

IDEA ROADMAP TOWARDS IMPLEMENTATION OF ECONOMIC VIABLE ALGAE VALUE CHAINS IN NWEUROPE

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Introduction

The Interreg NWEurope project IDEA envisions the development and enrolment of economic viable value chains based on micro-algae in NWEurope, with focus on phototrophic microalgae for higher value applications like feed, food and cosmetics.

Aim: Propose concept of an algae value chain implementation plan (roadmap) based on:

- (1) needs of actors along the value chain,
- (2) the reality of spatial distributions (logistic aspect),
- (3) quantities of biomass (fractions) required,
- (4) product specific requirements, and
- (5) economic aspects.

Challenges/opportunities for algae value chains

- Multiple algae species are a source of a variety of compound:
 - Which algae species to focus on?
 - Which compounds to target?
 - How to process the biomass? Required quality?
 - Tailoring algae biomass (fractions) towards specific ingredients
- Year-round cultivation in NWEurope climate
- Economic viability
- Algae as alternative crops for farmers → how to start?
- Contribution of algae to carbon capture and utilisation and/or storage (CCU/CCS)
- Contribution of algae to circular economy for side-stream re-use
- Linking offer and demand of algae biomass

Elements for inclusion in roadmap

