AIRPORTS COUNCIL INTERNATIONAL

ACI POSITION BRIEF
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CLIMATE CHANGE

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Airports are the interface between aviation and ground transportation. The aviation industry is working with ICAO towards a global framework to address global aircraft emissions. ACI is also working with its airport members to address aircraft emissions at airports from landing to take-off including auxiliary power units (APU), taxiing, queuing and congestion. Airports also need to address non-aviation emissions from ground support equipment (GSE), fleet vehicles, power and heating plants, and ground access vehicles (GAV).

Aviation and Climate Change

Civil aviation, including both domestic and international flights, currently contributes approximately 2% of anthropogenic CO2 emissions and this proportion is predicted to increase as demand growth outstrips industry-wide efficiency gains, and other sectors achieve emissions reductions.

As of 2010, The United Nations Framework Convention on Climate Change (UNFCCC) and the International Civil Aviation Organization (ICAO) intend to include the emissions from international aviation in the new agreement to succeed the Kyoto Protocol.

ACI supports the joint aviation industry position on a global sectoral approach for addressing aircraft emissions, a 1.5% average annual efficiency improvement, a goal of carbon neutral growth from 2020 and a 50% carbon reduction (relative to 2005 levels) by 2050. These aviation targets refer only to the emissions from aircraft both in-flight and on-ground, including taxiing and auxiliary power units (APU),

Airport GHG Emissions Inventory

Non-aircraft emissions from airport and airport-related activities such as power and heat generation, terminal use, ground support equipment, fleet vehicles and ground access vehicles, are all ground-based and are included in current Kyoto Protocol national inventories and targets,

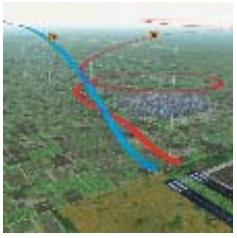
Airport operators can address their airport and airport-related greenhouse gas (GHG) emissions starting with an inventory consistent with the methods and structures recommended in ACI's 2009 Guidance Manual on Airport Greenhouse Gas Emissions Management (the GHG Manual).

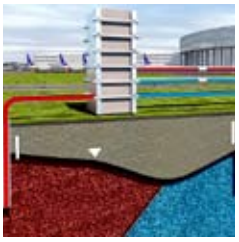
GHG Mitigation

Aircraft Emissions

Airports can help reduce aircraft emissions at airports, with the following:

- Providing fixed electrical ground power (FEGP) and pre-conditioned air (PCA) to allow aircraft auxiliary power unit (APU) shutdown.
- Improving aircraft taxiing efficiencies by providing appropriate airport and taxiway layout.
- Reducing aircraft queuing with options such as slot management and Collaborative Decision Making (CDM) regarding delayed push-back.





Scope 1 emissions are from sources that are owned or controlled by the airport operator, such as airport power or heating plants, airport fleet vehicles, construction, and fire fighting. Scope 2 emissions are those from the off-site generation of electrical power (and heating or cooling) purchased by the airport operator. Scope 3 emissions are those from airport-related activities from sources not owned or controlled by airport operators, including aircraft, most ground support equipment and most ground access vehicles.

- Working with stakeholders to improve Landing and Take-off (LTO) fuel burn efficiencies with procedures such as Continuous Descent Operations and Continuous Climb Departures.

Non-Aircraft Emissions

Airports can reduce their own Scope 1 and 2 emissions (For definitions see margin notes and the GHG Manual) through plant equipment and fleet vehicle modernization including using alternative fuels, generation or purchase of electricity from renewable sources, and efficient lighting and HVAC systems.

Stakeholder engagement is required to achieve non-aircraft Scope 3 emissions reductions such as providing public transit, consolidating shuttle bus fleets, modernizing ground support equipment, incentivizing taxi fleet modernization and promoting car-pooling and cycling.

Carbon Neutrality and Accreditation

ACI encourages its members to set goals on both GHG emissions sources within their control and those in the control of stakeholders which they can influence. For an airport's Scope 1 and 2 emissions, the ultimate target is for the airport to become carbon neutral. Carbon neutral status can be achieved by reducing emissions as much as practicable, then purchasing carbon offset credits for the remaining emissions. Offset credits must comply with international standards and be fully verified.

Airports can attain recognition for their achievements in carbon management with ACI Europe's Airport Carbon Accreditation which recognizes four levels of progress – Inventory, Emissions Reduction, Stakeholder Optimization and Carbon Neutrality. The project has started in Europe and is available worldwide.