



ICAO

ENVIRONMENT



ICAO Environmental
Symposium 2019

DESTINATION GREEN: THE NEXT CHAPTER



Green and Resilient Airports: about and beyond environment and airports

Juliana Scavuzzi

Senior Manager, Environment

Airports Council International (ACI)





ICAO

ENVIRONMENT



ICAO Environmental
Symposium 2019

DESTINATION GREEN: THE NEXT CHAPTER



A fast evolving concept to a fast growing industry

Meeting growing capacity demand and sustainably evolving

Being responsible according to the latest scientific evidence

Being more resilient

Bringing others to action

Understanding local/regional differences and limitations

Going beyond environmental impacts

Business to society challenge

- Being part of the communities they serve and adjusting to the change in societal values
- Social outcomes of business investments and business outcome on social investments



ICAO

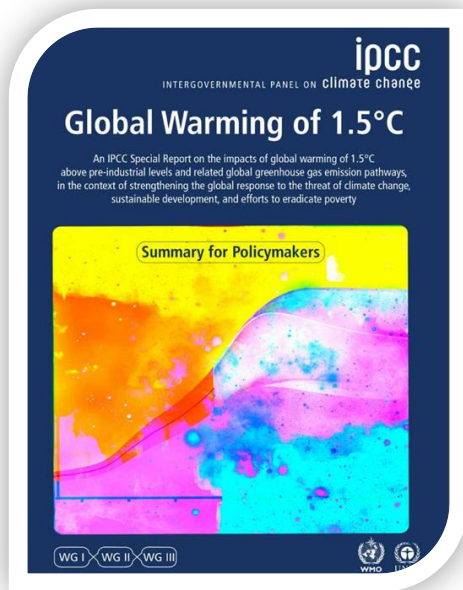
ENVIRONMENT



ICAO Environmental Symposium 2019

DESTINATION GREEN: THE NEXT CHAPTER

Is climate change promoting change in societal values?



#Fridaysforfuture



ICAO

ENVIRONMENT



ICAO Environmental Symposium 2019

DESTINATION GREEN: THE NEXT CHAPTER



Carbon/GHG Emissions

Noise Management

Local Air Quality

New Technologies Opportunities

Non-acoustic Factors of noise annoyance

Airspace Modernization

Waste Management Circular Economy

Environment Governance

Biodiversity

Engaging non-traditional stakeholders

Challenges

Beyond environment and the airport

Community Engagement

Water Management

Sustainable Aviation Fuels

Fast evolving society

Building new green and resilient infrastructure

Operating Sustainably

Disruption?



ICAO

ENVIRONMENT



ICAO Environmental
Symposium 2019

DESTINATION GREEN: THE NEXT CHAPTER



How ACI is responding to these challenges?

- Developing policies and expertise through our Environment Committees
- Developing programmes, tools, publications and sharing best practices
- Working closely with our members and regions to (re)define and adapt
- Collaborating with ICAO and especially CAEP
- Cooperating with aviation industry stakeholders and our business partners
- Providing training and capacity building initiatives
- Promoting exchange of knowledge and networking opportunities through our global and regional events



ICAO

ENVIRONMENT



ICAO Environmental
Symposium 2019

DESTINATION GREEN: THE NEXT CHAPTER

The logo for airport carbon accreditation. It features a stylized tree with a blue trunk and a canopy of colorful leaves (blue, yellow, green) and water droplets. To the right is a dark blue teardrop shape containing the text '10 YEARS'. Below the tree is the text 'airport carbon accreditation' and 'MAPPING | REDUCTION | OPTIMISATION | NEUTRALITY' in a smaller font.

airport
carbon
accreditation

MAPPING | REDUCTION | OPTIMISATION | NEUTRALITY



ICAO

ENVIRONMENT



ICAO Environmental Symposium 2019

DESTINATION GREEN: THE NEXT CHAPTER



Welcoming
3.6 billion
passengers
per year.

In **71**
countries
across
the world.

Or **43.8%**
of global air
passenger
traffic.



ICAO

ENVIRONMENT



ICAO Environmental
Symposium 2019

DESTINATION GREEN: THE NEXT CHAPTER



347,026
tonnes of CO₂



It is equal to the CO₂
sequestered by
8,158,834 seedlings
grown for 10 years



July 2017 – June 2018



Airport Carbon Emissions Reporting Tool - ACERT 5.1

- Updated emission factors
- More options for individual fuels and refrigerants
- Friendly interface



Available at ACI website

- A simple IT solution designed by airports for airports
- Calculates Greenhouse Gas (GHG) emissions at and around the airport
- Produces a comprehensive inventory highlighting KPIs and supporting information



ACERT is compatible with all levels of Airport Carbon Accreditation and provides relevant information required for the ACA Online Application.

ACERT@aci.aero



SAMPLE ACERT Airport Greenhouse Gas Emissions Inventory

Identifier	ACI	Operations of Date
Report	SAMPLE ACERT Report	Passenger Mileage
Airport Operator	Airport Operator Ltd	Airport Emissions
Country	Canada, QC	Gate ID
ICAO Region	North America	Route Code (in IATA)
Report Date	2018-01-01	Airport Operator Head Office
ICAO Level	ACA Level 3+	Average Airline to the City (km)

Greenhouse Gas Emissions	CO2eq	CO2eq	CO2eq
Airport Operator	145.0	119.0	119.0
Airport Operator - Scope 2	0.0	10,480.0	10,480.0
Total Greenhouse Emissions	0.0	10,625.0	10,625.0
CO2eq	0.0	10,625.0	10,625.0

Greenhouse Gas Emissions	Scope 1	CO2eq	CO2eq
Mobile Vehicles (MVE)	Scope 1	0.0	88.0
Buildings (Scope 1)	Scope 1	0.0	230.0
Fuel Tanking	Scope 1	0.0	0.0
Grounding Equipment	Scope 1	0.0	0.0
Flare	Scope 1	0.0	0.0
Flammable (Flammable/High)	Scope 1	0.0	143.0
Refrigerant (Refrigerant)	Scope 2	0.0	17.0
Other Processes	Scope 2	0.0	467.0
Total Scope 1+2	0.0	888.0	888.0



ICAO

ENVIRONMENT



ICAO Environmental Symposium 2019

DESTINATION GREEN: THE NEXT CHAPTER



AGES-S
AIRCRAFT GROUND ENERGY SYSTEM – SIMULATOR



- Defining environmental and economic benefits of replacing the use of the APU for Aircraft Ground Energy Systems
- Supporting the development of a business case to work in collaboration with stakeholders

Available at [ACT website](http://www.act.aero)



ICAO

ENVIRONMENT



ICAO Environmental Symposium 2019

DESTINATION GREEN: THE NEXT CHAPTER



APEX AIRPORT EXCELLENCE PROGRAMMES



DNA ASSISTANCE PROGRAMME



GLOBAL TRAINING

CAPACITY BUILDING





ICAO

ENVIRONMENT



ICAO Environmental Symposium 2019

DESTINATION GREEN: THE NEXT CHAPTER

ACI Airport Excellence APEX Pilots in Environment Improving Airports' Environment Management



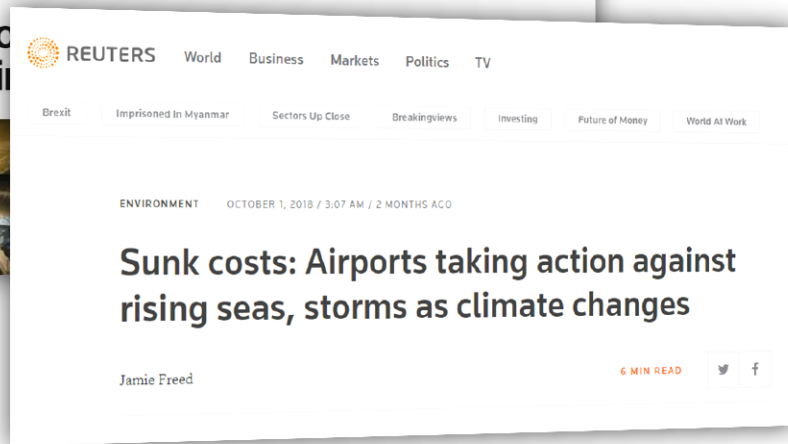
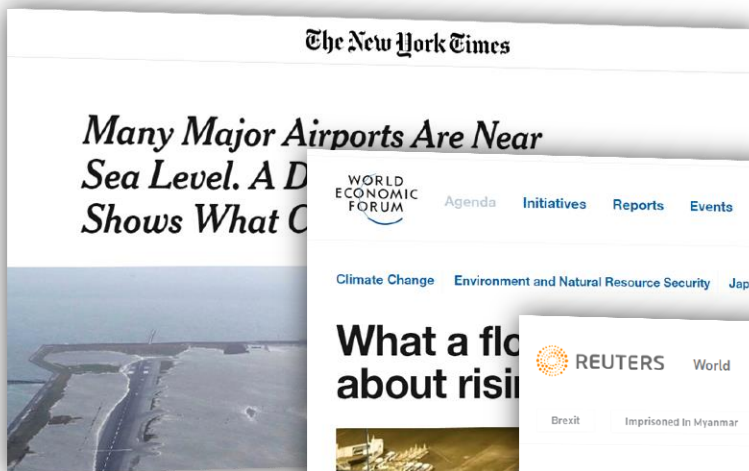


Climate Resilience and Adaptation





Airports Affected by Climate Change





ACI Resolution (2018) Encouraging airports to take action on resilience and adaptation to climate change

ACI encourages member airports to:

- Consider the impact of climate change in their Master Plans
- Conduct risk assessments for operational procedures and existing infrastructure
- Develop and take early action in accordance with the assessment, in line with overall business continuity management and emergency planning



ACI Policy Brief (2018) “Airports’ Resilience and Adaptation to a Changing Climate”

QUESTIONS FOR AIRPORTS:

Are you aware that there is an increased fire risk due to higher temperatures?



Are you aware that more airports may be used as a shelter or relief hub for weather-related disasters?



Do you know how climate change may affect the foundations of terminal buildings?

What should you do to prevent increasing wildlife-strike risks due to changes in the local ecosystem?

Will there be enough water available with increasing desertification around your airport?

What would happen to your airport if the electrical power supply failed during strong winds and storms?



Is your airport safe from potential inundation due to sea-level rise?

Have you considered whether your runway will be long enough for aircraft to take off at higher temperatures?

How will temperature change affect navigational signals and satellite coverage?

Can ground access be maintained with more extreme disruptive weather?



Data Collection

Developing global knowledge on the actual and potential impacts

- Physical damage to airport infrastructure and operations
- Fast recovery and business continuity
- Dealing with demand surge of grounded passengers
- Ripple effect on network of airports
- Identifying regional challenges
- Impacts on insurance premiums and other financial costs



DATA



KNOWLEDGE



ACTION



ICAO's Balanced Approach to Noise



Community Engagement





Addressing Illegal Wildlife Trafficking



BEST PRACTICE CASE STUDIES FROM SELECTED AIRPORTS

Combating Illegal Wildlife Trade



How Airports Can Take Action to Stop Wildlife Trafficking

Illegal Wildlife Trade is a Global Issue

Wildlife trafficking is one of the world's largest illegal trades. This illicit trade exposes passengers and staff to health and safety hazards and harms corporate reputations throughout industry supply chains. It is pushing many species - both animal and plants - to the brink of extinction.

Wildlife traffickers exploit the increasing connectivity of international aviation - targeting





ICAO

ENVIRONMENT



ICAO Environmental
Symposium 2019

DESTINATION GREEN: THE NEXT CHAPTER

Future Vision

- ACI recognizes the need to adjust policies to the new scientific evidence on CC
- We'll be revising our policies to incorporate new elements such as Circular Economy and Adaptation
- ACI Europe is developing a sustainability strategy
- Airports are encouraged to conduct risk assessments and develop Adaptation plans
- ACI World is currently working to help airports define Paris-based carbon targets
- We'll be encouraging ATAG and ICAO to set a long-term carbon goal for the whole aviation industry



ICAO

ENVIRONMENT



ICAO Environmental
Symposium 2019

DESTINATION GREEN: THE NEXT CHAPTER



Conclusions

- Committing to the long-term
- Working in collaboration with all stakeholders
- Evolving together with environment and sustainability trends
- Going beyond environment and beyond the airport
- Supporting combined mitigation and adaptation measures
- Communities and society at the core of environment and sustainability plans
- Promoting Capacity Building
- Leaving no airports behind



ICAO

North American
Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima

ICAO
Headquarters
Montréal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU