Effects of sustainable aviation fuel on local air quality is now measured in Copenhagen Airport

Researchers are now investigating how flying on a sustainable air fuel (SAF)-blend may have a positive effect on local air quality. The first of its kind measurement campaign is happening in Copenhagen Airport – the lighthouse airport in the EU funded project ALIGHT.

Right now, and in the following weeks researchers from German Aerospace Center (DLR) is situated near a gate in Copenhagen Airport with a state-of-the-art mobile laboratory. They are measuring the local air quality as an allocated SAS-airplane flies with a 35% SAF-blend between Stockholm and Copenhagen three to four times a day.

"Previous experimental studies have shown that the use of SAF-blends has the potential to significantly reduce the release of particulate emissions without disadvantages for flight operations" says Dr. Tobias Schripp, researcher at DLR.

A step towards transitioning air transport

The measurement campaign is the first of its kind with this level of detail. Consequently, it will provide new and valuable insight in the potentials of SAF, which is already known to have a great potential to escalate sustainable development within the aviation industry.

"It's commonly known that sustainable air fuels reduce the emissions of CO2, so these measurements may be yet another extensive gain from SAF and yet another motive to propagate the use of SAF as means to transitioning air transport" says Christian Poulsen, Senior Vice President and Head of Infrastructure, Operation & Services at CPH Airport.

The results of the measurements will be insightful for multiple stakeholders within air transportation, who are engaged in the green transition.

"We are proud to be part of this research project, which is in line with our ambition to be a driving force, together with our partners, toward sustainable aviation. By using SAF and participating in the test on these flights we hope to see positive results with regards to the local air quality and the working environment. This will underpin the well-known positive climate effect on high altitudes as well" says Ann-Sofie Hörlin, Head of Sustainability at SAS.

One of many activities in ALIGHT

In the EU-funded ALIGHT-project the measurement campaign is just one of many activities to investigate and disseminate what airports may initiate for sustainable development of the aviation industry. Copenhagen Airport have engaged in the project together with 15 European partners.

“Our engagement in the ALIGHT project reflects the ambitions for emission-free operations in Copenhagen Airport by 2030. No later than 2050, we aim to have all air transport and organizations operating in Copenhagen Airport emission-free” says Christian Poulsen, Senior Vice President and Head of Infrastructure, Operation & Services at Copenhagen Airport.

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FACT BOX
The ALIGHT project will bring forward the necessary solutions, knowledge, guidelines, and best practice handbooks supporting an efficient airport paradigm shift towards zero emission aviation and airport operation. The ALIGHT projects focus on two main topics:

- Sustainability Aviation Fuel including fuel supply chain, usage of sustainable aviation fuel, economics, and sustainability.
- Smart Energy Systems and under this smart energy supply, integration, management, and use.

The ALIGHT project has 16 European partners:

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