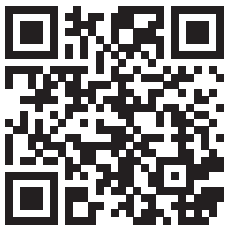



BIO



Green Aviation
The path to carbon-neutral growth





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INTRODUCTION



SMART IDEA
& PRACTICE

INTRODUCTION

Air transport has expanded swiftly and has become crucial to the global economy. Climate change poses a substantial threat to international aviation, due to a predicted growth in the sector, as well as the corresponding energy consumption and carbon emissions. Aviation is one of the fastest rising contributors to climate change.

Annual greenhouse effects from global air transport since 1940 demonstrate this. The latter, which includes both passenger and freight flights, is expected to have released 1.04 billion tonnes of CO₂ in 2018. This accounted for around 2.5 percent of total carbon footprint in 2018. Likewise, aircraft emissions have more than doubled since the mid-1980s.¹

The EU is taking steps to cut air transport emissions in Europe and collaborating with the international community to create global-reaching policies in response to growing environmental awareness. The European Commission released a series of legislative recommendations on 14 July 2021, outlining its strategy for achieving climate neutrality in the EU by 2050, including the intermediate goal of a net reduction of greenhouse gas impact of at least 55 percent by 2030.²



In the same vein, airlines have committed to carbon-neutral growth in international commercial aviation beginning in 2021, while US air transporters have set a target of 50 percent reduction in carbon dioxide emissions by 2050 compared to 2005 levels.³ Understanding the industry's needs to mitigate its climate effect requires a perception that considers the sector's socio-technical characteristics, as well as the challenges and opportunities associated with a future green transition of the aircraft industry. Lastly, the paper highlights five sustainable airlines which stand out in the industry for their environmental and fuel efficiency initiatives.

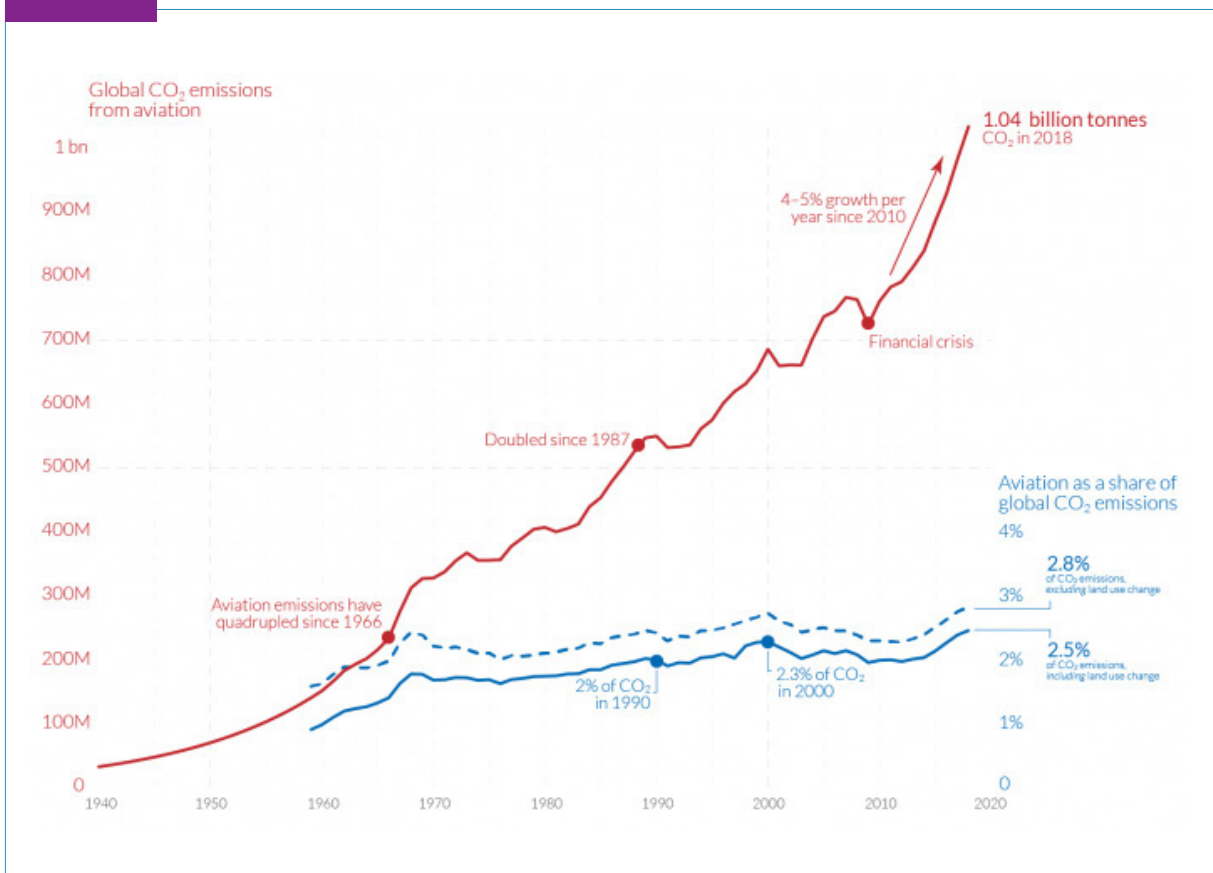


Figure 1

Global carbon dioxide emissions from aviation. Ritchie, H. (2020, October). Climate change and flying: what share of global CO₂ emissions come from aviation? GCDL. Retrieved from: <https://ourworldindata.org/co2-emissions-from-aviation>



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