

May 2025

10 years of EU FUNDING FOR THE ALGAE SECTOR

2014 — 2023

EU policies identify algae as a promising resource, with a wide range of applications, from energy and food to cosmetics and fertilisers

Between 2014 and 2023, the European Union funded **219 projects specifically on algae** via the European Maritime and Fisheries Fund (**EMFF**), European Maritime, Fisheries and Aquaculture Fund (**EMFAF**), **LIFE**, **Horizon 2020** and **Horizon Europe** programmes for a total EU contribution of about **€559.1 million**. The projects cover various commercial sectors, including **nature restoration**.

They have been implemented by 1 470 organisations, mainly from Germany, Spain, France, Italy, the Netherlands and Portugal.

EU funds proved fundamental to address technical and financial barriers and, to a lesser extent, market and social barriers, while regulatory barriers are best addressed at the national level.

Based on projects recommendations, future EU policy and funding should focus on:



Supporting research and development in advanced bio-based materials and technologies for seaweed cultivation.



Fostering collaboration among stakeholders and industries.



Addressing financial and market barriers, such as high research and development costs.



Developing reliable measurement of carbon sequestration by algae cultivation.

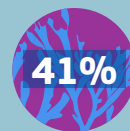


Raising awareness, social acceptance, and education among consumers.

SECTORS COVERED BY EU FUNDED PROJECTS*



FOOD



ENERGY



AGRICULTURAL
PRODUCTS



FEED



COSMETICS



BIOPLASTICS/
BIOPOLYMERS



BIOREMEDIATION



PHARMACEUTICAL

* Results from a multi-response survey.
A project might cover multiple sectors.

MEET SOME OF THE PROJECTS



Seafood Alternative

Fish substitute from algae to preserve marine wildlife and develop algaculture.

The Seafood Alternative project created microalgae-based fish substitutes to meet the increasing demand for sustainable food products. They worked on algae's transformation into alternatives for seafood. They focused on smoked salmon, canned tuna, caviar and tarama, creating a vegan version made of algae. Their success lies in integrating microalgae into these products while ensuring the organoleptic quality of the product is perfectly optimised.

PROJECT DURATION
1 Aug 2021 - 31 Jul 2023

PROJECT LOCATIONS
France

OVERALL BUDGET
€2 837 219

EU CONTRIBUTION
€1 986 053

FUNDING
European Maritime and Fisheries Fund

Seafood Alternative

"Algae offer a solution to the complex challenges of conventional seafood production, providing a sustainable, nutritious, and resilient alternative for future food systems. Our products showcase the culinary diversity and gastronomic potential of algae-based ingredients, highlighting their role in promoting sustainable diets, culinary innovation, and cultural diversity."

Ludovic d'Otreppe,
CEO of Algama

Reeforest LIFE

Restoration of *Cystoseira* macroalgal forests to enhance biodiversity along Mediterranean rocky reefs.

REEForest LIFE aims to reverse the degradation of the endangered habitat of brown macroalgal forests. The project implements active restoration and sets up monitoring plans in four marine protected areas in Italy (Sinis Peninsula, Cilento National Park, Bergeggi Island) and in the Gyaros island, in Greece where the causes of degradation have been addressed.



*"The decline of *Cystoseira* forests due to climatic change and human activities underscores the urgent need for active ecological restoration. One of the most beneficial strategies is the cultivation of *Cystoseira* in the laboratory and the outplanting of young plants into the sea. This can help restore these vital marine ecosystems to their original state in a reasonable time frame."*

Prof. Annalisa Falace, PhD,
University of Trieste, Italy

PROJECT DURATION
1 Sept 2022 -
31 Aug 2026

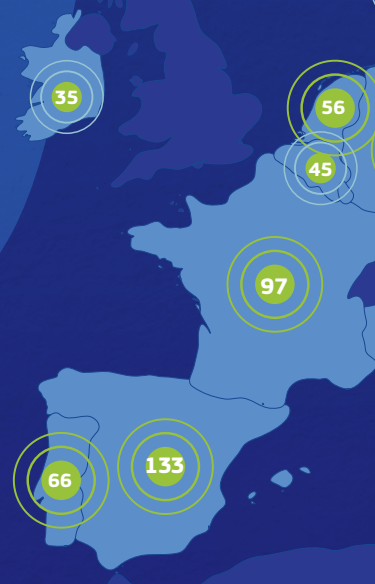
PROJECT LOCATIONS
Greece and Italy

OVERALL BUDGET
€2 294 471

EU CONTRIBUTION
€1 720 853

FUNDING
LIFE Programme

REEForest



ULTFARMS

Circular low trophic offshore aquaculture in wind farms and restoration of marine space.

ULTFARMS aims to increase Europe's capacity for low trophic algae cultivation within offshore wind farms through the shared use of marine space for different purposes. The main objective is to transform offshore aquaculture by devising innovative processes that optimise algae production in harsh offshore conditions and low-salinity environments. ULTFARMS integrates low trophic aquaculture systems within offshore wind farms. This guarantees the farming of environmentally responsible, low-carbon, and safe algae products from conception to market.

PROJECT DURATION

1 Jan 2023 - 30 June 2026

PROJECT LOCATIONS

Belgium, Denmark (Faroe Islands), Germany, Spain, Netherlands, Portugal and Sweden

TOTAL COST

€10 312 250

EU CONTRIBUTION

€9 590 771

FUNDING

Horizon Europe

ULTFARMS

"ULTFARMS' innovative seaweed production systems combined with nature inclusive design element boosts sustainable food and resource production through low trophic aquaculture. These designs are poised to help rehabilitate degraded ecosystems and supports marine life by improving water quality for a healthier balanced approached to marine use."

Alex Ziemba,
Ultifarms Project coordinator



EU COUNTRIES OF BENEFICIARIES



FUELGAE

Sustainable on-site and innovative technologies for advanced transport biofuels from microalgae.

The FUELGAE project aims to produce advanced liquid fuels from different CO₂ emission streams of two industrial sectors: biorefinery and energy-intensive industries.

The plan is to develop an innovative production model through a microalgae pilot plant integrated into their infrastructure.

PROJECT DURATION

1 Oct 2023 -
30 Sept 2027

PROJECT LOCATIONS

Ireland, Greece, Spain, Austria, Romania and Finland

EU CONTRIBUTION

€4 990 124

FUNDING

Horizon Europe

Fuelgae

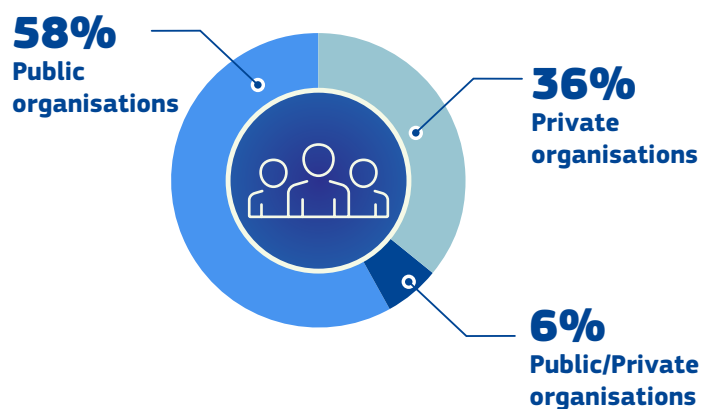
"Algae hold great potential for the future of the fuel sector, offering a sustainable way to reduce greenhouse gas emissions through CO₂ capture and advanced biofuel production. While challenges like high costs and scalability remain, continued innovation and support could position algae as a key player in achieving climate and energy goals".

Dra. Silvia Morales de la Rosa
(CSIC), Fuelgae Project coordinator

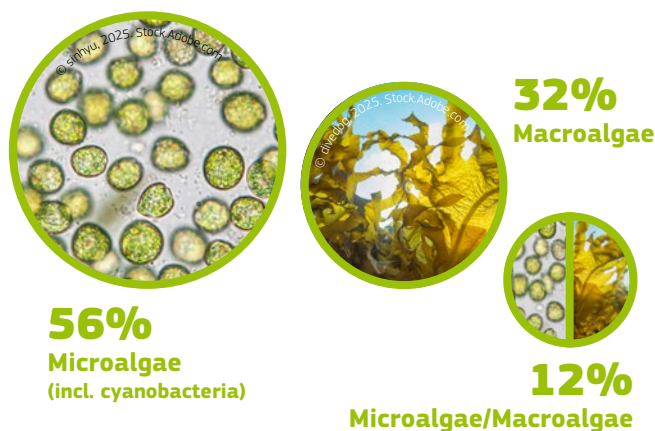


The EU4Algae platform is the main instrument deployed by the European Commission to analyse state of play and provide viable recommendations to address regulatory and market barriers. It gathers more than 1 000 stakeholders and manages a wide database of EU funded projects.

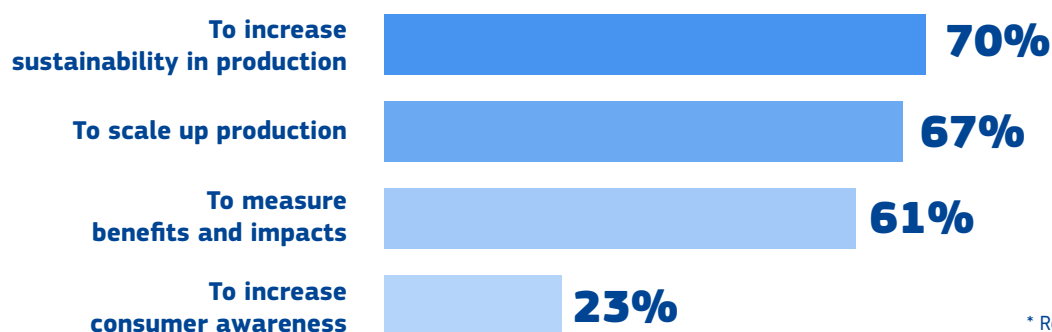
TYPE OF BENEFICIARIES



MICRO/MACROALGAE species focus of the projects



OBJECTIVES OF THE EU-FUNDED PROJECTS*



* Results from a multi-response survey. A project typically has multiple objectives.

MAIN ACHIEVEMENTS

Through a collaborative effort, these projects have identified several **strategies** that have improved the efficiency, environmental sustainability, and economic viability of algae production.

They created more effective solutions for sustainable algae production and mainly through:

- **Species** identification & selection of enhanced strains for growth, robustness, and composition;
- Easing **up-scaling and reducing production costs** through digitalisation and automation;
- Improving algae production as **by-products**;
- Increasing value from raw materials (**biorefinery approach**);
- Production of algae biomass coupled with wastewater treatment (**bioremediation**) and **carbon sequestration**.

Read more in
CINEA's report

<https://europa.eu/!63KBhm>

