Airports relying on offsets excluded under EU law

Reforms needed to industry offsetting programme

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Summary

Airport Carbon Accreditation (ACA) is a CO_2 emissions reduction programme for airports managed by industry association Airports Council International Europe (ACI Europe). It encourages airports to monitor and either reduce or offset their emissions. Our analysis finds that, while encouraging emission reductions and aiming towards carbon neutrality at airports in Europe is important and welcome, the ACA lacks transparency and the strict rules that are required to ensure offsets credits used actually deliver emission reductions. In many cases, airports are using offset credits which are ineligible under EU climate laws due to concerns as to their environmental integrity.

Given these environmental concerns about the scheme, and the rapid overall growth of aircraft emissions, the ACA should not be used as a justification to further expand aviation capacity. This should also serve as a warning to the UN's International Civil Aviation Organisation (ICAO) and its parties as they adopt implementing rules for its global offsetting scheme known as CORSIA.

1. Introduction

The ACA is a voluntary emission reduction scheme launched in 2009 by Airports Council International Europe (ACI Europe), the main industry body representing airports in Europe. The ACA aims to reduce airports' climate impact by assessing and recognising their efforts to reduce CO_2 emissions through a four-step programme, with 'carbon neutrality' as its highest level (Level 3+). Airports accredited at this level (currently 27 in Europe) need first to measure their carbon footprint, reduce actual airport CO_2 emissions as much as they deem possible and then purchase offset credits to compensate for the remainder of emissions - their so-called residual emissions.

Offsetting involves payments made to other actors to reduce their emissions, in lieu of reducing your own. Offsetting projects can range from industrial gas destruction in South Korea to distributing water filters in Kenya. This paper will focus exclusively on the issue of which type of offsets have been purchased by airports under the ACA.

According to industry figures, airport operations generate CO_2 emissions which in total equate to around two to five percent of all CO_2 emitted by commercial aircraft. T&E welcomes the initiative to reduce these carbon emissions and achieve carbon neutrality, but is critical about airports' potential over-reliance on offsets, the type of offsets credits used, and the lack of transparency about these issues in the ACA. This report outlines these concerns, and warns that the ACA should not be used to 'greenwash' airport expansion which serves only to enable more and more flights and thus CO_2 emissions. The findings should also be heeded by ICAO, which is currently finalising rules for its global offsetting scheme known as "CORSIA".

2. ACI guidelines

ACI Europe has established a number of broad criteria for determining which offset credits airports are allowed purchase to count under the ACA. These criteria are very general, and lack requirements on what type of projects can be used. This differs from many other carbon offsetting schemes. For example, offset credits permitted to count under the EU ETS are subject to clear environmental criteria determining eligibility. As is outlined below, the lack of such strict criteria significantly impacts the environmental effectiveness of the ACA.

ACA's eligibility criteria include:
- *projects are independently verified and certified;*
- *the emission reduction would not have happened without the offset project (this is known as 'additionality');*
- *the potential negative environmental or social side-effects of the project are considered;*
- *the emission reductions are maintained over time;*
- *double counting of emission reductions is avoided.*

3. Offsets market

A number of offsetting programmes are available on the open market for airports to use: Certified Emission Reductions (CERs), Emission Reduction Units (ERUs), European Union Allowances (EUAs) and Voluntary Emission Reductions (VERs). The CERs and ERUs are approved by the United Nation's Clean Development Mechanism (CDM) and the Joint Implementation (JI) respectively (both instruments were designed under the Kyoto Protocol). EUAs, though not technically an offset, are issued under the EU Emissions Trading System (EU ETS). These credits are known as compliance credits, as they are used for compliance with binding state targets.

VERs are emission reductions available on the voluntary offset market. The VER market functions differently from the regulated CDM and JI compliance markets, where demand is driven by a regulatory instrument (such as binding emission reduction targets). Trading volumes in the voluntary market are much smaller, since demand is only created by individual buyers (corporations, institutions and individuals) seeking to achieve voluntary targets. Because of this lower demand and because VERs cannot be used in compliance markets, VERs tend to be cheaper than those credits sold in the compliance market (e.g. CERs).

In addition, the voluntary market includes a wide range of programmes, entities, standards and protocols and lacks standardised quality criteria of the projects on offer. The lack of quality control has led to the production of some low quality VERs. In response, the voluntary offset market has developed various standards and protocols to improve the quality and credibility of its offset credits on offer, such as the Gold Standard and the Voluntary Carbon Standard. These standards offer extra credibility, but do not guarantee flawless projects, as will become clear below.

While the original intention was for CERs and ERUs to be used for compliance with binding targets established by states, it is now possible for non-state actors to purchase these offset credits. Our research has found that airports are using offset credits issued under both compliance and voluntary programmes.

4. Transparency

It is important that there is transparency as to what offset credits are being purchased by each airport, however this is currently lacking in the ACA. Transparency serves as a push for enforcement of the offset obligations and the environmental quality standards that the buyer needs to adhere to in order for them to count. If offset credit types used are to be made public, there is an incentive to ensure they are high quality otherwise there is a risk of reputational harm.

WSP, a Canadian international consultancy, was appointed by ACI Europe to enforce airport accreditation to the ACA. Airports submit their residual emissions levels to WSP and report which offset projects they have used. This information remains with WSP and is not open to the public due to stated confidentiality requirements, but airports are free to disclose their own details. However, only a small number of European airports actually publish details of their purchased offset credits directly on their websites. Information on offset projects used can sometimes be identified through online carbon market registries, a laborious process. T&E contacted some airports directly but they refused to disclose the types of offset credits used.

This inconsistency makes it very difficult, and in some cases impossible, for third parties to check the quality of offsets purchased by airports. And given the widespread concern over the environmental effectiveness of offset projects, the proper functioning and credibility of ACA depends directly on whether the public has access to key pieces of information: verified historical airport emissions, measures undertaken to reduce emissions, verified residual emissions, whether airports purchase sufficient offset credits to meet their residual emission and in which carbon offset projects airports have invested.

5. Problem with offsets project

Increased transparency alone will, however, not solve the problems related to emissions offsetting. According to a 2016 study for the European Commission (Cames et al, 2016) on offset projects offered under the CDM, some 85% of offset projects assessed did not deliver on their promise of emissions reduction. The biggest problem for CDM offset projects is the issue of additionality - whether the emissions reduction claimed by the project would have happened anyway - which for most project types is very difficult, if not impossible, to prove. The Commission study also finds that there is a generalised risk of over-crediting by project owners in order to inflate emission reductions and thereby project revenue. These problems are particularly relevant for wind, hydro and cooking stove projects.

When airports did disclose the types of offset credits used, they demonstrated a high degree of reliance on project types that this report identified as having a low likelihood of emission reductions being real, measurable and additional. For example wind, hydro and cooking stove offset projects. For those airports which failed to disclose the type of offset credits used, there is no information available to suggest that their offset quality is any better. In fact a failure to disclose may suggest that there is a high likelihood that these airports are using poor quality offset credits.

It is important to note that this Commission study analyses solely projects issued under the CDM, overseen by an international body run by the UNFCCC. This is referred to as a compliance market as it was originally intended to facilitate compliance with climate targets under the Kyoto Protocol. As mentioned above, compliance market offset projects are under greater scrutiny than most projects on offer in the voluntary offset markets. However the Commission study notes that the results of its analysis are to a large extent also relevant and valid for the voluntary market. In the ACA programme, airports have reached carbon neutrality through the use of both compliance and voluntary market offset credits.

6. Offset credits in the EU ETS

Unlike the ACA programme, the EU operates a negative list of offset project types admissible for crediting under the EU ETS. The list includes nuclear energy projects, afforestation or reforestation activities (due to issues with the permanence of reductions) and projects involving the destruction of some industrial gases. Large hydro power projects (over 20MW) are excluded except under certain conditions such as those in compliance with guidelines issued by the World Commission on Dams (WCD). In addition, the use of CERs issued after 2012 is prohibited unless the project is registered in a least developed country (LDC)[1]. The LDC-only rule was introduced in response to concerns relating to the quantity of low-quality offsets issued by large, advanced developing countries. This negative list was introduced largely in order to improve the

[1] https://ec.europa.eu/clima/policies/ets/credits_en

effectiveness of EU climate policies, following concerns that poor quality offsets were undermining our climate targets.

For its 2030 climate targets, the EU decided to discontinue the use of offsetting from 2021. This reflects the uncertainties related to offsetting discussed above. It is also a recognition that meeting the goals of the Paris Agreement will require early emission reductions by all countries and sectors, rather than actors purchasing emission reductions credits achieved elsewhere.

7. Analysis of offsets used by airports

T&E's research has found that in deciding which offsets to use, airports in the ACA programme are relying on projects and project-types with a low likelihood of delivering emission reductions. Many of these would not qualify for use under EU climate tools such as ETS, as they do not meet the criteria outlined above.

- An example is a hydro offset project in India, the Vishnuprayag dam, used by SEA Milan to offset residual emissions from Milan-Malpensa and Milan-Linate Airport. The plant was partly destroyed by severe floods in 2013 and while rebuilt in 2014, it caused enormous damage to the area. Although the offsets used by Milan airports predate this collapse, and therefore remain technically legitimate, the use of offsets from such a project is questionable give the resulting environmental and social harm. Offsets from such a project may never have been permitted under the EU ETS, as there is no available evidence that they meet the criteria for large hydro.
- Wind farm projects being constructed in India by Enercon have been associated with environmental violations, such as deforestation in preparation for the development and construction of the wind farm. One of Enercon's carbon offset project customers is Swedavia, the operator of ten Swedish carbon neutral airports, and while it did not invest in this particular project, it has used other Enercon Indian wind farm credits to offset the residual emissions of its airports.
- A number of airports rely on offsets issued by wind power projects in Turkey and China. For example Rome's Leonardo da Vinci-Fiumicino Airport relies on wind farm projects in Turkey to achieve carbon neutrality, while Athens International Airport relies on undisclosed wind farm projects in China. As the CDM study reports, such projects are highly unlikely to be additional as the offset price is too low to be meaningful, and both India and China have introduced domestic policies to incentivise wind farm development which are likely to have played a more important role.
- Three Turkish carbon neutral airports, Ankara Esenboga, Antalya and Izmir offset their residual emissions through hydropower plants in Turkey, the Uluabat Hydroelectric Power Plant. These projects would not be accepted in the EU ETS since, as stated above, credits from hydro projects exceeding 20 MegaWatt installed capacity are unlikely to be accepted.

In addition, none of the above projects are located in an LDC, and therefore on these grounds alone would be excluded from use under EU ETS.

8. Recommendation for airports

Despite the issues identified with offset programmes, airport demand for carbon reduction projects is likely to rise. While there are currently 27 European airports accredited with carbon neutrality, the aim of ACA is to grow this to 100 carbon neutral airports in 2030. This will increase demand for offset project credits and further underlines the need for strict environmental criteria and much greater transparency. While T&E welcomes the way the ACA programme requires airports to first reduce their own emissions as much as possible before purchasing offset credits, and that Level 3+ airports aspire to carbon neutrality, it needs to be clearer that airports are going to the greatest effort possible to reduce their own emissions.

Carbon neutrality *without* the use of offset credits must be the ultimate goal of the ACA programme. In this way, offsetting could serve as a temporary tool towards carbon neutrality while airports continue their

efforts to reduce their emissions to zero. Carbon neutral airports should have the objective of ultimately ending their reliance on offset credits. T&E recommends that for the period that offsets are used, the ACA 'guidance' is switched to binding criteria that includes a negative list. There should also be much great transparency in how the programme operates, i.e. publication of the offset project credits purchased by airports.

Airports need to decarbonise along with all other industrial enterprises across Europe. The more fundamental challenge is to decarbonise aviation itself as current traffic and emissions growth rates are simply unsustainable and aviation's climate impact is continuing to grow not reduce. The ACA programme should not be used as justification for airport expansion which will only lead to greater aviation emissions.

9. Recommendation for ICAO

The UN's International Civil Aviation Organisation (ICAO) is currently developing the rule book for its carbon offsetting and reduction scheme for international aviation (CORSIA), an offsetting mechanism which aims to stabilise emissions from international aviation at 2020 levels. While CORSIA was approved by parties at ICAO's 2016 assembly, it will be another year before these rules are finalised and made public.

If CORSIA is to have environmental credibility it is essential that ICAO take on board the lessons learned from the mistakes of existing offsetting programmes and introduce effective environmental offset criteria rules which are strictly enforced and come with a high degree of transparency. Such rules must include a negative list which excludes those offsetting projects which has the lowest probability of delivering real reductions and the rules must account for the risk of double counting of emission reductions.

Further information

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