



**XIV**

Welcome to **WALA XIV**  
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# Eco-Friendly Airports in Urban Areas

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HOSTED BY:

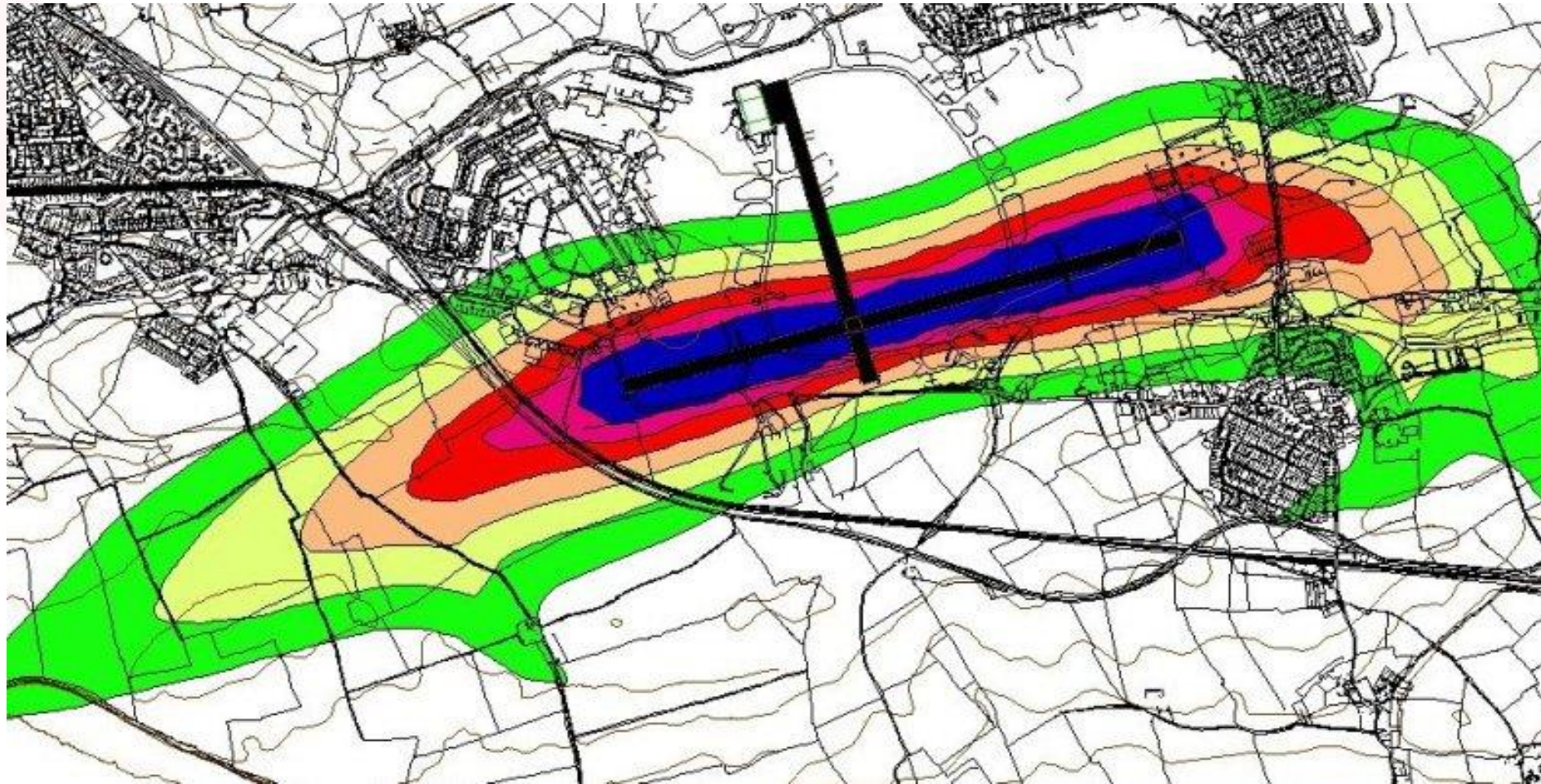


# Eco-Friendly Airports in Urban Areas

Noise  
mapping

Aircraft  
noise  
contours

[www.wbm.co.uk  
/services/noise-  
mapping](http://www.wbm.co.uk/services/noise-mapping)



# Eco-Friendly Airports in Urban Areas

## Facts and Forecast

- There will be approx. **9.7 billion people** will live on the Earth by 2050!

[See *World Population Prospects 2022: Summary of Results*. UN Department of Economic and Social Affairs (DESA), Population Division, New York, July 2022 <[www.un.org/development/desa/pd](http://www.un.org/development/desa/pd)>].

- In 2050, there will be approximately more than **10 billion passengers**, connecting the world safely, securely, and sustainably.

(See ATAG Commitment to Fly Net Zero. 5 October 2021 <[aviationbenefits.org/media/167501/atag-net-zero-2050-declaration.pdf](http://aviationbenefits.org/media/167501/atag-net-zero-2050-declaration.pdf)>).

- A large portion of the human population (**8.8 billion people**) will live in cities by 2050!

(See <[worldbank.org/en/topic/urbandevelopment/overview](http://worldbank.org/en/topic/urbandevelopment/overview)>).

# Eco-Friendly Airports in Urban Areas

- There are approx. **3,780 airports** are used for scheduled commercial flights, and a further 41,764 airports are at the disposal of civil, military (state) and commercial transport worldwide.

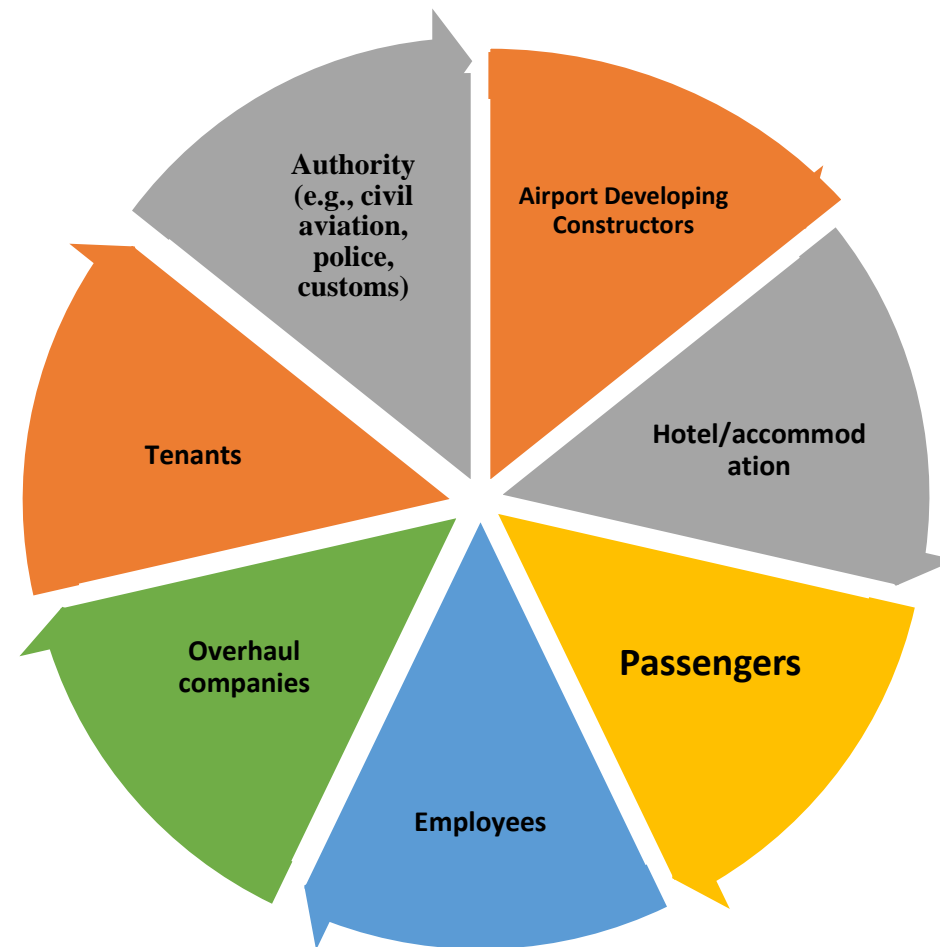
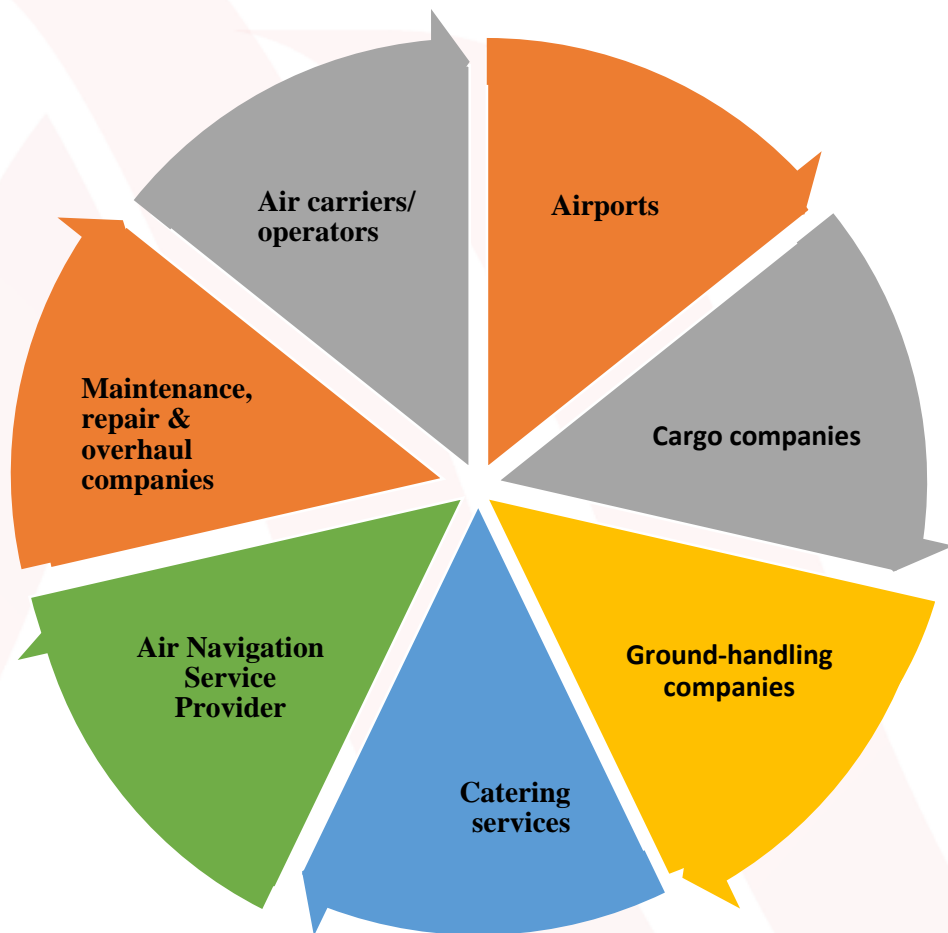
(See Aviation Benefits Beyond Borders. Executive Summary. ATAG Report, September 2020 <[www.aviationbenefits.org](http://www.aviationbenefits.org)>).

Airports are extremely energy-intensive!

Therefore, airports have to introduce a wide range of sustainable and energy-saving measures.

BUT the airport consists of many people, companies, stakeholders, etc.  
They are all using energy!

# Eco-Friendly Airports in Urban Areas



# Eco-Friendly Airports in Urban Areas

## Initiatives to mitigate environmental risks

- **Water management** (including the water entering and leaving the airport facility).
- **Waste management** (including Municipal Solid Waste (MSW); Construction and Demolition Debris (CDD); Waste from Aircraft Flights (Deplaned Waste); Compostable and Biodegradable Waste; Hazardous and Industrial Waste; and Lavatory Waste).
- **Eco-design for the Airport buildings** (such as Terminal, Cargo terminal buildings and warehouses, Air traffic control towers and backup air traffic control centre, Hangars and maintenance facilities, Parking structures, Office buildings, Fuel farms, Fire stations, fire training areas, etc).
- **Renewable energy** (mainly Airport Terminal and Airside)
- **Air quality management** (sustainable fuels, improving operations, training).

# Eco-Friendly Airports in Urban Areas

## Sustainability Performance for Green Urban Integration



# Eco-Friendly Airports in Urban Areas

## Every Airport differs from the other!

They have a common goal: **Economic and Environmental Prosperity**  
**BUT, they have multiple actions to be greener and Eco-Friendly!**

- Diverse approaches and initiatives,
- Wide range of opportunities and achievements,
  - Sources (different level of development),
    - Weather climate,
    - Management,
  - Capacity (different aviation market), etc.

The Globe is calling for a centralized SYSTEM that advocates for and manages environmental concerns!



# Eco-Friendly Airports in Urban Areas

## Main sources for aviation environmental protection by ICAO

- ICAO Annex 16 on the Environmental Protection – Volumes I – IV;
- ICAO's Annex 14 Aerodromes – Volume 1 – Aerodromes Design and Operations (9th ed., 2022);
- ICAO Doc 9889 Airport Air Quality Manual;
- ICAO Doc 9184 Airport Planning Manual – Part II – Land Use and Environmental Management;
- ICAO Doc 100013 Operational Opportunities to Reduce Fuel Burn and Emissions;
- ICAO Doc 9137 Airport Services Manual;
- ICAO Doc 9157 Aerodrome Design Manual;
- ICAO Doc 9968 Report on Environmental Management System (EMS) Practices in the Aviation Sector.

# Eco-Friendly Airports in Urban Areas

It is critical to establish closely with the Airports worldwide

- **Legal and Regulatory Framework**
- **Research and Development Fund**
- **Smart Technology Integration**
- **Global Training and Education Integration Programs**
- **Knowledge and Technology Transfer**
- **Planning and Regulations**
- **Community Engagement**

# Eco-Friendly Airports in Urban Areas

Solution:

## 1. Unilateral legal actions (national legislation)

## 2. International cooperation („No Airport Left Behind“)

To achieve Green Urban Integration in Airports' areas it is essential to formulate and implement substantial innovative structured approach.

### ➤ Technology Sharing and Innovation Hub

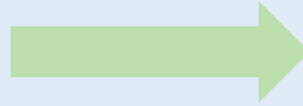
### ➤ Centre of Infrastructure Digital Platform

- **Technology Sharing and Innovation Hub**: a centralized platform for the sharing of Eco-Friendly technologies and best practices among Airports worldwide. Implementing a Global Eco-Friendly Airport Accord requires commitment and collaboration from Governments, international organizations, airport authorities, and the aviation industry. This framework aims to create a standardized and universally accepted approach to environmental sustainability in the aviation sector, contributing to a more sustainable and Eco-Friendly future for Airports worldwide.
- **Centre of Infrastructure Digital Platform**: a robust unified digital platform as the core infrastructure for the Hub. This platform should facilitate easy sharing of information, technologies, and best practices among participating Airports globally.

## 3. Multilateral legal actions (Standards)

# Eco-Friendly Airports in Urban Areas

It is crucial for ICAO contracting States to take regulatory actions in realizing  
**Eco-Friendly Airport Initiatives.**



Although many impressive plans and initiatives have been introduced throughout the World, there's still a need to

**UNIFY**

new standards and certain rules via ICAO in collaboration with Stakeholders, Companies and the General Public.

Needs **multi-sectoral collaboration** and **Unify rules** to elevate and sustain Airports worldwide.



# Thank you very much!

