

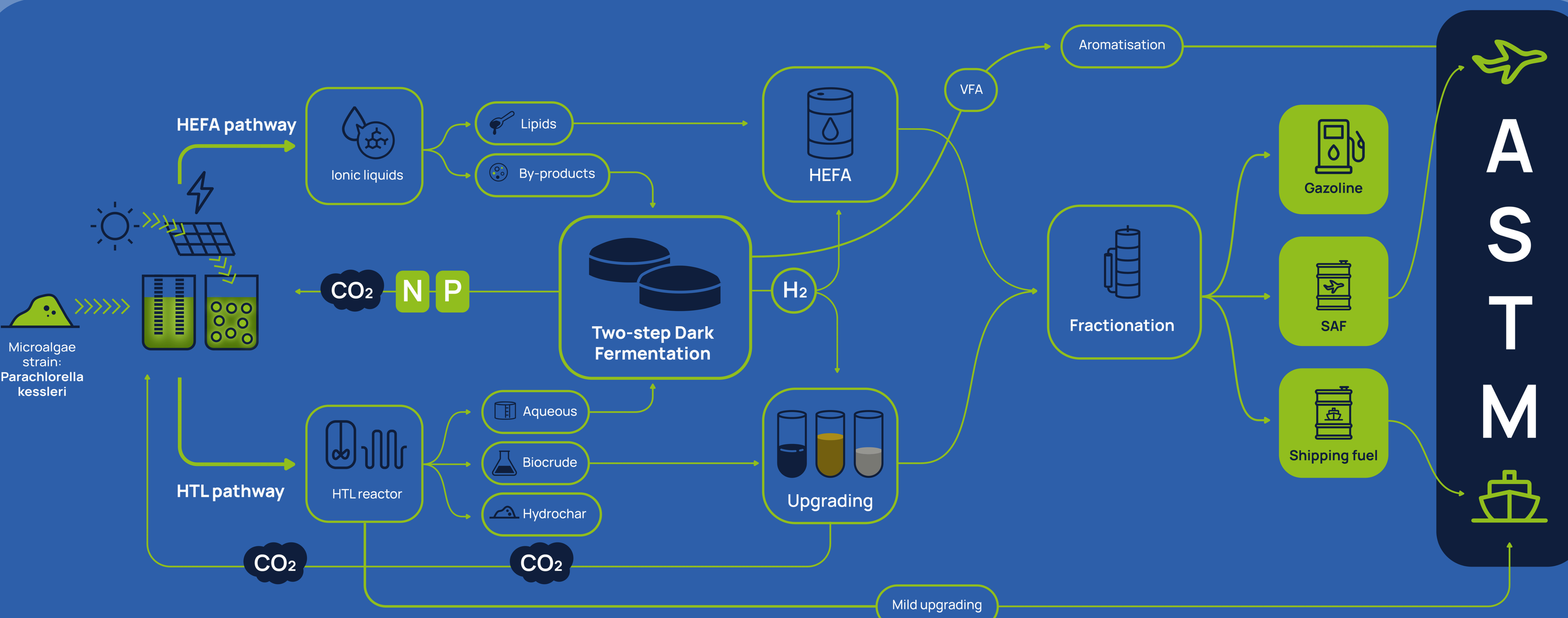
The concept

This project wants to support the **large-scale production of microalgae-based sustainable aviation and maritime fuels**, working to deliver an innovative, circular and complete biorefinery based production chain and also to develop a decision tool to analyze different scenarios to guide investors to the best solution for their specificities.

The process originates with **microalgae cultivation in photobioreactors (PBRs)** covered with semi-transparent photovoltaic (STPV) shell and develops along two possible pathways (HEFA, hydrotreated esters and fatty acids and HTL, hydro-thermal liquefaction), valorising by-products and power streams and finally producing aviation and shipping fuels that comply with American Society for Testing and Materials (ASTM) standards.

Three pillars of COCPIT approach:

- 01** Innovative solutions throughout the production process
- 02** Sustainability of the process through circularity
- 03** De-risking technology through COCPIT decision tool implementation



- Techno-economic evaluation, LCA, sLCA
- COCPIT decision tool
- Marketplace

Medium-long term impacts

- Availability of disruptive renewable energy and fuel technologies
- Costs and efficiency optimization of renewed energies
- De-risking investments in sustainable fuel technologies
- Better assimilation of renewable fuel-based solutions



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