

Production of Hydrogen, Methanol and SAF

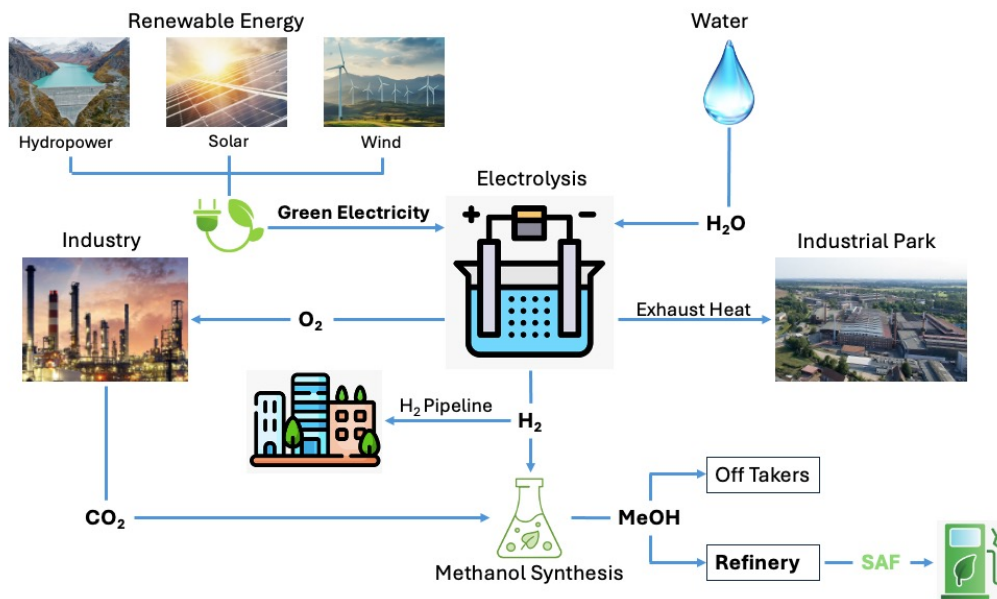
Sustainable production of hydrogen, methanol and synthetic fuel with leading technology providers by turning water and CO₂ into green gases and liquids using electricity from renewable energy sources.

Project Description

Through the enormous consumption of coal, oil and natural gas, we pollute our planet with billions of tonnes of CO₂ every year.

- Hydrogen can be used as a raw material in industry, as an energy carrier in the transport and energy sectors, as a synthetic fuel and as a storage medium.
- With innovative electrolyzers hydrogen can be produced from green electricity.
- Methanol synthesis using CO₂ enables the production of synthetic fuels (eFuel).
- For the production of SAF (Sustainable Aviation Fuel), the green methanol is further processed in a refinery.
- We support industrial customers and climate-conscious companies in decarbonising value chains.

Production process of Hydrogen – Methanol – SAF



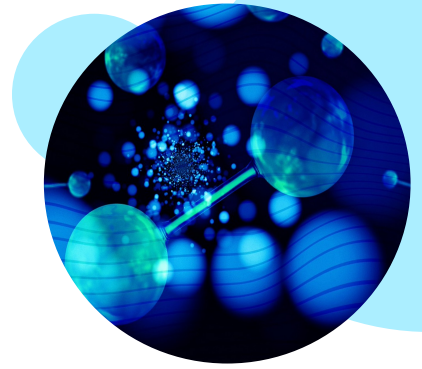
Project Partner

- Strategic local partner
- Industrial technology provider
- Electrolysis, methanol synthesis, SAF procedure
- Green power supplier
- Carbon Capturing
- Financing partner
- Finomics AG – Project initiator

Impact Investment

Our project considers environmental, social and governance criteria according to ESG.

ESG 9 – SDG 7, 8, 9, 13



Market

EU Regulations

The implemented EU regulations are driving the market forward. The demand for green methanol has therefore risen sharply.

- The new EU regulation for aviation (ReFuelEU 2023/405) came into force on January 2024. Since then, SAF (Sustainable Aviation Fuel) blending has been a regulatory requirement in aviation. The basis for SAF is green methanol, among other things.
- A similar EU regulation (FuelEU Maritime 2023/1805) has come into force for shipping and there are similar requirements regarding the blending of green methanol.
- For other customers such as heavy goods vehicles (logistics and delivery fleets), the pressure to find solutions to replace fossil fuels has also increased.

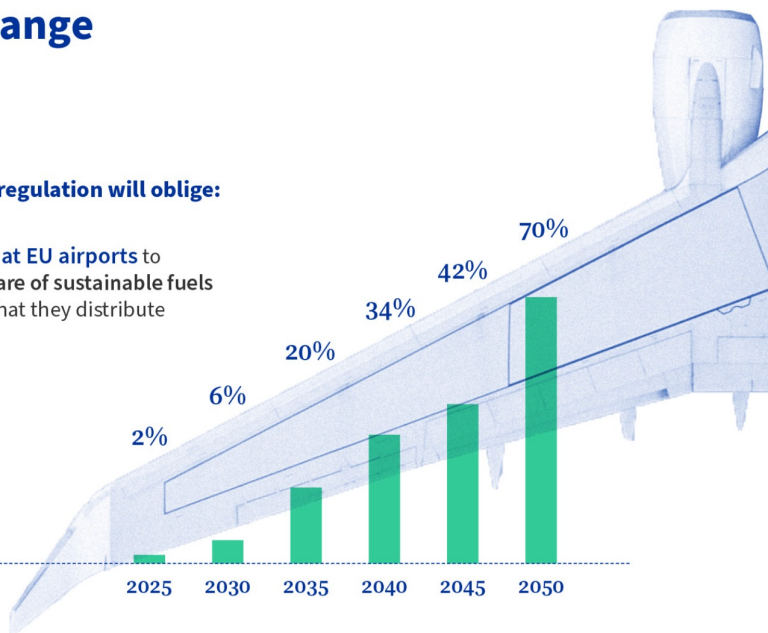
What will change



The ReFuelEU aviation regulation will oblige:

1. aircraft fuel suppliers at EU airports to gradually increase the share of sustainable fuels (notably synthetic fuels) that they distribute

Minimum share of supply of sustainable aviation fuels (in %)



Demand

An extract from the IRENEA Report for Renewable Methanol:

- E-Methanol is a way to increase the value of green energy and store it safely.
- Current demand of methanol is 98 million tonnes per year. Anticipated total demand of renewable methanol is 500 million tonnes per year in 2050.
- Modular and standardised units are required to reach needed capacities.