

Fact Sheet

Climate Change & CORSIA

The aviation industry recognizes the need to address the global challenge of climate change and in 2009 adopted a set of ambitious targets to mitigate CO2 emissions from air transport:

- An average improvement in fuel efficiency of 1.5% per year from 2009 to 2020
- A cap on net aviation CO₂ emissions from 2020 (carbon-neutral growth)
- A reduction in net aviation CO₂ emissions of 50% by 2050, relative to 2005 levels

The industry 4-pillar strategy

The industry is pursuing a 4-pillar strategy for addressing aviation's climate impacts and to meet the carbon targets:

- New technology, including the deployment of sustainable alternative fuels
- More efficient aircraft operations
- Infrastructure improvements, including modernized air traffic management systems
- A single Global Market-Based Measure (GMBM) to fill the remaining emissions gap

The aviation industry is confident that technology, operations and infrastructure measures will provide long-term solutions for aviation's sustainable growth. However, the industry recognizes that a global market-based measure (GMBM) is needed to fill any remaining emissions gap.

The industry favors a single, global market-based measure to address CO₂ emissions from international aviation. Many airlines fly into dozens of different countries on a daily basis, with some large airlines serving over a hundred different countries each day; they need to have a single point of accountability. If airlines are subject to a patchwork of national or regional CO₂ taxes, offsetting mechanisms, emissions trading schemes and other carbon pricing instruments, compliance would be unnecessarily complex and costly.

A CO₂ standard for aircraft

In February 2017, the International Civil Aviation Organization (ICAO) adopted the first ever global CO₂ certification standard for new aircraft. The standard sets limits to the CO₂ emissions from aircraft in relation to their size and weight. The standard is projected to save significant quantities of CO₂ once it comes into effect in 2020.

CORSIA – the ICAO global market-based measure

In 2016, ICAO adopted CORSIA, a global carbon offsetting scheme to address CO2 emissions from international aviation. The aviation sector is committed to technology, operational and infrastructure advances

to continue to reduce the sector's carbon emissions. Offsetting is not intended to replace these efforts. Nor would the CORSIA make fuel efficiency any less of a day-to-day priority.

Under CORSIA:

- All operators will need to monitor, verify and report their emissions on all international flights starting on 1 January 2019.
- Operators will be required to purchase "emissions units", to offset the growth in CO2 emissions covered by the scheme.

What is offsetting?

Offsetting allows a company to compensate for its emissions by financing a reduction in emissions elsewhere. While carbon offsetting does not require companies to reduce their emissions "in-house", it provides an environmentally effective option for sectors where the potential for further emissions reductions is limited. There are many ways to achieve CO2 reductions that can be used as offsets, many of which bring other social, environmental or economic benefits relevant to sustainable development.

Offsetting and carbon markets have been a fundamental component of emissions reduction policies and continue to be an effective mechanism to underpin action against climate change. Offsetting is also more effective than a tax, as a carbon tax merely requires companies to pay for their emissions, without any guarantees that the payment will lead to any emissions reductions.

Some facts on aviation and climate change

- Air transport accounts for 2% of global man-made CO2 emissions. In 2017, civil aviation, as a whole, emitted around 859 million tonnes of CO2, which is roughly 2% of man-made carbon emissions.
- It is estimated that, under CORSIA, aviation will have to offset 2.6 billion tonnes of CO2 between 2021 and 2035.
- Each new generation of aircraft is on average 20% more fuel efficient than the model it replaces and over the next decade airlines will invest \$1.3 trillion in new planes.
- Airlines have continued to improve their fuel efficiency performance between 2009 and 2016. In 2016, fuel efficiency for total system-wide services (in litres per 100 RTK) stands at 35.28 litres per 100 RTK, an improvement of 10.2% compared to 2009.
- Airlines already have a strong incentive to emit less: an airline reduces its fuel costs by approx. 225
 USD for each tonne of CO2 it is able to avoid.

More information on www.iata.org/policy/environment