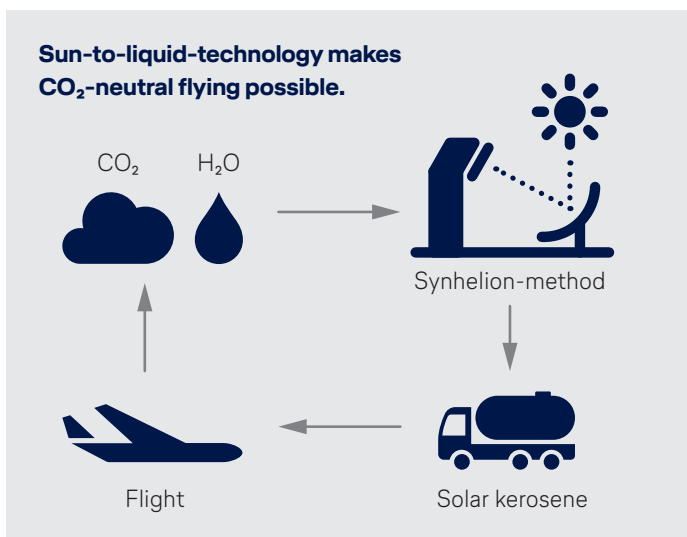


Flying on Sunlight

LUFTHANSA AND SYNHELION INVEST IN SOLAR KEROSENE

The Lufthansa Group is backing innovative and CO₂-neutral aviation fuels, more so than most other airlines. A recent example: At the beginning of March 2022, the Group airline SWISS and Synhelion agreed on a strategic collaboration to produce solar aviation fuels. The goal of this partnership is to accelerate the market rollout of this pioneering technology, implement initial pilot projects in Europe, and scale global production capacity.



The process developed by Synhelion, which has already been verified several times on a small scale, makes it possible to remove CO₂ from the atmosphere and convert it into a synthetic gas using concentrated sunlight and water. This process can then be used to generate fuel. These sun-to-liquid fuels release only as much CO₂ as was previously removed from the atmosphere.

Synhelion will build the world's first plant for the industrial production of solar fuels in Jülich before the end of 2022. There, the German Aerospace Center (DLR) maintains a pilot facility with 2,000 movable mirrors that bundle sunlight. Starting in 2023, the Lufthansa Group airline SWISS will be the first airline in the world to use solar kerosene.

Lufthansa Group pioneers sustainable aviation fuels

For more than a decade, the Lufthansa Group has been intensively involved in research, testing, and use of SAF and is pushing ahead with key technologies. Today, it is one of the world's largest purchasers of SAF made from biogenic residues.

With its commitment to solar fuels, the Lufthansa Group underscores its position as a pioneer in new climate-conscious technologies in aviation. The cooperation with Synhelion is one of more than 80 projects bundled in the Lufthansa Group CleanTech Hub. The Hub combines the comprehensive know-how of the Lufthansa Group with start-ups and global players from research and industry.