

1st TAKE-OFF Webinar *“Synthetic Aviation Fuels: an unavoidable pathway for aviation facing the increase in energy prices”*

24th of April 2023, 10 am – 12 pm
Online

Aviation is responsible for about 12% of CO₂ emissions from transport, making it the second biggest source of transport GHG emissions after road transport. As a result, aviation is now a prime target for sustainable innovation.

Multiple low-carbon technologies are being researched and sustainable aviation fuels (SAF) are among the solutions that can alleviate some of the pressure and significantly reduce the sector’s GHG emissions. However, not all SAF is created equal. Most biofuel available today comes from fats, oils, and biomass but the most promising next-generation SAF is derived from the conversion of renewable energy into fuels through electrolysis. These are known as synthetic aviation fuels or Power-to-Liquid.

Power-to-Liquid SAF are a key solution to contribute to achieving carbon-neutral aviation, supporting circularity and ensuring economic growth. These fuels will play a key part in decarbonising the aviation sector as they can be used within the existing global fleet and fuel supply infrastructure.

While SAF are currently more expensive than fossil-based jet fuels, cost savings are expected notably through future production economies of scale. SAF prices can vary depending on the production pathway, associated production costs and fluctuations in the energy market.

Against this context, over the past 6 years, the number of legally binding policies supporting the development of SAF has gone from 1 between 2013 and 2017, to 22 in 2022. Last year, the European Commission proposed a SAF blending mandate for fuel supplied to EU airports, with minimum shares of SAF gradually increasing from 2% in 2025 to 63% in 2050, and a sub-mandate for synthetic aviation fuels.

To highlight these promising perspectives, the TAKE-OFF project in collaboration with CO₂ Value Europe will hold its first webinar on the importance of SAF as an alternative solution for aviation amidst high energy prices.

The webinar will see the participation of CCU and policy experts, EU-funded projects leaders and industrial actors discuss the latest EU initiatives to face the race in energy prices, as well as the relative challenges and opportunities for the implementation of CCU technologies.

DRAFT AGENDA	
10 – 10.15 am	<p>Introduction to the TAKE-OFF project</p> <p>Lawien Zubeir, TNO, <i>Senior Development Engineer</i></p>
10.15 - 10.45 am	<p>The Energy price rise and its impact on the implementation of Carbon Capture and Utilisation technologies</p> <p>Q&A</p> <p>Daniel Marenne, ENGIE, <i>Energy Solution Architect Engie Generation Europe</i></p>
10.45 – 11.15 am	<p>The major European Union’s actions and measures to protect the path towards a successful green transition</p> <p>Q&A</p> <p>Tudy Bernier, CO₂ Value Europe, <i>Senior Policy Officer</i></p>
11.15 am – 11.45 pm	<p>Beyond the Environmental and Economic Assessment of Synthetic Aviation Fuel: Could SAF become a cost-competitive solution to defossilise the aviation industry?</p> <p>Q&A</p> <p>Henrik Wenzel, University of Southern Denmark - Department of Green Technology , <i>Full Professor</i></p>



The TAKE-OFF “Production of synthetic renewable aviation fuel from CO₂ and H₂” project, that has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement N°101006799.