



FAQ: Airports and the NetZero2050 Commitment

What have these airport operators committed to do?

The ACI EUROPE commitment engages the whole European airport industry to eliminate its carbon footprint at the latest by 2050. Based on the current air traffic volumes and the estimated carbon intensity of the industry (1.48 kg CO₂/pax, derived from data provided under *Airport Carbon Accreditation*), this means that an annual footprint of 3.46 million tons of CO₂ would be eliminated.

What does “net zero” mean exactly?

According to the Intergovernmental Panel on Climate Change (IPCC), net zero carbon emissions are achieved “when anthropogenic CO₂ emissions are balanced globally by anthropogenic CO₂ removals over a specific period”.

This means that the concept of ‘net zero carbon emissions’ is different from the term of ‘carbon neutrality’ as used in conjunction with the *Airport Carbon Accreditation* programme:

Carbon neutrality requires reducing emissions as much as possible and then compensating the remaining ones by offsetting – e.g. by investing in emissions reductions elsewhere (in other organisations/sectors) through the purchase of carbon credits.

The **net zero concept** does not allow for offsetting. This means that it requires emission reductions to a greater degree than carbon neutrality – ideally down to 0 (zero). However, it does allow for removal of any residual emissions from the atmosphere e.g. relying on natural processes (carbon sinks such as forests) or dedicated technologies (carbon capture & storage).

Does it mean that ACI EUROPE does not believe in offsets?

Our flagship programme *Airport Carbon Accreditation* does allow for offsetting of residual emissions at the currently highest level of certification, “Neutrality”. As such, we are not opposing offsetting in general. However, we recognise that offsetting is a complex mechanism and that not all offset instruments are of high quality. To help our members identify high quality offsets, we have produced detailed and stringent [guidance](#).

If we do not allow for offsetting in the context of our Net Zero commitment, it is because we believe that if we really want to be in a Net Zero world by 2050, there will simply be no offsets anymore, because everyone will have to eliminate its emissions. We believe that offsetting can only be a temporary measure that needs to be phased-out as soon as new opportunities for effective in-sector reductions arise.

But you allow for carbon removal to reach Net Zero. Are carbon removal and offsetting really different?

Yes, they are. Let's consider a concrete example: you emit 1 tonne of CO₂. Another company emits 1 tonne of CO₂ too. The total emissions are 1+1=2 tonnes. Now you decide to offset your emission by paying the other company to reduce its own emission of 1 tonne. The result of this transaction is 2-1=1. This means that your own emission of 1 tonne is still in the atmosphere – and as such, offsetting has not neutralised the increase in CO₂ in the atmosphere that you have contributed to.

Now let's consider removal. It means that after emitting your tonne of CO₂ you are removing it. 1-1=0. In this case, your impact on the emissions balance in the atmosphere is really zero.

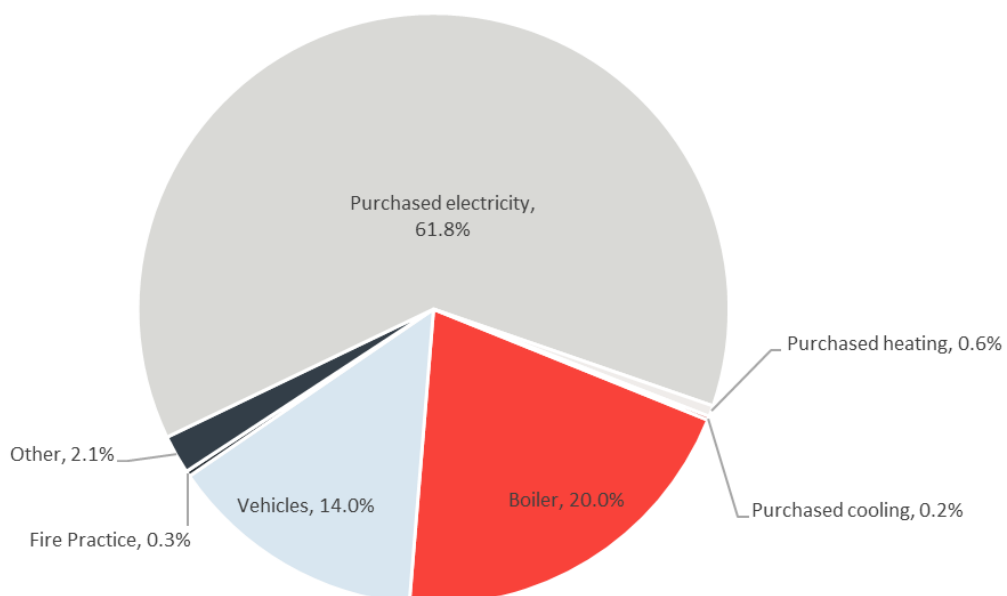
To make things more complex, it is true that some offsetting projects do rely on carbon removal projects, e.g. reforestation projects. To reach their Net Zero commitment, airports are not allowed to use this type of projects either. Any carbon removal would need to be part of their own operations to be accepted as a contribution to Net Zero, so we can avoid or at least minimise concerns around additionality, permanence or accounting that are inherent to offsetting.

So in practical terms, what emissions are we talking about & how can they be addressed?

The main sources of CO₂ emitted by airport operators and over which they do have control are:

- Electricity consumption, predominantly for heating/cooling/lighting and servicing terminal buildings and other buildings managed by airport operators.
- Boilers – mainly for heating purposes in relation to the above mentioned buildings. These run on gas and oil.
- Ground vehicles and support equipment running on petrol, diesel or gas.

Representative % of emissions of a typical airport



Source: WSP (Airport Carbon Accreditation Administrator) study on carbon reductions by Carbon Accredited airports (2018)

Airport operators do not have control over aircraft emissions at the airport and in the vicinity of the airport, as these are operated by airlines. Therefore, the emissions from aircraft operations are not covered by the commitment.

As the interface of a complex web of aircraft movements, technical operations and surface access transport, airport operators can address their CO₂ emissions in a variety of ways. These can include better insulation and energy efficiency, switching to green energy sources for electricity, heating and cooling, and investing in hybrid, electric or alternative fuelled service vehicles and support equipment.

In this context, the transition to a clean energy system in Europe is a key enabler for airports to reach net zero – for that reason, our commitment to net zero is accompanied by a call on the EU and national governments to accelerate this transition. Carbon capture and storage technologies and mechanisms for the accounting of emission removals are still in their infancy but will develop in the coming years, given the focus on achieving a net zero economy by 2050.

Regardless of the development of such technologies, the commitment shows how much airports recognise that emissions reductions need to be a priority if we are to move towards a net zero economy.

Are there any airports that have already achieved this?

Yes, there are 3 regional airports in Sweden, operated by Swedavia, that have already achieved net zero carbon emissions – and without any carbon capture. They are Luleå, Ronneby and Visby. The other 7 airports managed by Swedavia will be net zero by the end of 2020.

That's all very well and good, but what about the emissions of the flights that these airports facilitate?

Our commitment to net zero is an integral part of ACI EUROPE's call on the whole aviation sector to define a vision, ambition and roadmap towards a Net Zero air transport system.

Air transport is an elaborate, collaborative enterprise involving many different activities performed by different companies. There is no one measure or commitment you could take that would cover every aspect of air travel in a meaningful way. As the airport industry, we want to do our part to eliminate the emissions within our direct control and be a positive influence on other partners in the air transport sector – including passengers.

What % of total aviation emissions will this action by European airports actually eliminate?

CO₂ emissions from all flights departing the EU28+EFTA were estimated to 163 million tonnes of CO₂ in 2017. Our net zero commitment is estimated to deliver a reduction of 3.46 million tonnes per year, which is approximately 2%.

2050 seems a long while away. Is this really soon enough?

Airports are at different points on this journey to become cleaner and more efficient, and not all of them have access to affordable, clean energy and technologies today, so that is why the agreed deadline in 2050. It is 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. In addition, the European

Commission (EC) has set out the **EU's political ambition & vision for a net zero carbon economy by 2050** in the European Green Deal adopted in December 2019. All sectors are expected to contribute to this objective.

That being said, noting that the IPCC also calls on significant emissions reduction efforts by 2030, we do encourage airports to reach net zero as soon as possible. In addition, recognising that airports need to get on the right track towards Net Zero as soon as possible, we do also have an interim milestone for 2030, which is to reach 100 carbon neutral airports in Europe by that year.

Are any airports aiming to get there before 2050?

Yes, several. Airports in Sweden by 2020 (Swedavia), the Netherlands (Amsterdam Schiphol and Eindhoven), Denmark (Copenhagen Airport) and Norway (Avinor), all by 2030. Hamburg Airport in Germany is aiming at achieving this goal by 2021/2022 while Athens International Airport in Greece is aiming to be Net Zero by 2025, alongside Bristol Airport from the UK.

In addition, the Aeroports de la Cote d'Azur Group last week revealed plans to emit zero greenhouse gasses 20 years earlier than previously announced at the three airports it operates: Nice Cote d'Azur, Cannes Mandelieu and Golfe de Saint-Tropez.