GLAMOUR

GLycerol to Aviation and Marine prOducts with sUstainable Recycling

PROJECT

GLAMOUR (GLycerol to Aviation and Marine prOducts with sUstainable Recycling) is a H2020 research project to demonstrate the conversion of bio-waste feedstock such as glycerol into jetfuel and marine diesel oil by combining two technologies: Syngas generation using gas solid reactions and compact Fischer-Trospsch process with 3D printed catalyst.

OBJECTIVES

- To develop, test and scale-up new catalyst formulations for chemical and calcium looping reforming
- To select, test and scale-up a new 3D-printed structured catalyst for FT synthesis
- To integrate and demonstrate the glycerol-to-syngas conversion and fuel synthesis in a single process prototype at TRL5 after 1000 hrs of operation
- To perform the overall techno-economic analysis and optimisation of the process for full scale applications
- To assess the overall economics of the process
- To implement the business plan of the GLAMOUR process of the entire value chain
- To improve the social sustainability of bio-fuels and inform policy makers

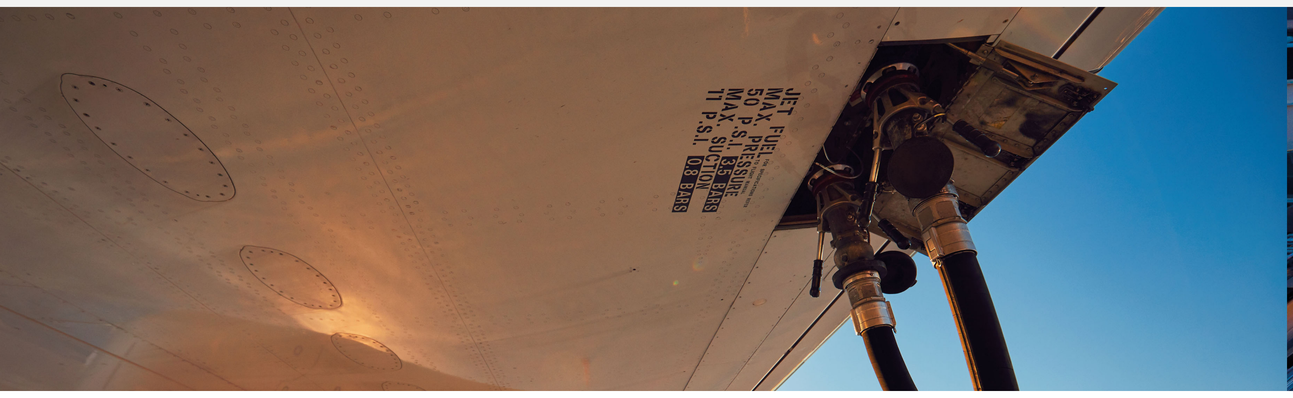
LATEST PROGRESS

The Project has received a six-month extension to complete the demonstration stage.

The research activities on Industrial Applications in WP2 are now completed and partners are looking at the engineering and costs of the fully integrated plant. Low-quality waste-derived glycerol has been purified to reach less than 1% ash content.

The materials for syngas generation and liquid fuel synthesis have been scaled and integrated into the pilot plant for the final demonstration. The Eindhoven University of Technology is now ready to start the TRL5 testing.

Finally, during the next M48 general assembly, CIAOTECH will run an industrial workshop in order to put the GLAMOUR technology in the context of biofuel production and existing R&D experiences in Europe.



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