

March 2024, BioSFerA is “*Setting the course for aviation and marine fuels for the transport of tomorrow*” - project meeting and final event

19th, 20th March 2024, Brussels – the BioSFerA Consortium met at the Spanish National Research Council (CSIC) Delegation facilities in Brussels for a two-days event. **BioSFerA** (Biofuels production from Syngas FERmentation for Aviation and maritime use), is a research and innovation project receiving funding from the European Union’s Horizon 2020 program under Grant Agreement No 884208, started in 2021 and is now coming to an end. During the past 4 years, main project objective was the development of an innovative cost-effective model for the production of advanced biofuels for sustainable transport in maritime and aviation sectors. At this stage, project partners have been called for the last General Assembly meeting of the project (19th March) and for sharing the final research’s results to a public audience: on the 20th of March 9:30-13 (CET). The BioSFerA final event took place with the title: “**Setting the course for aviation and marine fuels for the transport of tomorrow**”. The event was held in hybrid format and organized by Project Coordinator CERTH and by Environment Park, Project Communication leader with the support of CSIC partner.

The final event has seen the involvement of EU representatives, sector experts and researchers into an interactive morning session. Among them, the presence of the Advisory Board members, such as Q8 Aviation, Fly Green Alliance, Motor Oil Hellas, Athisa Biogeneración.

The morning was planned with an initial project’s presentation by Project Coordinator Konstantinos Atsonios from CERTH, followed by two panel sessions dedicated to the **innovative model of waste valorisation** proposed by BioSFerA and to the **TRL5 scaling-up of the pilot syngas fermentation process**. Here, the partners shared their project’s journey and results to the audience thanks to the representatives from partners BBEPP, CERTH, CSIC, CARTIF, ENVIPARK. Polls the presence of specialists from



every step in the supply chain led to an interactive and animated the morning to involve the audience and to understand their own point of view on the general topic and on the BioSFerA's technologies presented along the day. Low-CO2 emissions, circularity, green transports, low-prices were just some of the advantages about the sustainable fuels in transport put in evidence by the polls results. High interest was even showed on the project's technologies, lead by the two-stage biological syngas-to-lipids fermentation.

Finally, the role of the **advanced biofuels in the decarbonisation strategy of the transport sectors and the market potentiality of the BioSFerA model** have been discussed during a round table with biofuels value chain players coming from industry and research. The round table was moderated by Prof. Jose Luis Garcia Lopez, head of the Environmental Biotechnology group at CSIC, and it involved the following speakers: Marilena Demetriou - Project Researcher at FincoEnergies, Maria Georgiadou – European Commission Senior Expert - Renewable energy R&I policy, Piero Valmassoi - Project Manager at Greenovate! Europe, Teemu Nevalainen - Director, Solution Development at Sumitomo SHI FW, Xander de Jong - Principle Process Engineer Research & Development at Q8Research, Leonidas Kanonis - Director for Communications and Analysis at EWABA and BioSFerA's Advisory Board member.

The round table's speakers started with a short presentation by each, then some random questions had come by the moderator and by the audience. The importance of **advanced biofuels** as possible solution for the energy transition in the transport sectors was highlighted, as well as the European goals of decarbonization and energy independence. The comprehensive combination of different factors, from regulations and policies, to value chain players, fuels traders and final users was evident for the **uptake of biofuels** in the next future. Different technological solutions are close to be market ready, even at large scale and tailored for the different aviation or maritime industries' needs.

“I'm very glad for these years within the project in the role of coordinator” - states Konstantinos Atsonios, BioSFerA's Project Coordinator and Project Manager at the

Centre for Research & Technology Hellas (CERTH) – “In this final stage of our project’s journey, I would like to highlight the results achieved after years of research. BioSFerA project leaves a considerable legacy on the portfolio of the advanced biofuels technologies contributing to aviation and maritime decarbonization”.



The BioSFerA Consortium in Brussel, 8th GA meeting



BioSFerA Final Event, in order Maria Georgiadou – European Commission, Pedro Acuna Lopez – Bio Base Europe Pilot Plant, Xander de Jong - Q8Research.



BioSFerA Consortium composition: CErTH, Centre for Research and Technology Hellas – Project Coordinator, leader of the market analysis needs activity, industrial model development, lab-scale TAGs hydrotreating development and TRL5 validation; VTT, Technical Research Centre of Finland Ltd – responsible for providing optimized synthesis gas for the gas fermentation unit; Fundación CARTIF – leader of lab-scale optimisation activity of the two-fermentation process; BBEPP, Bio Base Europe Pilot Plant – responsible for the scale-up of the gas fermentation processes at TRL5; CSIC, Spanish National Research Council – selection of microorganisms to be used for the fermentation processes, performance optimisation by genetic engineer application; Q8Research – market assessment of project’s products with commercial and legal point of view; RINA Consulting – techno-economic, environmental, social and Health & Safety analysis; SUMITOMO SHI FW (SFW) – scale-up and techno-economic assessment of the gasification island; GoodFuels (FincoEnergies) – assessment of market potential of European biofuel, techno-economic assessment and fuel characterisation; NTUA, Laboratory for Maritime Transport – responsible for the social LCA and social CBA.

Environment Park – extraction and purification of the TAGs lipids, leader of C&D activity.



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