

# OPEN LETTER

Vice-President Timmermans and Commissioner Vălean  
European Commission  
Rue de la Loi 200  
1049 Brussels  
Belgium

10 March 2021

**Subject:** Ensuring all airlines play their part in tackling climate change

Dear Vice-President Timmermans and Commissioner Vălean,

We write to express our support for the European Union's ReFuelEU Aviation initiative and its aim to encourage the production and use of Sustainable Aviation Fuels (SAFs) by the aviation sector. In particular, we write regarding the legal obligation for the aviation sector to use SAFs on board aircraft (the so-called 'SAFs mandate').

We wish to highlight our concerns over the potential effectiveness of this initiative when it comes to recently proposed restrictions in scope.

Aviation must continue to tackle its environmental impact and reduce its contribution to climate change. SAFs can contribute to this goal by using aircraft fuels with a lower lifecycle carbon footprint than fossil kerosene. This, however, will only have the desired positive impact on the environment if the right fuels are selected, and if it includes long-haul aviation.

Long-haul aviation dominates emissions within the aviation sector, as noted for example by Eurocontrol<sup>1</sup>. Just 6% of flights, those over 4000km, create 51% of the emissions<sup>2</sup>. Together with medium-haul, they make up 60-75% of the global emissions of aviation - most of these flights would be excluded in an intra-EEA only scope<sup>3</sup>. Moreover, extra-EEA flights and long-haul hub operations are already excluded from many environmental policies such as the Emissions Trading Scheme (ETS) and passenger taxes on transfer passengers.

Excluding long-haul flights from the SAFs mandate would mean the very area of our sector that most needs to decarbonise would not be covered at all by this legislation.

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<sup>1</sup> Eurocontrol has stated that: "Long-distance air traffic dominates aviation emissions, drives their evolution, and hence must be targeted if a reduction in CO<sub>2</sub> emissions is to be achieved" - Aviation Intelligence Unit, Think Paper #7 - Eurocontrol, October 2020

<sup>2</sup> See appendix - conversely, trips under 500km represent 30% of flights but create just 4% of the emissions.

<sup>3</sup> See appendix, also see: 'CO<sub>2</sub> emissions from commercial aviation, 2018', International Council for Clean Transportation (ICCT), Brandon Graver, Kevin Zhang, Dan Rutherford, September 2019



In addition, looking ahead into the foreseeable future, SAFs continue to be the key technology for long-haul aviation to reduce its impact on the environment – and it is therefore even more critical to include long-haul in the scope of the mandate from the start.

Short-haul aviation on the other hand, can soon have innovative, disruptive, zero-emissions solutions available, such as electric, hybrid-electric and hydrogen propulsion. Pipistrel, for example, has recently announced work on a 19-seat liquid hydrogen mini-liner and Wright Electric have won a US grant for a 186-seater fully electric aircraft. Several airlines have partnered with manufacturers to help develop these technologies. In 2019 alone, the number of electrically propelled aircraft developments grew by circa 30%<sup>4</sup>.

For short-haul flying, SAFs are therefore only an interim step until zero-emissions technologies will be available by the mid to late-2030s. These new, zero-emissions technologies are not possible, however, for long-haul aviation for the foreseeable future, since there is no alternative to liquid fuels on long-haul flights.

Moreover, SAFs must be truly sustainable, with a policy framework which supports synthetic kerosene, strengthens criteria for what are considered advanced biofuels, and fully excludes biofuels from dedicated cropland<sup>5</sup>. An EU-wide industrial policy must be developed to ramp-up SAFs production over this decade. The mandate should be integrated into the ETS so airlines can realise their CO<sub>2</sub> savings. Direct Air Carbon Capture, which removes CO<sub>2</sub> from the atmosphere, and enables the creation of synthetic kerosene, must also be supported.

In the medium term we encourage policymakers to envisage a mechanism to enable airlines to move away from exclusive reliance on SAFs as cleaner zero-emissions technologies become available. SAFs should only be seen as a long-term solution where zero-emissions technology will not be possible, such as long-haul operations. The SAFs mandate must make all efforts to avoid diverting investments away from zero-emissions solutions in this context.

We also believe that a number of arguments which have been put forward to advocate for a restriction of scope of the ReFuelEU Aviation initiative potentially undermine its objectives and need to be considered carefully.

The perceived threat to global competitiveness, for example, can be minimised or averted through careful policy design, such as applying the obligations of the mandate to fuel suppliers, thereby including all departing flights since all fuel lifted in Europe will already be blended with SAFs.

When it comes to global solutions, as proposed by some: these face a very real risk of not materialising for years or decades to come. Even if a global SAFs agreement is found, it will inevitably be less stringent than the EU's own rules, as happened with the ETS and CORSIA.

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<sup>4</sup> Roland Berger, [rolandberger.com/en/Insights/Publications/Electric-propulsion-is-finally-on-the-map.html](https://rolandberger.com/en/Insights/Publications/Electric-propulsion-is-finally-on-the-map.html), 15 January 2020

<sup>5</sup> There are exceptions such as cover crops, for full details refer to Fuelling Flight Project's January 2021 statement - [europeanclimate.org/wp-content/uploads/2021/01/aviation-paper.pdf](https://europeanclimate.org/wp-content/uploads/2021/01/aviation-paper.pdf)



**This means that if we wait for a global solution, and exclude long-haul from the EU's SAFs policy today, we face the risk of nothing being done for years to address aviation's true impact on the climate.**

**We are not in the same position as a decade ago, and we do not believe the public will tolerate such inaction for long. It is now time for global aviation to play its part as well. There is simply no justification for more than halving this policy's efficacy by reducing the scope of its mandate and excluding the primary source of aviation emissions, namely long-haul operations.**

**We therefore urge you to:**

- **Not to give in to pressure - ensure that long-haul flights are included in the EU's SAFs mandate from the very start;**
- **Place the obligations of the mandate on the fuel supplier – this is the simplest policy design to ensure genuine equality for all flights leaving EU airports, as it will ensure that all fuel lifted in Europe is already blended with SAFs;**
- **Ensure that advanced biofuels are sustainable, exclude the use of biofuels from dedicated cropland, and ensure manageable and achievable mandates for best-in-class fuels such as synthetic kerosene;**
- **Support the development of zero-emissions aircraft such as hydrogen or electric propulsion in the medium run - and ensure that the increased costs of any SAFs mandate falling on short-haul airlines does not delay their conversion to these zero-emissions solutions.**

**Each of the organisations listed below supports this message:**



# APPENDIX

Eurocontrol Data Snapshot, 16 February 2021

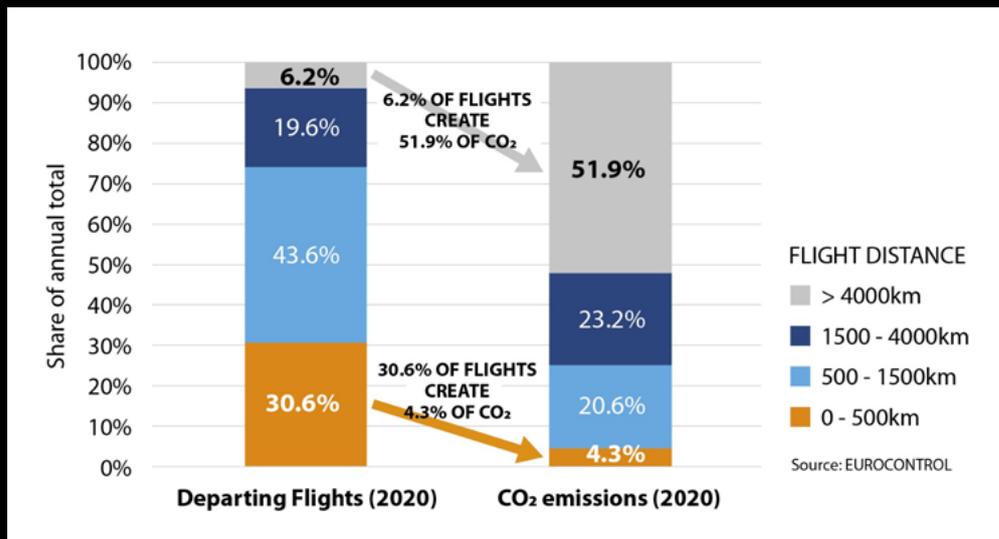
Link: [eurocontrol.int/publication/eurocontrol-data-snapshot-co2-emissions-flight-distance](https://eurocontrol.int/publication/eurocontrol-data-snapshot-co2-emissions-flight-distance)

## EUROCONTROL Data Snapshot

Half of CO<sub>2</sub> emissions come from just 6% of flights: the long-haul ones.



16 February 2021



For some routes, only aviation can provide a timely connection. This is true for some shorter hops, over water or where a land connection is difficult, but mostly this is a question of distance. In 2020, some 6% of flights from European airports were clearly long-haul, crossing more than 4000km.

For passengers and for urgent or high-value cargo, there is little or no alternative on such routes. The importance of long-haul is even more clear when measured in capacity, rather than flights. For example, on the passenger side these 6% of flights carry 10% of total seats, and more than 40% of seat-kilometres (the usual measure of passenger capacity in the industry).

The chart shows, however, that there is an environmental cost. Longer distances naturally mean longer duration flights, and mostly by larger aircraft (hence the higher proportion of seats). That has a significant cost in terms of CO<sub>2</sub>. In 2020, more than half of European aviation's CO<sub>2</sub> emissions were from this tiny proportion of the overall number of flights. We have mentioned in [other data snapshots](#) how COVID-19 has affected the mix of longer- and shorter-haul flights. But this domination of emissions by a few longer-haul flights is not COVID-related: in 2019, the 6% that were long-haul had a 48% share of CO<sub>2</sub>, very similar to 2020.

At the opposite end of the scale, the 31% of flights under 500km had only a 4% share of CO<sub>2</sub> (24% of flights with 3.8% of CO<sub>2</sub> in 2019). Short-haul is an excellent candidate for early electrification, amongst other initiatives, to reduce its environmental impact. These improvements will be needed, if aviation is to meet its sustainability targets. However, these data show that the maximum possible saving in short-haul is about 4% of the total CO<sub>2</sub>. Increasing the supply of sustainable aviation fuel to cover just 10% of the needs of long-haul, would do more than can ever be done in short-haul to reduce net CO<sub>2</sub> emissions.

**Technical Bits:** The statistics shown are for departures from airports in the 40 European States which participate in the EUROCONTROL Central Route Charges process zone. Seats and seat-km data are from 2019. For this illustration we assume sustainable aviation fuel saves 75-80% of CO<sub>2</sub> compared to kerosene.

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