

ALFAFUELS, A EUROPEAN PROJECT FOCUSED ON THE DEVELOPMENT OF SUSTAINABLE AVIATION FUELS

- **SUSTAINABLE INNOVATIONS IS ONE OF THE SPANISH PARTNERS INVOLVED IN THE EXECUTION OF ALFAFUELS**
- **THE PROJECT, FUNDED WITH €4.7 MILLION, AIMS TO MITIGATE CLIMATE CHANGE BY REDUCING DEPENDENCE ON FOSSIL FUELS**

Madrid, January 11, 2024 – [SUSTAINABLE INNOVATIONS](#) participates as a partner in the execution of the ALFAFUELS project, an initiative of the European Union's Horizon Europe research and innovation programme, involving a total of sixteen partners from nine European countries.

With a duration of 48 months, the project will focus on developing innovative technology to produce **sustainable aviation fuels**, playing a significant role in decarbonising the sector by replacing conventional fossil fuels in the medium and long term. The initiative will contribute to mitigating climate change, promoting energy transition, and establishing a biomass-based circular economy by capturing and directly utilizing CO₂.

To achieve this, ALFAFUELS will address the main challenges hindering the maturity and commercialization of current sustainable fuel production technologies. The initiative will employ microbial production of fuels (such as kerosene) from CO₂ using solar-driven photochemistry. Simultaneously, ALFAFUELS will also valorise all cellular components through a biorefinery approach by producing other valuable compounds such as starch and hydrogen.

SUSTAINABLE INNOVATIONS will be responsible for communication, dissemination activities, as well as exploitation and intellectual property tasks. "*This project represents not only an advancement but a revolution in the aviation sector from an economic and, above all, environmental perspective by addressing one of the sectors with the highest CO₂ emissions*" states Jesús Serrano, Deputy General Manager of SUSTAINABLE INNOVATIONS.

In summary, the ALFAFUELS project aims to boost the supply and technology of renewable fuels, promoting advanced and sustainable technological routes for production. Its impacts translate into greater sustainability, cost reduction, and a transition towards carbon-neutral technology, positioning Europe as a leader in innovation in the search for a solution for renewable fuels in the energy and transportation sector.

Sustainable fuels in the aviation sector

The importance of sustainable fuels in aviation lies in the urgent need to reduce carbon emissions in this critical sector. Aviation is one of the main sources of greenhouse gas emissions, and the transition to more sustainable fuels is essential to mitigate climate change. Currently, the situation is marked by high production costs and technological limitations, but investment in innovative and sustainable solutions represents a key opportunity for Europe and the world. Sustainable fuel production not only addresses the need to reduce emissions in aviation but also promotes energy independence and contributes to the development of a more ecological and sustainable economy in Europe and elsewhere. These efforts are crucial for meeting emission reduction goals and moving towards a cleaner and more sustainable future in air transport.

About ALFAFUELS

Led by the research center RISE (Sweden), the ALFAFUELS project is formed by the Catholic University of Leuven, e3Modelling, Eni, Fotosintetica & Microbiologica, IDENER, Industridoktorn, the Max Planck Society, the National Center for Scientific Research (CNRS), Skyinrg, Sustainable Innovations, the Technical University of Denmark (DTU), Uppsala University, University of Copenhagen, University of Florence, and University of Potsdam. The project has received more than €4,7 million in funding from the Horizon Europe Research and Innovation programme of the European Union under grant agreement number 101122224.

About SUSTAINABLE INNOVATIONS

SUSTAINABLE INNOVATIONS is a Spanish consultancy company that provides innovative services to a wide range of sectors across Europe. The core competencies offered by SUSTAINABLE INNOVATIONS are structured in three main pillars that bridge the gap between ideas and the market: Innovation Management, Business Development, and Capacity Building.

Some of the most important sectors of SUSTAINABLE INNOVATIONS' expertise are the Bio-industry, Advanced Materials, Energy, Circular Economy and Industry 5.0, among others.

You can find more information on: www.sustainableinnovations.eu