

Call for an ambitious European e-kerosene target: Minimal added cost per ticket with maximum investor certainty

Key to the decarbonisation of the aviation sector will be early and strong support for e-kerosene in the ReFuelEU Aviation Regulation since it is a key pathway to scale up the supply of sustainable aviation fuels (SAF). Industry players both within and outside the EU are ready to start developing projects when the right boundary conditions are in place.

Ahead of the publication of this proposal, Transport and Environment and the Global Alliance Powerfuels, together with 23 companies and industry associations, signed a [letter](#) in June 2021 calling for the EU to “set ambitious targets for synthetic jet fuel while preserving a level playing field for airlines.”

Unfortunately, ReFuelEU, as proposed by the European Commission and confirmed by the Council of the EU in its [General Approach](#), does not go far enough to send a clear market signal for e-kerosene. The Commission and Council positions only introduce a blending mandate in 2030 and the 0.7% target is too low to have an incentivising effect. A [study](#) by T&E found that there are 28 e-kerosene projects at present across the EU that could produce up to 1.85Mt in 2030, equivalent to 3.69% of the EU’s jet fuel demand for that year.¹ These projects are at different development stages and urgently need regulatory certainty to access the funding required to reach implementation.

A 0.7% target, which only covers a small part of the 3.69% potential, will not provide enough regulatory certainty to secure investment and scale up e-kerosene to the extent needed to reach net zero aviation by 2050.

We therefore call on the EU Member States and the European Commission to endorse the 2% e-kerosene target in 2030, as adopted by the [European Parliament](#).

Crucially, the cost impact of increasing the 2030 e-kerosene target from 0.7% to 2% will only be 0.6 euro per ticket per 1000km of flying², which is roughly the length of the [average intra-EU flight](#).

Furthermore, there is a proposed mechanism in the EU ETS to help fund some of the extra cost of using SAF in the form of ‘SAF allowances’. They work as contracts for difference, covering a certain portion of the price difference between fossil kerosene and SAF. The European Parliament has proposed 40 million allowances (2024-2029) and the Council has proposed 20

¹ Assuming a total jet fuel demand of 48 Mt in 2025 and 50 Mt in 2030, according to T&E’s [Roadmap to Decarbonise European Aviation](#) by 2050

² Based on the [ReFuelEU Aviation Impact Assessment](#) assumption that it will cost €2.97 to produce 1kg of e-kerosene in 2030, while fossil jet fuel will cost €1/kg in the same year (without added taxes). The fuel consumption of currently employed aircraft will be about [24kg per passenger per 1000 flight kilometres in 2030](#). This means that on a 2000km flight in 2030, one passenger consumes 48kg of fuel, costing €48. If 1.3% of those 48kg cost €2/kg more, this results in an added cost per passenger of €1.24 for a 2000km flight.

million (2024-2030). Analysis by T&E found that the extra cost of going to a 2% e-kerosene target in 2030 would require between 24 and 51 million SAF allowances 2024-2030 (depending on the cost assumptions taken).³ This would be equivalent to between €2.3 billion and €4.7 billion. Therefore, not only will the cost per passenger of increasing the e-kerosene sub-target be minimal, but a proportion of these extra costs could potentially be funded by SAF allowances, on the condition that these are limited in amount, time and essentially channeled towards e-fuels.⁴ Other funding mechanisms provided under the Innovation Fund will also benefit the e-fuels value chain and reduce production costs. For example, in its November 2022 [call for projects](#) the Innovation Fund is looking to finance, as part of the 'Innovative electrification in industry and hydrogen' topic (€1 billion), projects where the main innovation lies in the production of renewable hydrogen or derived fuels. It will also provide funding for disruptive or breakthrough technologies (€0.3 billion).

A 2% 2030 target will ensure the public and investor confidence in e-kerosene production capacity that we need to put aviation on track to climate neutrality in 2050.



³ 51 million allowances corresponds to an e-fuel price of 2968€/t by 2030, from [ReFuelEU Aviation Impact Assessment](#). 24 million allowances corresponds to an e-kerosene price of 2064€/t by 2030, from CONCAWE's Nov. 2022 report "[E-Fuels: A techno-economic assessment of European domestic production and imports towards 2050](#)", for e-kerosene produced in Southern Europe.

⁴ With the assumption that the auctioning price of ETS allowances will increase from €90/tCO₂ in 2024 to €100/tCO₂ in 2030.