



ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY

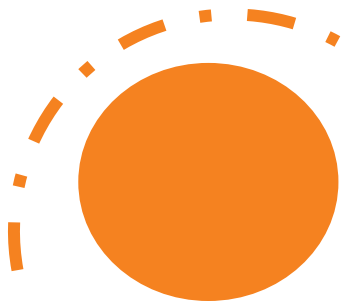
RECONNECTING **THE** WORLD

ICAO work on Green Airports & Airport Community Engagements

ICAO EURNAT Webinar on Green Airports

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How do we define Green Airports?

- The quietest?
- The least consumer of natural resources?
- The least energy-demanding?



**There are more than 2000 international AIRPORTS and
AS MANY WAYS of being GREEN!**



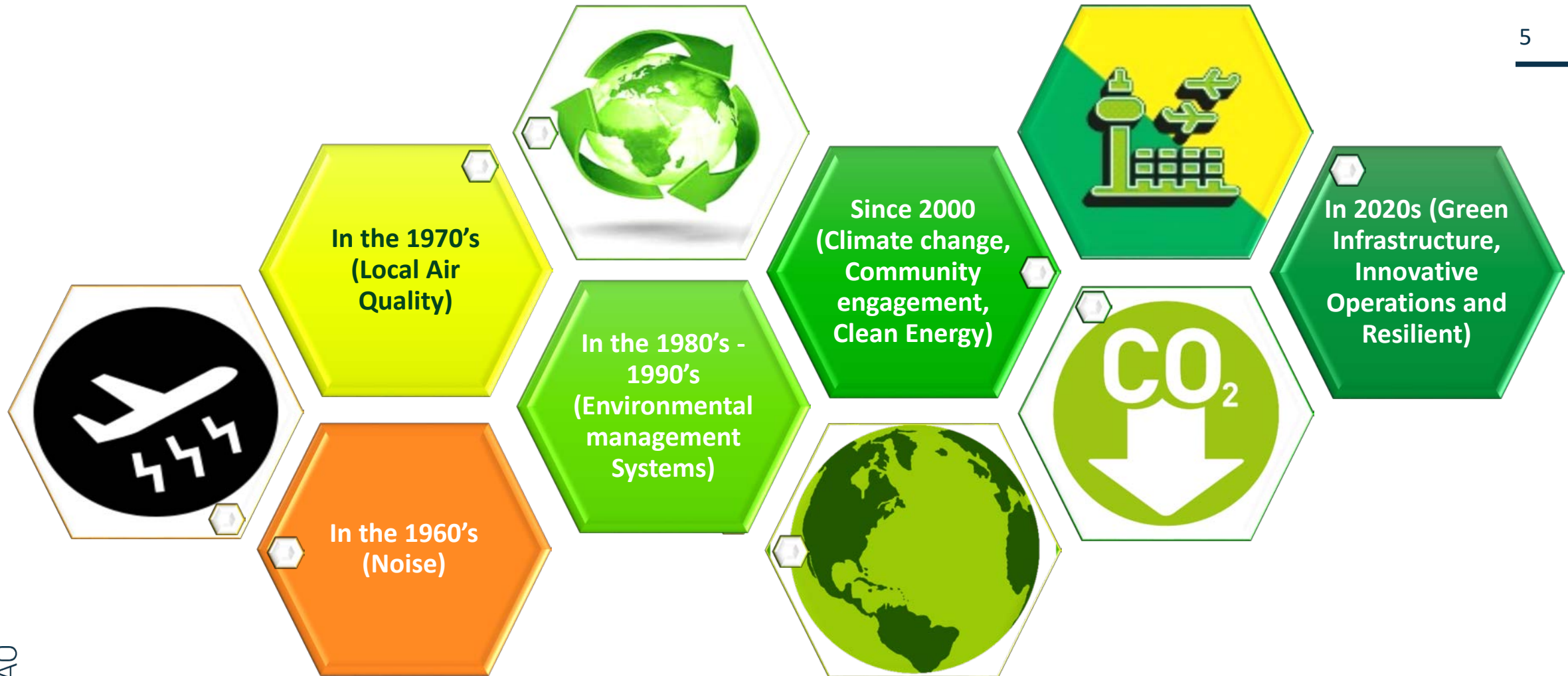
ICAO's ROLE

policy development and standards setting to limit and reduce the impact of aviation on the environment

Standards and
Recommended
Practices (or
SARPs)

Guidance
documents

Capacity building
and assistance



Green airports can become hubs for clean energy, and central to urban air mobility infrastructure

ICAO work on "Green Airports"

Environmental issues relating to airport operations such as air and water quality, land management, noise, and climate change, has required States to respond with sound policies, plans and procedures

ICAO have responded to these challenges through various initiatives:

- **ICAO CAEP Working Group 2** – Airports and Operations developed a wide range of materials related to airports and operations available on ICAO website
- As emerging issues require action, **specific guidance material** is developed by ICAO to identify, measure, and respond. Airports are key stakeholders to improve practices on the ground
- ICAO has developed practical and ready-to-use information to support the planning and implementation of airport infrastructure projects: **Eco Airport e-collection**

Guidance Documents and Policies

- Airport Planning Manual, Part 2 (Doc 9184)
- Balanced Approach to Aircraft Noise (Doc 9829)
- Airport Air Quality Manual (Doc 9889)
- Operational Opportunities to Reduce Fuel Burn and Emissions (Doc 10013)
- Guidance On Environmental Assessment Of Proposed Air Traffic Management Operational Changes (Doc 10031)
- Community Engagement for Aviation Environmental Management (Circ 351)



Community Engagements for Aviation Environmental Management

8



Community engagement by airport operators and other aviation stakeholders

- key link between environmental stewardship and mitigating environmental constraints to aviation operation and growth

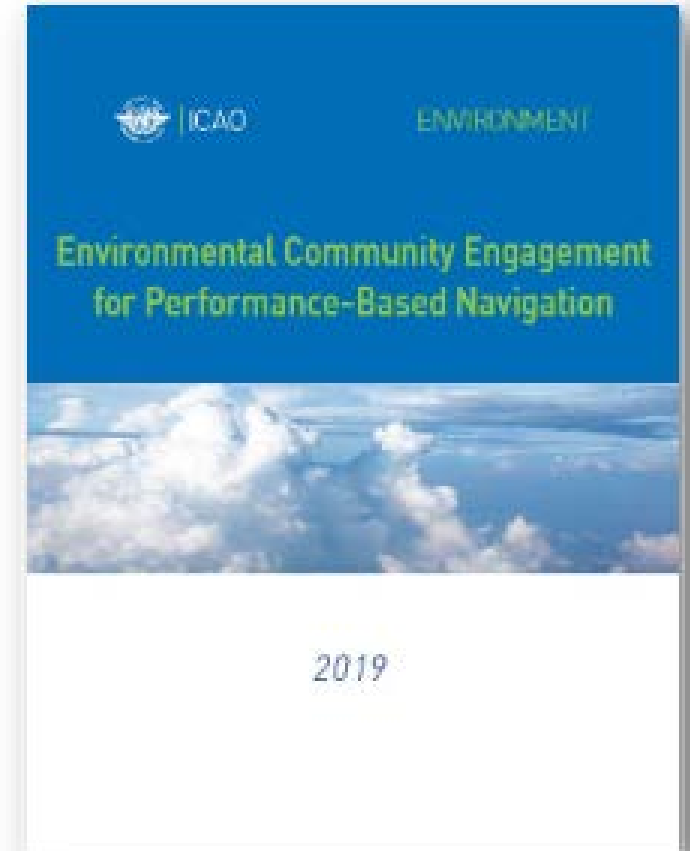
ICAO Circular 351:

- assists and encourages States and the aviation industry, in particular airports, airlines, and Air Navigation Service Providers, to
 - engage local communities early in airport development projects to address environmental matters

Environmental Community Engagement for Performance-Based Navigation

The report highlights

- importance of effective community engagement and provides good practices that should be considered when undertaking airspace modernization:
 - share and promote practices that have supported improved community understanding and effective airspace development
 - Serve as a reference point as the industry continues to modernize airspace in accordance with ICAO Global Air Navigation Plan (GANP) and Aviation System Block Upgrades (ASBU)



Airport Community Engagements

10

Review of Measures to better understand encroachment around airports

Third state of play **Report on the Investigation of Possible Indicators on Encroachment** focuses on the challenges and good practices related to population encroachment into the noise contours at airports

- maintain dialogue with communities and local governments or other stakeholders
- Airports and the relevant authorities should work together to ensure correct application of land-use planning techniques in development of airports; ;
- New guidelines or requirements be based on technically robust and up-to-date scientific evidence and coordinated with relevant stakeholders;
- Airports should strive to have a comprehensive noise management plan or strategy



Eco Airport e-collection

11

ICAO fosters the **exchange of information on best practices for Green Airports**, covering such subjects as smart buildings, renewable energy, green mobility, climate change resilience resource and biodiversity protection, community engagement and sustainability reporting



With the aim of sharing and harmonizing best practices amongst airports. ICAO has developed **practical and ready-to-use information to support the planning and implementation of airport infrastructure projects**

[Eco-Airport Toolkit e-collection \(icao.int\)](https://www.icao.int/Eco-Airport-Toolkit)

New Eco-Airport Toolkits

12

CAEP continued to contribute to the development of concrete tools to facilitate the implementation of solid action by aviation stakeholders worldwide:



Sustainable Considerations
for Airport Surface Access



Air Quality Management
at Airports



Climate Resilient Airports

New Eco-Airport Toolkits

13



GHG Management and
Mitigation at Airports
2022



Innovation and
Technology in Airport
Sustainability 2023



Unmanned Aircraft
Operations 2023

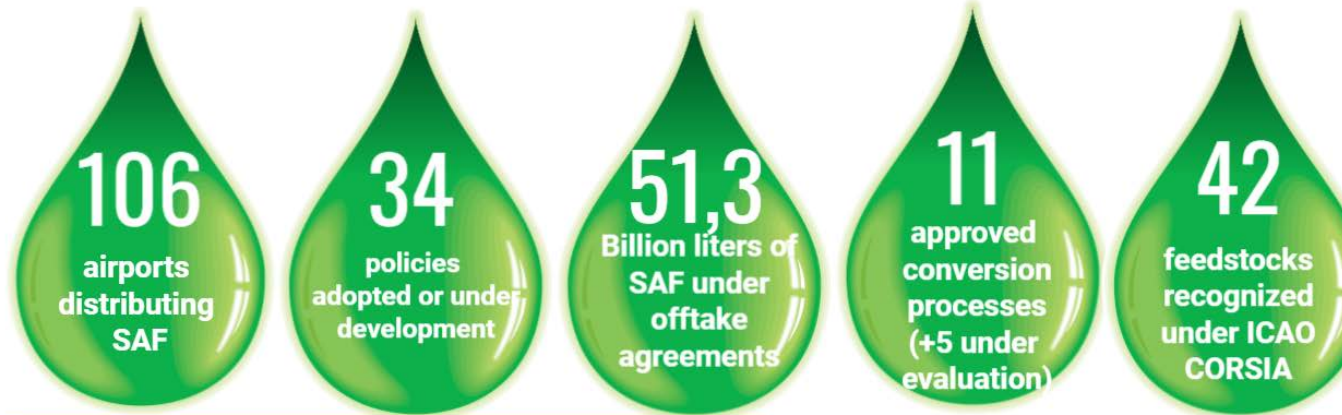
[Eco-Airport Toolkit e-collection \(icao.int\)](https://www.icao.int/Eco-Airport-Toolkit)

Airport and distribution of SAF & Low Carbon Aviation Fuels (LCAF)

14

- **Sustainable Aviation Fuels (SAF) development and deployment** is particularly important, considering that the drop-in fuels have the largest potential to reduce the overall emission from international aviation by 2050, according to the recent ICAO Report on the feasibility of a LTAG for international civil aviation CO₂ emission reductions and CAAF/3 outcomes

SAF Tracking tools (click for details)



Airport and distribution of SAF & Low Carbon Aviation Fuels (LCAF)

15

- **CORSIA** includes specific methodologies that allow aircraft operators to **reduce its offsetting requirements through the use of SAF and LCAF**, including globally-accepted sustainability criteria and life cycle methodologies
- ICAO organized Environmental Regional Seminars with the objective of focusing on the implementation of the LTAG including recent developments on the ACT-SAF programme, financing cleaner energy, etc.
- States' commitments to a strong global framework to implement a clean energy transition for international aviation and to achieve the **2050 ICAO Vision** to reduce CO₂ emissions in international aviation by 5 per cent by 2030, compared to zero cleaner energy use



Guidance on potential policies and coordinated approaches for the deployment of SAF (2022)



ACT-SAF (Assistance, Capacity Building and Training for SAF)

16

- ICAO initiative to **facilitate the development and deployment of sustainable fuels**, while recognizing “not one approach fits all”
- Tailored support for States in various stages of SAF development and deployment

1) Interested party expresses interest in becoming an ACT-SAF Partner	2) ICAO coordinates with the interested party the details of the offers and requests, and suggest possible projects	3) Agreement is signed and projects defined	4) ICAO connects ACT-SAF Partners
<p>Supporting State / Organization* can participate by providing experts and/or resources</p> <p>Requesting State can participate by providing a focal point for coordination</p>	<p>Possible projects:</p> <p>Feasibility Studies Training programmes Support for SAF certification Support for Policy implementation</p>	<p>The Agreement will contain:</p> <p>Details on the cooperation terms, including the roles and responsibilities of ICAO and each participant</p>	<p>Criteria for connection</p> <ul style="list-style-type: none"> • Matching expertise • Language, cultural and geographical aspects • Resources availability



You can become an **ACT-SAF Partner** by agreeing to the ACT-SAF Terms and Conditions

Capacity-Building and Assistance

17

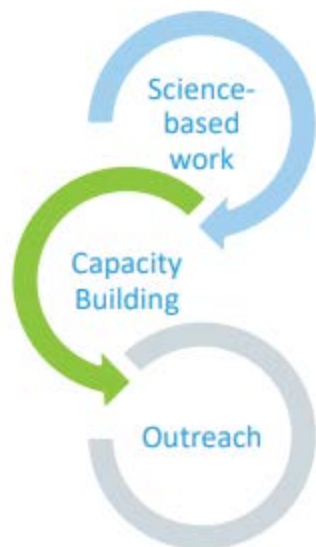
Recognizing the importance of Green Airports in the decarbonisation of the aviation sector, ICAO will continue its capacity-building activities to support airport operations and outreach information



ICAO regularly invites States and Organizations to indicate their interest in supporting or benefiting from potential future feasibility studies on SAF



7 successful feasibility studies on the use of SAF were developed as part of the ICAO assistance project with EU funding

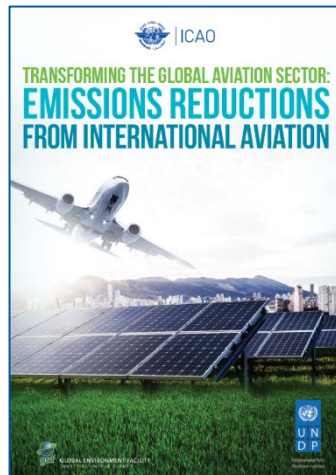
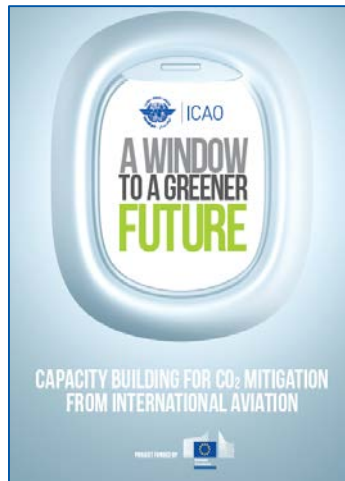


Capacity-Building and Assistance

18

Aviation infrastructure is switching to renewable energies

- originating from solar panels, wind turbines and geothermal energy, of which some can be deployed directly at airports.
- **Solar-at-Gate pilot projects** in Cameroon, Jamaica and Kenya, implemented by ICAO through external funding from the EU and UNDP/GEF:
 - allow aircraft to avoid the use of fossil fuels while on the ground.
 - objective is to replicate these types of projects broadly at other airports



Future developments

New essential topics of interest to the airport community include:

- emerging technology aircraft and their environmental and social impacts at and around airports
- the protection of biodiversity and the use of nature-based solutions to mitigate and adapt to climate change

Sustainability is no longer an option that is “nice” to have:



In June 2021, global ACI member airports committed to reach net zero carbon emissions by 2050
2023- Roadmap to support the commitment

ICAO Assembly adopted a long-term global aspirational goal (LTAG) for international aviation of net-zero carbon emissions by 2050

Customers, passengers, shareholders, investors, regulators, and governments, are looking at airports and expecting them to reduce their environmental impacts

The role of innovation and technology should not be underestimated by the industry. These two enablers have the potential to help airports and all their stakeholders be more resilient and limit their footprint on the environment



Thank You