

Reading 1

Should We Fly Less in an Age of Climate Change?

According to ongoing [research](#) by the Environmental and Energy Study Institute, aviation accounts for about 2.4% of total human-caused climate change. That may not sound like much, but for those who do fly, the impact adds up fast. One overseas or cross-country flight alone is likely to account for the largest chunk of your personal “carbon footprint,” or the total emissions you generate.

A roundtrip flight from London to San Francisco typically releases the equivalent of 5.5 tons of carbon dioxide per passenger. The BBC [reported](#) that this amounts to about half the average annual carbon footprint of someone living in the UK. For people in the United States, too, taking even a few flights per year can have a major environmental impact.

Staff writer Umair Irfan covered the impact of flying on climate change for a November 2019 article in Vox:

If you’re a regular flyer, odds are that your biggest single source of greenhouse gas emissions each year is air travel. It likely dwarfs the footprint of all the lights in your home, your commute to work, your hobbies, and maybe even your diet.

“Euro for euro, hour for hour, flying is the quickest and cheapest way to warm the planet,” said Andrew Murphy, aviation manager at Transport & Environment, a think tank in Brussels.

That’s alarming because humanity can only emit so much more carbon dioxide to limit warming this century to 1.5 degrees Celsius, the more ambitious goal under the 2015 Paris climate agreement. An international team of researchers last year reported that meeting this target would require [halving global emissions by as soon as 2030](#), reaching net-zero emissions by 2050, and even getting to negative emissions thereafter.

Right now, the world is flying in the opposite direction. [Global emissions](#) reached a record high last year, and so did atmospheric concentrations of [carbon dioxide](#).

Air travel is a big reason why. A one-way flight across the Atlantic from New York City to London emits one ton of carbon dioxide per passenger. There are upward of [2,500 flights](#) over the North Atlantic every day.

And that’s just one air corridor. Around the world, aviation emits about 860 million metric tons of carbon dioxide every year.... Those numbers are poised to soar. The [International Civil Aviation Organization](#) projects that emissions from air travel will grow between 300 and 700 percent by 2050 compared to 2005 levels.

Those emissions in turn stand to have a devastating impact. The planet has already warmed by 1 degree Celsius since the dawn of the Industrial Revolution, which has caused rising seas and more frequent and intense heat waves. Every metric ton of carbon dioxide emitted leads to 3 square meters of [Arctic sea ice loss](#). Aircraft also emit several other pollutants at altitude, like

particulates, sulfur compounds, and nitrogen compounds, which have an additional warming effect. In some parts of the Arctic under busy air routes, these pollutants combined contribute [one-fifth of the warming](#).

<https://www.vox.com/the-highlight/2019/7/25/8881364/greta-thunberg-climate-change-flying-airline>

The impact of air travel on the climate is only growing. Total passenger numbers are [projected](#) to double in the next 20 years, and scientists have [warned](#) that by 2050 emissions from commercial flights could triple.

In light of these trends, a variety of climate activists have drawn attention to the issue of air travel, including 19-year-old [Greta Thunberg](#)—a Swedish student who, starting in 8th grade, began refusing to go to school on Fridays to protest the inaction of global leaders on climate change. That sparked a global School Strike for Climate movement, in which students around the world skipped school on Fridays to protest climate inaction. Thunberg has publicly [refused](#) to partake in air travel whatsoever, and she has encouraged others to do the same.

The work of Thunberg and other activists has led to the growth of an anti-flying or “flight shame” movement, know as [flygskam](#) in Swedish. The movement began in 2017 when high-profile Swedish celebrities, including Olympic athletes and opera singers, publicly [announced](#) they would stop flying to reduce their environmental impact. Public awareness of this issue continued to grow, leading some to [post](#) on social media about swapping trains for planes, and others to join a group called [We Stay on the Ground](#) in which members pledge to give up flying for a year.

Reporting for CNN in 2019, journalist Isabelle Gerretsen interviewed two people who have given up flying altogether:

Roger Tyers, 37, spent a month on board trains and over \$2,500 – almost triple the cost of a return flight – to travel to the Chinese port city Ningbo for academic research in May.

It was the climate crisis, not a love of trains, that drove the sociologist to choose this complicated route over a return flight. Tyers told CNN that he felt compelled to stop flying when [UN climate experts warned](#) last year that the world has less than 11 years to avoid catastrophic levels of global warming.

Tyers is not the only person to shun air travel in response to climate change. Thousands of people worldwide have publicly pledged to stop flying, including teenage activist Greta Thunberg, who has inspired youth climate protests around the world.

They say there is no justification for flying in a world where governments have declared climate emergencies and scientists have warned of global warming's devastating impacts on [human health](#) and on the future of [countless species](#).

Activist Maja Rosen launched the "Flight Free" campaign in Sweden in 2018 with the aim of encouraging 100,000 people not to fly for one year....

The campaign sparked a wave of social media posts showing people traveling by train, accompanied by the hashtags #flygskam and #tågskryt, which mean "flight shame" and "train brag" in Swedish....

Rosen, who stopped flying 12 years ago, says the collective pledge helps combat the sense of hopelessness many people feel when it comes to tackling climate change.

"One of the problems is that people feel there's no point in what you do as an individual. The campaign is about making people aware that if we do this together, we can actually make a huge difference," she said.

<https://www.cnn.com/travel/article/train-travel-flying-climate-scn-intl-c2e/index.html>

While flygskam has led to an [increase](#) in train travel in Europe, and a reduction of flights in Sweden, it has not greatly impacted aviation patterns in the United States. These remain a serious concern for those worried about global warming.

Given that [less than 20% of people](#) in the world have ever flown on an airplane, however, reducing the toll of aviation on the environment will impact some more than others.

For Discussion

1. How much of the material in this reading was new to you, and how much was already familiar? Do you have any questions about what you read?
2. According to the reading, what is the impact of flying on climate change? What are some of the impacts of flying on the environment?
3. What do you think of the [flygskam](#) or "flight shame" movement?
4. Does it surprise you that less than 20% of people in the world have ever flown on an airplane? Why or why not?
5. Have you traveled by airplane? If so, how often have you flown? Would you consider reducing the number of flights you take or researching alternate forms of travel?
6. Do you think there are other viable alternatives to flying in the United States?

Extension Activity

Using the website https://co2.myclimate.org/en/flight_calculators/new, calculate the emissions for one flight you would like to take. Are there any other ways to get there besides air travel? What are the pros and cons of taking a flight to your chosen destination?

Reading Two

Collective Solutions to the Problem of Air Travel

Given that air travel is a significant driver of climate change, how should we respond as a society?

While some people believe that personal decisions to fly less can be an effective response, others contend that we need public policy and collective action to address the issue, and that the burden of limiting emissions from the airline industry cannot be placed solely on individuals.

Writing for Vogue in July 2022, reporter Sophia Li discussed this issue:

The average person can't – like [Greta Thunberg](#) – catch a ride with a [team of professional sailors](#), led by the prince of Monaco, in a carbon-neutral yacht every time we want to cross an ocean. The solution may not necessarily be omitting flying altogether but thinking more about frequency and intention when we do fly.

“It's important to challenge the myth that being a climate activist somehow means you can't fly in a plane or eat meat,” [Jade Begay](#), climate justice director of [NDN Collective](#) and Indigenous rights activist tells Vogue. “These false dichotomies are unhelpful and honestly distract from the bigger picture, which is that individuals are not responsible for the largest contributions to carbon emissions and climate change, it's industry.”

So what's the best way to press fight the industry? “By creating collective power, but if we are out here shaming each other for flying or not driving a Tesla, then we are literally turning people away from joining the climate movement,” Begay comments.

Climate activist and founder of non-profit [Climate Cardinals](#), [Sophia Kianni](#), agrees. “It's important to know that the very concept of the carbon footprint was invented by an ad agency hired by fossil fuel companies to distract people from the huge amounts of pollution that big oil and gas companies produce,” she says. “I don't believe in absolving personal responsibility but those who pollute the most have an obligation to reduce the most.”

Begay says that “flying does not make anyone less of a climate activist, adding: “That said, we probably shouldn't be flying every day or even every month.” The campaigner would prefer not to fly but in order to be at the table to speak truth to power, travel is part of the equation....

[Dominique Palmer](#), climate justice activist and organizer for Fridays for Future, explains how she prioritizes slow travel in a bid to make the most of each flight she takes. “Instead of going to as many places as possible, let's limit that and stay in each place longer. That's when you really connect with the community and culture,” she explains.

<https://www.vogue.co.uk/arts-and-lifestyle/article/flying-environment>

When it comes to air travel, it is important to note that not everyone's impact is equal. According to

[data](#) collected by Stefan Gössling, professor and tourism researcher at Western Norway Research Institute, nearly 89% of the world's global population rarely flies, and half of global aviation emissions come from 1% of the world's global population. Moreover, frequent fliers and individuals who travel by private jet are responsible for far more carbon dioxide emissions than the average person from an industrialized nation who travels on a commercial plane once or twice a year.

Writing for Novara Media in July 2022, columnist Eli Folan argued against the use of private jets by the mega-rich. Folan wrote:

Super-rich celebrity Kylie Jenner is no stranger to controversy, but a [recent Instagram post](#) made people hot with rage in a way she probably didn't intend.

Jenner posted a picture of the two private jets owned by her and her partner Travis Scott with the caption, "you wanna take mine or yours?" – a jokey reference to the fact that the couple own a private plane each...

One respondent wrote, "Why do I have to limit my meat consumption and use paper straws while the 1% gets to pump tons of carbon into the atmosphere for a day trip to Palm Springs?", and got over 61,000 likes.

The couple are hardly alone: outgoing British prime minister [Boris Johnson](#) used a private plane to fly from London to Blackpool earlier this year; Jeff Bezos flew to COP26 [a global climate conference] in a private jet; and Elon Musk has [reportedly ordered a new private jet](#) worth \$78 million.

These cases, and many others, drew attention not only to the extraordinary wealth of the elite, but also to the astonishing rate at which the jet-setting lifestyle of the billionaire class is pouring carbon into our atmosphere.....

This matters because private jets are reportedly more carbon-intensive than commercial flights. Within Europe, the Transport and Environment [campaign group has estimated](#) that private jets are on average [ten times more carbon intense than commercial planes](#)....

The average private jet owner has a net worth of [over \$1 billion]. The consequence of all these international and economic inequalities is that just 1% of people cause a stunning [50% of global aviation emissions](#).

<https://novaramedia.com/2022/07/22/private-jet-use-shows-why-we-must-abolish-billionaires/>

One public policy solution that would acknowledge the inequalities of air travel would be to tax people who fly frequently. The British group called [A Free Ride](#) is calling for fliers to be taxed progressively. They propose that everyone should get one tax-free one-way flight each year. A tax would kick in at a low rate for the return flight, and the tax would then ratchet up for each additional flight that year.

"We're not trying to prevent ordinary people from taking their hard-earned holiday," said Leo Murray, the group's founder, told New York Times reporters Niraj Chokshi and Clifford Krauss in June 2021. "The

annual family holiday isn't the source of the problem here. We can still tackle climate change, and everyone can still go on holiday," he said. "We're talking about a small wealthy elite group of air travelers."

Chokshi and Krauss go on to [report](#):

... Just this month, [a Britain-based commission recommended](#) banning air miles and frequent flier programs so that airlines do not "incentivize excessive flying." The report cites data showing frequent fliers "strongly tend to be wealthier and less price-sensitive," and recommends they should "incur increasingly powerful taxation to discourage additional flights."

Industry groups oppose such measures. "U.S. airlines are committed to reducing carbon emissions even further," said Carter Yang, a spokesman for the airline industry group Airlines for America. "That effort would be harmed, not helped, by proposals that would siphon away into government coffers the very funds needed to continue investing in new, more fuel-efficient aircraft, sustainable alternative aviation fuels," and other innovations, he said.

The urgency isn't lost on the industry. Scott Kirby, the chief executive of United Airlines, speaks often about the need to address climate change, but even he acknowledges that it will be difficult for the industry to clean up its act. He wants United and other airlines to try different things and see what works.

"It is the biggest long-term issue that our generation faces. It is the biggest risk to the globe," Mr. Kirby said in a recent interview. "There are plenty of things we can compete on, but we all ought to be trying to make a difference on climate change."

<https://www.nytimes.com/2021/05/28/business/energy-environment/airlines-climate-planes-emissions.html>

Even though a small percentage of people are responsible for a large share of emissions, once greenhouse gases are in the atmosphere, they impact all of us. Given the devastating impacts the climate crisis is already causing, it makes sense to reconsider every aspect of our lives, including the way we travel.

For Discussion:

1. How much of the material in this reading was new to you, and how much was already familiar? Do you have any questions about what you read?
2. Some people are responsible for a far greater share of carbon emissions from air travel than others. Were there any statistics or examples of inequality in air travel that stood out for you in the reading?

3. Besides having individuals make the personal decision to fly less, what are some other ideas for reducing emissions from aviation? What do you think of the idea of a tax on airline flights that targets frequent flyers and owners of private jets?
4. Activist Sophia Kianni argues that sometimes we focus too much on individual actions and too little on the systemic problems created by corporations. Do you agree? If so, why do you think this happens?
5. What role do you think aviation companies should play in reducing or limiting carbon emissions? The industry opposes taxation on flights, arguing that airlines should be allowed to find their own solutions to carbon emissions, such as research into less polluting fuels. What do you think of their position?
6. Some young advocates advocate for taking fewer flights and staying longer in destinations, participating in so-called “slow travel.” What do you think about these ideas? Would the idea of “slow travel” affect you at all?
7. What forms of travel other than air appeal to you? Why?