BLUE ECOSYSTEM | Interreg Euro-MED | Co-funded by the European Union

Blue Transformation challenges at MED level and priority matrix

Deliverable 1.2.1

RegioneEmiliaRomagna | ART-ER | ADRAL | PÔLE MER MÉDITERRANÉE | hcmr ΕΛΚΕΘΕ | HGK CROATIAN CHAMBER OF ECONOMY | CLUSTER MARÍTIMO de las Illes Balears | CHRYSALIS LEAP | CPMR CRPM

PROJECT DETAILS	
Project Acronym	BLUE ECOSYSTEM
Project Full Title	Transformative co-creation innovation labs for the Blue Sustainable Economy
Project Priority	Smarter MED
Project Mission	Strengthening an innovative sustainable economy
Specific Objective	RSO1.1: Developing and enhancing research and innovation capacities and the uptake of advanced technologies
Type of Project	Test project (Thematic Project)
Contract id	Euro-MED0200727
Start date	01 January 2024
Duration	33 months

DELIVERABLE DETAILS	
Deliverable	D1.2.1
Description	This report addresses the process for the development of the Blue Transformation challenges at MED level and priority matrix, as outlined under Activity 1.2.
Activity 1.2 "Blue Transformation challenges at MED level and priority matrix" responsible partner	HCMR
Authors	C. Efstratiou, A. Giannakourou, S. Valentini, J. Juarez, T. De Nittis
Participating partners	All
Due date of delivery	31 December 2024
Status (draft, version, final)	Final version
Language	English
Delivery date	28 February 2025
Distribution	Internal

Abstract

The **Blue Transformation Challenges at MED Level and Priority Matrix** (D1.2.1) is a key deliverable of the **BLUE ECOSYSTEM** project, dedicated to advancing **innovation, sustainability, and resilience** within the **Mediterranean Blue Economy**. Multidisciplinary experts **identified and categorized** sectoral challenges and strategic priorities, designing the **Blue Transformative Challenge Matrix (BTCM)**—a framework designed to **guide policy, investment, and innovation**. The BTCM links **identified challenges in the Mediterranean Blue Economy (BE) with proven best practices**, ensuring that sector-specific activities align with **EU sustainability objectives**, including the **Green Deal, the Biodiversity Strategy 2030, and the Nature Restoration Law**.

Environmental issues

Each of the planned activities is:

✓ carried o84ut reducing as much as possible the project carbon footprints (ex. limiting travels)

✓ wastepaper – all partners are limiting the hard copies of the project documents, as well as carrying hard copies of the working documents with them at the meetings

✓ making use of (green) public transports

✓ considering environmental issues as an added value in every activity the project will carry out.

✓ aligned with the Programme carbon footprint reduction initiative and counted into the calculator to be compensated.

TABLE OF CONTENTS

1. INTRODUCTION

1.1. BACKGROUND AND CONTEXT

The **Mediterranean region**, with its vast marine and coastal resources, holds immense potential for the **transformation of the Blue Economy**. However, it also faces **complex and interconnected challenges**, including **environmental degradation, economic disparities, and fragmented governance structures**. Addressing these issues requires a **structured and strategic approach** that fosters **sustainability, resilience, and innovation** across the region.

Activity 1.2 was designed to **navigate these challenges** and identify **opportunities for transforming Blue Economy sectors** into **resilient and sustainable economic drivers** for the Mediterranean. This was achieved through **participatory processes** that engaged **multi-disciplinary experts and stakeholders** in defining actionable pathways for **sustainable development**.

By conducting an in-depth review of **key thematic policy documents and strategies**—such as the EU Communication on Sustainable Blue Economy, SRIA Blue Med, RIS3, MISTRAL Blue Book, and BLUEMISSIONMED Innovative Transformative Solution—alongside regional and national action plans from Balearic Islands, Emilia-Romagna, Sud Paca-Occitanie, Zadar County, Alentejo, Greece, and Albania, A1.2 identified and categorized the **most pressing challenges** facing the **Mediterranean Blue Economy**, taking into consideration future scenarios.

The **identified challenges** were linked to **proven best practices and project outputs (ANNEX I)**, forming the foundation for a **strategic framework** aimed **at enhancing sustainability, resilience, and innovation** within the **Blue Economy** across the **Mediterranean regions**.

1.2. OBJECTIVES

1. **Review Strategic Priorities and Resilience Challenges:**
    - Conduct a systematic review of policy documents and regional projects.
    - Identify essential practices to accelerate the transition of EU-Mediterranean sectors towards sustainability.
2. **Assess Sectoral Value-Added Across Mediterranean Regions:**
    - Evaluate the interconnection between economic performance and sustainability taking into consideration market potential and environmental factors influencing the Mediterranean Blue Economy.
    - Identify drivers of innovation and sustainable growth in key sectors.
3. **Develop a Blue Transformative Challenge Matrix:**
    - Link innovation actions to sector-specific challenges and the objectives of the EU Mission restore our Ocean and Waters, which integrates EU frameworks such as the EU Green Deal, the Biodiversity Strategy 2030, and the Nature Restoration Law.
    - **Establish a guiding framework** for designing **impactful missions** that align **ocean health** with the **sustainable development** of the **Mediterranean Blue Economy**.

2. VALUE ADDED BY SECTOR IN EU-MEDITERRANEAN REGIONS

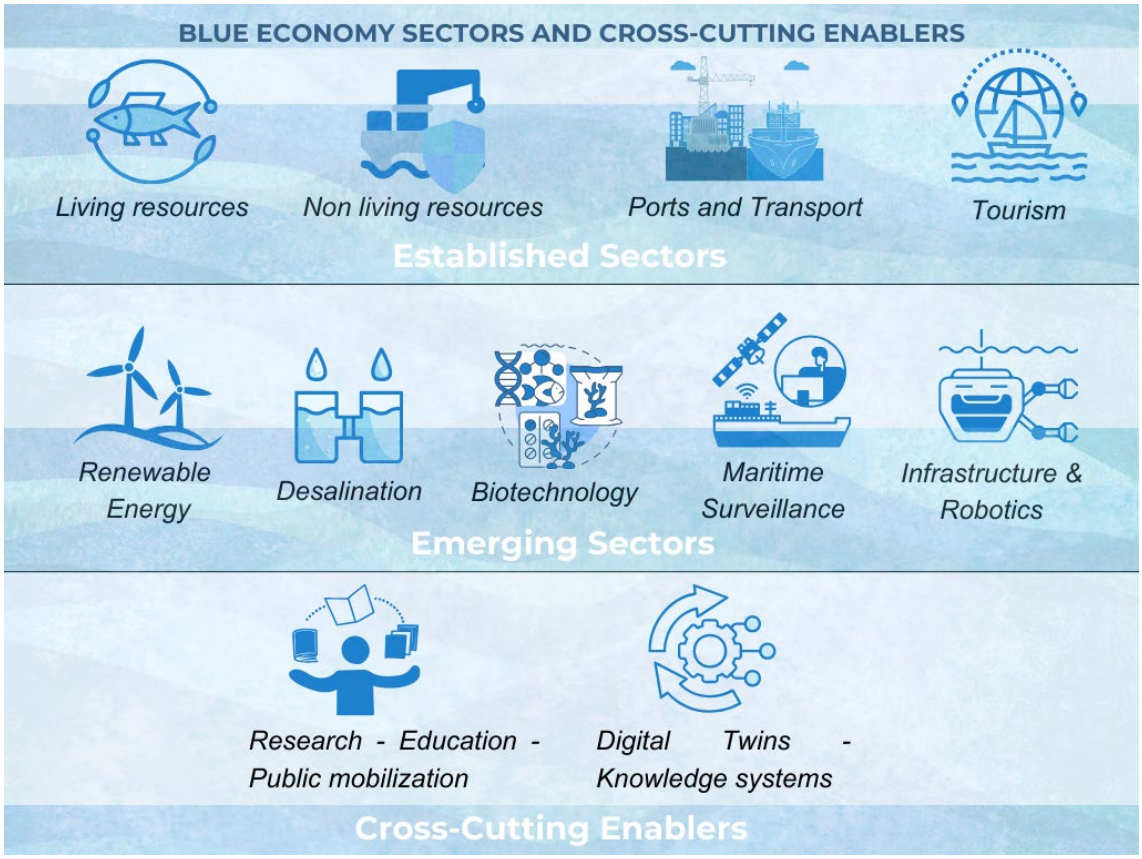

Figure-1 Blue Economy Sectors and Cross-Cutting Enablers

The economic significance of various sectors in the Mediterranean Blue Economy can be best understood by examining their respective contributions and challenges. **Marine living resources** play a crucial role in the Mediterranean region, with fisheries and aquaculture alone accounting for **one-third of the EU's €22 billion Gross Value Added (GVA) and supporting over 391,000 jobs**. These activities primarily take place in coastal zones and are driven by the demand for **high-quality seafood, advancements in sustainable practices, and increasing technological innovations**. However, the sector faces **pressing environmental concerns**, including **biodiversity conservation, the management of invasive species, and the urgent need to adapt to climate change**.

Equally important are the **marine non-living resources**, particularly in coastal Mediterranean regions rich in mineral reserves. In 2021, the GVA of this sector amounted to **approximately €700 million**, with Italy contributing 87% of the Mediterranean total. Economic **opportunities** in this sector are largely driven by the **demand for oil, gas, and alternative energy solutions**, but **stringent environmental regulations** impose **constraints** on resource extraction. Countries such as Cyprus are focusing on sustainable offshore services, while several regions are striving to balance industrial development with environmental preservation.

Port activities continue to be a major economic force, contributing **around €29.5 billion** to the European economy, with Spain, France, Italy, and Greece being the primary contributors. Port activities in these regions are influenced by **digital**

transformation trends, ecological transitions, and integration with European networks. The need for **achieving carbon neutrality, managing invasive species, and reducing pollution** has led to significant investments in innovative technologies aimed at making port operations more sustainable.

Shipbuilding and repair industries also hold a strong position in the Mediterranean, **employing 30% of Europe's workforce** in this sector, with France and Italy leading production. Increasing **digitalization is reshaping shipbuilding**, with regions like Cyprus and the Balearic Islands collaborating with academic institutions to develop smart, efficient maritime systems. Meanwhile, environmental sustainability efforts are guiding regions like Occitanie and Emilia-Romagna toward **eco-design, energy efficiency, and the adoption of new materials** to make shipbuilding operations more environmentally friendly.

Maritime transport remains a key sector, contributing **€44.3 billion in GVA and employing 30% of the workforce** in the European maritime industry. Italy, France, Greece, and Spain account for over 90% of the Mediterranean GVA in this sector. The increasing focus on **green transport technologies, decarbonization**, and the **adoption of alternative fuels** highlights the shift toward a more environmentally sustainable maritime transport network in the region.

The **coastal tourism** sector is one of the largest contributors to the Mediterranean Blue Economy, accounting for over **50% of the EU's coastal tourism GVA** and **employing more than 700,000 people**. The sector is increasingly driven by digitalization and the use of **AI, IoT, and Big Data** to enhance visitor experiences and optimize resource management. However, challenges such as **geopolitical instability, environmental degradation, land-use conflicts**, and the need to reduce **seasonal dependence** underscore the **necessity for innovative and collaborative solutions**.

Renewable energy and **desalination** technologies are gaining prominence, yet commercial deployment remains in its early stages. The sector generates **approximately €3.5 billion in GVA**, with innovation focused on offshore wind, floating **wind turbines**, and **wave energy** in regions like Occitanie, Attica, and Emilia-Romagna. Desalination is crucial, particularly for **arid Mediterranean islands** such as **Cyprus, Cyclades Islands in Greece, and the Balearic Islands**, as well as **coastal regions like Alentejo**. Emphasizing the **integration of renewable energy**, these efforts aim to enhance **sustainability, reduce environmental impact, and improve water security** in regions facing increasing water scarcity.

The **Blue Bioeconomy and Biotechnology sector** is an emerging field with significant potential, driven by market demands and environmental imperatives. Across the **EU-Mediterranean regions**, countries are leveraging **marine biotechnology** to advance **sustainable fisheries, aquaculture, and waste valorization**.

Maritime surveillance, infrastructure, and **robotics** are rapidly evolving sectors, driven by technological advancements and stringent regulatory compliance. Key innovations include **smart navigation systems, maritime safety protocols, electric vessel technologies, and enhanced surveillance mechanisms** to manage high tourism levels effectively.

A **detailed breakdown** of the **GVA by economic activity** in the **established sectors** (Figure 2) underscores the **significant industrial capacity** in areas such as **shipbuilding and the construction of floating structures**, as well as in **service activities supporting water treatment and transportation**. Data were derived from the EU Blue Economy Observatory, (link), taking into consideration the study regions.

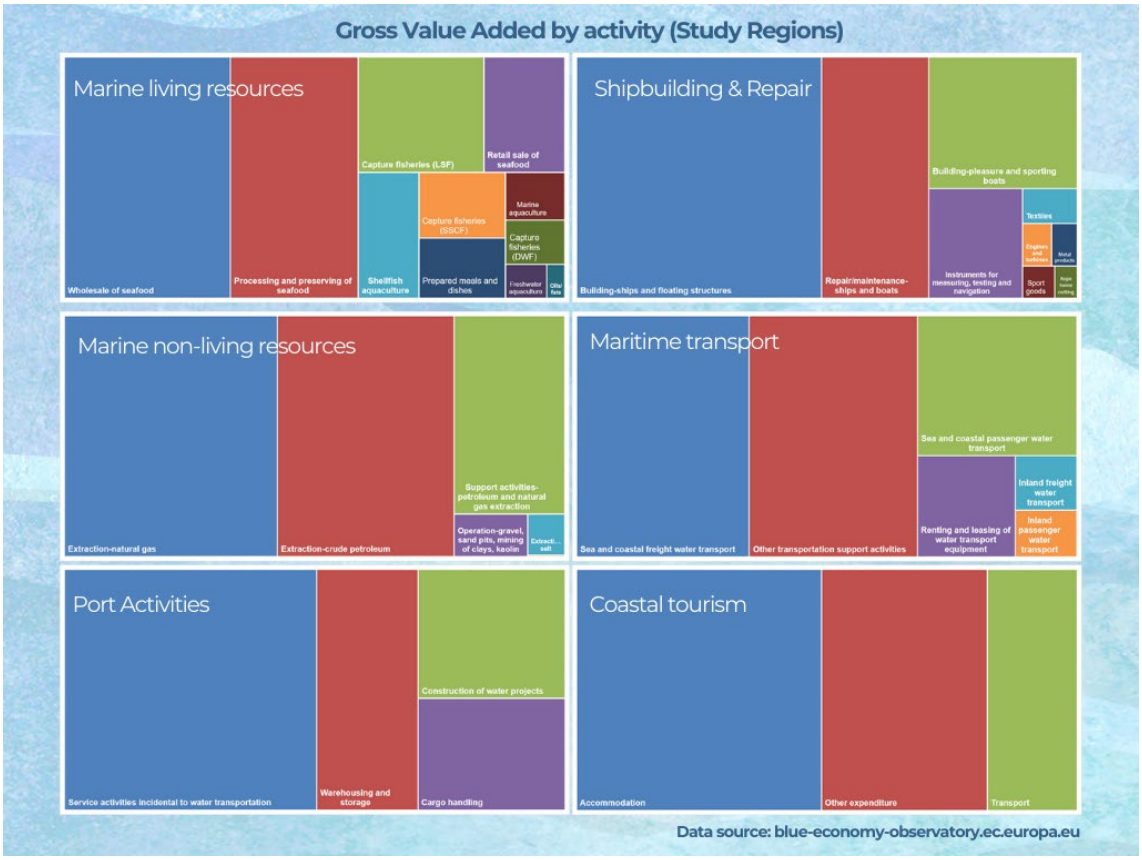

Figure 2-2 Gross Value Added (GVA) by sector and economic activity-Study regions

The links to the **detailed sectoral reports** on the **Blue Economy** for the study regions can be found in **ANNEX II**.

3. CHALLENGES OF RESILIENCE IN THE MEDITERRANEAN BLUE ECONOMY

3.1. Site-Specific Challenges and Smart Specialization Strategies (S3) Focus

The Mediterranean region faces a range of site-specific challenges that hinder the resilience and sustainability of its Blue Economy. These challenges arise due to overexploitation of resources, pollution, inadequate governance, and socio-economic constraints.

a) <u>Regional Approach of S3:</u>

Italy (Emilia-Romagna)

1. **Marine Resource Management:** Strengthening the blue bioeconomy and biotechnology sectors.

2. **Sustainable Tourism:** Developing innovative coastal tourism strategies (Tourism 2.0) to enhance sustainability.
3. **Innovation and Biotechnology:** Expanding marine bioeconomy and marine manufacturing advancements.
4. **Sustainable Economic Development:** Promoting renewable energy sources and sustainable manufacturing practices.

France (Sud Paca-Occitanie)

1. **Marine Resource Management:** Restoring coastal environments to enhance regional attractiveness and biodiversity.
2. **Pollution and Waste Management:** Implementing measures to reduce pollution caused by maritime activities.
3. **Sustainable Tourism:** Developing new sustainable tourism offerings that balance economic and environmental objectives.
4. **Climate Adaptation:** Enhancing climate resilience through adaptation strategies and sustainable infrastructure.

Portugal (Alentejo)

1. **Sustainable Economic Development:** Developing a sustainable bioeconomy to foster innovation and resilience.
2. **Sustainable Tourism:** Expanding tourism and hospitality services while minimizing environmental impact.
3. **Maritime and Coastal Infrastructure:** Enhancing mobility and logistics to support maritime and coastal economic activities.

Spain (Balearic Islands)

1. **Sustainable Tourism:** Strengthening sustainable coastal and maritime tourism initiatives.
2. **Marine Resource Management:** Enhancing biodiversity protection to safeguard marine ecosystems.
3. **Pollution and Waste Management:** Addressing marine litter and implementing waste reduction strategies.
4. **Sustainable Economic Development:** Advancing marine renewable energy projects to support the transition to a green economy.

Greece (Region of Attica)

1. **Marine Resource Management:** Integrating fisheries and aquaculture within the agro-food chain to enhance sustainability.
2. **Pollution and Waste Management:** Addressing marine pollution, environmental protection, and fostering a circular economy.
3. **Sustainable Tourism:** Enhancing sustainable coastal and maritime tourism with a focus on culture and creative industries.
4. **Innovation and Biotechnology:** Advancing aquatic biotechnology to drive innovation in the blue economy.
5. **Sustainable Economic Development:** Expanding the use of sustainable energy solutions to support long-term economic resilience.
6. **Maritime and Coastal Infrastructure:** Strengthening transport and supply chain systems to enhance regional connectivity.

b) <u>National Approach of S3:</u>

Albania

1. **Marine Resource Management:** Addressing overexploitation of marine resources, depletion of fish stocks, and degradation of marine habitats.
2. **Pollution and Waste Management:** Mitigating pollution from coastal tourism, increasing waste, and environmental degradation in high-tourism areas.
3. **Sustainable Tourism:** Implementing strategies to reduce tourism-related pollution and promote environmentally friendly practices.
4. **Resource and Waste Management:** Enhancing recycling and waste processing infrastructure to support sustainability goals.

Croatia

1. **Marine Resource Management:** Strengthening food and bioeconomy initiatives, particularly in fisheries.
2. **Sustainable Tourism:** Promoting sustainable coastal tourism to balance economic growth with environmental preservation.
3. **Pollution and Waste Management:** Ensuring a sustainable environment through effective waste management and pollution control measures.
4. **Maritime and Coastal Infrastructure:** Improving sea traffic management and infrastructure development.

Cyprus

1. **Marine Resource Management:** Advancing sustainable fisheries practices.
2. **Sustainable Tourism:** Promoting responsible coastal and maritime tourism to reduce environmental impact.
3. **Innovation and Biotechnology:** Expanding marine biotechnology initiatives to support sustainable development.
4. **Maritime and Coastal Infrastructure:** Strengthening the maritime and shipping ecosystem through innovation and digitalization.

3.2. Blue Transformative Challenges and Priorities Matrix

The **Blue Transformative Challenges and Priorities Matrix** (Tables 1a & 1b) serves as **a guiding framework** to address key **sustainability concerns** within the **Mediterranean Blue Economy**. This matrix highlights the core domains, **framing missions**, and **priorities** required for **resilience**.

Table 1a. Blue Transformative challenges matrix

					Innovation Actions			
Economic Domain	**Sustainability Mission**	**Correlated Sector(s)**	**Objectives Addressed**	**Priorities/ Impact**	*Technological*	*Social*	*Financial*	*Governance*
Bioeconomy – Agrofood	Sustainable Marine Food Systems.	Marine Living Resources, Marine Bio-Based Solutions.	Protect biodiversity, Carbon neutrality.	▪ Sustainable feed /use of alternative protein sources and pigments. ▪Rearing of new/emerging species for the expansion of Euro-Med aquaculture. ▪Sustainability standards and certification. ▪Address gaps in Illegal, Unreported, and Unregulated (IUU) Fishing. ▪Environmental footprint of aquaculture & fisheries. ▪Recycle/reuse gear and packaging materials. Biodegradable gear to enhance food security and ecosystem health. ▪Reduction of waste, sustainable, recycling/valorization of fishery and aquaculture by-products.	Sustainable aquaculture systems, biodegradable gear.	Community-led sustainable aquaculture practices.	Subsidies for sustainable feed, biodegradable gear R&D.	Regulations on sustainable aquaculture and gear usage.
Environment - Sustainable innovation - Ecosystem restoration, climate change mitigation	Environmental Resilience through Ecosystem Restoration.	Marine Living Resources, Infrastructure and Robotics, Maritime Surveillance.	Protect biodiversity, Prevent pollution.	▪Improved monitoring and management systems, bioindicators and early warning systems. ▪Marine Protected Area (MPA) Management Tools: Use of satellite monitoring, drones, and AI to enhance the management and enforcement of MPAs. ▪Support regenerative aquaculture and bioremediation. ▪Innovative technologies such as marine gardening, artificial reefs and recreational fisheries. Opportunities in animal, algae and plant breeding. ▪Technologies for the prevention/removal of plastics and CoECs. ▪Habitat restoration, marine litter clean-up, and citizen engagement.	Advanced systems for monitoring, bioremediation, and ecological restoration.	Community involvement in habitat restoration and clean-up efforts.	Grants for ecological restoration and pollution mitigation.	Policies for strengthening marine protected areas and restoration efforts.
Energy	Carbon-Neutral Marine Renewable Energy.	Marine Non-Living Resources, Renewable Energy and Desalination.	Carbon neutrality.	▪Expand offshore wind/solar farms and energy storage for transition to MRE. ▪Cold Ironing in reducing shipping emissions. ▪Multipurpose use of marine space. Multi-purpose platforms for food, energy and water production. ▪Combine space and activities with tourism. Integration of renewable energy and low trophic aquaculture. ▪Low impact desalination plants using renewable energy to address water scarcity.	Renewable energy technologies (wind, wave, solar, storage).	Public awareness on renewable energy transition.	Incentives for renewable energy infrastructure.	Renewable energy targets, carbon-neutral policies.
Materials and manufacturing systems	Marine Biobased Solutions and Circular Economy.	Marine Bio-Based Solutions, Infrastructure and Robotics.	Circular economy, Pollution prevention.	▪Develop bio-based materials, eco-friendly paints, solvents, and metals. ▪Promote recycling/upcycling of marine litter, and foster a circular economy. Reception facilities for recycling. ▪Sustainability standards and certification ▪Minimize the environmental consequences of undersea/submarine cabling and equipment.	Bio-based materials, recycling technologies.	Education on circular economy practices.	Funding for circular economy and bio-based materials.	Legislation on bio-based product usage.
Transport and logistics	Decarbonizing Maritime Transport.	Port Activities and Maritime Transport.	Carbon neutrality, Pollution prevention.	▪Adopt alternative fuels, electrify ports. ▪Integrate smart technologies for sustainable logistics (e.g. autonomous ships development of unmanned vessels).	Alternative fuels, smart logistics systems, green	Stakeholder collaboration for low-	Funding support for green ports and alternative	Emissions standards for transport and ports.

				▪Green ship technology innovations in ship design and propulsion systems to reduce emissions/fuel consumption and promote material recycling.	ship design material recycling.	emission transport.	energy solutions.	
Public Health	Marine Biotechnology for Health & Sustainability.	Marine Living Resources, Marine Bioeconomy/ Biotechnology.	Protect biodiversity, Circular economy.	▪Advance marine-derived pharmaceuticals, nutraceuticals, cosmetics, feed, algal biofuels, compounds for sustainable agriculture, and genomics linking conservation of marine resources with public health and sustainability. ▪Marine derived organic antimicrobial, antifouling agents. ▪Biobased materials such as bioplastics.	Blue biotechnologies, genomic advancements, waste valorization.	Awareness campaigns on marine biodiversity and blue biotechnology benefits.	Funding support for marine-derived products.	Policies on marine bio-based innovation and genomics.
Cultural and creative industry Social innovation	Inclusive and Sustainable Blue Innovation.	Coastal Tourism, Marine Living Resources.	Protect biodiversity, Prevent pollution.	▪Eco-tourism to promote conservation and awareness of marine environments. ▪Specific forms of sustainable marine tourism (e.g. cruise, yachting, diving tourism), support and upgrading of areas of cultural and environmental interest (marine parks and marine and coastal fauna observatories). ▪Citizen science protocols to collect data.	Digital platforms, green certifications.	Community-based eco-tourism models.	Funding support for local eco-tourism projects.	Regulations on eco-tourism and certifications.

Table 1b. Blue Transformative challenges matrix-Cross-cutting areas

					Innovation Actions			
Economic Domain	**Sustainability Mission**	**Correlated Sector(s)**	**Objectives Addressed**	**Priorities/ Impact**	*Technological*	*Social*	*Financial*	*Governance*
ICT-Digital transformation	Smart Marine Systems for Sustainability.	All	Protect biodiversity, Carbon neutrality.	▪Intelligent monitoring, data transmission systems, predictive forecasting techniques and early warning systems, to enhance resource management and reduce environmental impact. ▪Precision technologies and “tele-management” for biosecurity. ▪"Smart" Ports: digital technologies to optimize port operations, reduce congestion, and minimize environmental impact.	AI, IoT, real-time monitoring systems.	Community-led science programs for environmental monitoring.	Strategic investment in digital marine systems.	Regulatory frameworks for open data sharing in marine conservation.
Social innovation (closely related to cultural and creative industry)	Inclusive and Sustainable Blue Innovation.	All	Protect biodiversity, Prevent pollution.	▪ Campaign strategies for the protection of the environment. Educational activities to engage public to balance economic growth with conservation. ▪Cross sectoral consultations to minimize social obstacles and increase social acceptance (e.g. tourism, aquaculture, sustainable zoning of production sites) ▪Encourage community-based eco-tourism, citizen science, green certifications ▪Reskilling/Upskilling, new job opportunities, new business models ▪ Socio Ecological System Approach (SES), understanding that marine environment and marine industries form a dynamic system, for ecosystem-based management policies.	Digital twins, AI-driven IoT, risk prediction models, real-time monitoring systems.	Community-based eco-tourism models.	Grants for local eco-tourism projects.	Regulations on eco-tourism and certifications.

4. ANNEXES

ANNEX I: List of Projects

1. Skill Development and Education

- **MariTech Talent**: Develops skills in digital transformation and sustainability for the maritime workforce and supports deep-tech solutions for twin transitions.
- **Policy-Maritime Education**: Promotes maritime careers to students and parents through educational initiatives and partnerships with universities.
- **IN4BLUE**: Addresses skill gaps in creative industries and blue economy by fostering co-creation through Social Impact Business Incubators.

2. Innovation and Technology Development

- **iNavis**: Innovation hub for energy, environmental, and marine research, connecting stakeholders in the maritime sector.
- **BlueDIH**: Provides digital transformation services for the blue-green sector with expertise in AI and HPC.
- **THINK IN AZUL**: Enhances marine research and creates new technologies in sectors like tourism and fishing.
- **AI-driven Fish Tank Inspection**: Uses AI for environmental monitoring in aquaculture systems.
- **BIOGEARS**: Develops compostable aquaculture ropes to reduce plastic pollution.
- **FRUALGAE**: Explores biomaterials from marine organisms for sustainable food supply chain technologies.
- **SeaClear 2.0**: Robotic solutions for marine litter remediation in the Mediterranean.
- **NEXUS**: Promotes digital innovation in transport and logistics with a focus on AI and cybersecurity.

3. Environmental Sustainability and Climate Resilience

- **DesirMED**: Implements blue-green solutions for climate adaptation in the Mediterranean.
- **WATER-MINING**: Demonstrates sustainable water management methods.
- **SeaFennel4MED**: Develops cropping systems for agrobiodiversity and resilience to climate change.
- **Aegean Rebreath**: Establishes a circular economy for marine litter collection and recycling.
- **marGnet**: Converts marine litter into fuel, promoting sustainable recycling methods.
- **Seagrass transplantation (LIFE-TRANSFER)**: Restores coastal ecosystems through habitat regeneration.

- **INNOVATIVE DEVELOPMENT OF MULTITROPHIC AQUACULTURE (IDMA)**: Promotes sustainable aquaculture practices.

4. Blue Economy and Sustainable Development

- **2B-BLUE:** Promotes the Mediterranean blue biotechnology sector.
- **MENA Maritime Accelerator**: Supports start-ups with innovative solutions for maritime sustainability.
- **BEE-Blue Economy Entrepreneurship**: Encourages entrepreneurship and sustainable tourism in European islands.
- **HOLOSUD**: Creates a sustainable aquaculture industry based on sea cucumbers.
- **Blue Marina**: Promotes environmentally responsible maritime practices.
- **Eco Marina**: Develops sustainable marine superstructure technologies.

5. Renewable Energy and Decarbonization

- **Sun'Sète**: Offshore photovoltaic farm in the Mediterranean for renewable energy production.
- **Zero-Net Emissions: Resilient Maritime Hubs**: Aims for carbon neutrality in the shipping industry by 2050.
- **Fin150**: Develops hydrogen-powered boat engines to reduce GHG emissions.
- **Conversion of Defense into Civil Research for Renewable Energy**: Utilizes defense expertise for marine renewable energy development.

6. Invasive Species Management

- **EXPLIAS**: Develops methods for the commercial exploitation and management of invasive species.
- **BLUECRAB**: Monitors and manages blue crab populations to protect biodiversity and local economies.

8. Logistics and Port Management

- **iAoPort**: Centralizes data for efficient maritime activity management using AI.
- **NEXOMAR**: Enhances technological and organizational capacities for port logistics.

9. Tourism and Cultural Integration

- **RED CCF**: Develops a network of sustainable nautical tourism destinations.
- **National Tourism Strategy 2020-2030**: Establishes Cyprus as a sustainable, year-round tourist destination.

10. Research and Development

- **CIMMAR**: Advances interdisciplinary research for the Adriatic Sea's sustainability.

- **STIM-REI**: Integrates science and innovation for the Mediterranean's development.

ANNEX II: Sectoral Reports

Extended sectoral reports

- **Marine living resources-** LINK.
- **Marine non-living resources-** LINK.
- **Port Activities-**LINK.
- **Shipbuilding & Repair-**LINK.
- **Maritime transport-** LINK.
- **Coastal tourism-** LINK.
- **Blue Bioeconomy-Biotechnology**- LINK.
- **Renewable Energy and Desalination-**LINK.
- **Maritime surveillance, Infrastructure-Robotics-**LINK.

5. REFERENCES

Regional Action Plans_BE project KoM presentations.

MISTRAL BLUE GROWTH BOOK

https://apromar.es/wp-content/uploads/2021/12/Aquaculture-in-Spain-2020.pdf

https://eurofish.dk/member-countries/italy/

https://www.flag-costaemiliaromagna.it/flag_engv/

https://www.mdpi.com/2077-1312/10/3/417

https://www.fao.org/fishery/en/countrysector/al/en?lang=en

https://www.researchgate.net/publication/239546332_Recreational_maritime_fishing_in_the_Balearic_Islands_Tradition_and_future

https://www.franceagrimer.fr/fam/content/download/61053/document/a4-CC%20p%C3%AAche%202019%20eng-CORRIGE.pdf?version=8

https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2021/March/IRENA_RRA_Albania_2021.pdf

https://oceans-and-fisheries.ec.europa.eu/ocean/blue-economy/sustainable-blue-economy_en

https://bluemissionmed.eu/about-innovative-transformative-solutions/