

# Prospective and Attributional LCAs of Emerging ALGAE-PROducts in the BANOS Region

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# Scope of the project

Supporting product developments from TRL4-5 to TRL 7-8

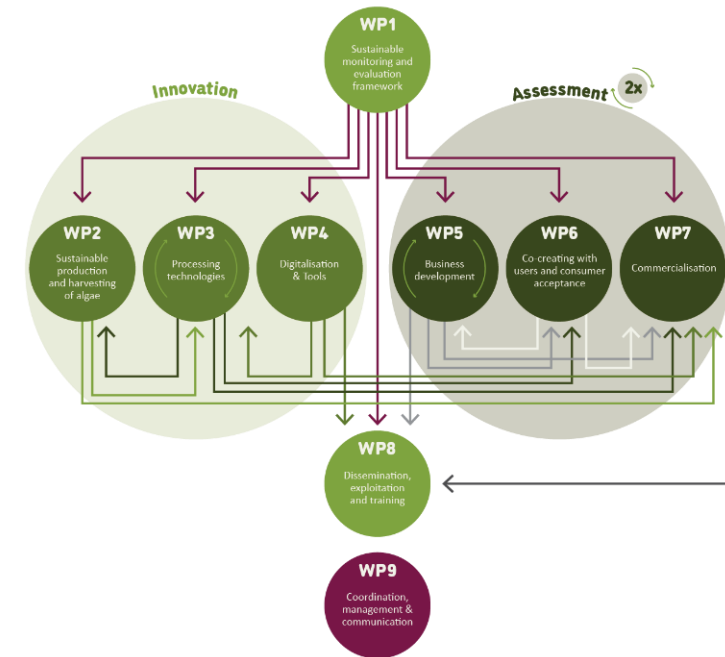
To demonstrate market accessibility and presence for sustainable and innovative algae products and solutions in the Baltic and North Seas.

26 partners coordinated by Submariner

20 key exploitable results from 9 work packages

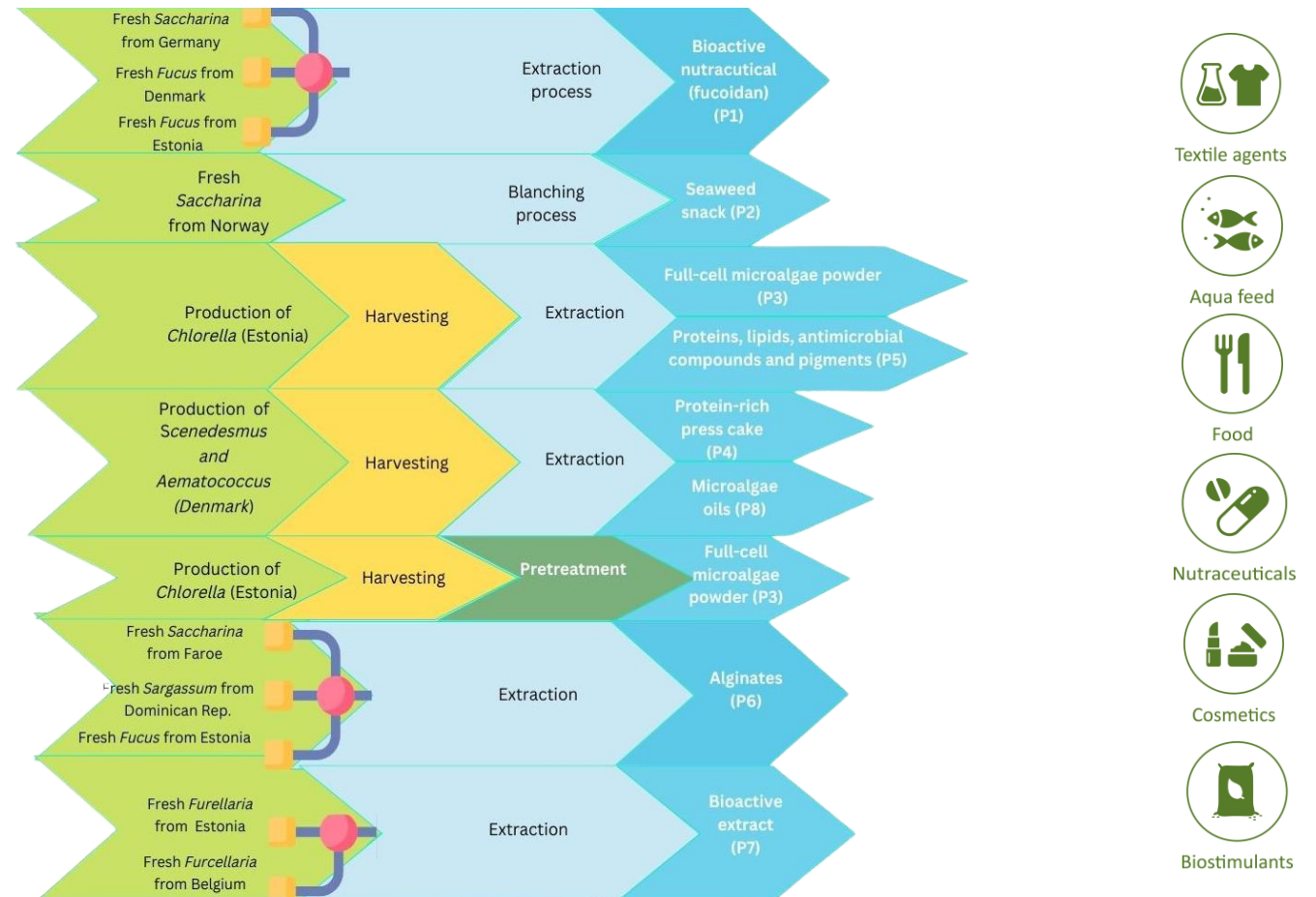
8 products from 6 pilots

Both micro- and macroalgae



# Value chain(s) analysed

- x8 tentative products in the pipeline
- Supporting product developments from TRL4-5 to TRL 7-8
- Most processes are evolving in the course of the project
- Scaling and optimisation of production, pretreatment, blanching, drying, fermentation, and more...



# Methodology



- Combination of attributional and prospective LCAs, and stakeholder participation
  - *PEF method, system boundaries and functional units adapted to each case*
- Objectives: (i) raise awareness of value chain impact hotspots, (ii) identify optimisation strategies, (iii) plan for more sustainable scaling and (iv) substantiate green claims
- LCAs conducted in two phases
  - *Phase 1 – streamlined attributional LCAs of existing value chains – focus on (i) and (ii)*
  - *Phase 2 – prospective LCAs of potential scaled value chains – focus on (iii) and (iv)*
- Status and timeplan
  - *2025 – Phase 1 goal and scope (Mar), LCI (June), LCIA, Report and Phase 2 start (Sep)*
  - *2026 – Phase 2 iterations, internal reports and green claims support workshops (Oct), publications (Dec)*



# Conclusions & main messages



- Focus is on the **start-ups** and supporting development of **low-impact products to market**
- Aim to **substantiate green claims** and **educate stakeholders through participation**
- Ambition to contribute to developing a **harmonized LCA method**, or perhaps several sets of recommendations (streamlined, prospective, process selection, etc.) for the whole algae sector



# Thank you for your attention!

AlgaeProBANOS

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Harmonising Algae-Based LCAs: Selecting Systems and Data Providers

Webinar, 4<sup>th</sup> February 2025