



Risk: American Airlines' Environmental and Lobbying Misalignment Could Impact Shareholders, Workers, and the Environment

Service Employees International Union

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Executive Summary

This report identifies areas of misalignment between American Airlines' environmental statements and related lobbying, human rights and safety commitments, and the company's actual practices. Misalignment poses risks to the company and shareholders. As the report below documents:

- ▲ The aviation industry is responsible for 3.5% of climate change.¹
- ▲ American Airlines says it supports the goals of the Paris Climate Agreement and is committed to reaching "net zero" emissions by 2050,² but the company typically opposes environmental regulations and promotes a questionable voluntary net zero strategy.^{3,4}
- ▲ American Airlines also says it is committed to safe working conditions and that the company respects basic human rights principles for workers and entities throughout its supply chain,⁵ but the company leaves service workers unprotected by the policies protecting passengers from climate impacts like boarding planes during extreme heat.⁶
- ▲ The workers holding down service jobs at airports are overwhelmingly Black, Brown, and immigrant laborers and experience disproportionate harm from aviation emissions. These low-wage workers are often dual stakeholders - working at the airports and living in frontline communities where both they and their families endure pollutants tied to jet emissions. They face elevated risks of diseases and other health disorders.⁷
- ▲ American Airlines acknowledges a series of climate-related financial risks including, but not limited to, the risks of: 1) damage to brand value and loss of customer base; 2) shifting supply and demand in response to climate change; 3) longer-term changes in weather patterns necessitating the relocation of key airports in response to rising sea levels; 4) extreme heat's negative impact on worker safety and productivity.^{8,9}
- ▲ Many of AAL's hubs are located in the south where heat and other climate-related risks are of particular concern.¹⁰
- ▲ Research into the company's GHG emissions reduction plan, related lobbying activities, and the consequences for workers calls into question whether or not the company has done all it can and should do to reduce emissions, protect workers, and effectively mitigate the company-identified risks.¹¹

Introduction

American Airlines Group Inc. (“American,” “AAL,” the “Airline,” or the “Company”) has identified a series of risks associated with climate change-related impacts.¹² AAL says it supports the goals of the Paris Climate Agreement.¹³ However, as the research below indicates, the company typically opposes environmental regulations, and it promotes a questionable voluntary net zero strategy.

On December 12, 2015, 196 parties adopted the Paris Agreement as a treaty on climate change.¹⁴ The preamble to the agreement recognizes “the need for an effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge.”¹⁵ The National Oceanic and Atmospheric Administration says that climate change refers to temperature increases that contribute to extreme heat as well as other environmental impacts such as “sea level rise, changes in weather patterns like drought and flooding, and much more. Things that we depend upon and value — water, energy, transportation, wildlife, agriculture, ecosystems, and human health — are experiencing the effects of a changing climate.”¹⁶

The aviation industry is responsible for 3.5% of climate change, according to research led by the UK’s Manchester Metropolitan University.¹⁷ According to the International Council on Clean Transportation, “Aviation poses a difficult challenge to the global effort to decarbonize transportation. Air travel is popular, and emissions from the sector are growing rapidly. But the low-carbon technologies required to decarbonize aviation are immature and expensive. For this reason, aviation (along with shipping and energy-intensive industrial sectors such as steelmaking) is often described as ‘hard to abate.’ Decarbonizing aviation will not be easy.”¹⁸

AAL also says it is committed to workplace safety and that the company respects basic human rights principles as identified by various international standards.¹⁹ Unfortunately, workers that service the airline are vulnerable to the climate change-related safety risks of extreme heat. The workers holding down service jobs at airports are overwhelmingly Black, Brown, and immigrant laborers and experience disproportionate harm from aviation emissions.²⁰ Direct airline employees and the contracted workers that service the airline are both impacted by the extreme heat and other environmental impacts.

AAL has articulated the risks associated with climate change and the connected health and safety impacts on workers. Many of AAL’s hubs are located in the south where heat and other climate-related risks are of particular concern. The company identifies the risks of coastal flooding at Miami (MIA), river flooding at Charlotte (CLT), river flooding and temperature extremes at Dallas Fort Worth (DFW), and temperature extremes at Phoenix (PHX) among the twelve airports where climate risks present the potential for costly annual losses to AAL.²¹

Research into the company’s GHG emissions reduction plan, related lobbying activities, and the consequences for workers calls into question whether or not the company has effectively mitigated these risks. The company should review the risks it has previously identified, examine potential shortcomings in its net zero GHG-reduction plan, and better align its practices with its stated climate, safety, and human rights goals. AAL has a fiduciary duty to its investors to meet its goals and address any concerns that are not aligned with the company’s interest. The airline industry’s large carbon footprint makes it all the more important for airlines like AAL to address misalignment.

I. American Airlines Says It Supports the Goals of the Paris Climate Agreement and is Committed to Reaching “Net Zero” Emissions by 2050, but the Company Typically Opposes Environmental Regulations and Promotes a Questionable Voluntary Net Zero Strategy.

American Airlines makes voluntary climate commitments in its Environmental Social Governance (ESG) and other reports, but is complicit in lobbying against actual climate solutions through its principal trade groups.

The company explicitly acknowledges a series of financial risks related to climate change including:

- A. The “risks of damage to brand value and loss of customer base” if customers shift to an airline they “perceive” to be more sustainable or choose to reduce air travel altogether;
- B. The “risk from shifting supply and demand as economies react to climate change” (e.g., increased utilization of virtual meetings by business customers and increased cost of raw materials);
- C. The “risk of longer-term changes in weather patterns,” which the airline says could necessitate relocation of key airports if sea levels rise, restricting the availability of seats for sale in a certain market, and potentially reduced schedules.²²

On the one hand, AAL says it supports the goals of the Paris Agreement and wants to reach “net zero” emissions by 2050.²³ On the other hand, AAL frames emerging regulations designed to address climate change as a competing financial risk and has lobbied against similar regulations.^{24,25} The airline has made a set of voluntary climate commitments that it claims aligns with the Paris Agreement.²⁶ However, many of these climate commitments are highly suspect and leave big questions unanswered regarding AAL’s path forward.²⁷

Many of the elements of American’s net zero strategy are controversial and resemble aspects of other corporate climate strategies that have been challenged. For example, a recent class action lawsuit was brought against Delta Air Lines for its “carbon neutral” representations, alleging “an unreliable carbon offset market renders Delta Air Lines’ environmentally friendly representations false and misleading.”^{28,29,30} While the Delta Air Lines lawsuit is also based on the allegation that Delta had claimed to be the world’s “first carbon neutral airline” since 2020, whereas AAL has claimed a pathway to carbon neutrality by 2050, there are still key reasons why the Delta lawsuit should be of concern to AAL shareholders. The reasons for concern are identified in more detail, along with documented sources, in the appendix below in the sections on [carbon offsets](#) and [SAF](#). A few examples from the appendix include:

- ▲ 15% of AAL’s pathway to carbon neutrality is based on the same unreliable carbon offset market that forms one of the bases of the Delta lawsuit.³¹ The underlying Delta lawsuit’s critiques of the carbon offset market, including that it is rife with “inaccurate accounting, dubious crediting practices, delayed and speculative emissions reductions . . .”^{32,33} would also be problematic if true about any of the other areas of an airline’s carbon neutrality pathway—not just carbon offsets.
- ▲ In fact, there are also several instances of potentially speculative emissions reductions or potentially inaccurate accounting of them when it comes to AAL’s sustainable aviation fuel goal (SAF), which would require the airline to replace 10% of its jet fuel with SAF by 2030. AAL claims that this accounts for 40% of the carbon reduction that AAL needs to reach net zero by 2050.³⁴

Examples of potentially speculative reductions and potentially inaccurate accounting include, but are not limited to:

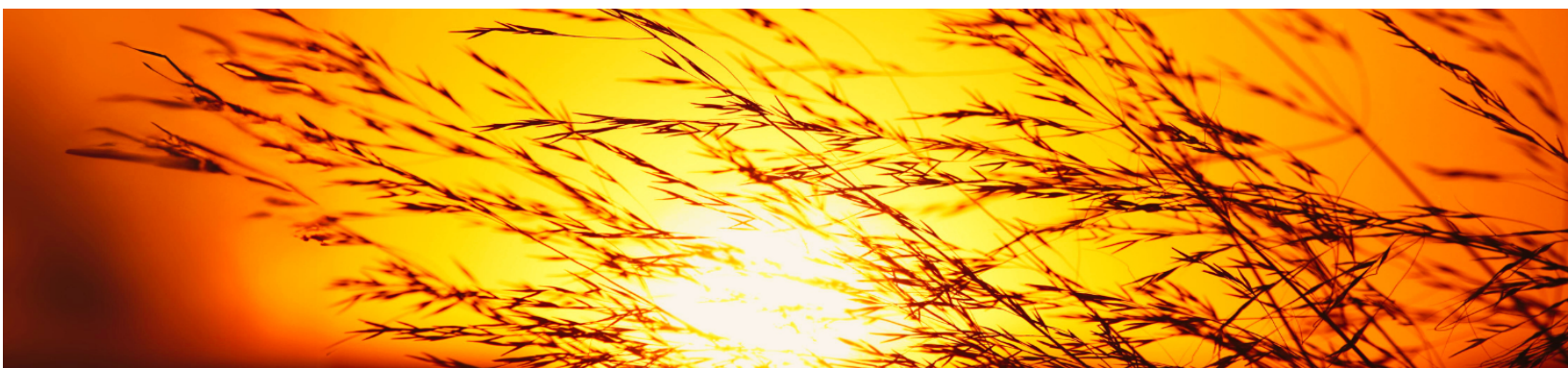
- △ AAL admits that SAF is one of the “levers requiring cross-sector collaboration” and is therefore not entirely within its control.³⁵ AAL says that in order to meet just 24% of its 2030 SAF goal, its “development-stage partners will need to be able to develop and operate commercial-scale facilities.” The airline states that it has signed an agreement with Gevo to obtain 500 million gallons of the SAF it needs over five years starting in 2026. Yet American acknowledges the future forward nature of Gevo’s production when it says, “Gevo is a company that *is developing* [emphasis added] production facilities to produce liquid hydrocarbons — including SAF — from renewable carbon and energy sources.”³⁶

AAL says that it has invested in efforts to scale production. However, the company also acknowledges that, “As critical as SAF is for achieving our own and our industry’s climate goals, it is not yet available at the scale or price needed to reduce aviation’s emissions significantly. Scaling SAF production to the point where it can materially reduce our industry’s emissions and be cost competitive will take the combined efforts of the private and public sectors.”³⁷

- △ AAL further qualifies the ability of SAF to contribute to its carbon reduction strategy in a footnote saying that in order to avoid approximately 3.5 million metric tons of CO₂e it “assumes 75% lower life cycle GHG emissions from purchased SAF, compared to petroleum jet fuel.”³⁸
- △ Even if AAL meets its goal of replacing 10% of its jet fuel with SAF by 2030, the amount of dirty jet fuel that the airline uses is estimated to increase by 751 million more gallons than the airline burned in 2022—a 21% increase.^{39,40} This begs the question—is it accurate accounting to say that increased SAF utilization, at the amounts and timeframe set by AAL’s stated goals, will therefore contribute to the necessary reductions to reach carbon neutrality by 2050 as the airline claims?

Additionally, The Big Con report released by Corporate Accountability, Global Forest Coalition, Friends of the Earth International and more than 50 other partner organizations casts doubt on the entire “net zero” strategy of many big polluters. Several U.S. airlines are mentioned. AAL is called out by name and accused of being one of the corporations that “pulled the puppet strings” to help pass the extension of a flawed “net zero” tax credit, which can be used in effect to extract more fossil fuel resources.⁴¹

The apparent inconsistencies in AAL’s lobbying practices and its voluntary “net zero” pathway warrant in-depth investigation by shareholders.



AAL says it is Committed to Limiting its Impact on Climate Change and Protecting the Environment⁴²

American Airlines indicates in its Statement on Public Policy Engagement and Political Participation that the company is committed to protecting the environment and addressing climate change:

“We believe it is important to have alignment on policies that will help our company and our industry transition to a net zero future. In 2022, we intend to assess the extent to which the climate lobbying activities of the principal trade groups of which we are a member are consistent with the goals of the Paris Agreement. To the extent we find mis-alignment, we will use our influence to work to make their policy positions consistent with the goals of the Paris Agreement. We intend to make this assessment available on our website and update it annually.” - *American Airlines*⁴³

Reality: American Airlines Typically Opposes Environmental Regulations and Promotes a Questionable Voluntary Net Zero Strategy.

In its 2021 ESG report and 2022 Sustainability Report, the airline says that it wants to reach a “net zero” future by 2050 and align with the Paris Climate Agreement,⁴⁴ but its history and current actions undermine its statements in several ways:

- 1) AAL has lobbied against responsible environmental regulation in its own name.⁴⁵
- 2) AAL is intimately involved, by financing and/or occupying key governing positions, in trade associations that have lobbied extensively against responsible environmental regulations.⁴⁶
- 3) In the same ESG report where it details commitments to environmental sustainability, AAL also talks up the financial risk of the emerging climate regulations that would level the playing field by making sure all airlines across the industry, including AAL, have to meet the same improved environmental standards.⁴⁷
- 4) AAL then makes a set of voluntary climate commitments that will be difficult to achieve and could fail to provide a pathway to net zero by 2050 even if achieved.⁴⁸ In fact, the airline further qualifies many of these voluntary commitments in footnotes or other subtle ways which are suggestive of weaknesses in its plan. Two specific examples of such qualifications are identified above, including references to reliance on development-stage partners for SAF and assumptions about its GHG emissions.⁴⁹

The bottom line is that the company acknowledges multiple times what it calls financial “risks” of climate change and makes a series of voluntary commitments, but it is disputable whether these commitments will be effective. The airline points specifically to damage that could be done through shifts in customer preferences to a more environmentally-friendly airline, stigmatization of the sector, environmentally conscious consumers simply choosing to fly less often, and increased stakeholder concern and involvement.⁵⁰

AAL’s climate strategy is full of questionable statements and questionable voluntary commitments, which are undermined by its complicity in lobbying. The company explicitly acknowledges a set of financial risks of climate change. AAL’s behavior is playing out in the context of increases in climate-washing litigation in recent years, including against Delta Air Lines. The increased litigation comes as environmental groups and others grow increasingly frustrated with corporate claims about their contribution to tackling climate change.⁵¹ AAL’s climate strategy warrants in-depth investigation by shareholders.

The section below details how environmental impacts, such as extreme heat, create an additional layer of risks for the company and workers. The appendix that follows provides examples where AAL has made a climate change-related statement along with challenges and questions regarding the climate statement the airline has made.

II. The Impacts of Climate Change Create Additional Risks for Workers and Shareholders

American Airlines says it is committed to safe working conditions and that the company respects basic human rights principles as identified by the Convention of the International Labour Organization, the UN Universal Declaration of Human Rights, and other international standards. The company says that it is committed to respect for human rights in all aspects of its business: “These principles apply to all team members of American Airlines Group Inc. and its wholly owned subsidiaries . . . They also apply to our agents, consultants, contractors, partners, providers and suppliers when they are representing or acting for us.”⁵²

AAL’s public commitment to human rights throughout its supply chain is rational and connects, at least in part, to the company-acknowledged climate risks identified above. The company identifies an additional chronic physical risk connected to “the risk of longer-term changes in weather patterns” and the impact of those changes on workers that service AAL: “Extreme heat poses a risk to our employees who work outdoors at airports and maintenance facilities. In addition to the potential health and safety risks for our team members, persistent higher temperatures could reduce employee productivity and increase costs.”⁵³

However, these risks have not been fully mitigated at key AAL hubs. Workers that service airlines, like American, remain vulnerable to climate-related safety risks at these hubs. The company and shareholders, by extension, are left vulnerable to the potential of reduced employee productivity and increased costs. The examples provided below showcase workers servicing AAL, as well as those working for other airlines. Regardless of the airline they service, all workers identified at AAL hubs experience the same extreme heat conditions.



Linda Ressler, a cabin cleaner at PHX, rallies with Phoenix airport service workers in support of a local Heat Protection Ordinance.

Airport service workers perform important, but often unseen work like cleaning cabins, loading baggage, helping passengers with disabilities travel safely through the airport, handling important cargo like pharmaceuticals, fueling planes and more. Thanks to them, the U.S. air travel industry is safe and can run smoothly even through a global pandemic, climate disasters, and busy travel seasons.

Unfortunately, the reality of their work environment is far from safe. Recent news stories have brought to the forefront the alarming conditions these workers face. Even apart from climate related issues, there is evidence of workplace injury⁵⁴ and even fatalities on the job.⁵⁵ These incidents highlight a glaring issue: airlines' failure to adequately protect the workers who service airlines and make the airports run.

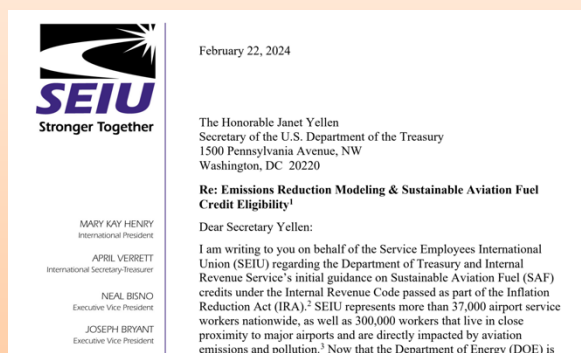
This neglect doesn't just put the workers at risk; it also poses brand and reputational risks for airlines like AAL and for the aviation industry at large. For investors, particularly those committed to ESG principles, these practices present a significant concern. The harm to workers directly contradicts the values of sustainability and responsibility of ESG-minded investors.

Global warming presents airport workers with yet another layer of safety concerns: heat stress and heat-related illnesses due to the changing climate. This new challenge further underscores the urgency of addressing unsafe working conditions, not only for the well-being of the workers but also for the broader implications for investor risk and industry reputation in an era increasingly defined by environmental concerns.

Climate Crisis and Impacts on Working People

In a February 2024 letter to the U.S. Treasury Secretary, Janet Yellen, SEIU highlighted that the workers holding down service jobs at airports are overwhelmingly Black, Brown, and immigrant laborers and experience disproportionate harm from aviation emissions:

“These workers are often dual stakeholders - working at the airports where exposure is most extreme, then going home to frontline communities where both they and their families endure long-term health impacts from the many harmful pollutants tied to jet emissions. Communities around major airports experience higher hospitalization and death rates from respiratory and cardiovascular conditions, adverse birth outcomes, and lower life expectancy overall⁵⁶. This workforce is also impacted by extreme weather events, like record high heat, that are related to climate change and exacerbated by carbon emissions.”⁵⁷ |



Last summer, extreme heat took a toll on workers nationwide, including those in airport services. Airport service workers across various roles - cabin cleaners, ramp agents, fuelers, cargo handlers, and wheelchair agents - faced challenges due to extreme heat. These workers encounter high temperatures inside airplane cabins and jet bridges, on the tarmac, and in warehouses. The time pressures of the aviation industry may prevent them from easily accessing adequate water and rest breaks during the workday. According to internal documents reviewed by Politico, AAL allows cabin temperatures to reach 90 degrees before declaring it too hot for passengers to board,⁵⁸ but the company reportedly does not have a policy prohibiting cabin cleaners servicing its airplanes from boarding when temperatures exceed that threshold.⁵⁹

Linda Ressler, 57, cleans airplane cabins at Phoenix Sky Harbor International Airport, Arizona during overnight shifts when the air conditioning systems are switched off, even though nighttime temperatures regularly stay near 100°F. Despite the extreme heat, workers said that they were "told explicitly we can't bring water on the planes with us." Linda Ressler said "I sometimes resort to drinking water left over from the passengers. It's grueling work, and we often have so many airplanes scheduled to clean, we aren't able to take breaks."⁶⁰ She lost consciousness briefly in July during her shift due to the heat. "It drains your brain," she said in a New York Times interview. "It slows your cognitive function. You're overwhelmed by the heat."⁶¹

Cabin cleaners such as Ressler can spend as long as an hour working in a single cabin and often have to rush to the next plane with little time to stop for a drink of water.

Another cabin cleaner, Rashele Bates, a 26-year-old who works at the Charlotte Douglas International Airport, North Carolina said that she felt sick and nauseous on the job one day in late July after she and a coworker had been cleaning for about three hours without a proper break. Bates vomited, and her coworker passed out and went to the hospital. “I’m sitting there drowning in sweat,” Bates recalls. The air conditioning isn’t always turned on in the plane while they work, Bates says, nor is there any air conditioning on the jet bridge connecting the plane to the terminal, where she and her coworker fell ill.⁶²

Atoung Angis worked as a wheelchair assistant bringing passengers in and out of planes for AAL and other airlines at Dallas Fort Worth international airport. Wheelchair assistants spend much of their time inside a jet bridge, where the air conditioning is often turned off. “It’s like an oven, that’s how bad it is,” Angis said in a Guardian interview, “And you don’t get time to sit down and cool off, or get a drink of water.”⁶³

Ramp agents and fuelers have informed SEIU that the tarmac can get extremely hot under direct sunlight, and remains hot after sunset and that a lack of shade can exacerbate heat on the tarmac. Cargo handlers face issues similar to those ramp agents experience. In addition, warehouses not insulated against heat can reach high temperatures.

Since the workers’ requests have not received adequate response from the airlines or their contractors, airport workers in various airports have advocated for protection against heat and fair treatment on the job through venues like state regulatory agencies, airport authorities, and city councils, and they are voicing their concerns to the general public.

In Phoenix Sky Harbor International Airport (PHX), worker leaders documented workplace hazards they alleged to have resulted from the extreme heat. For example, they highlighted how working inside parked aircraft or enclosed jet bridges heated over the tarmac caused some of them to feel ill, and several alleged that their working duties effectively prevented them from getting back to the break room to drink cool water. Ultimately, these workers filed a complaint with ADOSH alleging that their employer was exposing them to hazardous conditions.⁶⁴ No citation was issued pursuant to the complaint, but the Phoenix City Council passed an ordinance in March that strengthens protections for outdoor workers laboring in extreme heat, including at PHX.⁶⁵



Airport service workers join Rep Casar on Capitol Hill at a rally calling for paid water breaks for outdoor workers.

Similar concerns emerged at Dallas Fort Worth International Airport (DFW), where a cabin cleaning crew that services AAL airplanes addressed the Airport Board Members, urging improvements in working conditions and facilities to combat heat-related challenges.⁶⁶

At Charlotte Douglas International Airport (CLT), workers voiced concerns about poor conditions, including inadequate access to water, at a city council meeting.⁶⁷ Their petition to provide water, rest breaks, and training was supported by various organizations.

Conclusion

Despite claims of moving towards net zero emissions, AAL and its associated trade associations actively lobby against climate change initiatives, and the company is misaligned with many of its commitments regarding GHG emissions reduction, worker safety, and human rights. AAL should align its practices with its stated ESG policies. If it does not, workers and communities will suffer the consequences, and shareholders will face related financial outcomes. Until this misalignment is corrected, airport service workers are likely to continue to raise the health and safety concerns related to working in extreme heat. The activities described above at CLT, DFW, and PHX airports demonstrate that legislative and regulatory bodies are being invited to devise their own solutions to climate change and its impact on airport service workers in the absence of action by the company.

Airport Workers United is an initiative of the Service Employees International Union, which has 2 million members united by their belief in the dignity and worth of workers and the services they provide and dedicated to improving the lives of workers and their families and creating a more just and humane society. SEIU is a member of the BlueGreen Alliance, where a partnership of labor unions and environmental organizations is working to solve today's environmental challenges in ways that create and maintain quality jobs and build a clean, thriving, and equitable economy. Through Airport Workers United, more than 36,000 airport service workers at 45 airports have won their union and airport workers at 23 airports have won raises and other improvements for nearly 155,000 airport service workers.

Appendix. Key Questions and Concerns About Select AAL Climate-Related Statements

| AAL Statement | Reality/Key Concerns |
|---|---|
| <p>"In 2022, we intend to assess the extent to which the climate lobbying activities of the principal trade groups of which we are a member are consistent with the goals of the Paris Agreement. To the extent we find mis-alignment, we will use our influence to work to make their policy positions consistent with the goals of the Paris Agreement. We intend to make this assessment available on our website and update it annually."^{68,69}</p> | <p>A review of the AAL's 2022 Sustainability Report, 2022 and 2023 press releases, 2023 environmental policy statement, and the company's online ESG page, resource center, and investor page finds no mention of the promised assessment regarding misalignment between the Paris Agreement and the lobbying activities of AAL's principal trade groups.⁷⁰</p> <p>The 2022 Sustainability Report, in fact, appears to downplay the negative role played by at least one major trade group to which AAL belongs: "Through our membership in the International Air Transportation Association (IATA), the trade association for the world's airlines, we also support reforms to the global airspace system that will enable more efficient flight operations and reduced GHG emissions."⁷¹ Historically IATA has opposed regulations that would reduce GHG emissions: IATA has "actively opposed key national and EU aviation climate policies including the full inclusion of aviation in the EU Emissions Trading System, kerosene fuel taxes, and ticket taxes on flights."⁷²</p> <p>AAL does not mention Airlines for America (A4A), a principal trade group that AAL finances with other major U.S. airlines, and which AAL's CEO sits on the Board of, in its 2022 Sustainability Report.^{73,74} But A4A's history reveals repeated opposition to policies designed to address climate change:</p> <ol style="list-style-type: none"> 1) In December 2021, an A4A spokesperson appeared to oppose a New York jet fuel tax, stating it would hinder aviation's recovery from Covid-19.⁷⁵ A4A has also stated that "airlines must be the decision makers in fuel supply chain management," emphasizing cost concerns.⁷⁶ 2) In 2020, A4A spent up to €350,000 on lobbying in the EU and rejected the EU's proposed SAF mandates, claiming they were "a long way from being commercially viable."^{77,78} 3) In a November 2021 EU consultation response, A4A again opposed the EU's proposed SAF mandate, stating that "If the EU nevertheless proceeds with a mandate: The regulation should not be applied to non-EU carriers' international flights."^{79,80} 4) A4A opposed a 2016 New Jersey jet fuel tax bill, citing cost concerns and the potential for negative impacts on competitiveness.⁸¹ 5) A4A also opposed a 2018 New Jersey jet fuel tax bill that would have funded an expansion of public transit. A4A suggested New Jersey should reduce or eliminate the existing jet fuel tax entirely instead.^{82,83,84} |

| AAL Statement | Reality/Key Concerns |
|---------------|--|
| | <p>AAL does not mention the Chamber of Commerce in its 2022 Sustainability report. The Chamber of Commerce is a principal trade group in which AAL (and other major airlines) actively participates.⁸⁵</p> <p>A 2021 report by the Brown University Climate and Development Lab analyzes the Chamber's climate positions from 1989 to 2009. This report accuses the Chamber of downplaying the climate threat, identifies a long history, over the period analyzed, of lobbying to block specific US climate regulations and the promotion of regulatory frameworks that would significantly slow a transition away from a GHG emission-intense energy mix.^{86,87,88}</p> <p>InfluenceMap's "ongoing research into the climate policy engagement of the U.S. Chamber of Commerce finds continued opposition to meaningful legislation and regulation introduced by the federal government." In March 2022, InfluenceMap published a briefing "highlighting the lack of material improvement from the U.S. Chamber of Commerce (the Chamber) in its climate policy engagement since 2017."⁸⁹</p> <p>In February 2023, InfluenceMap gave The Chamber a grade of E- for its positions on climate policy, which is barely better than the lowest grade available: F. The Chamber's rating was identical to, or worse than, many fossil fuel and fossil fuel-adjacent companies. Phillips 66 and Marathon received the same E- grade as The Chamber. The Chamber's grade is actually worse than Chevron (D-), American Electric Power (D), and Ford (B-).⁹⁰</p> <p>ClimateVoice, a nonprofit that seeks to influence climate policymaking, launched a campaign in August 2023 "pushing tech companies including Amazon, Google, Microsoft and Meta to end its membership with the U.S. Chamber of Commerce, citing the group's history of lobbying against major climate initiatives across Congress and the executive branch."⁹¹</p> <p>Additionally, AAL has sometimes lobbied in its own name against past climate change measures consistent with the Paris Agreement. On June 16, 2016, six months after the Paris Agreement was adopted by 196 parties at the UN Climate Change Conference,⁹² AAL lobbied against a New Jersey jet fuel tax bill.</p> <p>Rhett Workman, then Managing Director of Government and Airport Affairs at AAL, said the following about the bill: "Current legislative proposals put New Jersey's aviation economic engine at risk and potentially bolster the competitive footprint of hubs in nearby states, including American's own global gateways in New York and Pennsylvania. Both New York and Pennsylvania have low effective tax rates on fuel, which would put New Jersey at a serious competitive disadvantage . . ."⁹³</p> |

| AAL Statement | Reality/Key Concerns |
|--|---|
| <p>AAL has a plan to achieve its target of net zero emissions by 2050, and is making real progress toward that goal.</p> | <p>AAL admits that only 18% of its carbon reduction strategy represents “levers that we [American] control” and adds further caveats to its proposals for levers that it both claims to control and those that it acknowledges it does not control. The cornerstone of its strategy is based on rosy predictions of SAF production, affordability, and lower lifecycle GHG emissions, and questionable carbon offsets are another pillar of its strategy.⁹⁴</p> <p>The factors below represent elements of AAL’s “net zero” carbon reduction strategy. As can be seen below, 86% of the carbon reduction that AAL needs to meet its net zero by 2050 goal is based on questionable strategies. And that is not to say that the remaining strategies, accounting for just 14% of planned carbon reduction, are all on solid ground either. In some key areas, AAL has actually taken lobbying stances that undermine its purported goal, and no evidence has been uncovered that it has ever attempted to shift the stance of its principal trade associations to align with the goals of the Paris Agreement.</p> |
| <p>Replace 10% of our jet fuel with SAF by 2030</p> | <p>This is the cornerstone of AAL’s strategy. AAL pins 40% of the carbon reduction it needs to reach net zero emissions by 2050 on something that is impossible to guarantee: replacing 10% of its jet fuel with SAF by 2030.⁹⁵ Meanwhile, as identified above, AAL is implicated in opposing SAF regulations that would help the airline meet this goal. This is a questionable cornerstone for any carbon reduction strategy.</p> <p>There are multiple problems with this strategy, as shown below: it is dependent on factors outside of AAL’s control; AAL has only secured 24% of the SAF needed to meet its commitments, and it is not clear how they plan to obtain the remaining SAF; and even if AAL secures the SAF needed to meet this goal, dirty jet fuel usage is estimated to increase substantially over much of this time period.⁹⁶</p> <ol style="list-style-type: none"> 1) Overall, SAF accounted for less than one-tenth of one percent (0.1%) of total industry jet fuel worldwide in 2021, and according to IATA could account for 2% by 2025.⁹⁷ AAL’s SAF utilization also accounts for only a small fraction of its fuel consumption: in 2022, SAF represented just 0.07% of AAL’s jet fuel usage—up slightly from 0.05% in 2021 and 0.02% in 2020.⁹⁸ 2) In 2022, AAL signed commitments covering 620 million gallons of SAF from 2025–2030 — 116 million gallons of which will be delivered in 2030, representing 2.4% of its estimated fuel consumption in 2030.⁹⁹ This is less than a quarter (2.4% vs. 10%) of its 2030 goal for SAF utilization. 3) Even if AAL meets its goal of replacing 10% of its jet fuel with SAF by 2030, the amount of dirty jet fuel that the airline uses will likely increase substantially to make up for the increase in total jet fuel demand by the airline: it is estimated that AAL will burn 751 million more gallons of non-renewable jet fuel in 2030 than the airline |

| AAL Statement | Reality/Key Concerns |
|---------------|--|
| | <p>burned in 2022. This is an increase of 21%.^{100,101}</p> <p>4) AAL, as a single airline, would have to procure a disproportionately high percentage of the world’s yearly SAF supply to meet its goals. This should raise serious questions about the viability of the goals.</p> <p>The International Civil Aviation Organization (ICAO) has modeled out three scenarios for future SAF production: (a) ICAO estimates that a best-case scenario under current production trends would amount to 3.6 billion gallons of yearly SAF production no later than 2032. AAL would have to use 13% of the world’s yearly production to meet its 10% goal, which would require 483.3 million gallons of SAF by 2030.^{102,103,104}</p> <p>AAL’s SAF goal would require it to use more than triple the share of global non-renewable jet fuel production currently represented by AAL’s usage, which was 4% in 2022. Additionally, even though according to the latest available information, AAL has only obtained signed commitments for 116 million gallons of SAF for 2030, that amount still represents 3% of the best-case yearly production scenario.^{105,106,107}</p> <p>However, ICAO acknowledges that there is significant uncertainty as to how much of the production will be represented by SAF and so models two other deployment scenarios:^{108,109} (b) A high ratio of production where 80% of the best-case scenario, or 2.9 billion gallons, of SAF is produced would mean that AAL would have to use 17% of the world’s yearly production to meet its 2030 goal; (c) A low ratio of production where 10%, or 359.3 million gallons, is SAF would necessitate AAL using 135% of the world’s yearly production to meet its 2030 goal—or more than would be available.</p> <p>5) AAL says that in order to meet the 116 million gallons commitment, or meet 24% of its 2030 SAF goal, that “our development-stage partners will need to be able to develop and operate commercial-scale facilities.”¹¹⁰</p> <p>6) AAL admits that SAF is one of the “levers requiring cross-sector collaboration” and is therefore not entirely within its control.¹¹¹</p> <p>7) The airline states that it has signed an agreement with Gevo to obtain 500 million gallons of the SAF it needs over five years starting in 2026, which is significantly more than the company identifies as being supplied by Prometheus Fuels (up to 10 million gallons), and Aemetis Carbon Zero (112 million gallons spread over seven years, starting in 2024). Yet American acknowledges the future forward nature of Gevo’s production when it says, “Gevo is a company that <i>is developing</i> [emphasis</p> |

| AAL Statement | Reality/Key Concerns |
|---|--|
| | <p>added] production facilities to produce liquid hydrocarbons — including SAF — from renewable carbon and energy sources.”¹¹²</p> <p>AAL says that it has invested in efforts to scale production, and that it is an “anchor partner” in a limited-liability corporation¹¹³ that invested \$50 million investment in SAF-producer LanzaJet.¹¹⁴ However, the company also acknowledges that, “As critical as SAF is for achieving our own and our industry’s climate goals, it is not yet available at the scale or price needed to reduce aviation’s emissions significantly. Scaling SAF production to the point where it can materially reduce our industry’s emissions and be cost competitive will take the combined efforts of the private and public sectors”¹¹⁵</p> <p>8) AAL further qualifies the ability of SAF to contribute to its carbon reduction strategy in a footnote, saying that in order to avoid approximately 3.5 million metric tons of CO_{2e} it “assumes 75% lower life cycle GHG emissions from purchased SAF, compared to petroleum jet fuel.”¹¹⁶ However, the International Civil Aviation Association has evaluated lifecycle emissions and found that the carbon intensity of SAF derived from corn grain ethanol is only 26% lower than that of petroleum jet fuel. Several cellulosic and advanced biomass feedstocks were found to have <i>potential</i> emission reductions in the range of 33% to 91%.¹¹⁷</p> <p>In other words, AAL has not demonstrated a viable pathway to achieving its goal, and even if it were somehow able to replace 10% of its jet fuel with SAF by 2030, that still might not have all of the positive effects that the airline is banking on to reach net zero status by 2050. Additionally, it appears that dirty jet fuel usage would increase over this time, thus making AAL responsible for a net increase in CO₂ emissions from jet fuel between now and 2030. Again, SAF represents 40% of AAL’s carbon reduction strategy.</p> |
| <p>Induct zero-emissions, hydrogen-powered aircraft into our fleet in 2032 or earlier</p> | <p>The second most significant commitment AAL makes is inducting “zero-emissions, hydrogen-powered aircraft into our fleet in 2032 or earlier.” This represents 16% of the carbon reduction AAL needs to meet its 2050 net zero goal.¹¹⁸ In 2022, American invested in two start-ups (ZeroAvia and Universal Hydrogen), both of which are “working to advance hydrogen fuel cell-powered aviation.”¹¹⁹</p> <p>The technology is in the early testing stages, and meeting this goal is dependent on many factors AAL cannot control.¹²⁰ Major hydrogen aircraft developers are focused on getting the technology to work on small aircraft to start, and at least one third-party aviation network has said it is unlikely that the capability will be built to outfit standard-sized regional jets on even short-haul flights by 2032:</p> <p>1) According to the U.K.’s New Aviation Propulsion Knowledge and Innovation Network, zero-carbon-emission flights on sub-regional routes for aircraft of seven to</p> |

| AAL Statement | Reality/Key Concerns |
|--|--|
| | <p>nine seats is <i>possible</i> before 2032, but it is “unlikely to be cost effective to change all the UK regional fleet with larger planes of 50-90 seats for at least another 15 years.”¹²¹</p> <p>2) In January 2023, ZeroAvia completed a test flight for a 19-seat aircraft powered <i>in part</i> by hydrogen fuel cells. The successful flight lasted 10 minutes, and even that plane was also powered partially by fossil fuel kerosene.¹²²</p> <p>3) MIT Technology Review says that “to make significant cuts, the technology would need to be scaled up to power relatively large aircraft.”¹²³</p> <p>4) AAL acknowledges that introducing hydrogen-powered aircraft into its fleet no later than 2032 is one of the “levers requiring cross-sector collaboration.”¹²⁴</p> |
| <p>Fleet renewal to fly 30% of available seat miles with latest-generation, fuel-efficient aircraft in 2025.¹²⁵</p> | <p>Fleet renewal represents 15% of the airline’s carbon-reduction strategy, making it tied for the third most significant commitment behind increasing SAF usage and introducing next-generation aircraft.¹²⁶</p> <p>AAL claims that fleet renewal as a carbon reduction strategy is one of the “levers that we control” and sets a goal to “fly 30% of our available seat miles with latest-generation, fuel-efficient aircraft in 2025.”¹²⁷ Concerns regarding the fleet renewal strategy include:</p> <ul style="list-style-type: none"> ○ While AAL says it is a lever that the airline itself controls in the body of the 2022 Sustainability Report, it also footnotes that fleet renewal is a lever that American controls “only to the extent that manufacturers deliver new aircraft as scheduled.”¹²⁸ ○ Despite claims that “fleet renewal” will lead to increased fuel efficiency, AAL announced that it had made commitments to purchase up to 20 Boom Supersonic aircraft, with an option for an additional 40. Boom Supersonic’s Overture is currently predicted to start carrying passengers in 2029.¹²⁹ <p>According to the International Council on Clean Transportation (ICCT): Due to the tremendous energy requirements for supersonic travel, these aircraft could have emissions between five and seven times higher, depending on the type of fuel that is used, than a traditional subsonic aircraft operating on fossil jet fuel.¹³⁰ Another ICCT post states: “Our recommendation is to prioritize aircraft and fuels that are inherently low-carbon—not highly polluting supersonics.”¹³¹</p> |

| AAL Statement | Reality/Key Concerns |
|--|---|
| <p>Utilize nature-based removal offsets after other decarbonization options are exhausted.¹³²</p> | <p>AAL says that it will utilize carbon offsets only when other decarbonization options are exhausted, but it is still tied for the third-most impactful carbon reduction goal (15%) out of seven the airline identifies in its pathway to “net zero” in 2050. AAL says it will prioritize nature-based removal offsets.¹³³ Offsets are controversial.</p> <ol style="list-style-type: none"> 1) Bold offset claims have generated legal issues for other airlines. For example, Delta was accused of greenwashing in a class action lawsuit filed in the U.S. District Court for the Central District of California in May 2023. The lawsuit “takes aim at Delta Air Lines’ “carbon neutral” representations, alleging an unreliable carbon offset market renders Delta Air Lines’ environmentally friendly representations false and misleading.”¹³⁴ <p>The lawsuit rests in large part on Delta’s reliance on the carbon offset market, which plaintiffs contend are unreliable “due to inaccurate accounting, dubious crediting practices, delayed and speculative emissions reductions, and impermanent projects subject to disease, natural disasters, and human intervention.”^{135,136} The plaintiffs further contend they would not have purchased and overpaid for some Delta flight tickets if not for the misleading claims.^{137,138,139,140}</p> 2) Dozens of advocacy organizations issued a report questioning if any number of trees, for example, can scientifically accommodate a company’s intention to continue to pollute.¹⁴¹ 3) Other airlines are aware of problems with the market and have taken steps to reduce reliance on carbon offsetting. In March 2022, United Airlines announced that its own 2050 carbon neutral pathway won’t rely on offsets.¹⁴² When asked about it in a 2023 Politico interview, United Airlines CEO Scott Kirby had this to say about offsets: <p>“There’s two things that are wrong with them. First, the majority of them are fraud. They’re planting trees or not cutting down trees, but they’re trees that were going to either be planted anyway or trees that were never going to be cut down. Even if they weren’t a fraud, they are not scalable. Because they’re mostly planting trees, there’s just not enough room on the planet. If we planted every square inch of the planet with trees that could grow trees, it would account for less than five months of mankind’s emissions. Oh, and by the way, we would all starve to death, because we’ve covered up all the farms.”¹⁴³</p> 4) In December 2022, JetBlue disclosed that it was reducing its reliance on carbon offsets, ditching them entirely as a means to tackling emissions on <i>domestic</i> flights. Sara Bogdan, JetBlue’s director of sustainability and environmental social |

| AAL Statement | Reality/Key Concerns |
|---|---|
| | governance said this about the market: “We do see an opportunity for greater transparency from the carbon credit market.” ¹⁴⁴ |
| Work with policymakers to accelerate modernization of global aviation infrastructure, technology and services to improve efficiency. ¹⁴⁵ | This accounts for just 9% of the carbon reduction needed to meet AAL’s goal of net zero by 2050. ¹⁴⁶ More research would be required to understand if there is any potential weakness in this component of the “net zero” pathway. |
| Achieve an absolute reduction of 50 million gallons of jet fuel from fuel efficiency initiatives by 2025. ¹⁴⁷ | This fuel efficiency goal accounts for just 3% of AAL’s planned carbon reduction. ¹⁴⁸ More research would be required to understand if there is any potential weakness in this component of the “net zero” pathway. |
| Target a 40% reduction in average emissions intensity from the production of the jet fuel we purchase by 2035. ¹⁴⁹ | This is the least significant prong of AAL’s carbon-reduction plan, representing just 2% of the needed reduction to meet the goal of net zero by 2050. ¹⁵⁰ More research would be required to understand if there is any potential weakness in this component of the “net zero” pathway. |

¹ [National Oceanic and Atmospheric Administration: Aviation is responsible for 3.5 percent of climate change, study finds. September 3, 2020.](#)

² [American Airlines Group Inc. Statement on Public Policy Engagement and Political Participation Adopted by the Board of Directors on January 25, 2022.](#)

³ See Appendix. Key Questions and Concerns About Select AAL Climate-Related Statements, infra at page 11 fns. 92–93.

⁴ See Appendix. Key Questions and Concerns About Select AAL Climate-Related Statements, infra at page 12–17, fns. 95–144.

⁵ [American Airlines Human Rights Statement Amended by the Board of Directors on May 3, 2023.](#)

⁶ [Shipe, O’Hara. “Sky Harbor workers complain of hellish conditions, low wages.” Phoenix New Times. September 14, 2023.](#)

⁷ See [Bendtsen, K.M., Bengtsen, E., Saber, A.T. et al. A review of health effects associated with exposure to jet engine emissions in and around airports. Environ Health 20, 10 \(2021\).](#)

See also:

[Johnson K., Solet D, Serry K., “Community Health and Airport Operations Related Noise and Air Pollution: Report to the Legislature in Response to Washington State House Bill 1109.” Public Health Seattle & King County, Assessment, Policy Development and Evaluation Unit. December 1, 2020 at Pgs. 8, 9, 13, 15, and 19.](#)

⁸ [American Airlines ESG Report 2021, PDF page 24–26.](#)

⁹ [American Airlines Sustainability Report 2022. PDF page 25–27.](#)

¹⁰ [American Airlines ESG Report 2021, PDF page 20–21.](#)

¹¹ This is a summary statement of the entire analysis below.

¹² [American Airlines ESG Report 2021, PDF page 24–26.](#)

¹³ [American Airlines Group Inc. Statement on Public Policy Engagement and Political Participation Adopted by the Board of Directors on January 25, 2022.](#)

¹⁴ [UN Climate Change: The Paris Agreement: What is the Paris Agreement? Retrieved October 24, 2023.](#)

¹⁵ [Paris Agreement, PDF page 1.](#)

¹⁶ [National Oceanic and Atmospheric Administration: Climate change impacts. August 13, 2021.](#)

¹⁷ [National Oceanic and Atmospheric Administration: Aviation is responsible for 3.5 percent of climate change, study finds. September 3, 2020.](#)

¹⁸ [ICCT: The Steep Descent to Net-Zero Aviation, March 8, 2023.](#)

¹⁹ [American Airlines Human Rights Statement Amended by the Board of Directors on May 3, 2023.](#)

²⁰ See [Bendtsen, K.M., Bengtson, E., Saber, A.T. et al. A review of health effects associated with exposure to jet engine emissions in and around airports. Environ Health 20, 10 \(2021\).](#)

See also:

[Johnson K., Solet D, Serry K., "Community Health and Airport Operations Related Noise and Air Pollution: Report to the Legislature in Response to Washington State House Bill 1109." Public Health Seattle & King County, Assessment, Policy Development and Evaluation Unit. December 1, 2020 at Pgs. 8, 9, 13, 15, and 19.](#)

²¹ [American Airlines ESG Report 2021, PDF page 20–21.](#)

²² [American Airlines ESG Report 2021, PDF page 24–26.](#)

²³ [American Airlines Group Inc. Statement on Public Policy Engagement and Political Participation Adopted by the Board of Directors on January 25, 2022.](#)

²⁴ [American Airlines ESG Report 2021, PDF page 23–24.](#)

²⁵ See Appendix. Key Questions and Concerns About Select AAL Climate-Related Statements, *infra* at page 11 fns. 92–93.

²⁶ "American submitted its intermediate [2035 GHG reduction] targets under the SBTi's first aviation pathway [. . .] which was designed to limit warming to well-below 2°C above preindustrial levels, the temperature goal outlined in the Paris Agreement." (2022 Sustainability Report PDF page 10)

²⁷ See Appendix. Key Questions and Concerns About Select AAL Climate-Related Statements, *infra* at page 12–17, fns. 95–144.

²⁸ [Foley & Lardner LLP Blog: Carbon Neutrality Suit Against Delta Airlines Signals the Arrival Time of "Greenwashing" Litigation. June 15, 2023.](#)

²⁹ [See Class Action Complaint Berrin vs. Delta Air Lines, \(C.D. Cal Case No. 2:23-cv-04150\), Document 1 Filed 05/30/23, PDF pages 3–4.](#)

See also:

[Second Amended Class Action Complaint Berrin v Delta Air Lines, \(C.D. Cal Case No. 2:23-cv-04150-MEMF-MRW\), Document 39 Filed 04/10/2024, PDF pages 3–4.](#)

³⁰ On March 28, 2024, the judge in the case granted in part and denied in part a motion by the defendant, Delta Air Lines, dismissing two of the claims in the case as insufficiently pleaded, but allowing the plaintiff to amend their claims so that they may be reinstated. The plaintiff filed a second amended class action complaint against Delta Air Lines on April 10, 2024, in which the plaintiff reasserted the allegations that are referenced in this report.

[See Order Granting in Part Motion to Dismiss with Leave to Amend \[ECF No. 22\] Berrin v. Delta Air Lines \(C.D. Cal Case No. 2:23-cv-04150\), Document 37 Filed 03/28/24, PDF pages 1 & 14\).](#)

See also:

[Second Amended Class Action Complaint Berrin v Delta Air Lines, \(C.D. Cal Case No. 2:23-cv-04150-MEMF-MRW\), Document 39 Filed 04/10/2024, PDF pages 3–4.](#)

³¹ American Airlines Sustainability Report 2022, PDF page 12.

³² [Foley & Lardner LLP Blog: Carbon Neutrality Suit Against Delta Airlines Signals the Arrival Time of "Greenwashing" Litigation. June 15, 2023.](#)

³³ [See Class Action Complaint Berrin vs. Delta Air Lines, \(C.D. Cal Case No. 2:23-cv-04150\), Document 1 Filed 05/30/23, PDF pages 3–4.](#)

See also:

Second Amended Class Action Complaint Berrin v Delta Air Lines, (C.D. Cal Case No. 2:23-cv-04150-MEMF-MRW), Document 39 Filed 04/10/2024, PDF pages 3–4.

³⁴ American Airlines Sustainability Report 2022, PDF page 12.

³⁵ American Airlines Sustainability Report 2022, PDF page 12.

³⁶ American Airlines Sustainability Report 2022, PDF page 18–19.

³⁷ American Airlines Sustainability Report 2022, PDF page 18.

³⁸ American Airlines Sustainability Report 2022, PDF page 10.

³⁹ American Airlines Sustainability Report 2022, PDF pages 10 & 59.

⁴⁰ AAL SAF Goal Calculator: Tab 3, Row 3, Especially Cell D3.

⁴¹ Bragg, Jesse; Jackson, Rachel Rose; Lahiri, Souparna. "The Big Con." Corporate Accountability, Global Forest Coalition, Friends of the Earth International et al. June 2021. PDF pages 4, 5, 9, 13.

⁴² American Airlines Environmental Policy Statement. May 3, 2023.

⁴³ American Airlines Group Inc. Statement on Public Policy Engagement and Political Participation Adopted by the Board of Directors on January 25, 2022.

⁴⁴ American Airlines ESG Report 2021, PDF pages 6 & 11.

⁴⁵ See Appendix. Key Questions and Concerns About Select AAL Climate-Related Statements, *infra* at page 11 fns. 92–93.

⁴⁶ See Appendix. Key Questions and Concerns About Select AAL Climate-Related Statements, *infra* at pages 10–11, fns. 71–91.

⁴⁷ American Airlines ESG Report 2021, PDF page 23.

⁴⁸ American Airlines ESG Report 2021, PDF pages 10–12 & 22–25.

⁴⁹ American Airlines Sustainability Report 2022, PDF pages 10–12 & 18.

⁵⁰ American Airlines ESG Report 2021, PDF page 24–26.

⁵¹ Setzer, Joana and Higham, Catherine. "Global trends in climate change litigation: 2023 snapshot. London: Grantham Research Institute on Climate Change and the Environment, et al. June 2023. PDF pages 4–5.

⁵² American Airlines Human Rights Statement Amended by the Board of Directors on May 3, 2023.

⁵³ American Airlines Sustainability Report 2022, PDF page 27.

⁵⁴ American Airlines retaliated against employees who reported toxic fumes - CBS Texas.

⁵⁵ American Airlines subsidiary fined for safety breach after worker 'ingested into engine'.

⁵⁶ Bendtsen, K.M., Bengtson, E., Saber, A.T. et al. A review of health effects associated with exposure to jet engine emissions in and around airports. *Environ Health* 20, 10 (2021).

See also:

Johnson K., Solet D, Serry K., "Community Health and Airport Operations Related Noise and Air Pollution: Report to the Legislature in Response to Washington State House Bill 1109." Public Health Seattle & King County, Assessment, Policy Development and Evaluation Unit. December 1, 2020 at Pgs. 8, 9, 13, 15, and 19.

⁵⁷ ⁵⁷ Weiland, Noah. "Workers Exposed to Extreme Heat Have Few Protections," *The New York Times*, October 5, 2023.

See also:

United Nations, "Causes and Effects of Climate Change

⁵⁸ Pawlyk, Oriana. "Sweltering cabin planes are travelers newest misery." *Politico*. September 5, 2023.

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- ⁵⁹ [Shipe, O'Hara. "Sky Harbor workers complain of hellish conditions, low wages." Phoenix New Times. September 14, 2023.](#)
- ⁶⁰ [Shipe, O'Hara. "Sky Harbor workers complain of hellish conditions, low wages." Phoenix New Times. September 14, 2023.](#)
- ⁶¹ [Gelles, David and Manuela Andreoni. "How Extreme Heat Affects Workers and the Economy." The New York Times. July 20, 2023.](#)
- ⁶² [Kim, Whizy and Kenny Torella. "This summer is giving us a glimpse at the dangerous future of work." Vox. August 25, 2023.](#)
- ⁶³ [Uteuova, Aliya. "The cruelty Olympics': Texas workers condemn elimination of water breaks." The Guardian. August 2, 2023.](#)
- ⁶⁴ [Records pertaining to Phoenix Sky Harbor airport workers' August 2023 Notice of Alleged Safety or Health Hazards to ADOSH on file with SEIU.](#)
- ⁶⁵ [ISHN Staff. "Phoenix passes heat safety ordinance for city contractors." Industrial Safety & Hygiene News \(ISHN\). March 28, 2024.](#)
- ⁶⁶ [Dallas Fort Worth International Airport Board meeting minutes, 7 Sep. 2023, p. 6.](#)
- ⁶⁷ [Charlotte City Council Business Meeting, 28 Aug. 2023, Recording of relevant sections begins 1:59:00.](#)
- ⁶⁸ [American Airlines Group Inc. Statement on Public Policy Engagement and Political Participation Adopted by the Board of Directors on January 25, 2022.](#)
- ⁶⁹ [AAL reminded shareholders of this reporting commitment when the Board unanimously opposed a transparency in lobbying stockholder proposal at the 2022 Annual Meeting as "unnecessary given the policies and disclosure practices we have in place today, the current public availability of much of the information requested by the proposal and the new disclosures we intend to make this year regarding our trade associations' alignment with the Paris Agreement on climate change policy." SEC DEF 14A, Pages 29–32 \(emphasis added\).](#)

Proposal 7–Transparency in Lobbying ultimately failed, garnering just 22% support. [Morningstar: Proxy Voting Insights: Voting on Politics, PDF page 10.](#)

⁷⁰ On or before August 24, 2023, the sections of AAL's website and reports, identified in this footnote below, were either read in their entirety and/or searched using the following search terms: "Paris" "aligned" "lobbying" "trade" "trade associations" "A4A".

- 1) [American Airlines Sustainability Report 2022.](#)
- 2) [American Airlines 2022 and 2023 Press Releases \(2024 Press Releases searched on April 13, 2024\).](#)
- 3) [American Airlines Environmental Policy Statement.](#)
- 4) [ESG Section of American Airlines Website \(Reconfirmed on April 13, 2024\).](#)
- 5) [Resource Center on American Airlines Website \(Reconfirmed on April 13, 2024\).](#)
- 6) [Investor Relations Section of American Airlines Website \(Reconfirmed on April 13, 2024\).](#)

⁷¹ [American Airlines Sustainability Report 2022, PDF page 17.](#)

⁷² [American Airlines Shareholder Communication from Megan Sweeney \(SEIU\), May 16, 2022.](#)

⁷³ [American Airlines Trade Associations Membership in 2022, Updated July 2023.](#)

⁷⁴ [A4A: Who We Are: Member Airlines & Our Board of Directors, Retrieved August 29, 2023.](#)

⁷⁵ ["New York Democrats Try Again to End Some Fossil Fuel Subsidies", The American Prospect, December 23, 2021.](#)

⁷⁶ ["Deployment of Sustainable Aviation Fuel in the United States", A4A, September 25, 2020.](#)

⁷⁷ [Lobby Facts: Airlines for America: 2020, Retrieved September 11, 2023.](#)

⁷⁸ [American Airlines Shareholder Communication from Megan Sweeney \(SEIU\), May 16, 2022.](#)

⁷⁹ [American Airlines Shareholder Communication from Megan Sweeney \(SEIU\), May 16, 2022.](#)

⁸⁰ See also:

[A4A Comments on Key Pieces of the European Commission's \(EC\) "Fit for 55" Package: ReFuelEU Aviation, RED III, and EU ETS for Aviation, Nov. 8, 2021.](#)

⁸¹ [Airlines for America: What They're Saying: New Jersey's Proposed Jet Fuel Tax Hike \(2016\), PDF page 4. Retrieved August 15, 2023.](#)

⁸² [Assembly Bill No. 4392, PDF page 1 & 5–6. Introduced September 13, 2018.](#)

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- ⁸³ [Metropolitan Airport News: NJ Senate Leader Proposes to Divert Aviation Fuel Tax for Off-Airport Development. August 14, 2018.](#)
- ⁸⁴ [N.J. Dems want to raise tax on jet fuel to fund PATH, but airlines hope the idea crashes and burns. December 17, 2018.](#)
- ⁸⁵ [Derek Kerr LinkedIn: Sits on Board of Dallas Regional Chamber, Accessed September 14, 2023.](#)
- ⁸⁶ [Climate and Development Lab: Chamber of Obstruction, PDF pages 3–6.](#)
- ⁸⁷ [American Airlines Trade Associations Membership in 2022, Updated July 2023.](#)
- ⁸⁸ [The US Chamber of Commerce Has Helped Downplay the Climate Threat, a New Report Concludes - Inside Climate News.](#)
- ⁸⁹ [InfluenceMap Briefing: The U.S. Chamber's Climate Policy Engagement, February 2023.](#)
- ⁹⁰ [InfluenceMap Briefing: The U.S. Chamber's Climate Policy Engagement, February 2023.](#)
- ⁹¹ [DiMolfetta, David, "Climate group pushes Big Tech to exit nation's largest business lobby," Washington Post. August 2, 2023.](#)
- ⁹² [UN Climate Change: The Paris Agreement: What is the Paris Agreement? Retrieved August 15, 2023.](#)
- ⁹³ [Airlines for America: What They're Saying: New Jersey's Proposed Jet Fuel Tax Hike \(2016\), PDF page 3. Retrieved August 15, 2023.](#)
- ⁹⁴ [American Airlines Sustainability Report 2022, PDF pages 10-12.](#)
- ⁹⁵ [American Airlines Sustainability Report 2022, PDF page 12.](#)
- ⁹⁶ In addition to the sources footnoted below, formulas and calculations for many of the figures in the bullets below are available in the [AAL SAF Goal Calculator](#).
- ⁹⁷ [Realizing the potential of sustainable aviation fuel | Airlines. April 19, 2021.](#)
- ⁹⁸ [American Airlines Sustainability Report 2022, PDF page 59.](#)
- ⁹⁹ [American Airlines Sustainability Report 2022, PDF page 10.](#)
- ¹⁰⁰ [American Airlines Sustainability Report 2022, PDF pages 10 & 59.](#)
- ¹⁰¹ [AAL SAF Goal Calculator: Tab 3, Row 3, Especially Cell D3.](#)
- ¹⁰² [ICAO: SAF Stocktaking - What is it about?](#)
- ¹⁰³ [UnitConverters: Convert liters to gallons.](#)
- ¹⁰⁴ [AAL SAF Goal Calculator: Tab 1, Row 2, Especially Cells E2 & F2..](#)
- ¹⁰⁵ [Mint: Sustainable aviation fuel production to hit 300 million litres in 2022: IATA.](#)
- ¹⁰⁶ [American Airlines Sustainability Report 2022, PDF page 59.](#)
- ¹⁰⁷ [AAL SAF Goal Calculator: Tab 1, Row 2, Especially Cell D2 & Tab 2, Row 2, Especially Cell F2.](#)
- ¹⁰⁸ [ICAO: SAF Stocktaking - What is it about?](#)
- ¹⁰⁹ [AAL SAF Goal Calculator: Tab 1, Rows 3 & 4, Especially Cells F3 & F4..](#)
- ¹¹⁰ [American Airlines Sustainability Report 2022, PDF page 18.](#)
- ¹¹¹ [American Airlines Sustainability Report 2022, PDF page 12.](#)
- ¹¹² [American Airlines Sustainability Report 2022, PDF page 18–19.](#)
- ¹¹³ [Breakthrough Energy, LLC. "What We Do."](#)
- ¹¹⁴ [American Airlines Sustainability Report 2022, PDF page 18.](#)
- ¹¹⁵ [American Airlines Sustainability Report 2022, PDF page 18.](#)
- ¹¹⁶ [American Airlines Sustainability Report 2022, PDF page 10.](#)
- ¹¹⁷ [Yoo, Eunji; Lee, Uisung; and Wang, Michael. "Life-Cycle Greenhouse Gas Emissions of Sustainable Aviation Fuel through a Net-Zero Carbon Biofuel Plant Design." ACS Sustainable Chem. Eng. 2022, 10, 27, 8725–8732 Publication Date: June 29, 2022.](#)

"Nonetheless, the [biomass] technology remains unproven at commercial scale." Prossi, Matteo; Lee, Uisung; et. al. "CORISA: the First Internationally Adopted Approach to Calculate Life-Cycle GHG Emissions for Aviation Fuels." [Renewable and Sustainable Energy Reviews](#), vol. 150, October, 2021.

Some estimates of corn ethanol are even lower. The U.S. Department of Energy Bioenergy Technologies Office estimates that, “Compared to petroleum jet fuel, SAF produced from today’s corn ethanol also already offers a 15 percent lower carbon intensity.”
Spaeith, Jim. “Sustainable Aviation Fuels from Low-Carbon Ethanol Production.” U.S. Department of Energy Bioenergy Technologies Office: October 20, 2021.

¹¹⁸ American Airlines Sustainability Report 2022, PDF page 12.

¹¹⁹ American Airlines Sustainability Report 2022, PDF page 13.

¹²⁰ As indicated, for example, by AAL's admission that its "statements based on hypothetical scenarios and assumptions as well as estimates or topics that are subject to a high level of uncertainty" (2022 Sustainability Report PDF p.76)

¹²¹ Reuters: Hydrogen aircraft developers are in for the long haul. February 9, 2023.

¹²² MIT Technology Review: Hydrogen-powered planes takeoff with start-up's test flight. January 19, 2023.

¹²³ MIT Technology Review: Hydrogen-powered planes takeoff with start-up's test flight. January 19, 2023.

¹²⁴ American Airlines Sustainability Report 2022, PDF page 12.

¹²⁵ American Airlines Sustainability Report 2022, PDF page 12.

¹²⁶ American Airlines Sustainability Report 2022, PDF page 12.

¹²⁷ American Airlines Sustainability Report 2022, PDF page 12.

¹²⁸ American Airlines Sustainability Report 2022, PDF page 12.

¹²⁹ American Airlines Announces Agreement to Purchase Boom Supersonic Overture Aircraft, Places Deposit on 20 Overtures.

¹³⁰ Rutherford, Dan. “Zero Cheers for the Supersonic Renaissance.” International Council on Clean Transportation. July 11, 2022.

¹³¹ Rutherford, Dan. “Place Your Bets: Supersonics, Or Zero-Emission Planes.” International Council on Clean Transportation. February 11, 2022.

¹³² American Airlines Sustainability Report 2022, PDF page 12.

¹³³ American Airlines Sustainability Report 2022, PDF page 12.

¹³⁴ Foley & Lardner LLP Blog: Carbon Neutrality Suit Against Delta Airlines Signals the Arrival Time of “Greenwashing” Litigation. June 15, 2023.

¹³⁵ Foley & Lardner LLP Blog: Carbon Neutrality Suit Against Delta Airlines Signals the Arrival Time of “Greenwashing” Litigation. June 15, 2023.

¹³⁶ See Class Action Complaint Berrin vs. Delta Air Lines, (C.D. Cal Case No. 2:23-cv-04150), Document 1 Filed 05/30/23. PDF pages 3-4.

See also:

Second Amended Class Action Complaint Berrin v Delta Air Lines, (C.D. Cal Case No. 2:23-cv-04150-MEMF-MRW), Document 39 Filed 4/10/24, PDF pages 3–4.

¹³⁷ Foley & Lardner LLP Blog: Carbon Neutrality Suit Against Delta Airlines Signals the Arrival Time of “Greenwashing” Litigation. June 15, 2023.

¹³⁸ See Class Action Complaint Berrin vs. Delta Air Lines, (C.D. Cal Case No. 2:23-cv-04150), Document 1 Filed 05/30/23. PDF pages 3–4.

See also:

Second Amended Class Action Complaint Berrin v Delta Air Lines, (C.D. Cal Case No. 2:23-cv-04150-MEMF-MRW), Document 39 Filed 4/10/24, PDF pages 3–4.

¹³⁹ Seattle Times: A greenwashing lawsuit against Delta aims to set a precedent. June 20, 2023.

¹⁴⁰ On March 28, 2024, the judge in the case granted in part and denied in part a motion by the defendant, Delta Air Lines, dismissing two of the claims in the case as insufficiently pleaded, but allowing the plaintiff to amend their claims so that they may be reinstated. The plaintiff filed a second amended class action complaint against Delta Air Lines on April 10, 2024, in which the plaintiff reasserted the allegations that are referenced in this report.

See Order Granting in Part Motion to Dismiss with Leave to Amend [ECF No. 22] Berrin v. Delta Air Lines (C.D. Cal Case No. 2:23-cv-04150), Document 37 Filed 03/28/24, PDF pages 1 & 14).

See also:

Second Amended Class Action Complaint Berrin v Delta Air Lines, (C.D. Cal Case No. 2:23-cv-04150-MEMF-MRW), Document 39 Filed 04/10/2024, PDF pages 3–4.

¹⁴¹ Bragg, Jesse; Jackson, Rachel Rose; Lahiri, Souparna. "The Big Con." Corporate Accountability, Global Forest Coalition, Friends of the Earth International et al. June 2021. PDF page 12.

¹⁴² S&P Global: United Airlines' 2050 carbon neutral target won't rely on offsets. March 15, 2022.

¹⁴³ Prang, Allison. "The airline CEO who hates offsets." Politico. March 24, 2023.

¹⁴⁴ Schlangenstein, Mary. "JetBlue Moves Away From Carbon Credits to Focus on Greener Fuel." Bloomberg. December 8, 2022.

¹⁴⁵ American Airlines Sustainability Report 2022, PDF page 12.

¹⁴⁶ American Airlines Sustainability Report 2022, PDF page 12.

¹⁴⁷ American Airlines Sustainability Report 2022, PDF page 12.

¹⁴⁸ American Airlines Sustainability Report 2022, PDF page 12.

¹⁴⁹ American Airlines Sustainability Report 2022, PDF page 12.

¹⁵⁰ American Airlines Sustainability Report 2022, PDF page 12.