

NIOSH Cert



*Advancing a Sustainable Aviation Future  
with NIOSH Cert*



# CORSIA

The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is the world's first global market-based mechanism targeting carbon emissions from international air travel. Developed by the International Civil Aviation Organization (ICAO), it requires airlines to monitor, report, and offset CO<sub>2</sub> emissions exceeding baseline levels—set at 2019 levels for the pilot phase (2021–2023), and 85% of 2019 levels from 2024 onward. CORSIA is currently in its voluntary pilot and first phases; however, it will become mandatory for most countries by 2027. As of 2025, 129 countries have joined, covering most international aviation emissions. It supports ICAO's goal of carbon-neutral growth in aviation and the global fight against climate change.

# WHY CORSIA MATTERS?

As the aviation industry continues to grow, so does its impact on the climate. CORSIA plays a critical role in stabilizing emissions from international flights by ensuring that growth in air traffic does not come at the expense of the environment. By addressing emissions that exceed established baselines, the scheme enables climate responsibility without restricting global connectivity.

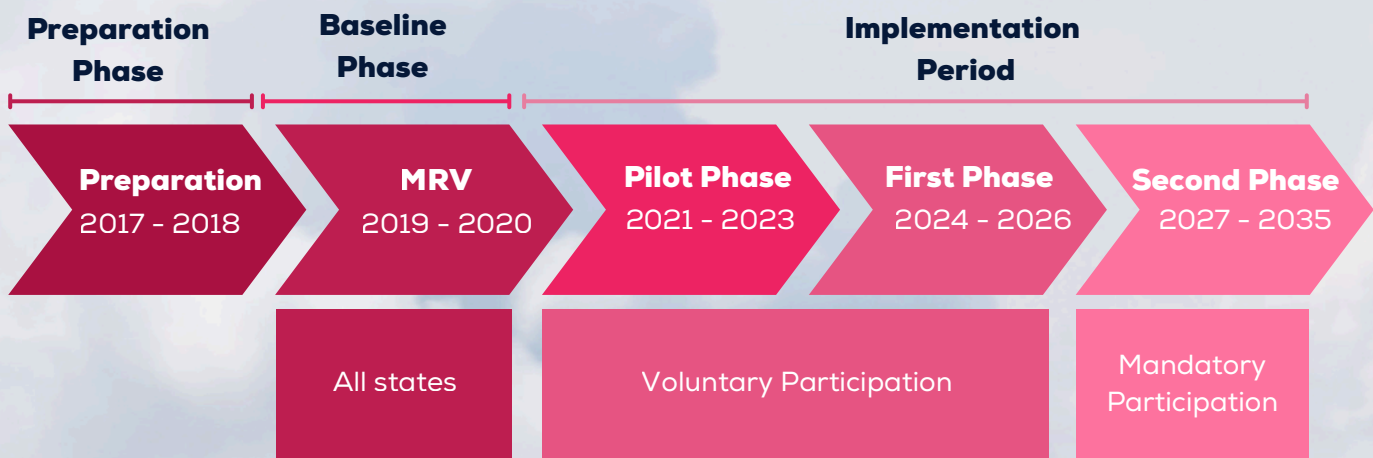
CORSIA also aligns with the global climate agenda. Through its connection to Article 6.2 of the Paris Agreement, it fosters international cooperation toward meeting countries' Nationally Determined Contributions (NDCs). Its implementation reinforces the aviation sector's role in achieving global climate targets.

Further momentum was gained at COP26 with the formation of the International Aviation Climate Ambition Coalition, which promotes coordinated action through ICAO. This includes supporting CORSIA, accelerating the use of sustainable aviation fuels, and advancing green aviation technologies.

By participating in CORSIA, airline operators and States reaffirm their commitment to global climate goals, support ICAO's environmental leadership, and contribute to building a sustainable and resilient future for international aviation. Beyond regulatory compliance, CORSIA verification delivers strategic value to the aviation industry in several key ways:



# TIMELINE



## Key Contexts:

- The Preparation Phase took place in 2018, where guidance materials and tools were developed.
- The Baseline Period was originally defined as the average of 2019 and 2020 but revised to 2019 only. The CORSIA baseline was revised from the 2019–2020 average to 2019 only because the sharp drop in 2020 air traffic due to COVID-19 would have created an unfairly low baseline and higher offsetting obligations for airlines.
- The full implementation period is officially recognized as 2021 to 2035.

# HOW CORSIA WORKS?

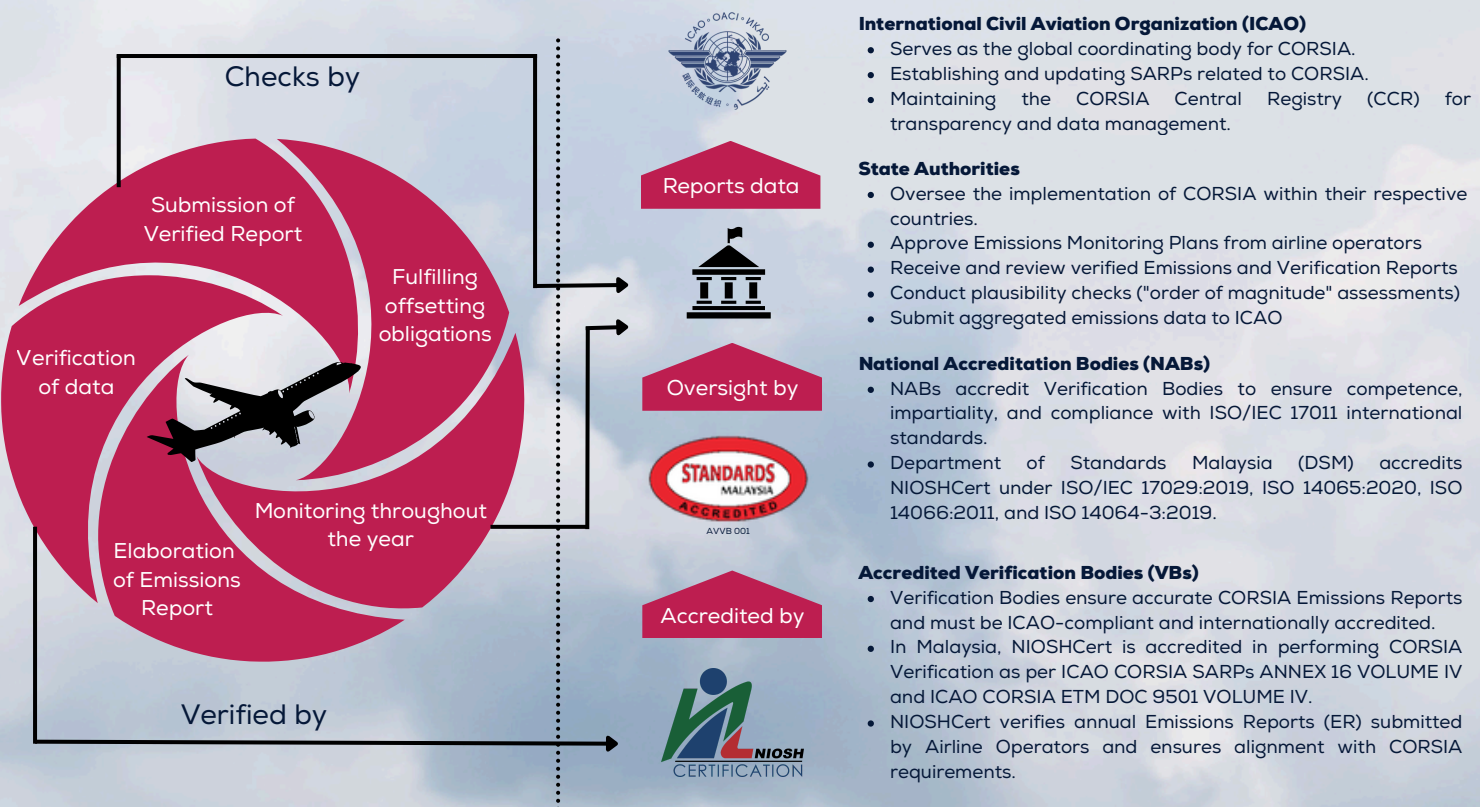
The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is implemented through a structured Monitoring, Reporting, and Verification (MRV) process involving airline operators, State Authorities, accredited Verification Bodies, and ICAO.

Under CORSIA, airline operators must monitor their fuel consumption and calculate CO<sub>2</sub> emissions from international flights using ICAO-approved methods. This data is compiled into an Annual Emissions Report (ER), which is submitted to the operator's State Authority. The ER must undergo independent verification by an accredited Verification Body (e.g. NIOSHCert) to confirm the accuracy, completeness, and compliance of the reported emissions.

If the operator's total emissions exceed the baseline—set at 2019 levels for the pilot phase and 85% of 2019 levels from 2024 onward—they are required to purchase and cancel eligible carbon credits from ICAO-approved offset programs. The details of this offsetting action are documented in the Emissions Units Cancellation Report (EUCR). The EUCR is also subject to independent verification, and must demonstrate that the correct number of eligible emissions units have been cancelled, in line with CORSIA's requirements. Both the verified ER and EUCR are then submitted by the State to ICAO for review and inclusion in the centralized CORSIA registry. This end-to-end process ensures transparency, data integrity, and credible climate action within the international aviation sector.



# KEY STAKEHOLDERS



# NIOSHCert: BRIDGING GAPS FOR A SUSTAINABLE TOMORROW

## Our Essence

NIOSHCert is Malaysia's first nationally accredited CORSIA verification body. With over 20 years of industry conformity assessments experience, we combine robust technical expertise and a deep understanding of the sectors we serve. At NIOSHCert, we prioritize transparency, integrity, and building lasting trust with our valued clients. Our comprehensive services empower corporations, government agencies, universities, and SMEs, many of whom have trusted us for more than a decade. By choosing NIOSHCert, clients gain not only industry-leading solutions but also a dedicated partner committed to their long-term success.

## Our Journey

NIOSHCert was founded with a strong commitment to sustainability, embracing the United Nation's SDGs and ESG principles. By leveraging internationally recognized standards, we help businesses adopt sustainable practices that drive positive environmental, social, and economic impact. Our mission has always been to support organizations in creating a responsible future while meeting industry standards.

## How We Are Measured?

NIOSHCert is proudly accredited by Department of Standards Malaysia for conformity assessment. The prestigious accreditation is a testament to our unwavering commitment to excellence and our adherence to the highest international standards. By choosing NIOSHCert, you're partnering with a trusted leader that consistently delivers unparalleled quality, credibility, and integrity across all our services.

## Need Us?



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