



**WORKING PAPER**

**ASSEMBLY — 41ST SESSION**

**EXECUTIVE COMMITTEE**

**Agenda Item 17: Environmental Protection — International Aviation and Climate Change**

**AIRPORTS' EFFORTS TO DECARBONIZE, REQUIRED SUPPORT AND A COLLABORATIVE APPROACH WITH GOVERNMENTS AND STAKEHOLDERS**

(Presented by Airports Council International (ACI))

**EXECUTIVE SUMMARY**

ACI member airports at the global level committed to reach net-zero carbon emissions by 2050 and urged governments to provide the necessary support in this endeavour. More than 130 airports have anticipated their target to 2030, or even earlier, while others by 2040. However, support is needed from governments to many others for the development of their own roadmaps and for these to implement their decarbonization strategies and action plans.

There are co-benefits associated with the decarbonization of airports and other aviation stakeholders. The availability of renewable energy is a necessity for airports to decarbonize, but it is also needed for the development of sustainable aviation fuels (SAF), green hydrogen and green electrification of ground support equipment and vehicles, and aircraft. A collaborative approach will enable the development of appropriate policy and tools to facilitate the availability and access of renewable energy, finance, and capacity building across the globe.

**Action:** The Assembly is invited to:

- a) recognize airports' efforts and the challenges they face to decarbonize;
- b) support airports' work to develop and implement their net-zero roadmaps; and
- c) support increased collaboration among relevant stakeholders and actions to facilitate the availability of renewable energy, finance, and capacity building.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective – <i>Environmental Protection</i> .
<i>Financial implications:</i>	N/A
<i>References:</i>	ICAO Long-term Aspirational Goal Feasibility Report ACI Long Term Carbon Goal Study Airport Carbon Accreditation ATAG Waypoint 2050

<sup>1</sup> English, Arabic, Chinese, French, Russian and Spanish versions provided by ACI.

## 1. INTRODUCTION

1.1 Airports Council International (ACI) World takes a leadership role in promoting sustainable development, which actively addresses environmental impacts while ensuring delivery of the economic and social benefits of aviation. ACI member airports have been mitigating their carbon emissions for almost 15 years through ACI's flagship Airport Carbon Accreditation (ACA) program.

1.2 ACA is the only institutionally endorsed, global carbon management certification program designed specifically for airports. It independently assesses and recognises the efforts of airports to manage and reduce their Scope 1 and Scope 2 carbon emissions through 6 levels of certification, providing airports with a common framework for active carbon management with measurable goalposts. The program is site-specific and allows flexibility to take account of national or local legal requirements, while ensuring a robust methodology. Currently, there are approximately 400 airports accredited globally, across all ACI Regions.

1.3 In addition, the well-established ACI World's Airport Excellence (APEX) Program in Safety and Security has recently been extended to Environment. APEX provides comprehensive onsite airport reviews led by industry peers and experts to optimize airport operations, regulatory compliance, and aviation standards worldwide. APEX is based on ICAO standards, international regulations, and ACI best practices. APEX in Environment could be tailored to assess and support airports' decarbonization initiatives.

1.4 Climate change is a global challenge requiring further and urgent global response. Taking into consideration the Intergovernmental Panel on Climate Change (IPCC) Special Report (2018), and thus the urgency in defining a path forward to net-zero carbon emissions, ACI member airports at a global level committed to reach net-zero carbon emissions by 2050 and urged governments to provide the necessary support in this endeavour. Made in June 2021, it is the first net-zero aviation-sector commitment at the global level and is based on a comprehensive long-term goal feasibility assessment.

1.5 The goal is limited to carbon emissions for which the airport operator is directly or indirectly responsible, referred to as Scope 1 and Scope 2 emissions; however, airports are also committed to facilitate the decarbonization of aviation emissions. ACI fully supports an ambitious ICAO long-term aspirational goal (LTAG) goal to be agreed at this Assembly.

1.6 The ACI long-term goal feasibility study considered regional differences in order to set a common global goal with an understanding that pathways are expected to vary according to the region, the level of maturity of some technology developments, drivers, business cases, opportunities and challenges, and particularly grid decarbonization. The acknowledgement that different decarbonizations pathways were part of the solution to achieve a common global goal, make it one of the enabling elements to reach consensus.

1.7 The steps to net-zero carbon emissions will require shared policies and collaboration with industry, government, and other stakeholders. The ACI Long-Term Carbon Goal Study for Airports Report recommended the following actions for ACI, member airports, governments, and stakeholders to consider:

**For government and stakeholders:**

- support global grid decarbonization;
- support renewable energy transitions and the development of viable business cases and partnerships for decarbonization measures; and
- incentivise and facilitate airports' access to green finance.

1.8 Effective action to achieve sustainable development goals will depend on the ability of airports to incorporate sustainability at the core of their corporate strategies. Multi-sector collaboration will play a critical role in ensuring a resilient aviation ecosystem capable of achieving global sustainability goals. Decarbonization is a necessity and the right thing to do. There is an ever-increasing pressure on airports and other aviation stakeholders to deliver on sustainability to attract and grant finance. Sharing climate-related risks is becoming a condition for investment. This requires a combination of efforts which align mitigation and adaptation initiatives to ensure a sustainable and resilient aviation ecosystem.

**2. DISCUSSION**

2.1 The greatest source of carbon emissions of airport operators is the energy used to power terminals and equipment. Therefore, the decarbonization of the electricity grid, which in most cases the airports have a limited ability to change, will be an essential component of the likelihood of airports reaching net-zero carbon emissions by 2050. There are clear benefits from accelerating the electricity grid decarbonization. Renewables are also needed for the development of sustainable aviation fuels (SAF), green hydrogen and green electrification of ground support equipment and vehicles, and aircraft. The industry will be increasingly dependent upon governments' renewable energy policies as the sector and the economy transition to more sustainable sources of energy.

2.2 Indeed, renewable energy is a strategic issue for States and the global economy. The grid decarbonization will happen unevenly across the globe and green energy could remain a scarce resource for many. Therefore, States should cooperate and consider the development of policies and mechanisms which could accelerate deployment of renewables globally, such as power purchase agreements (PPA) and book and claim systems which could be used among stakeholders from different States.

2.3 Supporting airports' sustainable recovery and the development and implementation of their net-zero roadmaps, the 31st ACI World Annual General Assembly (WAGA), Cancun, Mexico, 24 November 2021, approved Resolution No. 2 on Sustainable development of the aviation ecosystem. Action c) therein calls upon member airports, as part of their commitment to "Net-Zero 2050", to work in collaboration with ACI and other stakeholders to develop and submit their voluntary decarbonization action plans.

2.4 Many airport operators have already set their decarbonization roadmaps and started to implement them, including several which have anticipated their net-zero commitments. For instance, more than 130 airports have a net-zero target by 2030 (or earlier), while others have their targets set for 2040; however, support is needed from the governments to many others by helping them develop their own roadmaps and implement their decarbonization strategies and action plans.

2.5 Airports are also embracing technology and innovation, including accommodating new emerging technologies in the aviation market and innovative propulsion methodologies to promote a positive transformation of the aviation ecosystem, including the transition to net-zero and improve the

services they provide. The importance of collaboration cannot be overstated as it needs to reach higher levels as the challenge is significant and unprecedented.

2.6 The cooperation of aviation stakeholders to ensure the sustainable development of the sector is critical, particularly regarding the decarbonization of aviation emissions. Some airports can facilitate the deployment of sustainable alternative sources of energy onsite, especially SAF in the short- to mid-term. Airports operators need to receive SAF already blended ('drop-in') and start early their coordination if they wish to have SAF onsite, as this can take several months/year(s) to materialize. There is a great number of stakeholders who need to engage and be familiarized with the technical and regulatory incentives and requirements associated with SAF. At this stage, it is not feasible neither sustainable to have SAF available onsite every airport. Therefore, mechanisms that ensure book and claim alternatives are as important as focusing on the production, supply, and demand of SAF. There should also be consistency across different State policies to avoid unintended impacts.

### 3. CONCLUSION

3.1 The challenge to decarbonize aviation is significant, but airports have committed and are taking action to decarbonize. Support from government and collaboration with stakeholders will be essential for airports to have access to renewable energy, finance, and capacity building to decarbonize globally. Collaboration will act as a catalyst for impact by providing benefits to several stakeholders. Climate change is a global challenge. No country, and no airport should be left behind.

3.2 The Assembly is invited to:

- a) recognize airports' efforts and the challenges they face to decarbonise;
- b) support airports' work to develop and implement their net-zero roadmaps; and
- c) support increased collaboration among relevant stakeholders and actions to facilitate the availability of renewable energy, finance, and capacity building.

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