

POLICY BRIEF

European macroalgae import



382 060 tons

mix of dry weight/semi dry/fresh weight

mainly in the phycocolloid industry



65-85% of the total algal biomass is discarded as waste



European microalgae production



represents less than 0.5% of the global microalgae production

WE NEED TO...

Accelerate and support algae cultivation





Adopt innovative production models to enhance algae yield



Simplify licensing & integrate algae cultivation in maritime spatial planning

> Make licensing process faster for offshore, nearshore and inland seaweed farms



Enable the cultivation of high-demand species in controlled environment

Support controlled algae cultivation to meet the market demand



Showcase ecosystem benefits to improve societal acceptance

Highlight carbon impact, biodiversity gains and other benefits of algae production



Measure environmental. economic and social impacts

Prove algae's role in the blue economy & circular bioeconomy

WE NEED TO

Remove regulatory barriers and harmonize regulatory landscape



Establish a clear, supportive and coherent regulatory framework for microalgae production



Encourage safe use of secondary input materials in algae production where appropriate



Utilize cost-effective fertilizers like Nitrogen (N) and phosphorous (P) for algae cultivation



Establish clear regulations for algae grown with secondary inputs or sourced from environmental remediation



Define the regulatory status of waste-fed algae products



Harmonize and simplify European regulatory framework

Standardize regulations across Europe with clear fieldspecific guidelines aligned with European laws



Align feed and food safety regulations for contaminants

Define thresholds for harmful substances based on portion size and toxicity



Clarify the definition of novel food ingredients and feed additives

Establish clear purity criteria, differentiate raw vs. extracted products, and streamline autorization processes



Reevaluate testing and assessment requirements

Review toxicological and genotoxicological testing requirements and reassess allergenicity risk assessments, protein quality, and digestibility

WE NEED TO...

Promote acceptability of algae as food or food ingredients



Encourage wider adoption of algae, particularly for food

Increase consumer awareness of the algae's nutritional and environmental benefits in daily diets



Raise public awareness through targeted campaigns

Educate the public on algae's health benefits, sustainability and the role in circular economy



Engage with educational institutions

Collaborate with schools, universities, and vocational programs to create curricula that train a skilled workforce for the algae industry



Support the EU4Algae platform

The platform facilitates collaboration among European algae stakeholders and provides easy access to evidence-based algae informations

Promote the establishment of regional clusters to facilitate the processing of co-products



Facilitate technology transfer from research to industry

Encourage the transfer of innovative technologies from research institutions to industry with licensing agreements and provide support for pilot-scale



Build open-access pilot-scale facilities for biorefinery processes

Establish pilot scale biorefinery facilities near co-product resources to support algae processing. These facilities should be designed to benefit all stakeholders



Enhance cooperation through biorefinery cluster

companies by creating biorefinery clusters (stabilization and transportation of co-products optimization, local collaborations...)

WE NEED TO ...

Boost funding for applied research, development and scaleup



Expand funding and subsidies for the algae industry

Offer financial support to drive growth and innovation in the algae sector



Support standardization initiatives

Fund industry standardization efforts like the CEN TC 454, ensuring long-term support from DG Mare and DG SANCO



Establish grant programs

Launch targeted grants for research, development, and commercialization of sustainable algae technologies



Facilitate matchmaking between business and investors

Create platform that connect algae businesses with potential investors to provide financial backing for innovative algae-based solutions



Create dedicated investment funds

Set up investment funds focused on sustainable algae innovations









HORIZON-CL6-2021

Project: 101060607

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