AIRLINES FOR EUROPE

CONSULTATION INPUT
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A4E RESPONSE TO THE EU TAXONOMY DRAFT DELEGATED ACT PUBLIC CONSULTATION

European airlines are exploring pathways towards a net-zero, or low-carbon European air transport through reduction of CO_2 emissions in absolute terms and CO_2 mitigation. To reduce the carbon footprint of aviation, actions and policies are required across four pillars: improvement in aircraft, zero-emissions and CO2 mitigation technologies; improvement in airspace management aircraft operations; sustainable aviation fuels and smart market-based measures. This requires a collective effort from all actors in the European air transport ecosystem – aircraft operators, aircraft manufacturers, airports, Air Navigation Service Providers (ANSPs), ground handlers and fuel providers.

General statement

Given the absence of zero-emissions technologies currently available at scale for commercial aviation, it is crucial that aviation activities for which there are no technologically and economically feasible low-carbon alternatives but that support the transition to a climate-neutral economy are considered transitional activities in accordance with Article 10(2) of Regulation (EU) 2020/852. **They are currently critically missing from the draft delegated act.**

Considering the pressure on the aviation industry to decarbonise and the future financing needs of one of the sector hardest hit by the COVID-pandemic, it **is crucial to rapidly assess air transport activities in order to establish relevant, aviation-specific sustainable financing criteria**. In the absence of dedicated technical screening criteria, the actors of the aviation ecosystem will be unable to report on the measures undertaken.

The draft act rightly refers to the potential and challenges of GHG reduction in aviation for the transition to a low-carbon economy. **Separate studies should urgently assess the specificities of aviation activities, the appropriate KPIs and establish relevant technical screening criteria, where appropriate.**

To encourage the reduction of greenhouse gas emissions, the thresholds of the technical screening criteria for aviation should be set at a **level that will support the use of the best technologies in the sector based on a dedicated metric system.**

A sector's contribution to climate change mitigation should assess the **whole life cycle of air transport's sustainable activities**. In the comparison between modes of transport, the taxonomy needs to adopt a true well-to-wheel approach instead of a narrow well-to-tank definition of the environmental footprint of an activity. Any KPI adopted to assess the environmental performance of aviation should allow a comprehensive comparison of the environmental footprint across different modes of transport. Investments into the most modern, already-available state-of-the-art aircraft and into sustainable aviation fuels development should be considered as a transition activity in the taxonomy framework.

Environmental performance of airlines / KPIs

It is important to **consider a range of different KPIs** as, across different measures, there are very different relative rankings. The environmental performances of airlines are shaped by business structure, stage length, aircraft size and fleet age. The emissions metrics show correlations with the business model and seat density, average aircraft size, and average stage length as well as fleet age.

Focus on any one single measure would be misleading. The definition of environmental KPIs for airlines should therefore go beyond the mere assessment with regards a threshold to integrate a range of elements such as the use of SAFs, the use of offsets, etc. as well improvement in emissions across both traffic and revenue measures. Performance metrics need to be comprehensive, reflective of the nature of the airlines' market and ensure not to discriminate between business models as all KPIs are shaped by the nature of the company business models (e.g. point-to-point vs hub operations, cabin densification, or presence or not of cargo business on top of passenger transport). **If it requires further analyses and considerations, the ICAO aeroplane CO_2 emissions certification metric could be a basis for meeting these criteria.**

Fleet renewal

The COVID-19 crisis will in many cases delay aircraft renewal due to cash preservation. Maintaining and accelerating fleet renewal coupled with retiring older aircraft would have important environmental benefits in the short-term.

New aircraft models consume **on average 20% to 25% less** fuels than previous generations and are today the biggest single measure to reduce emissions in the short-term to support the EU's climate ambition for 2030. Replacing a Single Aisle aircraft can save more than 4 500 tons of CO_2 per year, and a Long-Range aircraft 27 700 tons of CO_2 per year; new generation aircraft also has a reduced noise footprint, when compared to older aircraft. Air quality around airports could also be further improved.

Fleet renewal coupled with retirement could also further improve customers' experience and have a number of clear economic and societal co-benefits.

Zero-carbon technologies and carbon mitigation, including airport infrastructure

Hydrogen and electric technologies are the most promising avenues for achieving zero-emissions flight for short and eventually medium-haul journeys but are currently underfunded. The technical screening criteria proposed in section 6.17 already seems appropriate and comprehensive and encompasses both the infrastructure required for current low carbon aircraft operations, and the adjustments that will be needed in the longer term to accommodate hydrogen and electrified aircraft operations. However, to make these criteria even more forward looking, we would recommend not limiting the scope of the infrastructure considered to the use of hydrogen and electrification only, as other aircraft technologies with zero tailpipe emissions might emerge in the future.

For this reason, we recommend amending the technical screening criterion (a) as follows:

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(a) the infrastructure is dedicated to the operation of aircraft with zero tailpipe CO_2 emissions, for instance electricity charging and hydrogen refuelling.

The **manufacturing and operation of zero tailpipe carbon emissions aircraft** (e.g. electrified and hydrogen powered aircraft), as well as highly efficient conventionally fueled aircraft, with the exact performance threshold to be defined in the context of the currently on-going dedicated study remain to be included.

Sustainable Aviation Fuels (SAFs)

In the absence of an alternative to liquid drop-in sources of energy for mainstream commercial flights in the next years, coupled with the commitment for aviation to reduce its CO_2 footprint, the reduction over the short term will have to be achieved by **progressively switching to aviation fuels that are increasingly CO_2 neutral, whilst remaining cost-competitive**. Currently approved SAFs not only reduce European airlines' dependency on fossil fuels but also incur up to 80% CO_2 savings on a life-cycle analysis compared to regular kerosene. The use of SAFs is generally considered as one of the most effective means to reduce CO_2 emissions from aviation in over the short to medium run and is expected to be a long-term solution for long-haul.

While the TEG report of March 2020 does not address aviation specifically, its recognition that "Manufacturing of Biofuel" is considered both for their own performance and as transitional activities is welcomed and should be further pursued taking into consideration the specificities of SAFs, from a market and a technological perspective[1]. It is therefore welcomed that the draft act refers to the manufacturing of biofuels (section 4.13).

To reach the ambitious goals of the EU Green Deal, **investments into SAFs should be incentivised by Taxonomy screening criteria** like in the original Sustainable Finance Regulation, not discouraged.

Considering SAFs as only a transitional technology overlooks the fact that several air carriers will be relying on significant greenhouse gas emission reductions from the use of Sustainable Aviation Fuels in transport when aiming for carbon-neutrality by 2050 and that SAF represents a robust long-term solution for decarbonising long-haul flights notably.

Whilst short-term SAFs deployment is likely to use the HEFA technology (Hydrotreated Esters and Fatty Acids), several other pathways are currently under development and should be supported. For this reason, it is important to **include all the sustainable waste and residue feedstocks** that significantly reduce GHG emissions (over 65%) to be eligible under the Taxonomy's scope including recycled carbon fuels, whilst remaining technologically agnostic.

[1] See notably on this: A4E Position Paper on Sustainable Aviation Fuels - December 2020 at https://a4e.eu/policies/sustainability/

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Low carbon airport infrastructure for SAFs (6.17)

The draft Act rightly considers criteria for low-carbon airport infrastructure. However, operating low-carbon infrastructure in the aviation sector should **also include infrastructure dedicated to the operation of aircraft run on sustainable aviation fuels.**

Similarly, it is important to ensure consistency of the eligibility of some SAFs compared to others and the **draft act should not unilaterally favour the use of some SAFs compared to others** by excluding the necessary corresponding infrastructure from the classification.

Offsetting

Though currently underused, **offsetting is expected to play a more significant role** in supporting the shift to a low-carbon economy, notably in the aviation sector. Offsetting helps fund the transition to greener technologies for other sectors of the economy, contributing towards the massive capital investments that are needed to fund the transition. Sequestration offsets such as afforestation directly remove carbon from the air, like carbon capture. As such it is important the Taxonomy supports verified offset programmes.

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About A4E: Launched in 2016, Airlines for Europe (A4E) is Europe's largest airline association, based in Brussels. The organisation advocates on behalf of its members to help shape EU aviation policy to the benefit of consumers, ensuring a continued safe and competitive air transport market. With more than 720 million passengers carried each year, A4E members account for more than 70 per cent of the continent's journeys, operating more than 3,000 aircraft and generating more than EUR 130 billion in annual turnover. Current members include Aegean, airBaltic, Air France-KLM, Cargolux, easyJet, Finnair, Icelandair, International Airlines Group (IAG), Jet2.com, Lufthansa Group, Norwegian, Ryanair Holdings, Smartwings, TAP Air Portugal, TUI and Volotea. Associate Members include Airbus, Boeing, GE Aviation and Embraer.

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