

FAQ: ACI World's Long-Term Carbon Goal for Airports

Why has ACI set a carbon goal?

Climate Change is a global challenge requiring further and urgent global response given the Intergovernmental Panel on Climate Change's (IPCC) call to reach net zero carbon emissions by 2050 - the long term carbon goal will be a crucial component of the aviation industry's contribution towards this global effort.

Failure to take climate action will increase the risk of further global and regional crises so timely climate action will make airport operations more cost-efficient and resilient. Delaying action can also lead airports to be locked in carbon intensive infrastructure and initiatives which may be more costly to modify at a later time.

The climate crisis requires bold action at the local, regional and global level and this global goal for airport members will help to drive action and identify common challenges and opportunities that can be tackled together.

It will also assist airports in securing funding and to advocate for government and utility (federal, state/provincial, and local) support, in decarbonizing.

What does 'net zero' mean?

Put simply, net zero refers to the balance between the amount of emissions produced and the amount removed from the atmosphere, so we reach net zero when the amount we add is no more than the amount taken away.

In a technical sense, according to the IPCC, net zero carbon emissions are achieved "when anthropogenic CO₂ emissions are balanced globally by anthropogenic CO₂ removals over a specific period".

Is 'net zero carbon emissions' different from the term of 'carbon neutrality' as used in conjunction with ACI's *Airport Carbon Accreditation* programme:

Carbon neutrality requires reducing emissions as much as possible and then compensating the remaining ones by offsetting (for example, by investing in emissions reductions elsewhere through the purchase of carbon credits).

The net zero concept does not allow for offsetting and means that it requires emission reductions to a greater degree than carbon neutrality – ideally down to 0 (zero). It does, however, allow for carbon removal of any residual emissions from the atmosphere.

How should the goal be adopted by airports?

Every airport, every state, every region, is different so it is for airports, in collaboration with local governments and their partners to adopt this goal and work together towards achieving it. Global action requires a local approach as there is no single formula that will work for all airports identically in all regions.

Why 2050?

Achieving net zero carbon emissions by 2050 has been identified as necessary to avoid the most catastrophic impacts of climate change.

The IPCC's Special Report, published in October 2018, called for drastic reductions in global carbon emissions. This claim was supported by scientific evidence which project significant differences in climate-related risks between 1.5°C and 2°C warming and the resulting change to global and regional climate systems.

Is 2050 soon enough?

We support and recognize the leadership in those airports electing to set more aggressive targets.

Our study acknowledges that all airports operate under different and often challenging conditions that may either encourage or prevent them from being able to reduce their own emissions at the same rate and scale (e.g., availability and access to renewable energy).

The 2050 timeline is also aligned with the Paris Agreement, signed at COP21, in December 2015, as well as the conclusion of the IPCC Special Report on Global Warming of 1.5°C published in October 2018, according to which net zero emissions need to be reached by 2050.

How should airports adopt the goal while they are navigating the COVID-19 pandemic?

As the aviation industry navigates the COVID-19 pandemic, climate action will be key to supporting the build back better concept and to rebuilding public trust and confidence in air travel.

It has always been the case that the aviation industry's permission to operate and grow - at both local and global levels - is only granted when airports, the wider aviation community, and governments work together to address, minimize and mitigate the environmental impacts of aviation growth so proactive climate action will also assist in securing government support (also in the context of COVID-19).

This is a long term goal and, while airports are focused in the short term on recovery, the industry will only return to the pathway of long term growth if it can demonstrate that it is doing so sustainably and with a real commitment to address climate change.

As seen throughout this pandemic, many countries offering government support in the context of COVID-19 have included climate related actions to be met as part of securing funds and climate goals and risk assessments have become an essential criterion to inform decisions on airport investment and finance.

How much do airports contribute to overall aviation emissions?

Airport emissions only account for 2% of the total global 2-3% from aviation and, as a key part of the aviation industry, airports have been taking active steps to address the environmental impact of operations for decades.

The long-term carbon goal is designed to promote sustainable development that removes, reduces, or mitigates the environmental impact while supporting the delivery of economic and social benefits.

Every stakeholder has a part to play in reducing emissions in the aviation sector however small when compared to others. We are proud to be laying down a marker for others to follow.

The sector is also expected to continue growing despite the current COVID-19 crisis. Inaction would then lead to an increase share of carbon emissions, if we also consider that other sectors will be decarbonising as well.

Airports have the opportunity to be a global leader in this area and lead calls for electricity grid decarbonisation which will benefit other sectors and industries.

How can governments support airports?

This is a global challenge requiring a more urgent global response and ACI World acknowledges the need to work with governments and other stakeholders, so that airports can have the required support to enable them to reach net zero carbon emissions by 2050.

For airport operators, the greatest source of carbon emissions is from purchased electricity generated off-site. Consequently, the carbon intensity reduction of the electricity grid is not something that an airport operator can directly control.

For other sources, the availability of appropriate business models and technological mature solutions required to decarbonise also depend on external stakeholders. This is why cooperation and collaboration is key.

What are the key focus areas and measures airports can take in decarbonising?

Government and utility (federal, state/provincial, and local) support in decarbonising the power grid will be critical to a net zero goal.

On average, indirect emissions from the use of purchased electricity and thermal energy (for heating and cooling) by an airport operator currently account for approximately 88% of all airport scope 1 and scope 2 emissions.

The remainder of reduction focus measures for airports could include:

- renewable electricity purchases
- improving building efficiency
- on-site thermal energy, such as transitioning to electric heating & cooling or switching to renewable fuels, and

- mobile fleet, such as transitioning to zero or low emission vehicles and negative emission technologies such as nature-based carbon removal technologies.

What is the next step for airports in reaching this goal?

The steps to net zero carbon emissions will require common policies and collaboration with industry, government and other stakeholders.

Included in the support material developed and to be produced by ACI World for member airports are recommendations for them to consider and implement. These include setting common goals, developing an engagement strategy and toolkit, and, importantly, developing a voluntary Airports Action Plan.

Such a plan will support airports taking action and gather relevant information and knowledge, including identifying where capacity building and support is necessary. This will also help inform on the progress and achievements of the sector towards the long term carbon goal and will be used to reassess the feasibility of the goal and any adaptations required.