

# Information Exchange & Carbon Offsetting Guidance

Panagiotis Karamanos April 2019

#### "..... to encourage and enable airports to implement best practices in carbon management, with the ultimate objective of becoming carbon neutral."



## *Airport Carbon Accreditation* is a global programme





The only global standard for carbon management in the airport industry



### Airports can choose from four accreditation levels





Scope 1&2

Scope 3



#### The certificate









Which emissions can occur at an airport?

Scope 1

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#### Emissions from airport controlled sources

 Vehicles/ground support equipment belonging to the airport
 On-site waste management
 On-site waste water management
 On-site power generation
 Firefighting exercises
 Beilers, fumaces

#### Scope 2

#### Emissions from purchased electricity

Off-site electricity generation
 A Heating
 Cooling
 Cooling
 Clighting

#### Scope 3

#### Emissions from other sources related to the activities of an airport

- Aircraft taking off
  Aircraft ground movements
  Auxiliary Power Unit
  3rd party vehicles/ground support equipment
  Passenger travel to the airport
  Staff commute
  Off-site waste management
- Off-site water management
- 🕦 Staff business travel

Mote: The presented for or preside emission secures at the eigent is not established. Furthermore, the operational structure of every airpart is different. Therefore, not all of the depicted emissions sources are present a every airport.

Design: inextremis.be - Illustrations: fotolia.com

#### **Growth has been continuous**







Welcoming **3.6** billion passengers a year





#### **39 accredited airports in North America ...**



### airports have mapped their carbon footprints

airport carbon accreditation

17 airports actively reduced their CO<sub>2</sub> emissions

10 airports reduced their CO<sub>2</sub> emissions & engaged others to do so

carbon neutral airport

41.3% of air passenger traffic

#### ... at various levels of accreditation



airport carbon accreditation

#### Key steps of accreditation







## Airports undertake various types of projects





### Various benefits from accreditation

- Knowledge transfer
- Efficiency improvements
- Raised profile & credibility
- Standardisation & benchmarking
- Increased awareness & motivation
- Reduction of regulatory risk
- Support to stakeholders









#### **Key reference material**









Guidance Manual: Airport Greenhouse Gas Emissions Management







#### Key features of the updated Guidance Document (February 2019)

- Alternative provisions for investment/divestment.
- Encouragement to procure renewable energy.
- ✤ Reference to the new Offsetting Guidance.







### Airports can choose from four accreditation levels







Scope 1&2

Scope 3

### Carbon neutral airports offset significant levels of emissions



Indicator	Unit	2017-2018	Absolute change	Change (%)
Offsetting of aggregate scope 1 & 2 & staff business travel emis- sions from airports at level 3+	tCO <sub>2e</sub>	672,000	-16,178	-2.4%





### Hydro is the preferred offset project type





### Key features of the new Offsetting Guidance Document (December 2018)

- Definitions
- Offset quality criteria
- Offsetting requirements & recommendations
- List of high confidence, medium confidence and non eligible offset project types
- Procurement guidelines







- Offset project: A project that aims to reduce emissions and generate offsets (e.g., biogas).
- Offset programme: An institution that has developed a specific acounting protocol (e.g., Gold Standard). For an offset project to be certified under a programme it must meet certain criteria (e.g., methodology).









#### **Offset Quality Criteria**

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- 1. Airports shall choose projects from specific offset programmes.
- 1. Airports shall <u>**not**</u> choose offset projects with a high risk of low environmental integrity.
- 2. Airports shall provide a minimum set of information about the offsets.





### 1. Aiports shall choose projects from five specific offset programmes

- Clean Development Mechanism
- Verified Carbon Standard
- Gold Standard
- Climate Action Reserve
- American Carbon Registry



Or upon request to add new programme



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## 2. Airports shall <u>not</u> choose projects with a high risk of low environmental integrity

- Nuclear energy
- Fuel switching
- Industrial gases HFC & N<sub>2</sub>O
- Coal mine methane



airport



### 3. Airports shall provide a minimum set of information about the offsets



- Offset programme
- Offset project type
- Project name
- Project identification number





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  - 5. Seek assurances about avoidance of double counting.
  - 6. Publicly communicate their offseting activities.

### **Six recommendations**

Airports are encouraged to:

- 1. Consider the confidence in the quality of eligible project types.
- 2. Use offset projects that were registered from 2013 onwards.
- 3. Use offsets that have been issued within five years prior to the airport emissions.
- 4. Choose offsets that are certified under an offset label.







## 1. Airports are encouraged to consider the confidence in the quality of project types



Higher Confidence	Medium Confidence		
Efficient lighting Biogas Methane from landfills Small solar (off grid) Small hydro (run-of-river) Geothermal Biomass Cookstoves	Industry efficiency (e.g., waste heat recovery) Transport Large scale conventional renewables Forestry Land use		



### **Useful procurement guidelines**



- Purpose for the Request For Proposals
- Background
- ✤ Volume
- Prices
- Quality criteria
- Offset programmes
- Project types
- Co-benefits
- Project location
- ✤ Vintage
- Registry
- Company information





#### **Lessons learned**



- Review the Guidance Documents
- Start early & develop a realistic timeline
- Obtain high level approval
- Establish a permanent inter-departmental team
- Ist time data collection will be more challenging
- $\rightarrow$  Electricity is likely to be the main source of CO<sub>2</sub> emissions
- Check what/how other airports became accredited











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