



4<sup>th</sup> edition

# BlueBioValue Acceleration



OCEANO AZUL  
foundation



CALOUSTE GULBENKIAN  
FOUNDATION





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# Challenges

Blue Bio Value program is looking for ocean-based solutions to:



**FEED A GROWING POPULATION AND ENSURE SUSTAINABLE FOOD SYSTEMS**



**EMPOWER A CIRCULAR BIOECONOMY GROWTH MODEL**



**ADDRESS RESOURCE SCARCITY AND PRESERVE NATURAL ECOSYSTEMS AND BIODIVERSITY**



**MITIGATE AND ADAPT TO CLIMATE CHANGE**



**ENHANCE HEALTH & WELL-BEING**



**REDUCE PLASTIC PRODUCTION & POLLUTION**

# Blue Biotechnology

Biotechnology is based on the use of living systems and organisms for the development of products or services. Different factors determine the usage of these biological agents, such as organisms, cells or molecules. Blue biotechnology develops products and services via marine biotas.

Blue biotechnology has grown significantly as a result of advancements in deep-water collection methods, extraction techniques and an increase in demand within the market, particularly for aquaculture and chemical synthesis. The great potential of marine biotechnology is above all the enormous diversity of living processes found in the ocean.





# The Accelerator

**Launched in 2018, Blue Bio Value Acceleration is a program for national and international startups in the marine bioeconomy sector.**

The program aims to accelerate startups that operate along the value chain of marine bioresources, specifically in the blue biotechnology sector, that offer sustainable services or products contributing to a healthier use of ocean resources. Serving also as a sustainable alternative to tackle primary challenges that the world faces, whilst subsequently attracting talent and knowledge to the sector to Portugal.

# Blue Bio Value





# Valuing your blue business, to design a better world

## Support, shape and develop

### Supporting talent

Support entrepreneurs with innovative ideas for marine bio-based solutions

### Enabling capabilities

Shape effective leaders

### Creating investment opportunities

Develop high quality projects worthy of investment and create global companies



# Big numbers

**4 years** [2018, 2019, 2020, 2021]

**59 startups**

**19 countries**







# Why Portugal

In addition to the diversity of raw materials, Portugal has a solid foundation when it comes to human talent and expertise in marine sciences and bioengineering, has a large ocean territory and dedicated policies to foster the development of the blue economy.

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## **BIODIVERSITY**

Seamounts cold water reefs and hydrothermal vents  
Deep sea abyssal plains and open ocean ecosystems  
Estuaries and coastal zones with rich marine biodiversity  
Submarine canyons and mesophotic reefs

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## **POLICY ASPECTS**

Public policies and local authorities focused on Blue Growth  
Public and governmental support and incentives to the Blue Economy

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## **R&D**

More than 30 scientific and technological centres of marine research  
Experience in marine biotechnology for research purposes

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## **DIMENSION**

Largest maritime area in the EU  
Extensive coastline and two Atlantic archipelagos

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# Why apply

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A unique opportunity to grow and scale your blue bio business

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High level networking with international investors, key specialists and entrepreneurs

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1-1 mentorship from executives, leaders, and investors

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Access to the best research and technological centers and laboratories

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Unique opportunities to explore the bioresources and biodiversity available in Portugal

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1-year membership at Bluebio Alliance with access to a network of experts and services specialized in bioresources and blue biotechnology

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Prize of up to 45,000€ to assist in business development via the Blue Demo Network

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# Testimonials

*"We believe that we made the best decision when we decided to participate in Blue Bio Value. We met amazing people and learned how to believe in our idea and of course believe in us. We just want to say thanks!"*

**FUTURALGA** 1<sup>st</sup> Edition (Spain)

*"Blue Bio Value was an enriching experience by providing tools to better design the business model of the startup project."*

**BLUMAN** 2<sup>nd</sup> Edition (Portugal)



*“Blue Bio Value is an amazing program for ocean related startups. The program offers access to fantastic mentors as well as an opportunity for peer to peer learning. We were extremely happy to be part of it and we greatly benefited from it. Thank you for having us!”*

**uFraction 8** Winner 2<sup>nd</sup> Edition (UK)

*“Blue Bio Value is an amazing program which helped us really streamline our business and learn the ethos of entrepreneurial activities. We are delighted by the whole experience because it came at a critical time of our venture development.”*

**Phabio enterprises private limited**  
2<sup>nd</sup> Edition (India)

16 | **BlueBioValue**

# 2021 edition

**Blue Bio Value Acceleration program aims to attract aspiring and committed entrepreneurs to develop commercially viable projects along the value chain of marine bioresources.**

We are looking for startups at prototype, launch stages or further on in the development process, SMEs aiming to develop new product lines, and/or teams with projects that can demonstrate high potential to rapidly scale up to viable market applications and ensure the sustainable use of the ocean.

**17 startups were selected from 10 different countries.**



# **Meet the startups**

**4<sup>th</sup> edition | 2021**







# Blue Oasis Technology

**Country** Portugal

**Year** 2021

**Category** Ecosystem restoration

**Website** [blueoasis.technology](https://blueoasis.technology)

Blue Oasis Technology from Portugal, develops reef structures to improve ocean biodiversity. The company can equip these and other human-made underwater structures with a BluBoxx for environmental data-recording.



# Clean Valley Bio

**Country** Canada

**Year** 2019

**Category** Aquaculture solutions

**Website** [cleanvalleycic.com](http://cleanvalleycic.com)

Clean Valley from Canada, holds a biofiltration technology that provides fish producers an alternative to treat wastewater, selling their filtration by-products for fertilizers or aquaculture feed.

# FeedVax Feedvax

**Country** Argentina

**Year** 2017

**Category** Aquaculture solutions

**Website** [feedvax.com](http://feedvax.com)

FeedVax from Argentina, produces an edible oral vaccine to prevent a common bacteria found in Tilapia fish. Being combined with their feed, it results in improved animal well-being, as a stress free solution and in the reduction of antibiotics usage.



# Fhair

**Country** Portugal

**Year** 2020

**Category** Haircare products

Fhair from Portugal creates beauty products with local natural ingredients including sea salt from Ria Formosa. The products are primarily designed for hair & scalp treatment, delivering professional results at home.





## FlexSea

**Country** United Kingdom

**Year** 2021

**Category** Plastic alternative

**Website** [flex-sea.com](https://flex-sea.com)

FlexSea from the UK, develops an alternative to single-used plastic packaging with its compostable and edible solution made from red seaweed. Their product is home-compostable and biodegrades within 8-12 weeks.



# Full Circle Aquaculture

**Country** Indonesia

**Year** 2018

**Category** Aquaculture

**Website** [fullcircle.dev](http://fullcircle.dev)

Full Circle Aquaculture, from Indonesia, promotes the regenerative sea cucumber aquaculture and harnesses the profits to fund the protection of a vast network of community-led marine reserves.



# IttInsect

**Country** Italy

**Year** 2020

**Category** Aquaculture solutions

**Website** [ittinsect.com](http://ittinsect.com)

IttInsect, from Italy, presents sustainable fish feed with a zero-waste circular economy using insects in biotechnologically improved agri-food by-products to enhance nutritional benefits for fish.



**ngve** Nature  
Ocean  
Value

**n9ve**

**Country** Portugal

**Year** 2019

**Category** New technologies

**Website** [n9ve.pt](http://n9ve.pt)

N9VE from Portugal, sustainably recuperates rare earth elements from permanent magnets via the biosorption capacity of live green macroalgae. These rare earth elements are used in wind turbines, cell phones, electric cars, amongst others.





## Origin by Ocean

**Country** Finland

**Year** 2020

**Category** Seaweed technologies

**Website** [originbyocean.com](https://originbyocean.com)

Origin by Ocean from Finland, tackles the issue of invasive seaweed and turns them into isolated specific compounds, using a biorefinery concept, which are used in food, feed, pharma and cosmetic industries.



# Relicta

**Country** Italy

**Year** 2020

**Category** Plastic alternative

**Website** [relictabioplastics.com](http://relictabioplastics.com)

RELICTA from Italy, offers a sustainable water-soluble bioplastic packaging made from fish skin and bones, that fully disintegrates under warm water. The self-disposal process is considered cutting-edge innovation in the market.



re§istomap

# Resistomap

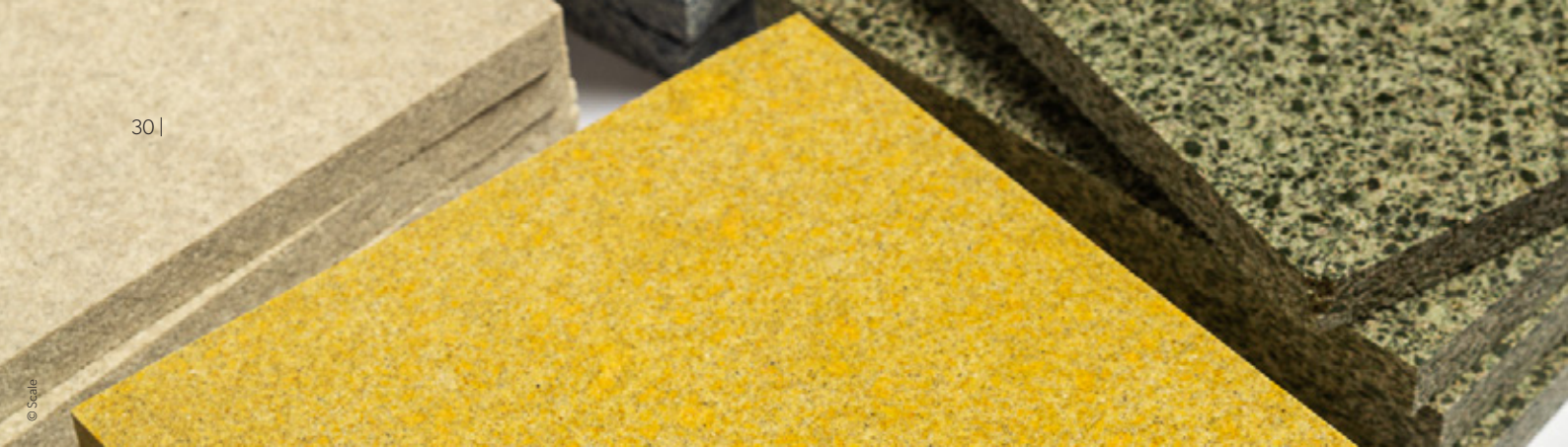
**Country** Finland

**Year** 2019

**Category** Environmental monitoring

**Website** [resistomap.com](https://resistomap.com)

Resistomap from Finland offers a technology combining molecular genetics and data science, detecting and quantifying antibiotic resistance. This customisable laboratory and analysis service is used to monitor antibiotic resistance from environmental samples.



# SCALE

**Country** France

**Year** 2018

**Category** Ceramics

**Website** [scale.vision](http://scale.vision)

SCALE from France, transforms fish scales into building materials, bringing a new generation of ocean friendly material for construction by using biodegradable and non-deleterious by-products.





# Seatrients

**Country** Sweden

**Year** 2020

**Category** Food

**Website** [seatrients.com](https://seatrients.com)

Seatrients from Sweden produces a nutritious power beverage using Caribbean Sea Moss. The pulverized product is rich in potassium, iron, zinc and omega-3 fatty acids, promoting both benefits for human health and economic growth for local sea farmers.

**SEDNA**

# Sedna Technologies

**Country** Canada

**Year** 2017

**Category** Aquaculture solutions

**Website** [sednatech.io](http://sednatech.io)

Sedna from Canada develops a mobile IOT (in orbit testing) sensor providing real time data of environmental parameters in aquaculture operations and physical conditions of fish throughout the transportation process, contributing to the reduction of stress factors.



# Sensefinity

**Country** Portugal

**Year** 2014

**Category** IoT

**Website** [sensefinity.com](http://sensefinity.com)

Sensefinity from Portugal, uses an intelligent sensor network to provide real time visibility and traceability for fishery and aquaculture supply chains by spotting the location of boats, sensor data and catch control.



# Tekslo Seafood

**Country** Norway

**Year** 2017

**Category** Food

**Website** [teksloseaweed.no](https://teksloseaweed.no)

Tekslo Seafood from Norway provides spices for everyday cooking derived from algae sustainably harvested from the North Atlantic Ocean. Soon they will also launch a skincare series as the seaweed also offers beneficial properties for skin treatment.





# Thalasso

**Country** Norway

**Year** 2019

**Category** Environmental remediation

**Website** [thalassoocean.com](http://thalassoocean.com)

Thalasso from Norway, tackles the invasion of the algae species *Sargassum* via sustainable harvesting with its electric, autonomous aquatic vehicle. *Sargassum* can be used to produce fertilizer, green energy, activated carbon, alginate, fucoidans, animal feed and other products.

# Promoter **Oceano Azul Foundation**



*From the ocean's point of view*



**OCEANO AZUL**  
foundation

**The [Oceano Azul Foundation](#) is based in Portugal and works to contribute to the conservation and sustainable use of the ocean, by:**

Developing blue literacy and fostering the public's understanding of the challenges of ocean sustainability;

Contributing to ocean conservation, promoting the value of biodiversity and the development of sustainable uses;

Contributing to a new system of ocean governance, guided by ethical values and based on scientific knowledge, as well as contributing to the development of an innovative, environmentally sustainable blue economy.

**Promoter**

# Calouste Gulbenkian Foundation



CALOUSTE GULBENKIAN  
FOUNDATION



**The Calouste Gulbenkian Foundation is a perpetual institution of Portuguese nationality with charitable, artistic, educational and scientific statutory aims.**

The Foundation promotes a wide range of programs and projects that contribute to overcoming particular needs in contemporary society and seek innovative responses to problems in the current world.

The Blue Bio Value is supported by the Gulbenkian Sustainable Development Program which aims to promote the development of a society that is committed to future generations, environmentally responsible, economically viable and socially fair.



# Partners

**BLUEBIO**  
ALLIANCE

**maze**  


A Portuguese non-profit association representing the marine bioresources and blue biotechnology sector, playing a key role in connecting the different stakeholders in the blue value chain and fosters entrepreneurship and innovation for blue products market development and expansion.

[\*\*bluebioalliance.pt\*\*](http://bluebioalliance.pt)

MAZE Impact is a European impact investing company based in Portugal created in 2013. MAZE Impact invests in effective solutions that solve social and environmental challenges and supports entrepreneurs in expanding their solutions to the European market through an impact investing fund, acceleration programs and through working with the public sector to improve the impact of social service delivery.

[\*\*maze-impact.com\*\*](http://maze-impact.com)



# Blue Bio Value

[bluebiovalue.com](http://bluebiovalue.com)

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