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Boeing, an aviation company that distributes about 90% of the world’s cargo is pledging to reduce its carbon emissions in half by the year 2050. In 2021, [Reuters](https://www.reuters.com/article/us-boeing-biofuels/boeing-says-its-fleet-will-be-able-to-fly-on-100-biofuel-by-2030-idUSKBN29R2C4) announced that the corporation will begin distributing airplanes with the ability to rely completely on biofuel instead of crude oil. Over 2 years later, it was recently announced that Boeing is continuing their effort to reduce their carbon footprint by signing an alternative fuel deal with a Los Angeles-based start-up, [Equatic](https://www.equatic.tech/).

**What is the difference between biofuel and crude oil?**

Biofuel, a liquid produced from organic matter (otherwise known as biomass) can be sourced from plants and animals. This jet fuel alternative works just the same, producing energy to create heat, drive automobiles and fly planes. Due to its origin, biofuel has been around a lot longer than oil - however, its popularity has only gained traction recently by companies and individuals wanting to limit climate change.

Currently, biofuels are mixed directly with conventional jet fuel. The most common blend is 80-20, with 80% being petroleum diesel and 20% biodiesel. The maximum mixture allowed under current specifications is 50/50 blend.

**Boeing’s contribution to carbon emissions**

2.5% doesn’t seem like much, however two and a half percent of the world’s total carbon emissions are contributed by aviation - that’s roughly 920 billion tons of carbon dioxide. This CO2 for the most part is emitted at the altitude of the plane, which is thought to induce a greater greenhouse effect than the same chemicals released at sea level.

Since 2007, Boeing [claims](https://s2.q4cdn.com/661678649/files/doc_financials/2020/sr/2020-Boeing-Environment-Report-Companion-Summary.pdf) they have reduced 29% in their personal greenhouse gas emissions from manufacturing. They are on a positive track, keeping their word and finding alternative ways to provide the world with a healthier atmosphere**.**

**How can aviation companies like Boeing speed up their efforts to reduce carbon emissions?**

Policy. In 2022, the [Biden administration](https://www.usda.gov/media/press-releases/2022/04/12/biden-harris-administration-department-agriculture-announce-efforts) announced the “Biofuel Boost”, which would raise the amount of biofuel mixture into gasoline and diesel from 20.87 billion gallons to 22.68 billion in 2025. Current regulations and limitations on the mixtures are making it harder for aviation - the help of policy makers and government officials would pave the way.

A green light by the government is needed, as well as by aviation regulators to affirm that using 100% biofuel or increasing the blends would be safe for planes to fly. Boeing must determine what changes to make to ensure safe flight on alternative fuels.

**Equatic & Boeing’s partnership in cleaning up the ocean**

Boeing will be buying hydrogen produced by the Los Angeles-based startup to be used to cleanse seawater of carbon dioxide. This carbon-removal system, developed by UCLA engineering faculty, is expected to be in full-swing by 2025. The ocean has absorbed 30% of carbon dioxide emissions since the Industrial Revolution, protecting people from early climate change.