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# ASSEMBLY — 37TH SESSION

#### **EXECUTIVE COMMITTEE**

**Agenda Item 17: Environmental protection** 

# AIRPORTS AND GREENHOUSE GAS EMISSIONS MANAGEMENT

(Presented by Airports Council International)

#### **EXECUTIVE SUMMARY**

Airports Council International has two recent initiatives for assisting airports with the management of greenhouse gas emissions.

The first is ACI's Guidance Manual on Airport Greenhouse Gas Emissions Management which provides a framework for the consistent classification and calculation of emissions from an airport operator's activities and other activities associated with the airport including aircraft and ground transportation. It also provides guidance on goal setting, mitigating emissions and obtaining recognition of achievements.

The second is *Airport Carbon Accreditation*. This system provides a standard for recognising and certifying the carbon management achievements of airports from conducting inventories and reducing emissions through to achieving carbon neutral status.

Strategic Objectives:	This working paper relates to Strategic Objective C, Environmental Protection - Minimize the adverse effect of global civil aviation on the environment.
Financial implications:	No additional resources required.
References:	No references.

#### 1. INTRODUCTION

- 1.1 Airports Council International (ACI) would like to inform the ICAO Member States of two major initiatives taken to assist airport operators to address the greenhouse gas (GHG) emissions associated with their airport activities.
- 1.2 The first is ACI's *Guidance Manual on Airport Greenhouse Gas Emissions Management* (the Manual) which provides a framework for the consistent classification and calculation of emissions from an airport operator's activities and other activities associated with the airport including aircraft and ground transportation. The Manual also provides guidance on goal setting, mitigating emissions and obtaining recognition of achievements.

- 1.3 The second is *Airport Carbon Accreditation*. This system provides a standard for recognising the carbon management achievements of airports. It was developed by ACI EUROPE and is available to airport globally.
- 1.4 Each of these is described in the following sections of this paper.

# 2. GUIDANCE MANUAL ON AIRPORT GHG EMISSIONS MANAGEMENT

- 2.1 ACI published its *Guidance Manual: Airport Greenhouse Gas Emissions Management* in 2009. This document draws together the threads of various guidance documents to assist airport operators, despite various regional approaches and requirements, to address greenhouse gas (GHG) emissions associated with airport activity in a consistent manner and using the same vocabulary.
- 2.2 While not guaranteeing that all approaches to airport GHG inventories will be the same, the Manual will assist with allowing comparisons of airport inventories and achievements and, more importantly, avoiding inappropriate comparisons.
- 2.3 There are many GHG emissions sources associated with airports including aircraft, ground service equipment, ground transport, power and heating plants and off-site plants providing the airport with electricity. An airport operator typically has ownership or control over just a few of these and can exercise influence over only some of the others. To gain any credibility and to track the benefits of all airport-related projects, an airport GHG management programme must include all relevant sources.

# 2.4 Features of the Manual include:

- definitions of terms to promote consistent approaches despite various regional requirements;
- the various reasons why an airport operator might decide to manage GHG emissions;
- guidance on how to conduct a GHG emissions inventory and what airport and airport-related sources and pollutant species to include;
- guidance on how to categorize sources into Scopes 1, 2, 3A and 3B, and how these categories can assist emissions management programmes including setting goals and reporting;
- references to documents assisting with the calculations of the quantities of emissions;
- guidance on the goals an airport operator can set for its emissions management programme;
- outlines of GHG emissions reduction projects;
- guidance on becoming Carbon Neutral and using offsetting to address residual emissions;
- guidance on reviewing programmes and reporting progress, including the necessity to report inclusions, exclusions and caveats; and
- guidance on gaining accreditation for achievements made.
- 2.5 The full Guidance Manual can be downloaded in pdf format at www.aci.aero/publications and is available in English, French and Spanish.

# 3. AIRPORT CARBON ACCREDITATION

- 3.1 In 2007, the ACI World Annual General Assembly resolved that its members be encouraged to reduce carbon emissions from their operations, with the ultimate target of becoming carbon neutral. In 2008, the Annual Assembly of ACI EUROPE committed to reduce carbon emissions from their operations, with the ultimate goal of becoming carbon neutral, then ACI EUROPE developed Airport Carbon Accreditation a carbon management standard for the airport industry launched in May 2009.
- 3.2 The programme is administered independently by WSP Environment & Energy and is in line with international standards, such as the Greenhouse Gas Protocol. The administration of the scheme is overseen by an Advisory Board of representatives of independent external organisations including a representative from the European Commission (DG MOVE), Eurocontrol, the European Civil Aviation Conference, Manchester Metropolitan University, the United Nations Environment Programme. The scheme is endorsed by Eurocontrol and the European Civil Aviation Conference (ECAC).
- 3.3 Airport Carbon Accreditation provides airports with a common framework for active carbon management with measurable targets. Airport Carbon Accreditation assesses and recognizes efforts to manage and reduce carbon emissions from airport operations, making a distinction between the emissions that the airport operator can control, guide or influence. Performance recognition is ensured with four levels of accreditation:
  - Level 1: Mapping Compile a carbon footprint report.
  - Level 2: **Reduction** Achieve emissions reduction targets.
  - Level 3: **Optimisation** Engage 3<sup>rd</sup> parties at and around the airport.
  - Level 3+: **Neutrality** Offset remaining emissions to achieve carbon neutral operations for all emissions over which the airport has control.
- As of 10 September 2010, 22 airports were accredited: Athens International Airport, Bologna Airport, Dubrovnik Airport, Izmir Adnan Menderes International Airport, Amsterdam Schiphol Airport, Farnborough Airport, Paris-Charles de Gaulle Airport, Paris-Orly Airport, Frankfurt Airport, Manchester Airport, Kristiansand Airport, Milan-Linate Airport, Milan-Malpensa Airport, Stockholm-Arlanda Airport, Stockholm-Bromma Airport, Trondheim Airport, Umea Airport, Istanbul Atatürk International Airport, Ankara Esenboğa International Airport, ICF Antalya Airport and Brussels Airport. Applications from another 10 airports were under review.
- 3.5 From June 2009 to June 2010, the aggregate reported reduction in carbon emissions from the airports accredited under the scheme exceeded 400,000t<sup>1</sup> CO<sub>2</sub>.

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<sup>1</sup> This figure derives from the individual applications, as verified externally according to the scheme rules. Under the scheme requirements, reductions are measured against a rolling average of the previous three years' emissions. At present, not all airports have three years historical data available.