ICAO Activity

ICAO provides Member States with internationally-agreed policies, Standards, guidance and tools, aimed at reducing or limiting the environmental impact of CO₂ emissions from international aviation, including the development and implementation of a "basket of measures" to meet the global aspirational goals of a 2% annual fuel efficiency improvement, and carbon neutral growth from 2020.

Significant progress has been achieved on the implementation of all the elements of the basket of measures, namely innovative aircraft technologies, more efficient operational procedures, sustainable aviation fuels, and a global market-based measure.

Regarding aircraft technologies, ICAO adopted in March 2017 the first-ever CO₂ emissions Standard for aeroplanes. In this regard, this new aeroplane CO₂ emissions Standard represents the world’s first global design certification standard governing CO₂ emissions for any industry sector. The Standard will apply to new aircraft type designs from 2020, and to aircraft type designs already in-production as of 2023.

Considerable progress has also been achieved with respect to operational improvements, for instance by realizing more efficient take-offs and landings using Performance-based Navigation (PBN), bringing increased flexibility in our approach to airspace use and route design, as well as improved Air Traffic Flow Management.

While technical and operational improvements are well under way, cleaner and more sustainable energy sources will be a real game-changer for aviation emissions reduction and sustainable aviation fuels are essential to ICAO’s environmental strategy. While the technical feasibility, environmental impacts and safety of biofuels have been well-demonstrated, ICAO is now fostering their large-scale deployment. ICAO launched the Global Framework on Aviation Alternative Fuels (GFAAF). This online platform provides a continuously updated database of activities and developments in the field of sustainable aviation fuels, as well as useful documentation and links, to support information sharing and dissemination for the benefit of the aviation fuels community.

In 2016, the ICAO adopted a landmark Assembly Resolution A39-3 on the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). This historic agreement on CORSIA, the first-ever market based measure addressing carbon emissions of a major industry sector at the global level, reflected several years of intensive efforts by ICAO and its Member States, in cooperation with the aviation industry and other stakeholders.

For the implementation of CORSIA, ICAO adopted a new Standards and Recommended Practices (SARPs) containing requirements for Monitoring, Reporting and Verification (MRV) of CO2 emissions, applicable from 1 January 2019. ICAO is presently in the process of determining eligible emissions units which airlines will purchase in order to meet their offsetting requirements under CORSIA.

ICAO is currently working on issues related to the adaptation to climate change impacts on aviation infrastructure and operational procedures, through the development of new guidance material on this subject.

ICAO also assists States to integrate and implement CO₂ reduction measures included in their state Action Plans, in particular in developing States and Small Island Developing States (SIDS), with the aim of providing technical assistance, including with resources from the ICAO – UNDP and the Global Environment Facility (GEF), and from ICAO-EU assistance projects, and through a capacity building strategy for effective climate change-related action.