

PBR2Scale

Ultra-Compact & Artificial Illuminated Photobioreactor Module

The Project

Microalgae have enormous potential to contribute to the UN SDG development goals in a world facing multiple crises that reinforce each other. In focus here are especially the bulk products like proteins, starch or fats for biofuels or biopolymers as materials to drive a future circular bioeconomy forward. But up to now only a few ten thousand tons of microalgae biomass are really produced world wide. No scalable and at the same time cost efficient solution is available at the market.

The aim of the project PBR2Scale is to further develop and commercialize an ultra-compact photobioreactor modul for the use in microalgae production plants.

The system under development can be characterized by highest productivities with energy efficient artificial illumination. The modularization of the system aims at a service friendly and individual expansion of the production capacities according to the user's wishes.

The Team

Location: Fraunhofer IGB Stuttgart

Members: Gordon Brinitzer

AHEAD Infos Batch: 13 / 2023 Phase: 1 Track: Spin-off

The Business Model

Unique Selling Proposition: Scalable, high performanve modules as a production plattform for various microalgae biomasses

Unfair Advantage: Patent filed, scalable, energy efficient, highly productive, cost efficient, service friendly

Revenue Model: Production, Sales, Service

Venture Readiness Level



Technology Readiness Level



The Side Facts

Customer Focus: B2B

Searching For: Co-Founder; Investors; PoC Partner; (Pilot) Customers; Mentors;

Industry Tags: Industrial Goods & Services; Technology Hardware & Equipment

Technology Tags: Bioengineering; Circular Economy; Clean Tech;