

EASA Activities on Sustainability

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**Certification
Conference**

*October 24, 2023
Cologne*

EASA Sustainability Aviation Programme (EASA SAP)



Certification Conference

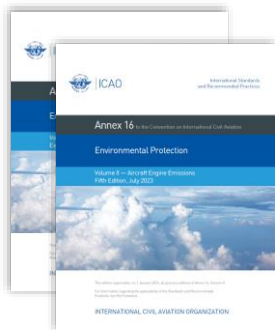
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Evolution of EASA environmental protection remit

20 Year Highlights



Robust certification
and green standard
setting



2007

- Development of new European airport noise contour model: **STAPES**.

2009

- Update of European market-based measures model: **AERO-MS**.



2003

- EASA established with remit to certify products against environmental certification standards. Direct reference in Basic Regulation to ICAO standards:
ICAO Annex 16 Vol. I – Aircraft noise
ICAO Annex 16 Vol. II – Engine emissions

2008

- First of multiple '**SAMPLE**' research projects on aircraft engine Particulate Matter (nvPM) emissions.

2010

- New ICAO Annex 16 Vol. II '**CAEP/8**' engine NOx emissions standard.

2013

- New ICAO Annex 16 Vol. I 'Chapter 14' aircraft noise standard.

2014

- **598/2014 Noise Regulation** adopted.
- New EASA remits to validate **Aircraft Noise and Performance Data** and manage an **Aircraft Noise Certificate Database**.

2016

- New **ICAO Annex 16 Vol. III – Aeroplane CO₂ emissions** standard.
- **1st EASA European Aviation Environmental Report (EAER)**.



More transparency:
Environmental Label
and European Aviation
Environmental Report



2017

- New ICAO Annex 16 Vol. IV 'CORSIA' standard.

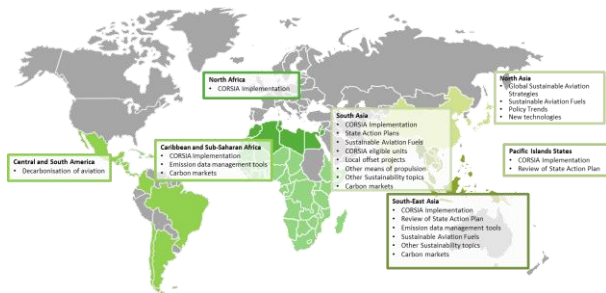
CORSIA



2018

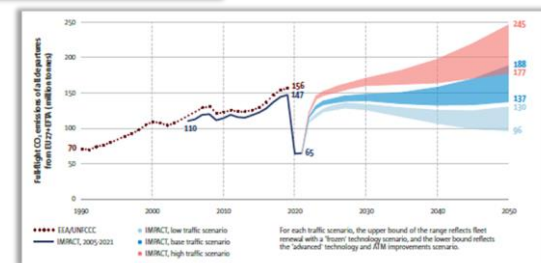
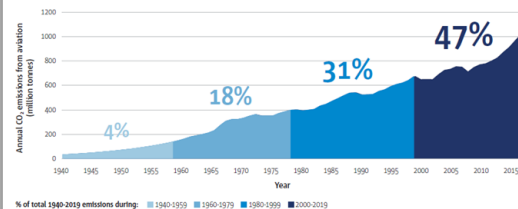
- Update to **Basic Regulation (2018/1139)** with additional environmental remits (Art. 87).
- Work on **Environmental Labelling** initiated.

- New ICAO Annex 16 Vol. II 'nvPM' engine emissions standard.
- **2nd edition** of EASA EAER published.
- EASA **SAF studies** on 'monitoring system' and 'facilitation initiative'.
- Initial EASA **international cooperation** environment project.



- EC launches **European Green Deal** with goal to reduce transport emissions by 90% in 2050 compared to 1990.

Figure 2.3 Annual global CO₂ emissions from aviation (1940-2019) with % of total cumulative emissions broken down into 20 year periods



2020

- EASA report on the climate impact of aviation **non-CO₂ emissions**.
- EASA certifies **Pipistrel Velis Electro** as first electric aircraft to be certified worldwide.
- EASA **SAP** created to coordinate Agency environmental activities.
- EC launches **Sustainable and Smart Mobility Strategy** with an Action Plan of 82 Initiatives.



Guiding research
towards zero emissions
aviation



Facilitating air
transport electrification
and de-carbonisation

2021

- **A330neo** certified against ICAO CO₂ emissions standard.
- **European Climate Law** adopted goal of climate neutrality by 2050.
- EC proposes '**Fit for 55**' legislative proposals.





2022

- **3rd Edition** of EASA EAER
- ICAO A-41 adopts a **long term aspirational goal** of net zero CO₂ emissions by 2050 for international aviation.
- **Revisions to ETS** adopted.



2023

- EASA leadership roles in **RCLF, AZEA alliances**.
- EASA publishes **UAS Noise Measurement Guidelines** for UAS lighter than 600kg in the 'Specific' category (Low and Medium Risk Operational Category).
- EASA publishes **Environmental Protection Technical Specifications for eVTOL aircraft** with multiple, vertical, non-tilting and evenly-distributed rotors.



Managing the
environmental impact
of Drones and Air Taxis

- EASA launches new projects on **EU SAF Clearing House** and **Fuel Standards**.
- ICAO Conference on Alternative Aviation Fuels (**CAAF/3**) to discuss updated ICAO 2050 SAF Vision and new global framework.
- **Revisions to RED** adopted.
- **ReFuelEU Aviation** Regulation adopted with new remits for EASA on the monitoring of supply and use of SAF, and the associated emission reductions, as well as an Environmental Labelling system....



Operational
Efficiency and
Sustainable Aviation
Fuels / ETS / CORSIA



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ReFuelEU Aviation: Main Considerations

ReFuelEU Aviation Regulation



Foster the **ramp-up of SAF supply in the EU** and ensure the availability of SAF to decarbonise aviation

Guarantee a **level playing field in aviation** through a harmonised EU approach

Other elements



New environmental label enabling passengers to book the most sustainable flight



Infrastructure for zero-emission aircraft

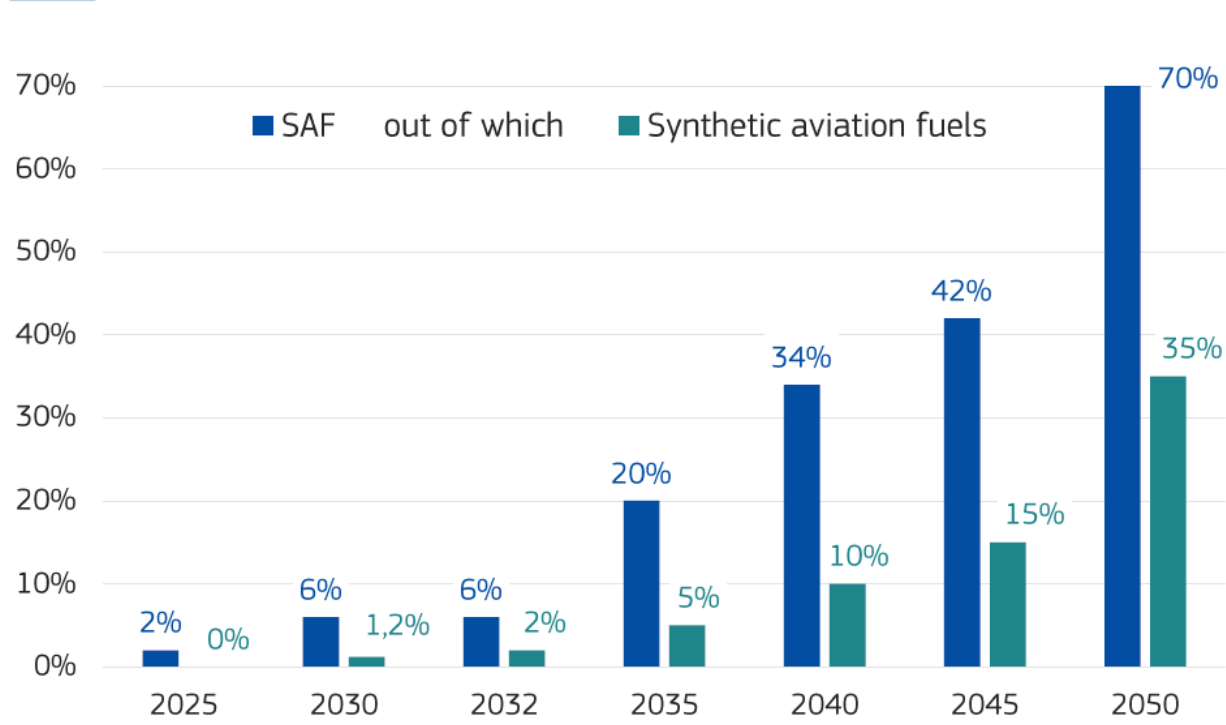


Flexibility measure to ensure a gradual ramp-up of SAF availability

Binding shares of SAF



Ambitious **EU-wide binding shares** and realistic **ramp-up 2025-2050**



Scope and obligations of the Regulation



Aviation fuel suppliers

Who

All aviation fuel suppliers
supplying to Union airports

What

- a) to **supply increasing amounts** of SAF at each Union airport
- b) with **flexibility** 2025-34



Union airports

≥ 800 000 passengers
≥ 100 000 tonnes freight
Opt-in for airports below threshold,
and those in outermost regions

to **facilitate** access to SAF



Aircraft operators

> 500 passengers flights
> 52 all-cargo flights
Opt-in for other commercial flights and
for non-commercial flights

to uplift aviation fuels at Union airports
without 'tankering' practices



EASA role under ReFuelEU Aviation and its flanking measures

EASA remit under ReFuelEU (yearly reporting)

- Collect information from Operators on SAF usage and SAF characteristics
- Collect information from Fuel Suppliers on volumes of SAF and fossil fuels delivered at Union Airports including levels of aromatics, naphthalene and sulphur
- Collect information from Airports on infrastructure development on and hydrogen and electricity
- Perform SAF market and price analysis
- Regulation Compliance Status and inform Member States in case of non-compliance
- Make available yearly report to EU Parliament and Council

EASA Supporting measures

EU Clearing House for SAF

EASA project to facilitate new SAF types going through ASTM qualification

EU Fuel Standards project

EASA project to reinforce European involvement in Fuel specification body and investigate the option to reduce aromatics

RLCF Alliance

Initiative to bring together SAF value chain stakeholders and to remove barriers preventing scaled SAF deployment

EASA SAF technical expertise

Further reinforce EASA technical expertise on SAF to ensure fleet/supply chain safety issues are addressed when scaling up

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Thank you!

www.easa.europa.eu/environment

