

AlgoSource Technologies:

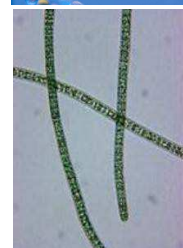
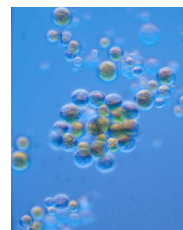
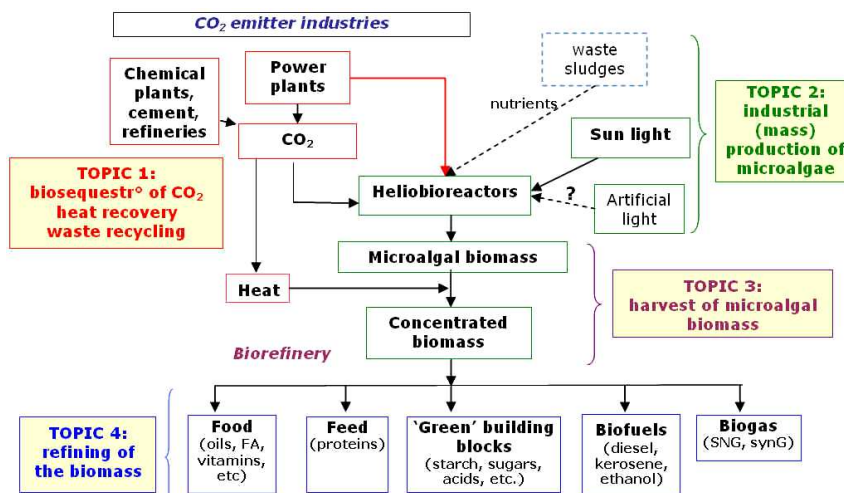
conceptual engineering and process development for photosynthesis of microalgae and biosequestration of CO₂

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Microalgae: Challenges and Opportunities for Sustainable Bioenergy and Biochemicals Production (20 May 2010)

For industries emitting CO₂, a truly sustainable solution for sequestration is controlled solar photosynthesis, in particular by microalgae. There is no techno-economic biosequestration without biorefining of the microalgal biomass to valuable products. Beyond optimal choice of the photobioreactor, the industrial challenge is process integration. Even more than the mass balance, important for optimization of recycle loops, the energy balance is critical: heat from upstream industries and excess sun energy (wavelengths not used by photosynthesis) must be utilized for harvesting, separating and transforming the biomass. Key tools are industrial ecology and energy/exergy analysis.

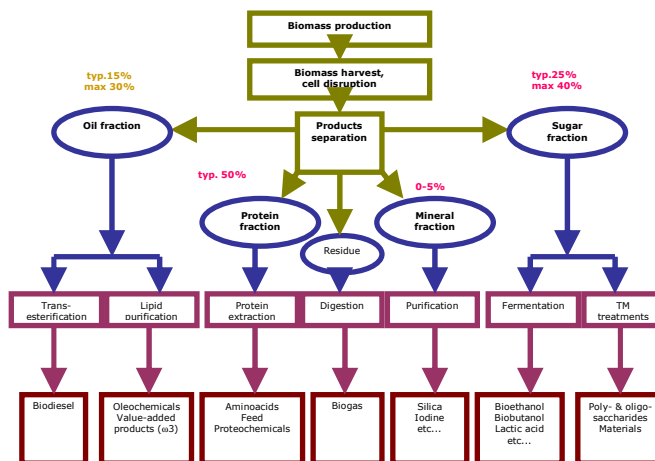


Our partner **AlphaBiotech**, located in Asserac, is the oldest producer of microalgae in France (since 1993)



Our management team has extensive experience in:

- production and transformation of microalgae (AlphaBiotech, www.alpha-biotech.fr)
- design and simulation of photobioreactors (GEPEA, www.gepea.fr)
- process intensification and industrialization (ENKI Innovation, www.enki2.com)
- business strategy & organization (Stratorg, www.stratorg.com)



Our partner **F&M**, located in Firenze (Pr. Tredici) develops the Green Wall Panel photobioreactors:



www.eaba-association.eu



AlgoSource is member of the Steering Board of **EABA**, the European Algae Biomass Association (12 members, incl. Roquette for France)



AlgoSource is partner of **SUPRABIO**, one of the three FP7 biorefineries projects (FP7 BIOREFINE 241640, with BIOCORE FP7 BIOREFINE 241566 and EuroBioRef FP7 BIOREFINE 241718)



'Microalgae demo plant' 10 ha
Call FP7 Energy.2010.3.4-1



PBRs and raceways in operation in partners units: a) Tubular PBR in A4F microalgae production unit, Portugal; b) Green Wall Panels of F&M, Italy; c) and d) Raceways of 2000 m², designed by BCU and in operation at Ein Yahav, Israel.