ACI EUROPE POSITION on Airport Climate Action

January 2018
1. Executive Summary

1.1. European airports recognize the threat of climate change as well as aviation's contribution to global greenhouse gas emissions. We are committed to climate action, including monitoring and reducing emissions under our control, while also engaging other members of the industry to address their emissions, in particular aircraft operators, ground handlers and providers of ground transportation services to access airports.

1.2. Airports are thus committed to collaborating with their stakeholders to influence emissions reductions throughout the aviation sector. To this end, we support the implementation of ICAO's Basket of Measures, including a robust and effective CORSIA to achieve carbon neutral growth for international aviation from 2020.

1.3. In line with this commitment, the European airport industry has set a voluntary target of 100 carbon neutral airports by 2030 (for emissions under their control) and has established the Airport Carbon Accreditation programme. It provides airports with an internationally recognized framework for carbon management and facilitates their efforts to reduce and eventually zero out the carbon footprint under their control, while also engaging with stakeholders to jointly reduce the emissions of the aviation sector.

1.4. ACI EUROPE advocates a holistic approach to policy-making and emphasizes the need to continue support for relevant research and innovative solutions to enable airports and aviation as a whole to deliver their social and economic benefits in a more sustainable manner.
2. Context

2.1. Climate change is recognized as one of the main environmental challenges for our society. Consequently, climate action is one of the 17 Sustainable Development Goals established by the United Nations (UN) (SDG 13: “Take urgent action to combat climate change and its impacts”). It points to the importance of combining climate change mitigation with economic and social development. Achieving truly sustainable growth is particularly relevant for the airport industry, which acts as an economic engine locally, regionally and nationally. Sustainable growth of aviation is also one of the objectives of the EU Aviation Strategy.

2.2. In December 2015, signatories to the United Nations Framework Convention on Climate Change (UNFCCC) adopted the landmark Paris Agreement, the first global treaty calling all countries to engage in climate action to maintain the global temperature increase below 2°C and aim to limit it to below 1.5°C.

2.3. The aviation industry agreed back in 2008 on three goals to address its climate impact: achieving an annual increase in fuel efficiency of 1.5%, carbon-neutral growth from 2020 and halving its total emissions by 2050 compared to 2005. To reach these objectives, the International Civil Aviation Organisation (ICAO) has defined a four-pillar strategy, the so-called ICAO Basket of Measures, involving technological and operational improvements, the use of sustainable alternative fuels and a global market-based measure. The latter will be implemented through the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), agreed upon by ICAO in October 2016 and due to fully take effect as of 2021.

2.4. Many businesses including the aviation industry are already affected by climate change today. Thus, mitigating climate change is also a matter of business continuity for airports. In addition, airports are taking action to adapt to the changing climate by enhancing the resilience of their infrastructure and operations.

2.5. While aviation is at the core of their business, airports are multimodal transport nodes, situated at the interface of several sectors, including ground transport, retail and in some cases power generation. This means that greenhouse gas management at an airport is very complex, especially considering airport operators are not in control of all emissions sources on their sites. Consequently, effectively addressing the collective climate

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1 An overview of different emissions sources related to airport operations and their categorisation as per GHG Protocol emission Scopes are presented in the Annex “Which emissions can occur at an airport?”.
impact of an airport requires a transversal perspective and collaborative approach between various stakeholders.

3. **Addressing aviation’s climate footprint from the airports’ perspective**

3.1. ACI EUROPE supports the ambitions of the Paris Agreement and the accordingly defined target of reducing emissions in the EU by 40% by 2030. Hence, European airports commit to contribute to the achievement of this objective by addressing in a comprehensive manner all of the emissions related to their operations: on one hand, by continuing to actively reduce the emissions under their control and on the other, by cooperating with their partners to address the climate footprint of aviation as a whole. European airports thus aim to be a driver of ambitious climate action within the air transport sector.

3.2. In line with this commitment, ACI EUROPE members also welcome the adoption of CORSIA and recognize it as a catalyst for effective collaborative action between airlines, airports and other aviation stakeholders in addressing aviation’s carbon footprint.

3.3. To help airports achieve emissions reductions, ACI EUROPE launched in 2009 the voluntary programme *Airport Carbon Accreditation*. It is structured according to four increasingly stringent levels of accreditation: ‘Mapping’, ‘Reduction’, ‘Optimisation’ and ‘Neutrality’. Becoming accredited at the level of ‘Optimisation’ requires an airport to actively reduce emissions under its control and engage with its stakeholders to support them in their emissions management. To achieve the level of ‘Neutrality’, in addition to the obligations of the ‘Optimisation’ level, airports have to demonstrate zero net emissions (from sources they control, including staff business travel). In addition to reductions, this usually means compensating for their residual emissions by purchasing robust carbon offsets.

3.4. As of January 2018, 118 European airports are accredited, representing 65% of European air passenger traffic. The initially European programme, attesting the leadership of the European airport industry in addressing its emissions, has expanded worldwide since its launch. Thus, at the global level, 209 airports are currently accredited, representing more than 40% of global passenger traffic.

3.5. Another instrument that helps airports to manage their CO2 emissions and achieve emissions reductions is the Airport Carbon Emissions Reporting Tool (ACERT), originally developed by ACI World in collaboration with Transport Canada in 2009. ACERT can be used by any airport size and has been increasingly used for *Airport Carbon Accreditation* purposes. Currently on version 5.0, ACERT is distributed free of charge upon request.
3.6. To further solidify their commitment to climate action, in December 2015 at the 21st Conference of the Parties to the UNFCCC (COP21) ACI EUROPE pledged that 50 of its member airports would be accredited as carbon neutral by 2030. With an increasing number of airports having individually committed to become carbon neutral since then and in order to raise the industry’s ambition, in June 2017, ACI EUROPE upgraded this target to 100 carbon neutral airports in Europe by 2030. Based on the carbon neutrality definition adopted by *Airport Carbon Accreditation*, this target is also a commitment to enhanced airport leadership in stakeholder cooperation enabling further emission reductions in aviation as a whole. Currently, 28 European airports have reached this accreditation level.

3.7. **Reducing greenhouse gas emissions under the airport’s control**

3.7.1. To reduce emissions under their control (Scope 1 and Scope 2 emissions), European airports commit to continue undertaking a range of actions, such as the use of zero or low-carbon energy sources (e.g. sustainable alternative fuels for ground support equipment, electric vehicles), procurement of electricity from renewable sources and improvements in energy efficiency (e.g. thermal insulation, energy efficient design principles). These measures are usually supported by the set-up of appropriate environmental management systems.

3.7.2. The results achieved so far by airports within *Airport Carbon Accreditation* demonstrate that these actions are indeed effectively reducing emissions. For example, between May 2016 and May 2017, European airports have reduced CO2 emissions under their control by 155,259 tonnes compared to their average emissions of the three previous years.

3.8. **Reducing greenhouse gas emissions of partners and customers**

3.8.1. The largest share of the total airport related emissions is not under the airport operator’s control (Scope 3 emissions). This concerns in particular emissions from aircraft operations, which are expected to grow by 45% in Europe between 2014 and 2035, and from surface access to the airport by passengers and staff. The airport can however make efforts to guide or influence these emissions.

3.8.2. To do so, the airport can for example help limit the use of Auxiliary Power Units (APUs) by providing electrical ground power and pre-conditioned air to aircraft on stand. Another example is the supply of charging

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3 An APU is a relatively small jet engine which produces power and pressurised air for the aircraft when it is on the ground and the main engines are turned off.
infrastructure for electric vehicles that may be used by ground handling companies but also passengers and airport staff.

3.8.3. To address aviation’s climate footprint in a comprehensive manner, for the past decade ACI EUROPE has been supporting the introduction of a global market-based measure to address international aviation emissions. As a first step towards such global mechanism, ACI EUROPE has been in favour of the inclusion of aviation into the EU ETS. With the adoption of a global scheme, CORSIA, by ICAO, ACI EUROPE calls for its effective and rigorous implementation, allowing for the widest possible coverage of international aviation emissions. The possibility of implementing complementary policy measures should only be decided following the implementation of CORSIA and an assessment of the effectiveness of all actions taken in the context of ICAO’s Basket of Measures.

3.8.4. ACI EUROPE members contribute to the implementation of the ICAO Basket of Measures through the following actions:

- European airports cooperate with aircraft operators and air navigation service providers to achieve more efficient aircraft operations in the vicinity of the airport. This collaboration takes place at the European level, through the involvement of airports in the Single European Sky Air Traffic Management Research (SESAR) programme, but also at the local level through the implementation of Collaborative Environmental Management (CEM) as defined by EUROCONTROL or CEM-type collaborative approaches. CEM encourages all operational stakeholders at the airport to collaborate with a view to reducing their environmental footprint. It has been adopted by ACI EUROPE as a Recommended Practice.

- Furthermore, ACI EUROPE also encourages its members to support the deployment of sustainable alternative fuels for aviation, as far as this is compatible with the operational structure and economic conditions of the airport. When doing so, it is of critical importance to ensure that the fuel used is effectively sustainable. Several European airports have already implemented significant initiatives in this area with their partners.

4. Key recommendations for policy makers

4.1. ACI EUROPE believes that when considering new policies, a holistic approach should be adopted, meaning that attention should be paid to unintended consequences as well as interdependencies between greenhouse gas emissions and other environmental impacts of airport operations.
Europe is facing a growing airport capacity challenge, and any new development must demonstrate that it is socially, financially and environmentally sustainable. In this light, trade-offs whereby capacity restrictions at airports could lead to congestion, and consequently greater emissions, should be taken into account. Examples may include passengers travelling longer distances to avoid congested airports and aircraft queuing for a long time both on the ground and in the air.

In a similar vein, aviation-specific environmental taxation mechanisms/ticket taxes implemented at the national level can divert traffic towards longer routes. The reason is that aviation is a truly international business, and therefore seeking to restrict demand in any one part of the international network invariably means that demand for passenger and freight transport will shift to other parts of the network towards alternative routes.

When considering aircraft operations, interdependencies exist between emissions reductions and noise mitigation. Hence, trade-offs need to be taken into account when approach or departure procedures at airports are being designed. With noise being one of the main environmental impacts of aviation at the local level, to reduce or avoid the noise exposure of communities surrounding the airport, longer routes may be beneficial. However, this could also imply increased emissions. Depending on the given local situation, different ways to deal with this trade-off may be suitable, but it is important that the underlying interdependency is well understood and the implications of various solutions are assessed.

4.2. ACI EUROPE considers that in order to further support airport climate action, the following policy action could be beneficial:

- Support sustainable surface access to airports through extension of low-emissions public transport infrastructure and services,

- Support improved air traffic management through an accelerated implementation of the Single European Sky and the continuation of development and deployment activities under SESAR,

- Provide incentives for the production, distribution and use of sustainable alternative fuels for aviation,

- Provide incentives to increase energy efficiency and facilitate the production, self-consumption and procurement of renewable energy,

- Enhance support to research and innovation in the area of low-emissions technologies and operations in air and ground transport.
and related services, including sustainable alternative fuels and electric aircraft,

- Support the use of domestic offsetting in international negotiations concerning Article 6 of the Paris Agreement, to allow airports to compensate their residual emissions by contributing to sustainable development in the regions they operate in and thus enhance the benefits provided to them. The relevant mechanisms should guarantee the highest environmental integrity of offsetting credits and avoid double counting of emissions reductions.

5. Conclusions

5.1. European airports are key nodes of the European aviation sector and are assuming their responsibility in addressing the climate impact of air transport. Their actions are being facilitated by Airport Carbon Accreditation.

5.2. European airports support the recent developments in international climate policy through the adoption of the Paris Agreement and CORSIA. They urge all stakeholders concerned to support their robust and ambitious implementation.

5.3. ACI EUROPE advocates a holistic approach to policy-making and emphasizes the need to continue support for relevant research and innovative solutions to enable airports and aviation as a whole to deliver their social and economic benefits in a more sustainable manner.
Which emissions can occur at an airport?

Note: The presented list of possible emissions sources at the airport is not exhaustive. Furthermore, the operational structure of every airport is different. Therefore, not all of the depicted emissions sources are present at every airport.

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