



Decarbonising biotechnology  
for sustainable agriculture

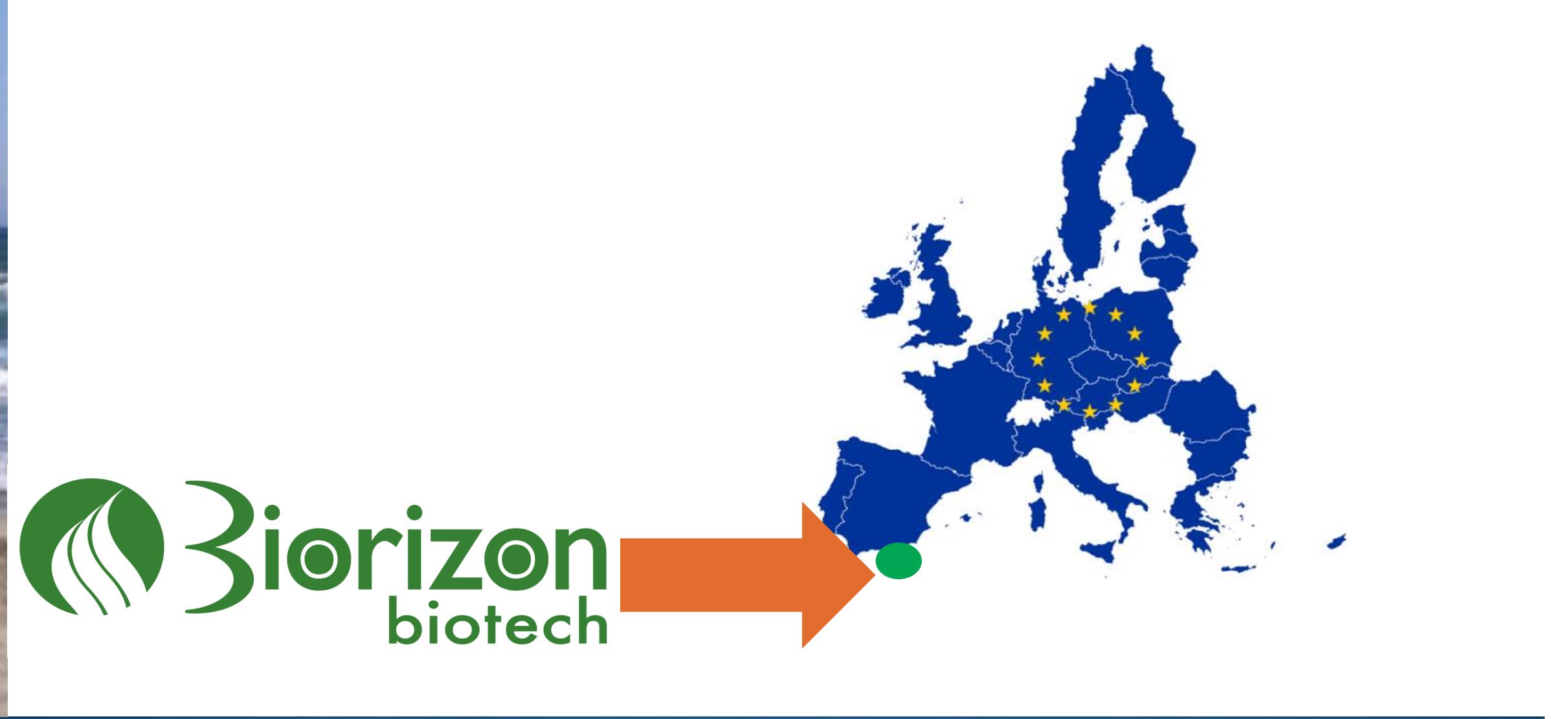


# Biorizon biotech

## Microalgae-based biostimulant products

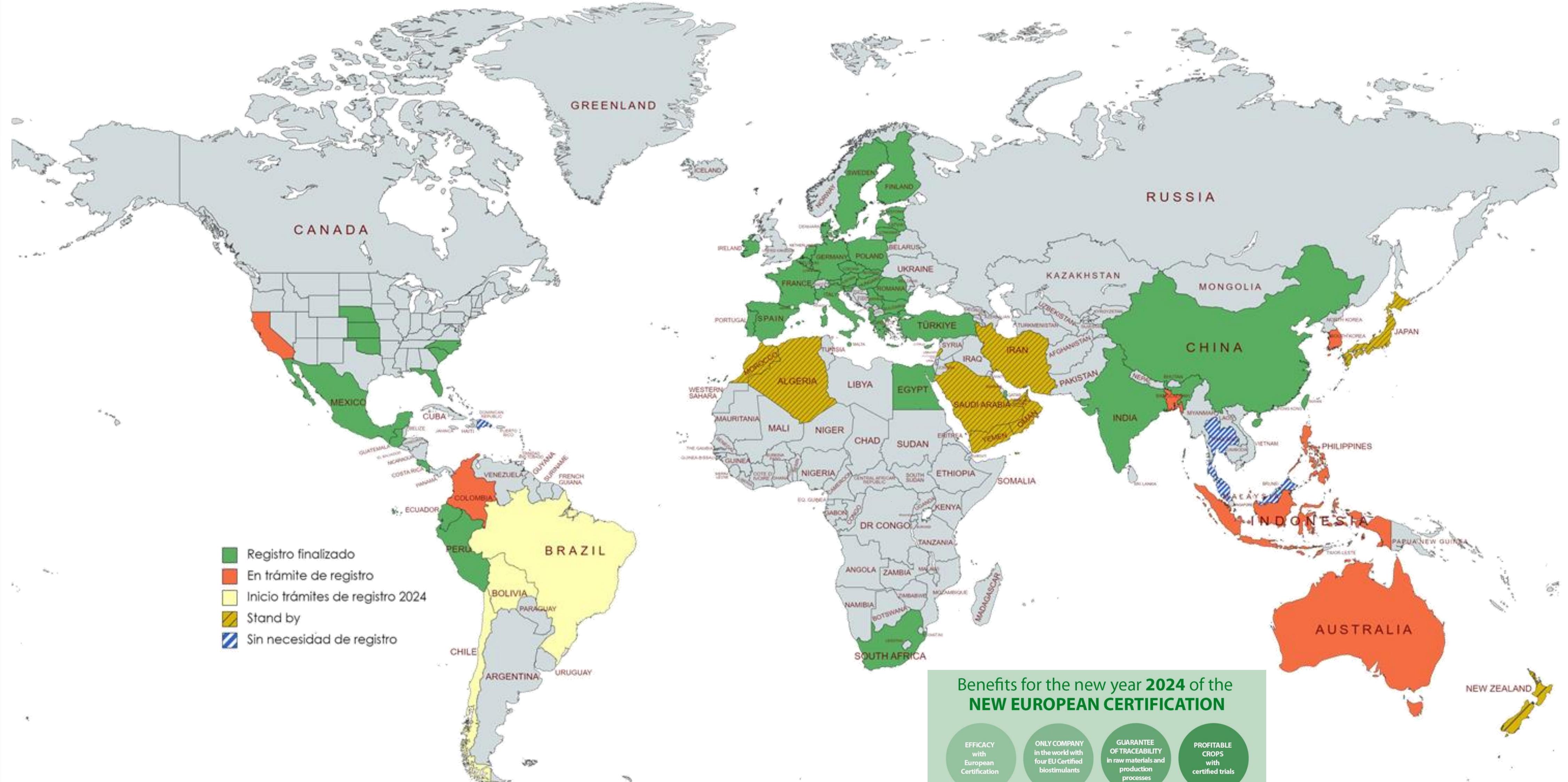


Co-funded by  
the European Union





- █ Registro finalizado
- █ En trámite de registro
- █ Inicio trámites de registro 2024
- █ Stand by
- █ Sin necesidad de registro



### Benefits for the new year 2024 of the NEW EUROPEAN CERTIFICATION

Efficacy  
with European  
Certification



ONLY COMPANY  
in the world with  
four EU Certified  
biostimulants

GUARANTEE  
OF TRACEABILITY  
in raw materials and  
production  
processes

PROFITABLE  
CROPS  
with certified trials



We work for a sustainable  
and productive agriculture

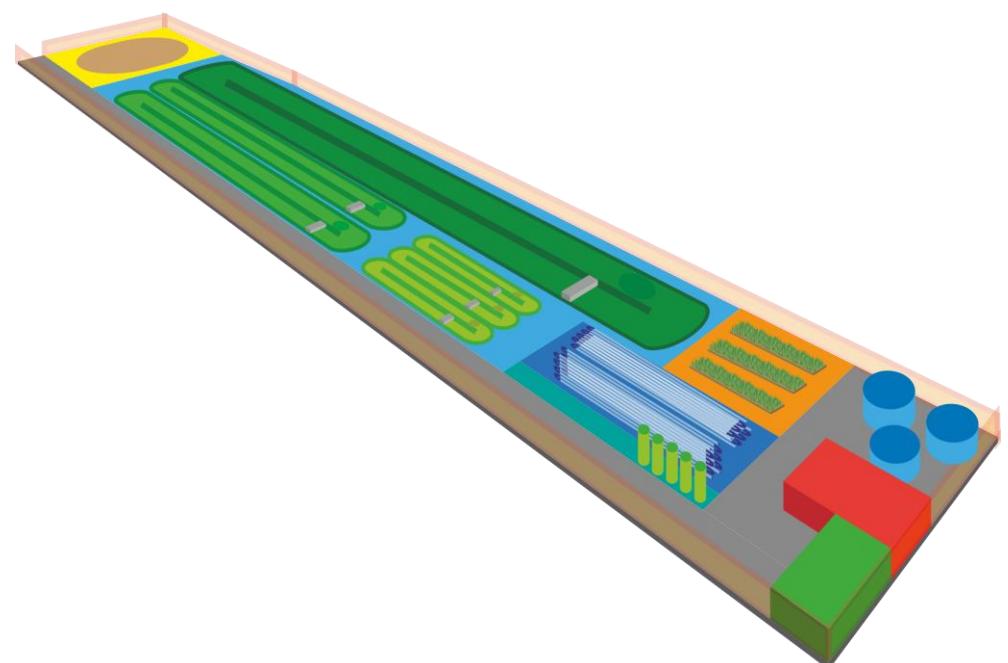
biorizon.es

# World pioneers in the development of microalgae-based products for agriculture

## Our process our innovation



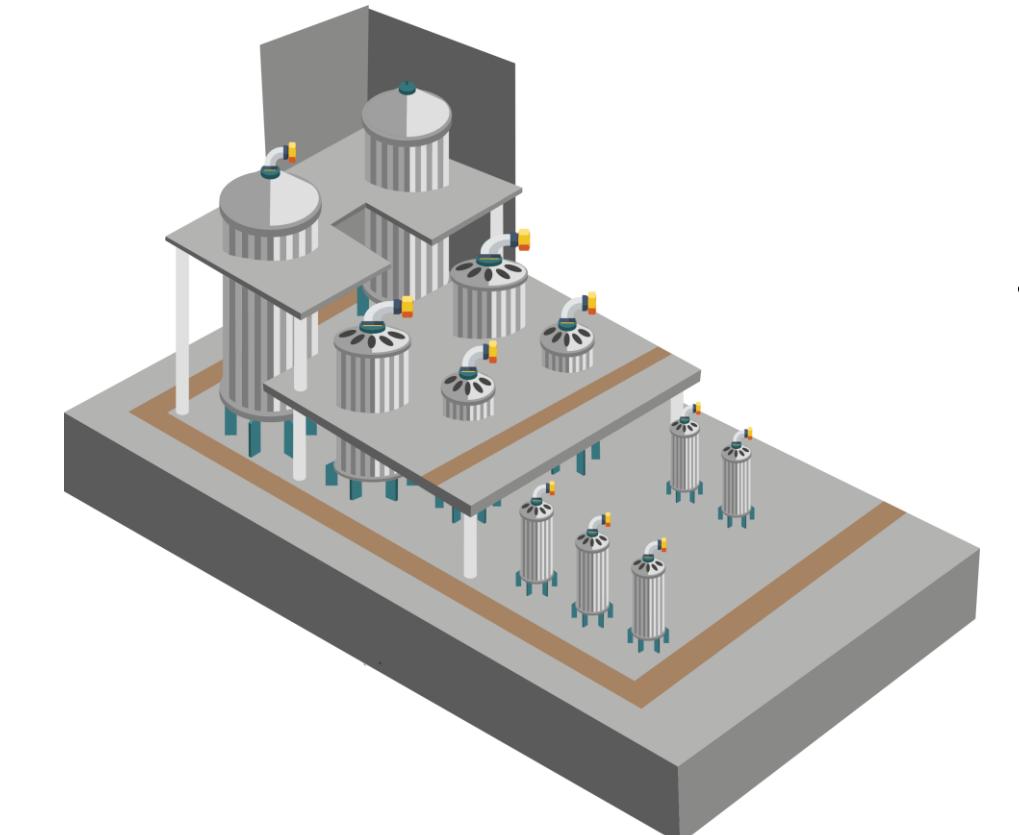
Microalgae  
Cultivation



Biomass



Biocatalytic  
Processing



Multienzymatic cascade reaction

 TrieTech<sup>©</sup>  
Technology

Bioproducts



# Technology & Solutions



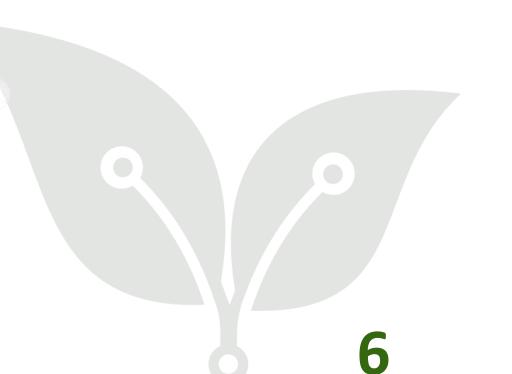
**BIOSTIMULANTS**



**BIPROTECTORS**



**MICROBIAL  
BIOSTIMULANTS**



# Technology & Solutions



BIOSTIMULANTS



ENZYMIC

ORGANIC

TRITECH TECHNOLOGY



ORGANIC TRIETECH LINE



MICROBIAL



BIOPROTECTANS



NUTRITIONALS



CALCIO

MICRO

COMPLET

BOTANICAL EXTRACTS





# Facilities and Infrastructure



PiTA



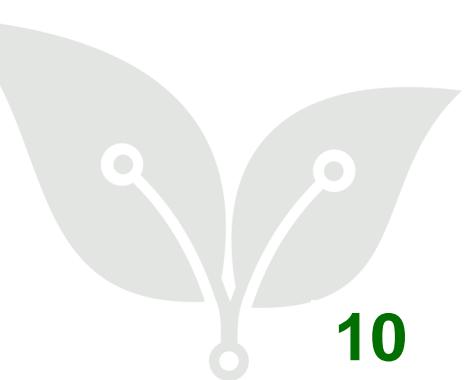
# HQ & Industrial facilities





# AGORA – SABANA

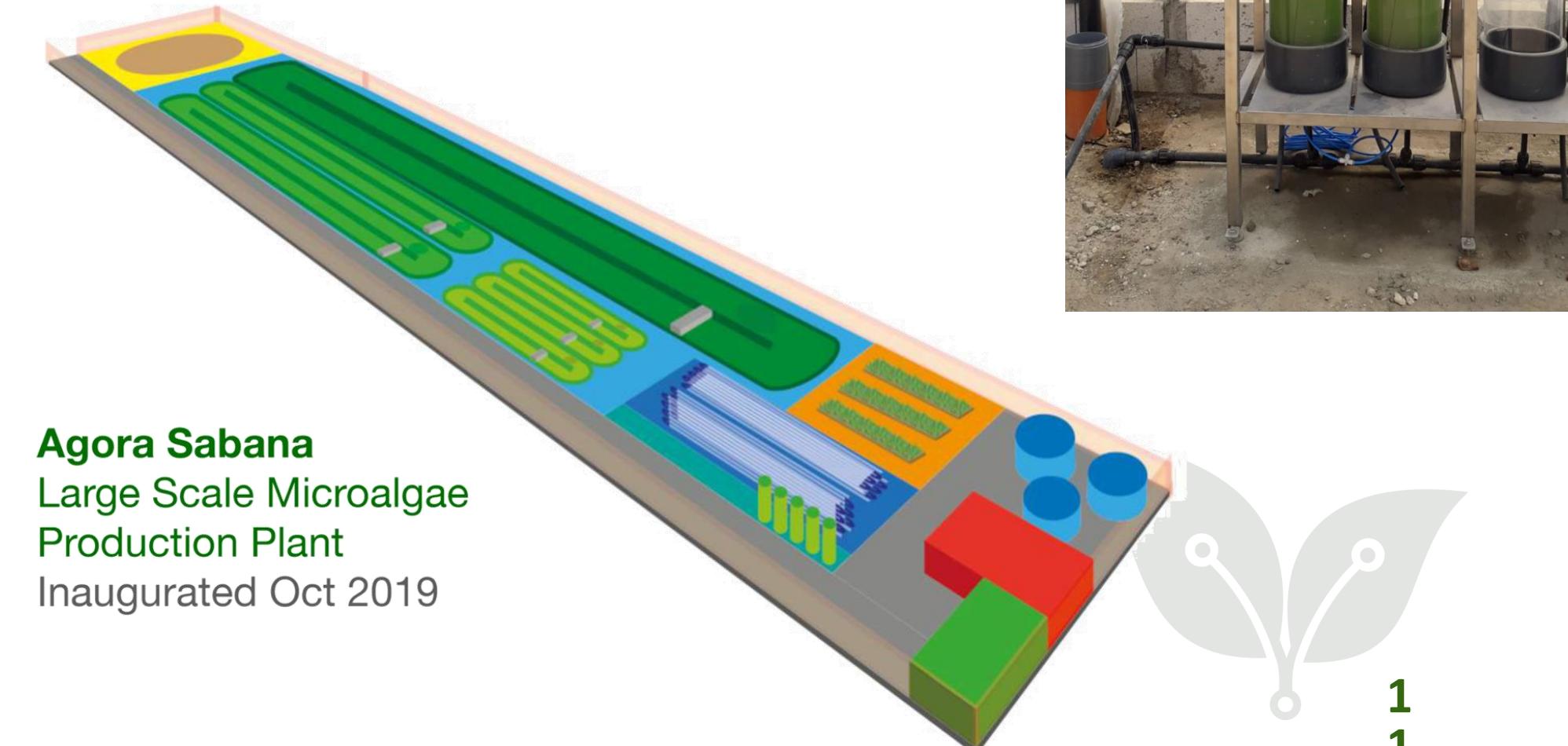
## MICROALGAE PRODUCTION PLANT



# AGORA - SABANA



2,0 hectares  
Microalgae Production Facility



Project  
funded by the  
EUROPEAN UNION



**Agora Sabana**  
Large Scale Microalgae  
Production Plant  
Inaugurated Oct 2019

# New Microalgae Production Facility

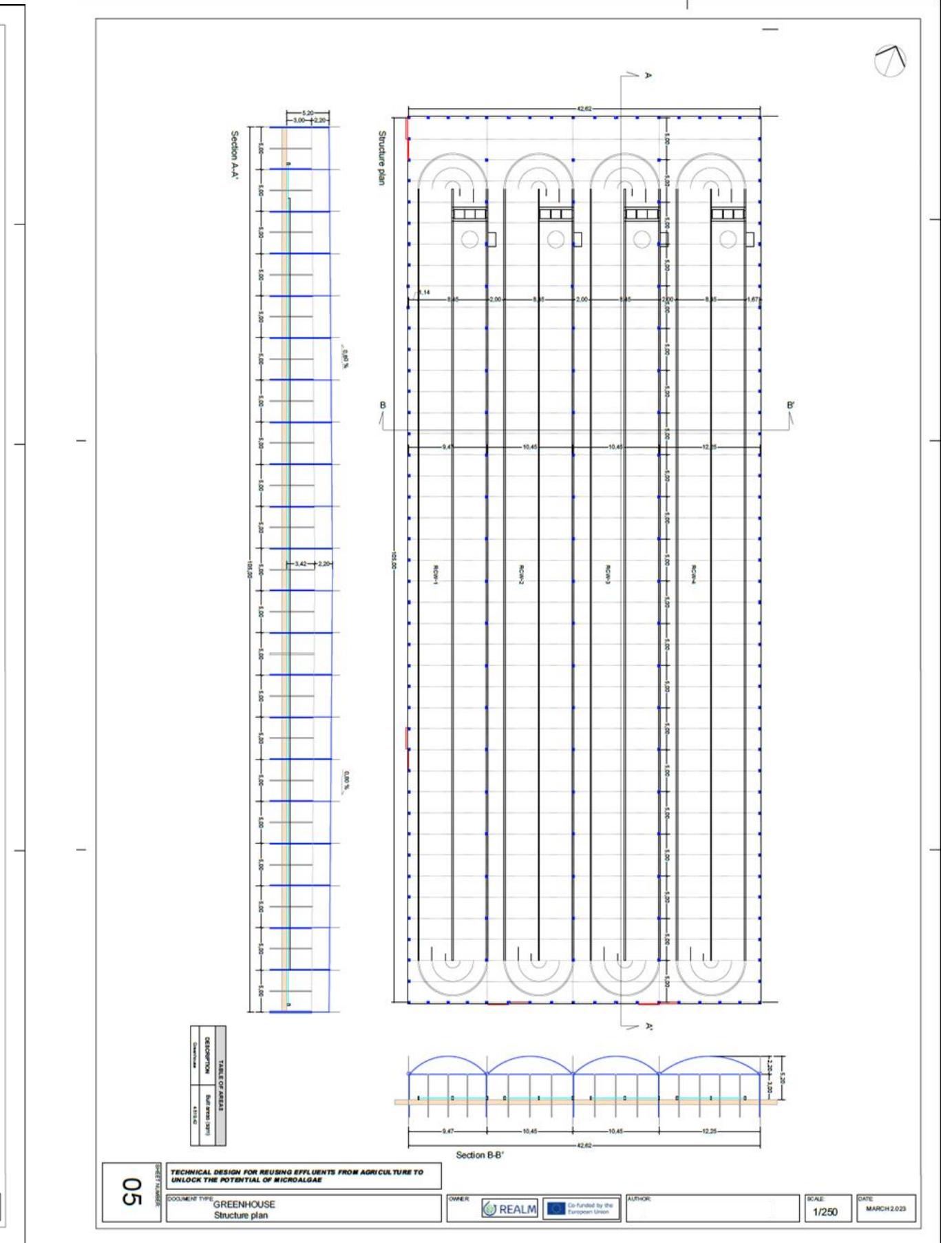
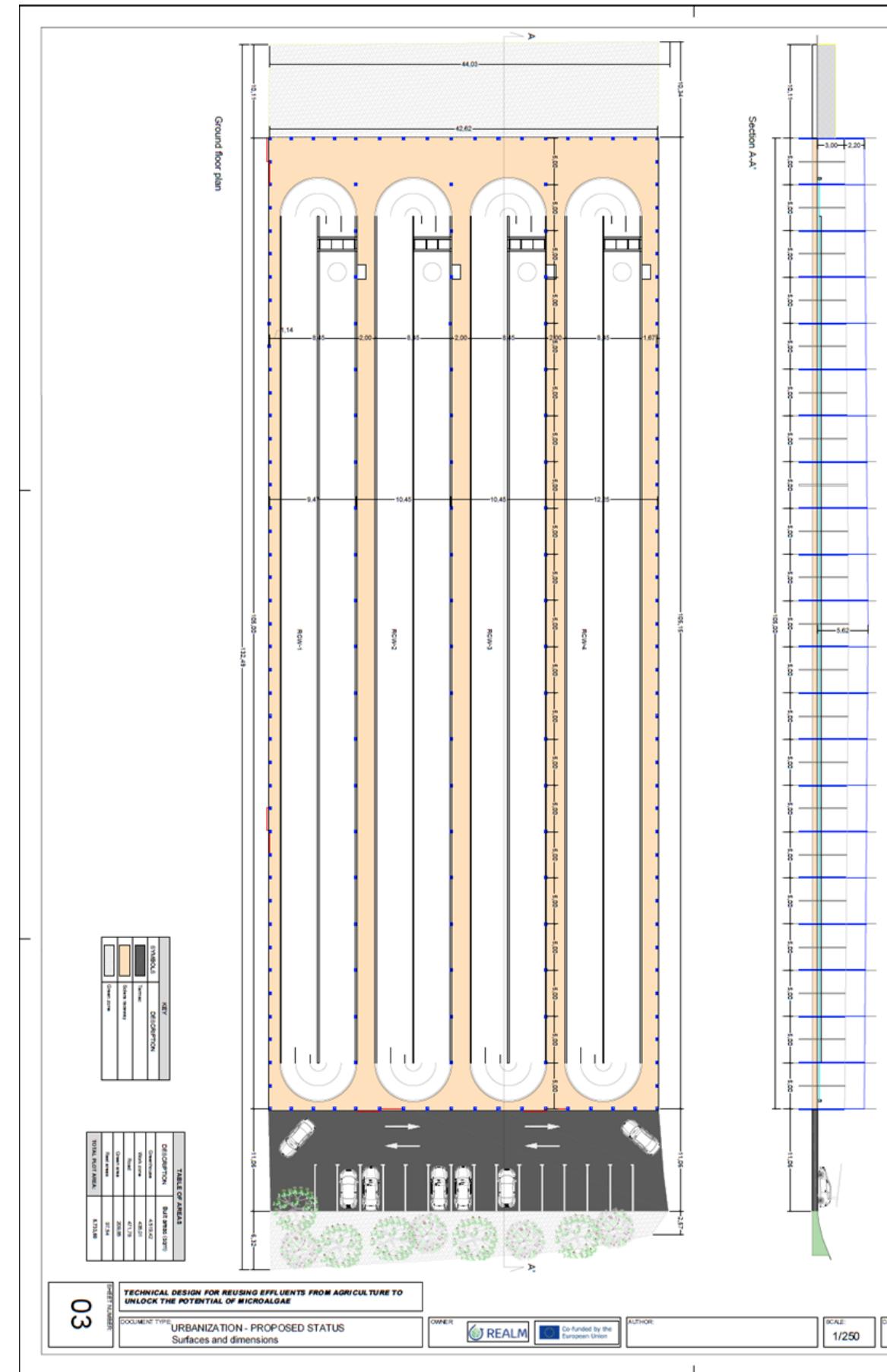


2 hectares  
in Carboneras

Thermal Power  
Plant  
(Almería, Spain)



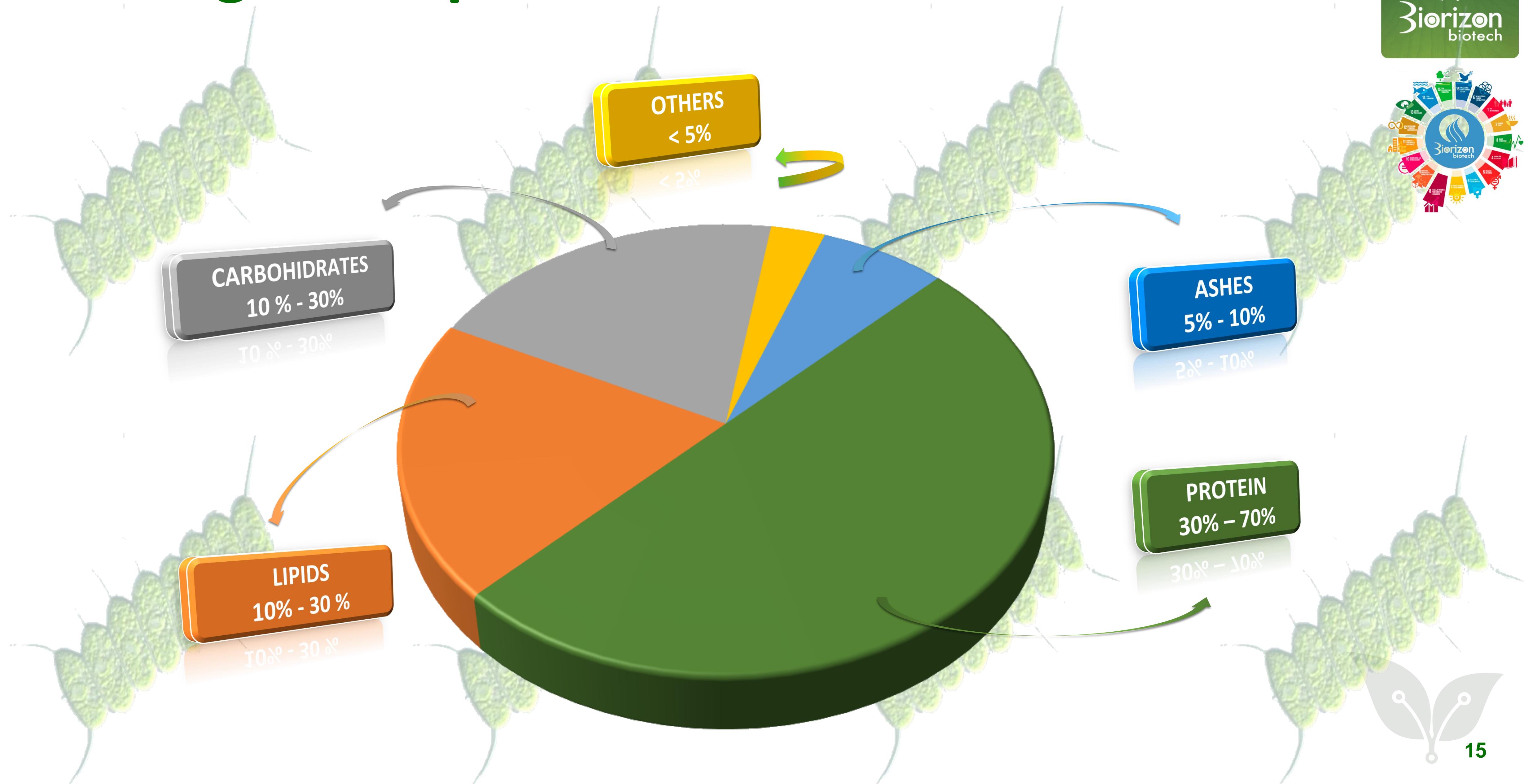
# BIORIZON'S REALM FACILITY



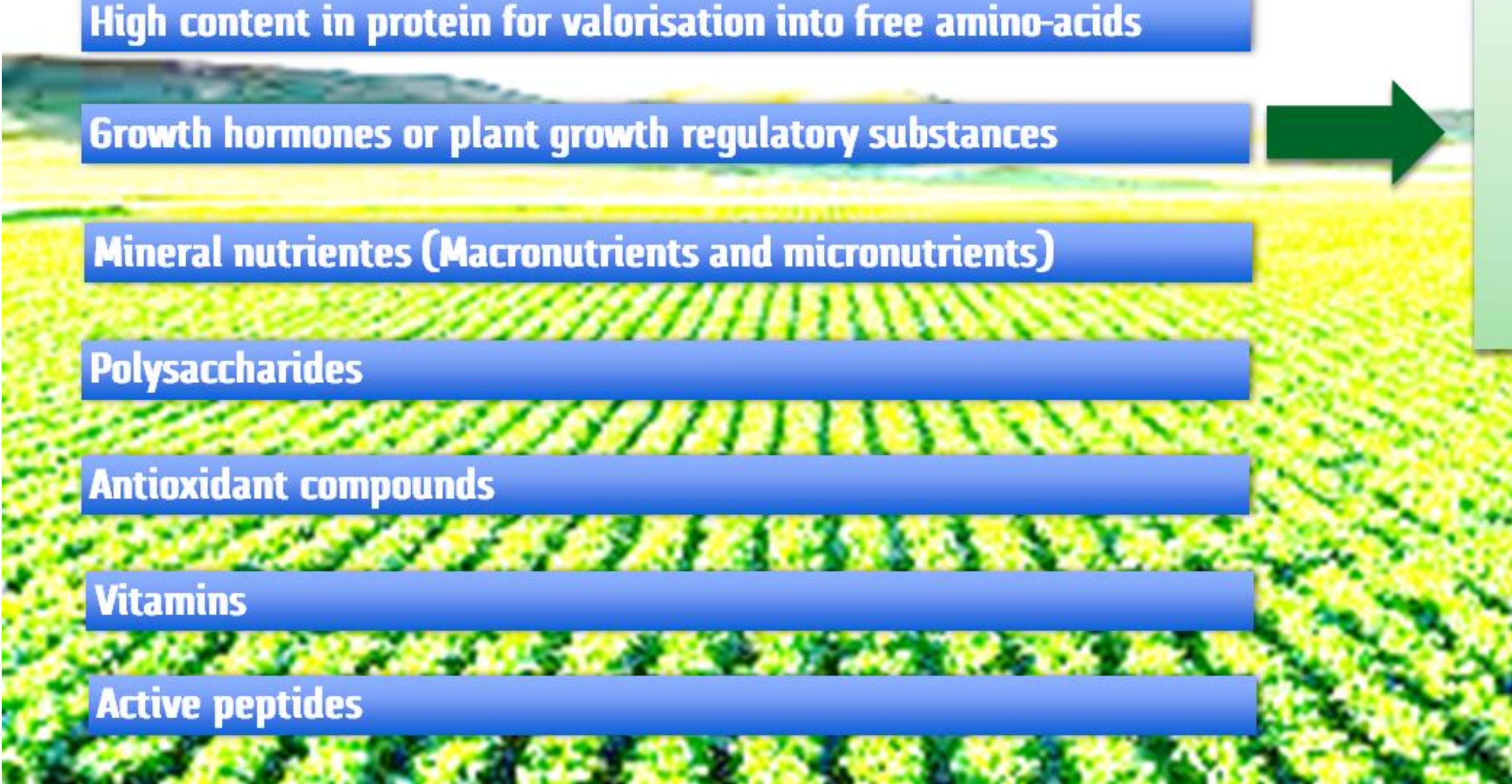


# WHY MICROALGAE?

# Microalgae composition



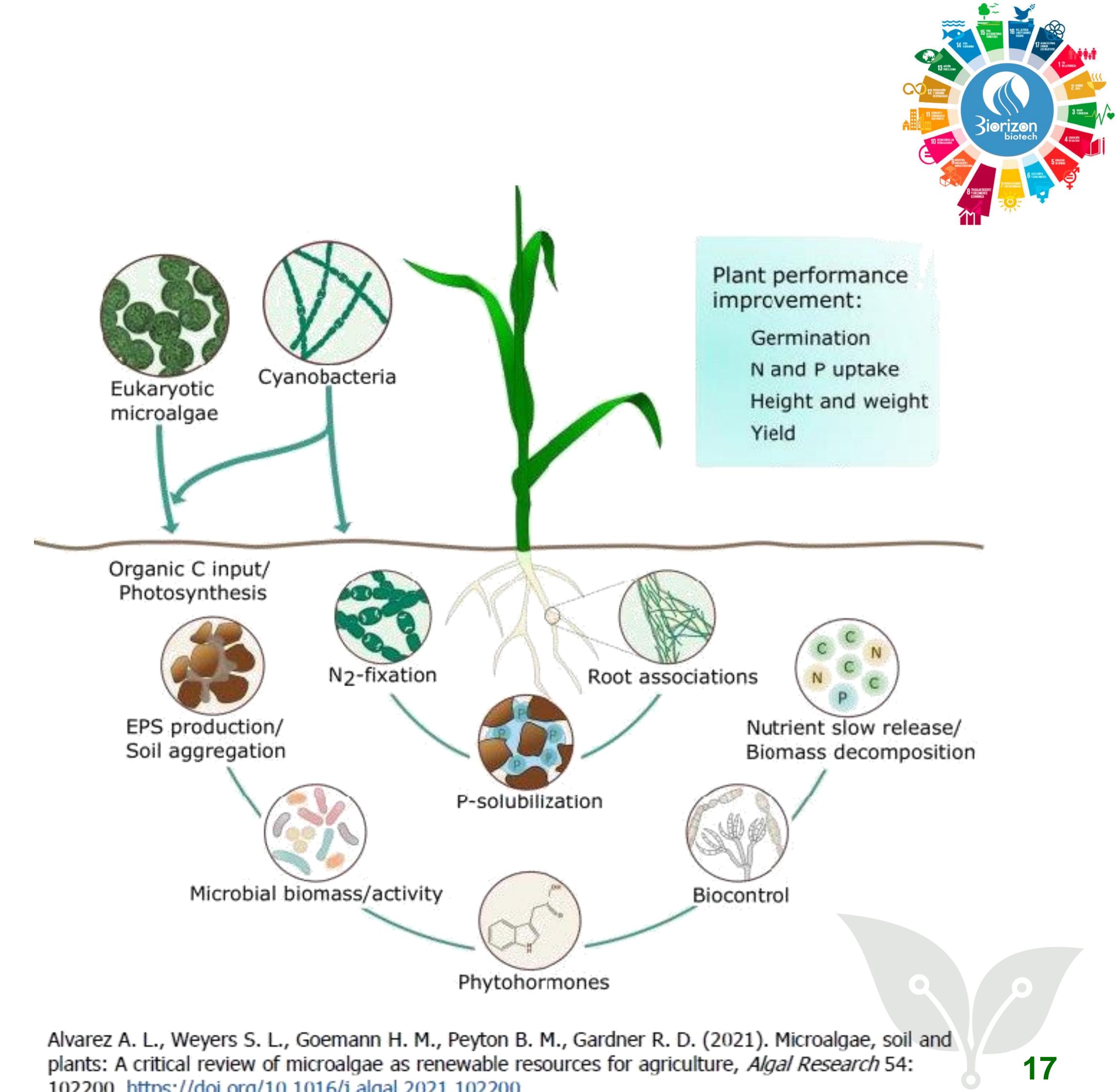
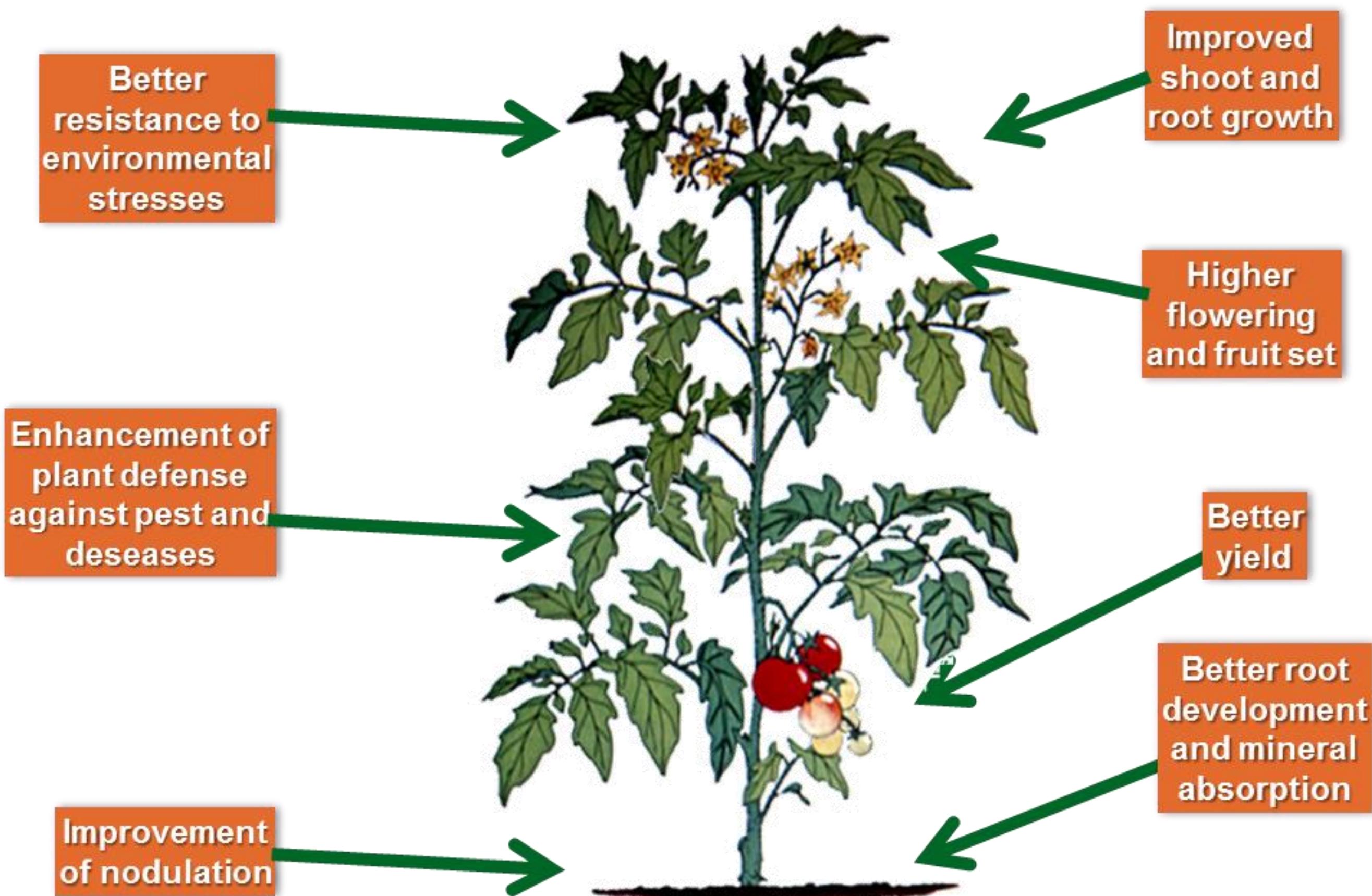
# Microalgae for plant biostimulants



- ✓ Auxines.
- ✓ Gibberellins.
- ✓ Cytokinins.
- ✓ Brassinosteroids.
- ✓ Abscisic acid
- ✓ Ethylene
- ✓ Jasmonic acid.
- ✓ Salicylic acid.

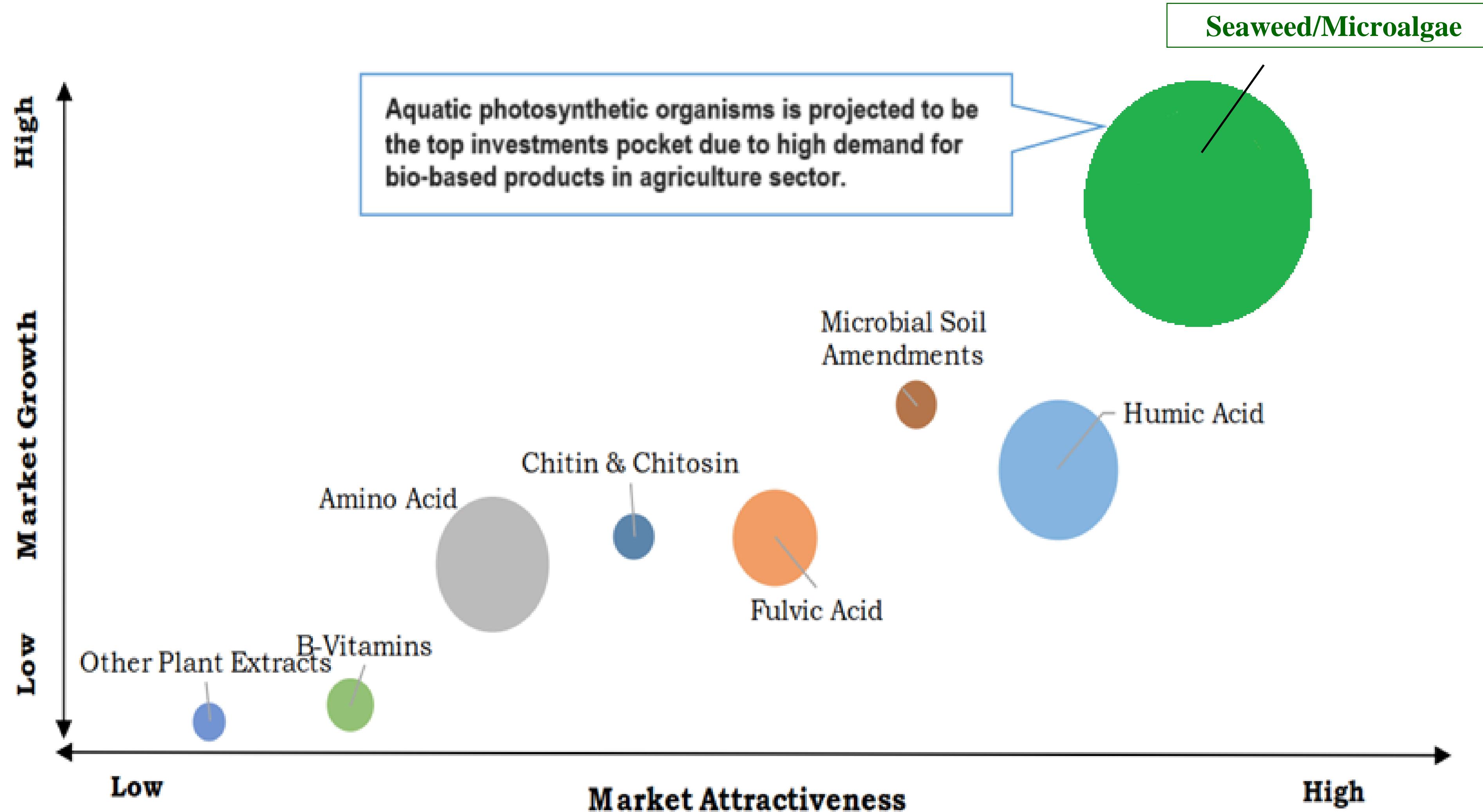


# Microalgae for plant biostimulants



Alvarez A. L., Weyers S. L., Goemann H. M., Peyton B. M., Gardner R. D. (2021). Microalgae, soil and plants: A critical review of microalgae as renewable resources for agriculture, *Algal Research* 54: 102200. <https://doi.org/10.1016/j.algal.2021.102200>

# Gobal Biostimulants Market



Source: Global Biostimulants Market. Allied Research Market





Research &  
Development

# 2013 - 2014

## REGENERA

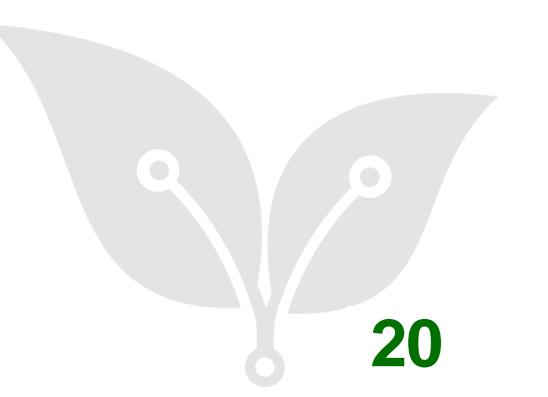
Wastewater treatment and **biofertiliser** BIOSTIMULANTS  
production via microalgae cultivation



Research Centers:  
**FUNDACIÓN**  
**cajamar**

UNIVERSIDAD DE ALMERÍA

Andalucía  
se mueve con Europa  
   
JUNTA DE ANDALUCÍA  
Unión Europea  
Fondo Europeo  
de Desarrollo Regional



# 2016-2021



Sustainable production of bioactive compounds from microalgae for enhancement of agriculture and aquaculture activities.



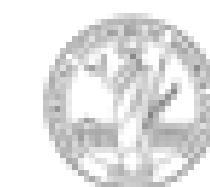
## Centros de investigación:



UNIVERSIDAD DE ALMERÍA



UNIVERSIDAD DE LAS PALMAS  
DE GRAN CANARIA



UNIVERSITÀ DEGLI STUDI DI MILANO



KIT  
Karlsruher Institut für Technologie



SZÉCHENYI  
ISTVÁN  
EGYETEM



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# REALM

# 2022-2026

Reusing Effluents from Agriculture to Unlock the Potential of Microalgae



Funded by  
the European Union

Budget  
10,8 M €

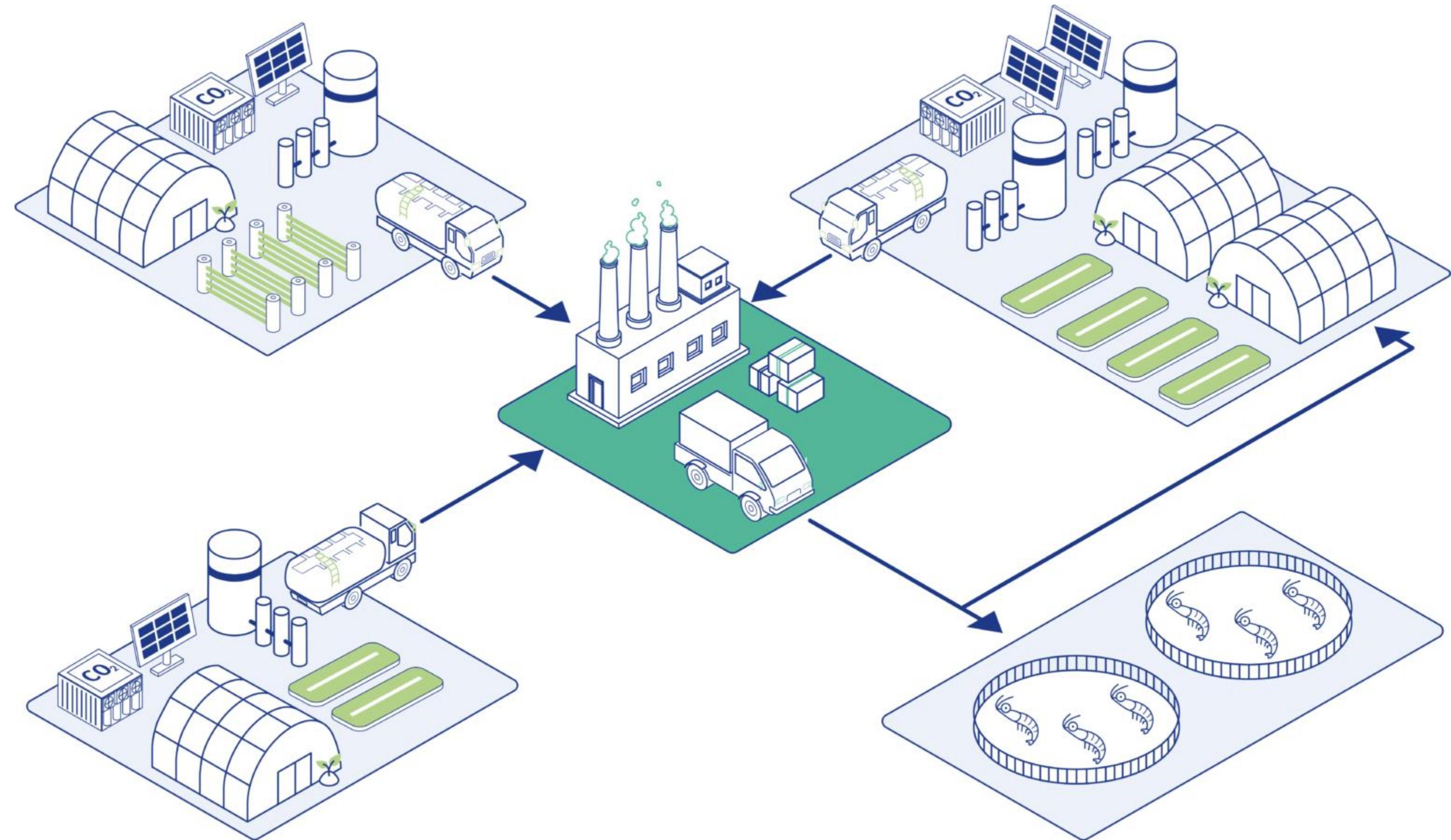




# REALM



Co-funded by  
the European Union



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ALGAENAUTS

2021-2023

Eco-friendly and sustainable new family of Biopesticides  
based on Microalgae via circular economy approach



Blue Economy Window Call  
- EASME/EMFF/2020



Co-funded by  
the European Union

Budget  
1,4 M €

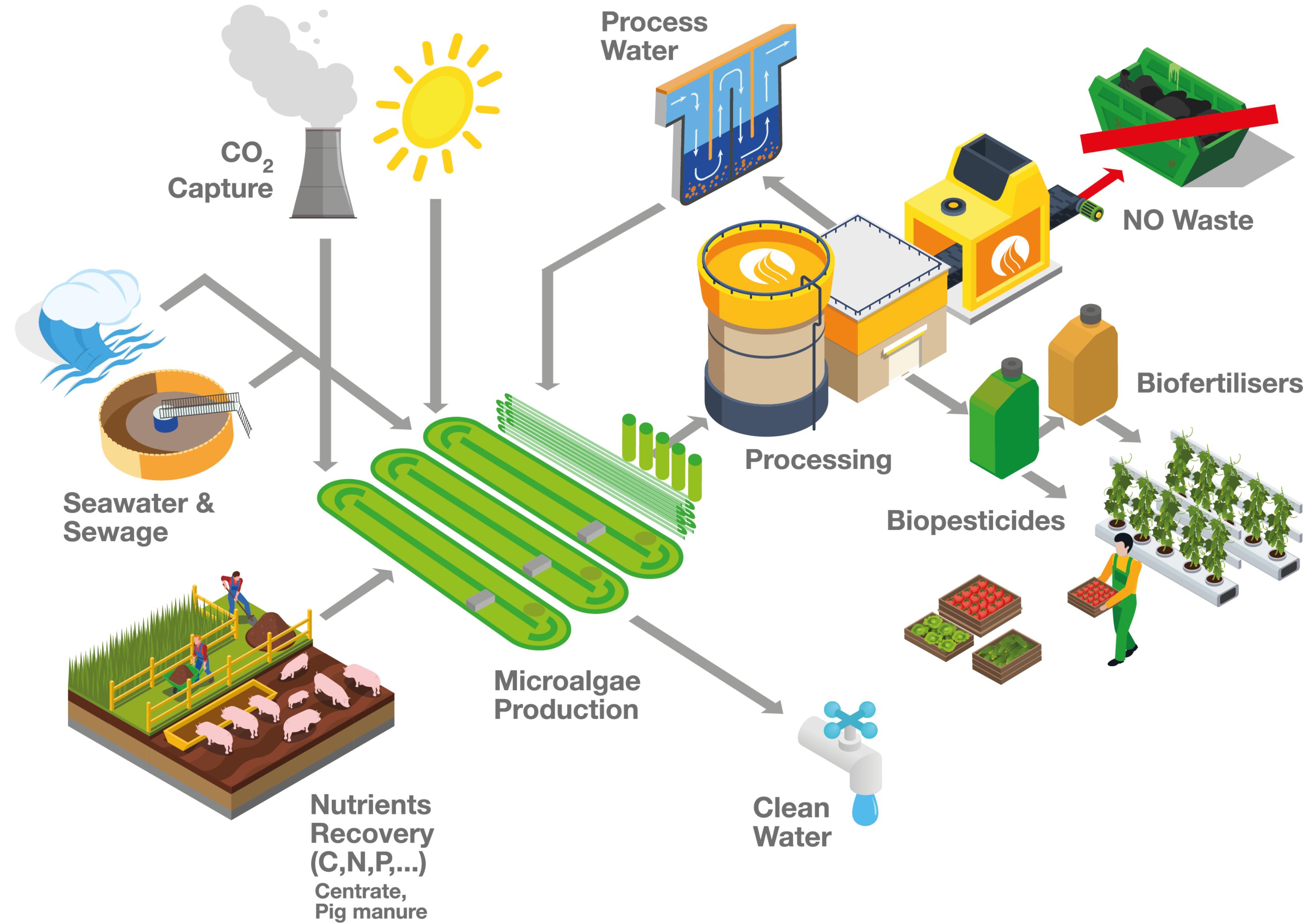


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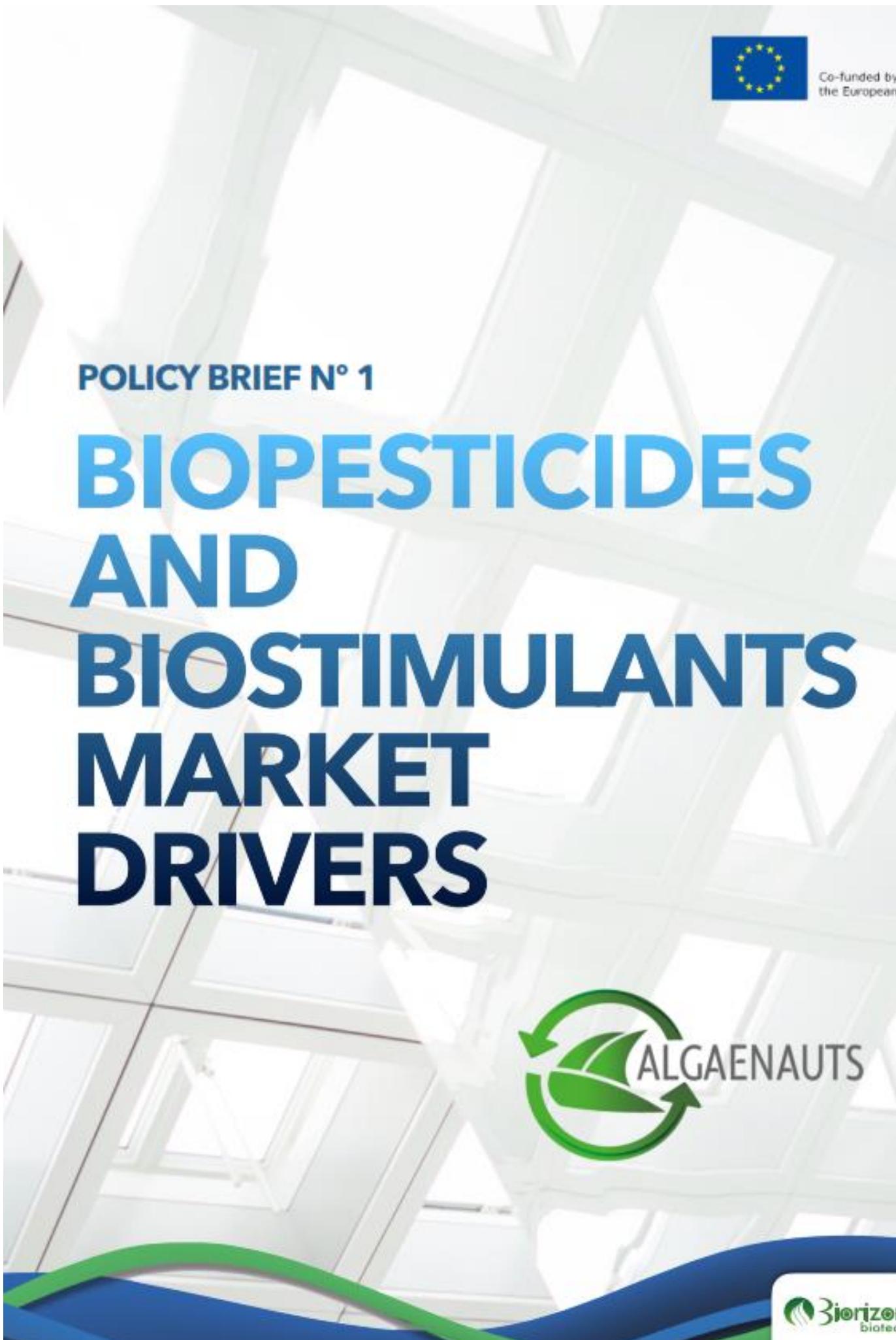
# Eco-Innovative process



Co-funded by the EMFF programme  
of the European Union under grant  
agreement No. 101038250



# Market and legal framework for microalgae-based biostimulants





[www.biorizon.es](http://www.biorizon.es)



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