UNDERSTANDING CORSIA



One part of the aviation sector's climate action is the ICAO Carbon Offsetting Scheme for International Aviation, also known as CORSIA. How does it work and what does it cover?

In 2016, the International Civil Aviation Organization (ICAO) adopted CORSIA, a global carbon offsetting scheme to address CO₂ emissions from international aviation. The agreement at ICAO demonstrates that the aviation industry is determined to live up to its climate change commitments and play its part in meeting international goals for greenhouse gas emissions reduction.

Cross-cutting strategy and three goals

Aviation is approaching the challenge of achieving its climate goals through a multi-pillar strategy: developing new technology, transitioning to sustainable aviation fuels, more efficient operations, better use of infrastructure and a global market-based measure for aviation CO₂ emissions.

In 2009, the aviation industry set three global goals to address its climate impact:

- 1. an annual average fuel efficiency improvement of 1.5% from 2009 to 2020;
- 2. stabilise net \mbox{CO}_2 emissions at 2020 levels with carbon-neutral growth; and
- 3. reduce aviation's net CO_2 emissions to half of what they were in 2005, by 2050.

CORSIA part of wider climate action

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. Instead, CORSIA will help mitigate some of the mid-term growth in aviation emissions while long-term technology and sustainable aviation fuel solutions can have time to mature and be introduced into the fleet.

Under CORSIA:

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

Offsetting instead of a tax

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



Figures as at July 2020, check www.enviro.aero/CORSIA for updates

reductions that can be used as offsets, many of which bring other social, environmental or economic benefits relevant to sustainable development. Traditional offsets include financing alternative energy for communities, protecting or extending forestry and other natural carbon sinks.

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. In many cases, a tax on aviation will not reduce emissions and will simply be used to generate revenue for governments. Offsetting places a cost on the industry, but the revenue goes directly to projects that reduce CO₂ emissions.



MRV	PILOT PHASE			FIRST PHASE			SECOND PHASE								
2019 2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
MONITORING, REPORTING & VERIFICATION TO SET THE BASELINE Due to the extraordinary impact of Covid-19 on global aviation, the baseline is being set using	VOLUNTARY States are volunteering to be part of the scheme from 2021 (more States are encouraged to volunteer).						MANDATORY With exemptions for: Small Islands, Least Developed Countries, Land-locked Developing Countries and States which have less than 0.5% of air traffic (although they can still volunteer).								
2019 emissions: more representative of a normal year.	Operators flying routes between volunteering States will offset emissions based on the average CO2 growth of the aviation sector.						Operators will offset Offset obligations shift to Offset obligations shift to be over 70% based on average CO2 growth of the sector. include over 20% of individual operator growth. individual operator growth.								

Scope of CORSIA

CORSIA is intended to offset the growth in emissions from international aviation, which is not covered under the Paris Agreement. Like the Paris Agreement, the CORSIA is initially a voluntary scheme, with States deciding if their country will be included. In later years, it is mandatory for all but small and developing countries.

CORSIA does not cover domestic air transport services, as these are subject to national action under the 'nationallydetermined contributions' outlined in the Paris Agreement. However, if countries are wishing to implement market-based measures for domestic aviation, the industry strongly urges them to use the CORSIA template to design their systems.

Phased implementation

In order to address the concerns of developing States and to take into account the special circumstances and respective capabilities of States, CORSIA will be implemented in phases, illustrated above. From 2021 until 2026, only flights between "volunteering" states will be subject to offsetting requirements. From 2027, all flights will be subject to offsetting, with the exception of flights to/from Least Developed Countries (LDCs), Small Island Developing States (SIDS), Landlocked Developing Countries (LLDCs) and small aviation markets, unless they volunteer to participate.

Sources of offsets and sustainability

The ICAO process also includes a robust mechanism to ensure the offsets used in CORSIA bring about real reductions in CO₂ emissions. In the past, a number of questionable offset schemes have not delivered on the emissions reductions they promised. The emissions units that can be used by airlines under CORSIA will be decided by a group of governmentappointed technical experts based on several criteria that have already been approved by the ICAO Council. These include:

Criteria for emissions unit integrity:

- Are additional
- Are based on a realistic and credible baseline
- Are quantified, monitored, reported and verified
- Have a clear and transparent chain of custody
- Represent permanent emissions reductions
- Assess and mitigate against potential increase in emissions elsewhere
- Are only counted once towards a mitigation obligation
- Do no net harm

Criteria for emissions unit programme design:

- Clear methodologies and protocols and their development process
- Scope considerations
- Offset credit issuance and retirement procedures
- Identification and tracking
- Legal nature and transfer
 of units
- Programme governance
- Transparency and public
 participation provisions
- Safeguards system
- Sustainable development criteria
 Avoidance of double
- counting, issuance and claiming

Summary of criteria sourced from GreenAir Online

