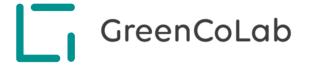
## GreenCoLab

Joining the pieces in algal biotechnology.







### What we are

GreenCoLab is a collaborative platform to bridge the transfer of knowledge in the broad field of algae biotechnology

R&I agenda based on the exploration of microand macroalgae for different applications

Based in the University of Algarve (Faro, Portugal), with strategic partners located all over Portugal





### Our partners



GreenCoLab is composed of 8 associates, with the common goal of advancing the RDI on algae biotechnology



ACADEMIA















### -' Our partners

GreenCoLab



GreenCoLab is composed of 8 associates, with the common goal of advancing the RDI on algae biotechnology





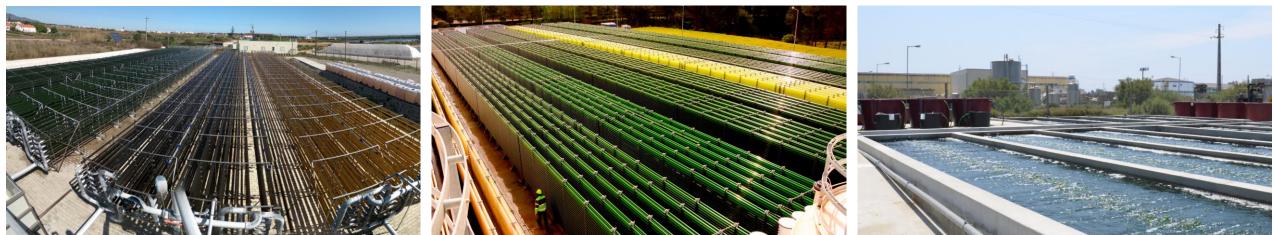
ACADEMIA

ALGAE PRODUCERS











### Our partners



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Joining the pieces.

ACADEMIA

ALGAE PRODUCERS ALGAE VALORIZATION

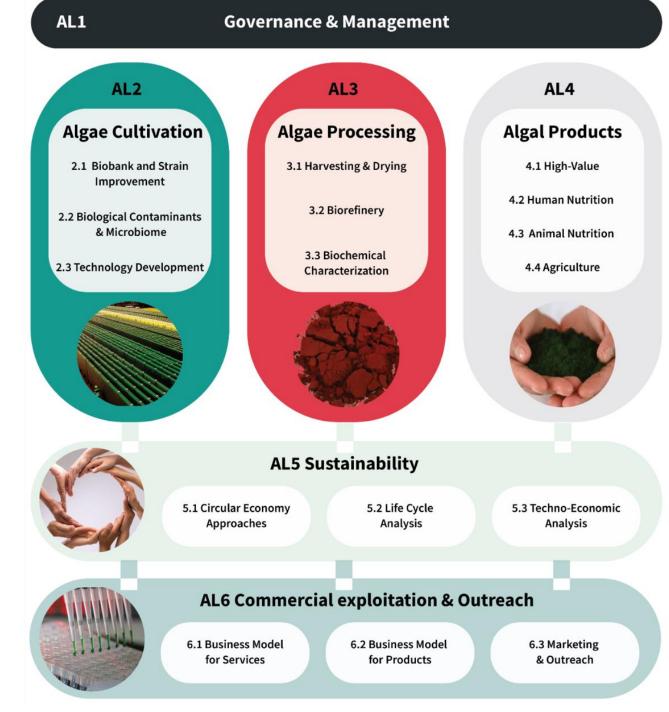






- ✓ 6 Action lines
- $\checkmark$  Covers the whole value chain
- ✓ High focus in sustainability

✓ Innovative Products & Services







National

- ✓ 2 PT2020 projects
- ✓ 1 SIAC
- ✓ 1 PRR Blue Bioeconomy agenda

#### International

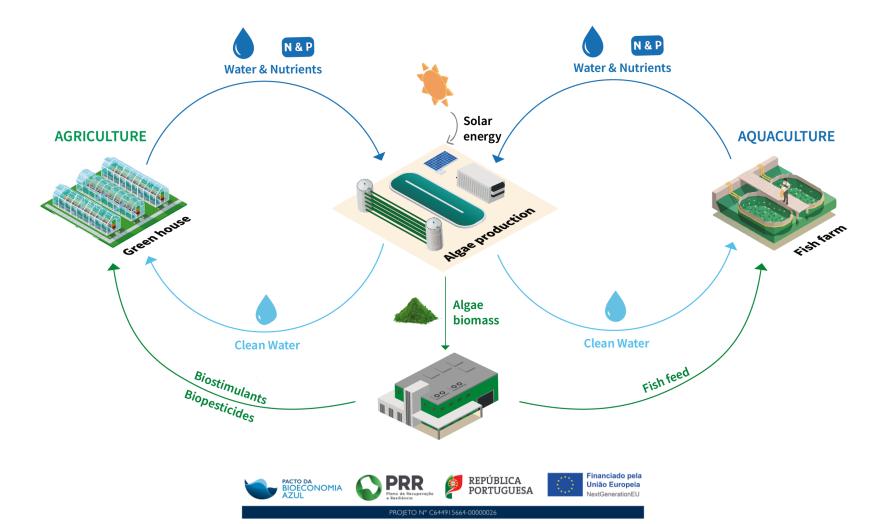
- ✓ 2 H2020 projects + 3 Horizon EU
- ✓ 2 EEA Grants + 1 INTERREG
- ✓ 2 Networking projects



## ECONOMIA CIRCULAR DEMO



#### **Circular economy DEMO**





Joining the pieces.

#### **PRR – Circular economy DEMO**

KICE DA BIOECONOMIA AZUL Reserventioned AZUL Reserventioned Reserv





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AN AN ANT

Sala do Horto

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#### Infrastructures

#### ALGAEREFINE

Lightweight industrial pavilion (500 m<sup>2</sup>)

- $\checkmark$  300 m<sup>2</sup> Biorefinery labs
- $\checkmark$  300 m<sup>2</sup> Offices
- ✓ 200 m<sup>2</sup> Pilot-scale biorefinery



#### Location: Close to "Horto"



### ALGAEREFINE

✓ Proof of concept DEMO

- ✓ Development of high value ingredients for different biotechnological applications
- ✓ Application of algae-based refined ingredients in innovative products
- Novel equipment's will be acquired (e.g., high performance miller, supercritical extractor)







# ECONOMIA CIRCULAR DEMO Cross-border cooperation

Jornada de Trabalho ATLAZUL













#### **DEMO ECONOMIA CIRCULAR**

#### Cross-border Context

*Privileged climate conditions, due to the high solar irradiance and temperature* 

Strong R&D+i relationship with Algae-valorisation, Aquaculture, Agriculture fields and their associated-economy

Ability to democratize and mobilize know-how and technical expertise associated with the DEMO

Southern Iberian regions face increasing challenges with limited natural water supply











## GreenCoLab

### **DEMO ECONOMIA CIRCULAR**



Validate sustainable integrated approaches as a derisking strategy by testing novel cultivation concepts

Decrease regional fresh-water usage, and enable nutrient recycling

Maximize productivity and profitability on a larger multi-industry scale

Attract highly qualified human resources, in tourismdominant and low-density areas

Promote a cross-border transfer of knowledge, leading to info exchange and data generation





#### **DEMO ECONOMIA CIRCULAR**

#### Outcomes

GreenCoLab



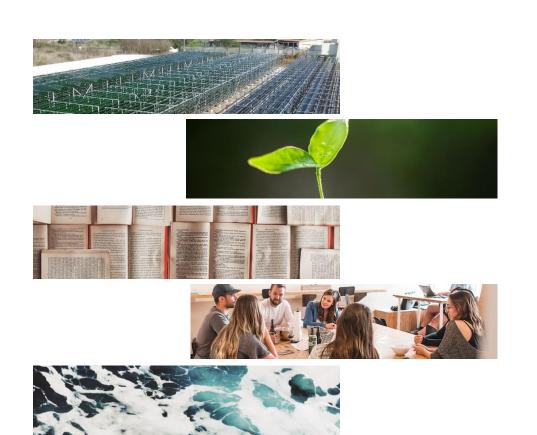
*Sustainable, scalable and economical-feasible cultivation systems* 

Development of new characterized functional ingredients alternative to synthetic and unsustainable

*High-quality scientific data, that will advance this field of research* 

*Strong collaborative networking among cross-border partners* 

*Reduced environmental impact and low dependency on water* 





Joining the pieces in algal biotechnology.

## **THANK YOU!**









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