WORKSHOP LA ROCHELLE DEC 2018

GAPS AND BARRIERS LIMITING THE INDUSTRIAL DEVELOPMENT OF THE MICROALGAE SECTOR IN THE **EUROPEAN ATLANTIC AREA**











Invited microalgae experts

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Atlantic Area

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MICROALGAE

from

countries

partners

Atlantic

and

area

project

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An open discussion with experts on different topics 100% Δ 90% 80% 70% 60% ÷(\$); **,**• 50% 444 40% 30% 20% 10% 0% Legislative Scientific Promisina **Commercial Administrative Technological** markets gaps gaps & marketing gaps gaps gaps

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Legislative gaps and guidelines

Formation

Improve knowledge of legislative staff about microalgae

Nagoya protocol

Create ecological footprint certification

Define regulatory framework and templates for microalgal strain import and traceability

Clearly define "domestic algae" for regulatory actions

Food and Feed legislation

Produce a document template for novel food production/commercialization Define ingredients from GMO microalgae to add to the Novel Feed list





The most critical barrier





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Scientific gaps and guidelines

Major gap: lack of microalgae **genomic data** interpreted by microalgae experts

Improved knowledge on **risks and prevention of contaminations**, including inter- and intraspecific interactions

Enhance validation of proofs of concept for microalgae related products

Improve knowledge for **biomass composition**

Invited microalgae experts from the Atlantic area countries and project partners







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Promising markets

Proteins and polysaccharides specific to microalgae (not synthesized by low-cost alternatives)

Use of microalgae for waste **bioremediation** and valorization as biofertilizers

Antimicrobial activities of microalgae and related products

Vaccines recombinant and proteins from GMO microalgae

Microalgal sources of food proteins

Commercial & marketing gaps and guidelines

Decrease costs of microalgae products increase to competitiveness

Enhance industry driven research Maintain marketing effort for a high quality microalgal products Promote marketing analysis

Increase public funding of R&D



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Administrative gaps and guidelines

Develop and strengthen **networks** between microalgae stakeholders

Harmonizeadministrativeproceduresacrossagriculture,aquaculture and biotechnologyadministrative



Technological gaps and guidelines

Expertise in high scale production

Decision supporting tools

Invited microalgae experts from the Atlantic area countries and project partners







