Press release

nova-Institut GmbH (<u>www.nova-institute.eu</u>) Hürth, 3 February 2020



Aviation fuels made from CO_2 – Register now to be part of the coolest new thing on the way to low-emission air transport

1_{st} European Summit on CO₂-based Aviation Fuels, 23 March 2020, Cologne (Germany) on Sustainable Strategies & Solutions for Cleaner Air Transport

The vital question for the future of aviation is: how do we tackle greenhouse gas (GHG) emissions from air transport and their serious impact on the climate? There are not many technological options available. Electric-driven aviation is, for the next decades, only suitable for short distance flights. The use of bio-based kerosene is confronted by NGOs as putting unacceptable pressure on natural resources, such as land and biodiversity. It is also hampered by quality and standards issues for different biomass sources and conversion processes.

First life cycle assessments show that especially the land and water footprints of e-fuels are much lower compared to bio-based aviation fuels, as bio-based kerosene (see figure on land use), and the huge demand cannot be covered by biogenic side streams or biowaste. The potential for fuels based on energy from solar, wind and hydro power and CO₂ is by far bigger than for biofuels.

Rudolf Dörpinghaus, managing director of IASA: "Climate-friendly, even climate neutral aviation is achievable! It can be done. It has to be done. And the necessary transformation is urgent and has to start immediately!"

Still, there are many questions to be answered. What is the best technology? How to provide the most cost-efficient renewable energy, hydrogen and CO₂? Where are the best locations for the production? Which possible business partners are willing to invest in a PtL production plant now? What are the best strategies to implement CO₂-based aviation fuels? What about the Carbon Offsetting and Reduction Scheme (CORSIA) and the European Emissions Trading System (ETS)? How to ensure aviation standards are met? Which airlines are willing to use sustainable aviation fuels (SAFs), even if they are initially more expensive than fossil fuels? What is required politically in terms of regulations and international support?

Michael Carus, Managing Director of nova-Institute: "The dream of producing environmentally friendly fuels for aircraft with sun, wind and CO₂ is within reach. If politics, society and industry want this, it can be implemented quickly. A first step would be an obligatory blending quota of e.g. 5%. This would directly trigger large-scale investment." The "1_{st} European Summit on CO₂-based Aviation Fuels", 23 March, 2020, Cologne, Germany, is for decision makers in policy, organisations, airlines and the respective industries. You are cordially invited by the International Association for Sustainable Aviation (IASA) and nova-Institute to take part in this essential summit.

Take a look at the outstanding programme with invited speakers from fields of policy, aviation industry, environmental protection and technology development: <u>http://co2-</u>chemistry.eu/aviationfuels/.

The summit on CO₂-based aviation fuels is one day prior to the 8th edition of the established "Conference on Carbon Dioxide as Feedstock for Fuels, Chemistry and Polymers", 24-25 March, 2020, Cologne, Germany (<u>www.co2-chemistry.eu/</u>). Combined tickets are available under <u>www.co2-chemistry.eu/registration/</u>

Find all nova press releases, visuals and more free for press purposes at <u>www.nova-institute.eu/press</u>

Responsible for the content under German press law (V.i.S.d.P.):

Dipl.-Phys. Michael Carus (Managing Director) nova-Institut GmbH, Chemiepark Knapsack, Industriestraße 300, DE-50354 Hürth (Germany)

Internet: www.nova-institute.eu – all services and studies at www.bio-based.eu Email: contact@nova-institut.de Phone: +49 (0) 22 33-48 14 40

nova-Institute is a private and independent research institute, founded in 1994; nova offers research and consultancy with a focus on bio-based and CO₂-based economy in the fields of food and feedstock, technology, economy, markets, sustainability, dissemination, B2B and B2C communication and policy. Every year nova organises several leading conferences on these topics. nova-Institute has 35 employees and an annual turnover of more than 3 million €.

Get the latest news from nova-Institute, subscribe at www.bio-based.eu/email