

Carbon Offsetting

Carbon offsetting is one of four key areas of aviation's climate action strategy to reduce CO₂ emissions. While work on the three other areas will reduce the CO₂ growth rate, forecasts indicate overall emissions will increase as the industry recovers from COVID-19. Offsets are necessary to fill the gap.

Global program



- **Every nation in the world adopted a program** in 2016 to offset CO₂ emissions from aviation. This historic agreement by the U.N. International Civil Aviation Organization (ICAO) represents the world's first sector-based, global market mechanism to address climate change.
- **The Carbon Offsetting and Reduction Scheme** for International Aviation (CORSIA) was expected to offset 76% of emissions growth from international flights from 2020 onward, based on pre-COVID-19 flying trends. That would go up to 90% from 2027 onward.



87 nations have agreed to participate voluntarily in CORSIA now before mandatory implementation takes effect in 2027.

Reducing CO₂ emissions



- **Airlines will buy offset credits** that finance projects to reduce emissions, many in developing countries.
- **Strict environmental criteria** will ensure the projects provide permanent and additional emission reductions that are quantifiable, monitored, and reported.
- **CORSIA does not replace efforts** to advance airplane efficiency, improve fleet operational efficiency, and scale up sustainable fuel supplies. It is helping to reduce emissions as the other work advances—enabling aviation to achieve its climate goals.



41 airlines support offsetting as a key aspect of aviation's strategy to reduce emissions.

Over three dozen operators offer carbon offsetting to their passengers or buy credits on their own.

Voluntary efforts



Over 60 airports around the world are carbon-neutral. Among them: Abidjan, Ivory Coast, Dallas-Fort Worth, Mumbai, Oslo, Norway, Quito, Ecuador, and Sunshine Coast, Australia.

- **Many airlines are acting on their own** outside of CORSIA. They offer carbon offsetting to their passengers and/or buy credits for some or all of their domestic and international emissions.
- **Air France, British Airways, and jetBlue** committed to offset their respective domestic emissions in 2020. easyJet committed to offset all of its emissions starting this year. Delta stopped its CO₂ growth, starting in 2012, through the purchase of offsets.
- **More than 300 airports** are working toward zero net emissions through the Airport Carbon Accreditation program, run by Airports Council International. In addition to various emissions-reduction efforts, a number of airports offset the rest of their CO₂ emissions.



1% – 3% of passengers typically offset their emissions from flying.

Carbon Offsetting



CORSIA Offsetting

How carbon offsets work

Ensuring integrity

Government-appointed technical experts assess the eligibility of carbon offset projects.

Emissions reductions must be additional, quantifiable, permanent, verified, and cause no net harm.

ICAO has approved six voluntary and government-run entities to provide carbon offsets and ensure that funded projects meet the eligibility standards.

- **Offset credits compensate for producing CO₂** in one area by funding a project that reduces CO₂ in another. Most offsets are in units of one metric ton of CO₂. CORSIA is helping to ensure aviation meets two key environmental goals the industry adopted in 2008.
- **Offsets fund a range of projects** such as forestry and solar, hydro, and other renewable energy. Offsets in the future may also fund carbon-capture projects, which use technology to draw CO₂ out of the air.
- **Airlines flying between participating nations** must offset the net increase in their emissions over 2019 levels, starting in 2021. ICAO modified CORSIA's original baseline years of 2019 and 2020 due to the extraordinary decline in flying, which would have established an abnormal baseline. The action preserves CORSIA's intent to stop net CO₂ emissions growth.
- **Offsetting is more effective than aviation taxes.** Revenue from a carbon tax might not actually reduce emissions. Offsets place a cost on the industry for its activities—and ensure the revenue goes directly to projects that reduce CO₂ emissions.
- **Boeing is complying with CORSIA** for its corporate international flights as a first step toward offsetting business travel.

GOAL

0%

STABILIZE AVIATION'S NET CO₂ EMISSIONS GROWTH

from 2020 onward

IN WORK

GOAL

50%

REDUCE AVIATION'S NET CO₂ EMISSIONS

to 2005 levels by 2050

IN WORK