

25 February 2021

Filip Cornelis

European Commission
Directorate-General for Mobility and Transport
1049 Brussels, Belgium
MOVE-E1-SUSTAINABLE-FINANCE@ec.europa.eu

Dear Mr. Cornelis,

Application of the EU taxonomy to the aviation sector

Thank you for your letter dated 9 November 2020. We look forward to our virtual meeting on 2 March 2021 to discuss the 'AWG carbon calculator' and its links to the work being undertaken by the European Commission and EASA.

In addition to the development of the AWG carbon calculator, the AWG's 'ESG subgroup' is considering the application of the EU taxonomy to the aviation sector. The questions posed in Steer's stakeholder workshop presentation dated 29 September 2020 have been the basis of the ESG subgroup's discussions, which are ongoing. This letter sets out the ESG subgroup's initial, **principle-based response** to how the EU taxonomy might be applied to the aviation industry. A more detailed response will be provided following our meeting and further consultation with AWG members.

Given the AWG's focus on aviation financing and leasing, the ESG subgroup has concentrated on 'the sale, lease and operation of aircraft', and by extension the financing thereof, as an aviation-related activity that is eligible for classification as 'environmentally sustainable'.

As a general comment, the AWG's preference is that there is a single international system for classification of green aircraft financing and leasing, to avoid conflicting national or regional standards. We would therefore support extending the discussion to involve other leading aviation states.

Principle 1 – feasible improvement standard

After employment costs, fuel is typically the next largest expense for airlines. As a result, the aviation industry has continually focussed its attention on, and trended towards, the development and production of more fuel-efficient (and, therefore, less carbon-intensive) aircraft. While we recognise the importance of the aviation sector's contribution towards the 'environmental objectives', current technological limitations must be acknowledged in the determination of what is 'environmentally sustainable' in the context of 'the sale, lease and operation of aircraft'.

Current constraints in electric or sustainable hydrogen powered aircraft technology, having regard to the physics of flight, mean that all-electric, hybrid-electric or sustainable hydrogen powered aircraft that might compete in the regional, single-aisle and widebody airliner market are still far from production, especially noting rigorous safety testing requirements. Sustainable aviation fuels ('drop-in' replacement hydrocarbon jet aircraft fuels produced from sustainable sources) will present a significant opportunity to reduce aviation CO2 emissions, but they are currently in limited production at this time and require significant commercial development to reach widespread availability. Sustainable

Aviation commissioned independent consultants E4tech to forecast production of sustainable aviation fuels under current trends, and their analysis estimated that by 2035 the use of sustainable aviation fuels will represent 4%-8% of global aviation fuel use. In addition, the use of sustainable aviation fuels is an operator choice, which is beyond the control of lessors and financiers, and so should not be used in any determinations that might impact lessors or financiers.

If adopting electric or sustainable hydrogen powered aircraft or widespread use of sustainable aviation fuels is either impossible or impractical over the short and medium term, demand for air transport will be met by aircraft using conventional fossil-based liquid hydrocarbon fuels. Accordingly, 'environmentally sustainable' in the context of 'the sale, lease and operation of aircraft' should be measured in terms of feasible and meaningful improvement, rather than the more rapid advances that might be technologically available and practical in other sectors. Therefore, in this context, the use of less carbon-intensive aircraft should be considered to 'contribute substantially' to climate change mitigation, notwithstanding that this may be inconsistent with the approach taken in respect of other less technologically constrained sectors.

Principle 2 – incentive standard

The ESG subgroup believe that incentivisation has a key role to play in the reduction of CO2 emissions in the aviation sector. The classification of an aviation-related activity as 'environmentally sustainable', and its potential economic and social benefits, is an incentive for selecting a less carbon-intensive option. However, the incentive will only encourage selection of a less carbon-intensive option where such option is viable, having regard to all material selection factors (including, availability, CapEx, OpEx, seating/cargo capacity, safety, and operational requirements, together **material selection factors**). Therefore, for the EU taxonomy to have the greatest effect in reducing CO2 emissions, the realm of options that might be classified as 'environmentally sustainable' must represent a viable option for a significant proportion of airlines and lessors. The availability of green financing products should encourage and enable airlines and lessors to upgrade their aircraft to less carbon-intensive models from the range of viable aircraft options available to them.

The Discussion Paper published by Steer considers 'the sale, lease and operation of aircraft' to be eligible as a 'transitional activity', as described in Article 10(2) of the EU taxonomy regulation. The ESG subgroup agrees that, to the extent that 'the sale, lease and operation of aircraft' cannot be considered to 'contribute substantially' to climate change mitigation, it must then qualify as a 'transitional activity'. As a 'transitional activity' additional requirements must be satisfied, namely that (a) it has greenhouse gas emission levels equal to the best performance in the sector, (b) it does not hamper the development and deployment of low-carbon alternatives, and (c) it does not lead to a lock-in of carbon-intensive assets, considering the lifetime of those assets.

If a 'transitional activity' is limited to the 'best performance in the sector', a fleet upgrade to more fuel-efficient aircraft would not be considered as a 'transitional activity' where such upgrade is not to the best performing aircraft. Given that the best performing aircraft are new aircraft, this would mean that there is no incentive available if manufacturer delivery positions are not then available and there is no incentive available to airlines that cannot afford new aircraft, even though more efficient used aircraft may be available and affordable and the effect on CO2 emissions of their re-fleeting to less carbon-intensive aircraft might be substantial. For there to be a meaningful reduction of CO2 emissions across the aviation sector, incentive to select the less-carbon intensive

option must be available to as many airlines and lessors as possible. Therefore, re-fleeting activity by airlines and lessors that results in a meaningful reduction in their CO2 emissions, but does not exclusively use new aircraft, should be considered as 'environmentally sustainable'.

As discussed, for both practical and economic reasons the aviation industry has continually trended towards the development and production of more fuel-efficient aircraft, and so aircraft transactions are unlikely to hamper the development or deployment of low-carbon alternatives. Similarly, many airlines elect to re-fleet on a regular and continuous basis. Accordingly, aircraft transactions are unlikely to be considered a lock-in of carbon-intensive assets.

Principle 3 – aircraft class differentiation standard

If the 'best performance in the sector' requirement must apply, the ESG subgroup has considered how it might apply to 'the sale, leasing and operation of aircraft'. In other transport sectors, transitional activities are broadly classed together (for example, 'passenger rail transport' and 'freight rail transport'), without distinction between the different technologies used in such sectors. The ESG subgroup considers this approach unsuitable in the context of the aviation sector due to the wide variety of aircraft types used for different purposes, including turboprop, regional, single-aisle, widebody aircraft and subcategories thereof.

The CO2 emissions of one aircraft class are not comparable to those of another and applying the same 'best performance' threshold across all aircraft would be unworkable and produce consequences contrary to the 'environmental objectives' – for example, incentivising the use of several smaller aircraft to operate long-haul flights for which a single larger aircraft may produce lower emissions. Accordingly, the ESG subgroup suggests that there should be various classes of aircraft, each with its own 'best performance' threshold, to ensure that the aviation sector has clear, ambitious and realistic targets for improved CO2 emissions. Aircraft classes should be limited to aircraft that represent viable alternative options to each other, having regard to material selection factors.

The Discussion Paper published by Steer suggested that 'best performance' might apply to '1%, 5% or 10%' of aircraft. The ESG subgroup believe that the relevant percentage should be significantly higher. To give some context, the current 'next generation' (and most fuel-efficient) equipment (including, for example, Airbus A320neo and Boeing 737 MAX aircraft) represent a significantly higher percentage of similarly classed aircraft in operation, and this percentage will rise substantially over the coming years (without there being more fuel-efficient alternatives).

We also query whether the threshold for 'best performance' of each aircraft class should be limited to a fixed percentage of aircraft with the lowest greenhouse gas emissions. Instead, it may be appropriate that any aircraft whose CO2 emissions are below a specified level (which may vary over time, as technologies improve) should meet the 'best performance' threshold. This approach appears consistent with that applied in the road, rail and water transport sectors, as detailed in *The Taxonomy Report: Technical Annex*, published in March 2020.

Principle 4 – ICAO certification standard

Whether an aircraft meets the applicable 'best performance' threshold should be determined upon the technical characteristics of an aircraft without consideration for its utilisation or configuration. These are operational variables that are outside the control of

lessors and financiers, and, in any event, are not relevant to the aim of ensuring that the aircraft operated are the best performing aircraft available.

The ESG subgroup suggests referencing the ICAO aeroplane CO2 emissions certification as the certification standard for confirming compliance with the 'best performance' criteria. The ICAO certification is internationally recognised and credible, is administered by a reputable organisation, and its use would minimise scope for accusations of 'greenwashing'. Furthermore, there are currently no suitable alternative sources of emissions data for use as a certification framework standard.

The current absence of utilisation-based emissions data presents further challenges for the inclusion of utilisation within the 'best performance' criteria. However, if the 'best performance' metric is to be based on an aircraft's utilisation in the future, in addition to its technical characteristics, the 'AWG carbon calculator' might be considered an invaluable tool. Using data provided by aircraft manufacturers including Boeing and Airbus, it calculates an aircraft's annual CO2 emissions based on its annual flight hours and cycles. Such supplemental use of calculator is not intended to impact the primacy of ICAO certification, as noted above. The applications of the AWG carbon calculator can be discussed further during our meeting on 2 March 2021.

Principle 5 – data-based self-reporting standard

The ESG subgroup recognises that an appropriate level of monitoring and regulation is required to increase transparency and prevent accusations of 'greenwashing', an objective that we support. A data-based self-reporting standard is appropriate for the aviation sector and is the simplest and least costly approach. The ICAO aeroplane CO2 emissions certification is unambiguous, and its application does not require further independent analysis. If the 'best performance' threshold is determined solely upon technical criteria, the confirmation of an aircraft's compliance with the 'best performance in sector' criteria is determined at the time of financing and so ongoing monitoring is not required for that confirmation. However, the ESG subgroup acknowledges that the European Commission may need ongoing provision of information for future policy formation and other reporting requirements. Data from the 'AWG carbon calculator' could be used for said reporting requirements, similar to its intended purpose in reporting estimated emissions of lessor and financier aircraft portfolios.

As the ESG subgroup's consideration of the EU taxonomy regulation and its application to the aviation sector continues in the coming weeks, we would be happy to provide further input. We would also welcome responses from and more detailed discussions with you and your colleagues.

Sincerely yours,



Jeffrey Wool
secretary general
Aviation Working Group

CC: Francois COLLET of Airbus and Daniel da SILVA of Boeing, Co-Chairmen, AWG