



SUSTEPS aims to revolutionize renewable fuel technologies by advancing the algae-based biofuels value chain. The project's goal is to create technologies that meet the market's specifications for replacing fossil fuels in targeted sectors, paving the way for a cleaner and more sustainable energy future.



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PROJECT DETAILS

Start Date: September 2023
Duration: 48 months

By incorporating waste stream valorization and utilizing green hydrogen and biologically captured process flue gas (carbon capture), the integrated process is designed to be more efficient. The production of biofuels using microalgae as a raw material and CO₂ as a feedstock holds significant potential for positive environmental impact as well, consequently mitigating greenhouse gas levels in the atmosphere.

PROJECT OBJECTIVES

- To foster international cooperation
- To design a cost-effective, sustainable and safe integrated process
- To develop advanced microalgal bio-production systems supported by system biology tools
- To develop a high-oil-yield biocrude generation process
- To develop a biofuel upgrading process that meets the fuel market specifications
- To establish circular/valorisation pathways along the value chain
- To develop a biofuel production process at TRL 4 level
- To engage with key target groups and effectively communicate, disseminate and exploit SUSTEPS outputs.

PROJECT PARTNERS

