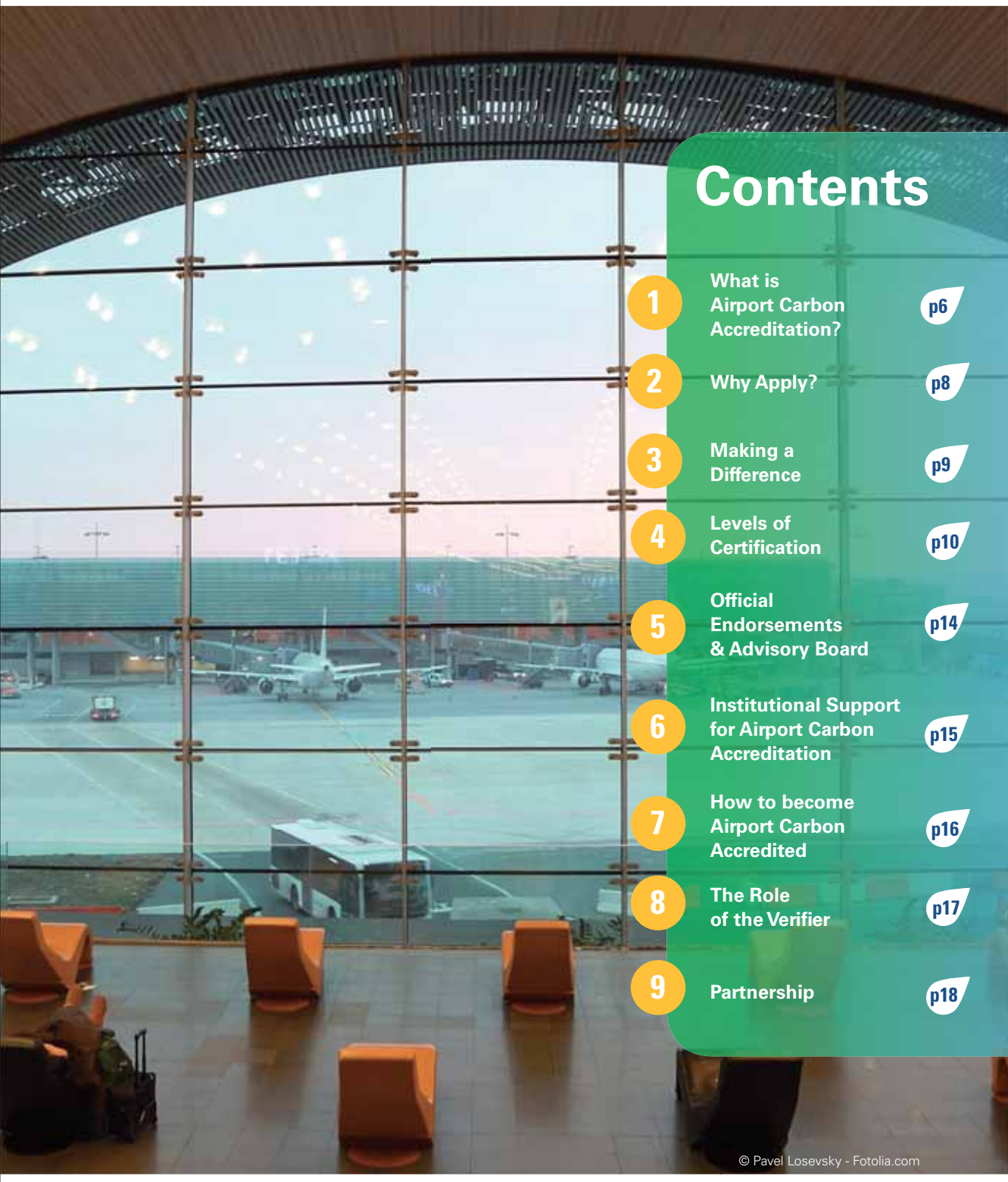
Achieving Carbon Reduction

airport carbon accreditation

MAPPING | REDUCTION | OPTIMISATION | NEUTRALITY

Achieving Carbon Reduction

Paris Charles de Gaulle Airport



Contents

In today's globalised world, the theme of mobility surrounds us. Yet, there is a growing awareness that the planet's resources are finite. Society has also woken up to the potentially damaging effects of climate change. Coupled with recent economic and financial crises, a clear priority has now been placed on efficiency. Efficient use of energy in business, in travel and at home to lower emissions, lower environmental impact and achieve better, cleaner living.

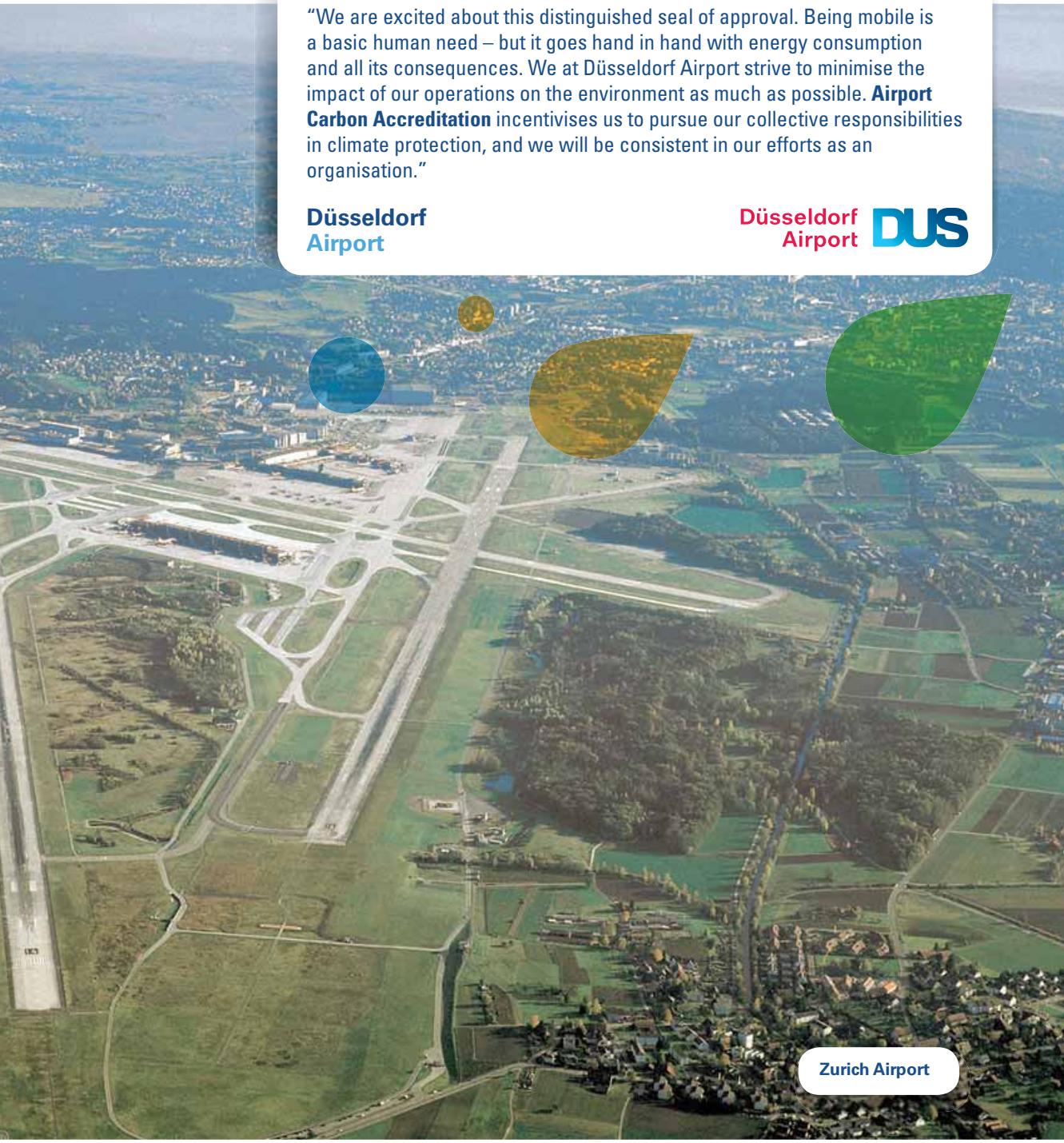
The air transport sector, with its legacy of innovation, has sought to drive this agenda of efficiency forward, in particular, the airport industry. As the visible face of aviation on the ground, airports bring undeniable benefits to society - connecting places, people and products. Following years of working individually to address their local environmental impact, airports are now working in a collective way, to make further strides in managing, reducing and ultimately neutralising their carbon footprint.

And **Airport Carbon Accreditation** is empowering their efforts.

“We are excited about this distinguished seal of approval. Being mobile is a basic human need – but it goes hand in hand with energy consumption and all its consequences. We at Düsseldorf Airport strive to minimise the impact of our operations on the environment as much as possible. **Airport Carbon Accreditation** incentivises us to pursue our collective responsibilities in climate protection, and we will be consistent in our efforts as an organisation.”

Düsseldorf Airport

Düsseldorf Airport DUS



Zurich Airport

Athens International Airport
Photovoltaic Park

1. What is Airport Carbon Accreditation?

Airport Carbon Accreditation is the only institutionally-endorsed, carbon management certification programme for airports. It independently assesses and recognises the efforts of airports to manage and reduce their carbon emissions through 4 levels of certification: 'Mapping', 'Reduction', 'Optimisation' & 'Neutrality'. **Airport Carbon Accreditation** is also the only airport specific carbon **standard** which relies on internationally recognised methodologies. It provides airports with a common framework for active carbon management with measurable goal-posts. The programme is site-specific allowing flexibility to take account of national or local legal requirements that individual airport operators have to comply with, while ensuring that the methodology used is always robust.

Airport Carbon Accreditation is aimed at innovative airports and strives to allow the airport industry to benefit from increased efficiency through lowered CO_2 emissions, shared expertise and knowledge exchange, as well as better communication of the results.

“Athens International Airport is proud to have played an important role in the development of **Airport Carbon Accreditation** and to have been among the first airports accredited following its launch in 2009. The programme continues to provide an opportunity to showcase important achievements with regard to energy management, to translate our ambitions into a long-term emissions reduction target and to underscore our commitment to protecting the environment to our stakeholders.”

Athens International Airport

75 Airports certified in 22 countries in Europe

1 Airport certified in 1 country in Africa

11 Airports certified in 7 countries in Asia-Pacific

Through its 4 levels of certification, **Airport Carbon Accreditation** acknowledges that airports are at different stages towards comprehensive carbon management and carbon neutrality. It is a programme for airports of all sizes, extending even beyond hubs and regional airports with scheduled passenger traffic, to include general aviation and freight-focused airports.

First launched in 2009 by ACI EUROPE, **Airport Carbon Accreditation** has established itself as the authoritative industry standard for certifying carbon management at airports. As of May 2013, there are over 75 European airports in 22 countries accredited at one of the 4 available levels of certification, these airports represent a **figure of 58.6% of passenger traffic in Europe.** The number of airports certified at each level of the programme, signifies clearly that regardless of size or geography, these airports are leading *“a quiet revolution”,* actively lowering aviation’s carbon footprint on the ground. In November 2011, the programme expanded to the Asia-Pacific region of ACI. As of June 2013, 11 airports in 7 countries in Asia-Pacific have been certified. The programme was also extended to the African region of ACI in June 2013 with the official certification of the first African airport to the programme, Enfidha-Hammamet International Airport in Tunisia.

2. Why Apply?

The airport is a uniquely complicated space, typically welcoming millions of passengers, thousands of vehicles and hosting hundreds of companies. **Airport Carbon Accreditation** has been developed specifically for airports seeking to address their carbon emissions and become more efficient. Accredited airports in Europe, Asia-Pacific and Africa have developed a wide range of activities to reduce carbon emissions linked to airport operations. These emissions mainly stem from energy use in airport buildings and infrastructure, transport to/from airports, airside vehicles, aircraft ground movements and energy consumption and refrigerants.

By becoming **Airport Carbon Accredited**, an airport benefits in many ways including

- Data collection and verification, which ensures that a clear understanding of emissions at the airport is developed, enabling the airport to identify priority areas for emissions reduction.
- The exercise promotes dialogue between airport personnel and departments on issues relating to CO_2 emissions.
- Achievement of real, verified emissions reductions gives further credibility to claims made by the airport in the public domain.
- Improved emissions performance and operational/cost efficiencies not only for the airport itself, but also for third parties responsible for emissions sources at the airport.
- Increased shareholder value, brand reputation and stakeholder support.

“During 2012, Swedavia took a number of steps to take responsibility for our environmental impact. All ten Swedavia airports included in Sweden’s national basic infrastructure are certified at the highest level of **Airport Carbon Accreditation.** Therefore, ten of the fourteen airports in the world that have attained the highest level of Airport Carbon Accreditation are Swedish and operated by Swedavia.”

Swedavia
Swedish Airports

Swedavia Airport
October 2012 - Swedavia becomes the world’s first national airport group to achieve carbon neutrality

Dublin Airport Authority
The nine electric mini-vans at DAA, used by DAA maintenance crews in both airside and landside locations, as well as staff from car park and terminal services departments, at its Cork and Dublin airports

3. Making a Difference

Airport Carbon Accreditation has continuously succeeded in reducing significant levels of CO_2 emissions. Year 4 of the programme was no exception with a total reduction of **170,164 tonnes of CO_2** achieved

Airport Carbon Accreditation provides a unique common framework and tool for active carbon management at airports with measurable tools. It covers operational activities that contribute the most, to carbon emissions. **Airport Carbon Accreditation** is site specific and can be used at any airport as part of its daily environmental management activity and long term strategy. It helps to guide and support airport environmental management through a process of continual improvement and partnership with its airport stakeholders.

170,164 tonnes of CO_2

Enough to power 71,000 households for a year

4. Levels of Certification

Munich Airport

Level 1: **Mapping**

airport carbon accredited
MAPPING

What is it?

Becoming **Airport Carbon Accredited** at the **Mapping** level requires carbon footprint measurement.

How to achieve it?

To achieve this level of accreditation, an airport has to:

- Determine its 'operational boundary' and the emissions sources within that boundary which are Scope 1 and Scope 2 sources, as defined by the Greenhouse Gas Protocol.
- Written evidence of policy commitment to emissions reduction is required from the top management at the airport.
- Collect data and calculate the annual carbon emissions for the previous year for those sources
- Compile a carbon footprint report, and
- Engage an independent third-party to verify the report before submission, to ensure that the carbon footprint calculation is in accordance with ISO14064 and accreditation requirements.

"

London City Airport made the decision to pursue **Airport Carbon Accreditation** to demonstrate our on-going commitment to managing our carbon emissions and to assist the work we are doing to develop our sustainability strategy. **Airport Carbon Accreditation** is highly respected in our industry and our continuing drive towards a more energy-efficient and environmentally-friendly business at LCY will have the move to the next level of the programme built into it.

London City Airport

LondonCityAirport

Level 2: **Reduction**

airport carbon accredited
REDUCTION

What is it?

Becoming **Airport Carbon Accredited** at the **Reduction** level requires carbon management and progress towards a reduced carbon footprint.

How to achieve it?

To achieve this level of accreditation, an airport has to:

- Fulfil all the requirements of Mapping.
- Provide evidence of effective carbon management procedures including target setting, and
- Demonstrate a reduction in Scope 1 and 2 CO_2 emissions against a 3 year rolling average.

Level 3: **Optimisation**

airport carbon accredited
OPTIMISATION

"In line with our strategic objective to reduce our carbon emissions by 25% between 2009 and 2015, **Airport Carbon Accreditation** has allowed us to strengthen initiatives undertaken within Aéroports de Paris as well as those with our partners in air transport."

Aéroports de Paris

AÉROPORTS DE PARIS

What is it?

Becoming **Airport Carbon Accredited** at the **Optimisation** level requires third-party engagement in carbon footprint reduction. Third parties includes airlines and various service providers, for example, independent ground handlers, catering companies, air traffic control and others working on the airport site. In addition, this includes engagement on surface access modes (road, rail) with authorities and users.

How to achieve it?

To achieve this level of accreditation, an airport has to:

- Fulfil all the requirements of Mapping and Reduction,
- Widen the scope of its carbon footprint to include a range of Scope 3 emissions. Scope 3 emissions to be measured include:
  - landing and take-off cycle emissions.
  - surface access to the airport for passengers and staff.
  - staff business travel emissions.
  - any other Scope 3 emissions which the airport chooses to include.
- Presentation of evidence of engagement with third-party operators to reduce wider airport-based carbon emissions.

Level 3+: **Neutrality**

airport carbon accredited
NEUTRALITY

What is it?

Becoming **Airport Carbon Accredited** at the **Neutrality** level requires that airport company neutralises the remaining direct carbon emission under its control, by offsetting.

How to achieve it?

To achieve this level of accreditation, an airport has to:

- Fulfil all requirements of Mapping, Reduction and Optimisation, and
- Offset its remaining Scope 1 and 2 carbon emissions to show its commitment to achieving carbon neutral operations for all direct emissions and indirect emissions over which the airport has control, using internationally recognised offsets.

More information

Carbon neutrality is when the net carbon dioxide emissions over an entire year is zero. Achieving carbon neutrality for an airport is in almost all cases impossible without external help. For this reason, airports, among many other industries, look to carbon offsetting as the final part of the process. Carbon offsetting is providing funds or resources to other projects that reduce carbon dioxide so as to make up for the emissions that one is not able to eliminate. **Airport Carbon Accreditation** has been designed to give participant airports significant flexibility within specific parameters in deciding how they should offset their emissions in order to achieve carbon neutrality.

Istanbul Atatürk Airport

Helsinki Airport

5. Official Endorsements & Advisory Board

As a hallmark of European, Asia-Pacific and African airports active engagement in reducing their carbon emissions, **Airport Carbon Accreditation** has received the official patronage of the **European Civil Aviation Conference (ECAC)** and the European Organisation for the **Safety of Air Navigation (EUROCONTROL).**

Independent Expert Advisory Board:

The administration of **Airport Carbon Accreditation** is overseen by an independent Advisory Board, with participation from institutions that have endorsed the programme, as well as other relevant organisations which have expressed support or an interest in the programme. The members of the Advisory Board play an active role in monitoring the progress of **Airport Carbon Accreditation.**

The Advisory Board is comprised of many distinguished, independent experts from the fields of aviation and environment, including:

- Mr Patrick Gandil, Focal Point for Environment, ECAC (European Civil Aviation Conference).
- Mr Frank Brenner, Director General, EUROCONTROL
- Mrs Martina Otto, Head of Policy Unit - Energy Branch, UNEP (United Nations Environment Programme).
- ICAO Focal Point: Ms Jane Hupé, Head of Environment, ICAO.
- Mr Matthew Baldwin, Director of Air Transport, DG Mobility & Transport, European Commission.
- Mr Damien Meadows, Advisor to the Director for European & International Carbon Markets, DG Climate Action, European Commission.
- Professor Callum Thomas, Centre for Air Transport and the Environment at Manchester Metropolitan University
- Mr Tim Johnson, Director of Aviation Environment Federation (In his personal capacity).

> “An airport, however big or small, has to take responsibility for its effects on community, as well as the surrounding environment. Being **Airport Carbon Accredited** gives our environmental efforts a solid framework, which makes it a lot easier for us to set goals for ourselves and that way be a responsible part of our community.”
>
> **Tallinn Airport**

6. Institutional Support for Airport Carbon Accreditation

Airport Carbon Accreditation is a highly significant initiative by airports for meaningful and measurable action in addressing their greenhouse gas emissions. I commend ACI for its success with the programme in Europe and for extending it to the Asia-Pacific region, in line with ICAO's global strategy for dealing with climate change'.

Raymond Benjamin,
Secretary General, ICAO

I applaud ACI EUROPE for having set up **Airport Carbon Accreditation,** an initiative that demonstrates commitment to reduce the carbon footprint of airports and eventually to become carbon neutral. The programme reflects the different steps required to reduce emissions and provides a tool for airports both to manage their emissions and to communicate about improvements."

Achim Steiner
Executive Director,
United Nations Environment Programme
(UNEP)

It is important that all parts of industry and society join in our efforts against climate change, and examples like yours are inspiring."

Connie Hedegaard
European Commissioner
for Climate Action

Airport Carbon Accreditation provides a very useful tool to measure CO_2 emissions, and it allows for a common method to be used across Europe. **Airport Carbon Accreditation** paves the road to carbon footprint calculators that the European White Paper on Transport clearly urges. ACI EUROPE made a bold move and set up a standard at a time of uncertainty."

Patrick Gandil
Focal Point for Environment, ECAC
(European Civil Aviation Conference)

With substantial CO_2 reductions achieved already, I believe that **Airport Carbon Accreditation** is playing a crucial role in helping move aviation onto a more sustainable footing."

Siim Kallas
European Commission
Vice-President in charge
of Transport

7. How to become Airport Carbon Accredited

Any airport wishing to apply to the programme should have a continued dialogue with the **Airport Carbon Accreditation** Administrator during this process to ensure that information is prepared correctly and in line with the minimum **Airport Carbon Accreditation** requirements.

- Contact **Airport Carbon Accreditation** Administrator to obtain up-to-date programme documentation.
- Decide on level of participation based on level of carbon management activity at airport.
- Collate data and prepare documentary evidence to support application.
- Identify an independent third party organisation to verify data and supporting documentary evidence.
- Contact **Airport Carbon Accreditation** Administrator to make your formal application.

“Becoming the first carbon accredited airport in Asia-Pacific to achieve ‘Optimisation’ not only secures recognition against the emerging industry standard for the carbon reduction work of Airport Authority Hong Kong and over 40 of our business partners, but also provides a practical framework for further improving our performance.”

Hong Kong International Airport

香港國際機場 | HONG KONG INTERNATIONAL AIRPORT

Mr. Stanley Hui, CEO of Airport Authority Hong Kong; Dr. Marvin Cheung, Chairman of Airport Authority Hong Kong and Ms. Patti Chau, Regional Director, ACI Asia-Pacific at the Hong Kong International Airport accreditation ceremony, for ‘Optimsation’ level.

DID YOU KNOW?

Airport Carbon Accreditation has recently launched an Online Tool with the aim of making the application process for airports more accessible. The new tool is designed at making the application more cost effective and less time consuming for airports.

The Online Tool, designed to allow registration and application to the programme, is readily accessible from the **Airport Carbon Accreditation** website and also the online tool address www.aca-application.org

8. The Role of the Verifier

As part of the **Airport Carbon Accreditation** application process, each airport's carbon footprint must be independently verified before its full review by the programme administrator, WSP Environment & Energy. The **Airport Carbon Accreditation** Advisory Board recently agreed a new policy regarding verifier requirements for the programme. This new policy is in response to calls for greater robustness in verification, from both the verification community and the airports themselves.

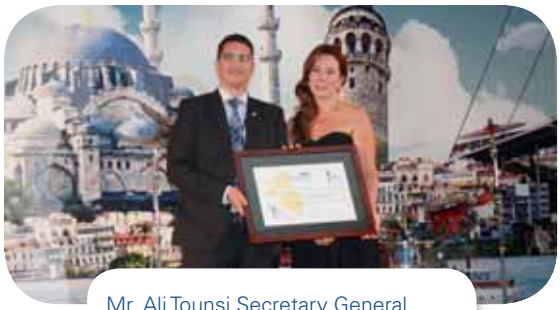
Who can verify?

Verifiers or verification bodies may be:

- Nationally accredited certification bodies.
- An environmental consultancy or accountancy firm offering validation and verification services as part of their business portfolio.
- Individual environmental specialists with an appropriate track record of verification.
- Organisations that already report on an airport's behalf (financial reporting / ISO / EMAS certification.
- Or drawn from the list of individual verifiers on www.airportcarbonaccreditation.org.
  These are individual verifiers who have verified at least one carbon footprint to the satisfaction of the Administrator under the programme's previous requirements and / or undertaken the mandatory verifier training outlined.

"Rajiv Gandhi International Airport (RGIA), Hyderabad is committed to effectively managing its Greenhouse Gases. As part of that, RGIA has been accounting and reducing its GHG emissions through **Airport Carbon Accreditation,** with the support of the stakeholders. We will continue to make sustained efforts to achieve carbon neutrality and become one of the Greenest Airports in the world.

Hyderabad Airport



Mr. Ali Tounsi Secretary General of ACI AFRICA presenting the 'Mapping' certificate to Ms. Eda Bildiricioglu TAV Operation Services General Manager

"Enfidha Hammamet International Airport is proud to be the very first airport in Africa to be certified by Airport Carbon Accreditation. We played an important role in the expansion of the programme into Africa and we encourage other African airports to follow our lead. We made this decision in order to demonstrate our on-going commitment to manage our environmental obligations, as well as to build on a solid framework for our social aspirations and commitments.

Enfidha Hammamet International Airport

9. Partnership

Airport Carbon Accreditation has just partnered with the 'A World You Like' campaign, which promotes innovation in carbon reduction and was launched last year by EU Commissioner for Climate Action, Connie Hedegaard. The campaign is interested in getting creative and innovative minds from across the EU, to put their low-carbon initiatives to the test and inspire others to follow suit.

For more information
http://world-you-like.europa.eu

Lyon Saint-Exupéry Airport

About ACI EUROPE

ACI EUROPE is the European region of Airports Council International, the only global association of airport operators. Based in Brussels, Belgium, ACI EUROPE represents over 450 airports in 44 European countries, accounting for over 90% of commercial air traffic in Europe. In 2007, ACI EUROPE member airports welcomed 1.47 billion passengers and handled 17.4 million metric tonnes of cargo and 20.8 million aircraft movements.

www.aci-europe.org

About ACI ASIA-PACIFIC

ACI Asia-Pacific is the Asia-Pacific region of Airports Council International and has 96 members operating over 520 airports in 43 countries. According to the ACI World Airport Traffic Report 2012, the airports in the Asia-Pacific and Middle East regions handled 1.49 billion passengers and 34.9 million tonnes of cargo.

www.aci-asiapac.aero

About ACI AFRICA

ACI-Africa is the African region of Airports Council International. The region is composed of 57 members, operating 200 airports, situated in 47 countries across the continent. In 2011, ACI Africa member airports handled 153 million passengers, 1,795 tonnes of cargo and over 2.5 million aircraft movements.

www.aci-africa.aero

About WSP Environment and Energy

As part of one of the world's leading professional services firms, WSP and GENIVAR, WSP Environment and Energy is a global consultancy which delivers practical and cost-effective solutions to many environmental, energy, sustainability, climate change and business risk issues. Working for all industries and businesses its expertise ranges from land remediation to climate change adaptation. From geotechnical design to product stewardship. From airport masterplanning to environmental compliance. From carbon and energy management and renewables to health and safety. From noise and acoustics to digital solutions. And from waste management to due diligence.

www.wspenvironmental.com

To find out more about
Airport Carbon Accreditation,
including an up-to-the-minute
list of participating airports,
please visit our website at:
www.airportcarbonaccreditation.org

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