



AIRLINES



Decarbonizing aviation: Executing on net-zero goals

Aviation is responsible for 2% of global energy-related CO₂ emissions.¹ However, aviation also emits non-CO₂ emissions that are likely to be at least equally significant in their contribution to global warming.² Demand for aviation is expected to increase substantially between now and 2050, making the decarbonisation of the sector urgent and challenging.³

Key climate-related requests

Category	Requests
Targets 	<ul style="list-style-type: none"> Near-term and long-term emission reduction targets covering all material scopes 1, 2, and 3 emissions, in line with the goal of the Paris Agreement. Externally certified, if possible. A sustainable aviation fuel (SAF) blending target in line with the goals of the Paris Agreement.⁴ Subject to decreased uncertainty, set a target for reducing non-CO₂ impacts. For example, via flight planning or using higher SAF blends.
Strategy 	<ul style="list-style-type: none"> Disclose the levers for reaching emission reduction targets, including an estimated contribution of each lever. Disclose a capital and operating expenses plan that supports decarbonisation targets. Disclose the criteria used to assess potential SAF providers. Provide information on how the company ensures the sustainability of sourced SAF, including possible effects on biodiversity. Disclose the reliance on offsets to meet emission reduction targets and provide a report on the quality assessment of such offsets. Monitor, report, and verify non-CO₂ effects in a manner consistent with relevant reporting frameworks.
Risk analysis 	<ul style="list-style-type: none"> Disclose an examination of the company's resilience to transition and physical climate risks using a scenario analysis. Provide information on how this risk assessment is incorporated in the company's targets and strategy.
Engagement 	<ul style="list-style-type: none"> Align climate policy engagement with the decarbonisation goals of the company. Disclose a recurring review of direct and indirect climate policy engagement against the Paris goal. Demonstrate that the company is helping its customers and suppliers decarbonise. Contribute to scientific research reducing the significant uncertainty around the overall impact on climate change of aviation's non-CO₂ emissions and how to address it.

¹ IEA (2023). Aviation. Available at: <https://www.iea.org/energy-system/transport/aviation>

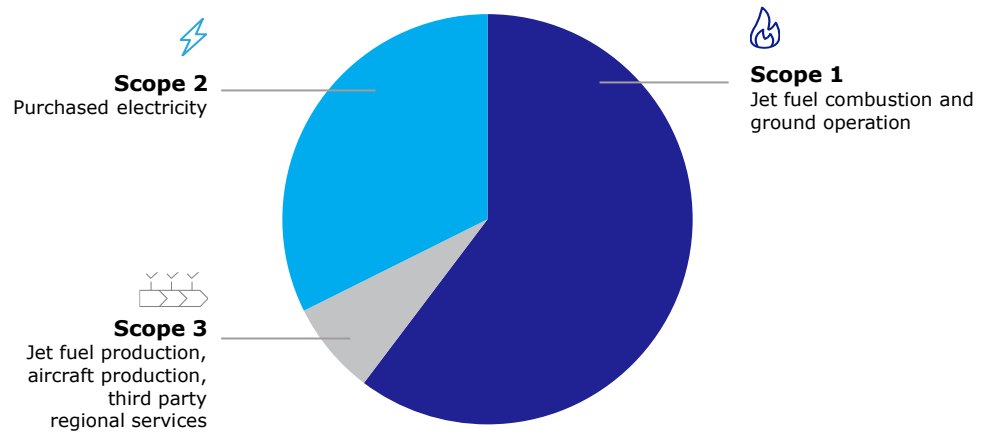
² EASA. (2020). Updated analysis of the non-CO₂ climate impacts of aviation and potential policy measures pursuant to the EU Emissions Trading System Directive Article 30(4). Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD:2020:277:FIN>

³ ICCT. (2022). Vision 2050: Aligning aviation with the Paris Agreement. Available at: https://theicct.org/wp-content/uploads/2022/06/Aviation-2050_report_final_v2.pdf

⁴ For example, the Net Zero Emissions scenario of the International Energy Agency (IEA NZE) includes 11% SAF (biojet kerosene) blending by 2030. IEA. (2023). World Energy Outlook 2023. Available at: <https://www.iea.org/reports/world-energy-outlook-2023>



Emissions sources



Levers to decarbonise

- Blending SAF into jet fuel
- Using aircrafts with improved fuel efficiency
- Improving operational efficiency, such as single-engine taxiing
- Using electric or hydrogen-powered aircrafts for short-haul flights



Threats

- High cost of SAF
- Availability of sustainably-sourced SAF
- Commercial viability of electric and hydrogen-powered aircrafts
- Insufficient global coordination

Opportunities

- Cost savings from operational and fuel efficiency gains
- Diversification of fuel sources
- Increased preparedness for future regulation
- Government incentives

Supporting factors

- Regulatory measures, such as carbon pricing, SAF mandates, and SAF incentives.
- International cooperation



Companies under engagement

Companies can be selected for several reasons (e.g., size, emissions, geography, etc.). Therefore, selected companies should not necessarily be seen as laggards compared to peers.

- **Deutsche Lufthansa**
- **International Consolidated Airlines Group**
- **Turkish Airlines**
- **United Airlines**