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Private Jet Regulation



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NOTIFICATION FROM AIRPORT

Globally, aviation is responsible for 3.5% of human-driven climate change and 2.4% of global carbon outputs; **4% of carbon emissions from aviation are due to private jet use** (Collins, Ocampo, & Thomhave, 2023). Traveling by airplane is **the least environmentally friendly method of transportation**, with an average of 1/4 tonne of CO2 equivalent per passenger per hour of flying (Carbon Independent) on a commercial plane. For private jet passengers, this number is at least ten times higher. Private jet usage has rapidly increased in the last two decades, with the amount of private jets globally growing from 9,895 in 2000 to 23,122 in mid-2022, an almost **133% increase** (Air Industry Review). Despite their rapid growth within the aviation industry, negative impacts on the environment, and heavy reliance on taxpayer funded services, private jets go relatively unchecked and untaxed. The following policy memo will analyze existing regulations on private jets and provide potential solutions to address the shortcomings in current private jet regulation.

PROBLEM DEFINITION

The aviation industry releases a substantial amount of greenhouse gasses into the atmosphere that contribute to global warming. Private jets “amount to just 4 percent of aviation’s emissions, which in turn are 3.5 percent of all emissions” (Phillips, 2023; Collins, Ocampo, & Thomhave, 2023). Just because the overall percentage is low doesn’t mean that private jets should avoid regulation. Private jets emit **at least ten times more pollutants than commercial planes per passenger** (Collins, Ocampo, & Thomhave, 2023). Technological advancements must be made to significantly decrease carbon emissions in the aviation industry. However, there is limited progress in e-planes and the necessary battery technology to reduce the impact of carbon emissions; additionally, long-haul flights cannot be fully electrified until batteries are more energy efficient than jet fuel. Until more sustainable aviation options become commercially available, the government must make efforts to curb emissions.

In addition to emitting green house gasses, private jets are the ultimate symbol of economic inequality. The average private jet owner’s net worth is **1.4 billion dollars** (Phillips, 2023); other estimates suggest a median net worth of between 140 and 190 million (Collins, Ocampo, Thomhave, 2023). The ultra-rich use private jets the same way the rest of us hop on a bus or order an Uber. Private jet flights are often extremely short, with the average flight times for private jet users being just 71.77 minutes with an average of 66.92 miles traveled per flight (Yard Digital PR Team, 2022). In 2022, Kylie Jenner drew public outrage for her 17-minute flight (Milman, 2022). Industry estimates suggest that approximately **40% of private jet flights are ‘empty leg’ journeys**, in which the aircraft are empty and repositioned for the owner’s convenience (Beevor & Murray, 2019).

In the context of economic equity, it is unfair that any person has the money to spend on a private jet while there are people starving, living on the streets, or unable to afford primary medical care in our society. Additionally, taxpayers subsidize the private jet use of the ultra-rich while they themselves struggle financially. The public funds thousands of municipal airports in the US, but

many primarily serve private and corporate jets (Collins, Ocampo, Thomhave, 2023).

ROLE FOR GOVERNMENT

As private jet travel increases, its economic and environmental impacts become more prevalent. Private jet travel negatively impacts the environment to a disproportionate extent, **emitting at least ten times more pollutants than commercial planes per passenger** (Collins, Ocampo, & Thomhave, 2023). It is imperative that the government find a way to regulate the negative impact that private jets have on the environment. Additionally, **it is also crucial that the government proportionately tax private jets for their use of publicly funded airports.** Private jets make up one in every six flights handled by the Federal Aviation Administration (FAA), and only contribute 2 percent of the taxes that primarily fund the FAA (Collins, Ocampo, Thomhave, 2023). Private jet users are effectively free riders. They benefit from the FAA's regulations of flight paths and air traffic control, which provide the essential service of preventing airborne collisions, without contributing proportionally to its funding.

One example of government action on the private jet industry comes from the Inflation Reduction Act which provided \$297 million to support sustainable aviation fuels over the next five years (Phillips, 2023). This is part of a wider effort to commercialize the necessary clean technologies. Funding from the Inflation Reduction Act is also being used by the Internal Revenue Service (IRS) to begin dozens of audits on business aircraft involving personal use (IRS, 2024). These audits aim to close tax loopholes abused by the rich and tax corporations that use private jets. On the state level, California has passed a law requiring private planes be registered and taxed, in a similar manner to cars; the Californian government will use this money to address pollution and other “harmful environmental impacts of airplane emissions” (E&E News by Politico).

RECOMMENDED POLICY SOLUTIONS

To achieve net zero emissions, the aviation industry needs sustainable aviation fuels, energy efficient aircraft, and reduced demand for air travel (Collins, Ocampo, Thomhave, 2023). There are a few ways to go about achieving these changes and discouraging the use of private jets. Any regulations on private jets should serve as a blueprint for future regulations of the commercial aircraft industry which is responsible for the majority of greenhouse gas emissions from aviation.

01

LUXURY TAX



02

BAN



03

INVESTMENT IN CLEAN ENERGY
AVIATION



LUXURY TAX

The first policy option is to impose a luxury tax on the sale or transfer of private jets. One such precedent is **Canada's 10 percent luxury tax on new aircraft manufactured after 2018**; this law provides exemptions for certain pre-owned aircraft (Collins, Ocampo, Thomhave, 2023). In the United States, a 10 percent tax on pre owned aircraft and 5 percent transfer fee on new private aircraft would have raised \$2.4 billion in 2021 and \$2.6 billion in 2022 (Collins, Ocampo, Thomhave, 2023). Elon Musk alone would have to pay an additional \$3.9 million in taxes if the transfer fee was implemented (Collins, Ocampo, Thomhave, 2023).

Another option is a tax on the fuel used for private jets. The U.S already levies a federal excise tax on general aviation fuels, but can impose an additional tax for fuel used for private jets. President Biden proposed a major tax increase on fuel for private jets, an increase from \$0.22 per gallon to \$1.06 per gallon which would provide funding for the FAA (Benson, 2024). This tax on jet fuel would likely lead to the ultra-wealthy using more fuel efficient planes.

Top Three Celebrities with the most private jet carbon emissions in 2023

The Emissions

Private jets are 5 to 14 times more polluting than commercial flights, and 50 times more polluting than trains. (Airport Technology) in response people have begun tracking the flights of the ultra-rich and celebrities to bring attention to the negative environmental impacts of private jets in hopes to bring public attention and gain support for more environmentally sustainable practices.

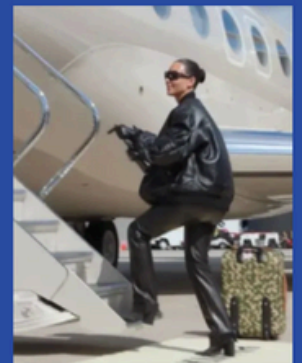


01. Travis Scott

Travis Scott had the most private jet carbon emissions in 2023, taking 137 flights, in his Embraer ERJ-190 that cost \$72 million. In this jet he traveled approximately 205,143 miles, and emitting 13,362,879 pounds of CO2 emissions

02. Kim Kardashian

Kim Kardashian took 165 flights in her custom private jet that is valued at \$150 million, she traveled a total distance of 301,428 miles emitting 12,913,797 pounds of CO2 emissions,

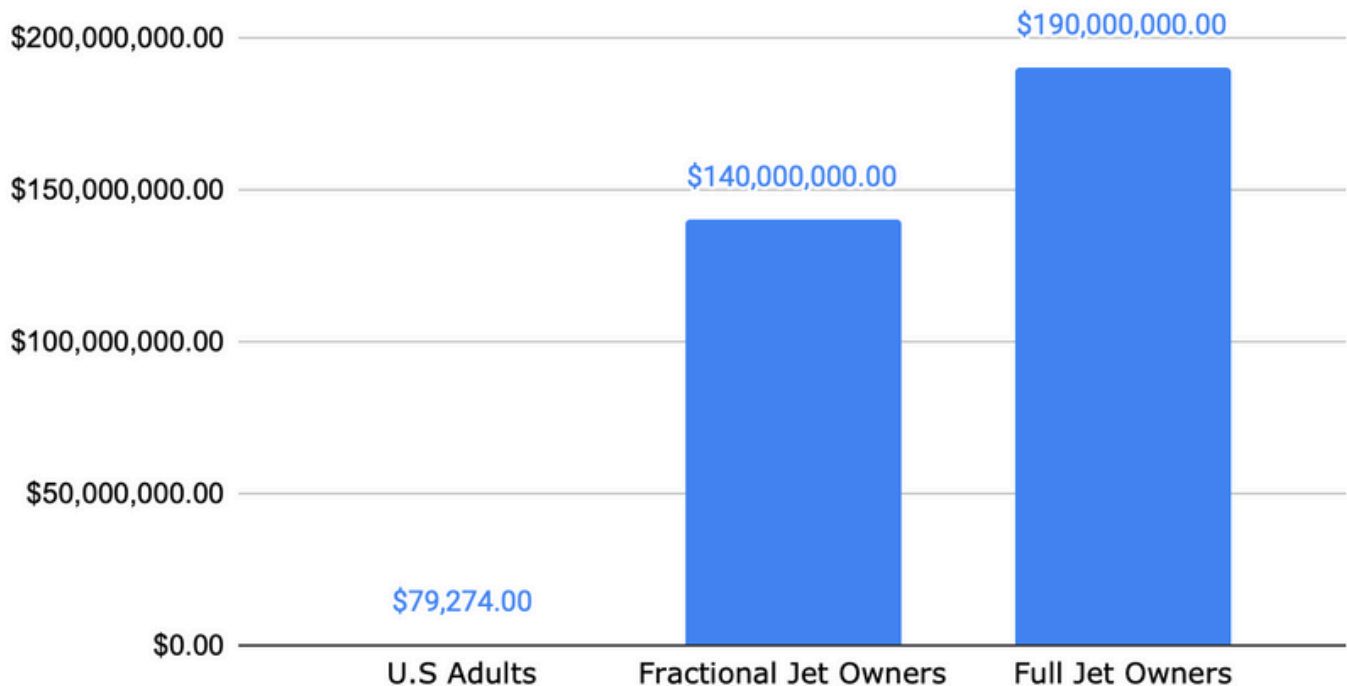


03. Elon Musk

Elon Musk took 150 flights in his \$78 million Gulf stream G700, traveling approximately 210,469 miles emitting 10,063,441 pounds of CO2 emissions.

Median Wealth of Jet Owners

Median wealth of fractional and full jet owners vs. that of all U.S. adults



Currently, vast disparities in fuel efficiency exist among private jet owners. For example, Drake’s private jet uses 1,722 gallons of jet fuel per hour while Taylor Swift’s uses 347 gallons per hour (Yard Digital PR Team, 2022). Policy experts have also proposed a “short hop” surcharge that would tax trips shorter than 210 miles (the distance from New York City to Washington D.C.) in an effort to disincentivize private jet owners from taking ludicrously short flights (Collins, Ocampo, Thomhave, 2023). Critics suggest that the ultra-wealthy would just treat new IRS taxes as part of what it costs to use a private jet (Phillips, 2023); while this may reduce demand from the millionaire class, it’s likely that the billionaire class would just eat the costs and continue their normal use of private jets.

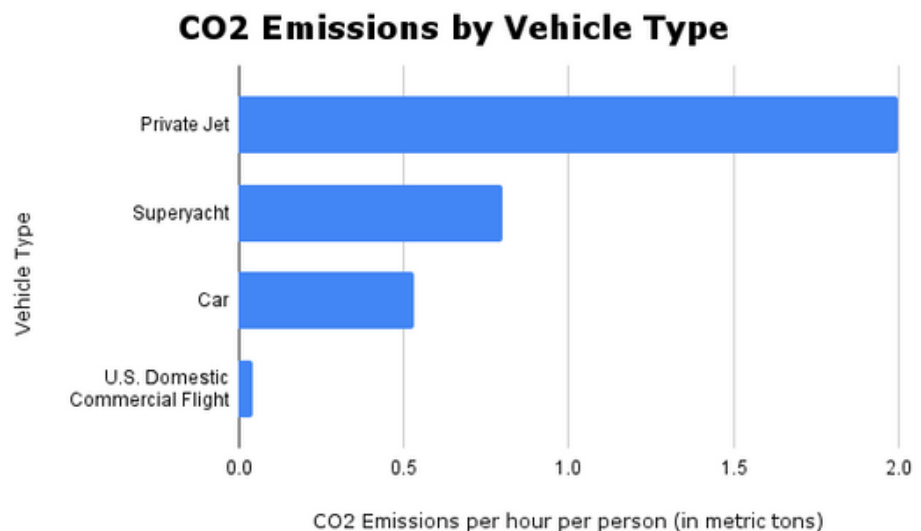
BAN

Another potential solution is an outright ban on private jet usage. Several airports in Europe have already announced such bans. Eindhoven Airport in the Netherlands has announced a ban on fossil fuel private jets starting in 2026 as part of an effort to reduce CO2 and noise emissions (Buyck, 2023). Amsterdam Airport Schiphol (also in the Netherlands) has a similar ban in the works (Newsroom Schiphol, 2023). Both airports provide exemptions for electric aircraft. Additional exemptions will also be necessary until clean aviation options are widely available. Private jets chartered to support humanitarian or disaster relief should not be subject to this ban. Additionally, air delivery of essential medical services particularly in relation to organ transplants (the organs themselves, organ-transplant patients, and the necessary surgeons and medical staff) are typically conducted via private jet. This number of flights used for medical services is quite small, accounting for only 1% of private jet flights, and will not have a significant impact on the overall emission reduction from banning other private jet flights (Phillips, 2023).

This may be the most direct way to curb aviation emissions from private jets. However, if bans continue to come from major airports, rather than governments with regulatory power, it may be ineffective; private jet users can simply reroute to airports that were built solely for private jets or, in extreme cases of wealth, build their own airports. Additionally, critics point out that this may turn into a game of “carbon whack-a-mole” when it comes to regulating the activities of the ultra wealthy (Phillips, 2023). If the government bans private jets, the billionaire and millionaire classes will just spend their money on some other carbon intensive activity such as yachts, private golf courses, or large mansions (Phillips, 2023).

INVESTMENT IN CLEAN ENERGY AVIATION

Because so many private jet flights are over short distances, they could be completed with a small fully-electric aircraft (Beevor & Murray, 2019). These “E-planes” as they are sometimes known are currently in commercial development.



Unfortunately, even if these fully electric aircraft are made commercially available, **they will not be able to curb the majority of aviation emissions.**

While most private jet flights are short haul, long haul flights are responsible for the majority of emissions. We currently do not have the technology to develop an electric plane able to complete transatlantic flights or other long distance travel (Beevor & Murray, 2019). Fuel is more energy dense than electric batteries which means that until major technological breakthroughs occur, planes will be unable to conduct long distance flights without some sort of fuel.

The answer may come through sustainable aviation fuels (SAFs) which are any aviation fuel that meets the criteria of at least 50% reduction in GHG emissions compared to conventional fuel (Collins, Ocampo, Thomhave, 2023). **SAFs are three to five times more expensive than conventional aviation fuels** and accounted for only 0.1 percent of total aviation fuel purchases in 2021. Government investment, which has already begun under the Inflation Reduction Act, can help bring this price down and support further development of sustainable fuels within the aviation industry.

CONCLUSION

Regulating private jets is not enough to solve the problems of economic inequality or global warming. The existence of private jets is a symptom of a dysfunctional society. If the United States had an effective progressive tax structure, private jets wouldn't exist because billionaires wouldn't exist. The wealth that the elite would have spent on private jets would instead be redistributed to the rest of society through social programs and other government services. The issue of private jets is part of a much larger problem, but that does not excuse inaction. This is a call for action on all parts of the system that perpetuate economic inequality and contribute to global warming.

It does not make sense to ban private jets unless there are new carbon emission regulations on the airline industry as a whole. Private jets are just one part of a much larger system. Additionally, regulations on the use of private jets, if successful, can serve as a model for wider regulation of the commercial aviation industry. The moral issues associated with private jet use provide a perfect opportunity to reform the airline industry to be more sustainable for all passengers, not just the wealthiest.

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