA tasked Luton Rising with coming up with an answer during the course of the planning process. Mr Riat said there are "different iterations of design" which the team can go through to come up with more detailed answers.

[9] FoE pollution report on Luton *Luton Today* 11 Oct 2023

<https://www.lutontoday.co.uk/news/people/warnings-over-dangerously-high-air-pollution-in-luton-and-dunstable-4368403?fbclid=IwAR1VJEIj2H51iW1wXv1NuDmpdanINdhdkTjegR7kc4eHVbD-fvJRq2dANOU>

Warnings over 'dangerously' high air pollution in Luton and Dunstable

Dangerously high air pollution in all Luton neighbourhoods with Dunstable and Houghton Regis also impacted

All neighbourhoods in Luton are exposed to dangerously high air pollution, a new analysis has found.

Analysis from Friends of the Earth, an environmental organisation, shows more than 36.1 million people in England and Wales, including 8 million children, were breathing air with hazardous levels of nitrogen dioxide in 2022.

The data uses information from the census to divide the country into over 33,000 neighbourhood areas, each with between 1,000 and 3,000 people living there.

The analysis revealed every neighbourhood in Luton was exposed to air pollution exceeding the [World Health Organisation](#) recommended safety limit.

This meant approximately 214,000 people were breathing polluted air in the area in 2022, which has been linked to up to 36,000 premature deaths every year in the UK.

There were 78 schools in the areas of Luton where the dirty air was recorded, affecting 58,000 children.

In neighbouring [Central Bedfordshire](#), which includes [Dunstable](#) and [Houghton Regis](#), more than a third of neighbourhoods are exposed to dangerously high air pollution.

The analysis revealed 60 neighbourhoods in Central Bedfordshire (38)% were exposed to air pollution exceeding the World Health Organisation recommended safety limit.

It comes as the Government announced it was pushing back the deadline for several environmental policies such as the ban on sales of new diesel and petrol cars, which are significant contributors to greenhouse gas emissions.

Nitrogen dioxide can affect the respiratory system and is associated with higher mortality rates. It is especially dangerous for children as it increases their risk of respiratory infection and may lead to poorer lung function in later life.

Friends of the Earth's head of policy, Mike Childs, said: "It's a national scandal that millions of people across the country live in areas where air pollution is double the safety level, with children, the elderly and those with pre-existing health conditions most at risk."

Areas where the recommended limit was exceeded twice accounted for 9% of all neighbourhoods, with 5.9 million people breathing dangerously polluted air.

Further figures by the Royal College of Physicians show the issue costs the UK economy £20 billion annually through NHS costs and workdays lost due to illness.

Mr Childs added: “Rishi Sunak’s back-peddalling on measures aimed at tackling poor air quality – such as funding better cycling provision and financial support and incentives to switch to cleaner cars – will simply prolong people’s misery.

“Most of the areas with really bad air pollution are in Labour constituencies, so if Keir Starmer wins the next election, he will be under intense pressure to give this issue the priority it deserves.”

A Department for Environment, Food and Rural Affairs spokesperson said: “This data makes comparisons to WHO guidelines which are intended to inform the setting of air quality standards and are not ready-made targets for adoption. Natural and transboundary sources alone mean that even if all humans left the South East it would still have levels higher than the WHO guideline.

“We absolutely recognise the importance of protecting people from air pollution – which is why we have set stretching new targets for fine particulate matter, and are taking comprehensive action set out in the Environmental Improvement Plan 2023 to improve air quality for all.”

[10] Climate Emergency UK scorecards report 27% 18 Oct 2023

Demonstrates Luton’s lack of ability or commitment to introduce vital climate measures

<https://councilclimatescorecards.uk/councils/luton-borough-council/>

Climate Emergency UK assessed all UK councils on the actions they've taken towards net zero. The Scorecard assessment consists of 91 questions or less, depending on council type, across 7 different sections, created in consultation with over 90 different organisations and individuals. Each council was marked against these criteria and given a right to reply before the scores underwent a final audit. This work was completed between January and August 2023. Unless otherwise stated, council climate action from 1st January 2019 up until 31st March 2023 was assessed. Councils have been scored across seven sections, each covering the important actions that councils can be taking towards net zero. The marks within these sections add up to make up the council's overall score. A chart allows comparison with other councils.

Luton received a well below average report (27%). Luton scores well on biodiversity, but if airport expansion were approved, the council would fell 2 hectares of trees in Wigmore Park and thousands more along Airport Way if widened.

Councils receive a lower score if they support further fossil fuel infrastructure including airports. Luton is particularly poor on transport and pollution (exceeding safe WHO guidelines). This acts as a strong recommendation against a plan to increase plane journeys, as most passengers and staff, as now, would arrive by road, adding both to climate emissions and pollution, which is already bad (*see 4*).