By 2050, the commercial aviation industry could expect to fly 10 billion passengers, generating 2,350 million tons of CO2 emissions.

Without decarbonization, that translates into 2.6 times the emissions generated in 2005 and 3.6 times the emissions generated in 2005, making the aviation industry responsible for 22% of the planet's total emissions by 2050.

This could lead to:
- Regulations reducing short-flights and promoting the use of more sustainable alternate modes of transportation, such as electric trains, may come into force.
- Two solutions have significant potential to reduce Scope 3 emissions: Regulations reducing short-flights and promoting the use of more sustainable alternate modes of transportation, such as electric trains, may come into force.
- Together, these two could reduce up to 6.9% (1,400 million tons of CO2 emissions) through 2050.

70% of the industry's total carbon footprint

DECARBONIZING AEROSPACE

A road map for the industry's lower-emissions future

By 2050, the commercial aviation industry could expect to fly 10 billion passengers, generating 2,350 million tons of CO2 emissions.

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- Regulations reducing short-flights and promoting the use of more sustainable alternate modes of transportation, such as electric trains, may come into force.
- 6.9% (1,400 million tons of CO2 emissions) through 2050.

Two solutions have significant potential to reduce Scope 3 emissions:

- ELECTRIC PROPULSION: BETTER FOR SHORTER FLIGHTS
- SUSTAINABLE AVIATION FUELS: BETTER FOR LONGER FLIGHTS

Together, these two could reduce up to 6.9% (1,400 million tons of CO2 emissions) through 2050.

SIX IN 10 INDUSTRY LEADERS

Robust collaboration among all the aerospace ecosystem players will be key to driving the adoption and growth of electric aircraft.

For SAFs, the focus should be on scaling production capabilities to drive down the price and increase demand.

Deloitte Insights

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