

ReFuelEU Aviation

T&E's recommendations on the biofuel definition (art. 3)

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Context

Sustainable aviation fuels (SAFs) have an important role to play in the decarbonisation of aviation. But to realise their potential, it is vital that we select the right type of fuels and avoid unsustainable practices. It is therefore concerning that the European Parliament's Transport (TRAN) committee has expanded the definition of SAFs to include recycled carbon fuels and widen the feedstock base for biofuels¹. Below are T&E's recommendations on what feedstock should be eligible and how to guarantee the 'sustainability' of SAFs. More information on our overall ReFuelEU recommendations (including on e-kerosene, non-CO₂ effects and direct air capture) can be found in our [position paper](#).

Which feedstocks should be eligible?

The Commission's original ReFuelEU proposal goes some way towards selecting the right types of SAFs. It excludes food and feed crop-based biofuels and instead focuses on advanced biofuels and synthetic aviation fuels. The ITRE and ENVI committees, who provided opinions on ReFuelEU, followed this and even improved on it by capping biofuels derived from Annex IX part B feedstock. This is important as they are only available in very limited quantities (limited to EU sourced feedstocks, to avoid driving unsustainable practices) and have a competing use with the road sector. However, the TRAN committee changed the definition of SAFs by including more biofuels and recycled carbon fuels.

Original SAF definition includes:

- Synthetic aviation fuels
- Advanced biofuels (Part A Annex IX of RED)
- Biofuels from Part B Annex IX of RED

Adopted SAF definition in TRAN includes:

- Synthetic aviation fuels
- Advanced biofuels (Part A Annex IX of RED)
- Biofuels from Part B Annex IX of RED
- Recycled carbon fuels (RED article 2, 2nd paragraph, point 35)
- Biofuels from non-Annex IX feedstock excluding food and feed crops (as defined in Article 2, second paragraph, point 40) until the end of 2034

¹ European Parliament (2022): [TRAN report on ReFuelEU](#) (AM 46 page 34).

Issues with a broader feedstock base for biofuels

Even with limiting non-Annex IX feedstock until the end of 2034, this definition change risks flooding the market with biofuels from other sectors and locking in unsustainable practices. **The change in definition significantly weakens the sustainability of ReFuelEU, as it opens the door to the following feedstocks, which all have competing uses and would therefore cause displacement emissions:**

- **Animal fats cat III** - are by-products from the animal slaughter process and are already being used for the manufacture of oleochemicals (e.g. soaps, cosmetics), pet food and animal feeds.²
- **Palm Fatty Acid Distillate (PFAD)** - is a by-product of the palm oil refining process. It has a high value in other industries, such as oleochemicals. Its use for biofuels is likely to cause significant displacement emissions.³
- **Intermediate crops** - planted before or after the main crop. They create a major loophole as according to the ICCT, intermediate crops can include winter corn and soybean from Brazil.⁴
- **Molasses** - are by-products from the processing of sugar cane and sugar beet into sugar and are already being used for animal feed and in the yeast sector.

Issues with recycled carbon fuels

The change also includes **recycled carbon fuels** from waste or exhaust gases. These are by definition not renewable and therefore should not be promoted. If industries like steel or cement want to decarbonise, then any carbon captured has to go to storage. As fuels are combusted, CO₂ would still be released into the atmosphere, thus only delaying emissions rather than reducing them. It will reduce incentives for industries to reduce emissions as they could sell their carbon instead.

The Commission's recent delegated act⁵ states that "In the long-term, the use of recycled carbon fuels produced using unsustainable carbon is not compatible with climate neutrality as the use of carbon from non-sustainable processes entails a continued use of non-sustainable fuels and the related emissions." So why should we use and promote fuels that are incompatible with climate neutrality even in the short term? The simple answer is that we shouldn't. Promoting RCFs now will delay the necessary investments to scale up fuels that are sustainable such as renewable hydrogen, renewable electricity and e-kerosene derived from direct air captured CO₂. Our choices now will have impacts for decades to come. Let's make the right one.

² Ecofys (2016) [Indirect emissions from rendered animal fats used for biodiesel](#)

³ Cerulogy (2017) [Waste not want not](#)

⁴ ICCT (2021) [Changes to the Renewable Energy Directive revision and ReFuel EU proposals: Greenhouse gas savings and costs in 2030](#)

⁵ European Commission (2022) [Renewable energy – method for assessing greenhouse gas emission savings for certain fuels](#)

Conclusion

To make ReFuelEU a success, it is of utmost importance to select those fuels that can truly contribute to the decarbonisation of the aviation sector. Therefore, this is a crucial time for the future of Europe's aviation industry. We need to get it right now or risk a cure that is worse than the disease. However, with the definition from the TRAN committee, ReFuelEU would actively promote the uptake of biofuels from unsustainable feedstocks such as palm oil fatty acid (PFAD), which is just palm oil with another name. The negative impacts on the environment of such feedstocks are well documented. Not only is this bad news for the climate and for biodiversity, but it will also harm the reputation of SAFs, not to mention further discrediting the aviation industry to citizens. The industry is already under scrutiny by the people with 'flygskam' rising among citizens. We call on members of the European Parliament to be responsible and forward-looking and to go back to the Commission's original biofuel definition.

T&E recommends that: the definition of SAFs (Art.3, point 5) reverts back to the Commission's original proposal on biofuels, excluding recycled carbon fuels and non-Annex IX feedstocks while removing the 'drop-in' requirement (to make hydrogen and electricity eligible):

'Sustainable aviation fuels' ('SAF') means aviation fuels that are either synthetic aviation fuels, advanced biofuels as defined in Article 2, second paragraph, point 34 of Directive (EU) 2018/2001, or biofuels produced from the feedstock listed in Part B of Annex IX to that Directive, which comply with the sustainability and greenhouse gas emissions criteria laid down in Article 29(2) to (7) of that Directive and are certified in accordance with Article 30 of this Directive;

Further information

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