

Take-off: A high-efficiency, low-cost alternative to produce sustainable aviation fuels from CO₂ and H₂

Aviation fuels derived from non-fossil resources are the only way to diminish the hefty carbon footprint of air transport. The EU-funded Take-off project will bring together leading industrial players and prominent research institutes to develop an innovative process for producing sustainable aviation fuels with higher efficiency and lower costs compared to other power-to-liquid alternatives. State-of-the-art successful attempts to turn carbon dioxide into jet fuel involve complex processes such as the Fischer-Tropsch process. The unique Take-off technology will be based on converting carbon dioxide and green hydrogen into fuel via ethylene as an intermediate. In this process, carbon dioxide is captured from industrial flue gases or direct air capture and reacts with hydrogen produced by renewable electricity to create light olefins.

Website: <https://takeoff-project.eu>



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