



METHANOLOGY

Gerhard Meier – Cofounder and CEO

Christoph Herz – Cofounder and CTO

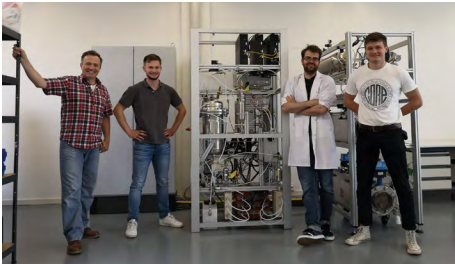
Founded in 2020

methanology.com



Founders

METHANOLOGY is a startup founded in 2020 by two entrepreneurial engineers: Gerhard Meier and Christophe Herz.



METHANOLOGY's founders:
Gerhard Meier and Christophe Herz.

Mission

Located in Schaffhausen the mission of the startup is to develop a sustainable and fossil-free energy solution based on renewable methanol.

Innovation

Whereas the already known process to create methanol uses electrolysis, their innovation, called WILLPOWER ENERGY, is based on a biocatalytic reaction driven by enzymes. It's a reverse catalytic process that takes carbon dioxide and water to produce

an alcohol: methanol. Renewable electricity is needed to stimulate enzymes in the system, which are the reaction's catalysts. This technology leads to a new approach to produce renewable methanol, since it does not require high temperature or pressure, and relatively low energy to achieve high efficiency rates. This clean energy liquid methanol can then be used to heat houses by replacing the oil heaters, or powering electric cars for increasing the range to more than 900 km. METHANOLOGY is still in an early stage. Although the first version of the prototype is working, the team is engineering the next prototype called WPE-RS10 with an increased system efficiency of up to 80 %.

Markets and Clients

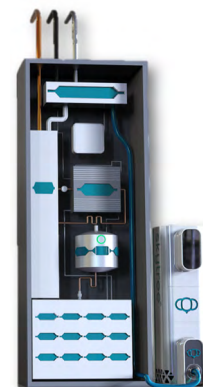
METHANOLOGY needs carbon dioxide, they want to capture it directly at the source, where it is emitted. More and more farmers operate biogas systems, where also biogenic CO₂ is available. With this source of CO₂, every average-sized biogas plant could produce 250'000 litres of methanol per year. Moreover their product can be built up in small bioreactors that make it possible to be broadly distributed. This leads to a huge market potential in various contexts.

Vision

With a distributed approach the startup wants to share the captured value. Instead of a single company making profit, a community of farmers in Switzerland and around the world can be equipped with this technology. METHANOLOGY's vision is not only to build the next generation of technology, but to innovate the business model and impact the energy production system. They want to build a circular methanol economy.

Funding

The startup is mostly privately owned and financed. They see this as a big advantage since other industries, such as the automotive and aviation, have more and more interest in their sustainable solutions. Everybody has the opportunity to participate in their crowd investing and become a cleantech pioneer too!



METHANOLOGY's
bioreactor prototype.