

The project

REFOLUTION – Refinery integration, scale-up and certification for aviation and marine biofuels production is a Horizon Europe Innovation Action, aiming to demonstrate the cost-effective production of advanced biofuels for aviation and marine sector via a process that can be implemented in existing European refineries.

The project started on 1st January 2023 and will continue through 31st December 2026.



Funded by
the European Union

This project has received co-funding from the European Union's Horizon Europe Research and Innovation Programme under Grant Agreement N° 101096780.

Project partners



university of
 groningen



Universität
Rostock



Traditio et Innovatio



refolution.eu



REFOLUTION Project



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REFOLUTION

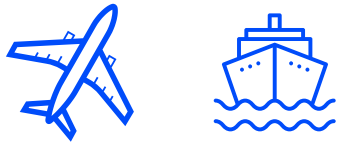
Unlocking the potential of biofuels

Refinery integration, scale-up
and certification for aviation
and marine biofuels production



Activities

The REFOLUTION project aims to demonstrate the cost-effective production of advanced biofuels for **aviation and marine sector**



via a process that can be implemented in existing European refineries.

TECHNOLOGY

Bio-oils produced from fast pyrolysis → Advanced biofuels

Through intermediate process steps combined with downstream **co-processing technologies**:

- Fluid Catalytic Cracking
- Hydrotreating

As robust routes towards aviation and marine fuels

Unlocking the potential of biofuels

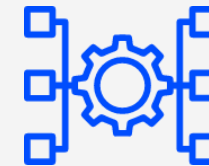
The project is designed to facilitate the market uptake of advanced biofuels in Europe by tackling the challenges limiting their full development.

The implementation of REFOLUTION technology is expected to reduce the production costs by:

- 50% capital expenditures
- 45% operative expenditures



Novel technologies for production of biofuels for aviation and marine sectors



Implementation in existing industry infrastructures, decreasing CAPEX and OPEX



Paving the way for standardization and certification



Bringing new knowledge de-risking the technology