



2B-BLUE

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2B-BLUE

Boosting the Blue Biotechnology community in the
Mediterranean



1st newsletter 2B-BLUE: Advancing Mediterranean Blue Biotechnology

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Contributing partners: Amelia Canovas Muñoz (UMU), Jesús Enrique Argente García (UMU), Ana Isabel Fernández Martínez (UMU), Antonio Fernando Skarmeta Gómez (UMU) Andrea Fanelli (CNR IRBIM), Massimiliano Pinat (CNR IRBIM), Antonia Giannakourou (HCMR), Chrysa Efstratiou (HCMR).





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1. Introduction to 2B-BLUE project: Boosting the Blue Biotechnology community in the Mediterranean

The 2B-BLUE project, coordinated by the University of Murcia and co-funded by the Interreg Euro-MED programme, seeks to advance Blue Biotechnology across the Mediterranean by establishing national Blue Biotechnology Hubs (BBHubs). Bringing together 10 partners from six countries (Spain, France, Slovenia, Italy, Albania, and Greece) 2B-BLUE unites a regional network of expertise to leverage Blue Biotechnology for sustainable development, environmental restoration, and economic growth. Building on the achievements of the prior B-Blue project, 2B-BLUE sets specific goals to drive innovation, increase sustainability, and stimulate economic activities in key Blue Biotechnology value chains, such as integrated multi-trophic aquaculture (IMTA), algae cultivation, cosmetics or fisheries and aquaculture byproduct valorisation. Along these lines, the project emphasizes both environmental conservation and technological advancement to ensure that marine and coastal ecosystems are preserved alongside economic growth.



1.1. Project goals and relevance

The 2B-BLUE project has four primary objectives. First, it aims to identify and showcase best practices and significant stakeholders in Blue Biotechnology, creating a robust, collaborative network across the Mediterranean. Second, it seeks to establish national Demonstration Sites (DS) and Transformative Labs (T-Labs), using a “living lab” approach to test and refine emerging Blue Biotechnologies under real-world conditions. These DS bridge the gap between research and practical applications, accelerating the adaptation of laboratory innovations to market-ready solutions. Third, 2B-BLUE focuses on building strategic alliances to encourage the adoption of advanced biotechnologies within the environmental industry, supporting environmentally responsible practices across the region. Finally, the project strives to influence regional policies to enhance sustainability and bolster research and innovation capacities across the Euro-Mediterranean, creating a policy framework that supports long-term growth in Blue Biotechnology.



1.2. Project benefits





2B-BLUE will generate both environmental and socioeconomic benefits. Environmentally, the project will support best practices to protect and improve marine ecosystems by applying biotechnological innovations to monitor, restore, and sustain marine environments. Socioeconomically, 2B-BLUE aims to foster the growth of a Blue Biotechnology sector in the region, generating jobs and boosting economic activity through the sustainable use of marine resources. At the same time, the DS and T-Labs will function as innovation hubs where emerging biotechnologies can be refined, validated, and adapted for widespread industry use, helping to stimulate local economies, adapted regulations and create new business and innovation opportunities.

1.3. Transferable Knowledge

A key strength of the 2B-BLUE project is its commitment to knowledge sharing. By creating six BBHubs modeled as living labs, 2B-BLUE encourages practical experimentation, collaboration, and knowledge exchange across sectors and regions in key Blue Biotechnology value chains. These hubs will not only support the project's immediate goals but will also serve as long-term resources for training, collaboration, and continued innovation beyond the project's lifespan. In line with this, the methodologies, partnerships, and technologies developed through 2B-BLUE are designed to be adaptable and transferable, providing valuable insights for other regions and industries looking to adopt Blue Biotechnology solutions.



Through these initiatives, 2B-BLUE will help establish a thriving Mediterranean Blue Biotechnology community that contributes to sustainable development, while generating valuable transferable knowledge and technologies to support the global the blue economy.

2. Introducing MedBBHub: A Pioneering Platform for Mediterranean Blue Biotechnology

In early 2024, the 2B-Blue project launched an innovative online platform, MedBBHub, to drive growth and innovation in the Mediterranean Blue Biotechnology sector. As part of the wider 2B-Blue project, MedBBHub aims to foster collaboration and support sustainable practices by connecting stakeholders and showcasing best practices.

2.1.A Comprehensive Map of Blue Biotechnology: Fostering Collaboration and Opportunity

MedBBHub serves as a dynamic database, providing a comprehensive map of key stakeholders and best practices within the Blue Biotechnology sector. This platform is designed to benefit policymakers, entrepreneurs, and researchers by:

- Identifying and showcasing key players
- Facilitating informed decision-making
- Fostering partnerships





By highlighting pioneering practices, MedBBHub supports the establishment and growth of regional Blue Biotechnology Hubs, equipping them with essential resources and knowledge to advance marine biotechnology value chains.

This interactive tool aggregates valuable insights from past initiatives, serving as a rich repository for practitioners and policymakers. By spotlighting successful strategies and showcasing exemplary practices, the database acts as a roadmap, guiding the replication and advancement of innovative projects across the Mediterranean regions).

To anchor pilot activities in the realities of the Mediterranean context, a **Preliminary Study** was conducted to evaluate regulatory frameworks, environmental impacts, and market value chains. This study pinpointed promising areas for intervention, emphasizing industries with significant economic potential. The findings offer a tailored strategy for advancing blue biotechnology activities, prioritizing sustainability and scalability to ensure long-term success.

Addressing the challenges to adopting blue biotechnology has been another critical focus of WPI. Through the activation of **Working Groups (WGs)** and **co-creation activities (T-Labs)**, stakeholders from diverse sectors collaborate to define actionable strategies. These collective efforts can assess socioeconomic, environmental, and regulatory parameters, establishing measurable goals via **Key Performance Indicators (KPIs)**.

As WPI continues to advance, its outputs lay the groundwork for implementing pilot activities and establishing a collaborative network that transforms innovative solutions into practical, scalable applications in one of the richest sea basins.

Through strong partnerships with policymakers, researchers, and industry leaders, WPI fosters collaboration to tackle barriers such as regulatory constraints and market feasibility. By delivering practical resources—including case studies, stakeholder insights, and best practices—the project empowers the broader adoption of blue biotechnology innovations.

WPI outputs are developing a comprehensive framework to support the transition toward sustainable business models in the marine bioeconomy. This framework will offer a practical description of the challenges and priorities that need to be addressed, tailored to the specific context of Euro-Mediterranean regions. Designed to ensure that proposed solutions are both scalable and investment-ready, it will provide actionable insights to meet the diverse needs of the region, bridging the gap between innovative concepts and practical implementation.

With a clear roadmap in place, WPI is set to deliver a comprehensive strategy by the beginning of 2025.





2.2. Two Pillars of Innovation: Hub Members and Good Practices

MedBBHub comprises two primary components:

1. **Hub Members:** A community of registered members who can network, exchange ideas, and stay updated on the latest developments in the project. By joining, members gain exclusive access to resources, events, and collaboration opportunities.
2. **Good Practices:** A repository of successful approaches in Blue Biotechnology, submitted by users. This collection showcases valuable insights and inspires innovation within the Mediterranean region.

2.3. Join the MedBBHub Community

Industry professionals, researchers, and policymakers are invited to register as members, contribute good practices, and engage with the thriving Mediterranean Blue Biotechnology network. MedBBHub offers a dynamic platform for sharing knowledge, fostering collaboration, and driving innovation. Registered Hub members can decide to what degree they want to be involved in a scale from “Information” to “Empowerment”.

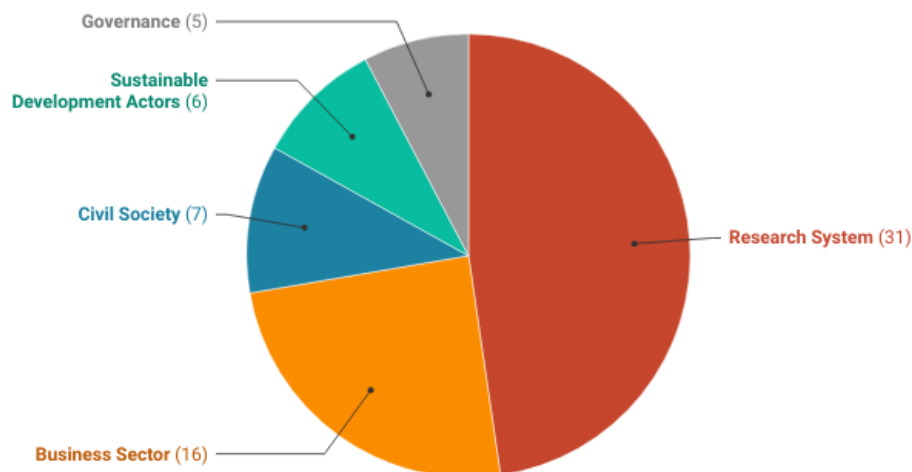
2.4. Expanding the Network of Hub Members: Key Stakeholders in Blue Biotechnology

As of November 2024, MedBBHub has attracted 65 stakeholders from various sectors, including:

- **Research institutions (31):** A significant portion, highlighting the academic contribution to innovation and knowledge-sharing.
- **Business sector (16):** Demonstrating increasing industry interest in sustainable marine biotechnology solutions.

While Spain leads in stakeholder involvement, followed by France, Italy, and Greece, other participating countries have fewer active stakeholders, indicating an opportunity for broader engagement and regional balance.

Stakeholders per country (helix detail)

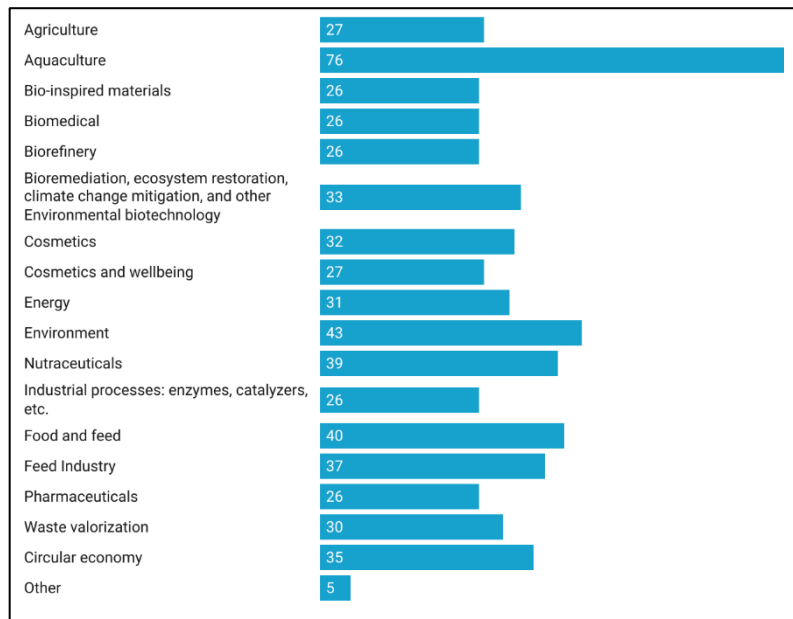




2.5. Showcasing Good Practices: A Repository of Innovative Solutions

MedBBHub's Good Practices sector currently houses 123 practices, with Aquaculture being the most prominent area, representing 76 of the total. This diversity showcases the amplitude of Blue Biotechnology applications and the potential for innovation across various sectors.

By sharing and learning from these good practices, stakeholders can foster a more integrated, innovative, and sustainable approach to Blue Biotechnology in the Mediterranean region.



Stay tuned to learn about the results of 2B-BLUE of work groups & co-creation activities!

