



Aviation Decarbonisation and CORSIA

Course: Emissions MRV, SAF and Offsetting



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Introduction:

Aviation decarbonisation and CORSIA, covering emissions MRV, SAF and offsetting, are the subject of this 5-day course for airline environment, fuel efficiency, airport sustainability and fuel procurement units, who produce an Aviation Decarbonisation and CORSIA Action Plan for a case airline or airport. Monitoring plans, fuel records and airport carbon data often sit with different units, so emissions reports fail verification and fuel claims lack evidence. Nominees already handle flight, fuel or airport environmental data and practise through case studies built on operator fuel and flight records. CoreConcept Training Center delivers this aviation decarbonisation course.

Course Objectives:

- Establish an operator carbon baseline by converting fuel burn on international flights into CO₂ and separating airline from airport sources
- Prepare an Emissions Monitoring Plan that selects a fuel use monitoring method suited to the fleet and route profile
- Compile an annual emissions report and assemble the evidence a third-party verifier requests
- Calculate offsetting requirements and screen CORSIA eligible emissions units before purchase and cancellation
- Evaluate sustainable aviation fuel pathways, life-cycle emissions values and book-and-claim records for CORSIA eligible fuel claims
- Plan fuel-efficiency measures and the next Airport Carbon Accreditation level within an Aviation Decarbonisation and CORSIA Action Plan

Target Audience:

- Airline environment units responsible for CORSIA monitoring, reporting and verification files
 - Fuel efficiency and flight operations units responsible for fuel burn data and operational saving measures
 - Airport sustainability and energy units responsible for airport carbon footprints and accreditation submissions
 - Aviation fuel procurement units responsible for jet fuel and sustainable aviation fuel contracts
 - Aviation finance and planning units responsible for budgeting offsetting and fuel transition costs
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Course Outline:

Day 1: Aviation Emissions Landscape and Operator Carbon Baseline

- ICAO Carbon-Neutral Growth Goal and Complementary Emissions Reduction Measures
- Jet Fuel Burn to CO₂ Conversion for Flight Emissions
- International Versus Domestic Flight Attribution for CORSIA Scope
- Airport Emission Sources Across Airside, Terminal and Landside Operations
- Operator Carbon Baseline Review From Fuel and Flight Records

Day 2: CORSIA Requirements and Emissions Monitoring Plan Design

- Annex 16 Volume IV Structure and CORSIA Applicability Tests
- Emissions Monitoring Plan Template From the Environmental Technical Manual
- Fuel Use Monitoring Methods Compared for Different Fleet Profiles
- CORSIA CO₂ Estimation and Reporting Tool for Small Emitters
- Data Gap Filling Procedures and Monitoring Plan Revision Triggers

Day 3: Emissions Reporting, Verification and Offsetting Requirements

- Annual Emissions Report Compilation From Flight-Level Fuel Data
- Third-Party Verification Process and Verifier Evidence Requests
- Offsetting Requirements Calculation From Operator Emissions and Sector Growth
- CORSIA Eligible Emissions Units Screening and Purchase Criteria
- Emissions Unit Cancellation Records and CORSIA Central Registry Reporting

Day 4: Sustainable Aviation Fuel, Fuel Efficiency and Airport Carbon Accreditation

- ASTM Jet Fuel Annexes for HEFA, FT and ATJ Pathways
- Life-Cycle Emissions Values and CORSIA Eligible Fuel Sustainability Criteria
- Book-and-Claim Chain of Custody and Double Claiming Controls
- Operational and Fleet Fuel-Efficiency Measures Ranked by Abatement Cost
- Airport Carbon Accreditation Levels From Mapping to Transition

Day 5: Case Study Practice and the Aviation Decarbonisation and CORSIA Action Plan

- Case Airline Data Pack With Fuel Uplift and Route Records
 - Draft Emissions Monitoring Plan and Verification Readiness Check
 - Offsetting Cost Scenario With and Without SAF Claims
 - Case Airport Accreditation Gap Review and Upgrade Steps
 - Aviation Decarbonisation and CORSIA Action Plan Completion and Review
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Skills You Will Gain:

- Flight Fuel Burn Analysis
- CORSIA Monitoring Method Selection
- Verification Evidence Assembly
- Offsetting Requirement Estimation
- Emissions Unit Eligibility Screening
- SAF Pathway Appraisal
- Book-and-Claim Record Control
- Airport Carbon Footprint Planning

Why Attend This Course:

- Deliver an Aviation Decarbonisation and CORSIA Action Plan to the head of environment, the fuel manager or the airport sustainability lead
- Decide which fuel use monitoring method, emissions units and SAF supply route suit the operator's fleet and network
- Avoid verification findings, late unit cancellations and SAF claims that cannot be evidenced at audit
- Brief flight operations, fuel purchasing and finance colleagues on the data and records each CORSIA step depends on

Conclusion:

Back at work, the participant presents the Aviation Decarbonisation and CORSIA Action Plan to the environment lead, the fuel purchasing manager and finance. They use it to fix the monitoring method, budget the offsetting requirement, decide how much sustainable aviation fuel to contract and set the airport's next accreditation step. After the first verified emissions report, the unit should compare verifier findings with the plan, check whether fuel claims were accepted and update cost assumptions for the next compliance cycle.

Frequently Asked Questions FAQ:

What should participants know before the aviation decarbonisation and CORSIA course?

Participants should already work with flight, fuel or airport environmental data and be comfortable with spreadsheets. Prior CORSIA experience is not needed. Bringing a sample of fuel uplift records, a monitoring plan or an airport footprint helps them apply the case studies to their own operation.

How does the aviation decarbonisation and CORSIA course differ from a general carbon markets course?

This course follows the airline and airport duties step by step: monitoring plans, emissions reports, verification, unit cancellation, fuel claims and airport accreditation. A general carbon markets course covers trading schemes and voluntary credits across all sectors without the aviation-specific monitoring and fuel rules.

How do sustainable aviation fuel claims reduce CORSIA offsetting requirements?

An operator that uses CORSIA eligible fuels meeting the sustainability criteria can claim the life-cycle emissions reduction against its offsetting requirements. The claim needs purchase and blending records, sustainability evidence and controls against the same fuel being claimed twice, including under book-and-claim.

What do participants take back from the aviation decarbonisation and CORSIA course?

Participants take back an Aviation Decarbonisation and CORSIA Action Plan for a case airline or airport, with a monitoring method, a verification checklist, an offsetting cost scenario, a sustainable aviation fuel route and airport accreditation steps ready to adapt to their own operation.
