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# 1 Introduction

#### 1.1 Background and aim of this document

On the 2<sup>nd</sup> February 2021 the UfM Ministerial Declaration for a Sustainable Blue Economy<sup>1</sup> was ratified, calling for a number of relevant actions to be implemented across the Mediterranean sea basins. Those actions addressed a number of different priorities, including some sectoral ones (fisheries and aquaculture; maritime transport and ports; coastal and maritime tourism; marine litter; maritime safety and security) and others of a more cross-cutting nature (governance and sea basin strategies; research and innovation; skills, careers and employment; maritime spatial planning and integrated coastal zone management; sustainable investments).

The UfM Ministerial Declaration was commonly welcomed as an ambitious Declaration on shared goals with an expanded scope in terms of areas of cooperation, principles and common actions. Its specific aim was to address the joint challenges for the future of the Mediterranean Sea and its region and thus set a basis for coordinated future support by the UfM and other relevant regional stakeholders. As agreed by the UfM Co-Presidency, UfM Secretariat and UfM Countries, in order to be fully operational, the UfM Ministerial Declaration should be backed by a clear prioritisation of the list of actions called by Ministries.

This document therefore reviews the proposed actions under the various priorities identified by the UfM Ministerial Declaration and on this basis provides a clear indication and prioritisation of the way forward towards its full implementation. It does so by offering an overview and analysis of the joint needs, gaps and opportunities for future support, with the final ambition of offering a clear Roadmap for the implementation of the thematic priorities set by the UfM Ministerial Declaration.

Since its first publication on 2022, the document has undergone a number of updates to reflect progress made in the implementation of the Ministerial Declaration Priorities. In the table below, an overview of the history of versions of the document is provided.

Version	Changes introduced	Date
Version 1	First version of the Roadmap (baseline)	March 2022
Version 2	Additional section per priority with progress up to 2023	April 2023
Version 3	Additional section per priority with progress up to 2024	June 2024
Version 4	Additional section per priority with progress up to 2025	September 2025

## 1.2 Analysis provided and main outcomes expected

The Roadmap proposed through this document is based on several steps which ensure its overall soundness and feasibility – such different steps are resumed in this section.

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 $<sup>^{1} \</sup>quad \text{https://ufmsecretariat.org/wp-content/uploads/2021/02/Declaration-UfM-Blue-Economy-EN-1.pdf}$ 

As a first step, a **large database of over 650 relevant initiatives** has been compiled. The database includes relevant regional, subregional and international/transnational initiatives including policy frameworks, projects, etc.) covering each priority area identified in the UfM Ministerial Declaration;

As a second step, building on this broad set of information, a **qualitative review has been provided** by matching each collected initiative with the relevant calls for action identified by the UfM Ministerial Declaration and the type of support being provided – i.e. offering regional or subregional policy framework for actions or a specific contribution in terms of support to cooperation amongst stakeholders, R&I advancements, capitalisation of previous initiatives, etc.;

As a third substantial step, the **state of the art in the implementation** of each priority and call for actions as formulated in the UfM Ministerial Declaration has been assessed, including **areas where greater support** is possibly needed and areas where good efforts should be continued.

As the result from this analytical groundwork, the main **potential avenues for future cooperation** (pathways, processes and actions) in implementing the UfM Ministerial Declaration have been sketched, as a basis for further discussion and endorsement by the UfM Working Group on the Blue Economy. Such avenues for cooperation provide the basis for a number of concrete initiatives that can be launched, scaled-up and promoted in the short, medium and longer term by the UfM Secretariat in partnership with relevant regional actors across the Mediterranean sea basin.

#### 1.3 Structure of the Roadmap

The Roadmap is structured around five different chapters:

- 1. Introduction
- 2. Assessment of the UfM Ministerial Declaration: Sectoral Priorities
- 3. Assessment of the UfM Ministerial Declaration: Cross-cutting Priorities
- 4. Provisions for the monitoring system
- 5. Overview of shortlisted actions for a concrete follow-up

Chapter 1 describes the objectives of the document, the rationale and the outcomes expected to guide the midterm implementation of the UfM Declaration.

This is followed by an in-depth assessment of the **UfM Ministerial Declaration priorities (both sectoral and cross-cutting)** under **chapters 2** and **3**, respectively.

This in-depth assessment entails a description of the state of the art of the activities, including an overview of the on-going actions, an assessment of the regional coverage of those actions, information about the expenditure of the sector compared to other Sustainable Blue Economy sectors and for different types of projects.

As a next step in the assessment the document gets back to the main priorities put forward by the UfM Ministerial Declaration for the sustainable development of each of the sector by including a table which provides further analysis on the state of the art in advancing with the specific UfM priorities, It does so by building on the reviewed initiatives (frameworks/processes and projects) and confronting those with each priority of the UfM Ministerial Declaration for the sector. The analysis allows for an assessment on the status of the implementation of each priority (a "visual check").

Finally, and building on the overall assessment provided, this section provides some insights on the type of actions (frameworks processes, projects) and related support to be foreseen as part of the UfM Roadmap, in addressing each sectors' opportunities across the Mediterranean. In this way, the actions presented in the Roadmap have been defined and developed based on the priority areas which present a higher number of gaps as emerged in the assessment, the ultimate goal being to support and further strengthen the work carried out by UfM.

**Chapter 4** introduces a basic **monitoring system** to monitor overall progress of the UfM Ministerial Declaration, including some concrete tools, procedures and a compact system of initially proposed indicators (which will be further developed in finetuned).

As a way of conclusion, **chapter 5** includes a shortlist of **15** proposed actions for a concrete follow up. This list includes the description of the action proposed, the links to the specific Ministerial Priority and the relevant call for action within the Declaration, as well as the concrete steps envisaged to start their implementation.

As stated above, the present version of the Roadmap, updated as of June 2024, includes an update of chapter 6, which provides a number of illustrative elements of progress in the implementation of the Ministerial Declaration, including concrete examples of new frameworks, initiatives and projects emerged since early 2023..

# 2 Assessment of the UfM Ministerial Declaration: sectoral priorities

#### 2.1 Overview of sectoral priorities

The sectoral priorities as included in the UfM Ministerial Declaration on Sustainable Blue Economy are the following:

- Sustainable food from the sea: Fisheries and Aquaculture
- Sustainable, climate-neutral and zero-pollution maritime transport and ports
- Interactions between marine litter and the blue economy
- Coastal and maritime tourism
- Marine renewable energies
- Maritime safety and security

As stated above, an in-depth assessment of each of the priorities -in order of appearance in the Ministerial Declaration- is elaborated in this section. For each of the sectors, the following structure has been developed with a cascade approach:

- Brief introduction on the current challenges of the sector
- Description of the state of the art of regional, subregional, and transnational cooperation in the sector, with a focus on geographical coverage of initiatives across Mediterranean countries and an analysis of project expenditure per sector.
- Stocktaking on the current status of implementation of the UfM SBE Ministerial Declaration
  (as of March 2022), with a focus on identifying possible gaps and opportunities for future
  cooperation. This assessment is based on the state-of-the-art section and is applied to all the
  concrete calls for action included in the Ministerial Declaration.
- Overview of proposed avenues for future cooperation based on the identified areas where additional UfM/regional support is considered to bring added value.

#### 2.2 Food from sea: fisheries, aquaculture

#### 2.2.1 Introduction

Fisheries have historically supported coastal communities and local economies in the Mediterranean, and are at the core of important socio-economic and cultural values across the region. The sector is key for the regions' food security and livelihoods, as over 300 000 persons are directly employed on fishing vessels in the Mediterranean, whilst many more indirect jobs also depend on the sector. However, it is widely acknowledged that the sustainability of fishing and aquaculture in the Mediterranean is currently at risk, with more than 85% of the scientifically assessed stocks are being caught beyond safe biological limits.

#### UfM Ministerial Declaration on Sustainable Blue Economy, 2<sup>nd</sup> February 2021:

- UfM member countries to "comply with the management recommendations adopted by the GFCM with the view to sustainably manage key stocks in the region and develop sustainable aquaculture"
- The adoption of an ambitious new GFCM strategy for the period 2021-2025 to further turn around fisheries governance in the Mediterranean towards increased sustainability
- The establishment and strengthening of marine protected areas and fisheries restricted areas
- The creation of initiatives for increased cooperation between the Mediterranean countries in the fight against Illegal, Unreported and Unregulated (IUU) fishing

#### 2.2.2 State of the art of activities

Support to fisheries and aquaculture is a top priority for the Mediterranean region. To briefly describe the state of the art of Sustainable Blue Economy (SBE) frameworks, initiatives and actions related to sustainable fisheries and aquaculture in the Mediterranean, a selection of relevant actions is made (on the basis of a longer-list of collected initiatives and projects) and outlined in this section.

This selection aims to illustrate the variety of subjects being addressed and carried out based on a combination of criteria, including:

- a) Relevance with respect to the calls for action set for this UfM Ministerial Declaration priority, as presented above:
- b) Geographical coverage;
- c) In the case of projects, the incorporation of sustainability and innovation aspects in its approach;

An overview of main frameworks, processes and initiatives/projects is provided in the figure below and further described in this section.

Figure: Overview of selected regional frameworks, subregional processes, transnational projects per sectoral priority (based on the compiled database of SBE actions and initiatives in the Mediterranean)

### **Regional Policy** frameworks, processes or initiatives

- The General Fisheries Commission for the Mediterranean (GFCM) and particularly its 2030 Strategy for Sustainable fisheries and Aquaculture
  - The Sustainable Food System Platform launched by FAO, UfM: CIHEAM as wiell as PRIMA, One Plane

Declaration

- (set of UfM training webinars; 9th of The MedFish4Ever Ministerial
- The Regional Plan of Action for Small-Scale Fisheries in the Mediterranean (RPOA-SSE)
- The IUU Plan of Action (IPOA-IUU)
- The Strategy for the Sustainable Development of Aquaculture
- At international level, the UN Fish Stocks Agreement (UNFSA), and the Code of Conduct for Responsible Fisheries

#### Subregional processes or initiatives

- **EU Sustainable Blue Economy Communication** 
  - EU Common Fisheries Policy (CFP)
- EU Guidelines for a sustainable and competitive aquaculture
  - EU4Algae initiative
- "AquaWest" WestMED Technical Group on Sustainable Aquaculture
  - OECD Committee for Fisheries (COF)

#### Transnational projects

- SVC4MED Sustainable Fisheries and Aquaculture Value Chains for the Mediterranean
- AQUAEXCEL3.0 Aquaculture Infrastructures for Excellence in European Fish
- an Inclusive and Circular Economy in aquaculture sector fostering new be opportunities and eco-consciousness society

   E-FishMed Fisheries Control Academy for the Mediterranean

#### Regional policy initiatives

With the authority to adopt binding recommendations for fisheries conservation and management, the General Fisheries Commission for the Mediterranean (GFCM) established in 1949 within the framework of the Food and Agriculture Organisation of the United Nations (FAO) plays a crucial role in the regional governance of the sector. Currently, GFCM has 22 member countries plus the EU, and an additional 6 noncontracting parties who "actively participate in GFCM activities, attend the sessions of the Commission and commit to fully implement all GFCM recommendations"2. In sum, GFCM activities and decisions directly affect the vast majority of UfM countries, with the exception of Mauritania and Palestine.

Over the years, GFCM has promoted the adoption of a wealth of regulatory and strategic documents; contributed to data collection, knowledge building and sharing in the region and established collaboration frameworks for each of the sub-areas prioritised under this sector. Key examples include:

- The Regional Plan of Action for Small-Scale Fisheries in the Mediterranean (RPOA-SSF) is a political commitment setting forth an ambitious roadmap for the ten years from 2018-2028. It prescribes concrete and coherent measures to address challenges and reinforce opportunities for small-scale fisheries, including by giving fishers a voice in the decisions that affect their livelihoods, by safeguarding environmentally sustainable fishing practices and by providing economic, social and employment benefits.
- The IUU Plan of Action (IPOA-IUU) aims to prevent, deter and eliminate Illegal, Unreported and Unregulated (IUU) fishing by providing all States with comprehensive, effective and transparent measures by which to act, including through appropriate regional fisheries management organizations established in accordance with international law.
- The Strategy for the Sustainable Development of Aquaculture defines measures to ensure that a level playing field in the Mediterranean aquaculture sector is achieved, as well as to increase its competitiveness, sustainability, productivity, profitability and equity.

<sup>2</sup> https://www.fao.org/gfcm/about/membership/en/

In recent years, GFCM has continued to adopt technical resolutions (e.g., new MAPs, management measures, data/VMS protocols and aquaculture/pathogen cooperation instruments) to recover stocks and regulate Mediterranean fisheries and aquaculture (including implementation phases in the Adriatic and small-pelagics MAPs). Notably, the European Commission and European Parliament have been transposing GFCM multiannual measures into EU proposals (fishing opportunities, effort limits) for Mediterranean basins (e.g., proposals for 2026 fishing opportunities referencing GFCM MAPs)<sup>3</sup>, concretely delivering on the "MedFish4Ever" Ministerial Declaration adopted in 2017 by most<sup>4</sup> UfM countries with the objective of providing a comprehensive ten-year regional strategy, mainly focused on the socio-economic dimension in fisheries management and the sustainability of resources, based on best scientific advice and taking into consideration social-economic aspects.

In parallel to the GFCM, other regional initiatives such as the **SFS-MED Platform** are also active in the region. Supported by CIHEAM<sup>5</sup>, FAO and UfM, the SFS-MED Platform is a multi-stakeholder initiative aimed at promoting collaborative actions for the sustainable transformation of food systems in the Mediterranean, ultimately accelerating progress on the delivery of the 2030 Agenda for Sustainable Development. On **22 January 2025**, these organizations renewed their Memorandum of Understanding to continue supporting agrifood systems transformation via SFS-MED. Recent initiatives launched by SFS-MED include a new **digital tool aimed at mutual learning and cooperation**<sup>6</sup>, compiling 8 catalytic levers for agrifood systems transformation in the Mediterranean, and 38 inspiring experiences from stakeholders.

#### Subregional policy initiatives

In parallel, a plurality of initiatives is observed -mainly at EU level- establishing sub-regional implementation policies. Notably, the European Union's has adopted the following legislative frameworks, strategies and/or initiatives to promote the sustainable development of fisheries and aquaculture:

- The Common Fisheries Policy (CFP), since its latest reform in 2013, introduces new instruments
  to guarantee the sustainability of the sector, including the Maximum Sustainable Yield (MSY)
  objective, minimum fish and mesh sizes, etc.
- Furthermore, the European Commission's Communication on "a new approach for a sustainable blue economy in the EU: Transforming the EU's Blue Economy for a Sustainable Future" (hereinafter referred to as EU Sustainable Blue Economy Communication 2021) called for responsible fishing to bring stocks to sustainable levels, sustainable aquaculture to complement the natural limits of wild captures and algae production as an alternative to agriculture.
- The EU Guidelines for a sustainable and competitive aquaculture<sup>7</sup> aim to offer a common vision for EU Member States and all relevant stakeholders for the further development of the aquaculture sector in a way that contributes to the European Green Deal. Recently, the EU4Algae stakeholder platform has been launched to accelerate the development of a European algae

<sup>&</sup>lt;sup>3</sup> https://oceans-and-fisheries.ec.europa.eu/news/commission-proposes-fishing-opportunities-2026-mediterranean-and-black-seas-2025-09-22 en?utm source=chatgpt.com

<sup>&</sup>lt;sup>4</sup> The Declaration has been adopted by 16 countries (Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, France, Greece, Italy, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Tunisia and Türkiye) as well as the European Commission. The following UfM countries have not adopted the Declaration: Egypt, Israel, Jordan, Lebanon, Mauritania and Palestine.

<sup>5</sup> https://www.ciheam.org/

<sup>&</sup>lt;sup>6</sup> https://www.ciheam.org/agendas/sfs-med-new-digital-tool/?utm\_source=chatgpt.com

https://eur-lex.europa.eu/resource.html?uri=cellar:bab1f9a7-b30b-11eb-8aca-01aa75ed71a1.0022.02/DOC\_1&format=PDF

industry and promote algae for nutrition and other uses among consumers and businesses in the EU.

- The Energy Transition Partnership (ETP) for the EU Fisheries and Aquaculture Sector was launched by the European Commission (DG MARE) in June 2023 with the objective of enhancing collaboration and mobilise resources to deliver solutions to challenges posed by the energy transition in the sector.
- Finally, the Ocean Pact (June 2025), built around six key priorities to create a unified and coordinated plan for managing the ocean. Under its priority of Strengthening EU ocean diplomacy and international ocean governance, the Pact highlights the importance of developing a strategic approach to EU external fisheries action, including a new generation of Sustainable Fisheries Partnership Agreements. Furthermore, the priority of Protecting and restoring ocean health acknowledges that pressures on the ocean harm marine ecosystems and biodiversity, which in turn affect coastal communities, fisheries, and other sea-based activities.

Sub-regional maritime strategies in the Mediterranean sub-sea basins (EUSAIR, WestMED Initiative) also incorporate specific objectives and mechanisms related to the sustainability of fisheries and aquaculture in their Action Plans. A notable example includes the **WestMED Initiative's "AquaWest" Technical Group**8. Through this forum, WestMED stakeholders under the lead of Maghreb countries facilitate cross-national development by sharing best practices and guidelines to sustainably develop aquaculture. Participants in this group consist of high-level policymakers at national level, researchers, as well as companies and entrepreneurs. The ultimate goal of this group is to establish a permanent platform for exchange and expertise sharing on aquaculture, with a focus on resource mobilization and project development.

Moreover, the OECD Committee for Fisheries (COFI), embedded in the Trade and Agriculture Directorate, was founded in 1961 to provide "timely, evidence-based policy analysis" of pressing global issues in fisheries, aquaculture and sustainable fisheries management.

Importantly, in the context of the UfM 2<sup>nd</sup> Stakeholders Conference in Athens (2024)<sup>9</sup>, **Mediterranean stakeholders** called for a level playing field to achieve growth of fisheries and aquaculture that is sustainable socially, economically and environmentally. The focus should be placed on driving collaborative and cooperative approaches, finding cross-sectoral complementarities and strengthening a common regulation across the region. Leveraging the digital transition and smart data-driven governance is also critical for the sector progress, and so is to offer valuable training and sharing of practices to support sectoral needed skills and competences through capacity building. In the table below, there are summarised the outcomes and recommendations regarding this priority emerging:

# Outcomes and recommendations of Multi-stakeholder Workshop 3: Sustainable fisheries and aquaculture

 A level playing field is needed: commonality and consistency are required to achieve growth of fisheries and aquaculture that is sustainable socially, economically, and environmentally.

<sup>8</sup> https://www.westmed-initiative.eu/aquawest/

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<sup>&</sup>lt;sup>9</sup> UfM (2024), 2<sup>nd</sup> UfM Stakeholders Conference on sustainable blue economy, https://medblueconomyplatform.org/wp-content/uploads/2024/03/2nd-ufm-sk-conf-sbe-outcomes-main-messages.pdf

- Advancing towards the harmonization of the Mediterranean's approach to challenges and perspectives is critical to achieve change at pace. This requires strong political will to drive collaborative and cooperative approaches. This also includes finding cross-sectoral complementarities. Improved regulation that is commonplace across the Mediterranean is
- Training, Skills & Capacity Building is also crucial for the sectors' progress. There is equally a need for greater gender parity with more female representation at senior positions within the sector. Enthusiasm and passion from youth should be better harnessed to support and drive initiatives, through improved knowledge sharing and integrated working between junior and senior staff/stakeholders is required.
- Leveraging the digital transition and smart data-driven governance is critical for understanding the baselines, predicting change and impacts, and identifying best practice interventions. • Not all Mediterranean countries have the same status or are facing the same challenges. This poses a major challenge and demands honest discussion and dialogue regarding political and sectoral positions and practices. The UfM along with other forums are uniquely positioned to provide the right environment for these challenging discussions.
- Marine Protected Areas and Marine Spatial Planning are important tools that are available to help to develop cross-sectoral, cross-border, inter-regional dialogue on 6 such complex and sensitive matters.

#### Transnational and multi-country projects

A wide range of transnational cooperation projects can also be observed which are characterised by an innovative approach and with the objective of contributing to the sustainability and competitiveness of fisheries and aquaculture activities in the Mediterranean. The main outputs generated in the framework of these projects include knowledge building and sharing; innovation and technology demonstrations; development of strategies, guidelines or recommendations; establishment of stakeholder platforms and capacity building instruments.

Since 2024, a wider range of projects has been developed in the aquaculture and fisheries sector, focused on improving education and engagement with the sector, especially among women and young people. Exemplary of this are BlueAqaEDU<sup>10</sup>, aimed at exploring gamification as a pedagogic approach to engage young persons in the aquaculture sector, BOUTCAR<sup>11</sup>, with the goal of creating an educational program to allow young people and adults to improve their knowledge and skills to create sustainable jobs in the Blue Economy and WINBLUE<sup>12</sup>, aimed at addressing the undervalued contribution of women in the fisheries and aguaculture sector and seeking to accelerate the empowerment of women in this field. Other projects, such as EUFish Sustainable Growth<sup>13</sup>, are aimed at promoting a sustainable food chain, through the development of innovative seafood products that promote the consumption of neglected fish materials.

<sup>&</sup>lt;sup>10</sup> https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/projectsdetails/43392145/101124699/EMFAF?programmePeriod=2021-

<sup>2027&</sup>amp;programId=43392145&freeKeywords=blueaquaedu&order=DESC&page=1&pageSize=10

 $<sup>^{11} \,</sup> https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/projects-projects$ details/43392145/101124841/EMFAF?programmePeriod=2021-

<sup>2027&</sup>amp;programId=43392145&freeKeywords=boutcar&order=DESC&page=1&pageSize=10

<sup>12</sup> https://winblue-project.eu/resources/

<sup>13</sup> https://www.plumtri.org/Project\_EuFish-SustainableGrowth

- SSF2 Transforming Small Scale Fisheries in the Mediterranean (Phase I and II)<sup>14</sup> aims to
  reduce the ecological footprint of small-scale fishing, improve fish stocks, preserve the natural
  integrity of coastal environments and create opportunities for the communities who call the
  Mediterranean home.
- SVC4MED Sustainable Fisheries and Aquaculture Value Chains for the Mediterranean<sup>15</sup> aims to identify strategies to improve the economic performance and social and environmental sustainability of capture fisheries and aquaculture value chains in the Mediterranean region.
- AQUAEXCEL3.0 Aquaculture Infrastructures for Excellence in European Fish Research 3.0<sup>16</sup> further ensures that aquaculture research is aligned with industry needs to boost the sector by expanding the Transnational Access program, developing new tools to attain pace with rapid scientific development and add value to existing tools and resources. The project is developing free online training courses which are multi-partner based and demand-driven focused on the spread of good practices and the transfer of knowledge based on project results and laboratory experiment results. The main focuses are on shellfish and microalgae research as well as transnational access and networking activities.
- AZA4ICE Allocated Zones for circular Aquaculture to trigger the transition to an Inclusive
  and Circular Economy in aquaculture sector fostering new business opportunities and ecoconsciousness society addresses the sustainability challenges of aquaculture in the EuroMediterranean area promoting inclusive and circular practices. AZA4ICE relies on transnational
  cooperation and cross-border knowledge exchange to pioneer circular aquaculture spatial planning
  beyond existing coastal sea area practices; defining and testing the Allocated Zones for Circular
  Aquaculture in close-to-coast and inland waters.
- E-FishMed Fisheries Control Academy for the Mediterranean <sup>17</sup>promotes cooperation in the fight against IUU fishing, the implementation of General Fisheries Commission for the Mediterranean (GCFM) and International Commission for the Conservation of Atlantic Tunas (ICCAT) conservation and management measures.
- CallmeBLUE Cluster Alliance MED BLUE aims to strengthen existing cluster alliances in the Mediterranean area and to accelerate north-south regional cooperation towards the emerging of strategic maritime clusters in North Africa.

#### Assessment of regional coverage

Beyond the selected exemplary initiatives described so far, our analysis covered a wider number of projects (provided in the annexed "project database" tables). The main emerging findings with regards to the initiatives in place in this sector are as follows:

• There is currently an overall **good coverage of regional frameworks**, notably thanks to the policy and regulatory efforts accomplished in the framework of the GFCM and FAO.

<sup>&</sup>lt;sup>14</sup> **SSF2** Countries covered: Spain, Italy, Croatia, Türkiye and Tunisia

 $<sup>^{\</sup>rm 15}$   ${\bf SVC3MED}$  Countries covered: Albania, Italy, Lebanon, Tunisia, and Türkiye.

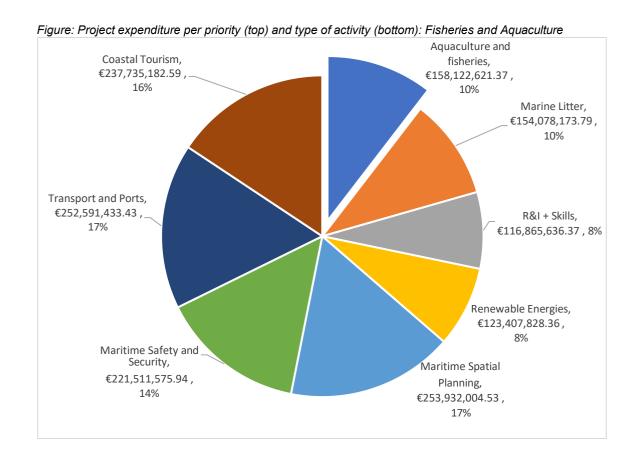
<sup>&</sup>lt;sup>16</sup> **AQUAEXCEL3.0** Countries covered: Belgium, Czech Republic, Finland, France, Germany, Greece, Italy, Latvia, Lithuania, Netherlands, Portugal, Spain and United Kingdom

<sup>&</sup>lt;sup>17</sup> **E-FishMed** Countries covered: Algeria, Libya, Mauritania, Morocco, and Tunisia

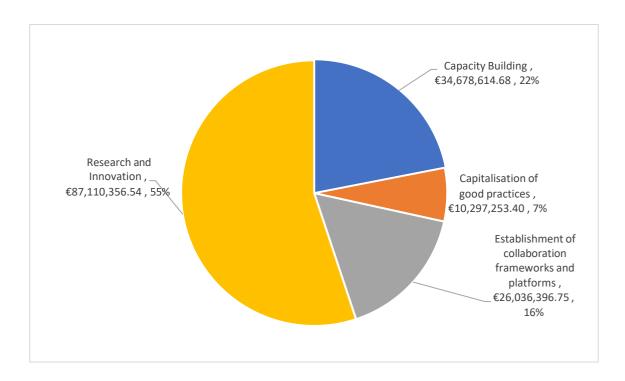
- Subregional processes identified are mainly covering EU and south-west countries.
- A wide range of transnational cooperation projects exist, although less evenly distributed than
  frameworks amongst Med countries, except for projects establishing collaboration platforms, which
  appear to involve partners from a larger amount of countries.
- Capitalisation projects tend to concentrate in the north.
- · While there seems to be relative limited R&I and capacity building projects in the South-East.

#### Expenditure of the priority

The figures below show the expenditure of the sector compared to other SBE sectors and for different type of projects. Projects are divided depending on their main focus (Establishment of collaboration frameworks and platforms, Capacity Building, Research and Innovation, Capitalisation of good practices). We can observe in the figure, that Fisheries and Aquaculture accounts for 10% of the overall spending on SBE priority<sup>18</sup>. The figure also indicates that more than half of the expenditure goes to Research & Innovation (55%), followed by capacity building (22%) and the establishment of collaboration frameworks and platforms (16%) while a smaller share (7%) is spent on capitalisation projects.



 $<sup>^{\</sup>rm 18}$  Data unavailable for a number of projects



Source: Database of projects compiled for the UfM State of the Art of the Mediterranean Sustainable Blue Economy report

#### Further details on the support provided

The figure below provides an overview of the distribution of the collected initiatives (frameworks, processes and projects) across the various UfM countries in the different areas of the Mediterranean. The darker the blue, the higher the coverage of the mapped initiatives for each country (i.e. dark blue indicates that a country is involved in all the initiatives mapped for the specific category and pale blue indicates a very limited percentage of the total initiatives mapped). It should be noted that the projects are also divided depending on their main focus (Collaboration, Capacity Building, Research and Innovation, Capitalisation of good practices). An analysis of the colour schemes provides some observations:

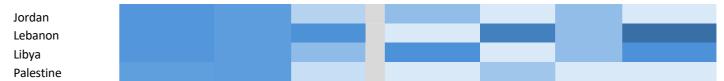
- Organisations and platforms show a highly uneven distribution of shades across the
  Mediterranean, with notably darker tones concentrated in some northern and western countries,
  while much lighter shades appear on the south and south-east areas of the region. This pattern
  indicates significant differences in the presence and participation of stakeholder platforms, with
  certain regions benefitting from more structured or mature cooperation mechanisms, whereas
  others may have limited access or engagement in such networks.
- Policies and strategies also display a diverse palette, with some regions, particularly in the northern area of the Mediterranean, showing stronger coverage, while others, especially in the south-east, remain lightly shaded. This polarisation points to uneven levels of strategic development across the basin, with certain sub-regions likely benefiting from more advanced national planning and institutional frameworks. The disparity shows a clear opportunity for facilitating peer exchange and alignment of policy approaches, particularly to support countries or areas where policy development is still in progress.

• Distribution of projects indicates that project activity remains relatively unevenly distributed across different sub-regions. The density of projects (illustrated by darker blue shades) is higher in the north-west and gradually decreases shifting to the north-east and south-west of the Mediterranean and shows the lower levels on the south-east of the region. Among the project types, Collaboration frameworks are slightly more widely distributed, while R&I and Capitalisation display a more polarised pattern, concentrated in specific regions. This limits the dissemination and scaling-up of project results across the basin and suggests the need to enhance inclusiveness in project design and outreach.

Figure: Overview of existing actions per country/ sectoral priority

Source: Database of processes, frameworks, initiatives and projects compiled for the UfM State of the Art of the Mediterranean Sustainable Blue Economy report

					Type of	project	
	Organisations and platforms	Policies and strategies	Projects (total)	Collaboration frameworks	Capacity building	R&I	Ca
North-West							
France							
Italy							
Malta		l					
Portugal							
Spain							
North-East							
Albania							
Bosnia-							
Herzegovina							
Croatia							
Cyprus							
Greece							
North Macedonia							
Montenegro							
Slovenia							
Türkiye							
South-West							
Algeria							
Mauritania							
Morocco							
Tunisia							
South-East							
Egypt							
Israel							



Legend of the table: the darker the blue, the higher the coverage of the mapped initiatives for each country (dark blue indicates that a country is involved in all the initiatives mapped for the specific category and pale blue indicates a very limited percentage of the total initiatives mapped).

#### 2.2.3 Stocktaking of the Ministerial Declaration: progress and opportunities

As a final step in the analysis, we get back to the main priorities put forward by the UfM Ministerial Declaration for the sustainable development of the tourism sector. The table below provides further analysis on the state of the art in advancing with the specific UfM priorities, as sketched in the introduction to this chapter. It does so by building on the initiatives (frameworks/processes and projects) as reviewed earlier in this chapter and confronting those with each priority of the UfM Ministerial Declaration for this sector. The analysis allows for an assessment on the status of the implementation of each priority (a "visual check") to be used as a basis for the future UfM Roadmap.

Figure: Identification of opportunities per sectoral priority

UFM MINISTERIAL DECLARATION CALL	LEVEL OF PROJECT COVERAGE	JUSTIFICATION AND IDENTIFICATION OF OPPORTUNITIES AS PER THE MAPPING OF
FOR ACTION		INITIATIVES
UfM member countries to comply with the management recommendations adopted by the GFCM with the view to sustainably manage key stocks in the region and develop sustainable aquaculture	0% 20% 40% 60% 80% 100% ■ GFCM ■ Non-GFCM	<ul> <li>Monitoring compliance with fisheries and aquaculture management recommendations is key to identify possible gaps between national legislation and relevant regional recommendations and to encourage countries to make progress in this regard. The GFCM itself established a Compliance Committee (CoC) in 2006, and there are currently some examples of monitoring initiatives such as the Mediterranean Legislation Project "GFCM-Lex"<sup>19</sup>, or the FAO National Aquaculture Legislation Overview (NALO)<sup>20</sup>, although they currently do not cover all UfM countries. Although the GFCM has competence for all marine waters of the Mediterranean and the Black Sea, challenges to monitor progress persist in those countries where GFCM rules and procedures do not apply (i.e. UfM member states who are not part of GFCM: Mauritania and Palestine. Besides, Jordan and Bosnia-Herzegovina have the status of "noncontracting cooperating parties").</li> <li>The sustainable development of aquaculture is also relatively well covered at the level of regional frameworks in most UfM countries -e.g., the GFCM Sustainable Aquaculture strategy, GFCM Aquaculture working groups,</li> </ul>

<sup>19</sup> https://www.togetherforthemed.org/success-stories/identifying-legal-gaps-to-accelerate-fishing-sector-transition-8.html

<sup>&</sup>lt;sup>20</sup> https://www.fao.org/fishery/en/nalo/search

		SIPAM Aquaculture data and statistics platform, among others), as well as projects, which seem to focus mainly on developing and validating technologically-advances (NewTechAqua, EASY FEED), increasing competitiveness of the sector (MedAid) and setting eco-friendly standards (InDAM, SHoCMed).
		• In terms of stock management, a wide array of relevant policy, regulatory frameworks and initiatives are currently in place covering most UfM countries. Notably, the UN Fish Stocks Agreement (focused on straddling and highly migratory species), the GFCM multiannual management plans and permanent working groups on demersal and small pelagic fish species - where stock data are regularly assessed and "priority species" and "shared stocks" lists are elaborated As a result of these efforts, according to SoMFi 2020 report data, fish stock exploitation ratios in the Mediterranean are decreasing for the first time in decades, showing some positive trends even though overexploitation of most fish stocks remains a reality <sup>21</sup> . Projects tend to focus on data collection and the development of information sharing systems.
Adoption of an ambitious new GFCM strategy for the period 2021-2025 to further turn around fisheries governance in the Mediterranean towards increased sustainability	0% 20% 40% 60% 80% 100% ■ Adoption new GFCM strategy	An ambitious GFCM 2030 Strategy <sup>22</sup> was adopted in July 2021 by GFCM's 22 contracting parties plus the European Union. The 2030 Strategy has clearly defined aims in line with existing policies and is rooted in practical actions.

https://www.fao.org/gfcm/news/detail/en/c/1364435/
 https://www.fao.org/gfcm/2seas1vision/en/

Establishment and strengthening of marine protected areas and fisheries restricted areas	0% 20% 40% 60% 80% 100% ■ Ecosystem-based approach to fisheries ■ Total projects	<ul> <li>At regional level, MedPAN actively promotes the establishment and operation of Marine Protected Areas in the Mediterranean. Moreover, 1,760,000 km2 of sea habitats are currently protected by the nine Fisheries Restricted Areas (FRAs) established by the GFCM.</li> <li>One project has addressed opposition from local fishermen to MPAs in the north-east (FishMPABlue), leaving room for capitalisation in other countries. Importantly, the GEF is in the process of approving its investment in the full-sized "Fisheries and Ecosystem Based Management for the Blue Economy of the Mediterranean" project, which covers most Mediterranean countries.</li> <li>On fisheries specifically, ecosystem-based approaches to fisheries have seen development, particularly at regional level. Projects such as ECOCYST, MedSea4Fish and REEForest have begun in recent years. Horizon-funded projects focus on market innovation, eco-labelling, and seafood traceability, including AZA4ICE, SeaChem, and diversification of the blue bio-economy, with projects as REALM.</li> </ul>
Initiatives for increased cooperation between the Mediterranean countries in the fight against Illegal, Unreported and Unregulated (IUU) fishing	0% 20% 40% 60% 80% 100% ■ Fight against IUU fishing ■ Total projects	At the level of policy frameworks, the issue is properly addressed at regional level by the IUU Plan of Action (RPOA-IUU), established by the GFCM in 2020 as a comprehensive toolbox to combat IUU Fishing. It is also included in point 40 of the MEDFISH4EVER Declaration. Moreover, in 2019, GFCM selected seven best practices from Mediterranean countries in fighting against IUU fishing across the region <sup>23</sup> . Civil society initiatives actively work on this topic as well, such as Oceana or the Global Fishing Watch organisation, which produces open-source datasets and analyses which can be further exploited to understand the extent of the IUU problem in the Mediterranean.

<sup>&</sup>lt;sup>23</sup> https://www.fao.org/gfcm/meetings/medfish4ever/awards/en/

Further support to the GFCM's Regional Plan of Action for Small-Scale Fisheries in the Mediterranean and Black Sea (RPOASSF) as a vital political commitment to strengthen and support sustainable SSF in the region as well as their resilience to shocks						
Plan of Action for Small-Scale Fisheries in the Mediterranean and Black Sea (RPOA-SSF) as a vital political commitment to strengthen and support sustainable SSF in the region as well as their resilience to						
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the Mediterranean and Black Sea (RPOA-SSF) as a vital political commitment to strengthen and support sustainable SSF in the region as well as their resilience to	Further support to the GFCM's Regional					
SSF) as a vital political commitment to strengthen and support sustainable SSF in the region as well as their resilience to	Plan of Action for Small-Scale Fisheries in					
strengthen and support sustainable SSF in the region as well as their resilience to	the Mediterranean and Black Sea (RPOA-					
in the region as well as their resilience to	SSF) as a vital political commitment to	0%	20%	40%	60%	80%
in the region as well as their resilience to	strengthen and support sustainable SSF		■ SS	F projects	■ Total p	roiects
shocks	in the region as well as their resilience to			, ,,		.,
	shocks					

- Existing projects tend to focus on training and knowledge sharing such as
  FIUUFRA, which was conceptualised during the first stakeholders
  hackathon organised in Algiers (2019) by the WestMED initiative, as well
  as the follow-up project E-FISHMED. The GFCM is leading efforts to
  address this issue through targeted, collaborative actions that prioritise the
  long-term sustainability of marine ecosystems. As part of the GEFfunded <u>FishEBM MED</u> project, the GFCM has undertaken initiatives that
  aim to thwart IUU fishing.
- Relevant commitments were made during the UNOC event in Nice in June,
   with further agreements expected to be formalised in the near future.
- Good advancements have been made regarding the implementation of RPOA-SSF, including the establishment of the SSF Forum 2021, a platform where small-scale fishers can exchange knowledge and best practices to jointly build their capacities. At the level of initiatives, importantly the WWF Transforming Small-Scale Fisheries initiative supports 10 Mediterranean countries in developing participatory fisheries management strategies. National examples include the Algerian network of Small-scale fishers associations.
- At the level of transnational projects, as showcased by GFCM's SSF mapping tool<sup>24</sup>, there is a wealth of SSF-related projects, which seem to be evenly distributed across the Mediterranean, and tend to concentrate on issues such as the participation of small-scale fishers in decision-making processes, capacity building and development of the value chain; while topics related to the impacts of SSF on climate and environment and decent work seem to be less covered by SSF projects in general.

100%

<sup>24</sup> https://www.fao.org/gfcm/activities/fisheries/small-scale-fisheries/mapping-tool/en/

#### 2.2.4 Potential avenues for future cooperation: pilot actions / projects

Building on the overall assessment provided so far, this section provides some insights on the type of actions (frameworks processes, projects) and related support to be foreseen as part of the UfM Roadmap, in addressing fisheries and aquaculture opportunities across the Mediterranean.

The actions proposed as follows have been defined and developed based on the priority areas which present a higher number of gaps as emerged in the assessment, the ultimate goal being to support and further strengthen the work carried out by UfM.

The calls for action in the SBE Ministerial Declaration allow for a clustering exercise, which is presented as follows.

Firstly, a number of potential avenues for future cooperation related to FAO's *General Fisheries Commission* for the Mediterranean should be derived from the previous description of the state-of-the-art and subsequent analysis:

- Strengthening and possibly enlarging stakeholder collaboration schemes within the GFCM (i.e. GFCM Technical working groups on Aquaculture), ensuring the participation of all relevant countries to avoid limited coverage in case of non-GFCM membership.
- UfM could support and coordinate the provision of tailored capacity building to UfM countries to embed GFCM priorities and monitor compliance with GFCM recommendations

As concerns wider frameworks, particularly referring to sustainable food systems, the following is proposed:

- **Promote climate adaptation in fisheries**: the UfM could play a facilitating role in joint research on climate-resilient fish stocks, invasive species management, and adaptive management plans
- Continue the work done under the topic of Sustainable Food Systems (particularly through the SFS-MED Platform), with a focus on finalizing national pathways and start their implementation, including defining the actors involved and outlining a clear timeline and key milestones to ensure implementation in future years, building on the 2021 UN Food Summit, the. upcoming 3<sup>rd</sup> Conference on Mediterranean Diet in September 2022, in Italy; and the PRIMA Community of Practice on WEFE<sup>25</sup>.

Regarding Small-Scale Fisheries (SSF):

• Continue establishing and strengthening mechanisms to guarantee a participatory approach to decision-making and the implementation of GFCM plans/strategies, through the active involvement of fishers, fish workers and other stakeholders who actively work in Mediterranean.

Continue promoting frameworks to ensure decent working conditions as well as education and training opportunities for men and women of the sector.

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<sup>25 &</sup>lt;a href="https://prima-med.org/wefe-nexus-community-of-practice-a-solution-for-the-mediterranean-future/">https://prima-med.org/wefe-nexus-community-of-practice-a-solution-for-the-mediterranean-future/</a>

Concerning Illegal, Unreported, and Unregulated Fishing (IUU):

- Support common Mediterranean eco-labels/traceability schemes to promote sustainable seafood and reduce illegal, unreported, and unregulated fishing products.
- Create the means to ensure the transfer and capitalisation of the best practices selected by
  GFCM to combat IUU fishing in all UfM countries. Overall support to skills and capacity building,
  especially with local communities which are most exposed to IUU, building on existing examples
  such as FIUUFRA project.

As regards the adoption of *sustainable and environmentally conscious practices* in the Fisheries and Aquaculture sector:

- Promote digitalisation and the uptake of advanced tools and technologies for fisheries and aquaculture, capitalising on good experiences across the region. In terms of fisheries, focus should be placed on remote electronic monitoring systems, catch reporting using mobile applications, ecosystem modelling and artificial intelligence tools (as proposed by the European Commission's Communication on Sustainable Blue Economy). Concerning aquaculture, research and innovation shall prioritise the application of new business models (circular practices), diversified sustainable productions (blue biotechnology, pharma, added value) and innovative technologies (cages, feeding process, sustainable feeding supply, etc).
- Enlarging existing subregional frameworks toward Eastern Mediterranean countries, particularly taking stock on the progress done in the context of the WestMED initiative's Technical Group on Sustainable Aquaculture.

Finally, concerning cross-cutting priorities in the UfM SBE Ministerial Declaration (Maritime Spatial Planning):

In the context of the development of national Marine Spatial Planning strategies, prioritise the
identification of Principal Areas for Fisheries and Allocated Zones for Aquaculture (AZAs) at
country level in the Mediterranean basin and increase their number by 2024. This could be done
through a dedicated series of exchanges/meetings among competent national authorities and key
stakeholders.

#### 2.2.5. Measuring progress in the UfM Declaration Implementation: Fisheries and Aquaculture

#### **Output (Process indicators)**

+Number of actions, sets of activities and projects of regional cooperation planned in the area of Sustainable Fisheries and Aquaculture, in particular with regards to the following sub-priorities:

- Ecosystem-based approaches to fisheries, including the establishment of marine protected areas and fisheries restricted areas
- Illegal, Unreported and Unregulated fishing (IUU)
- Small-Scale Fisheries (SSF)
- Diversification of the blue bio-economy
- Market innovation, eco-labelling and traceability of seafood

- +Number of actions, sets of activities and projects of regional cooperation being implemented in the Mediterranean area in the field of Sustainable Fisheries and Aquaculture (with regards to the sub-priorities mentioned above)
- +Level of compliance at national level with GFCM/FAO recommendations on fishing stocks management and aquaculture
- +Level of financial support committed/secured to support the priority on Sustainable Food from the Sea: Fisheries and Aquaculture of the UfM Ministerial Declaration
- +Number and typology of partners and stakeholders involved in the actions/sets of activities/projects

#### **Outcomes (result indicators)**

- +Achieved and projected results of the different actions, sets of activities and projects underway or finished in the field of Sustainable Food from the Sea: Fisheries and Aquaculture, mainly:
- Number/type of new/enhanced products/services developed;
- Number/type of new/enhanced collaboration networks and platforms being supported/activated;
- Number/type of stakeholders (businesses, research, CSOs, etc.) involved and benefitting from the action/activity/project;
- Number/type of regional policies influenced as a result of regional cooperation (mainstreaming).

#### 2.3 Sustainable, climate-neutral and zero-pollution transport and ports

#### 2.3.1 Introduction

Maritime transport has a vital and strategic role in the Mediterranean. It plays a role in ensuring connectivity among the UfM member countries. Covering about 80% of global trade, commercial shipping is crucial for intra-Mediterranean maritime trade flows. In addition, the Mediterranean hosts the largest cruise fleets linking maritime transport and tourism. To assume its responsibility in meeting UN Sustainable Development Goals in the contract of the transition towards a climate-neutral economy, Mediterranean waterborne transport must become cleaner and greener to transform towards zero-emission transport. Greening maritime transport is amongst the most pressing challenges for the region.

More specifically, this challenge concerns a drastic reduction of greenhouse gas emissions, air and water pollution as well as accidents and marine spills, noise, and overall impacts on coastal and marine biodiversity. In order to address such challenges, the sector must accelerate the market-readiness for 'zero-emission' technologies, which in turns implies the mobilisation of significant investments in equipment and infrastructures across the sea basin. In addition, the sector needs to preserve safe and secure waterborne transport including all its activities, its products and its infrastructure. Safety implies the importance to protect the life and preserve the health of the Waterborne workforce, passengers, and citizens living in coastal areas. The Waterborne sector pursues a zero accident, zero fatalities, zero pollution policy and needs to protect ships, vessels and infrastructures from perils, cyber-attacks, piracy and terrorism. Digitisation will connect smart ships and vessels as well as smart ports and smart infrastructure. It will enhance data flows. and lead to a higher degree of automation and autonomy, automated and autonomous systems, ship operations and remote control from the shore by 2030<sup>26</sup>. Connectivity and automation will only improve nautical operations, safety and the energy-efficiency of Waterborne transport, as well as logistics and mobility flows.

#### UfM Ministerial Declaration on Sustainable Blue Economy, 2<sup>nd</sup> February 2021:

- UfM member countries to "work towards a UfM Strategic Action Plan for Transport Connectivity"
- UfM member countries "to comply with the 0.50% sulphur limit in marine fuels and call upon all riparian UfM member countries, which have not already done so, to ratify the Annex VI to the MARPOL Convention as soon as possible, to maximise health and environmental benefits"
- Support the entry into force of the Med Sox ECA
- The strengthening of "expertise and boosting investments in infrastructure taking duly into account the specific needs and priorities of Mediterranean countries; including investments on the provision of Onshore Power Supply and energy saving technologies for ports activities as well as on the development of alternative fuels, and transitional fuels as appropriate, and technical and operational energy efficiency for ships"
- Mediterranean countries to actively cooperate and participate in the implementation of joint projects in the provision of clean energy and technology
- "Developing necessary means for facilitation of maritime trade such as a fully digital administrative environment for waterborne transport", necessary for achieving the full benefits of a Maritime Single Window system.

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<sup>&</sup>lt;sup>26</sup> https://www.waterborne.eu/vision/connected-and-automated-waterborne-transport/

"Mediterranean countries to ratify the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, and to make sure that vessels flying their flag only get dismantled in facilities which meet high social and environmental standards"

#### 2.3.2 State of the art of activities

To briefly describe the state of the art of Sustainable Blue Economy (SBE) frameworks, initiatives and actions related to Maritime transport and ports in the Mediterranean, a selection of relevant actions will be outlined in this section. The selection is aiming to be as illustrative as possible on the variety of subjects being addressed and has been carried out based on a combination of criteria, including:

- 1. Relevance with respect to the calls for action set for this UfM Ministerial Declaration priority, as presented above;
- 2. Geographical coverage;
- 3. In the case of projects, the incorporation of sustainability and innovation aspects in its approach;

#### **Regional Policy** frameworks, processes or initiatives

- UfM Sustainable Blue Economy Ministerial Declaration 2021
- UfM Ministeral Declaration on Transport 2013
- Regional Transport Action Plan for the Mediterranean RTAP 2014-2020 **EUROMED Transport Ministerial**
- Conference Working Group on Transport and Integrated Maritime Policy
- MED SOx ECA
- UfM Working Group on Transport
- REMPEC
- Strategic Plan 2018-2022 of the **Centre for Transportation Studies** for the Western Mediterranean(CETMO)

#### Subregional processes or initiatives

- Trans-european Transport Network
- WestMED Green Shipping Technical Group
- EU Strategy for the Adriatic and Ionian Region
- European Maritime Safety Agency
- EU Communication on a Sustainable Blue Economy

#### Transnational projects

- Mediterranean

  Blue Ports Blue Careers in Net Zero energy Ports
- Mediterranean
  SAFEMED IV

Figure: Overview of selected regional frameworks, subregional processes, transnational projects per sectoral priority (based on the compiled database of SBE actions and initiatives in the Mediterranean)

#### Regional

UfM Working Group on Transport: The UfM Regional Platform on Transport Connectivity and its dedicated working groups on land, air and maritime transport and logistics connectivity bring together UfM government representatives, key regional and international partner organisations and international financial institutions, as well as key experts and stakeholders from the public and private sectors. On February 9th, 2023, a new Ministerial Declaration on Transport<sup>27</sup>, together with a Regional Transport Action Plan (2021-2027)<sup>28</sup> was endorsed by the UfM Ministers. This plan is expected to reinvigorate multilateral cooperation in the sector and unlocking its full potential in

<sup>27</sup> UfM Ministerial Declaration on Transport (https://ufmsecretariat.org/wpcontent/uploads/2023/02/decl\_UfM\_transport\_ministerial\_2023\_EN.pdf)

<sup>&</sup>lt;sup>28</sup> Regional Transport Action Plan (RTAP) 2021-2027 (https://ufmsecretariat.org/wp-content/uploads/2023/02/RTAP-2021-2027\_final\_EN.pdf)

the region by 2027. The Regional Plan takes into account the latest developments in key global and regional agendas and policy frameworks for both policy transfer and regulatory convergence, including the UN 2030 Agenda and its transport-related Sustainable Development Goals (SDGs) and targets, the Paris Agreement and the European Green Deal. The objectives are fully aligned with the UfM Ministerial Declaration on Sustainable Blue Economy. In addition to actions related to national transport strategies and policies and the Trans-Mediterranean Transport Network, the Action Plan proposes seven actions specifically related to maritime transport and ports, including regulatory reforms, port efficiency and protection of the marine environment The Ministerial Declaration explicitly recognised the need for increased joint cooperation in the field of maritime transport, notably the "improvements in port efficiency; the work towards sustainable, climateneutral and zero-pollution maritime ports; the provision and use of services and tools in the field of maritime safety and security, such as access to the Maritime Knowledge Centre and the five new Maritimes lines that have been put into operation according to the concept of motorways of the sea; cooperation on environmental concerns at IMO, full decarbonisation by 2050 and the entry into force by 2025 of a Mediterranean Emission Control Area".

- MED SOx ECA: The main recent achievement for the Med SOx ECA is its official establishment and entry into force on May 1, 2025, requiring ships to use fuel with a maximum 0.1% sulphur content within the Mediterranean Sea. This marks a significant milestone in combating air pollution from shipping in the busy regional waters, which is expected to lead to a 78.7% reduction in SOx emissions and tangible benefits for human health and the marine environment by reducing acid rain and improving air quality.
- The objective of Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) is to contribute to preventing and reducing pollution from ships and combating pollution in case of emergency. REMPEC and UNEP/MAP programmes and regional contingency work for ports and pollution response remained active and updated into 2024–25, with new contingency planning for pollution from ships (programme of work 2024–25; regional SOx/SCR limits workshops, port preparedness)
- The Strategic Plan 2018-2022 of the Centre for Transportation Studies for the Western Mediterranean (CETMO)<sup>29</sup> aims to improve transport conditions in the Mediterranean region to facilitate trade and the safe, efficient and sustainable movement of people, particularly in view of environmental protection with the overarching goal of promoting the socio-economic development of the region.
- Created in 2018 by 20 port authorities of the Mediterranean Basin, the MEDports Association now has 31 member ports (in early 2025) representing about 70% of cargo and 90% of passenger traffic in the Mediterranean sea. It aims at creating a new platform of collaboration, production and exchange between the Mediterranean ports on common issues and is also promoting the international visibility of the Mediterranean maritime and ports area, a true connected and connecting platform between Asia, Africa and Europe. Recent initiatives supported by the association include Staff Exchange Programs across EU and non-EU ports.

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<sup>&</sup>lt;sup>29</sup> https://www.cetmo.org/sites/default/files/2.3 Strategic plan (bo).pdf

Moreover, in the framework of the implementation of the UfM Ministerial on Sustainable Blue Economy and the Roadmap for its implementation, an immediate short-term joint priority on the diversification of small ports and marinas beyond maritime transport was identified within the UfM Blue Economy Roadmap:

#### Small ports and marinas

Small ports and marinas have been considered an essential component for the sustainable development of the sustainable maritime transport and ports in the Mediterranean. Although they represent a high potential for the region, particularly towards the development into 'local/regional community hubs' for sustainable innovation and diversification of local value-chains, they are very often far too small and fragmented in their ability to networking to offer a relevant leverage for local businesses and other stakeholders.

As such, it was agreed to investigate ways forward in **developing project ideas** so as to further support the ability of local small ports, harbours and marinas to act as 'innovation hubs' for a sustainable diversification of local business ecosystems.. Under the 'flagship' call of the European Fisheries and Aquaculture Fund (EMFAF) 30 26 proposals were received by CINEA, including support to "sustainable ports and transport" in the Mediterranean (Topic 3).31 The call aimed to support the 'Promotion of energy communities in ports of the Mediterranean, e.g. by supporting/anticipating the transition to LNG, or from LNG towards a wider choice of alternative fuels/technologies, including green hydrogen, electrification, wind, etc.'.32

In Athens during the the 2nd UfM Stakeholder Conference on Sustainable Blue Economy,<sup>33</sup> Mediterranean stakeholders called for more research efforts to achieve the cleanest possible technological solutions and to ensure their widespread adoption, given the current limited sustainability of many types of "alternative fuels". In addition, it was recalled that there is an urgent need to identify financially viable models for shipowners, especially small shipowners, as key actors in the Mediterranean business landscape. The costs associated with the energy transition will have a major impact on the maritime transport sector. Investments, research and innovation and the necessary supportive policy instruments should focus on improving the efficiency of ships and achieving sustainable fuels. In the table below, there are summarised the outcomes and recommendations regarding this priority emerging from the 2<sup>nd</sup> UfM Stakeholders Conference on Sustainable Blue Economy, held in Athens on 19-20 February 2024.

<sup>&</sup>lt;sup>30</sup> https://oceans-and-fisheries.ec.europa.eu/funding/emfaf\_en

 $<sup>^{31} \,</sup> https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/emfaf-2023-pia-flagship-3-details/emfaf-2023-details/emfaf-2023-details/emfaf-2023-details/emfaf-2023-details/emfaf-2023-details/emfaf-2$ med:callCode=EMFAF-2023-PIA-

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<sup>32</sup> Ibid.

<sup>33</sup> UfM (2024). 2nd UfM Stakeholders Conference on sustainable blue economy- Available at: https://medblueconomyplatform.org/wp-content/uploads/2024/03/2nd-ufm-sk-conf-sbe-outcomes-main-messages.pdf

## Outcomes and recommendations of Multi-stakeholder Workshop 4: Sustainable, climateneutral and zero-pollution maritime transport and ports

- Considering the current limited sustainability (toxicity, pollution, flammability, etc.) of
  many types of 'alternative fuels' (ammonia, Hydrogen, LNG, Methanol, etc.), there is
  an urgent need to significantly increase research efforts towards achieving the cleanest
  possible technological solutions and ensuring their wide adoption.
- There is an urgent need to identify economically/financially/fiscally viable models for shipowners, in particular small shipowners as vital actors of the Mediterranean entrepreneurial landscape. The 'costs' associated to the energy transition will largely impact the maritime transport sector. Investments, R&I, and the necessary enabling policy instruments should focus on improving the efficiency of vessels, adopting transitional fuels, and achieving Sustainable fuels.
- Best practices in Antalya and Aqaba were highlighted. In the Turkish Mediterranean capital of coastal tourism and commercial activities, compliance with the SECA targets along its 650 km coastline is expected already by end of 2024. Aqaba has focused on enhancing cohesion among the community of port operators so as maximize the impacts of common sustainable actions. The EC is engaged at multiple levels, namely by: recognizing the IMO as the suitable level of governance (gathering 74 countries); adopting cross-sectoral collaborative approaches, as key strategy to engage the largest possible ecosystem of stakeholders; acknowledging the competitiveness of the shipping industry as a key actor; setting 2040 emission reduction targets; setting the development of fuel technologies, as high priority within the Net Zero Technology Act; and awarding significant EMFAF projects in the sector (i.e. GREEN MARINE MED and POWER4MED).
- As a follow-up to the first UfM Conference on Greening Ports and Maritime Transport
  organised in Barcelona in June 2023 and given that this topic is a shared priority both
  of the UfM Regional Transport Action Plan and the UfM SBE Roadmap, UfM HoS for
  Transport Mr Francesc Carbonell suggested the possibility of holding back-toback with
  the UfM Regional Platform on SBE (former UfM WG on SBE) an
  event/meeting/conference on these matters, possibly linking with Maritime Clusters.

#### Subregional

In parallel, a plurality of initiatives is observed -mainly at EU level- establishing sub-regional implementation policies. The "Motorways of the Sea" concept introduced new intermodal maritime-based logistics chains in Europe in 2001. Motorways of the Sea aims to improve access to markets throughout Europe, and bring relief to the over-stretched European road system. The **Trans-European Transport Network (TEN-T) policy** addresses the implementation and development of a Europe-wide network of railway lines, roads, inland waterways, maritime shipping routes, ports, airports and railroad terminals. The ultimate objective is to close gaps, remove bottlenecks and technical barriers, as well as to strengthen social, economic and territorial cohesion in the EU. With the TEN-T revision in December 2021, the former Motorways of the Sea

are included in the European Maritime Space<sup>34</sup>. Moreover, a major EU climate policy change covering CO<sub>2</sub> is the inclusion of shipping in the EU Emissions Trading System (EU ETS)<sup>35</sup> from January 2024 onward from large ships operating to/from EU ports, and with impacts for Mediterranean shipping calling at EU ports.

The European Maritime Safety Agency (EMSA) provides technical expertise and operational support to enhance maritime safety, pollution prevention and response and maritime security. Most of the Agency's tasks are preventive (e.g. monitoring the application of certain laws and assessing their overall effectiveness). However, some tasks are reactive (e.g. providing oil spill response vessels to EU countries in the event of a major oil spill at sea and detecting marine pollution through satellite monitoring).

The EU Strategy for the Adriatic and Ionian Region (EUSAIR) is a multi-regional strategy adopted by the European Commission and approved by the European Council in 2014. The Strategy was developed in collaboration between the European Commission, representatives of the countries and the stakeholders of the Adriatic-Ionian region. An agreement was reached to work in concert in areas of common interest to benefit both the individual countries and the region as a whole. Pillar 2 of the strategy focuses on connecting the region. It aims to develop reliable transport networks and intermodal connections with the hinterland, both for freight and passengers. It also aims to strengthen maritime safety and security as well as to develop a competitive regional intermodal port system. The pillar 2 is coordinated by Italy, North Macedonia and Serbia.

The EU Communication on Sustainable Blue Economy (2021)<sup>36</sup> focusses on greening and decarbonising maritime transport and port infrastructure. As regards transport, the Communication puts emphasis on renewing or retrofitting ships with low and zero-emission technologies, whilst in the case of ports, it proposes to develop their key role as energy hubs (for integrated electricity, hydrogen and other renewable and lowcarbon fuels systems), as well as for the circular economy (for collecting, transhipping and disposing of waste from ships and other port industries, and for decommissioning ships), for communication (for submarine cables), and for industry (as industrial clusters). Along those lines, the 2020 Communication on a sustainable and smart mobility strategy<sup>37</sup> aims to bring the first zero emission vessels to market by 2030 and decarbonise maritime transport through an articulate set of measures.

The WestMED Technical Group on Green Shipping 38 was created in 2019 with the objective to carefully monitor and examine innovations in the industry such as green fuels (methanol, ammoniac, hydrogen and alternative technologies, including electrification), as well as to promote stakeholder dialogue as a proper basis for further regional action in the field. So far, the Technical Group has, inter alia, conducted an assessment of emerging technologies and their adaptability to the western Mediterranean region and set up a networking sub-group on ports as energy communities. As a concrete outcome of this group, the S3 Thematic partnership - Shipbuilding Propulsion Systems Alliance<sup>39</sup> was created in 2025 with the aim to speed up the modernisation and renewal of the supply chains related to the production/refitting of propulsion systems, as well as to the delivery of the fuel, for each type of alternative fuel, also accelerating the replacement/refitting of traditionally propelled fleets to diversify, renew, revitalise the sector across

https://eur-lex.europa.eu/resource.html?uri=cellar:7b299e69-5dc8-11ec-9c6c-01aa75ed71a1.0001.02/DOC 1&format=PDF

<sup>35</sup> https://climate.ec.europa.eu/eu-action/transport-decarbonisation/reducing-emissions-shippingsector en?utm\_source=chatgpt.com

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0240&from=EN

<sup>37</sup> https://eur-lex.europa.eu/resource.html?uri=cellar:5e601657-3b06-11eb-b27b-01aa75ed71a1.0001.02/DOC 1&format=PDF

https://www.westmed-initiative.eu/green-shipping/

Europe and its neighbourhoods; and finally fostering the adoption of innovative fiscal and financial schemes, to allow shipowners, shipbuilders and related stakeholders to achieve greater impact and sustainability for their investments.

#### Transnational and multi-country projects

There exist a wide range of transnational projects in the field of sustainable maritime transport and ports with an ample diversity of objectives, geographical scope and funding. Between the mapping and analysis performed, several have been identified:

- GREEN MARINE MED Mediterranean Green Shipping Network<sup>40</sup> brings together, engage and mobilise the comprehensive Mediterranean Green Shipping stakeholder community, representing the full value chain including actors from the full vessel community, ports and marinas, fuel and energy, as well as finance, investment, innovation and other stakeholders. The comprehensive Network will create the foundation to enable the most broadly supported and useful Monitoring and Technology Foresight on Mediterranean Green Shipping. Through the project's unique inclusion of accelerators and other business support programmes in the Network, GREEN MARINE strengthens the position of Green Shipping entrepreneurs and start-ups in the region. With the launch of an International Call for Green Shipping Innovation, the project provides specific support to start-ups, SMEs and entrepreneurs to revolutionise the ports and maritime transport industries and to ensure the acceleration of Green Shipping innovation in the Mediterranean. Thanks to its specific focus on innovation, capacity building and sustainable finance, GREEN MARINE MED has a strong basis for scalability post-project across the Mediterranean region and beyond, enhancing north-south sharing of best practices..
- GreenMED Green Shipping Pathways Towards a Clean Energy Transition in the Mediterranean is a regionally-oriented project aiming to effectively support green shipping efforts in the Mediterranean Sea basin, by promoting plausible scenario-based decarbonisation pathways. The GreenMED's ambition is to contribute directly and actively to the emission targets established by the EU under the 2030 and 2050 milestones. However, the goals' realisation relies on the comprehension and integration of innovative technologies, specifically selected depending on future potentials and various economic, social and environmental criteria. Thus, to perform this task, the regional ship energy demands, the fuel supply chains in both shores of the Mediterranean Sea, and the variety of emerging green shipping technologies will be considered. The assessment of these aspects leads to the establishment of a decarbonisation hub; the Mediterranean Sustainable Shipping Observatory (MSSO), which serves the project's objectives through the development of a stakeholders' network, and the building of knowledge capacity.
- Blue Ports Blue Careers in Net Zero energy Ports<sup>41</sup> supports the development of skills of the
  ports' human capital and cover the gap between current services and EGD targets, including
  Sustainable Blue Economy Strategy till 2030 and 2050. Therefore, this project offers a professional
  advantage to the personnel and port authorities with practical tips and smart tools on zero-emission
  port; integrated waste management; offshore green power generation; sustainability assessment;

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<sup>&</sup>lt;sup>40</sup> **GREEN MARINE MED** Countries covered: Spain, France, Italy, Netherlands, Türkiye, Israel, and Tunisia.

 $<sup>^{\</sup>rm 41}$  Blue Ports Countries covered: Greece, Italy, Spain, Georgia and Tunisia

also to young graduates. Key market actors, representing the quadruple innovation helix are involved: (i) marine and maritime education/academy; (ii) blue economy industry; (iii) civil society-environment; (iv) governance. Special courses will be developed and implemented, supported by young and environmental associations towards new student talents.

• POWER4MED - Local Emporwerment of Fuel Transition for a Green Mediterranean<sup>42</sup>. Transition toward carbon neutrality in maritime transport requires short & medium-term solutions, the former based on transition fuels (LNG), the latter on not yet fully available alternative fuels (green hydrogen, methanol, electricity & wind). Dealing with such complexity is difficult for the operators of smaller ships and POWER4MED has the ambition to support them by developing the POWER4MED Supporting Structure, a "Supporting Team" of multidisciplinary experts and a set of toolkits facilitating the path toward carbon neutrality of the 3 sectors targeted by the project: fishing boats, commercial vessels and marinas.

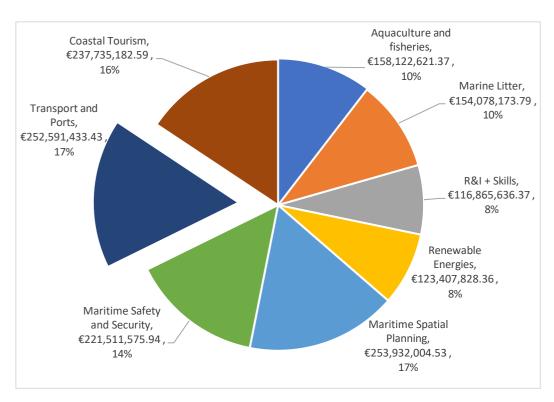
#### Assessment of regional coverage

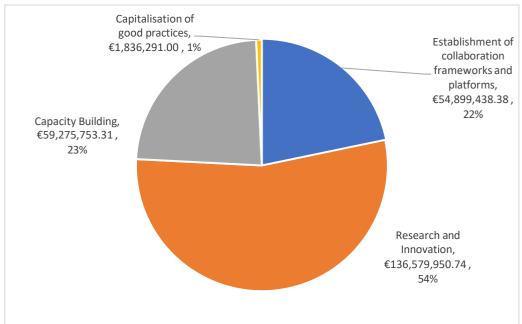
The following charts illustrate the allocation of funding across maritime priorities, highlighting that Transport and Ports received a substantial 17% of total project expenditure, making it the second-highest funded area after Coastal Tourism. Under this priority, the dominant share of funding (56%) directed toward Research and Innovation shows the importance of advancing technological solutions and sustainable practices in this sector. The next significant portion, 22%, is allocated to the establishment of collaboration frameworks and platforms, followed by capacity building (11%) and capitalization of good practices (6%).

#### Expenditure of the priority

Figure: Project expenditure per priority (top) and type of activity (bottom): Transport and Ports

 $<sup>^{42}</sup>$  **POWER4MED** Countries covered: Algeria, Italy, Egypt, Spain, Libya dn Türkiye





Source: Database of projects compiled for the UfM State of the Art of the Mediterranean Sustainable Blue Economy report

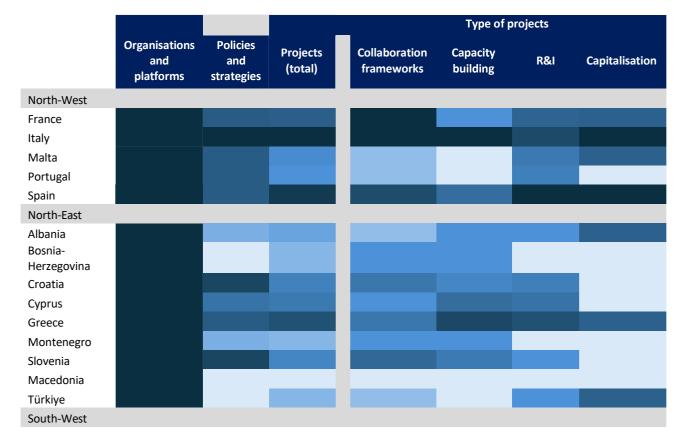
#### Further details on the support provided

The figure below provides an overview of the distribution of the collected initiatives (frameworks, processes and projects) across the various UfM countries in the different areas of the Mediterranean. The darker the blue, the higher the coverage of the mapped initiatives for each country (dark blue indicates that a country is involved in all the initiatives mapped for the specific category and pale blue indicates a very limited percentage of the total initiatives mapped). An analysis of the table below suggests some sectoral trends:

- Organisations and Platforms show a geographical balance in the coverage of this type of
  initiatives. Countries from all four sub-regions are actively engaged in regional platforms. This
  supports the shared governance ambitions noted by Ministers in the UfM Sustainable Blue
  Economy Ministerial Declaration, reinforcing the importance of collaborative frameworks such as
  the Regional Transport Action Plan for the Mediterranean showing its importance for sectoral
  governance.
- Policies and Strategies, shows a diverse palette, suggesting that while some countries are well
  covered, others are lagging behind. This uneven distribution reflects a degree of polarisation, but
  also opens avenues for mutual learning and cooperation. Sub-regional mechanisms, notably those
  linked to the EU transport policy and initiatives like LOGISMED or the Centre for Transportation
  Studies for the Western Mediterranean, could be leveraged to harmonise policy development and
  strategic planning.
- Project distribution remains un-evenly distributed across the Mediterranean. A clear clustering is
  visible around countries such as Italy, Spain, and France, which participate robustly in all categories
  of projects. In contrast, many countries, particularly in the south-east and south-west of the
  Mediterranean, show limited engagement, especially in R&I and capitalisation activities. Capacity
  building, however, remains a more accessible and evenly spread initiative, reflecting a focus on
  foundational skills and institutional support across the region.

Legend of the table: the darker the blue, the higher the coverage of the mapped initiatives for each country (dark blue indicates that a country is involved in all the initiatives mapped for the specific category and pale blue indicates a very limited percentage of the total initiatives mapped).

Figure: Overview of existing actions per country/ sectoral priority



Algeria				
Mauritania				
Morocco				
Tunisia				
South-East				
Egypt				
Israel				
Jordan				
Lebanon				
Libya				
Palestine				

Source: Database of processes, frameworks, initiatives and projects compiled for the UfM State of the Art of the Mediterranean Sustainable Blue Economy report

## 2.3.3 Stocktaking of the Ministerial Declaration: progress and opportunities

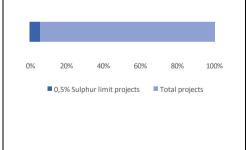
As a final step in the analysis, to the main priorities put forward by the UfM Ministerial Declaration for the sustainable development of the transport sector are revisited. The table below provides a further analysis on the state of the art in advancing with the specific UfM priorities as sketched in the introduction to this chapter. It does so by building on the initiatives (frameworks/processes and projects) as reviewed earlier in this chapter and confronting those with each priority of the UfM Ministerial Declaration for this sector. The analysis allows for an assessment on the status of the implementation of each priority (a "visual check") to be used as abasis for the future UfM Roadmap.

Figure: Identification of opportunities per sectoral priority

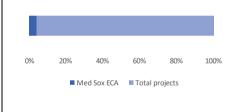
UFM MINISTERIAL DECLARATION CALL FOR ACTION	LEVEL OF PROJECT COVERAGE	JUSTIFICATION AND IDENTIFICATION OF OPPORTUNITIES AS PER THE MAPPING OF INITIATIVES
Work towards a UfM Strategic Action Plan for Transport Connectivity	0% 20% 40% 60% 80% 100%  SSF projects Total projects	<ul> <li>The basis for the Action plan is EU transport policy (in particular the Motorways of the Sea, the Trans-European Transport Network and the Transport Dimension in the European Neighbouring Policy). The UfM Strategic Action Plan for Transport Connectivity further will take stock of the implementation of the Regional Transport Action Plan for the Mediterranean region (RTAP) 2021–2027 in Mediterranean countries.</li> <li>OPTIMED IMPLEMENTATION: Towards a new Mediterranean Corridor: from South-Eastern to North-Western ports is an example of a project optimising and strengthening of the trade connections among the ports of the Mediterranean area which can be taken into account when working on the Action Plan. EuroMed Transport projects support southern Mediterranean countries to implement the Regional Transport Action Plan 2021-2027.</li> <li>UfM Regional Platform on Transport reviews progress to boost transport connectivity in the Mediterranean</li> </ul>

Enforcement / ratification of the International Maritime Organisation's (IMO) requirement setting the global 0.50% sulphur limit in marine fuels, under Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL), to reduce relevant air pollution worldwide including in the Mediterranean basin, with the view to submit a proposal to IMO in 2022 based on the outcome of the socio-economic studies and the decision of COP 22

Support bringing into force the Med SO<sub>x</sub> ECA



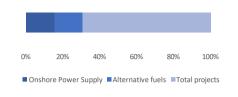
 A significant milestone in this area is the designation of the Mediterranean Sea as an Emission Control Area (ECA) for Sulphur Oxides (SOx) under MARPOL Annex VI Regulation 14. Vessels operating in the region will be required to use fuels with a sulphur content not exceeding 0.10%. Furthermore, the WestMED Technical Group on Green Shipping has supported a dedicated <u>Smart Specialisation (S3) Thematic Partnership</u> which aims to accelerate the modernisation and renewal of the shipping supply chains.



 At COP 22 it was agreed that the Contracting Parties to the Barcelona submit to the International Maritime Organization (IMO) for consideration by mid-2022, the joint and coordinated proposal to designate the Mediterranean Sea, as a whole, as an Emission Control Area for Sulphur Oxides (Med SOx ECA). This initiative effectively comes into force on May 1, 2025.

The LIFE4MEDECA Project carries out identifies needs, bottlenecks and barriers to the designation of an Emission Control Area and coordinates closely with REMPEC.
 A considerable number of projects have been identified dealing with. The Connecting Europe Facility funded masterplan for OPS in Spanish ports

Strengthening expertise and boosting investments in infrastructure taking duly into account the specific needs and priorities of Mediterranean countries; including investments on the provision of Onshore Power Supply and energy saving technologies for ports activities as well as on the development of alternative fuels, and transitional fuels as



- deals with Onshore Power Supply. Interestingly, several projects have been funded by the EU, including the one above mentioned, exclusively for Spanish beneficiaries. Another focus of projects is investment in LNG technology and infrastructure.
   Development of alternative and transitional fuels is also a key focus area at
- Development of alternative and transitional fuels is also a key focus area at both regional and national level. At regional level, the EMFAF-funded GREEN MARINE MED project has played a role in driving sustainable fuel

appropriate, and technical and operational energy efficiency for ships		adoption across the Mediterranean and a Centre of Excellence on Green Shipping has been created under this framework. Horizon-funded projects also aim to boost research and innovation in this area such as <u>ABATE</u> , <u>FLEXSHIP</u> and <u>ESY</u> .
Mediterranean countries to actively cooperate and participate in the implementation of joint projects in the provision of clean energy and technology	0% 20% 40% 60% 80% 100% ■ Energy efficiency projects ■ Total projects	<ul> <li>11 northern Mediterranean countries collaborate in the Mediterranean Interregional Electromobility Networks for intermodal and interurban low carbon transport systems including land-sea mobility. Furthermore, Interreg MED funds the project Sustainable Urban Mobility in MED PORT cities in which the knowledge of Sustainable Mobility Plans is improved in Italy, Montenegro, Albania, Cyprus, Spain, Greece &amp; Slovenia.</li> <li>Southern countries are missing projects related to the provision of clean energy and technology</li> </ul>
Developing necessary means for facilitation of maritime trade such as a fully digital administrative environment for waterborne transport, necessary for achieving the full benefits of a Maritime Single Window system	0% 20% 40% 60% 80% 100% ■ Digitalization of the sector ■ Total projects	Three projects in both the north and south address digitisation in transport and ports. For instance, the EU-funded DataPorts R&I project will design an Industrial Data Platform. The Cognitive Ports Data Platform will connect existing digital infrastructures of seaports and their systems. Beneficiaries come from Spain, France, Israel & Greece
Call on Mediterranean countries to ratify the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, and to make sure that vessels flying their flag only get dismantled in facilities which meet high social and environmental standards	0% 20% 40% 60% 80% 100% ■ Total projects	No framework, initiative or projects have been identified related to the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships

## 2.3.4 Potential avenues for future cooperation: pilot actions / projects

Building on the overall assessment provided so far, this section provides some (preliminary) insights on the type of actions (frameworks processes, projects) and related support to be foreseen as part of the UfM Roadmap, in addressing transport and port opportunities across the Mediterranean. The calls for actions are grouped into two clusters, one related to frameworks and the other one related to projects.

The following potential avenues refer to the calls for actions related to **frameworks**, which are the enforcement / ratification of the IMO's requirement setting the global 0.50% sulphur limit in marine fuels, the support of the entry into force of the Med  $SO_x$  ECA, the call on Mediterranean countries to ratify the Hong Kong International Convention, and the work towards a UfM Strategic Action Plan for Transport Connectivity.

- Build on the potential of the extension of the trans-European transport network (TEN-T), particularly the new Maritime European Space, to neighbouring third countries<sup>43</sup>. The 2021 Joint Communication on a Renewed Partnership with the Southern Neighbourhood and the accompanying Economic and Investment Plan for the region recognise transport connectivity as a key component for the development of the Southern Mediterranean. A comprehensive network for a trans-Mediterranean network for transport, the idenfication of which is ongoing, would facilitate regional connection. Ports need to be better integrated into broader inland multi-nodal logistic system, particularly in the southern and eastern basin, which could be one of the objectives of this network. Another goal should be the regionalisation of supply chains across the Mediterranean, which to date has been heavily dependent on global trends. Such regionalisation can be an efficient solution for both the southern and northern shores of the Mediterranean.
- Build on the work by the UfM Working Group on Transport for the UfM Strategic Action Plan for Transport Connectivity and the WestMed Technical Group on Green Shipping as a good practice of reinforced cooperation of significance for the whole Mediterranean Sea Basin.

The following potential avenues refer to the calls for actions related to **projects** are the *boosting of investments in infrastructure, the call for Mediterranean countries to actively cooperate and participate in the implementation of joint projects, and to develop necessary means for facilitation of maritime trade such as a fully digital administrative environment for waterborne transport.* 

- Projects related to the provision of clean energy and technology could be piloted in the south. In the north, there are examples such as projects improving Sustainable Urban Mobility Plans whose results could be capitalised. Boosting the uptake of innovative technologies and full digitalisation is vital to promote smart ports, effective onshore power supply for the decarbonisation of maritime transport, and the roll-out of single-window maritime systems across all regional operators. For the role of ports as energy hubs see also MRE chapter. New projects should be closely aligned with the WestMED initiative's Technical Group on Sustainable Transport and Green Shipping and in particular the action for green ports in the western Mediterranean to act as a network of 'energy communities'.
- Regarding waterborne transport, research from other parts of the EU can be capitalised, in
  particular Horizon 2020 Research and Innovation delivering smart, green, safe and competitive
  waterborne transport such as the STEERER project (led by a Belgian organisation and including
  Portuguese and Italian beneficiaries). Here, greater synergies with northern EU experiences could
  be promoted/capitalised.

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<sup>&</sup>lt;sup>43</sup> https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0820&from=EN

- Expertise and investment in the north in Onshore Power Supply and energy saving technologies for ports activities as well as on the development of alternative fuels, and transitional fuels as appropriate, and technical and operational energy efficiency for ships should be strengthened given projects have only been identified for Onshore Power Supply as well as alternative and transitional fuels. Existing projects can share their expertise with transport stakeholders in the south and east.
- There is potential for fostering investments and innovation in green ports. A matchmaking between green ports and green shipping companies with a focus on small ports can be a viable option to improve the potential of innovation and diversification through clean energy and technology<sup>44</sup>. This would also include a broader support towards diversification of business models in small ports (link to maritime tourism, aquaculture and fisheries in an energy-efficient approach).
- Encourage Mediterranean countries to ratify the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, and ensure that vessels flying their flag are dismantled only in facilities that meet high social and environmental standards. Currently, no regional frameworks, initiatives, or projects address this issue, showing a clear gap and opportunity for coordinated action.

# 2.3.5. Measuring progress in the UfM Declaration Implementation: Sustainable transport and ports

#### **Output (Process indicators)**

+Number of actions, sets of activities and projects of regional cooperation planned in the area Sustainable, climateneutral and zero-pollution transport and ports, in particular with regards to the following sub-priorities:

- Reduce relevant air pollution, including the implementation of the global 0.50% sulphur limit in marine fuels
- Setting up an Emission Control Area for Sulphur Oxides in the Mediterranean Sea
- Provision of Onshore Power Supply and energy saving technologies for ports activities
- Development of alternative and transitional fuels
- Technical and operational energy efficiency for ships
- Provision of clean energy and technology
- Fully digital administrative environment for waterborne transport, necessary for achieving the full benefits
  of a Maritime Single Window system
- Ensuring that vessels only get dismantled in facilities which meet high social and environmental standards
- +Number of actions, sets of activities and projects of regional cooperation being implemented in the Mediterranean area in the field of Sustainable, climate-neutral and zero-pollution transport and ports (with regards to the sub-priorities mentioned above)
- +Level of enforcement / ratification of the IMO's requirement setting the global 0.50% sulphur limit in marine fuels at national level
- +Level of financial support committed/secured to support the priority of Sustainable Climate Neutral and Zero Pollution Transport and Ports
- +Number and typology of partners and stakeholders involved in the actions/sets of activities/projects

## **Outcomes (result indicators)**

+Achieved and projected results of the different actions, sets of activities and projects underway or finished in the field of Sustainable Climate Neutral and Zero Pollution Transport and Ports, mainly:

- Number/type of new/enhanced products/services developed;
- Number/type of new/enhanced collaboration networks and platforms being supported/activated;
- Number/type of stakeholders (businesses, research, CSOs, etc.) involved and benefitting from the action/activity/project;
- Number/type of regional policies influenced as a result of regional cooperation (mainstreaming).

<sup>&</sup>lt;sup>44</sup> The Atlantic Smart Ports Blue Accelerator can be regarded as a reference concept for this purpose (https://cinea.ec.europa.eu/news/applications-are-open-take-part-atlantic-smart-ports-blue-accelerator-2021-10-01\_en)

#### 2.4 Coastal and Maritime Tourism

#### 2.4.1 Introduction

Coastal and maritime tourism is one of the major economic sectors for Mediterranean countries. The sector is currently undergoing a transformative structural change, which involves finding an appropriate balance between current and future economic, social and environmental needs and opportunities. The coastal and maritime tourism sector is amongst the most severely impacted ones by the COVID-19 pandemic. As the sector itself has significant impacts on the environment and local population, preservation of marine and coastal ecosystem as well as sustainable tourism are issues that are also well reflected by the UfM Ministerial Declaration on Sustainable Blue Economy. More specifically, sustainable change in the sector aims at untapping the economic potential of the sector, at addressing its environmental impacts and at guaranteeing long-term sustainability thus matching the Sustainable Development Goals (SDGs) goals.

## UfM Ministerial Declaration on Sustainable Blue Economy, 2<sup>nd</sup> February 2021:

- Promote policy coordination, stakeholder collaboration and cooperation mechanisms to strengthen the resilience of the tourism sector in the Mediterranean;
- Develop comprehensive monitoring, evaluation and statistics schemes and promote the digitalisation of the sector;
- Implement sectoral strategies and action plans to green the sector and reduce carbon emissions from the whole tourism industry, including tourism-related maritime transport;
- Address seasonality and overtourism by promoting the diversification of the tourism offer, encouraging experience-based and slow tourism as well as associating the hinterland;
- Promote eco-tourism and niche tourism, including activities such as pesca-tourism, culinary tourism, and sport tourism, among others;
- Promote fiscal and investment policies to support sustainable coastal and marine tourism.

#### 2.4.2 State of the art of activities

In the coastal and maritime tourism sector, activities identified across the Mediterranean present a strong emphasis on **Sustainable tourism**, which is due to the priority set by the European Union programmes<sup>45</sup>. These include the Agenda for a Sustainable and Competitive European tourism published in 2007 by the European Commission.<sup>46</sup> To briefly describe the state of the art of Sustainable Blue Economy (SBE) frameworks, initiatives and actions related to sustainable fisheries and aquaculture in the Mediterranean, a selection of relevant actions is therefore made (on the basis of a longer-list of collected initiatives and projects) and outlined in this section.

<sup>&</sup>lt;sup>45</sup> https://ec.europa.eu/growth/sectors/tourism/offer/sustainable\_en

<sup>&</sup>lt;sup>46</sup> Communication from the Commission - Agenda for a sustainable and competitive European tourism COM/2007/0621 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52007DC0621

This selection is aiming to be as illustrative as possible on the variety of subjects being addressed and has been carried out based on a combination of criteria, including:

- a) Relevance with respect to the calls for action set for this UfM Ministerial Declaration priority, as presented above;
- b) Geographical coverage;
- c) In the case of projects, the incorporation of sustainability and innovation aspects in its approach;

An overview of main frameworks, process and initiatives/projects is provided in the figure below and further described in this section.

An overview of main frameworks, process and initiatives/projects is provided in the figure below and further described in this section.

## **Regional Policy** frameworks, processes or initiatives

- ASCAME-UNWTO Memorandum of understanding to promote the development of sustainable tourism in the Mediterranean region
- The Mediterranean Tourism Forum (MediTour)

## Subregional processes or initiatives

- Athens Declaration for a Sustainable Tourism
- **MEET NETWORK**
- Petra Declaration on Investing in Tourism for an Inclusive Future
- A European Strategy for more Growth and Jobs in Coastal and Maritime Tourism
- **BLUEMED** initiative
- EU Communication on a Sustainable Blue Economy

## **Transnational projects**

- TouMaLi Tourism Marine Litter

  ECO-CRUISING FU\_TOUR

  EU WeMED\_NaTOUR European West Mediterranena NaTOUR project

  REBOOT MED Recovering, Experiencing and Boosting eco-tourism in the WestMed area

  EU DigiTOUR Boosting the Digital Capacity of Tourism SMEs in the EU

  MED-ROUTES Mediterranean Routes for Thematic Tourism

Figure: Overview of selected regional frameworks, subregional processes, transnational projects per sectoral priority (based on the compiled database of SBE actions and initiatives in the Mediterranean)

#### Regional and subregional

- In 2024, a Blue Tourism Initiative with related blue tourism pilots was rolled out by IUCN and other partners. Regional pilot projects in Mediterranean countries like Lebanon, Morocco and Tunisia have been launched to mainstream sustainable blue tourism practices and governance.
- In addition, the WestMED Initiative created a new Technical Group on Sustainable Tourism in 2024. The overall objective of this stakeholder group is to serve as a technical forum to discuss trends and opportunities towards sustainable tourism within the region and to provide support to participants to develop project ideas around the topics already set at EU level with regards to the tourism-related topics of green transition, digitalization, promotion of social inclusion, governance, and skills.
- A European Strategy for more Growth and Jobs in Coastal and Maritime Tourism focuses on the challenges to be addressed and proposes a strategy to enhance the sector's sustainability and

- competitiveness, to be implemented by the Commission, Member States, regional and local authorities, private operators and other stakeholders. Coastal and maritime tourism needs an ambitious policy framework.
- The framework of Interreg MED's Sustainable Tourism Community (policy and capitalisation project) aims to address tourism pressures; enhance attractiveness and tourism offer; strengthening planning and management practices towards sustainable tourism and building a strong community of projects and stakeholders.
- ASCAME-UNWTO Memorandum of understanding to promote the development of sustainable tourism in the Mediterranean region. ASCAME and UNWTO signed a memorandum of understanding to promote the development of sustainable tourism in the Mediterranean region. As recognised by the World Tourism Organization (UNWTO), the private sector has a key role in achieving its objectives. Both entities will continue to work together on strategies that promote responsible tourism, driving regional sustainable development and catalysing positive changes in the region.
- The Mediterranean Tourism Forum (MediTour) gathers private sector annual conferences whose goals are the promotion of tourism investment projects in the Mediterranean region, the development of North-South Mediterranean and Euro-Mediterranean cooperation in the sector, the valorisation of Mediterranean tourism assets, the improvement of the tourism quality and the support of the tourism businesses that align with SDGs and strengthening of cooperation.
- The Athens Declaration for a Sustainable Tourism it brings together six partners from northern
  Mediterranean countries, by the MED Sustainable Tourism Community aims to attain four goals:
  Contributing to address tourism pressures, enhancing attractiveness and tourism offer,
  strengthening planning and management practices towards sustainable tourism, and building a
  strong community of projects and stakeholders.
- The MEET Network represents a new ecotourism model and provide a membership network for protected areas who are committed to embracing a new way of developing tourism in the Mediterranean. Through the experiences, they promote: (1) conservation and local communities through ecotourism, (2) deep connections between travellers and the destination, the local environment, local people, and ultimately the travellers themselves, (3) integrate conservation efforts and knowledge in the Med.
- The **EU Communication on Sustainable Blue Economy** (2021)<sup>47</sup> focuses on greening and decarbonising maritime transport and port infrastructure. As regards transport, the Communication puts emphasis on renewing or retrofitting ships with low and zero-emission technologies, whilst in the case of ports, it proposes to develop their key role as energy hubs (for integrated electricity, hydrogen and other renewable and low-carbon fuels systems), as well as for the circular economy (for collecting, transhipping and disposing of waste from ships and other port industries, and for decommissioning ships), for communication (for submarine cables), and for industry (as industrial clusters). Along those lines, the 2020 Communication on a sustainable and smart mobility strategy<sup>48</sup> aims to bring the first zero emission vessels to market by 2030 and decarbonise maritime transport through an articulate set of measures.

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https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0240&from=EN

 $<sup>{}^{48} \</sup>quad \underline{\text{https://eur-lex.europa.eu/resource.html?uri=cellar:5e601657-3b06-11eb-b27b-01aa75ed71a1.0001.02/DOC\_1\&format=PDF} \\$ 

• **BLUEMED initiative**: The Preliminary Implementation Plan has been issued in June 2020, including a priority action linked to tourism, tourists and the environment addressing sustainable tourism and cultural heritage, actions on the digitalisation of the sector, and policy coordination.

At the 2<sup>nd</sup> UffM SBE Stakeholders Conference held in Athens,<sup>49</sup> **Mediterranean stakeholders** acknowledged that the sector has recovered rapidly after having been hit hard by the COVID-19 pandemic. The rebound effect in the northern Mediterranean countries is increasing the pressure on coastal and marine ecosystems. Simultaneously, the sector is severely vulnerable to climate change. The implementation of adaptation strategies will be of utmost importance in the future. To reduce pressure on ecosystems, it will be important to consider ecosystems, biodiversity, and nature as important assets to promote more sustainable tourism, and to embrace sustainability to create positive impacts generated by the tourism industry. The importance of data and the need for continuous data monitoring and analysis became apparent during the workshop focused on tourism. Based on this awareness, UNWTO has supported the creation of a Coastal and Maritime Tourism Monitoring Centre based in Greece. Multilevel governance models between communities and destinations, at regional and national levels are needed to create integrated and systemic approaches that address sustainability dimensions, such as waste management, biodiversity protection, or climate change adaptation. Evidence-based information for monitoring, evaluation, and planning is needed to measure the overall impact of tourism on marine ecosystems and the economy. To take this forward, Plan Bleu is working with other stakeholders to develop common indicators at the Mediterranean level.

At EU level, on February 8th, 2022, the European Commission presented the **Transition Pathway for tourism**<sup>50</sup> as part of the **Industrial Strategy Update**<sup>51</sup> This new pathway is a strategy developed in **joint action** with key players in the tourist ecosystem outlining goals, crucial activities, and requirements for achieving the green and digital transitions along with the sector's long-term resilience. This Transition Pathway requires the tourism industry to take actions in 27 different areas including: circular economy to reduce waste while meeting the growing demand for sustainable tourism; improving data-sharing procedures to enable innovative tourism services; investing in skills development to ensure qualified workforce; and investing in data-sharing practices to allow for new innovative tourism services. The Transition Pathway for tourism has been the result of a **co-creation process**<sup>52</sup> involving public and private stakeholders across different sectors and levels.

In the context of the 2021-2027 programming exercise of the EU, relevant programmes for the Mediterranean such as INTERREG Euro-MED<sup>53</sup> have incorporated specific objectives on Coastal and Maritime Tourism (i.e. Mission 4: Enhancing sustainable tourism). A new Thematic Community Project within Mission 4 was approved from the 1<sup>st</sup> call for proposals launched on February 2022<sup>54</sup>. This project, titled "Community4Tourism", will aim at facilitating the exchanges and the development of synergies between thematic projects under the Mission MED Declaration for a smarter and greener sustainable tourism ecosystem in the Mediterranean region.

<sup>&</sup>lt;sup>49</sup> UfM (2024). 2<sup>nd</sup> UfM Stakeholders Conference on sustainable blue economy- Available at:

 $<sup>\</sup>underline{\text{https://medblueconomyplatform.org/wp-content/uploads/2024/03/2nd-ufm-sk-conf-sbe-outcomes-main-messages.pdf}$ 

<sup>50</sup> https://ec.europa.eu/commission/presscorner/detail/en/ip 22 850

<sup>51</sup> https://commission.europa.eu/document/9ab0244c-6ca3-4b11-bef9-422c7eb34f39 en

https://ec.europa.eu/eusurvey/runner/Together4EUTourism

https://interreg-euro-med.eu/en/

https://interreg-euro-med.eu/wp-content/uploads/documents/call1 list final results.pdf

Emerging from the 3<sup>rd</sup> call for proposals of the programme, the Institutional Dialogue Project "Dialogue4Tourism" will focus on supporting the effective cooperation of all stakeholders concerned by the Mission<sup>55</sup>. Both will aim at amplifying and increasing impact of the projects' results, transferring them into the practices and mainstreaming them into public policies related to Mission 4.

In parallel, the ENI CBC MED programme, as part of the new Interreg NEXT framework, also includes Sustainable Tourism as a thematic priority in the new period (i.e. Priority A.1.3 - Encourage sustainable tourism initiatives and actions aimed at diversifying into new segments and niches).

Since 2021, the Interreg Euro MED, Maritime Italy-France, and NEXT MED programmes have been working together to promote sustainable tourism in the Mediterranean. This pilot action aims to transfer the most valuable results, creative tools, and governance papers to support stakeholders in the tourism sector. It is foreseen that this joint work will be extended to other key sectors and opened to other Mediterranean Interreg Programmes to facilitate synergies and contribute to local policy development with tested solutions. The initiative has developed a Sustainable Tourism Toolkit. It is the first concrete outcome of the pilot action set up by the Multi-programme Co-ordination Mechanism. It brings together some of the most transferable and valuable results, creative tools, and governance papers to provide concrete support to stakeholders in addressing the challenges they face across the Mediterranean in developing a vibrant, sustainable, and responsible tourism sector. <sup>56</sup>

Related to this, many Interreg tourism projects within the **Mediterranean Multi-Programme Mechanism** are actively addressing the challenges faced by rural, coastal, and island communities experiencing population decline. These funding programme mechanisms aim to revitalise local economies by promoting sustainable and diversified tourism models that extend beyond peak seasons. Moreover, the priority of coastal and maritime tourism is addressed by the Ocean Pact under its goal of **boosting the competitiveness of the EU sustainable blue economy**, establishing the launch of a sustainable tourism strategy as one of its key actions.

On 20 June 2024 the UfM organised a webinar on synergies and partnerships to enable the sustainable transformation of Blue Tourism in the Mediterranean. The webinar aimed at showcasing the role that synergies, partnerships, and regional collaboration can play in fostering the uptake of innovation in the tourism sector towards its "green and blue" transformation. It also seeked to assess and promote alignment between funding and policies; as well as to share/illustrate with concrete examples of multi-level and cross-sectoral cooperation, including partnerships between academia, industry, and governments. The webinar built on previous and ongoing efforts bringing different types of stakeholders in various areas together, including public funding programming -such as the Interreg Multi-programme Coordination Mechanism6-; cross-sector technical cooperation projects, including TouMaLi7 or the Blue Tourism Initiative8; stakeholder networking platforms like the Sun&Blue Congress9; or industry representative fora, such as ASCAME, among others.

https://interreg-euro-med.eu/wp-content/uploads/documents/call3 list final results .pdf

https://interreg-euro-med.eu/en/multiprogramme-sustainable-tourism/

In the table below, we summarise the outcomes and recommendations regarding this priority emerging from the 2<sup>nd</sup> UfM Stakeholders Conference on Sustainable Blue Economy, held in Athens on 19-20 February 2024.

# Outcomes and recommendations of Multi-stakeholder Workshop 7: Sustainable maritime and coastal tourism

- Coastal and sea-based tourism is a leading blue economic sector in the region, providing important income generation and employment opportunities throughout the basin. Hard hit by the pandemic, the sector has rapidly recovered, and the rebound effect, visible in at least the countries on the Northern Mediterranean shore is putting increasing pressure on coastal and marine ecosystems. At the same time, the sector is highly vulnerable to climate change. With rising sea levels, increasing temperatures, and seasonal water shortages, the implementation of adaptation strategies will be of utmost importance moving forwards. To decrease the pressure on ecosystems, it will be important to consider ecosystems, biodiversity, and nature as important assets to promote a more sustainable tourism and to embrace sustainability as to create positive impacts generated by the tourism industry.
- The workshop focused on showcasing good examples from the micro to the national level that are already considering sustainability, as well as sound spatial planning.
- During the exchange, the importance of data and the need for constant data monitoring and analysis emerged. Based on this awareness, the UNWTO has promoted and supported the creation of a Coastal and Maritime Tourism Monitoring Centre to be based in Greece. This initiative further strengthens the UN Tourism International Network of Sustainable Tourism Observatories (INSTO), that is a network of tourism observatories monitoring the economic, environmental and social impact of tourism at the destination level. The initiative is based on UN Tourism's long-standing commitment to the sustainable and resilient growth of the sector through measurement and monitoring, supporting the evidence-based management of tourism.
- The contributions during the workshop confirmed that good practices with regards to sustainable maritime and coastal tourism are under implementation by businesses (e.g. the examples of the Switcher Community or from Eco-cruising), on the municipal or destination level, on the regional level, as shown by the case of Andalucia, as well as on the national level (e.g. in Malta or Mauritania). All these examples are working on the diversification of the existing tourism offer, showing real opportunities on how to decrease the pressure on ecosystems, while at the same time promoting local economic development.
- However, to reach a broader application as well as positive impacts, mainstreaming and upscaling are necessary. To embed the principles of sustainable maritime and coastal tourism, collaboration on all levels is paramount. Multilevel governance models between municipalities and destinations, the regional and the national level will be necessary to create integrated and systemic approaches that do not only take economic opportunities into account, but are also considering broader sustainability dimensions, including the management of waste, the protection of biodiversity or adaptation to climate change. At the same time, countries in the Mediterranean must

- continue to learn from each other, as well as to define a joint vision as well as clear criteria for sustainable blue tourism.
- To be able to measure the overall impact of tourism on marine ecosystems, as well as the economy, there is a need for evidence-based information for monitoring, evaluation and planning. To advance this, Plan Bleu in collaboration with other stakeholders is currently developing joint indicators on the Mediterranean level. At the same time, capacity development programmes for Blue Tourism, as to be able to learn on how to define sound sustainable blue tourism projects are underway.

## Transnational and multi-country projects

There exist a wide range of transnational projects in the field of coastal and maritime tourism with an ample diversity of objectives, geographical scope and funding. Between the mapping and analysis performed, several have been identified:

- TouMaLi Tourism Marine Litter aims to develop and establish sustainable waste management solutions in the tourism sector in the countries of Morocco, Tunisia, and Egypt to protect marine ecosystems in the Middle East and North Africa region. One of the main project goals is to decrease tourism-related beach pollution in the project region. Therefore, the project investigates the quantities and main sources of marine litter in tourism destinations and provides sustainable solutions considering the development of a legal framework, organizational structures, financial tools and technical approaches in the TouMaLi countries. Clear roles and responsibilities, availability of funds and decision makers' knowledge are the main factors when introducing such solutions. The tourism sector, both private and public, is involved and integrated into the strategies developed. Tourists represent a significant income source and the main industry players should consider their responsibilities to keep the coastal areas attractive for tourists, to not threaten the stability of their businesses.
- **ECO-CRUISING FU\_TOUR** <sup>57</sup>is a project co-funded by the European Union, aiming at exploiting the green and blue potential of the West Mediterranean tourism SMEs through cross-border cooperation to unlock new business opportunities around the new eco-cruise tourism sector. The project designs innovative, sustainable and smart cruising packages targeting Millennials and Gen Z, aiming at minimising the impact of large groups of visitors. The green component of the package stimulates participants to enjoy nature-based tourism, where possible using alternative zero-impact means of transport to explore the places visited. At the same time, it will foster environmental and cultural understanding, appreciation and conservation.
- EU WeMED\_NaTOUR European West Mediterranena NaTOUR project<sup>58</sup> intends to focus on
  West Mediterranean natural marine sites and maritime/coastal destinations to develop responsible
  and sustainable transnational eco-smart tourism packages according to the blue economy strategy.
   The designed tourism packages increases the attractiveness of coastal and marine destinations in

<sup>&</sup>lt;sup>57</sup> **ECO-CRUISING FU\_TOUR** Countries covered: Italy, Spain, Greece, Cyprus, Morocco, Tunisia and Algeria.

<sup>&</sup>lt;sup>58</sup> **EU WeMED NaTOUR** Countries covered: Italy, Belgium, Spain, Portugal and Mauritania.

the participant countries, highlighting their unique value to a broader audience of visitors, with a specific focus of the "new generations"

- REBOOT MED Recovering, Experiencing and Boosting eco-tourism in the WestMed area<sup>59</sup> is working on the development of several ecotourism packages and policy recommendations in the Western Mediterranean area. The project seeks to build capacity and raise awareness on the competitiveness and sustainability of coastal and maritime tourism. The target is tourism SMEs, coastal communities and potential pioneers that will be key players in the sustainable blue economy. The project capitalizes on lessons learned through their dissemination.
- MED-ROUTES Mediterranean Routes for Thematic Tourism<sup>60</sup> focuses on promoting the
  development of sustainable tourist routes in the Mediterranean region, integrating cultural, natural,
  historical and gastronomic aspects, among others. These routes not only aim to attract visitors, but
  also contribute to the socio-economic development of local communities, while preserving the
  region's heritage and natural resources, and offering tourist experiences that promote sustainability.

## Assessment of regional coverage

Beyond the selected exemplary initiatives described so far, our analysis covered a wider number of projects (provided in the annexed "project database" tables). A synthesis of the analysis of such broader sample of frameworks, initiatives and projects is described in this section.

The main emerging findings with regards to the actions currently in place in this sector are as follows:

- Regional frameworks seem to cover all countries although they might require some further development to substantiate and strengthen the existing frameworks and the support provided;
- (Sub)regional processes remain more scattered (apart from north-west where many countries are part of subregional frameworks);
- **Project support** is largely developed on the northern shore in all four categories (collaboration, capacity building, R&I and capitalisation), with some exceptions (capacity building in Tunisia and R&I in Lebanon);
- Capitalisation support is currently stronger in few EU countries (Italy, Spain, Croatia, Greece);
- Low balance in project support seem to persist between southern and norther Countries.

## Expenditure of the priority

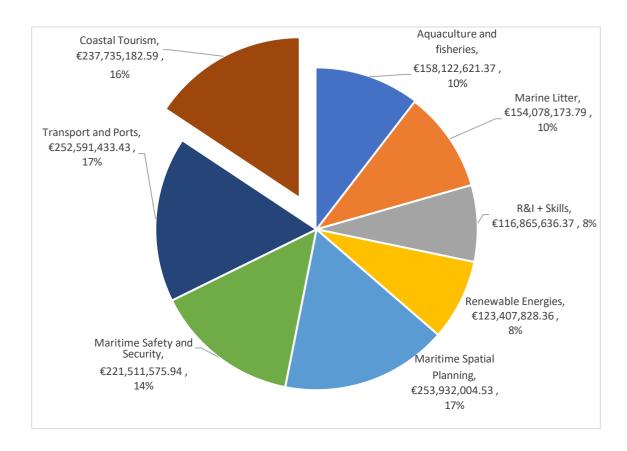
The figures below provide an overview of the expenditure of the sector compared to other SBE priorities and for different type of projects. Projects are divided depending on their main focus (Establishment of collaboration frameworks and platforms, Capacity Building, Research and Innovation, Capitalisation of good practices). It can be observed in the figure below that Coastal and Maritime Tourism accounts for 16% of the overall spending on SBE priorities, which is the fourth highest expenditure behind Transport and Ports and Maritime Spatial Planning. Given the size of the sector and the challenges outlined in the UfM ministerial Declaration public spending on transnational projects is needed. The figure (bottom) indicates that 39% of

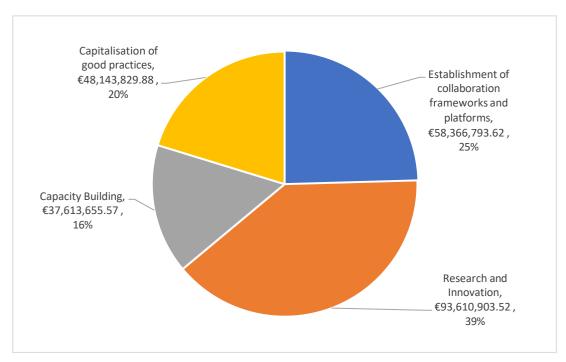
<sup>&</sup>lt;sup>59</sup> **REBOOT MED** Countries covered: France, Italy, Spain, Tunisia, Morocco and Mauritania.

<sup>&</sup>lt;sup>60</sup> MED-ROUTES Countries covered: Italy, Spain, Croatia, Cyprus, Greece, Portugal and Bulgaria

projects are spent on R&I projects, while all categories receive at least EUR 30 million. Capacity building projects account for the lowest percentage of spending (16%).

Figure: Project expenditure per priority (top) and type of activity (bottom): Coastal and Maritime Tourism





Source: Database of projects compiled for the UfM State of the Art of the Mediterranean Sustainable Blue Economy report

#### Further details on the support provided

The figure below provides an overview of the distribution of the collected initiatives (frameworks, processes, initiatives and projects) across the various UfM countries in the different areas of the Mediterranean. The darker the blue, the higher the coverage of the mapped initiatives for each country (dark blue indicates that a country is involved in all the initiatives mapped for the specific category and pale blue indicates a very limited percentage of the total initiatives mapped).

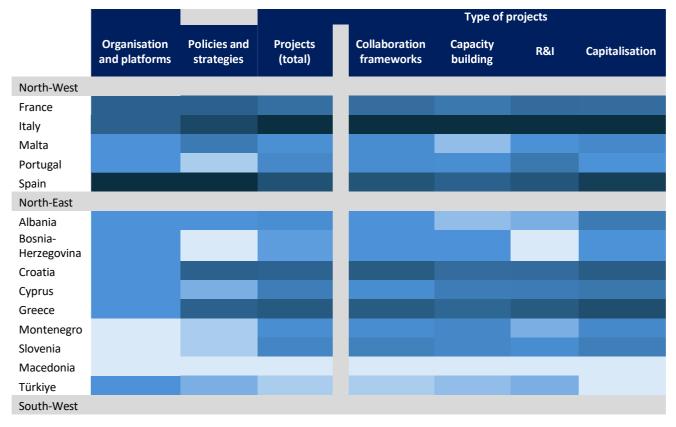
Note that the projects are also divided depending on their main focus (Collaboration, Capacity Building, Research and Innovation, Capitalisation of good practices). An analysis of the table below provides for some observations:

• Organisations and Platforms suggest a relatively balanced regional engagement across the Mediterranean in terms of institutional and platform-based initiatives. Countries from all sub-regions are represented, indicating a shared interest in collaborative governance. However, despite this coverage, the mapping reveals that dedicated frameworks specifically targeting tourism remain limited. The most comprehensive strategies are found within the EU, notably the European Strategy for more Growth and Jobs in Coastal and Maritime Tourism, which outlines key sectoral challenges. While declarations such as the Athens Declaration for Sustainable Tourism and the Petra Declaration on Investing in Tourism for an Inclusive Future provide valuable sub-regional direction, the absence of a Mediterranean-wide framework means that many sectoral challenges identified in the UfM Ministerial Declaration on Sustainable Blue Economy (2021) remain insufficiently addressed.

- Policies and strategies are spread across the region, they tend to involve a limited number of countries, leaving room for greater synergy and exchange of best practices. This pattern is evident in collaboration projects that touch on diverse aspects of coastal and maritime tourism—such as cultural tourism, ecotourism, overtourism, niche tourism, and tourism-related maritime transport. Most of these initiaitves are funded through EU instruments, with participation concentrated in EU member states. Notable exceptions include CROSSDEV (ENI CBC MED) and MAST (UfM), which extend collaboration to non-EU countries, but such examples remain rare and highlight the need for more inclusive project design and funding mechanisms.
- Projects distribution reveals a polarised distribution of collaboration frameworks, with a clear concentration in northern Mediterranean countries such as Italy, Spain, and France, with southern and eastern Mediterranean countries often underrepresented. This imbalance risks reinforcing existing disparities in institutional and technical capacity. While capacity building shows slightly more equitable distribution, it still reflects a need for targeted support to ensure that all countries can benefit from foundational skills development and institutional strengthening in the tourism sector. A significant gap is also observed in terms of "capitalisation" projects in the southern shore of the Mediterranean, which calls for greater collaboration with authorities and stakeholders in those countries to encourage the uptake of successful and replicable project results.

Legend of the table: the darker the blue, the higher the coverage of the mapped initiatives for each country (dark blue indicates that a country is involved in all the initiatives mapped for the specific category and pale blue indicates a very limited percentage of the total initiatives mapped).

Figure: Overview of existing actions per country/ sectoral priority



Algeria				
Mauritania				
Morocco				
Tunisia				
South-East				
Egypt				
Israel				
Jordan				
Lebanon				
Libya				
Palestine				

Source: Database of processes, frameworks, initiatives and projects compiled for the UfM State of the Art of the Mediterranean Sustainable Blue Economy report

## 2.4.3 Stocktaking of the Ministerial Declaration: progress and opportunities

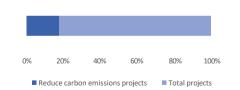
As a final step in the analysis, it is important to return to the main priorities put forward by the UfM Ministerial Declaration for the sustainable development of the tourism sector. The table below provides a further analysis on the state of the art in advancing with the specific UfM priorities as sketched in the introduction to this chapter. It does so by building on the initiatives (frameworks/processes and projects) as reviewed earlier in this chapter and confronting those with each priority of the UfM Ministerial Declaration for this sector. The analysis allows for an assessment on the status of the implementation of each priority (a "visual check") to be used as a basis for the future UfM Roadmap.

Figure: Identification of opportunities per sectoral priority

UFM MINISTERIAL DECLARATION	LEVEL OF PROJECT COVERAGE	JUSTIFICATION AND IDENTIFICATION OF OPPORTUNITIES AS PER THE MAPPING OF INITIATIVES
Promote policy coordination, stakeholder collaboration and cooperation mechanisms to strengthen the resilience of the tourism sector in the Mediterranean	*No projects classified under this sub-priority	Provided that adequate/targeted funding is available, cooperation mechanisms have good potential to be expanded to other Mediterranean countries, especially in the southern and eastern shores. This opportunity for capitalisation may build on synergies with existing region-wide initiatives such as the ASCAME-UNWTO MoU. There are few regional and sub-regional frameworks and no subregional framework outside the EU. An outstanding example is the European Strategy for more Growth and Jobs in Coastal and Maritime Tourism, which calls for targeted action in the area of coastal and marine tourism and proposes a strategy for EU Member States.  There are important regional initiatives within this priority. These include the Interreg Multiprogramme Coordination Mechanism which aims to enhance sustainable tourism in the Mediterranean across various Interreg programmes through transferring the most valuable results, creative tools and governance papers to support stakeholders the tourism sector, as well as the WestMed Sustainable Tourism Technical Group launched in July 2024 with the aim of discussing opportunities towards sustainable tourism in the region and in the support to project

		ideas. Besides, the BlueTourism Initiative supports exchanges of knowledge, good practices, projects and experiences between three major marine regions sharing similar environmental and social challenges related to coastal and maritime tourism.  Projects  • While there are some projects in the south, there is potential to expand collaboration projects in the south, also by creating synergies with EU-funded projects. Projects in the north are focussed on SMEs, tourism in the hinterland, capitalisation of project results and community building. MED Sustainable Tourism Community project is an outstanding example coordinating INTERREG Med projects to increase coordination of strategies and synergies of INTERREG Med projects. Projects in the south/ east focus on coordinating in the area of cultural tourism. Policy coordination, stakeholder collaboration and cooperation mechanisms can be strengthened further.
Develop comprehensive monitoring, evaluation and statistics schemes and promote the digitalization of the sector	0% 20% 40% 60% 80% 100%	Frameworks and processes     There is no sectoral strategy how to promote digitalization in the sector and improve sectoral statistics. Only projects have been identified by the mapping of actions in coastal and maritime tourism
	■ Digitalisation of the sector ■ Total projects	Relevant regional projects have begun within the Horizon and Interreg EURO MED funding programmes, such as SEA-LIMITHS for the former and D4T – Dialogue4Tourism for the latter. At national level, plans relating to the digitalisation of the tourism sector have been implemented in Greece, Spain, Morocco, Algeria and Egypt.

Implement sectoral strategies and action plans to green and reduce carbon emissions from the whole tourism industry, including tourism-related maritime transport



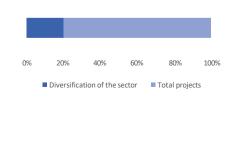
## Frameworks and processes

 Sustainability is part of the sectoral strategy for the EU but sectoral strategies or processes on greening and reducing carbon emission for the sector are missing.

#### **Projects**

• The project SIROCCO focusses on sustainable interregional coastal & cruise maritime tourism though cooperation and joint planning in the north. Furthermore, there is a lack of projects with explicit objectives to reduce carbon emissions. Projects that have been included under this call for action are projects focussed on strategies and action plans for sustainable tourism, two projects on circular economy in tourism in the Mediterranean north, and CONSUME-LESS, which focusses in the reduction of consumption in Mediterranean touristic communities. All projects have been identified in the north.

Address seasonality and over tourism by promoting the diversification of the tourism offer, encouraging experience-based and slow tourism as well as associating the hinterland;



## Frameworks and processes

No frameworks currently exist that address seasonality

## **Projects**

There are gaps in the south. Most projects addressing seasonality and
over tourism are situated in the north of the Mediterranean. There is a
possible capitalisation from projects in the north as well as a possibility
for synergy building with projects in the north. A few projects funded by
ENI CBC MED have been identified addressing seasonality and over
tourism in the north and south. In the north, especially INTERREG
Med focusses on these aspects, in particular projects on slow tourism
and in the hinterland.

Promote eco-tourism and niche tourism, including activities such as pesca-tourism, culinary tourism, and sport tourism, among others	0% 20% 40% 60% 80% 100%  ■ Eco-tourism ■ Total projects	<ul> <li>Frameworks and processes</li> <li>A few initiatives and processes have been identified in the north and south, especially on eco-tourism.</li> <li>Projects</li> <li>Niche tourism projects except for cultural and adventure/sport tourism are situated mostly in the north. Ecotourism projects are scarce in the south. A wealth of projects in the north related to ecotourism, as well as other niche tourism projects (pesca-tourism, culinary tourism, sport tourism and cultural tourism) have been found funded by COSME, ERASMUS+, EMFF, INTERREG MED, etc. Some recent regional projects implemented in this area include those funded by EMFAF such as REBOOT MED and TWINNEDbySTARS, funded by Horizon, such as TOURAL and funded by various Interreg programmes such as NaTour4CChange and GUSTI.</li> </ul>
Promote fiscal and investment policies to support sustainable coastal and marine tourism		Frameworks and processes  Funding is available specifically for sustainable costal and maritime tourism both in North and South and within wider funding schemes such as INTERREG Med, other INTERREG programmes or ENI CBC MED. The majority of the funds stem from EU sources.

## 2.4.4 Potential avenues for future cooperation: pilot actions / projects

Building on the overall assessment provided so far, this section provides some insights on the type of actions (frameworks processes, projects) and related support to be foreseen as part of the UfM Roadmap, in order to address and ensure fully sustainable coastal and maritime Tourism across the Mediterranean. The different avenues for cooperation are clustered depending on the different aims of the call for actions extracted from the UfM SBE Ministerial Declaration – as indicated in the text below.

The following potential avenues refer to the **calls for actions related to governance**, which are to promote policy coordination, stakeholder collaboration and cooperation mechanisms to strengthen the resilience of the tourism sector in the Mediterranean; to develop comprehensive monitoring, evaluation and statistics schemes and promote the digitalization of the sector; and to implement sectoral strategies and action plans to green the sector and reduce carbon emissions from the whole tourism industry, including tourism-related maritime transport:

- A stronger regional framework could be promoted by supporting projects/initiatives related to policy coordination, stakeholder collaboration and cooperation mechanisms in the south. In the north there are several examples where this is happening and working well. In particular, the MED Sustainable Tourism Community platform/observatories (local level) should be set-up to offer a framework of collaboration to facilitate synergies among modular regional projects. A good practice is the collaboration of CPMR IMC and UfM, together with other key actors namely World Tourism Organisation, Interreg Med, ENI CBC Med, which turned into the recent operational handbook Operational Handbook on "Social and economic regeneration of the Mediterranean after the crisis: shared methods and tools for relaunching a sustainable post COVID-19 tourism model" as well as in 2018 bringing together CO-EVOLVE and MedCoast4BG stakeholders. PANORAMED reinforces the concrete capacities of public to support governance processes in tackling common transnational challenges and planning potential solutions. It is understood that the upcoming MoU between the UfM and the UNWTO will strengthen the regional framework.
- A strategic framework for digitalisation could be implemented in the north and the south to advance the digitalisation in the sector. The mapping has not identified regional frameworks supporting the digitalisation of tourism businesses and operators. There is a need for greater ability to plan and develop the full uptake of digitalisation potential towards the diversification of touristic markets, products and services across the region. Projects such as CAST Creative Accelerators for Sustainable Tourism are good practices that can be capitalised on.
- Projects that explicitly implement sectoral strategies and action plans to green and reduce carbon emissions are scarce. In this sense, projects rather focus on sustainability or the circular economy in the north. Thus, in the south there is a strong opportunity to strengthen projects in this

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<sup>&</sup>lt;sup>61</sup> https://cpmr.org/maritime/cpmr-imc-fosters-collaboration-on-sustainable-tourism-with-partners-from-southern-and-eastern-mediterranean/19824/:

https://cpmr-intermed.org/uncategorized/med-sustainable-tourism-days-several-paths-towards-a-common-goal/13890/

<sup>62 &</sup>lt;u>https://cinea.ec.europa.eu/events/sustainable-tourism-innovation\_en</u>

- regard. There is a need for greater ability to plan and develop green tourism infrastructures, towards the diversification of touristic markets, products and services across the region.
- Projects related to tourism-related marine small-scale cruise with low environmental footprint, promoting local entrepreneurship and cultural heritage can be further developed both in the north as in the south. This can be linked to efforts aimed at the uptake of digitalisation in and greening of small ports linking it to the idea of investing in small ports in the sectoral priority "Maritime Transport and Ports", including both infrastructure and the industry.
- Seasonality remains one of the most persistent challenges in the coastal and maritime tourism sector across the Mediterranean, leading to economic instability and precarious employment. Future cooperation should focus on developing integrated strategies that promote year-round tourism through diversification of offerings, such as eco-tourism, cultural heritage routes, and maritime education experiences. While existing practices of all-year-round tourism exist in the region, twinning and peer exchanges could be fostered with interested countries to raise overall understanding of opportunities.

The following potential avenue refer to the **calls for actions related to sectoral innovation**, which are to address seasonality and overtourism by promoting the diversification of the tourism offer, encouraging experience-based and slow tourism as well as associating the hinterland; and to promote eco-tourism and niche tourism, including activities such as pesca-tourism, culinary tourism, and sport tourism, among others;

- Push on the capitalisation of the wide range of existing good practices/projects (often but not only developed on the northern shore), towards the full adoption and further development to reflect the specific challenges and opportunities for southern Mediterranean countries. This action would also allow to strengthen synergies and cooperation across relevant stakeholders (south-south as well as north-south) and accelerate innovative concepts and ideas by building on previous experiences. The European Maritime, Fisheries and Aquaculture Fund launches a call to support flagship projects on Tourism specifically towards the Western Mediterranean area, but which is open to the whole region. The projects should be monitored and successful results should be capitalised towards the whole region.
- Support a more systematic involvement of Development Agencies and local/regional Investment Banks (e.g., African Development Bank) in the region in promoting innovative and sustainable coastal and maritime (eco/sustainable) tourism entrepreneurship not sure it flows logically with the part before possibly with a strong emphasis on youth and women as tourism is the largest employer of female but they are mainly underrepresented in leadership and managerial positions. In addition, the tourism sector is an important source for growth and jobs, especially for youth, as 13% of the tourism-related work force are aged under 25. "Twinning" experiments between the EU countries and non-EU countries could be arranged, in order to promote technology transfer, know-how and good practices exchange.

## 2.4.5. Measuring progress in the UfM Declaration Implementation: Coastal and Maritime Tourism

## **Output (Process indicators)**

+Number of actions, sets of activities and projects of regional cooperation planned in the area of Coastal and Maritime Tourism, in particular with regards to the following sub-priorities:

- Promotion of the digitalization of the sector
- Reduction of carbon emissions and greening of the tourism industry, including tourism-related maritime transport
- Diversification including experience-based and slow tourism as well as tourism associating the hinterland
- Promotion of eco-tourism and niche tourism
- +Number of actions, sets of activities and projects of regional cooperation being implemented in the Mediterranean area in the field of Coastal and Maritime Tourism (with regards to the sub-priorities mentioned above)
- +Level of fiscal and investment policies to support sustainable coastal and marine tourism at national level
- +Level of financial support committed/secured to support sustainable coastal and marine tourism.
- +Number and typology of partners and stakeholders involved in the actions/sets of activities/projects

## **Outcomes (result indicators)**

- +Achieved and projected results of the different actions, sets of activities and projects underway or finished in the field of Coastal and Maritime Tourism, mainly:
- Number/type of new/enhanced products/services developed;
- Number/type of new/enhanced collaboration networks and platforms being supported/activated;
- Number/type of stakeholders (businesses, research, CSOs, etc.) involved and benefitting from the action/activity/project;
- Number/type of regional policies influenced as a result of regional cooperation (mainstreaming).

## 2.5 Marine renewable energies

#### 2.5.1 Introduction

Marine Renewable Energies can play a crucial role in meeting reduction targets in greenhouse gas emissions and in combatting climate change. Despite their currently limited LEVEL OF PROJECT COVERAGE, there are numerous locations in the Mediterranean Sea with considerable Marine Renewable Energies development potentials. Offshore wind energy is considered a particularly promising MRE sector, given its LEVEL OF PROJECT COVERAGE in terms of technology, policy frameworks, commercialisation and installed capacity. Nevertheless, it also faces social acceptance challenges concerning its coexistence with other maritime uses and its still largely unknown impact on marine ecosystems.

The UfM Ministerial Declaration on Sustainable Blue Economy, 2<sup>nd</sup> February 2021, has called for:

- Cooperation on research and innovation towards the development of technologies capable of fully exploiting the potential of MRE sources of the Mediterranean, including combining different marine activities in the same marine space;
- Offshore operations for renewable energy production to be carried out by taking safety precautions and considering environmental impacts;
- The enhancement of relevant regulatory frameworks and facilitation of licensing process while preserving adequate assessment and public consultation prior to installing MRE infrastructure.

## 2.5.2 State of the art of activities

To briefly describe the state of the art of Sustainable Blue Economy (SBE) frameworks, initiatives and actions related to Marine Renewable Energies in the Mediterranean, a selection of relevant actions is made on the basis of a longer-list of collected initiatives and projects and outlined in this section.

This selection is aiming to be as illustrative as possible on the variety of subjects being addressed and has been carried out based on a combination of criteria, including:

- d) Relevance with respect to the calls for action set for this UfM Ministerial Declaration priority, as presented above;
- e) Geographical coverage;
- f) In the case of projects, the incorporation of sustainability and innovation aspects in its approach;

Figure: Overview of regional frameworks, subregional processes, transnational projects on Marine Renewable Energy (based on the compiled database of SBE actions and initiatives in the Mediterranean)

## **Regional Policy** frameworks, processes or initiatives

- The UfM Ministerial Declarations on Sustainable Blue Economy (February 2021), Environment and Climate Change (October 2021) and Energy (June 2021)
- Observatoire Méditerranéen de l'Energie (with a Task Force on renewable energy)

#### Subregional processes or initiatives

- EU Blue Growth Strategy, with an specific axis on Ocean and Offshore wind energy, in the broader framework of the EU Climate and Energy package and European Green Deal
- The Blue Growth Community (BCG) Working Group on Marine Renewable Energy
- The Central and South Eastern Europe energy connectivity (CESEC) High-level

#### Transnational projects

- MAESTRALE Laying out the foundations for the establishment of a Strategy for the Deployment of Maritime Energy in the Mediterranean

  PELAGOS Establishment of a permanente Cluster and Platform of National Hubs in the Blue Energy Sector.

  BLUE DEAL Labs, Open Days and Business Forums focusing on the definition, testing and dissemination of enabling tools for SMEs/start-ups in the Blue Energy Sectors

  NextFloat Project Disrupting offshore wind

  FLORES Offshore Renewable Energies partnership in the Pact for Skills

## Regional

- This priority is closely linked to global greenhouse emissions reduction targets. In this sense, it draws direct links to the UfM Ministerial Declarations on Environment and Climate Change (October 2021) and Energy (June 2021), whereby Mediterranean Ministers have called for the enhancement of existing relevant regulatory frameworks, with a focus on licensing processes with adequate assessment and public consultation.
- Moreover, the UfM launched a Renewable Energy and Energy Efficiency Platform with the objective of promoting the progressive deployment of renewables and energy efficiency measures. On top of this, the UfM Regional Electricity Market Platform seeks to achieve the gradual integration of electricity systems and markets in the Euro-Mediterranean region.
- With an active role in these platforms, the Mediterranean Association of National Energy Management Agencies (MEDENER) and the Mediterranean Energy Regulators platform (Med-Reg) play a key role in the exchange of experience, know-how and best practices between member countries.
- Other relevant actors at regional level include the **Mediterranean Energy Observatory** (OME).

On 27th June 2022, the Union for the Mediterranean held its first Mediterranean Ministerial Conference on Research and Innovation, whereby the importance of marine renewable energy was emphasised. The role of Science Diplomacy was considered key to enhance regional cooperation in this sector<sup>63</sup>. The UfM convenes three UfM Energy Platforms (UfM Regional Electricity Markets Platform, UfM Renewable Energy and Energy Efficiency Platform, and UfM Gas Platform). The Energy Platforms annual meeting will be held in May 2023.

At the level of initiatives, on 28 September 2023, the Offshore Coalition for Energy and Nature' in the Mediterranean (Med OCEaN)<sup>64</sup> was officially launched, an initiative driven by the Renewables Grid Initiative

<sup>63</sup> https://ufmsecretariat.org/wp-content/uploads/2022/06/UfM-Ministerial-Declaration-RI-EN-270622.pdf 64 https://www.ree.es/en/press-office/news/press-release/2022/04/red-electrica-french-italian-counterparts-ngoswind-industry-drive-offshore-wind-energy-mediterranean

(RGI) and the World Wildlife Fund (WWF), among others. The coalition involves the transmission agents and operators of the Spanish, French and Italian electricity systems (Red Eléctrica de España, RTE and Terna, respectively), together with NGOs and the wind industry, with the aim to promote the sustainable expansion of offshore wind and the necessary development of the grid to make it possible. Its work aims to support an integrated planning of offshore wind energy and nature in Maritime Spatial Plans. Additionally, Med OCEaN will bridge knowledge gaps, track developments and assess the impacts and effectiveness of biodiversity measures in the offshore wind sector and grid infrastructure, while also exploring innovative solutions<sup>65</sup>.

In terms of marine renewable energy deployment in the Mediterranean, the company Renexia is currently projecting the Med Wind project in the Strait of Sicily. This consists of 190 floating turbines with an installed capacity of 2.8 GW and an estimated annual production of almost 9TWh<sup>66</sup>. Additionally, two other smaller floating wind farms will be installed in Sardinia with an installed capacity of 825 MW and 555 MW. Similarly, France has taken further concrete steps by identifying the locations for two new 250 MW floating wind projects. These projects will be subject to a competitive bidding process to be commissioned by 2031<sup>67</sup>. The Medfloat Pilot Parc is a pre-commercial pilot park with 3 to 5 units and a total potential of 50MW to be installed in an area located more 15 km from Cap de Creus on the Costa Brava (Catalonia, Spain) in 2025<sup>68</sup>.

The central importance of MRE as a potential solution for decarbonization was stressed during the **2nd UfM SBE Stakeholders Conference**<sup>69</sup>, while acknowledging common challenges for the sector such as the need for cohabitation, effective planning, MSP, and access to finance as large-scale investments are needed. Mediterranean stakeholders gathered in this forum highlighted the existence of common needs in the region to facilitate the first stages of the development of concrete (commercial) projects, including the need for common/shared standards/regulatory frameworks. In addition, the right set of skills in the existing workforce needs to be developed and guaranteed, investors should be placed at the center of the discussion, and strengthening regional cooperation on MRE is of paramount importance.

Following the needs identified, the UfM is planning a specific webinar on MRE, touching upon the abovementioned issues (licensing, planning, etc.)

On July 1<sup>st</sup> 2024, the webinar "Unlocking Marine Renewable Energy through Effective Licensing and Maritime Spatial Planning" will be organised by the UfM in collaboration with the World Wildlife's Fund (WWF) Offshore Coalition mentioned above.

The webinar will explore the critical aspects of licensing processes and maritime spatial planning in the context of marine renewable energy projects. As such, it seeks to provide insights into the regulatory frameworks, challenges, and best practices to facilitate the sustainable development of marine renewable energy resources.

Among its main expected outcomes, the webinar intends to:

<sup>65</sup> https://offshore-coalition.eu/med-ocean

<sup>66</sup> More information at: https://medwind.it/en/med-wind-park/

<sup>&</sup>lt;sup>67</sup> A. Memija (2023) "<u>France Pinpoints Location of Floating Offshore Wind Farms in the Mediterranean</u> Sea," OffshoreWIND.biz,

<sup>&</sup>lt;sup>68</sup> More information: <a href="https://saitec-offshore.com/en/projects/medfloat/">https://saitec-offshore.com/en/projects/medfloat/</a>

<sup>&</sup>lt;sup>69</sup> https://medblueconomyplatform.org/wp-content/uploads/2024/03/2nd-ufm-sk-conf-sbe-outcomes-main-messages.pdf

- Promote an enhanced understanding of licensing procedures and maritime spatial planning requirements for marine renewable energy projects;
- Identify opportunities to streamline regulatory processes and improve stakeholder engagement.
- Draw inspiration from innovative approaches to overcome challenges and accelerate the development of marine renewable energy resources.

The webinar also aims to foster collaboration and knowledge exchange among stakeholders involved in marine renewable energy development. By addressing key issues related to licensing and maritime spatial planning, it seeks to facilitate the transition towards a sustainable and resilient blue energy future.

In the table below, we summarise the outcomes and recommendations regarding this priority emerging from the 2<sup>nd</sup> UfM Stakeholders Conference on Sustainable Blue Economy, held in Athens on 19-20 February 2024.

## Outcomes and recommendations of Multi-stakeholder Workshop 9: Marine Renewable Energies – Effective Planning and future landscape

- Though this sector is still at a relatively embryonic stage in the Med (few fully fledged projects on the ground), MRE is fully recognized as one of the key solutions for decarbonization. Comprehensive set of EU and regional initiatives which are fully embedding MRE, i.e.: 2021 UfM Ministerial Declaration on the SBE, 2023 reviewed priorities for the WestMED Initiative, 2021 EC communication on a new approach for the Sustainable Blue Economy. The neighboring Sea basin Strategy for the Atlantic is also working intensively to take the sector forward. Examples from Portugal and Greece on initial MRE developments were presented, and the perspective of local authorities was shared by the mayor of the city of Menjez (Lebanon).
- Also from the perspective of local authorities, the Offshore Coalition for Energy and Nature – Mediterranean Sea (Med OCEaN) highlighted 3 key elements to be taken into account: MSP and full engagement with local coastal communities; early identification of environmental impacts and mitigation measures; and codevelopment and management of offshore wind with other sea related activities as a driver and facilitator.
- MEDSTAT V stressed the importance of data collection and sharing for informed decision-making.
- The central importance of MRE as a potential solution for decarbonization was stressed, while acknowledging common challenges for the sector such as the need for cohabitation, effective planning, MSP, and access to finance as large-scale investments are needed.
- Final takeaways of the session highlighted the existence of common needs in the region to facilitate the first stages of the development of concrete (commercial) projects, including the need for common/shared standards/regulatory frameworks. In addition, the right set of skills in the existing workforce needs to be developed and guaranteed, investors should be placed at the center of the discussion, and strengthening regional cooperation on MRE is of paramount importance.

The Mediterranean region is experiencing a notable increase in offshore wind development, reflecting a broader commitment to sustainable energy and innovation in marine renewable

energy technologies. This growth is marked by significant investments in research, including advancements in turbine design, floating platforms, and grid integration, all aimed at improving efficiency and reducing costs. Collaborative initiatives among Mediterranean countries are helping to build a dynamic ecosystem for renewable energy, positioning the region as an emerging leader in both offshore wind deployment and MRE technological progress.

Additionally, the Pact for the Mediterranean sets out the intention to work with the Commissioner for Energy and Housing, as well as regional partners, to establish a **Trans-Mediterranean Energy and Clean Tech Cooperation Initiative** aimed at increasing renewable energy trading and boosting clean tech manufacturing in the region, notably through the Global Gateway.

## Subregional

- At the level of the EU, a wealth of policy developments has taken place in recent years: notably, the, European Union's Communication on Sustainable Blue Economy (2021) with a specific axis on marine renewable energy; embedded in the so-called Climate and Energy package, as well as the European Green Deal. This Communication acknowledges the key role of marine renewable energy in the reduction of maritime activities' carbon footprint, and encourages the development of a diversified energy mix including bottom-fixed offshore wind, floating wind, thermal, wave and tidal energy.
- Moreover, the 2020 Communication "An EU Strategy to harness the potential of offshore renewable energy for a climate neutral future" proposes a strategy to make offshore renewable energy a core component of Europe's energy system by 2050. It sets targets for offshore wind (60 GW in 2030 and 300 GW in 2050) and supports the take-up of emerging technologies such as floating wind and ocean energy (wave and tidal: targets: 100 MW by 2025, 1 GW by 2030 and 40 GW by 2050). As such, it presents a general enabling framework that addresses barriers and challenges common to all offshore technologies and sea basins (including the Mediterranean Sea) and proposed supporting actions that are now implemented.
- Beyond the EU, no Marine Renewable Energy-specific frameworks are observed. In spite of this, a number of initiatives are active in the development of (renewable) energies in general:
  - In Mediterranean Arab countries, the Regional Centre for Renewable Energy and Energy Efficiency (RCREEE) has the two-fold objectives of diffusing the implementation of cost-effective renewable energy and energy efficiency policies, strategies and technologies in the Arab region, as well as increasing the share of renewable energy and energy efficiency products and services in the Arab region and their share of global market.
  - Moreover, the Central and South Eastern Europe energy connectivity (CESEC) works to accelerate the integration of central eastern and south-eastern European gas and electricity markets.
- At EU level, the revision of National Energy & Climate Plans (NECPs) in 2023 represents an
  opportunity for Member States to revise and commit to ambitious objectives for ocean energy.

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https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2020:741:FIN&gid=1605792629666

- The new overall installed capacity ambition stands at 111 GW of MRE generation capacity by the end of this decade and it rises to around 317 GW by mid-century<sup>71</sup>.
- Furhermore, under its objective to boost the competitiveness of the EU sustainable blue economy, the Ocean Pact includes the development of a blue generational renewal strategy as one of its actions, encouraging young professionals to join the sector.

#### Transnational and multi-country projects

- MAESTRALE<sup>72</sup> This project aims to lay the foundations for a strategy for the deployment of
  maritime energy in the Mediterranean area. A geodatabase with information on energy potentials
  has been created, with a view to selecting 20 pilot sites to implement Blue Energy plants in partner
  regions. Different stakeholders have been involved via national "Blue Energy Labs" to achieve a
  participatory design process.
- PELAGOS<sup>73</sup> This project's aim is to establish the first permanent Mediterranean Cluster of National Hubs in the Blue Energy (BE) sector, where technical experiences are shared. An innovative online platform (be-cluster.eu) has been developed to increase the innovation capacity of its members, and support research and innovation in the marine renewable energy sector.
- BLUE DEAL<sup>74</sup> This project intends to define, test and disseminate effective practices and tools to enable SMEs to start-up new businesses in the Blue Energy (BE) sector. It also aims at improving public administrations' procedures for integrating BE in national and regional energy policies, in the planning and management of coastal zones, in maritime governance and in RIS3 strategies<sup>75</sup>. BLUE DEAL tested their methodology and demonstrated how to implement a successful planning process during two "BLUE DEAL Testing Labs" (online) focusing on Malta and Durres (Albania).
- NextFloat Project Disrupting offshore wind's <sup>76</sup>objective is to demonstrate at a full-scale the innovative floating platform design, while advancing in parallel on the industrialization and scaling-up of the integrated solution up to 20MW+ scale, in preparation for commercial floating wind farms under development in Europe and other continents. The industrialization roadmap will serve as input to optimize the design for industrial mass production and deployment, required to contribute to the European and worldwide decarbonization targets.
- FLORES Offshore Renewable Energies partnership in the Pact for Skills <sup>77</sup>supports MRE stakeholders, featuring regional pilot actions tailored to Europe's sea basins. The project counts with the participation of Mediterranean countries such as Spain, Italy, France and Greece.

<sup>&</sup>lt;sup>71</sup> European Commission (2023). Delivering on the EU offshore renewable energy ambitions.

 $<sup>^{72}\,\</sup>textbf{MAESTRALE}\ countries\ covered:\ Cyprus,\ Greece,\ Croatia,\ Italy,\ Malta,\ Portugal,\ Slovenia,\ Spain$ 

<sup>&</sup>lt;sup>73</sup> **PELAGOS** countries covered: Cyprus, France, Greece, Croatia, Italy, Portugal, Spain

<sup>74</sup> BLUE DEAL countries covered: Albania, Greece, Croatia, Italy, Malta, Spain

<sup>&</sup>lt;sup>75</sup> National/Regional Research and Innovation Strategies for Smart Specialisation

<sup>&</sup>lt;sup>76</sup> **NextFloat Project** countries covered: France, Spain, Netherlands, Greece, Türkiye, and Norway

<sup>&</sup>lt;sup>77</sup> **FLORES** countries covered: Spain, Greece, Belgium, Ireland, Netherlands, Germany, France and Italy.

Concerning transnational projects on the topic of marine renewable energy, on 14-15 September 2022, in Rabat (Morocco), the EMFF-funded MSP-MED project organised a Technical Workshop on MSP and specific sectors78, with a specific focus on marine renewable energies and aquaculture, with the aim to foster collaboration and networking and share technical knowledge, experiences and tools<sup>79</sup>. Discussions on MRE explored how the sector has been integrated in MSP (if so), its conflicts with other uses and its impacts on the marine environment.

Moreover, in the framework of the Interreg MED project "Blue Growth Community" project, Plan Bleu and UNEP/MAP developed in 2022 an in-depth study on the status and the potential for development of Marine Renewable Energy in the Mediterranean<sup>80</sup>.

Additionally, the Horizon Europe project "NEXTFLOAT"81, involving Greek, French, Spanish and Turkish partners in the Mediterranean basin, aims at reducing the level cost of energy (LCOE) of marine renewable energies, in particular floating offshore wind energy, in order to accelerate its large-scale deployment.

At national level, it should be highlighted that the upcoming Moroccan Blue Economy Strategy will take into full consideration this priority through financing models and pilot initiatives, such as those in Tanger Port82.

#### Assessment of regional coverage

Beyond the selected exemplary initiatives described so far, our analysis covered a wider number of projects (provided in the annexed "project database" tables). A synthesis of the analysis of such broader sample of frameworks, initiatives and projects is described in this section.

The main emerging findings with regards to the actions currently in place in this sector are as follows:

- The sector is still emerging in the Mediterranean region, with a smaller number of initiatives as compared to other sectoral priorities, although an acceleration of initiatives is observed, particularly but not only 'offshore'.
- There is a relatively good coverage of different sub-regions by regional frameworks existing in the Mediterranean, although not in a homogeneous way, implying the existence of overlapping mechanisms with potential to be further expanded.
- Sub-regional distribution shows relative polarisation, with EU countries leading the way as concerns the number of regional frameworks, initiatives and projects. Specifically in EU countries, initiatives tend to be national or local-based (e.g. France has planned to install two floating wind

<sup>&</sup>lt;sup>78</sup> https://mspmed.eu/wp-content/uploads/2022/07/Rabat.pdf

<sup>79</sup> https://mspmed.eu/wp-content/uploads/2022/07/Rabat.pdf

<sup>80</sup> https://planbleu.org/wp-content/uploads/2022/06/Report-on-Blue-Energy-in-the-Med\_EN.pdf

<sup>81</sup> https://cordis.europa.eu/project/id/101084300

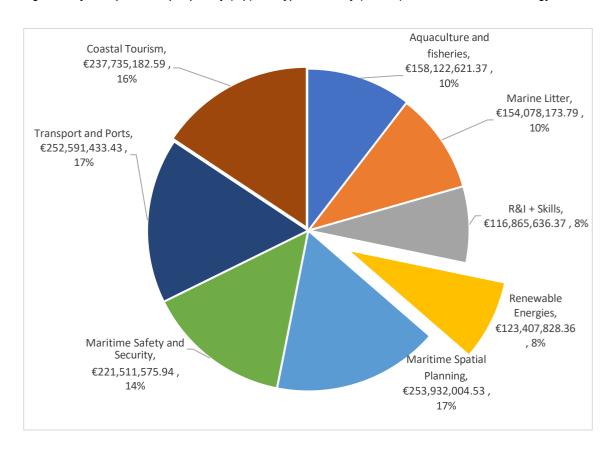
<sup>&</sup>lt;sup>82</sup> https://www.offshore-energy.biz/interview-moroccan-start-up-set-to-transform-power-supply-ofports-with-wave-energy/

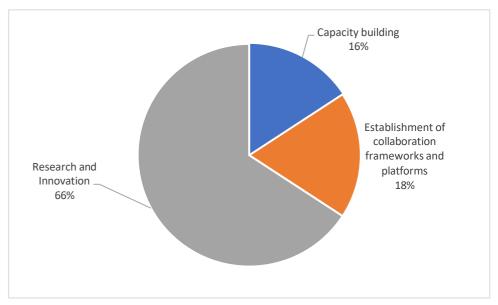
- farms by 2023-2024). One subregional initiative on renewable energies was identified covering Mediterranean Arab countries.
- Existing transnational projects tend to concentrate on Capacity building in the north-west and north-east, and to a minor extent on Platforms and Capitalisation projects. No transnational projects have been identified on the topic of marine renewable energy in the southern Mediterranean countries, although several pilot installations at national level are gradually emerging.

## Expenditure of the priority

The figure below provides an overview of the expenditure of the Marine Renewable Energy sector compared to other SBE priorities and for different type of projects. Projects are divided depending on their main focus (Establishment of collaboration frameworks and platforms, Capacity Building, Research and Innovation, Capitalisation of good practices). The figure below shows that Marine Renewable Energy accounts just for 8% of the overall spending on SBE priorities, coherently with its still emerging status. The figure (bottom) also indicates that the larger part of the expenditure goes to research and innovation (66%).

Figure: Project expenditure per priority (top) and type of activity (bottom): Marine Renewable Energy





Source: Database of projects compiled for the UfM State of the Art of the Mediterranean Sustainable Blue Economy report

## Further details on the support provided

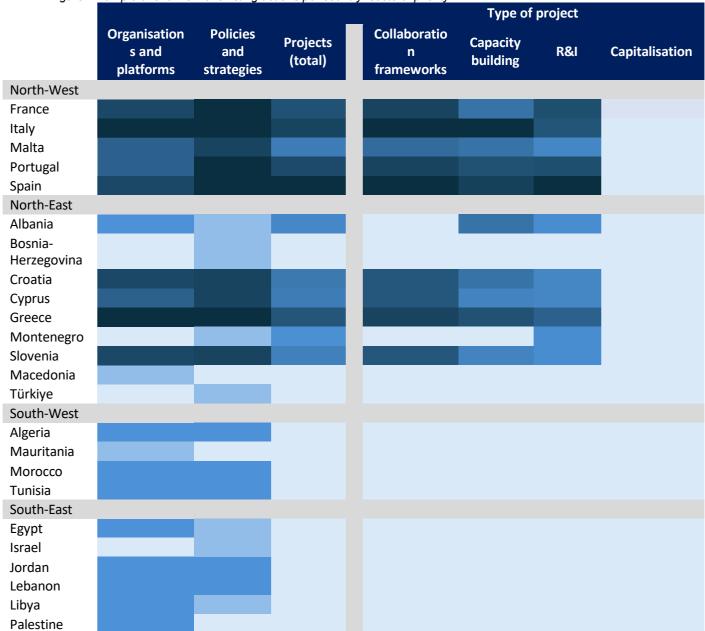
The figure below provides an overview of the distribution of the collected initiatives (frameworks, processes and projects) across the various UfM countries in the different areas of the Mediterranean.

- Organisations and Platforms show a clear concentration of involvement in the north-west of the Mediterranean, particularly in countries such as France, Italy, Spain, and Portugal, which are marked by darker shades of blue. This suggests that institutional and platform-based engagement in marine renewable energies is largely driven by northern countries. In contrast, countries in the south-west and south-east sub-regions show limited participation, indicating a need for broader inclusion and support. While the presence of platforms is a positive sign of coordination, the overall picture confirms that regional frameworks in this sector remain underdeveloped, and further efforts are needed to ensure that all Mediterranean countries are equally represented and supported in governance structures.
- Policies and Strategies also reflects a geographically uneven landscape, with north-western countries again leading in strategic engagement. Countries like France and Italy show strong policy development, while others display minimal involvement. This imbalance highlights the absence of a comprehensive regional policy framework for marine renewable energies. Although some national strategies exist, they are not harmonized across the basin, and the lack of a unified Mediterranean approach limits the sector's potential to grow in a coordinated and inclusive manner. Sub-regional cooperation and knowledge-sharing mechanisms could help bridge these gaps and promote more balanced strategic planning.
- Projects distribution reveals a high concentration of activity in France, with Italy and Greece also showing notable engagement in certain categories. However, the rest of the Mediterranean, particularly the south-west and south-east, shows limited or no participation, especially in R&I and Capitalisation, which are crucial for scaling up innovation and sharing best practices. The overall low number of projects in this sector, especially in Capacity Building (with only one identified project), underscores the early stage of development of marine renewable energies in the region.

The darker shades in some countries should therefore not be interpreted as indicators of sectoral maturity, but rather as isolated concentrations of activity, mostly in the northern Mediterranean.

Legend of the table: the darker the blue, the higher the coverage of the mapped initiatives for each country (dark blue indicates that a country is involved in all the initiatives mapped for the specific category and pale blue indicates a very limited percentage of the total initiatives mapped).

Figure: Example of overview of existing actions per country/ sectoral priority



Source: Database of processes, frameworks, initiatives and projects compiled for the UfM State of the Art of the Mediterranean Sustainable Blue Economy report

# 2.5.3 Stocktaking of the Ministerial Declaration: progress and opportunities

As a final step in the analysis, it is important to return to the main priorities put forward by the UfM Ministerial Declaration for the sustainable development of the marine renewable energy sector. The table below provides a further analysis on the state of the art in advancing with the specific UfM priorities as sketched in the introduction to this chapter. It does so by building on the initiatives (frameworks/processes and projects) as reviewed earlier in this chapter and confronting those with each priority of the UfM Ministerial Declaration for this sector. The analysis allows for an assessment on the status of the implementation of each priority (a "visual check") to be used as abasis for the future UfM Roadmap.

Figure: Example of identification of opportunities per sectoral priority

UFM MINISTERIAL DECLARATION CALL FOR ACTION	LEVEL OF PROJECT COVERAGE	JUSTIFICATION AND IDENTIFICATION OF OPPORTUNITIES AS PER THE MAPPING OF INITIATIVES
Cooperation on research and innovation towards the development of technologies capable of fully exploiting the potential of MRE sources of the Mediterranean, including combining different marine activities in the same marine space	0% 20% 40% 60% 80% 100%  Multi-use activities Total projects	<ul> <li>At subregional level, targets for offshore energy development have been set in the EU, and potential conflicts with other maritime uses are increasingly being addressed through Marine Spatial Planning existing frameworks (see related sectoral priority for more information). As shown in the latest UfM publication on Sustainable Blue Economy, deployment has started in countries like France, Italy and Spain.</li> <li>There have been important regional developments in terms of initiatives, for example the establishment of the Mediterranean Offshore Coalition for Energy and Nature (Med OCEaN) in 2023, a platform for collaboration for Mediterranean NGOs, offshore developers and grid operators with the objective of improving cooperation towards the sustainable development of the offshore wind industry.</li> <li>Projects identified on R&amp;I tend to focus on testing and deployment of emerging technologies (MaRINET, MARINA Platform). Concerning the combination of different marine activities with MREs, there are a few examples in the north such as the multi-use experiment in the Gulf of Lion (MRE with aquaculture).</li> </ul>

Offshore operations for renewable energy Ongoing offshore operations, mostly at testing level, are based on a few production to be carried out by taking northern and eastern Mediterranean countries, particularly member states safety precautions and considering of the EU and Israel. As MRE installations spread across other environmental impacts Mediterranean countries, there is a growing need to consider their impacts on marine habitats and wildlife. At regional level, the UfM Ministerial Declaration on Environment and Climate Action establishes clean energy recommendations (although not marine renewables specific), while at EU level, marine renewable energy development must be compliant of European environmental legislation. A growing development of **offshore wind projects** emerges across the Mediterranean. At the **regional level**, important projects relate to **research** and innovation on MRE technologies – particularly those launched under the Horizon funding programme in this area, such as WindTwin, LIGHTWIND, MARES, Sun-Bio and BETTER. Regarding transnational projects, the environmental impacts of offshore wind energies have been analysed by the project Pharos4MPAs. concluding that impacts are highly dependent on the habitat characteristics of an individual site, the types of turbines and foundations used, and the installation techniques involved. The enhancement of relevant regulatory At the level of regional frameworks/initiatives, Med-Reg acts as a frameworks and facilitation of licensing collaborative platform to support countries to reinforce their regulatory process while preserving adequate capacity. This regional association brings together energy regulatory assessment and public consultation prior authorities of 22 Mediterranean countries. to installing MRE infrastructure One transnational project covering northern Mediterranean countries was ■ Regulatory frameworks ■ Total projects identified with the objective of supporting public administrations in order to improve procedures for integrating Blue Energy in national and regional ag energy policies (BLUE DEAL).

## 2.5.4 Potential avenues for future cooperation: pilot actions / projects

Building on the overall assessment provided so far, this section provides some insights on the type of actions and support to be foreseen as part of the UfM Roadmap, in addressing marine renewable energy opportunities across the Mediterranean. The actions proposed as follows have been defined and developed based on the priority areas which present a higher number of gaps as emerged in the assessment, the ultimate goal being to support and further strengthen the work carried out by UfM.

Concerning the first call for action extracted from the UfM SBE Ministerial Declaration, "Cooperation on research and innovation towards the development of technologies capable of fully exploiting the potential of MRE sources of the Mediterranean, including combining different marine activities in the same marine space", the analysis of the status of implementation carried out in the previous section points toward the following areas of potential future cooperation:

- Given that the topic is quickly catching up in the Med, and due to the fact that northern EU countries are amongst the most advanced in the world in terms of MRE Development (North Sea, Baltic Sea and Atlantic), it might be worth investigating areas for further exchange and cooperation, bearing in mind the specificities of the various sea basins. In this regard, through existing UfM cooperation mechanisms, Technical Assistance and Information Exchange (TAIEX) or "twinning" experiments between the most MRE-advanced EU countries and Mediterranean countries could be arranged, in order to promote technology transfer, know-how and good practices exchange.
- Capitalising on valuable and innovative outputs of existing transnational projects on Blue Energy in the Mediterranean (e.g. PELAGOS' Blue Energy Cluster, MAESTRALE regional Blue Energy Labs) and enlarging their scope towards Southern and Eastern Mediterranean countries.
- Increasing (visibility of) research and innovation projects in the field of Marine Renewable
   Energy and upscaling existing regional and local initiatives, particularly through increased dialogue with international funding/finance institutions in the sustainable blue economy.
- Further exploit existing Research & Innovation cooperation mechanisms (such as the UfM Research and Innovation Platform) to enhance technology marine renewable energies in the region

Regarding the second call for action, "Offshore operations for renewable energy production to be carried out by taking safety precautions and considering environmental impacts", the following paths for future cooperation are proposed:

• Foster the conceptualisation and development of transnational projects that explore Multi-Use (MU) approaches to marine renewables' development in combination with other

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<sup>&</sup>lt;sup>83</sup> Twinning programmes link institutions from different countries to strengthen a specific field of research. In this context, activities like short-term staff exchanges, expert visits, on-site or virtual trainings, workshops or conferences are supported.

**maritime uses** (i.e. aquaculture, tourism, desalination, etc.), capitalising on existing knowledge and good practices, such as the MARIBE, MERMAID or TROPOS projects.

- Explore links and synergies with sectoral priority "Maritime Transports and Ports", building on the notion of Ports as clean energy hubs<sup>84</sup> (port electrification, renewable energy production based on marine technologies, energy storage, grid connection).
- Deepen the knowledge on the environmental impacts of marine renewable energy, building on existing methodologies for environmental impact assessment of MRE as developed by relevant projects (e.g. Pharos4MPAs) and on the experience from more advanced countries.

Finally, as concerns the third call for action, "Enhancement of relevant regulatory frameworks and facilitation of licensing process while preserving adequate assessment and public consultation prior to installing MRE infrastructure", the following streams of action are proposed:

- Establishment of rather a "UfM Marine Renewable Energies Platform", or a specific working
  group under existing platforms on Renewable Energy and Energy Efficiency or Electricity Market
  Integration. This group may involve relevant regional stakeholders (including IFIs and new
  funds/facilities), with the objective of developing a Mediterranean Marine Renewable Energy
  Strategy, fostering the establishment of MRE development targets at national level, good practice
  exchange, and concrete project development.
- Explore and share best practices in terms of regulatory frameworks and facilitation of licensing process, notably for multi-use projects, including stronger role for Maritime Spatial Planning in terms of permission for the setup of pilot areas for new initiatives in this field (also building upon the upcoming guidance on permitting for renewables, for which a public consultation<sup>85</sup> is currently being launched.
- Further strengthening existing regional and subregional energy collaboration frameworks in the Mediterranean (e.g. MEDENER, Med-Reg, RCREEE, OME), promoting dialogue and exploring synergies amongst them; as well as promoting the incorporation of the topic of Marine Renewable Energy development under their portfolio.

Lastly, with a focus on cross-cutting priority "Marine Spatial Planning":

 Further foster the conceptualisation and development of transnational projects that explore Multi-Use (MU) approaches to marine renewables' development at local level in combination with other maritime uses (i.e. desalination for islands' water supply, aquaculture, tourism, etc.),

https://maritime-executive.com/editorials/sustainable-ports-as-energy-hubs

https://ec.europa.eu/info/news/public-consultation-launched-renewables-permitting-and-power-purchase-agreements-2022-jan-18 en

capitalizing on existing knowledge and good practices in the European Union, such as MARIBE, MERMAID or TROPOS projects.

# 2.5.5 Measuring progress of the Ministerial Declaration implementation: Marine renewable energies

### **Output (Process indicators)**

+Number of actions, sets of activities and projects of regional cooperation **planned** in the area of Marine Renewable Energies, particularly addressing the following sub-priorities:

- Research and innovation on MRE technologies
- Multi-use activities (e.g. combination of different maritime activities in the same marine space, including MRE)
- Environmental impacts of MREs
- Enhancement of regulatory frameworks and facilitation of licensing processes

+Number of actions, sets of activities and projects of regional cooperation **being implemented** in the Mediterranean area in the field of Marine Renewable Energies (with regards to the sub-priorities mentioned above)

- +Number of national MRE-related strategies and regulatory frameworks in place
- +Level of **financial support** committed/secured to support the development of Marine Renewable Energies in the Mediterranean
- +Number and typology of partners and stakeholders involved in the actions/sets of activities/projects

# **Outcomes (result indicators)**

- +Achieved and projected results of the different actions, sets of activities and projects underway or finished in the field of Marine Renewable Energies, mainly:
- Number/type of new/enhanced products/services developed;
- Number/type of new/enhanced collaboration networks and platforms being supported/activated;
- Number/type of stakeholders (businesses, research, CSOs, etc.) involved and benefitting from the action/activity/project;
- Number/type of regional policies influenced as a result of regional cooperation (mainstreaming).

### 2.6 Interactions between marine litter and the blue economy

#### 2.6.1 Introduction

Marine litter — and marine plastic pollution in particular — is a major threat to oceans and seas due to its significant environmental, economic, social, political and cultural implications. Marine litter negatively impacts coastal and marine ecosystems and the services they provide, by ultimately affecting people's livelihoods and well-being. Plastic pollution across the Mediterranean poses a threat to economic resilience and environmental sustainability, with negative effects on human health.

It is widely acknowledged that the Mediterranean is one of the most affected seas by marine litter worldwide. 86 The root causes of marine litter in the Mediterranean are a complex combination of multiple challenges: production and consumption patterns, irresponsible behaviour of individuals and economic sectors, weak enforcement and/or lack of policy and legislative frameworks, poor solid waste management practices, misconceptions related to possible solutions, fragmented understanding of the problem due to the lack of fit-for-purpose data. For these reasons, addressing litter and plastic pollution is a priority for the UfM.

## UfM Ministerial Declaration on Sustainable Blue Economy, 2<sup>nd</sup> February 2021:

- "Progress in the implementation of the Regional Action Plan on marine litter management in the Mediterranean and the application of the Sustainable Consumption and Production approach as per the 2014 UfM Ministerial on Environment and Climate Change, and the following approval of the 2016 Regional Action Plan on Sustainable Consumption and Production (SCP) of the Barcelona Convention"
- UfM member countries to "develop further initiatives to raise public awareness on marine litter
  and address it, including micro-plastics, through actions that include among others marine litter
  monitoring and removal"
- UfM member countries to "contribute to the implementation of the BLUEMED pilot initiative for a 'Healthy, plastic-free Mediterranean Sea'"
- Progress in "the Barcelona Convention's COP 21 commitment to take urgent action to prevent
  plastic leakage in the Mediterranean Sea, by promoting prevention measures and circular
  approaches, and adopting national plans to progressively achieve 100% plastic waste collection
  and recycling, by 2025"
- "UfM member countries to improve port reception facilities to ensure proper collection and recycling of waste coming from all maritime activities"
- Exchange of best practices to address the issue of marine litter from aquaculture and the issue
  of abandoned, lost or otherwise discarded fishing gear in the framework of the GFCM, engaging
  with fishermen to involve them in the collection of marine litter at sea

<sup>86</sup> https://www.unep.org/unepmap/resources/factsheets/pollution

#### 2.6.2 State of the art of activities

As to briefly describe the state of the art of Sustainable Blue Economy (SBE) frameworks, initiatives and actions related to the protection of ecosystems tackling marine litter in the Mediterranean, a selection of relevant actions will be outlined in this section. The selection is aiming to be as illustrative as possible on the variety of subjects being addressed and has been carried out based on a combination of criteria, including:

- 1. Relevance with respect to the calls for action set for this UfM Ministerial Declaration priority, as presented above;
- 2. Geographical coverage;
- 3. In the case of projects, the incorporation of sustainability and innovation aspects in its approach;

#### Subregional processes or initiatives Regional Policy frameworks, Strategy for Plastics in a Circular Economy processes or initiatives Marine Strategy Framework Directive Mediterranean sea basin lighthouse - actions to prevent, minimise and remediate litter and plastic UfM Ministerial Declarations on Sustainable Blue Economy (Feb . Cooperation Agreement between the United Nations Environment Programme (UNEP) and the Italian Ministry of Environment, Land and Sea Protection (IMELS) 2021), Environment and Climate Change (Oct 2021) EU Mission Restore our Oceans and Water Convention for the Protection of the Marine Environment and the Coastal Region of Mediterranean, including the Regional Marine Pollution **Emergency Response Centre for** the Mediterranean Sea (REMPEC) Mediterranean Node on Marine Litter BLUEMED initiative

Figure: Overview of regional frameworks, subregional processes, transnational projects per sectoral priority

# Regional

- The UfM Ministerial Declaration on Environment and Climate Change calls for developing and implementing environmental policies and actions aiming at preventing and reducing air, water, marine and soil pollution, towards achieving the long-term objective of zero pollution in order to protect human health and well-being and safeguard the environment. Special attention is given to plastic pollution, in particular marine litter and the impact of single use plastics.
- The objective of the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) is to contribute to preventing and reducing pollution from ships and combating pollution in case of emergency. In this respect, the mission of REMPEC is to assist the Contracting Parties in meeting their obligations of the Barcelona Convention; the 1976 Emergency Protocol; the 2002 Prevention and Emergency Protocol and implementing the Regional Strategy

for Prevention of and Response to Marine Pollution from Ships (2016-2021), adopted by the Contracting Parties in 2016, which key objectives and targets are reflected in the Mediterranean Strategy for Sustainable Development.

- The Mediterranean Node on Marine Litter establishes linkages and synergies with the Global Partnership on Marine Litter (GPML), and enhances knowledge among governments, NGOs/NPOs and local communities in the Mediterranean. It was launched to enhance awareness on marine litter prevention and reduction measures, promote the exchange of information and knowledge, establish linkages and synergies with the Global Partnership on Marine Litter, and enhance knowledge among governments, NGOs and local communities in the Mediterranean.
- The BlueMed Initiative, set up in May 2014 in the framework of the European Strategy on Blue Growth, is a political initiative aiming at advancing a shared vision for a more healthy, productive, resilient, better known and valued Mediterranean Sea, promoting the citizens' social well-being and prosperity, now and for future generations, and boosting economic growth and jobs.

In terms of relevant frameworks, after the landmark 22nd Meeting of the Contracting Parties to the Barcelona Convention (COP 22), held in Antalya, Türkiye, new measures were included in the amended Regional Plan on Marine Litter Management in the Mediterranean (RPML), which constitutes one of the most advanced instruments for cooperation on tackling marine litter in a regional sea context. Moreover, in 2022 the UN resolution "End Plastic Pollution: Towards an internationally legally binding instrument" was adopted based on a comprehensive approach to address the full life cycle of plastic with 175 nations agreeing to develop the legally binding agreement by 2024.

In terms of projects, in the framework of the UfM-labelled Plastic Busters Initiative, the UfM and the Mediterranean Sustainable Development Solutions Network (SDSN Med) launched in November 2022 the "Plastic Busters CAP" project. With an allocation of 1.1 million euro, the initiative will help reduce pollution in the Mediterranean marine and coastal environment, particularly in Tunisia and Egypt. Additionally, the policy paper "Litter free is the way to be" was published in 2022 in the framework of the Plastic Busters initiative, supported by the Union for the Mediterranean among other key regional actors.

In February 2023, the ENI CBC MED Plastic Busters 'COMMON' Project (Coastal Management and Monitoring Network to tackle Marine Litter in the Mediterranean) was finalised. The main objective of COMMON was to combat marine litter in the Mediterranean Sea using the principles of Integrated Coastal Zone Management (ICZM) through a participatory approach, testing a model that is potentially transferable to the entire Mediterranean basin. Activities took place in five pilot areas: two in Italy (Maremma and Salento), two in Tunisia (Kuriate Islands and Monastir) and one in Lebanon (Tyre nature reserve). In addition to capacity-building workshops, engagement with key stakeholders through participatory methods, and awareness-raising campaigns, common monitoring protocols have been developed and applied to assess the impacts of marine litter in the five pilot areas, a key aspect in terms of replication potential and to define targeted and more effective mitigation actions.

The project's scientific monitoring/assessment activities focused on the analysis of macrolitter and microplastics on the beaches, on the sea surface, and ingested by mussels, commercially important fish species, and sea turtles (caretta caretta). Over 90,000 objects were collected and analyzed on the Mediterranean beaches, among these, 17,000 (around 20%) are cigarette butts, and 6,000 are cotton bud sticks. One out of three fish and more than half of the analysed sea turtles were found to have ingested plastic. In addition, project results demonstrated that the ingestion of plastic and microplastics can cause

alterations to metabolic pathways and endocrine systems of marine wildlife due to the release of toxic substances contained or absorbed by plastics. Regarding the assessment of microplastics in the water column, 130 samples were collected in three countries and five different areas. The highest floating microplastic abundance was found in the waters facing the Tyre Reserve in Lebanon.

Additionally, the Plastic Busters CAP project organised two training sessions in Egypt and Jordan. The first national training session was held in early March 2023 in Marsa Matruh on marine litter monitoring and mitigation measures, targeting the Mediterranean marine litter practitioners from Egypt, and aiming to enhance their capacities in designing and implementing a comprehensive marine litter monitoring strategy.

The training was divided in two days focused on different themes, among them: monitoring approaches for microliter on the coastal and marine environment; beach macrolitter monitoring and microplastics; floating macrolitter monitoring and floating microplastics sampling with manta net. The second training session took place on mid March in Jordan.

In the table below, we summarise the outcomes and recommendations regarding this priority emerging from the 2nd UfM Stakeholders Conference on Sustainable Blue Economy, held in Athens on 19-20 February 2024.

# Outcomes and recommendations of Multi-stakeholder Workshop 5: Tackling marine litter for a sustainable blue economy

- The detrimental effects of plastics (the majority of which are single-use plastics) in Mediterranean coastal and marine environments extends to the economic sustainability of the region's coastal communities by affecting key sectors such as tourism, fisheries, aquaculture, and shipping.
- In the Mediterranean, there exists an advanced policy and regulatory framework for tackling marine litter. Although countries have made strides in monitoring, reporting, and implementing measures, significant efforts are still required to attain good environmental status.
- Methodological discrepancies continue to affect marine litter monitoring in the Mediterranean, hindering data comparability. Further progress is needed to implement harmonized monitoring approaches aligned with advancements at the Barcelona Convention and EU levels.
- The entry of plastic litter into the marine environment occurs through a multitude of points and diffuse sources, originating from both land-based and ocean-based sources. Rivers constitute a significant pathway of marine litter, contributing to the proliferation of plastics in the coastal and marine environment. This underscores the need for a coordinated and holistic approach to tackle marine plastic pollution at its source (source-to-sea approach).
- To effectively address marine plastic pollution, a thorough and comprehensive understanding of all aspects of plastics is essential, including their composition, degradation mechanisms, recycling feasibility, among others. Sound scientific and up-to-date knowledge is not readily available and accessible to all stakeholders, often resulting in misconceptions and 'false' solutions. Empowering stakeholders with insights into the diverse dimensions of plastics makes them pivotal agents in driving viable solutions for marine litter.
- Numerous pilot projects for marine litter prevention and mitigation have been conducted in the Mediterranean. The challenge now is to scale up these pilot actions and experiences to regional and national levels. Transformative and innovative solutions in addressing marine litter also hinge on a multi-actor ecosystem where stakeholders (i.e. local coastal communities) play a pivotal role. Furthermore, the

industry's involvement in the discussions, which has been rather limited thus far, should be reinforced as an integral part of the solution.

- Targeted and science-based awareness raising campaigns and educational activities represent essential measures to engage a diverse audience into propelling the paradigm shift needed. Clean-up efforts, although effective for raising awareness and altering mindsets or for restoring hotspot areas, do not provide a systemic solution to the core issue of marine litter pollution.
- Prioritizing accessibility and affordability of marine litter solutions within inclusive and just societies is paramount. In this context, social innovations related to how we 8 produce, distribute, and consume products should be regarded as a pivotal approach to moving away from the linear production and use of plastics to the circular one.
- Implementing more sustainable business models, both on and off-shore, is essential in addressing marine litter. This involves integrating principles of eco-design and the 3Rs (Reduce, Reuse, Recycle) into business practices, encouraging innovation and fostering a culture of sustainability, securing sustainable financing mechanisms, implementing Extended Producer Responsibility (EPR) schemes.
- Decarbonizing our economies holds immense potential to generate positive externalities in the realm of plastic pollution mitigation. By incentivizing circularity and reducing the reliance on single-use plastics, decarbonization initiatives contribute to mitigating plastic pollution.
- Further exploration is needed to understand how digitalization can help to address the marine litter crisis. Data analytics, remote sensing, and machine learning could improve monitoring and assessment, and support evidence-based decision-making and mitigation efforts.

# Subregional initiatives

- The framework to reduce Marine Litter in the European Union is governed by the European Green Deal, Marine Strategy Framework Directive, the Directive on the reduction of the impact of certain plastic products on the environment (Single-Use Plastics Directive) and the Strategy for Plastics in a Circular Economy. The priorities of the European Green Deal include the reduction On water pollution, moving towards a circular economy and improving waste management.
- The EU Plastics Strategy aims to protect the environment and reduce marine litter. It will support more sustainable and safer consumption and production patterns for plastics. The Plastics Strategy also aims to transform the way plastic products are designed, manufactured, used and recycled in the EU. Single-use plastic products (SUPs) are used once or for a short time and then thrown away. The impact of this plastic waste on the environment and our health is global and can be severe. The 10 most common single-use plastic items found on European beaches, together with fishing gear, account for 70% of all marine litter in the EU. Consequently, the EU aims to lead the global fight against marine litter and plastic pollution.
- The EU Single-Use Plastics Directive aims to prevent and reduce the impact of certain plastic
  products on the environment, in particular the marine environment, and on human health. They also
  aim to promote the transition to a circular economy with innovative and sustainable business
  models, products and materials, thereby also contributing to the efficient functioning of the EU
  internal market.

- The EU Marine Strategy Framework Directive aims to protect the marine environment. It requires the application of an ecosystem-based approach to the management of human activities that enables the sustainable use of marine goods and services. To implement the Directive, each EU Member State must describe what it considers to be a clean, healthy and productive sea. These include: Good Environmental Status (GES), monitor and assess the quality of its seas against GES, and ensure that it takes appropriate measures to maintain or achieve GES by 2020. The European Commission adopted a report on the first implementation cycle of the Marine Strategy Framework Directive in June 2020.<sup>87</sup> The report shows that while the EU framework for protecting the marine environment is comprehensive and ambitious, it needs to be strengthened to address prevailing pressures such as overfishing and unsustainable fishing practices, plastic waste, excessive nutrients, underwater noise and other types of pollution.
- Particularly relevant for the near future is the relevant funding streams to tackle Marine Litter through the Mediterranean Lighthouse, under the EU Mission 'Restore our oceans and waters by 2030', which offers possibilities to also tackle marine pollution. The broader goal of the EU mission is to restore our oceans and waters by 2030. To achieve that, we need to succeed in restoring biodiversity and ecosystems, eliminating pollution and bring climate neutrality and circularity to the blue economy sectors. The Mediterranean Lighthouse, under this mission, has as its priority to prevent and eliminate pollution by reducing plastic litter at sea, nutrient losses and use of chemical pesticides by 50%.88 Starting from research and innovation, Horizon Europe provides funding to address marine pollution in the EU.
- However, funding from other sources will be needed to address pollution and achieve the objectives of this Mission from public and private sector at national, regional and local level. The circular design of fishing gear is one of the foreseen measures of the Horizon Europe call. This call covers the objectives of the UfM ministerial Declaration and provides funding in the Mediterranean Sea. In addition, following the Cooperation Agreement between the United Nations Environment Programme (UNEP) and the Italian Ministry of Environment, Land and Sea Protection Marine Litter Management has been enhanced in Albania, Montenegro, Slovenia, Bosnia-Herzegovina & Italy.
- The European Commission (DG MARE) supports the EU4Ocean Coalition, which connects diverse organisations, projects and people that contribute to ocean literacy and the sustainable management of the ocean. There is thematic work undertaken by the platform of members on 'Healthy and Clean Ocean', that looks specifically into marine pollution/plastics- The cooperation among members help projects and initiatives to emerge and promote ocean literacy actions that focus on marine pollution by working with other organisations and individuals. The Working Group on Healthy and Clean Ocean is chaired by the Ocean Literacy Italia network in Italy (countries: Italy, Spain, France, Portugal, Malta, Greece, Cyprus).
- The EU Mission Restore our Oceans and Waters is part of EU Horizon Europe and aims to
  restore the health of a very important global natural source: our ocean and waters. It will deliver on
  the European Green Deal by restoring ecosystems and biodiversity, eliminating pollution, and

https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1593613439738&uri=CELEX:52020DC0259

<sup>88</sup> https://ec.europa.eu/oceans-and-fisheries/news/mission-restore-our-ocean-and-waters-powerful-wave-actions-our-ocean-seas-and-waters-2021-12-16 en;

https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/healthy-oceans-seas-coastal-and-inland-waters\_en

making the blue economy carbon-neutral and circular. The Mediterranean lighthouse mainly focus on plastic, agricultural and urban/industrial pollution (chemicals).

At the level of initiatives, the EU Mission Restore our Ocean and Waters aims to protect and restore the health of the oceans and waters through research and innovation, citizen engagement and blue investments. In doing so, it will support regional engagement and cooperation through area-based "lighthouses" in major sea/river basins of the EU, including the Mediterranean. In preparation of the launch of the Mediterranean Lighthouse, a hybrid workshop "Working together towards a Mediterranean lighthouse for the Mission Restore our Ocean and Waters" was held in the premises of the Union for the Mediterranean on 1st March 2022, with the aim of integrating lessons learnt from the implementation of the BlueMed Pilot Initiative. The implementation of the Mediterranean Lighthouse is expected to reduce pollution from litter, plastic and microplastic, in the Mediterranean Sea basin in line with the objectives of the EU Zero Pollution Plan and the Convention for the protection of the Mediterranean sea against pollution. In addition, the Mediterranean Lighthouse seeks to reduce beach litter to less than 20 items per 100 meters of coastline in line with the Marine Strategy Framework Directive (MSFD) requirement. Effective monitoring of marine litter quantities, in line with EU methodologies, will also be promoted such as Single Use Plastics Directive. The Mediterranean Lighthouse officially started its path on January 1st, 2023.

To support the implementation of the Mediterranean Lighthouse objectives, the Coordination and Support Action "BlueMissionMED" officially started its path on January 1st, 2023. The project aims to design, structure and support a well-functioning basin scale innovation ecosystem towards the achievement of Mission "Restore Our Oceans and Waters by 2030" objectives. Specifically, the project is supporting the development and deployment of transformative innovative solutions in all forms: technological, social, business, governance. To date, the project has developed a network of 7 National and Regional Hubs as Territorial Multistakeholder Communities which implement the activities and priorities of BlueMissionMed. Additionally, BlueMissionMED is in the process of elaborating a participatory Operational Implementation Roadmap for the mitigation of marine pollution and contamination in the Mediterranean. A specific set of activities and services dedicated to supporting the upscaling and commercialisation of innovative practices, technologies, and/or solutions to address marine pollution in the Mediterranean will be launched during the second half of 2024.

In the context of the Mediterranean Lighthouse, several Innovation Actions have been approved and initiated in 2023 and 2024. These include SeaClear2.0, focused on community activation and empowerment towards the marine pollution reduction goals; REMEDIES, which particularly tackles the issue of valorising plastic pollution; RHE-MEDIATION, which is setting up a responsive hub for long-term governance to destress the Mediterranean Sea from chemical pollution; and i-MERMAID, aiming at bringing together smart solutions to prevent and monitor the pollution of contaminants of emerging concerns (CoEC) in the Mediterranean Sea basin.

Furthermore, in the Mission Oceans and Waters context, the EU announced the launch in June 2024 of the the Digital Twin of the Ocean, a digital space which will provide access to data, models, artificial intelligence, and other tools to allow for the replication of properties and behaviours of marine systems, including ocean currents, waves, marine life, human activities, and their interactions, in and near the sea.

This tool will allow to bridge knowledge gaps and develop new ways to restore marine and ocean habitats, support a sustainable blue economy and evidence-based strategies to mitigate and adapt to climate change.

Prevention measures and circular approaches to marine litter have gained significant attention at both regional and national levels in the Mediterranean. Policymakers and stakeholders are increasingly prioritizing strategies that not only reduce the generation of marine litter but also promote the reuse, recycling, and valorisation of materials to close the loop on waste. Additionally, under its priority of **strengthening EU ocean diplomacy and international ocean governance**, the Ocean Pact commits to intensifying efforts to conclude an ambitious Plastics Treaty to curb ocean pollution

## Transnational and multi-country projects

There are a wide range of transnational projects in the field of marine litter with various objectives, geographical scope and funding. Between the mapping and analysis performed, several have been identified:

- PlasticBusters MPAs Plastic Busters: preserving biodiversity from plastics in Mediterranean Marine Protected Areas (North Med)<sup>89</sup> The overall objective of the PlasticBusters MPAs project is to contribute to maintaining biodiversity and preserving natural ecosystems in pelagic and coastal Marine Protected Areas, by defining and implementing a harmonized approach against Marine Litter. The project entails actions that address the whole management cycle of Marine Litter, from monitoring and assessment to prevention and mitigation, as well as actions to strengthen networking between and among pelagic and coastal Marine Protected Areas.
- BlueMissionMed Supporting the Mediterranean Sea Basin for the Implementation of the EU Mission Restore Our Ocean and Waters<sup>90</sup> designs, structures and supports a well-functioning basin scale innovation ecosystem, ensuring fast progress towards the achievement of Mission "Restore Our Oceans and Waters by 2030" objectives and important impact on the society. The project builds on, connect and structure existing initiatives and activities to disseminate and upscale solutions and mobilise relevant actors with the specific aim of addressing the Objective 2 of the Mission, namely "prevent and eliminate pollution of our ocean, seas and waters".
- SeaClear 2.0 Scalable Full-cycle Marine Litter Remediation in the Mediterranean: Robotic
  and Participatory Solutions<sup>91</sup> develops an integrated approach to address the entire life cycle of
  marine litter, focusing on reducing marine litter pollution. It especially targets plastic pollution and
  will use teams of robots to monitor and collect marine seafloor and surface litter.
- REMEDIES Co-creating strong uptake of REMEDIES for the future of our oceans through
  deploying plastic litter valorisation and prevention pathways <sup>92</sup>aims to create innovative
  solutions and technologies to monitor, collect, prevent, and valorise microplastics from the oceans.
  It aims to do so through the detection, collection, monitoring, valorisation, and prevention of plastics
  and zero waste solutions.

 $<sup>^{89}</sup>$  PlasticBusters MPAs countries covered: Albania, Croatia, Greece, Italy, France, and Spain

 $<sup>^{90}</sup>$  **BlueMissionMed** countries covered: France, Greece, Italy, Malta, Spain, Tunisia and Türkiye.

<sup>&</sup>lt;sup>91</sup> SeaClear 2.0 countries covered: Croatia, Cyprus, France, Germany, Italy, Netherlands, Romania and Spain.

<sup>&</sup>lt;sup>92</sup> **REMEDIES** countries covered: Bosnia and Herzegovina, Montenegro, Cyprus, Türkiye, Egypt, Lybia, Algeria, Tunisia, Lebanon, Israel, Romania, Bulgaria, North Macedonia, Ukraine, Moldova, Portugal, Morocco, Syria, Palestine and Jordan.

- PUREEF-Y<sup>93</sup> aims to bolster the scientific excellence and policymaking influence of the Cyprus Marine and Maritime Institute (CMMI) by facilitating its collaboration with two leading research organisations. The project assesses key parameters collected from coastal ecosystems affected by climate change and ocean acidification and study levels of marine pollution affecting important marine habitats. It also includes capacity-building and networking activities.
- TREASURE's<sup>94</sup> overall objective is to improve environmental quality in and around Mediterranean
  port areas, by mitigating and reducing sediment and water pollution. The overall challenge
  that TREASURE wishes to tackle is the fragile environmental quality of Mediterranean port areas.
  In order to do so, project partners performs transnational testing of integrated, multi-sectorial
  support environments, merging three elements to constitute an innovative approach.

Other transnational projects currently being implemented in the Mediterranean to tackle the issue of marine litter include Life MUSCLES, aimed at reducing the impact linked to the use of Polypropylene (PP) socks for mussel farming. The main goal is to create and encourage a more sustainable mussel production value chain that reduces the dispersion of PP socks in the marine environment and encourages the recovery and recycling of polymers to produce new socks and/or other items.

Recently, and in the context of the 2nd UfM Stakeholders Conference on Sustainable Blue Economy, Mediterranean stakeholders acknowledged that numerous pilot projects for marine litter prevention and mitigation have been conducted in the Mediterranean, however, the challenge now is to scale up these pilot actions to regional and national levels. Transformative and innovative solutions were considered pivotal in addressing marine litter. Additionally, stakeholders pointed out that decarbonizing our economies by incentivizing circularity holds immense potential to generate positive externalities in the realm of plastic pollution mitigation.

## Assessment of regional coverage

Beyond the selected exemplary initiatives described so far, our analysis covered a wider number of projects (provided in the annexed "project database" tables).

The main emerging findings with regards to the initiatives in place in this sector are as follows:

- Regional frameworks are fairly spread across countries
- Subregional processes mainly referred to the north
- Capacity building and R&I are largely missing with some country exceptions in the north and south
- Capitalisation mainly in the north
- Collaboration projects seem to be more heavily distributed but still with some notable gaps

#### Expenditure of the priority

The figures below provide an overview of the expenditure of the priority compared to other SBE priorities and for different type of projects. Projects are divided depending on their main focus (Establishment of collaboration frameworks and platforms, Capacity Building, Research and Innovation, Capitalisation of good

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<sup>93</sup> **PUREEF-Y** countries covered: Cyprus, Israel and Spain.

<sup>&</sup>lt;sup>94</sup> **TREASURE** countries covered: Italy, Montenegro, Spain, Albania, France, Greece and Malta.

practices). We can observe in the figure below, that Marine Litter accounts for 10% of the expenditure on SBE sectors. The figure (bottom) indicates that Marine Litter projects focus on research and innovation (61%). Capacity building accounts for the lowest amount of spending (11% of total spending).

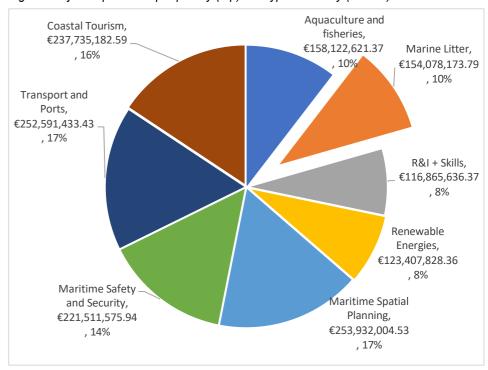
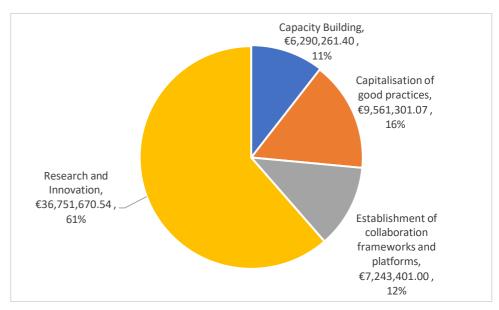


Figure: Project expenditure per priority (top) and type of activity (bottom): Marine Litter



Source: Database of projects compiled for the UfM State of the Art of the Mediterranean Sustainable Blue Economy report

# Further details on the support provided

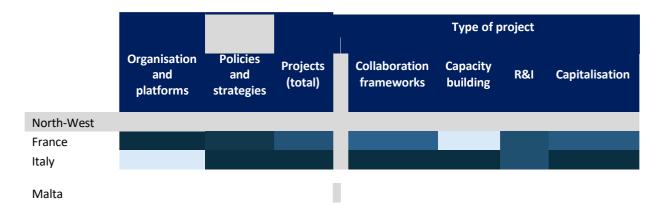
The figure below provides an overview of the distribution of the collected initiatives (frameworks, processes, initiatives and projects) across the various UfM countries in the different areas of the Mediterranean. The darker the blue, the higher the coverage of the mapped initiatives for each country (dark blue indicates that a country is involved in all the initiatives mapped for the specific category and pale blue indicates a very limited percentage of the total initiatives mapped).

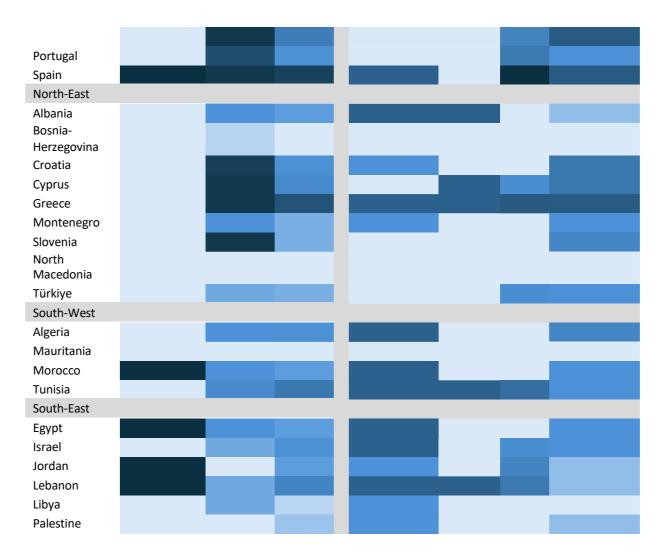
Projects are also divided depending on their main focus (Collaboration, Capacity Building, Research and Innovation, Capitalisation of good practices). The table below provide some insights:

- Organisation and platforms show a strong concentration of engagement in the North-West Mediterranean, particularly in France, and Spain, with darker blue shades indicating high involvement, also in some countries in the south, such as Morocco, Egypt, Jordan and Lebanon.
- Policies and strategies reveal a more balanced but still regionally skewed pattern. While North-Western countries again lead in strategic engagement, countries like Croatia, Cyprus and Slovenia show notable involvement, indicating growing policy development in the North-East and South-East. However, the overall lighter shades in many southern countries suggest that EU-driven strategies, such as the Marine Strategy Framework Directive and the European Green Deal, continue to shape the policy landscape, with limited adaptation or uptake in non-EU Mediterranean states. This points to a need for more regionally tailored policy frameworks that reflect the specific challenges and capacities of all UfM countries.
- Project distribution show a diverse spread of activity. France and Greece are consistently active across all project types, but countries like Egypt, Tunisia, and Israel also demonstrate strong engagement, particularly in R&I and capitalisation. Morocco and Algeria show notable involvement in collaboration and R&I projects, while Malta and Spain contribute significantly to capitalisation efforts. This distribution suggests that southern countries are not only recipients of capacity-building support, but are also active contributors to innovation and knowledge-sharing. While capacity building remains scattered, the overall spread of projects indicates a growing regional commitment to addressing marine litter through a mix of practical, strategic, and innovative approaches.

Legend of the table: the darker the blue, the higher the coverage of the mapped initiatives for each country (dark blue indicates that a country is involved in all the initiatives mapped for the specific category and pale blue indicates a very limited percentage of the total initiatives mapped).

Figure: Overview of existing actions per country/ sectoral priority





Source: Database of processes, frameworks, initiatives and projects compiled for the UfM State of the Art of the Mediterranean Sustainable Blue Economy report

# 2.6.3 Stocktaking of the Ministerial Declaration: progress and opportunities

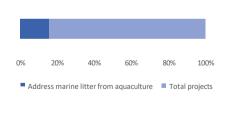
As a final step in the analysis, it is important to return to the priorities put forward by the UfM Ministerial Declaration for the interaction between the marine litter and the blue economy. The table below provides a further analysis on the state of the art in advancing with the specific UfM priorities as sketched in the introduction to this chapter. It does so by building on the initiatives (frameworks/processes and projects) as reviewed earlier in this chapter and confronting those with each priority of the UfM Ministerial Declaration for this sector. The analysis allows for an assessment on the status of the implementation of each priority (a "visual check") to be used as a basis for the future UfM Roadmap.

Figure: Identification of opportunities per sectoral priority

UFM MINISTERIAL DECLARATION CALL	LEVEL OF PROJECT COVERAGE	JUSTIFICATION AND IDENTIFICATION OF OPPORTUNITIES AS PER THE MAPPING OF
FOR ACTION		INITIATIVES
Progress in the implementation of the Regional Action Plan on marine litter management in the Mediterranean		<ul> <li>The object of the Marine Litter MED II project is to reduce and prevent the generation of marine litter in the Mediterranean through an expanded implementation of key reduction and prevention measures as provided for in the Regional Plan on Marine Litter Management in the Mediterranean. This project facilitates the implementation in countries of the southern Mediterranean. One of the key actions of Plastic Busters is to assess the status of the implementation of the Regional Plan on Marine Litter Management at national, sub-regional and regional level</li> <li>All other projects identified deal with the challenges of marine litter and reduction measures, both in the north and south.</li> </ul>
Develop further initiatives to raise public awareness on marine litter and address it, including micro-plastics, through actions that include among others marine litter monitoring and removal	0% 20% 40% 60% 80% 100% ■ Raising awareness ■ Total projects	<ul> <li>Raising public awareness, e.g. by collaboration with NGOs such as in the MEDSEALITTER project is a part of many projects mapped.     PlasticBusters MPAs proposes monitoring mechanisms for marine litter.     Both named projects are situated in the north Projects related to this call for action tend to be situated in the north</li> <li>Integrated Monitoring and Assessment Programme of the Mediterranean Sea is a key achievement for the Mediterranean region, which will enable a quantitative, integrated analysis of marine litter.</li> </ul>

Contribute to the implementation of the BLUEMED pilot initiative for a 'Healthy, plastic-free Mediterranean Sea'	0% 20% 40% 60% 80% 100% ■ BLUEMED Countries ■ Total projects	Furthermore, especially in the north there are well-connected ocean literacy activities on marine pollution, in particular related to the EU4Ocean Coalition     11 countries from the north, south and east Mediterranean are participating in the BLUEMED initiative. Countries not participating so far are missing out on the results of the initiative.
Progress in the Barcelona Convention's COP 21 commitment to take urgent action to prevent plastic leakage in the Mediterranean Sea, by promoting prevention measures and circular approaches, and adopting national plans to progressively achieve 100% plastic waste collection and recycling, by 2025	0% 20% 40% 60% 80% 100%  Prevention measures Total projects	<ul> <li>Prevention measures and circular approaches to marine litter have received great attention at both regional and national level. At regional level, TOUMALI project is instrumental in tackling tourism-related marine litter in Northern Africa by contributing to the development of a sustainable waste management system. In the same way, the Plastic Busters MPAs project addresses the entire management cycle of marine litter, from monitoring and assessment to prevention and mitigation.</li> <li>National plans have not been analysed as part of this roadmap. However, some projects such as ACT4LITTER develop plans adapted to MPA and in the EU there is a Strategy for Plastics in a Circular Economy in place. The circular approach is lacking in many projects.</li> </ul>
UfM member countries to improve port reception facilities to ensure proper collection and recycling of waste coming from all maritime activities	0% 20% 40% 60% 80% 100%  Improve port reception facilities Total projects	Port reception facilities are being addressed only by the cooperation agreement between the UNEP and the Italian Ministry of Environment, Land and Sea Protection. No project has been identified tackling this issue.

Exchange of best practices to address the issue of marine litter from aquaculture and the issue of abandoned, lost or otherwise discarded fishing gear in the framework of the GFCM, engaging with fishermen to involve them in the collection of marine litter at sea



ADRINET and the recently launched Plastic Busters CAP are a
comprehensive bunch of actions focused to improve a joint coastal
management system and to create governance plans to preserve
biodiversity and coastal ecosystems of the Programme Regions, which
share the same issues in terms of pollution and fishing addressing the
issue of marine litter related to fishery. Example of exchange of best
practices to address the issue of marine litter from aquaculture can be
found under the BlueMissionMed project, part of the EU Mission: Restore
our Ocean and Water.

# 2.6.4 Potential avenues for future cooperation: pilot actions / projects

Building on the overall assessment provided so far, this section provides some insights on the type of actions (frameworks processes, projects) and related support to be foreseen as part of the UfM Roadmap, in addressing Marine Litter opportunities across the Mediterranean. The avenues for future cooperation are grouped into two clusters, one related to frameworks and the other one related to projects.

The following potential avenues refer to the calls for actions related to **frameworks**, which are the *Progress in the implementation of the Regional Action Plan on marine litter management in the Mediterranean*; and progress in the Barcelona Convention's COP 21 commitment to take urgent action to prevent plastic leakage in the Mediterranean Sea

- The regional framework is in place. It is important for UfM member countries to make progress in the implementation of these frameworks. However, circularity should be fully embedded in policies and institutional frameworks.
- A common information sharing system, with an observatory mechanism, would be beneficial to tackle marine litter in a more effective way. Existing tools such as the MEDBEP, the Bluemed website, the UfM Blue Economy Working Group and the UfM WG on Environment and Climate Change,, UNEP/MAP Mediterranean node, the UNSDSN Med node are to be acknowledged as information sharing system.

The following potential avenues refer to the calls for actions related to **projects** are to contribute to the implementation of the BLUEMED pilot initiative for a 'Healthy, plastic-free Mediterranean Sea'; to develop further initiatives to raise public awareness on marine litter and address it, including micro-plastics, through actions that include among others marine litter monitoring and removal; to improve port reception facilities to ensure proper collection and recycling of waste coming from all maritime activities, and the exchange of best practices to address the issue of marine litter from aquaculture and the issue of abandoned, lost or otherwise discarded fishing gear

The EU mission: Restore our Oceans and Waters provides for many opportunities to reduce pollution from litter, plastic and microplastic, to accelerate the uptake of innovative solutions to prevent and minimise litter, plastic and microplastic pollution, monitoring of marine litter quantities, and assessment of the impact of implemented measures and to empower citizens taking action against pollution. The role of the UfM to support the streamlining the objectives of the Regional Action Plan across the sea basin by considering ongoing UNEP- MAP activities and building on UfM's experience over the last decade in actions such as Plastic Busters CAP<sup>95</sup>and the UfM H2020 initiative Towards a cleaner Mediterranean<sup>96</sup>. This would include support in monitoring of marine litter quantities, and assessment of the impact of

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<sup>95</sup> https://ufmsecretariat.org/launch-plastic-busters-cap-project/

<sup>96</sup> https://op.europa.eu/en/publication-detail/-/publication/a483cca7-f0b1-11ea-991b-01aa75ed71a1/language-en/format-PDF/source-187701518

implemented measures and to empower citizens taking action against pollution on an integrated coastal zone management approach.

- The role of the UfM as catalyser and facilitator of regional processes, ensuring convergence and inclusiveness, is expected/shall continue. In particular, so far the UfM has ensured the north-south connection of ongoing activities/projects and future joint programming; stimulated convergence of financing around the region; linked marine litter as such with the green, circular economy approach, with emphasis on sustainable consumption and production and resource efficiency; placed marine litter in the wider land-sea approach; linked ML with research and innovation; linked with blue skills.
- Circularity is a key concept related to marine litter and the mapping has shown a limited number of projects related to circularity. Pilot projects to build capacity in the region can be launched to reduce and recycle waste and address the challenges related to marine litter in the region. The H2020 DIGICIRC project (European cluster-led accelerator for digitisation of the circular economy across key emerging sectors) serves as a good practice to build on Circularity, to recycle materials from waste, is key to achieve the objective of 100% plastic waste collection and recycling, by 2025. In this regard Ocean literacy also plays a vital role to raise public awareness on the problem of marine litter.
- Other countries can also benefit from participating in the follow up of the BLUEMED pilot initiative for a 'Healthy, plastic-free Mediterranean Sea' tackling marine litter in the whole Mediterranean region by expanding current scope of activities and geography and the newly launched EU Mission Restore our Ocean and Waters— Mediterranean sea basin lighthouse. The Mission will serve as overall R&I umbrella for marine pollution and start with ML activities in the Mediterranean Sea.
- The sub-priority of UfM member countries to improve port reception facilities to ensure proper
  collection and recycling of waste coming from all maritime activities has only been addressed by
  the cooperation agreement between the UNEP and the Italian Ministry of Environment, Land and
  Sea Protection. No project has been identified tackling this issue.

# 2.6.5. Measuring progress in the UfM Declaration Implementation: Marine Litter

#### **Output (Process indicators)**

+Number of actions, sets of activities and projects of regional cooperation planned in the area of Interactions between marine litter and the blue economy, in particular with regards to the following sub-priorities:

- Raising awareness and addressing marine litter including micro-plastics
- Prevention measures and circular approaches
- Improvement of port reception facilities to ensure proper collection and recycling of waste coming from all maritime activities
- Address the issue of marine litter from aquaculture and the issue of abandoned, lost or otherwise discarded fishing gear engaging with fishermen to involve them in the collection of marine litter at sea
- Achieving 100% plastic waste collection and recycling, by 2025

- +Number of actions, sets of activities and projects of regional cooperation being implemented in the Mediterranean area in the field of Interactions between marine litter and the blue economy (with regards to the sub-priorities mentioned above)
- +LEVEL OF PROJECT COVERAGE of the Regional Action Plan on marine litter management in the Mediterranean at national level
- +Level of progress in the Barcelona Convention's COP 21 commitment to take urgent action to prevent plastic leakage in the Mediterranean Sea
- +Level of financial support committed/secured to support the priority of Marine Litter
- +Number and typology of partners and stakeholders involved in the actions/sets of activities/projects

# **Outcomes (result indicators)**

- +Achieved and projected results of the different actions, sets of activities and projects underway or finished in the field of Marine Litter, mainly:
- Number/type of new/enhanced products/services developed;
- Number/type of new/enhanced collaboration networks and platforms being supported/activated;
- Number/type of stakeholders (businesses, research, CSOs, etc.) involved and benefitting from the action/activity/project;
- Number/type of regional policies influenced as a result of regional cooperation (mainstreaming).

## 2.7 Maritime safety and security of blue economy activities

#### 2.7.1 Introduction

Effective coastguard functions are critical to ensure a safe and secure Mediterranean region. Yet these functions face relevant challenges, including the need to detect marine and coastal threats -including environmental ones- as early as possible. As a result of the different needs of maritime safety and security, a number of opportunities now exist for the development and innovation across the sector. In brief, examples include the development of training activities, as well as the exchange of information, expertise, technical assistance, training and best practices to address knowledge sharing across the region.

The UfM Ministerial Declaration on Sustainable Blue Economy, 2<sup>nd</sup> February 2021:

- Recognised "the importance of ensuring a high level of maritime safety and security throughout the Mediterranean Sea basin, for the protection of citizens and countries, and for the development of a sustainable blue economy";
- Welcomed the role of the Mediterranean Coast Guard Functions Forum (MedCGFF) "in enhancing regional cooperation and promoting understanding of maritime issues of mutual importance and of common interest related to Coast Guard Functions across borders and sectors, both civil and military"
- Highlighted regional institutions such as the regional Maritime Pollution Emergency Response
  Centre for the Mediterranean Sea (REMPEC) and initiatives, such as the SAFEMED initiative
  implemented by the European Maritime Safety Agency (EMSA)

## 2.7.2 State of the art of activities

To briefly describe the state of the art of Sustainable Blue Economy (SBE) frameworks, initiatives and actions related to Marine Renewable Energies in the Mediterranean, a selection of relevant actions is made on the basis of a longer-list of collected initiatives and projects and outlined in this section.

This selection is aimed to be as illustrative as possible on the variety of subjects being addressed and has been carried out based on a combination of criteria, including:

- g) Relevance with respect to the calls for action set for this UfM Ministerial Declaration priority, as presented above;
- h) Geographical coverage;
- i) In the case of projects, the incorporation of sustainability and innovation aspects in its approach;

Figure: Overview of regional frameworks, subregional processes, transnational projects on Maritime Safety and Security (based on the compiled database of SBE actions and initiatives in the Mediterranean)

# Regional Policy frameworks, processes or initiatives

- Conventions of the International Maritime Organisation (IMO)
  - Mediterranean Coast Guard Functions Forum (MedCGFF)
- Maritime Pollution Emergency
   Response Center for the
   Mediterranean (REMPEC)
- Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter (Med SOx ECA)

# Subregional processes or initiatives

- European Maritime Security Agency (EMSA)
- European Border and Coast Guard Agency (Frontex)
- Common Information Sharing Environment (CISE)
  - Copernicus Maritime Surveillance Service

#### **Transnational projects**

- SAFEMED Capacity building and technical Assistance project by which a
  platform is established to enhance safety and security cooperation
  - WestMOPoCO Preparedness and response to oil and highly noxious substances (NHS) marine pollution
- MED OSMoSIS Information Exchange to develop regional and local Smart plug-in capability for interoperable systems
- CALYPSO SOUTH Safer marine transportation and reduction of risks in sea faring

#### Regional

- Conventions of the International Maritime Organisation (IMO): the International Maritime Organisation is the United Nations specialised agency with responsibility for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships. Key IMO conventions include the International Convention for the Safety of Life at Sea (SOLAS, 1974, as amended), the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto and by the Protocol of 1997 (MARPOL) and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) as amended, including the 1995 and 2010 Manila Amendments.
- In close alignment with the former, the Maritime Pollution Emergency Response Centre for the Mediterranean (REMPEC) assists Mediterranean coastal States in "ratifying, transposing, implementing and enforcing" the above mentioned international maritime conventions, and specifically those related to the prevention, preparedness and response to pollution from ships. REMPEC is administered by the International Maritime Organisation (IMO) in cooperation with the Mediterranean Action Plan of the United Nations Environment Programme (UNEP/MAP). Importantly, REMPEC has recently elaborated the "Mediterranean Strategy for the Prevention of, and Response to Marine Pollution from Ships (2022-2031)<sup>97</sup>", including a dedicated Action Plan.
- The Mediterranean Coast Guard Functions Forum (MedCGFF) was established to enhance
  cooperation among Mediterranean Littoral States Coast Guard Agencies in 2009. It is defined as a
  "non-binding, non-political and independent" forum that brings togetherthe heads of national
  maritime authorities, which engage in coast guard activities in Mediterranean countries as well as
  the EU and international bodies

<sup>97 &</sup>lt;u>https://www.rempec.org/en/knowledge-centre/online-catalogue/wg-51-5-med-strategy-2022-2031.pdf</u>

• On 15 December 2022 the 79th session of the International Maritime Organization's (IMO) Marine Environment Protection Committee (MEPC 79) adopted the Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter (Med SOx ECA), with effect from 1 May 2025, to further limit air pollution from ships, pursuant to Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL). This implies that from then on when operating in the Mediterranean Sea, the sulphur content of the fuel used on board shall not exceed 0.10%, unless using an exhaust gas cleaning system (EGCS) ensuring an equivalent SOx emission level. This is believed to significantly reduce ambient levels of air pollution in the Mediterranean Sea and in the Mediterranean coastal states, providing benefits to human health and the environment.

In terms of relevant frameworks, as a historic milestone in the prevention of marine and atmospheric pollution by ships, the Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter (Med SOx ECA) was agreed to come into effect on 1 May 2025 in the context of the 79th session of the International Maritime Organization's (IMO) Marine Environment Protection Committee. From this moment onwards, ships operating in this area will be required to comply with a limit for sulphur content in fuel oil (0.10 per cent mass by mass (m/m) versus 0.50 per cent m/m allowed outside Med SOx ECA). This implies a 78.7% drop in emissions of sulphur oxides and an annual reduction of 8.5 million tonnes of SOx released into the atmosphere<sup>98</sup>.

In addition, the Mediterranean Strategy for the Prevention of, Preparedness, and Response to Marine Pollution from Ships (2022-2031)<sup>99</sup> and its related Action Plan was adopted by the Contracting Parties to the Barcelona Convention in 2021 and sets out seven Common Strategic Objectives (CSOs). The Strategy was adopted with a vision of a "clean and healthy Mediterranean marine and coastal environment with a sustainable and pollution free maritime sector, supported by a rigorous enforcement system and strengthened multi-sectoral cooperation, for the benefit of present and future generations".

Furthermore, at EU level, the **European Maritime Security Strategy (EUMSS)**<sup>100</sup> and its related **Action Plan**<sup>101</sup> were renewed in 2023, with the aim of protecting EU interests at sea (i.e. citizens, economy, infrastructure, and borders); protecting the marine environment and resources; upholding international law of the oceans, and promptly reacting to growing threats.

The **Mediterranean Coast Guard Functions Forum (MedCGFF)** chaired by the Italian Coast Guard took place in 2022 on the 29<sup>th</sup> of September until the 1<sup>st</sup> of October in Naples, Italy. The Forum is non-binding, voluntary and independent, bringing together representatives from institutions and EU agencies with competencies in Coast Guard Functions in the Mediterranean and international Observers including the UfM, REMPEC, EMSA, FRONTEX, EFCA and FAO. The 2022 MCGFF served as an important opportunity to facilitate multilateral cooperation on a range of common challenges including maritime safety, security, and

<sup>98</sup> https://www.unep.org/unepmap/news/press-release/mediterranean-historic-milestone-MedSOxECA

<sup>99</sup> https://www.rempec.org/en/our-work/strategies-and-actions-plans/regional-strategy

<sup>&</sup>lt;sup>100</sup> https://oceans-and-fisheries.ec.europa.eu/publications/joint-communication-update-eu-maritime-security-strategy-and-its-action-plan-enhanced-eu-maritime\_en

<sup>&</sup>lt;sup>101</sup> https://oceans-and-fisheries.ec.europa.eu/document/download/57c32475-1dea-47d7-8bcb-92d8a2d0f056\_en?filename=2018-06-26-eumss-revised-action-plan\_en.pdf

environmental protection activities, as well as enabling potential partnerships, sharing expertise and best practices, and promoting international efforts to enhance the safety and security of activities in the Med Sea.

Among the key items discussed were the role of innovation in maritime transport (linking namely to decarbonization/sustainable shipping, digitalization, and automation); the role of Coast Guard Functions in preservation and response activities concerning the marine environment and related enforcement competencies; safety and security of activities at Sea as a key enabler for the development of a resilient and sustainable Mediterranean Blue Economy; fisheries activities and control in the context of Next generation EU; global perspectives on Coast Guard cooperation; and the role of education and capacity-building in ensuring a safe, secure and sustainable Mediterranean. The next Mediterranean Coast Guard Functions Forum (MCGFF) Annual Conference will be held in October 2024, under the auspices of the current Co-Chair of the Forum, Albania.

DG MARE, as EU UfM Co-Presidency, recalled the potential of the MedCGFF 'to enhance regional cooperation and to promote collaboration on maritime issues of common interest related to Coast Guard Functions across borders and sectors, both civil and military' as highlighted by the 2021 UfM Ministerial Declaration on Sustainable Blue Economy – which equally invites the Forum to develop training activities and further facilitate 'the exchange of information, expertise, technical assistance, training and best practices to address illicit activities at sea'. In closing, the notion of a future African Coast Guard Forum was evoked.

In terms of projects that are relevant to this priority, the Horizon Europe **EURMARS**<sup>102</sup> project -which brings together partners from UfM countries such as Greece, Cyprus, France, Slovenia, Albania and Spain-, kicked-off in October 2022. The aim of EURMARS is to expand the common risk assessment practices currently deployed by authorities to enable the development, deployment and evaluation of a secure multitasking maritime surveillance platform. Its architecture will build on the lessons learnt of previous initiatives, and assimilate the knowledge of the key stakeholders and their practice on CISE and other relevant systems. Other recent and ongoing projects include **E-FishMed**<sup>103</sup>, the Mediterranean virtual regional training academy on fisheries control and inspection which was launched in 2022 and encourages cooperation in combatting IUU fishing, and the **Strata data platform**<sup>104</sup>, launched in 2021 by UNEP and FAO, which identifies and monitors environmental stresses potentially influencing threats to peace and security.

Mediterranean stakeholders gathered in Athens in the context of the **UfM 2<sup>nd</sup> Stakeholders conference on Sustainable Blue Economy** recognised the importance of promoting further dialogue, cooperation, coordination and skills development in order to enhance MSS in the Mediterranean. The role of the UfM was acknowledged to be critical in this regard, particularly by paving the road for the definition of common priorities. It was also deemed crucial to continue reinforcing mechanisms that allow the exchange of information and data among different agents operating in the field, both military and civilian, and particularly between coastquards<sup>105</sup>.

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<sup>&</sup>lt;sup>102</sup> https://cordis.europa.eu/project/id/101073985

<sup>103</sup> https://www.efca.europa.eu/en/content/project-e-fishmed

<sup>104</sup> https://unepstrata.org/project/

<sup>&</sup>lt;sup>105</sup> https://medblueconomyplatform.org/wp-content/uploads/2024/03/2nd-ufm-sk-conf-sbe-outcomes-main-messages.pdf

In the table below, we summarise the outcomes and recommendations regarding this priority emerging from the 2<sup>nd</sup> UfM Stakeholders Conference on Sustainable Blue Economy, held in Athens on 19-20 February 2024.

# Outcomes and recommendations of Multi-stakeholder Workshop 10: Maritime safety and security of blue economy activities

- Maritime safety and security (MSS) is an essential pre-condition for the sustainable development of the sectors and activities of the Med SBE: MSS ensures predictability, which in turn is needed in order to secure investments and develop economic activities in the maritime domain. MSS also protects the safety and well-being of citizens and the environment by tackling illegal activities, enforcing regulation, and protecting strategic resources and infrastructure at sea.
- Threats and challenges to maritime security in the Mediterranean are evolving and growing: In recent years, an evolution from 'traditional threats' to new, hybrid threats has been observed, most of them posed by non-state actors. Key threats mentioned include: Hybrid and cyber-attacks targeting critical maritime infrastructure; piracy and human trafficking, Illegal; unreported and unregulated fishing (IUU), smuggling activities; climate change and environmental degradation. Particular attention was given to the depletion of fish stocks, tensions and competition over the use of marine resources, flooding in coastal areas and islands.
- A wide array of initiatives are already in place to ensure MSS in the Mediterranean, including the 2021 UfM SBE Ministerial Declaration and its related Roadmap, the WestMED Initiative, EUSAIR, Common Information Sharing Environment (CISE), the SAFEMED Project, and the European maritime security strategy (EUMSS) and action plan. The complex ecosystem of actors includes EMSA, EFCA, Frontex, REMPEC the Mediterranean Coast Guard Functions Forum (MedCGFF). The next MeCGFF will take place in October in Albania, current Co-Chair of the Forum, together with Italy.
- Further dialogue, cooperation, coordination and skills development is needed in order to enhance MSS in the Mediterranean. The role of the UfM could be critical in this regard, particularly by paving the road for the definition of common priorities. It is also crucial to continue reinforcing mechanisms that allow the exchange of information and data among different agents operating in the field, both military and civilian, and particularly between coastguards. For this, transnational projects scaling up success stories at national level, and capacity building, training and skills development of different stakeholders in the context of professional development schemes are essential.
- Finally, it was noted that collaboration should be promoted not only within the Mediterranean itself, but also with neighboring basins, particularly the Black and Caspian Sea, and the Atlantic.

At the Conference on Maritime Security in the Mediterranean, EU Commissioner for the Mediterranean Dubravka Šuica highlighted that the New Pact for the Mediterranean has become a top priority, aiming to strengthen cooperation between the European Union and its partner countries. This initiative is designed to foster deeper collaboration on maritime security and address common challenges in the region. By

promoting joint actions and partnerships, the Pact for the Mediterranean seeks to build a more integrated, stable, and secure Mediterranean, reflecting the EU's commitment to regional stability, prosperity, and shared responsibility.

The idea behind the Pact for the Mediterranean is that the European Union, the Mediterranean region, and countries across the Southern Neighbourhood share many aspirations, challenges, and perspectives. A strengthened Mediterranean partnership is considered a strategic imperative for Europe, as sustainable prosperity, security, and resilience can only be built through close cooperation and partnership among all involved parties.

#### Subregional

- The European Maritime Safety Agency (EMSA) aims to ensure a "high, uniform and effective level of maritime safety, maritime security, prevention of, and response to, pollution caused by ships", as well as to provide an early and adequate response to marine pollution caused by oil and gas installations. In the Mediterranean region, it coordinates the SAFEMED initiative, a technical assistance and capacity building project that brings together national, European and international stakeholders with the aim to raise the safety, security and protection of marine environment standards.
- The **European Fisheries Control Agency (EFCA)** has the mission to promote the highest common standards for control, inspection and surveillance under the Common Fisheries Policy.
- The European Border and Coast Guard Agency (Frontex) promotes, coordinates, and develops European border management, with a focus on preventing smuggling, human trafficking and terrorism as well as many other cross-border crimes. Among other activities, it supports search and rescue operations that arise during border surveillance operations at sea, and develops training curricula in a variety of areas to guarantee the highest levels of professional knowledge among border guards across Europe.
- The Common Information Sharing Environment (CISE) is an EU initiative providing a decentralised framework for point-to-point information exchange across sectors and borders. It involves more than 300 EU and national authorities with responsibilities in maritime surveillance with the aim to make European and national maritime surveillance systems interoperable, enabling all concerned authorities to exchange information on a voluntary basis in an automatic and secure way.
- The Copernicus Maritime Surveillance (CMS) service provides satellite-based data to detect
  illegal ship-sourced discharges (e.g. of oil), to identify polluting vessels and to track the evolution
  of accidental spills. The service is provided in areas of European interest outside European waters
  such as overseas territories of EU states.
- The Ocean Pact, under its priority of Enhancing maritime security and defence, states that the growing complexity of maritime threats, including attacks on underwater infrastructure, cyber threats, risks posed by the shadow fleet, and strategic competition over maritime spaces, demands a coordinated response. In this way, the Commission will strengthen EU coast guard and naval cooperation, as well as maritime border security.

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- SAFEMED IV<sup>106</sup> Capacity building and technical assistance project by which a platform is
  established to enhance safety and security cooperation. Among its thematic components, this
  project implemented by EFSA includes Flag State Implementation, Port State Control, Vessel
  Traffic Monitoring, Environmental Protection, Security of ships and port facilities, etc. It also offers
  technical assistance and support to the Mediterranean Coast Guard Functions Forum (MedCGFF).
- WestMOPoCO<sup>107</sup> Preparedness and response to oil and highly noxious substances (NHS). This
  project aims at strengthening cooperation between participating countries in preparing for and
  responding to oil and Highly Noxious Substances (HNS) marine pollution and in improving the
  quality and interoperability of their response capacities. Particularly, it enhances emergency
  decision-making capabilities, assesses national contingency plans and strengthens cooperation
  and national emergency procedures.
- MED OSMoSIS<sup>108</sup>— Information exchange to develop regional and local smart plug-in capability for
  interoperable systems. MED OSMoSIS is a strategic project under Interreg MED Governance axis
  focusing on the development of modules for Maritime Surveillance activities to enhance maritime
  situational awareness in the Mediterranean. It aims to ease information exchanges that will support
  the further development of a regional/local smart plug-in capability supporting interoperable and
  transnational systems.
- CALYPSO SOUTH<sup>109</sup> Safer marine transportation and reduction of risks in sea faring. This project
  addresses the challenges of safer marine transportation, protection of human lives at sea, and the
  safeguarding of marine and coastal resources from irreversible damages. It is a commitment to put
  technological advancement and scientific endeavour at the service of humanitarian responses,
  reducing risks in sea faring, and protecting the marine environment.

## Assessment of regional coverage

Beyond the selected exemplary initiatives described so far, our analysis covered a wider number of projects (provided in the annexed "project database" tables). A synthesis of the analysis of such broader sample of frameworks, initiatives and projects is described in this section.

The main emerging findings with regards to the actions currently in place in this sector are as follows:

- A relatively heterogeneous coverage of regional frameworks is observed across UfM countries, although with a wide distribution across different subregions.
- A gap is observed in subregional processes coverage, as all initiatives observed are concentrated in the EU

<sup>&</sup>lt;sup>106</sup> **SAFEMED countries covered**: Algeria, Egypt, Jordan, Israel, Libya, Lebanon, Morocco, Palestine and Tunisia

<sup>107</sup> WestMOPoCO countries covered: Algeria, France, Italy, Malta, Morocco, Spain, Tunisia, Monaco

<sup>108</sup> MED OSMOSIS countries covered: Greece, Italy, Spain, Slovenia, Portugal, France, Croatia, Montenegro

<sup>&</sup>lt;sup>109</sup> CALYPSO SOUTH countries covered: Italy, Malta

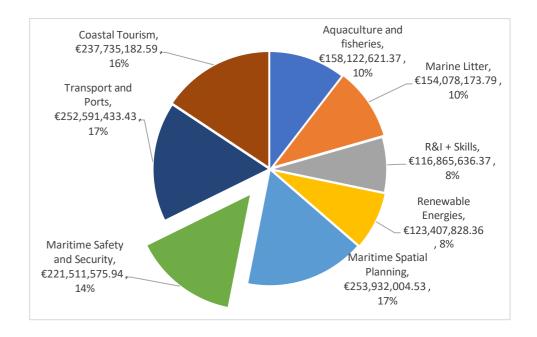
- Projects are instead more distributed across the region, showing at times a focus on bilateral schemes (e.g. Italy-Malta cooperation).
- Capitalisation shows a clear gap for this priority area, offering further room for cooperation.

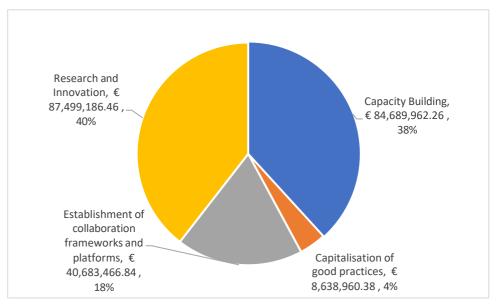
## Expenditure of the sector

The figure below provides an overview of the expenditure of the sector compared to other SBE sectors and for different type of projects. Projects are divided depending on their main focus (Establishment of collaboration frameworks and platforms, Capacity Building, Research and Innovation, Capitalisation of good practices). We can observe in Figure 2, that Maritime Safety and Security accounts for 14% of the overall spending on SBE sectors.

Additionally, almost a half of the resources dedicated to Maritime Safety and Security (40%) is focused on Research and Innovation projects (such as the development of IoT applications, early warning technologies, HF-radars, weather sensors, and so on). Activities based on capacity building (38%) and the setup of collaboration platforms (18%) also seem to constitute funding priorities in this sector, often identified together as part of the same project (e.g. SAFEMED IV, WestMOPoCo).

Figure: Project expenditure per sector (left) and type of activity (right): Maritime Safety and Security





Source: Database of projects compiled for the UfM State of the Art of the Mediterranean Sustainable Blue Economy report

## Further details on the support provided

The figure below provides an overview of the distribution of the collected initiatives (frameworks, processes and projects) across the various UfM countries in the different areas of the Mediterranean. The darker the blue, the higher the coverage of the mapped initiatives for each country (dark blue indicates that a country is involved in all the initiatives mapped for the specific category and pale blue indicates a very limited percentage of the total initiatives mapped). Note that the projects are also divided depending on their main focus (Collaboration, Capacity Building, Research and Innovation, Capitalisation of good practices).

An analysis of the table below allows for some observations:

- Organisations and platforms reveal a clear concentration of institutional presence in the North-West Mediterranean, particularly in France, Italy, and Spain, which show the darkest shades of blue. This suggests that these countries host or participate in a significant number of maritime safety and security platforms. In the same way, some countries of the north-east, such as Croatia, Cyrpus, Greece and Slovenia, also show greater coverage. While regional coordination mechanisms such as REMPEC and the Mediterranean Strategy for the Prevention of, and Response to Marine Pollution from Ships (2022–2031) provide a framework, the data confirms that no single security system covers the entire Mediterranean, and institutional engagement remains uneven.
- Policy and strategies show strong engagement in the North-East region, with countries like Albania, Bosnia-Herzegovina, Croatia, Cyprus, and Greece displaying significant activity. This suggests that policy development in maritime safety and security is gaining traction in this subregion. In contrast, the south-west shows lower levels of strategic engagement, highlighting a potential gap in policy formulation and implementation. The dominance of EU-driven mechanisms, such as EMSA, CISE, and SAFESEANET, continues to shape the strategic landscape, but their reach appears limited outside the EU, reinforcing the need for more inclusive policy frameworks.

• Project distribution shows a diverse and regionally differentiated pattern. Collaboration frameworks are particularly active in the North-East, with Albania and Bosnia-Herzegovina leading. Capacity building projects are prominent in both the North-East and South-West, especially in Bosnia-Herzegovina and Algeria, indicating a focus on strengthening operational capabilities in these areas. R&I projects are more evenly distributed but stand out in Cyprus, suggesting a growing emphasis on innovation in maritime safety. Capitalisation efforts, while generally limited, are most visible in the North-East, particularly in Cyprus, pointing to early efforts to consolidate and scale successful practices. Notably, no region shows dominance across all project types, underscoring the fragmented nature of project engagement in this sector.

Legend of the table: the darker the blue, the higher the coverage of the mapped initiatives for each country (dark blue indicates that a country is involved in all the initiatives mapped for the specific category and pale blue indicates a very limited percentage of the total initiatives mapped).

Figure: Example of overview of existing actions per country/ sectoral priority

					Type of	project	
	Organisations and platforms	Policies and strategies	Projects (total)	Collaboration frameworks	Capacity building	R&I	Capitalisation
North-West							
France							
Italy							
Malta							
Portugal							
Spain							
North-East							
Albania							
Bosnia- Herzegovina							
Croatia							
Cyprus							
Greece							
Montenegro							
Slovenia							
Macedonia							
Türkiye							
South-West							
Algeria							
Mauritania							
Morocco							
Tunisia							
South-East							
Egypt							
Israel							

Jordan				
Lebanon				
Libya				
Palestine				

Source: Database of processes, frameworks, initiatives and projects compiled for the UfM State of the Art of the Mediterranean Sustainable Blue Economy report

# 2.7.3 Stocktaking of the Ministerial Declaration: progress and opportunities

As a final step in the analysis, it is important to return to the main priorities put forward by the UfM Ministerial Declaration for the sustainable development of the maritime safety and security sector. The table below provides a further analysis on the state of the art in advancing with the specific UfM priorities as sketched in the introduction to this chapter. It does so by building on the initiatives (frameworks/processes and projects) as reviewed earlier in this chapter and confronting those with each priority of the UfM Ministerial Declaration for this sector. The analysis allows for an assessment on the status of the implementation of each priority (a "visual check") to be used as abasis for the future UfM Roadmap.

Figure: Example of identification of opportunities per sectoral priority

UFM MINISTERIAL DECLARATION CALL FOR ACTION	LEVEL OF PROJECT COVERAGE	JUSTIFICATION AND IDENTIFICATION OF OPPORTUNITIES AS PER THE MAPPING OF INITIATIVES
Mediterranean Coast Guard Functions Forum (MedCGFF) to develop training activities	0% 20% 40% 60% 80% 100% ■ Training activities ■ Total projects	<ul> <li>So far, with regards to training activities, during past plenary sessions, the MedCGFF has called for conducting a mapping of existing Training Centres of the various Coast Guards in the Mediterranean Sea (2017); to extend EFCA's European Coast Guard Functions Training Network (ECGF)<sup>110</sup> project in order to establish a Sectorial Qualification Framework (2018); and to promote cooperation, dialogue and training activities in the region (2019). From a thematic point of view, the topics of focus for MedCGFF have been: Oil Spill Response, Maritime Surveillance, Illegal Immigration, Cooperation for the control of fishing in the Mediterranean Sea.</li> <li>At subregional level several initiatives and projects observed promote capacity building and expertise sharing: the European Coast Guard Functions Training Network (ECGF) has developed a Training Portal in the field of coast guard functions; promotes sharing of best practices, mobility and on-the-job training as a form of learning. The SAFEMED initiative also offers practical training to Port State Control officers to familiarise them with the various functionalities of THETIS-MED, as well as on environmental</li> </ul>

<sup>110</sup> https://ecgf.efca.europa.eu/

		legislation, including to southern and eastern Mediterranean countries such as Morocco and Jordan.
Further facilitate exchange of information, expertise, technical assistance, training and best practices to address illicit activities at sea	0% 20% 40% 60% 80% 100% ■ Exchange of information ■ Total projects	<ul> <li>Concerning regional frameworks, the MedCFGG provides an annual forum (last meeting held on 2019) for political dialogue. On the topic marine pollution, the MENELAS information system launched by REMPEC in 2015 is a network of Law Enforcement Officials from participating States supported by an electronic information system.</li> <li>At subregional level, a wide array of EU information sharing and collaboration tools (such as CISE or Copernicus) have been identified.</li> <li>There have also been developments at national level on exchange of information and best practices, particularly with countries' participation in the SAFEMED V project implemented by the European Maritime Safety Agency which brings together stakeholders with the aim of raising maritime safety, security, and protection of marine environment standards in the Mediterranean basin.</li> </ul>

## 2.7.4 Potential avenues for future cooperation: pilot actions / projects

The UfM Ministerial Declaration on Sustainable Blue Economy *recalled* the importance of improving maritime safety, and acknowledged the role of many of the initiatives briefly described above (i.e. the the Mediterranean Coast Guard Functions Forum (MedCGFF), the regional Maritime Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), the SAFEMED initiative and the European Maritime Safety Agency (EMSA)).

Even though no concrete *calls for action* concerning Maritime Safety and Security have been expressed in the SBE Declaration, Ministers have *invited* the Mediterranean Coast Guard Functions Forum (MedCGFF) to develop training activities and further facilitate exchange of information, expertise, technical assistance, training and best practices to address illicit activities at sea. In this regard, and building on the overall assessment provided in the previous section, some insights on the type of actions and support to be foreseen as part of the UfM Roadmap are proposed as follows.

Considering the development of *training activities* in the framework of MedCGFF, the following cooperation avenues are suggested:

- With a flexible and virtual approach, promote the set-up of a Mediterranean Maritime Safety
  and Security Academy operated by the MedCGFF Secretariat, targeted at maritime safety
  officials, both civil and military. This Academy may capitalise on the experience of the European
  Coast Guard Functions Training Network (ECGF) or the 5+5 Defence College and shall
  especially consider gender equality by focussing on increasing the number of female trainees
  recruited.
- Based on a detailed analysis on training needs and/or preferences in each of MedCGFF member countries, design and implement a series of training workshops at national/ local level, building on training experiences and support schemes from the SAFEMED initiative.

As regards the exchange of information, expertise, technical assistance and best practices within the MedCGFF:

- Capitalising on and expanding scope of coordination tools developed at EU level aimed to
  improve interoperability, surveillance and intervention capacities at transnational level. Building on
  the successful example of the Common Information Sharing Environment (CISE), and account
  taken of its availability for EU Mediterranean countries only, a CISE-style platform may be replicated
  for non-EU Mediterranean countries. This may be linked with training activities (above) focused on
  familiarising Mediterranean officers with the functionalities of such tools and their potential
  replicability at regional level.
- Strengthening data management strategies as a reference for better exchange of information.at
  Mediterranean level, with a particular focus on data simplification and the improvement of data
  sharing channels between different institutional levels, the involvement of public and private bodies,
  universities, local authorities and citizens through their digital transformation.

# 2.7.5 Measuring progress of the Ministerial Declaration implementation: Maritime Safety and Security

### **Output (Process indicators)**

- +Number of actions, sets of activities and projects of regional cooperation **planned** in the area of Maritime Safety and Security, particularly addressing the following sub-priorities:
  - Development of training activities
  - Exchange of information, expertise, technical assistance and best practices
  - Prevention and reaction against manmade and natural disasters
  - Ship pollution
- +Number of actions, sets of activities and projects of regional cooperation **being implemented** in the Mediterranean area in the field of Maritime Safety and Security (with regards to the sub-priorities mentioned above)
- +Level of **financial support** committed/secured to support the development of Maritime Safety and Security in the Mediterranean
- +Number and typology of partners and stakeholders involved in the actions/sets of activities/projects

### **Outcomes (result indicators)**

- +Achieved and projected results of the different actions, sets of activities and projects underway or finished in the field of Maritime Safety and Security, mainly:
- Number/type of new/enhanced products/services developed;
- Number/type of new/enhanced collaboration networks and platforms being supported/activated;
- Number/type of stakeholders (businesses, research, CSOs, etc.) involved and benefitting from the action/activity/project;
- Number/type of regional policies influenced as a result of regional cooperation (mainstreaming).

# 3 Assessment of the UfM Ministerial Declaration: cross-cutting priorities

# 3.1 Overview of cross-cutting priorities

Following the detailed description of the sectoral priorities, this chapter will be dedicated to the assessment of the cross-cutting priorities included in the UfM Ministerial Declaration for Sustainable Blue Economy. As such, it will assess their current status of implementation and accordingly propose potential avenues for future cooperation feeding the Roadmap.

**Cross-cutting priorities** are defined as transversal, horizontal (sets of) methodologies and actions which are considered instrumental for the development of the sustainable blue economy sectors described above. The cross-cutting priorities included in this section (as included in the UfM Ministerial Declaration) are the following:

- Governance and the future of sea basin strategies
- Marine research and innovation, skills, careers and employment
- Maritime Spatial Planning, Integrated Coastal Zone Management
- Sustainable investment in the blue economy

In addition, cross-cutting priorities have been grouped in two different clusters: "enablers" and "tools".

- **Enablers** are conceived as fundamental instruments which constitute a pre-requisite for the development of sectoral priorities. They are considered critical and *conditio sine qua non* given that they provide the resources and organisational structures essential for their operation. These include: Governance and Sustainable Investments.
- Tools are considered to be auxiliary methodologies, ultimately serving as a means to the
  development of the sectoral priorities individually and particularly useful for the advancement of a
  propitious ecosystem for the development of the sustainable blue economy as a whole. These
  include Maritime Spatial Planning, Integrated Coastal Zone Management and Marine research and
  innovation, skills, careers and employment.

Given the distinct and specific nature of cross-cutting priorities, either tools or enabling factors, a slightly different structure and methodology has been followed in this section. Thus, for each of the cross-cutting priorities, three main aspects have been developed: firstly, an in-depth although non-exhaustive description of the most relevant frameworks and initiatives (state of the art) is presented. Secondly, a stocktaking exercise on the implementation of the SBE Ministerial Declaration has been conducted. Finally, a set of potential avenues for future cooperation are proposed based on the gaps identified and/or the areas where UfM/regional cooperation would bring special added value.

## 3.2 Enabler: Governance and the future of sea basin strategies

#### 3.2.1 Introduction

The Declaration tasks the UfM Secretariat to continue reinforcing the existing dialogue among stakeholders in the blue economy in order to maximise regional coordination, partnerships, opportunities for cooperation and pooling of resources.

In this section an overview of the complex ecosystem of institutions and organisations operating in the sea basin is provided. This is paired with an analysis of potential thematic synergies and links amongst the different initiatives. A focus is also put into the sub-regional Initiatives WestMED and EUSAIR, as well as on projects which can support/be the driving force of governance processes in the region (such as the Governance Axis of the INTERRREG MED Programme).

# UfM Ministerial Declaration on Sustainable Blue Economy, 2nd February 2021:

- Ministers task the UfM Secretariat to reinforce dialogue between UfM member countries and stakeholders on the sustainable blue economy, maximising regional coordination, partnerships, opportunities for cooperation and pooling of resources – in close cooperation with the UNEP/MAP Barcelona Convention and other relevant partners, and commit to continue their constructive work within the Blue Economy Working Group;
- Ministers welcome the proposals made by civil society representatives of 10 countries within the Summit of the Two Shores to develop concrete projects in the fields of sustainable development, support to Mediterranean youth, development of digital technology, culture and circular economy;
- Ministers take note of the on-going implementation of the European Union Strategy for the
  Adriatic and Ionian Region (EUSAIR) and call participating member countries to make full use
  of future European Structural and Investment Funds (ESIF) and the Instrument for preAccession (IPA), including Interreg programmes, to actively support the development of
  sustainable blue economy in the Adriatic and Ionian region;
- Ministers recognise both the WestMED initiative and the EUSAIR as successful examples of
  cooperation, focused on clear goals, priorities and measurable targets and as a catalyst for the
  development of sustainable blue economy projects in the region;
- Ministers call for further opportunities for exchange of experiences and best practices, as well
  as cooperation between the countries of the Mediterranean region, maximizing the potential of
  the above mentioned two sub-regional initiatives and encourage the involvement of other UfM
  countries in relevant activities;
- Ministers call on relevant Managing Authorities and participating countries to further enhance synergies between future Interreg programmes and other European Union funds, aligning them to the extent possible to address the needs of the whole region whilst avoiding double funding, and promoting their contribution to the achievement of policy objectives set out either in the UfM context, or within the context of agreements between the European Union and third countries, or within the context of other regional cooperation agreements;

- Ministers encourage the engagement of all the relevant national and local authorities;
- Ministers call on other donors to further support the fruitful cooperation in the region and complement the ongoing and future actions, as possible and opportune

#### 3.2.2 State of the situation

A wide variety of governance structures and institutional frameworks which play a direct or indirect role in expanding the activities related to the sustainable blue economy in the sea basin can be identified in the Mediterranean region. This ecosystem of organisations, international associations or collaborative networks can be found both at an international, regional and sub-regional level.

This wide variety of institutional frameworks translates into the identification of a selection of over **twenty-five organisations** operating in the Mediterranean, these being organisations both regional and sub-regional. They include very different profiles and dynamics of cooperation.

Central to this ecosystem and with a **holistic approach towards governance** in the Mediterranean are, 3 key organisations can be identified: The **Union for the Mediterranean**<sup>111</sup>, the **Maghreb Arab Union** (MAU)<sup>112</sup>, which is a cooperation initiative based on the Marrakech Treaty (1989) between Mauritania, Morocco, Algeria, Tunisia and Libya (Southern members of 5+5) aiming to support "common policy in all the domains", and the **5+5 Dialogue**, an intergovernmental cooperation Initiative between Malta, Italy, France, Spain, Portugal, Mauritania, Morocco, Algeria, Tunisia, and Libya (Launched in 1990 and steered through Ministerial Conferences of ministers of Foreign Affairs<sup>113</sup>).

In parallel to the 3 key inter-governmental frameworks identified above, the following should also be listed when dealing with a better governance and reinforcing the dialogue among different levels of government and stakeholders:

**ARLEM (Euro-Mediterranean Regional and Local Assembly)**<sup>114</sup>: An assembly of local and regional elected representatives from the European Union and its Mediterranean partners which was set up in 2010 by the European Committee of the Regions, allowing elected representatives from the three shores of the Mediterranean Sea to represent their local and regional authorities politically, maintain political dialogue and promote interregional cooperation

**CPMR Mediterranean Commission**<sup>115</sup>: It gathers around 40 Member Regions from 9 different EU members states and other countries (Albania, Cyprus, France, Greece, Italy, Malta, Morocco, Spain and Tunisia). It is open to all the different sub-national levels in all Mediterranean countries and focuses on the development of the Euro-Mediterranean dialogue and territorial cooperation, concentrating its efforts on Transport and Integrated Maritime Policy, Economic and Social Cohesion, Water and Energy.

https://issafrica.org/profile-arab-maghreb-union-amu

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<sup>111</sup> https://ufmsecretariat.org/

<sup>&</sup>lt;sup>113</sup> In particular, the WestMED initiative is the result of years of dialogue between ten countries in the western Mediterranean region involved in the '5+5 Dialogue': These countries are ready and willing to work together on their shared interests for the region: to increase maritime safety and security, promote sustainable blue growth and jobs, and preserve ecosystems and biodiversity.

https://cor.europa.eu/en/our-work/Pages/ARLEM.aspx

<sup>115</sup>https://cpmr-intermed.org/

**MED CITIES**<sup>116</sup>: it is network which helps empower Mediterranean local governments to achieve their strategic priorities, believing them to play a vital role in improving the lives of citizens. It is a Mediterranean voice for local authorities and builds their capacity to meet the challenges of local governance in a sustainable way. It has four principal fields of activity: developing and implementing projects; sharing knowledge and building expertise in local authorities; facilitating cooperation and multilateral action between municipalities and metropolitan areas; participating in regional and international political processes.

**PRIORITY axis 4 INTERREG MED Programme:** PANORAMED<sup>117</sup> is a governance platform that supports the process of strengthening and developing multilateral cooperation frameworks in the Mediterranean region for joint responses to common challenges and opportunities.

As regards *marine policies, sustainability and the blue economy*, and based on the mapping carried out, we can first identify 3 pivotal frameworks in the Mediterranean, which are: Firstly, the **Mediterranean Strategy for Sustainable Development (MSSD)** 2016-2025<sup>118</sup>, which provides an integrative policy framework for all stakeholders, to translate the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) at the regional, sub-regional, national and local levels in the Mediterranean region.

Secondly, the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention)<sup>119</sup>, Mediterranean Action Plan (MAP) constitutes the key regional governance framework on environmental issues in the sea basin.

Thirdly, the **General Fisheries Commission in the Mediterranean (GFCM)**<sup>120</sup> promotes the development, conservation, rational management and best utilisation of living marine resources, as well as the sustainable development of aquaculture in the Mediterranean, Black Sea and connecting waters.

In parallel to these three central elements to marine and sustainability policies in the Mediterranean Sea basin, the following are also play an important role in their respective fields of activity: ...

**MedWet**<sup>121</sup>: the Mediterranean Wetlands Initiative brings together 27 Mediterranean and peri-Mediterranean countries that are Parties to the Convention on Wetlands. The MedWet mission is to ensure and support the effective conservation of the functions and values of Mediterranean wetlands and the sustainable use of their resources and services

**MedPAN**<sup>122</sup>: The network's mission is to promote, through a partnership approach, the sustainability and operation of a network of marine protected areas in the Mediterranean which are ecologically representative, connected and effectively managed to help reduce the current rate of marine biodiversity loss

**PIM Initiative**<sup>123</sup>: This is an international NGO for the promotion and assistance in the management of mediterranean insular areas. Its objective is the preservation of these micro-areas through the

117 https://governance.interreg-med.eu/el/

<sup>116</sup> https://medcities.org/es/

<sup>&</sup>lt;sup>118</sup> https://www.unep.org/unepmap/what-we-do/mediterranean-strategy-sustainable-development-mssd

<sup>119</sup> https://www.unep.org/unepmap/who-we-are/barcelona-convention-and-protocols

<sup>120</sup> https://www.fao.org/gfcm/en/

<sup>121</sup> https://medwet.org/

<sup>122</sup> https://medpan.org/

<sup>123</sup> http://initiative-pim.org/index.php/en/home/

implementation of concrete actions in the field, by promoting the exchange of know-how and knowledge between conservationists and specialists in the Mediterranean basin. Its approach gives priority to simple and pragmatic solutions.

The IUCN Centre for Mediterranean Cooperation<sup>124</sup>: This is an environmental organisation devoted to promote sustainable livelihoods and biodiversity conservation through cooperation and shared values and culture.it is the only environmental organisation with observer status at the United National General Assembly.

Finally, two instrumental platforms/tools can be identified which serve the development of the blue economy in the Mediterranean:

- The Mediterranean Blue Economy Stakeholder Platform<sup>125</sup>, a regional networking platform for sharing knowledge and supporting the development of the blue economy, which is the largest "onestop-shop" for general, technical and sectoral information related to marine and maritime affairs in the Mediterranean, and
- The European Maritime Spatial Planning Platform<sup>126</sup>, an information and communication gateway designed to offer support to all EU Member States (including the Mediterranean ones) in their efforts to implement Maritime Spatial Planning (MSP) in the years to come.

From a *more sub-regional perspective*, the WestMED Maritime Initiative and the EUSAIR: European Union Strategy for the Adriatic and Ionian region (Pillar 1 Blue Growth) offer dedicated collaborative frameworks which bring together national and regional authorities with the wider blue economy communities:

**WestMED initiative**<sup>127</sup>: The European Commission launched the initiative for the sustainable development of the blue economy in the Western Mediterranean region in 2017. The objectives of the WestMED Initiative are to establish a safer and more secure maritime space; a better governance of the seas; and a smart and resilient blue economy.

**EUSAIR**<sup>128</sup>: The EU Strategy for the Adriatic and Ionian Region is a macro-regional strategy adopted by the European Commission and endorsed by the European Council in 2014. The Strategy was jointly developed by the Commission and the Adriatic-Ionian Region countries and stakeholders, which agreed to work together on the areas of common interest for the benefit of each country and the whole region. Its Pillar 1 focuses on Blue Growth Topic 1 – Blue technologies; Topic 2 – Fisheries and aquaculture; Topic 3 – Maritime and marine governance and services).

The **European Ocean Pact**<sup>129</sup>:: The Ocean Pact is a comprehensive strategy to better protect the ocean, promote a thriving blue economy and support the well-being of people living in coastal areas. It brings together the European Union's policies and actions related to the ocean and creates a unified and coordinated plan for managing the ocean. It is built around six priorities: 1. Protecting and restoring ocean health; 2. Boosting the competitiveness of the EU sustainable blue economy; 3. Supporting coastal and island communities, and outermost regions; 4. Advancing ocean research, knowledge, skills and innovation; 5. Enhancing maritime security and defence; and 6. Strengthening EU ocean diplomacy and international

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<sup>124</sup> https://www.iucn.org/regions/mediterranean

<sup>125</sup> https://medblueconomyplatform.org/

<sup>126</sup> https://maritime-spatial-planning.ec.europa.eu/

<sup>127</sup> https://westmed-initiative.eu/

<sup>128</sup> https://www.adriatic-ionian.eu/

https://oceans-and-fisheries.ec.europa.eu/european-ocean-pact\_en

ocean governance. As part of this last priority, the EU will strengthen its ocean diplomacy to protect the ocean, promote EU interests and values, and advance multilateral cooperation. This will help create a fairer international playing field, benefiting both EU fisheries and global sustainability. In this way, The EU will enhance its ocean diplomacy to protect the ocean, promote EU interests and values, and advance multilateral cooperation, helping to create a fairer international playing field that benefits both EU fisheries and global sustainability. Under this strategic priority, the European Ocean Pact proposes to encourage the swift ratification and implementation of the Biodiversity Beyond National Jurisdiction Agreement and to support its implementation in developing countries through a €40 million contribution to the Global Ocean Programme. It also aims to support the entry into force and implementation of phase one of the World Trade Organisation agreement on banning harmful fisheries subsidies and to conclude negotiations on phase two, as well as to pilot an International Platform for Ocean Sustainability (IPOS).

The **Pact for the Mediterranean** 130: the new Pact for the Mediterranean has being prepared by DG MENA, in cooperation with the European External Action Service (EEAS). Thirty years after the launch of the Barcelona Process, it aims to provide a renewed impetus to the EU's engagement in the Mediterranean region. The Pact is expected to be presented in autumn 2025, and is being developed following intensive and in-depth consultations with partner countries, Member States, as well as local authorities, civil society, academia, research institutions, the business sector, and other interested parties from both the EU and the Southern Mediterranean region. The Pact for the Mediterranean covers the ten countries of the Southern Neighbourhood (Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine 131, Syria and Tunisia). It seeks to strengthen the common space of peace, prosperity, and stability in the Mediterranean region, building on the foundations of the Agenda for the Mediterranean and deepening cooperation in areas of mutual benefit. Based on an open and frank political dialogue with partner countries, the Pact identifies thematic areas for joint action to deliver concrete improvements and foster integration through collaborative initiatives. These include specific actions in areas such as energy and clean tech, trade and investment, talent, skills and job development, higher education, culture and sport, digital and transport connectivity, and security.

The UfM has continued to provide structural support to the governance of the Sustainable Blue Economy approach at regional level. As a key milestone, the UfM EU and Jordan Co-Presidency, the UfM member countries, the UfM Secretariat and Mediterranean stakeholders gathered together at the **Mediterranean Sustainable Blue Economy (SBE) stakeholders in Athens on 19-20 February 2024** to exchange on the knowledge-base, best practices, and advancements related to the implementation of the 10 priority areas of work agreed by the 43 Euro-Mediterranean countries within the 2021 UfM Ministerial Declaration on Sustainable Blue Economy. The conference acted as a 'living lab', with 11 thematic and multi-stakeholder workshops whereby substantial feedback on the progress in the implementation of the SBE approach in the Mediterranean was gathered<sup>132</sup>.

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 $<sup>^{130} \</sup>quad \text{https://north-africa-middle-east-gulf.ec.europa.eu/what-we-do/pact-mediterranean\_en}$ 

<sup>&</sup>lt;sup>131</sup> This designation shall not be construed as recognition of a State of Palestine and is without prejudice to the individual positions of the Member States on this issue

<sup>&</sup>lt;sup>132</sup> https://medblueconomyplatform.org/wp-content/uploads/2024/03/2nd-ufm-sk-conf-sbe-outcomes-main-messages.pdf

In addition, the **Union for the Mediterranean Regional Platform on Sustainable Blue Economy (SBE)** (formerly known as UfM Working Group on Blue Economy) has continued to meet on a regular basis in order to steer and support the implementation of the relevant SBE priorities.

In terms of sub-regional initiatives, as of October, 2022, the **WestMED Initiative** is supported by the new "Sea Basin Strategies Assistance Mechanism", which provides technical assistance to three EU Sea Basin Strategies: Atlantic Ocean, Black Sea, and the Western Mediterranean. In this context, during the European Maritime Days 2024 held in Svendborg, Denmark, the Presidencies/Chairmanships of the three sea basin strategies involved, along with the Greater North Sea Initiative announced the launch of an informal cooperation group to meet on a yearly basis, with the participation of DG MARE.

On 23 June 2023, following the countries' reports and the EC report evaluating the WestMED Initiative's implementation so far<sup>133</sup>, that listed as one its main recommendations to 'reconfirm and streamline priorities', Ministers and high-level representatives from the 10 WestMED countries met in Malta together with representatives of the European Commission and the Union for the Mediterranean to reassess and update the priorities stated in the WestMed Framework for Action as supported by the WestMED Initiative.

In this framework, the countries renewed and adjusted their commitments on a **new 2023 WestMED**Ministerial declaration<sup>134</sup>, streamlining the WestMED Framework for Action priorities to focus on:

- Sustainable production and consumption, and in particular, through the support of the transition of
  Maritime Transport, Green shipping, and Ports towards carbon-neutrality and zero emission and
  ports as hubs for energy; Innovative and restorative aquaculture and fisheries and Coastal and
  maritime eco-Tourism.
- Maritime Clusters
- Blue skills and jobs
- Ocean literacy and youth
- Promoting Maritime Spatial Planning (MSP)
- Decarbonisation of the blue economy and, importantly, boosting the Marine Renewable Energy sectors
- Stepping up the efforts to tackle air and marine pollution
- Increasing ambition for preserving marine and coastal biodiversity in the Mediterranean
- Promoting training and technology transfer
- Developing coastal resilience solutions and early warning systems
- Maritime security and surveillance as a pre-condition for a prosperous and sustainable blue economy in the Mediterranean.

The 2023 WestMED Declaration is fully in line with the 2nd UfM Ministerial Declaration on Sustainable Blue Economy adopted on 2 February 2021 and its related Roadmap for implementation. It is also fully aligned to the EC Communication on the sustainable approach to the Blue Economy in the EU, from May 2021.

Additionally, as it has been previously mentioned, the **Mediterranean Lighthouse** (BlueMissionMED CSA) in the framework of the EU Mission Restore our Oceans and Waters has been established as a new

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<sup>133</sup> https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52023DC0003&from=EN

 $<sup>^{134}\,</sup>https://westmed-initiative.ec.europa.eu/wp-content/uploads/2023/06/WestMED-2023-Revised-Ministerial-Declaration-Final-Draft.pdf$ 

horizontal support structure to support the implementation of the Mission objectives in the Mediterranean basin. The Sustainable Blue Economy Partnership (SBEP)135 also constitutes an unprecedented effort to pool research and innovation investments and align national programmes at pan-European scale, including the Mediterranean basin.

In parallel, the Regional Action Plan for Sustainable Consumption and Production in the Mediterranean (SCP) is a forward-looking framework to complement and work in full synergy with existing national and regional policy frameworks, and to support the implementation of the Barcelona Convention and its Protocols. The SCP Action Plan supports the implementation of the 2030 Agenda for Sustainable Development and is structured around four key economic sectors for the region, (i) food, fisheries and agriculture, (ii) goods manufacturing, (iii) tourism, (iv) housing and construction. 136 Progress on the Regional Action Plan on Sustainable Consumption and Production in the Mediterranean (2016 - 2027) is measured using a set of SCP indicators that were selected among existing international indicators or new indicators for the Sustainable Development Goals (SDGs). The indicators -encompass six thematic areas - (1) land use, (2) water (efficiency), (3) energy (efficiency), (4) pollution, (5) resource (efficiency), and (6) behaviour (producers and consumers) - and a set of macro-indicators - were selected among existing international indicators or new indicators for the Sustainable Development Goals (SDGs). Information on the indicators and the Mediterranean Sustainability Dashboard is available at the Mediterranean Observatory on environment and sustainable development managed by Plan Bleu. 137 During the 2020-2021 period, also at the request of COP21, the list of SCP indicators was reviewed, its database was updated, and fact sheets were prepared for each of the selected indicators with the support of SwitchMed II. 138

At the level of programmes and projects, the Interreg EURO-MED programme has launched three calls for project proposals targeting the third priority of the Programme "Mediterranean Governance", Specific Objective (SO) 6.6 "Other actions to support better cooperation governance". In this framework, and after the closure of the PANORAMED139 project, several follow-up projects fostering institutional dialogue and governance in the Euro-Mediterranean region across thematic missions have recently been approved (GOV4MED -focusing on tourism as previously mentioned-, Go4Med Nature, in line with the mission on protecting, restoring and valorising the natural environment and heritage, and EUCLID, which aims at promoting green living areas 140).

Finally, it is important to note that the UfM labelled the Interreg EURO-MED Programme's approach towards governance. The approach is based on a new typology of governance projects, particularly Thematic Community Projects and Institutional Dialogue Projects. The UfM label has recognised the dialogue-based governance approach of the Interreg EURO-MED as a relevant provision to support a better governance of the Mediterranean and contribute to climate neutral and resilient society. In addition, the UfM label facilitates the institutional dialogue among all actors while deepening and expanding the effective exchange and transfer of mutual relevant results. Thanks to the label, the institutional dialogue sought by the Interreg EURO-MED programme will reach both shores of the Sea.

<sup>135</sup> https://bluepartnership.eu/

<sup>136</sup> https://www.obs.planbleu.org/en/action-plan-on-scp/

<sup>137</sup> https://www.obs.planbleu.org/en/action-plan-on-scp/

<sup>138</sup> https://switchmed.eu/policy/monitoring-progress-on-the-regional-action-plan-on-scp-in-the-mediterranean/

<sup>139</sup> https://governance.interreg-med.eu/

 $<sup>^{140}\ \</sup> https://interreg-euro-med.eu/wp-content/uploads/documents/call3\_list\_final\_results\_.pdf$ 

Within this same programme, new "governance" projects have been approved since 2023. These include the Community4 projects, such as Community4Innovation<sup>141</sup> which focuses on bolstering the innovative sustainable economy (ISE) in the Mediterranean region by developing and enhancing capacity for research and innovation. Community4Nature<sup>142</sup> aims to establish a Community of Practice (CoP) for coordination among different levels of knowledge and policy in order to approach the challenges faced by biodiversity protection and adaptation and mitigation to climate change in the region. Community4Tourism<sup>143</sup> focuses on contributing to territorial cooperation on tourism within the Mediterranean region, especially through enhancing the outlook of sustainable tourism. There are also the Dialogue4 projects, such as Dialogue4Innovation<sup>144</sup> which also aims to contribute to a more innovative and sustainable economy in the region, and Dialogue4LivingAreas 145 which takes on a holistic approach to creating green living areas in the Mediterranean through promotion of energy efficiency, citizen energy communities, sustainable urban transport, sustainable waste and water management and the development of urban agriculture, among other objectives. The Dialogue4Nature 146 project works to establish a Mediterranean Resilience Network (MRN) which will coordinate cooperation on a regional level through coordination on climate change, biodiversity and the achievement of policies conducive to sustainable development. Lastly, the Dialogue4Tourism147 project aims to increase the coordination and institutional capacity on a various institutional levels across the Mediterranean in order to transform the regional approach to tourism to be greener, smarter and more resilient.

# 3.2.3 Emerging findings

Based on the analysis of all of the above, the main emerging findings with regards to the Declaration priority on governance include the following:

1. The existence of a rich ecosystem of governance structures both at regional and subregional level can be observed.

A wide variety of governance structures and institutional frameworks can be identified in the Mediterranean region. This ecosystem of organisations, international associations or collaborative networks can be found both at a regional and sub-regional level and comprises virtually all relevant blue economy related sectors.

2. These ecosystems entail both organisations with a holistic approach and sector-related organisations

Central in the ecosystem and with a holistic approach: Union for the Mediterranean, the Maghreb Arab Union (MAU) or the 5+5 Dialogue.

https://keep.eu/projects/27706/Mediterranean-innovation-su-EN/

https://www.conisma.it/it/community4nature-project/

https://planbleu.org/en/projects/community-4-tourism/

<sup>144</sup> https://www.adriaticionianeuroregion.eu/projects/dialogue4innovation/

https://keep.eu/project-ext/27709/

https://keep.eu/projects/27712/Dialogue4Nature-the-Institu-EN/

<sup>147</sup> https://keep.eu/projects/27710/Dialogue4Tourism-Institutio-EN/

Sector related organisations include: the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention), Mediterranean Action Plan (MAP), or the General Fisheries Commission in the Mediterranean (GFCM).

- 3. A fundamental strength: Two instrumental platforms/tools, which serve the development of the blue economy in the Mediterranean:
  - +The Mediterranean Blue Economy Stakeholder Platform.
  - +The European Maritime Spatial Planning Platform.

# 4. Dedicated sub-regional cooperation frameworks in the West and Adriatic Ioanian region: Not in the East MED

From a more sub-regional perspective, the WestMED Maritime Initiative and the EUSAIR: European Union Strategy for the Adriatic and Ionian region (Pillar 1 Blue Growth) offer dedicated collaborative frameworks which bring together national and regional authorities with the wider blue economy communities., thus covering and offering dedicated support in these two geographies. By contrast, the eastern part of the Mediterranean does not enjoy a governance structure to facilitate cooperation among stakeholders and blue economy related actors.

# 3.2.4 Stocktaking of the Ministerial Declaration and exploring ways forward and future actions

As a final step in the analysis and going back to the main priorities as included in the UfM Ministerial Declaration with regards to governance, and to identify potential avenues for future cooperation in the governance field, the two following aspects can be underlined:

- It needs to be acknowledged that, as underlined above, there is already an existing rich and quite comprehensive ecosystem of governance structures both at regional and sub-regional level.
- This leads to the assumption that most of the future avenues of actions will need to be linked to the search for further synergies and complementarities among the existing organisations and frameworks of regional cooperation operating in the sea basin (rather than the creation of new ones).

In brief, the Declaration includes four specific calls for further action:

Firstly, the Declaration calls to increase the number of opportunities for exchange of experiences and best practices, as well as cooperation between the countries of the Mediterranean region, maximizing the potential of the two sub-regional initiatives (WestMED and EUSAIR) and encouraging the involvement of other UfM countries in relevant activities.

Given that the WestMED Initiative and EUSAIR are recognised as successful examples of cooperation, focused on clear goals and acting as catalysts for the development of sustainable blue economy projects in the region, the proposals for the future could come from two different angles:

Firstly, identify clear elements of good practice which can be replicated at regional level by some other frameworks or initiatives, especially in the topics of **governance** (i.e. how the actual WestMED Initiative and the macro regional strategy EUSAUIR work in terms of planning and decision making) and in the key aspects on **project development support** through the work of dedicated Technical Groups (for instance, and in the case of the WestMED Initiative: Green Transport, sustainable aquaculture or the WestMED clusters alliance).

Secondly, both the WestMED Initiative and the EUSAIR have a geographical component, which makes them put the focus on a given part of the Mediterranean region. In this way, exploring ways of a more articulated joint work (taking the shape of concrete pilot actions) with the Blue Economy Working Group could be an option.

The Declaration also calls on relevant Managing Authorities and participating countries to further enhance synergies between future Interreg programmes and other European Union funds, aligning them to the extent possible to address the needs of the whole region whilst avoiding double funding, and promoting their contribution to the achievement of policy objectives set out either in the UfM context, or within the context of agreements between the European Union and third countries, or within the context of other regional cooperation agreements;

In this regard, a short and concise strategy for cooperation with EU funding sources, and especially with the INTERREG Programmes operating in the Mediterranean could be sought. This strategy could represent the basis for cooperation with INTERREG Programmes in the Mediterranean (INTERREG MED, INTERREG NEXT MED, cross-border Programmes), with the aim to reinforce synergies and cooperation between the INTERREG Programmes and the priorities identified in the Declaration on Sustainable Blue Economy.

Building on the INTERACT series of events to "Improving Synergies in the Mediterranean post 2020- How to achieve inter-programme cooperation?" where both Interreg and ENI CBC programmes participated together with EU Member States and Partner countries of the 2021-2027 programming task forces, with the support of DG REGIO and DG MARE, an agreement on synergies and related actions with the UfM Blue Economy Working Group could be envisaged.

A non-exhaustive list of potential actions and joint activities to be included in this cooperation strategy could include the following:

- Co-organising events, exchange of best practices, communication; establish regular meetings, ideally on a quarterly basis.
- Joint seminars and webinars before launching Programmes calls (to activate regional stakeholders and experts) and to disseminate previous results.
- Providing inputs on possible areas of intervention as identified during UfM activities including
  mainly the BE Working Group and Webinars organised in the context of the blue economy sector,
  etc. to be considered by INTERREG Managing Authorities when drafting calls and ToRs.
- Specific cooperation with the UfM Blue Economy Working Group and the UfM Secretariat to support the capitalisation of valuable projects across the Mediterranean.
- Potential participation of UfM representatives (i.e., Chair or Blue Economy Working Group) in relevant ad hoc Programmes Monitoring Committees meetings and with specific modalities to be jointly identified.
- Support the process of utilising projects' results to feed evidence-based policymaking in the region.

As a third call for action, Ministers encourage the engagement of all the relevant national and local authorities.

Opportunities for this third call for action might have a more limited scope than the two previous ones, as this engagement of subnational levels of government is taking place already, following the institutional architecture of the different Member States and countries.

In any case, and for this engagement of sub-national levels of government to be further developed, three organisations could play a pivotal role to secure a more active involvement in the activities of the UfM Blue Economy Working Group:

ARLEM (Euro-Mediterranean Regional and Local Assembly), CPMR (Conference of Peripheral Maritime Regions) Mediterranean Commission or MEDCITIES (network of Mediterranean local governments).

Specific activities could then be identified in different scopes of action, with CPMR and MEDCITIES playing a role for bringing cities and regions into future project consortia, and ARLEM playing a more political role (based on the experience of the Nicosia Initiative). All these opportunities should be further discussed and exchanges with these three organisations should be scheduled.

Finally, the Declaration calls on other donors to further support the fruitful cooperation in the region and complement the ongoing and future actions, as possible and opportune.

For this call for action, organisations such as the World Bank and the European Bank of Reconstruction and Development should be taken into consideration, together with the African Development Bank. All three of them include in their portfolios blue economy related projects, especially in the case of the World Bank, which is already quite active in northern Africa in this context.

#### 3.3 Enabler: Sustainable investment in the blue economy

#### 3.3.1 Introduction

On 17 May, the European Commission adopted the Communication on a new approach for a sustainable blue economy in the EU "A Green Recovery for the Blue Economy – Transforming the EU's Blue Economy for a Sustainable Future". This strategy sets out a detailed agenda for the sector to transition from "Blue Growth" to a sustainable blue economy, which drives the green transition, replacing unchecked expansion with clean, climate-proof and sustainable activities. The Communication set out a detailed agenda for the blue economy. To implement this agenda, the European Commission and the European Investment Bank Group, composed of the European Investment Bank and the European Investment Fund (EIF) will increase their cooperation on a sustainable blue economy. The institutions will work jointly with Member States to meet existing financing needs to reduce pollution in European seas and support investment for blue innovation and blue bioeconomy.

The new European Maritime, Fisheries and Aquaculture Fund - especially with its 'BlueInvest' platform and the new BlueInvest Fund - will support the transition towards more sustainable value chains based on the oceans, seas and coastal activities. To further finance the transformation, the Commission has urged Member States to include investments for a sustainable blue economy in their national resilience and recovery plans as well as their national operational programmes for various EU-funds from now to 2027.

As regards private investments, agreed ocean-specific sustainability principles and standards such as the EU-sponsored Sustainable Blue Economy Finance Initiative should be used in relevant investment decisions.

Across the Mediterranean, the blue economy as a whole is an essential driver for growth and jobs for the region. ocean-related activities in the Mediterranean Sea generate an annual economic value of US\$450 billion, which compared to the regional GDPs, makes it the fifth largest economy in the region after France, Italy, Spain and Türkiye. This value represents about 20% of the world's annual GMP,' in an area which makes up only 1% of the world's ocean. Furthermore, the economic assets of the Mediterranean Sea are conservatively valued at a staggering US\$5.6 trillion. Although these figures are impressive, they only partially demonstrate the significance of the Mediterranean Sea, as the intrinsic value of biodiversity and the numerous intangible benefits of a healthy sea cannot be adequately reflected in economic terms. <sup>149</sup>

However, this source of wealth remains under threat from several human induced challenges, including overfishing, pollution and environmental degradation, as well as the multiple impacts of global climate change. The mapping of investment sources undertaken reveals that there are a multitude of sources to finance blue economy projects. A wide range of funds and financing opportunities are available for the next decade, in particular for the current EU programming period (2021-2027) in support of a sustainable blue economy in the Mediterranean. These sources of finance should be fully optimised in order to address the current

<sup>148</sup> https://ec.europa.eu/info/news/european-commission-adopts-new-communication-sustainable-blue-economy-2021-may-17 en#:~:text=Search-

<sup>&</sup>quot;European%20Commission%20adopts%20New%20Communication%20on%20Sustainable%20Blue%20Economy,Economy%20for%20a%20Sustainable%20Future%E2%80%9D.

<sup>149</sup> https://wwfint.awsassets.panda.org/downloads/reviving mediterranean sea economy full rep lowres.pdf

challenges faced by the region, and synergies between public grants and private investments should be strengthened, in order to achieve a truly sustainable Mediterranean blue economy.

Calls for fully sustainable financing (and investments) are constantly emerging as an opportunity for the Mediterranean region. A wide array of public and private streams of finance are increasingly available. These are both through regional and global initiatives addressing the blue economy as well as more broadly aiming to support climate change mitigation and adaptation across the sea basin).

Contributing to the dissemination of these opportunities and calls is key to reach all countries and potential beneficiaries. In line with this, DG MARE and the UfM are planning an event in June 2022 as regards investment/finance in sustainable blue economy in the Mediterranean countries (especially in non-EU states).

From the UfM Ministerial Declaration:

# As regards sustainable investment in the blue economy:

- 73. Concerned about the critical status of the marine environment in the Mediterranean and the uneven levels of economic development and access to finance, including concessional finance, between countries in the region, both for public and private stakeholders as well as the lack of capacity, in particular in the developing UfM countries;
- 74. Ministers welcome the increasing interest of European and International Financial Institutions in the sustainable blue economy, and in particular their active participation in meetings of the UfM Blue Economy Working Group, as well as other events organized by the UfM Co-Presidency and Secretariat;
- 75. Ministers reiterate their call on UfM members to continue making the necessary domestic reforms to create a more conducive environment for investments;
- 76. Ministers commit to promote the transition to sustainable blue economy in their national recovery strategies;
- 77. Ministers call upon International Financial Institutions, development partners, public and private actors to prioritize investment in the sustainable blue economy according to the Sustainable Blue Economy Finance Principles and notably in the following domains:
- a. preservation of the marine environment;
- b. innovation in a sustainable blue economy, circular economy, waste management and reduction;
- c. sustainable food value chains from the sea incl. both fisheries and aquaculture;
- d. marine renewable energies and de-carbonization of blue economy sectors;
- e. sustainable maritime transport including energy efficiency in ports;
- f. sustainable coastal and maritime tourism, including the protection and valorisation of maritime cultural heritage;
- g. adaptation to climate change, notably adapting relevant infrastructure and acting against coastal erosion by using nature-based solutions. 150

<sup>&</sup>lt;sup>150</sup> Quote from the UfM Ministerial Declaration: <a href="https://ufmsecretariat.org/wp-content/uploads/2021/02/Declaration-UfM-Blue-Economy-EN-1.pdf">https://ufmsecretariat.org/wp-content/uploads/2021/02/Declaration-UfM-Blue-Economy-EN-1.pdf</a>

#### 3.3.2 State of the art of activities

On a global scale, in the mapping we find initiatives such as the United Nations' Sustainable Blue Finance Initiative and the UN Sustainable Blue Economy Finance Principles <sup>151</sup>, or the PROBLUE initiative <sup>152</sup> from the World Bank, among many others. Funds are available to developing countries and countries with economies in transition to meet the objectives of the international environmental conventions and agreements.

In the Mediterranean region, the main sources of investment in the blue economy include public funding opportunities offered by International Organisations, governments, Multilateral Development Banks (MDBs), structural funds, in particular the European Regional Development Fund (ERDF) and the EMFAF, and green funds. Such funding is offered in the form of grants or concessional lending instruments aiming at co-financing of projects and providing support to infrastructure development and SMEs. As a key example, the Environmental Fund<sup>153</sup> for Mediterranean Marine Protected Areas (MedFund) aims at strengthening long-term financial sustainability of Marine Protected Areas (MPAs) through the establishment of a fund jointly managed by Mediterranean states and regional organisations (MedPAN, WWF-Mediterranean, IUCN-Mediterranean, among others).

On 22<sup>nd</sup> June, 2022, the **Union for the Mediterranean's Conference "Investing in a Sustainable Blue Economy in the Mediterranean"** took place in Barcelona, with the goal of encouraging investments in- and funding of- Sustainable Blue Economy projects and initiatives in the Mediterranean region, especially in the Southern countries<sup>154</sup>.

**BlueInvest Africa 2022** took place in the Seychelles on 7-8 September as a hybrid event. It aimed to showcase Africa's potential on sustainable blue economy; foster innovation, sustainability, and entrepreneurship; and promote public-private cooperation. It has a continental scope, and will consist of pitching sessions, B2B meetings, an exhibition showcasing small-scale African projects, and opportunities for networking between participants and potential future partners. Attendance by entrepreneurs from the Med region is welcome and encouraged.

The World Ocean Council (WOC) has partnered with the City and Port of Barcelona to develop the leading global hub for the Blue Economy, headquartered in Barcelona. To celebrate this new partnership, the WOC hosted two summits: Sustainable Ocean Summit SOS 2022 (17<sup>th</sup>-18<sup>th</sup> October, 2022) followed by the launch of the Global Blue Finance Summit BlueFIN 2022 (19<sup>th</sup> October, 2022). The UfM has joined forces with WOC as Endorsing Partner of the Events.

The **2<sup>ND</sup> UfM Annual Stakeholder Conference on Sustainable Blue Economy** took place in Athens on February 19 and 20 2024, which emphasised the need for greater cooperation among blue economy stakeholders and financial institutions, particularly to support southern Mediterranean countries in the framework of the Blue Mediterranean Partnership.

<sup>&</sup>lt;sup>151</sup> The Sustainable Blue Economy Finance Principles are the foundational keystone to invest in the ocean economy. Launched in 2018, they are the world's first global guiding framework for banks, insurers and investors to finance a sustainable blue economy. They promote the implementation of SDG 14 (Life Below Water), and set out ocean-specific standards, allowing the financial industry to mainstream sustainability of ocean-based sectors. More info at: <a href="https://www.unepfi.org/blue-finance/">https://www.unepfi.org/blue-finance/</a>

https://www.worldbank.org/en/programs/problue

https://ufmsecretariat.org/project/medfund/

<sup>154</sup> https://ufmsecretariat.org/ufm-blue-finance-conference/

Financial initiatives and investment tools specifically targeted to the Sustainable Blue Economy and aimed at Mediterranean countries in particular are currently in the making, including:

- European Investment Fund (EIF)'s Mediterranean Investment Platform: based on the good
  experience of Portugal Blue, the EIF intends to extend/replicate the fund at regional level on the
  Mediterranean. They are looking for a number of "champion" EU Member States (MSs). Although
  funding will go to MSs SMEs, these can have projects and initiatives in non-EU countries and may
  partner with non-EU countries.
- During COP 27 in Sharm-El-Sheikh, the Blue Economy Mediterranean Partnership was announced by the UfM, EIB, EBRD, and the EU in the framework of the Mediterranean Pavilion. This new partnership proposed a new multi-donor and multi-IFI financing instrument that aims at fostering innovative Blue Economy investments in the Mediterranean basin (with a focus in non-UE countries), while tackling environmental and climate change-related challenges and harnessing the related benefits following the successful example of the NDEP (Northern Dimension Environmental Partnership) in the Baltic Sea and Western Balkan Investment Facility.
- At COP28 in Dubai, partners and donors of the Partnership reaffirmed their commitment to developing the sustainable blue economy in the Mediterranean and Red Sea regions, announcing €9.5 million in funding from the European Commission, SIDA and the AFD, with more donors and countries expected to follow. With the aim of mobilising €1 billion in investments, the EIB, AFD, KfW, CPD and EBRD will co-operate to co-finance blue economy projects within the Partnership. Currently, the Partnership is reviewing proposals from Med Countries on investment projects.
- In 2023, the European Investment Bank launched the EU Blue Champions Scheme to promote and support promising ocean innovation, identify market failures, and highlight gaps in forwardlooking technologies across blue economy sectors through awarding financial assistance to companies to sale up their businesses which adhere to the EU Mission on Oceans and Waters.
- The European Investment Fund's **Blue Revolution Fund**<sup>155</sup> which focuses on boosting sustainable aquaculture investments. It is supported by €20 million under the InvestEU Programme and will aim to boost sustainable and innovative practices amongst participating companies. The Fund will also contribute to marine ecosystem restoration goals and is strategically aligned with the objectives of the European Green Deal. It is managed by Hatch Blue.
- The upcoming National Blue Economy Strategy in Morocco is expected to mobilise valuable resources.
- In the second half of 2024, the project BlueMissionMed will organise pitching and investors workshops which could be a good chance for greater coordination and cooperation with the UfM under this Ministerial Declaration priority.

Moreover, as part of the implementation of the UfM Ministerial on the Blue Economy, two immediate/short-term joint priorities were identified under this area:

# Financing the blue economy innovation ecosystems

**Blue economy innovation ecosystems** are essential drivers for transformative change in coastal and maritime regions. A number of financing initiatives exist to support such ecosystems. However, when it

https://www.eif.org/InvestEU/news/2024/eif-supports-blue-revolution-fund-in-boosting-sustainable-aquaculture-investments-backed-by-the-investeu-programme.htm

comes to maximising access to sustainable finance, innovation, and related opportunities, Southern Mediterranean Countries may require greater support, including capacity building and awareness raising.

To address this issue, the webinar "Financing Innovation Ecosystems for the Mediterranean Sustainable Blue Economy: Local actors, opportunities, and challenges" was held on January 30<sup>th</sup>, 2023. This UfM webinar aimed at shedding a light on the different actors, their experiences, and specific roles that contribute to supporting the development of innovation ecosystems in and for the sustainable blue economy across various Mediterranean countries:

- 'Enablers' including maritime clusters, accelerators, incubators, etc.
- 'Financing operators' including local development banks, SMEs support, etc.
- 'International supporters' including investors engaged in impact 'blue' financing.

Among the outcomes of this activity, the lack of understanding and awareness persists as a key barrier to raise the level of investments in the Blue Economy. Mutual dialogue and recognition among the actors involved, as well as regulatory and investment preconditions were highlighted as key drivers to further expand investments.

## Capacity building on project development

On October 25<sup>th</sup>, 2022, in Aqaba, a **Capacity Building session on project proposal development** was organised by the UfM Secretariat and delivered in the framework of the 12<sup>th</sup> UfM Blue Economy Working Group, and in a hybrid modality in order to allow wider participation of relevant blue economy stakeholders from various Mediterranean countries. The session was aimed at covering the typical participants' requests of information for training, including effective proposal writing, consortium building and partner roles, development of a project idea, the financial management of a project, aligning project objectives to the funding programme of choice priorities, as well as general tips and hints on the process.

As such, the training was organised around two main blocks: first, a theoretical block, which included modules on the main funding opportunities available in the blue economy market, the "do's and don't's" of proposal writing process, project intervention logic design, and consortium building. Secondly, a practical session to put into action the knowledge acquired was set-up for participants present on-site. The practical example applied to an open EMFAF 2022 Call for Proposals.

In the table below, we summarise the outcomes and recommendations regarding this priority emerging from the 2<sup>nd</sup> UfM Stakeholders Conference on Sustainable Blue Economy, held in Athens on 19-20 February 2024.

Outcomes and recommendations of Multi-stakeholder Workshop 11: The blue finance process in the Mediterranean – Boosting sustainable investments in the Med Blue Economy

The panel discussed the opportunities offered to southern Mediterranean Countries
through the newly launched Blue Mediterranean Partnership (BMP), the initiative
promoted by the UfM, the EC and the EIB in cooperation with EU Donor countries and
established in November 2023, with the aim to support large-scale sustainable blue

- economy investments. It also allowed for a broader understanding of other investment opportunities across the Mediterranean, including the PAMEX's Local Investment Finance Facility (PLIFF), and addressing how such initiatives support investment 'pipelines' to address the structural challenges and related potential of the Med SBE.
- The need for greater cooperation among blue economy stakeholders and financial institutions was stated, as expressed in the WestMED Ministerial Conference held in Malta in 2023.
- A number of relevant EU initiatives were reviewed, including BlueInvest, offering support to 100s of businesses aiming to scale-up their solutions and offering an important opportunity in the upcoming 2nd BlueInvest Africa matchmaking event, InvestEU blending funds from the European Maritime Fisheries and Aquaculture Fund (EMFAF) with private financing and allowing for guarantees addressing investment risks across the Mediterranean, and a number of initiatives aimed at scaling up innovation, such as the Sustainable Blue Economy Partnership (SBEP), the Mediterranean Lighthouse for the EU Mission Ocean, and Horizon Europe.
- The discussion also served to highlight the needs and challenges expressed by southern Mediterranean partner Countries currently being supported by the BMP Egypt, Jordan and Morocco. A general consensus emerged on the need to support financial investments in relevant SBE sectors, including maritime transport, the support to energy transition, access to water including desalination, nature-based solutions to restore the marine ecosystems, and sustainable marine aquaculture.
- Furthermore, the role of Technical Assistance in supporting bankable projects was
  particularly appreciated, as a key means to support a better vision on the management
  of exiting funds and to allow for a greater alignment of southern pipelines with the
  potential offered by financing mechanisms such as the BMP and the PLIFF.
- The need to learn how to best communicate with the national and international banks and to persuade local and international investors on the opportunities offered by blue financing was a key element highlighted.
- Finally, the role of key players including maritime clusters emerging across southern
   Mediterranean Countries as intermediaries with local businesses and start-ups was highlighted.

Regarding the call for actions highlighted by the UfM Ministerial Declaration, the domains underlined are addressed due to the variety of funding opportunities, that either offer investment for several domains (such as the BlueInvest Fund or are focused on specific areas. Thanks to the development of the Sustainable Blue Economy Finance Principles<sup>156</sup> (under the Sustainable Blue Economy Finance Initiative of the UN), signed by a multitude of institutions as well as its founders (European Commission, WWF, the World Resources Institute (WRI) and the European Investment Bank (EIB)), it enhances the promotion of sustainable finance in blue economy.

In this chapter, we first take stock of the relevant work in terms of financing carried out by international organisations world wide. Then, we present different financing options by typology of sources of financing. We have divided them into three broad typologies: general funding programmes, ad hoc calls and projects, and specific financing sources (such as funds and crowdfunding initiatives).

#### International organisations

- United Nations: with the creation of the Sustainable Blue Economy Finance Initiative UN-convened global community focused on the intersection between private finance and ocean health.
- WWF: also a part of the Sustainable Blue Economy Finance Principles, it includes investment in several projects and grants and has dedicated schemes for financial support, the majority of which go towards the development of the green economy but it also applies to the development of the sustainable blue economy. Moreover, it has developed the Mediterranean Marine Initiative (MMI)<sup>157</sup>.
- World Resources Institute: works with partners to implement on-the-ground projects and mobilize
  diverse coalitions to put the world on a more sustainable path. It is currently investing in the Ocean
  Watch platform<sup>158</sup> that supports the flow of data into policy and aims to present essential and
  reliable ocean data to policymakers.
- International Development Banks have a focus on sustainable investment in blue economy. There are four main multilateral banks operating in the region:
  - EIB: The EIB, as the EU climate bank, is investing in the sustainable blue economy and supporting initiatives aimed at reducing pollution and preserving this natural resource.<sup>159</sup>
  - World Bank: has an overall oceans portfolio worth over \$9 billion and includes relevant actions such as PROBLUE is a new Multi-Donor Trust Fund, that supports the development of integrated, sustainable and healthy marine and coastal resources.
  - African Development Bank, which finances at the national and international level and has financed the Nador West Med Port Complex (NWM) Construction Project<sup>160</sup>, among other projects.
  - European Bank for Reconstruction and Development: also a signatory to the Sustainable Blue Economy Finance Principles<sup>161</sup>.

 $\frac{principles/\#:\text{``:text=The}\%20Sustainable\%20Blue\%20Economy\%20Finance, invest\%20in\%20the\%20ocean\%20economy. \&text=They\%20promote\%20the\%20implementation\%20of, sustainability\%20of\%20ocean\%20based\%20sectors.$ 

https://www.eib.org/en/about/initiatives/preserving-our-oceans/index.htm

<sup>156</sup> https://www.unepfi.org/blue-finance/the-

<sup>157</sup> https://www.wwfmmi.org/who\_we\_are/mediterranean\_marine\_initiative/

<sup>158</sup> https://www.wri.org/initiatives/ocean-watch

 $<sup>{\</sup>color{red}^{160}} \quad \underline{\text{https://projectsportal.afdb.org/dataportal/VProject/show/P-MA-DD0-004}}$ 

https://www.ebrd.com/news/2020/ebrd-signs-up-to-sustainable-blue-economy-finance-principles.html

# 1. Funding programmes

As part of established programmes, we can find at least 19 programmes with the potential to fund blue economy initiatives in the region, including general ones such as the LIFE Programme, <sup>162</sup> COSME Europe's programme for small and medium-sized enterprises <sup>163</sup>, Erasmus + Programme <sup>164</sup>, or Horizon Europe <sup>165</sup>, which includes specific missions such as the Oceans and Seas Mission and the sea basin lighthouse coordination activities <sup>166167</sup>.

The eligible countries for LIFE, COSME, Erasmus+ and Horizon Europe programmes are the following 168:

- 1. Legal entities established in the following countries and territories will be eligible to receive funding through the aforementioned programmes:
  - The Member States (MS) of the European Union (EU), including their outermost regions;
  - The Overseas Countries and Territories (OCT) linked to the Member States: Anguilla, Aruba, Bermuda, Bonaire, British Antarctic Territory, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Curaçao, Falkland Islands, French Polynesia, French Southern and Antarctic Territories, Greenland, Montserrat, New Caledonia and Dependencies, Pitcairn, Saba, Saint Barthelemy, Saint Helena, Saint Pierre and Miquelon, Sint Eustatius, Sint Maarten, South Georgia and the South Sandwich Islands, Turks and Caicos Islands, Wallis and Futuna Islands.
  - The associated countries (AC).
  - Multitude non-EU countries except where this is explicitly excluded in the call text.
  - 2. International European interest organisations will also be eligible to receive funding.
  - 3. Legal entities established in countries not listed above will be eligible for funding when such funding is explicitly foreseen in a call.
  - 4. In addition, legal entities established in countries not listed above and international organisations (IOs) will be eligible for funding:
  - When funding for such participants is provided for under a bilateral scientific and technological agreement or any other arrangement between the EU and an international organisation or a third country:
  - When the Commission deems participation of the entity essential for carrying out the action funded.

These programmes are in addition to the specific regional ones of all the areas relevant to the development of the blue economy in the Mediterranean, of which the most relevant are: Interreg Adriatic-Ionian<sup>169</sup>, Interreg

https://ec.europa.eu/info/news/life-programme-2018-oct-25 en

<sup>163</sup> https://ec.europa.eu/growth/smes/cosme\_es

https://erasmus-plus.ec.europa.eu/

<sup>165</sup> https://ec.europa.eu/programmes/horizon2020/

https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/healthy-oceans-seas-coastal-and-inland-waters es

https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-miss-2021-ocean-03-02

https://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-ga\_en.pdf

https://www.adrioninterreg.eu/index.php/projects/support-to-applicants/

Balkan Mediterranean<sup>170</sup>, Interreg Greece-Italy<sup>171</sup>, Interreg Greece-Cyprus<sup>172</sup>, Greece-Albania<sup>173</sup>, Interreg Italy-Croatia<sup>174</sup>, Interreg Italy-Malta<sup>175</sup>, Interreg Marittimo-IT FR-Maritime<sup>176</sup>, Interreg NEXT MED<sup>177</sup>, Interreg EuroNEXT<sup>178</sup>, Interreg EuroMed<sup>179</sup>, Interreg PRIMA MED<sup>180</sup>, and Interreg SUDOE<sup>181</sup>.

The eligible countries in these cases are the bilateral Member States/countries which from part of each of the programmes. Interreg PRIMA MED varies its eligible countries by call, Interreg Euromed includes EU Member States and associated countries and for Interreg NEXT MED the eligible countries will probably be all Mediterranean countries except Morocco.

In addition, the Northern African countries from the Mediterranean region also benefit from the African Development Fund<sup>182</sup> that enhances sustainable economic development and social progress of African countries. Moreover, the Interregional Innovation Investments (I3)<sup>183</sup> will likely open up to neighbouring countries.

# 2. Ad hoc Calls

In addition to the aforementioned category of regional development programmes and their respective calls, there are a multitude of recent or active ad hoc calls that provide opportunities to finance specific projects in different areas. The main thematic areas covered by these calls include a wide variety of topics, including topics that are crucial to the future of Blue Growth in the Mediterranean (driven by the BLUEMED Strategic Research and Innovation Agenda<sup>184</sup>), strengthening the capacity and accountability of civil society organisations and facilitating their involvement in political decision-making processes, identifying cutting-edge circular economy solutions and by promoting business development and start-up growth. Reinforcing the sustainability, prominence, governance and resources of the different networks (MEDPAN, BLUEMED, BLUEBIO, Galatea, etc.) is also a recurring topic.

- BLUEBIO COFUND<sup>185</sup>
- BlueCrowdMED<sup>186</sup>
- BLUEMED Call for Start-up Actions<sup>187</sup>
- European Civil Protection and Humanitarian Aid Operations<sup>188</sup>

<sup>170</sup> http://www.interreg-balkanmed.eu/calls-for-proposals/

https://greece-italy.eu/call-for-project/

https://interreg.eu/programme/interreg-greece-cyprus/

<sup>173 &</sup>lt;a href="https://greece-albania.eu/calls">https://greece-albania.eu/calls</a>

https://www.italy-croatia.eu/what-we-fund

https://italiamalta.eu/bandi/bandi-aperti/?lang=en

<sup>176</sup> http://interreg-maritime.eu/

 $<sup>\</sup>frac{}{\text{https://www.enicbcmed.eu/sites/default/files/National\%20consultations/ISO1\%20activities.pdf}}$ 

<sup>178</sup> https://www.euronext.com/en

https://interreg-med.eu/about-us/futureinterregmedprogramme/

https://prima-med.org/wp-content/uploads/2021/12/Preliminary-version-AWP2022.pdf

https://www.interreg-sudoe.eu/gbr/home

https://www.afdb.org/en/about-us/corporate-information/african-development-fund-adf

https://ec.europa.eu/regional\_policy/en/policy/themes/research-innovation/i3/

http://www.bluemed-initiative.eu/strategic-research-and-innovation-agenda/

https://bluebioeconomy.eu/bluebio-call-announcement/

<sup>186</sup> https://en.goteo.org/channel/bluecrowd

http://www.bluemed-initiative.eu/start-up-actions/

 ${\color{red}^{188}} \quad \underline{\text{https://ec.europa.eu/echo/funding-evaluations/financing-civil-protection/calls-for-proposal en} \\$ 

- European Commission Blue Economy Window 2020<sup>189</sup>
- European Commission Annual work programme for grants and procurement
- Galatea Blue Growth Accelerator<sup>190</sup>
- Mava Foundation<sup>191</sup>
- MedPAN<sup>192</sup>
- European Cooperation in Science and Technology<sup>193</sup>

Specific projects like the SwitchMed<sup>194</sup>, funded by the Neigbourhood Policy Funds which supports sustainable consumption and production practices for a circular economy in the Mediterranean, contribute towards strengthening the capacity and accountability of civil society organisations and facilitate their involvement in political decision-making processes, and institutional framework.

# 3. Financing (crowdfunding) initiatives<sup>195</sup>

When it comes to specific financing initiatives (including crowdfunding), there is also a wide array of blue economy topics subject to being financed by these initiatives. These range from conservation issues at the local level and protecting plants, promoting regional networking and preserving three ecosystems (coastal, freshwater and traditionally managed landscape) to protecting biodiversity of chemical pollutants (for example implementing sustainable projects that reduce or avoid plastics and other waste and clean up waste and wastewater).

In more general terms, support is provided to fight against the effects of climate change, safeguarding biodiversity and making the switch to a green, circular and social economy in the Mediterranean a reality. The main beneficiaries (independently of whether they could also be donors in other projects or calls) of the financing options available are government agencies, civil society organisations, private sector companies, research institutions, among the broad diversity of potential partners, to implement projects and programs in recipient countries. Organisations or Funds that have carried out specific financing/crowdfunding initiatives are the following:

- Blue Sustainable Ocean Strategy<sup>196</sup>
- BlueInvest<sup>197</sup>
- Critical Ecosystem Partnership Fund<sup>198</sup>

<sup>189</sup> https://emff-infoday-2020.converve.io/index.php

<sup>190</sup> https://galateaproject.eu/innovation-support-call/

https://mava-foundation.org/for-grant-seekers/
 https://medpan.org/on-going-calls-for-tender/

<sup>193</sup> https://www.cost.eu/

<sup>194</sup> https://switchmed.eu/

<sup>&</sup>lt;sup>195</sup> The definition of "crowdunding" used here is the one provided by the European Commission: Crowdfunding is an emerging source of financing involving open calls to the public, generally via the internet, to finance projects through monetary contributions in exchange for a reward, product preordering, lending, or investment. For small businesses, access to this form of finance represents an alternative (or a complement) to more traditional sources of finance like debt finance. Crowdfunding platforms are websites where fundraisers such as SMEs can source financial pledges from a crowd. There are several crowdfunding types, the most common types used by profit-making SMEs and start-ups are peer-to-peer (or marketplace) lending and equity crowdfunding: <a href="https://ec.europa.eu/growth/access-finance-smes/policy-">https://ec.europa.eu/growth/access-finance-smes/policy-</a>

 $<sup>\</sup>frac{areas/crowdfunding}{en\#:} en\#: $$ ``text=Crowdfunding\%20 is \%20 an \%20 emerging\%20 source, preordering\%2C\%20 lending\%2C\%20 lending\%2C\%20 in which is the proof of the proo$ 

https://www.eib.org/en/about/initiatives/preserving-our-oceans/index.htm

<sup>&</sup>lt;sup>197</sup> The BlueInvest pilot initiative managed by the European Investment Fund, provides financing to underlying equity funds that strategically target and support the innovative blue economy: <a href="https://ec.europa.eu/commission/presscorner/detail/en/IP">https://ec.europa.eu/commission/presscorner/detail/en/IP</a> 21 222 <sup>198</sup> <a href="https://www.cepf.net/">https://ec.europa.eu/commission/presscorner/detail/en/IP</a> 21 222 <sup>198</sup> <a href="https://www.cepf.net/">https://www.cepf.net/</a>

- European Investment Bank<sup>199</sup>
- European Investment Fund<sup>200</sup>
- European Maritime, Fisheries and Aquaculture Fund (EMFAF)<sup>201</sup>
- European Bank for Reconstruction and Development:
- Fonds Français pour l'Environnement Mondial (FFEM)<sup>202</sup>
- Global Environment Facility <sup>203</sup>
- MedFund<sup>204</sup>
- Prince Albert II Monaco Foundation<sup>205</sup>
- PROBLUE Initiative from the World Bank <sup>206</sup>
- Swedish International Development Cooperation Agency SIDA<sup>207</sup>
- The SwitchersFund<sup>208</sup>
- United Nations' Sustainable Blue Finance Initiative<sup>209</sup>
- World Wildlife Fund<sup>210</sup>
- Sub-national Climate Finance Initiative (SnCF)<sup>211</sup>
- Dutch Fund for Climate and Development<sup>212</sup>
- The CommonWealth<sup>213</sup>
- JPI Oceans<sup>214</sup>
- European Fund for Sustainable Development under the European External Investment Plan<sup>215</sup>
- Critical Ecosystem partnership Fund<sup>216</sup>
- International Fund for Agricultural Development<sup>217</sup>
- Green Climate Fund <sup>218</sup>
- InnovFin<sup>219</sup>

# 3.3.3 Stocktaking of the Ministerial Declaration and exploring ways forward and future actions

As described throughout this section, there are a wealth of financing opportunities available. However, most funds remain very competitive and often focussed or mainly targeted to the northern shore of the region. As a result, the ability of southern Mediterranean stakeholders to access to such valuable stream of financial support may remain limited.

<sup>201</sup> https://ec.europa.eu/oceans-and-fisheries/funding/emfaf\_en

<sup>203</sup> https://www.thegef.org/about/funding

138

<sup>199</sup> http://www.eib.org/efsi/index.htm

<sup>200</sup> https://www.eif.org/

https://www.ffem.fr/fr

https://themedfund.org/en/to-become-a-beneficiary/

<sup>&</sup>lt;sup>205</sup> https://www.fpa2.org/foundation-projects.html

https://www.worldbank.org/en/programs/problue

https://www.sida.se/English/

<sup>208</sup> https://www.theswitchersfund.eu/en/

https://www.unepfi.org/blue-finance/

<sup>210</sup> https://www.wwfmmi.org/newsroom/latest\_news/?uNewsID=2479966

<sup>211</sup> https://www.subnational.finance/

https://wwf.panda.org/wwf\_news/?355950/Dutch-Fund-for-Climate-and-Development-open-for-business

<sup>213</sup> https://thecommonwealth.org/

- 214 https://www.jpi-oceans.eu/
  215 https://ec.europa.eu/eu-external-investment-plan/home\_en
  216 https://www.cepf.net/
  217 https://www.ifad.org/en/
  218 https://www.greenclimate.fund/
  219 https://www.eib.org/en/products/mandates-partnerships/innovfin/index.htm

This is an aspect that might limit the potentials for the implementation of the UfM Ministerial Declaration, and dedicated support to financial access by southern stakeholders would be needed for a more well-balanced support towards a sustainable blue economy development across the Mediterranean (e.g., local support for financing visibility and intermediation for greater reach of financial support towards the southern shore).

Furthermore, we suggest considering the following avenues of additional support towards the implementation of the UfM Ministerial Declaration and an even more effective financing of a sustainable blue economy across the Mediterranean:

- Offer relevant training on project management and conceptualisation to enable countries to identify and access all available resources. This could be particularly relevant for EU Member States and southern Mediterranean non-EU countries. One such example is the pilot training session carried out as part of the WestMed Assisstance Mechanism. This session aimed at Blue Economy stakeholders in the Southern Mediterranean who were interested in acquiring basic knowledge and skills for EU project proposal development.<sup>220</sup> Relevant topics could include sessions on the logical framework approach, do's and don'ts in the preparation of these type of projects, consortium building, budget preparation as well as concrete examples of on-going blue economy related projects counting with a presence of Southern Mediterranean partners.
- Innovative financial solutions will be required to enhance ocean and coastal resilience. A new financing path that could provide new ways of financing the blue economy are blue bonds. They are relatively new compared to the green bonds but have shown a great potential in the Republic of Seychelles. Since then, more successful examples have taken place such as the Nordic Investment Bank "Nordic-Baltic Blue Bond". As the largest asset class in the global financial market, the bond market offers an opportunity for private sector capital to be mobilized to support the blue economy and the achievement of SDG 14. Alongside WWF's Oceans Practice Statement on Outcome of COP26, Fiji announced its plan to issue a sovereign blue bond in 2022 intended to raise up to \$100 million for investments to deliver a resilient sustainable blue economy, create jobs and protect Fiji's ocean and biodiversity, and called for urgent investment in coral reef conservation as part of delivering ocean-climate solutions in support of people and nature.
- International multilateral banks to continue the efforts to bring together the development of the blue
  economy. The four main international banks operating in the region are the European Investment
  Bank, European Bank for Reconstruction and Development, World Bank and the African
  Development Bank. The former three are signatories of the Sustainable Blue Economy Finance
  Principles showing that collaboration on investment is possible and useful.

BlueInvest is a European Commission and European Investment Fund initiative that aims to improve access to finance and investment readiness for start-ups, early-stage businesses, and SMEs active in the blue economy. It is enabled by the European Maritime and Fisheries Fund and has proved to be successfully working. Moreover, it is also an example of collaboration between EU and Africa, for instance, with the BlueInvest Africa event. This is an opportunity for enhancing further collaboration between companies operating in the African blue economy and European investors.

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https://www.westmed-initiative.eu/effective-project-proposal-development-for-eu-funding-29-june-2021-online/

### 3.3.4. Update on progress in the implementation of the Ministerial Declaration (July 2025)

The new Pact for the Mediterranean establishes a strong commitment to advancing funding and investment in the region. It sets out to work closely with the Commissioner for Budget, Anti-Fraud and Public Administration to develop a simpler, more focused, and responsive long-term budget that aligns with European strategic priorities and the ambition to position the EU as an Investment Commission. Under the leadership of the High Representative/Vice-President, the Pact will drive the creation of comprehensive partnerships centred on investment, economic stability, job creation, energy, transport, security, migration, and other shared interests. It will also support the scaling up and deepening of trade and investment with Mediterranean partners by promoting cooperative standard-setting, a reliable regulatory framework, and market-driven demand. In collaboration with other Commissioners, the Pact aims to foster the necessary conditions for a favourable business environment and investment climate, ultimately working towards a more integrated Euro-Mediterranean market.

### 3.4 Tool: Marine research and innovation, skills, careers and employment

#### 3.4.1 Introduction

Research and innovation (R&I) offer significant opportunities for Mediterranean countries to develop and use their assets for the benefit of their economies and of their peoples, especially as a driver of economic development. Moreover, the maritime sector plays a relevant role in employment in the Mediterranean region, where fisheries support 200,000 direct and 500,000 indirect jobs.

In light of the current challenges such as climate change, overexploitation of fish stocks or pollution that continuously changes the Mediterranean, it is clear that research and innovation on these fields is key to address these challenges. In addition, the new approach for a sustainable blue economy in the EU - Transforming the EU's Blue Economy for a Sustainable Future, highlights the role of this priority for achieving the EU's ambition to become climate-neutral by 2050, for protecting and restoring marine ecosystems and for making the blue economy a font of ideas and action to generate sustainable innovation. It also emphasises the potential for a transition towards a sustainable blue economy in terms of skills, careers and employment. These range from fisheries to tourism, but are not fully exploited, as there is a shortage of skills and qualifications on many sectors in the blue economy.

The UfM Ministerial Declaration on Sustainable Blue Economy (2<sup>nd</sup> February 2021) calls for:

- The uptake of the BLUEMED Implementation Plan and the continuation of the BLUEMED Initiative for Blue Jobs and Growth in the Mediterranean region under Horizon Europe, as a key element for an integrative implementation of the Research and Innovation Agenda for the Mediterranean through a coordinated multi-programme effort;
- The promotion of the Start-up Europe Mediterranean (SEMED) initiative, aiming, in partnership
  with BLUEMED, to connect all the actors of the innovation system in the Mediterranean area as
  well as other instruments and initiatives to support the sustainable development, job creation
  and competitiveness of Blue economy SMEs;
- The continuation and further development of the Copernicus marine service to tackle coastal challenges as called by the MED7 group white paper "Copernicus for the blue economy in the Mediterranean sea and beyond";
- The establishment of blue economy clusters including transnational ones, the strengthening of
  existing clusters, and increased cooperation between national clusters in the Mediterranean;
- Stakeholders to work together in sector-specific partnerships to develop and implement strategies to address skill gaps and promote decent work and tailored training for blue economy sectors;
- Further use of the Mediterranean Blue Economy Stakeholder Platform managed by the UfM Secretariat to facilitate contacts between existing education networks, exchange information including pedagogic tools and serve as an interface for mobility programs;
- The UfM countries to collaborate in the relevant international fora to adapt training and education requirements for maritime-related professions, in view of technological developments and climate-related commitments.

#### 3.4.2 State of the art of activities

To briefly describe the state of the art of Sustainable Blue Economy (SBE) frameworks, initiatives and actions related to Marine research and innovation, skills, careers and employment in the Mediterranean, a selection of relevant actions (on the basis of a longer-list of collected initiatives and projects) will be outlined in this section. The selection aims to be as illustrative as possible on the variety of subjects being addressed and has been carried out based on a combination of criteria, including:

- Relevance with respect to the calls for action set for this UfM Ministerial Declaration priority, as presented above;
- k) Geographical coverage;
- I) In the case of projects, the incorporation of sustainability and innovation aspects in its approach;

Figure: Overview of regional frameworks, subregional processes, and transnational and multi-country projects on Marine research and innovation, skills, careers and employment (based on the compiled database of SBE actions and initiatives in the Mediterranean)

# Regional Policy frameworks, processes or initiatives

- Valletta Declaration on Strengthening Euro-Mediterranean Cooperation through Research and Innovation
- BLUEMED Strategic
   Research and Innovation
   Agenda
- UfM Regional Platform in Research and Innovation
   Startup Europe

Mediterranean (SEMED)

# Subregional processes or initiatives

- BLUEMED Initiative
- JPI Healthy and Productive Seas and Ocean
- Mediterranean Initiative for Jobs (Med4Jobs)

#### Transnational projects

- SEGRALCS Predictive tool of seagrass health to optimize the design of low
- IMAGINE-B5G Advanced 5G Open Platform for Large Scale Trials and Pilots across Europe
  - WIN-BIG Women In Blue Economy Intelligence Gathering and Capacity
     Boosting
- 2B-BLUE Boosting the Blue Biotechnology community in the Mediterranean
   Smart Twin Transition

# Regional

• BLUEMED Initiative, adopted by all UfM countries, fosters integration of knowledge and efforts to develop Blue Growth in the Mediterranean and promotes joint actions on relevant research and innovation priorities. This includes actions such as the EU Mission Restore our Ocean and Waters, in which BLUEMED Initiative will collaborate through the national hubs and building on the experience of the Pilot for a healthy and plastic-free Mediterranean. This mission aims to know, restore and protect our ocean and waters by 2030. This to be achieved by reducing human pressures on marine and freshwater environments, restoring degraded ecosystems and sustainably harnessing the essential goods and services they provide. Among its main instruments to reach these goals, it must be highlighted the BlueMed Strategic Research and Innovation Agenda (SRIA), that outlines a set of key challenges for the Mediterranean and, particularly knowledge gaps, specific activities enabling the blue growth as well as measures for capacity creation and skills' enhancement and the Implementation Plan, that presents the shared priority goals and a set of strategic action to reach them.

 $<sup>{\</sup>color{red}^{221}} \quad \underline{\text{https://op.europa.eu/en/publication-detail/-/publication/672ddc53-fc85-11ea-b44f-01aa75ed71a1}$ 

- Mediterranean Blue Economy Stakeholder Platform (MED BESP), that plays a crucial role in promoting a common and coherent framework, bearing in mind regional specificities of the Mediterranean, to enhance exchange and dissemination of knowledge, networking and capacitybuilding.
- Moreover, the UfM launched a Regional Platform in Research and Innovation that actively supports the sustainable development of the Mediterranean region and plays a central role in stimulating and monitoring Euro-Mediterranean cooperation in the fields of research and innovation.
- In addition, the Copernicus Marine Service provides free, open, regular and systematic baseline information on the state, variability and dynamics of the blue (physical), white (sea ice) and green (biogeochemical) ocean with respect to the global ocean and European regional seas. Additionally, the European Marine Observation and Data network provides openly accessible, standardised and harmonised, data, metadata and data products of in-situ marine data for the European Seas, in 7 disciplinary areas. The Mediterranean sea basin is addressed through the Mediterranean Monitoring Forecasting Centre (MED MFC) as well as through diverse actions such as training sessions for the Mediterranean.
- Other relevant actors at regional level include the PRIMA (Partnership for Research and Innovation in the Mediterranean Area), UNIMED (Mediterranean Universities Union) and EMUNI (Euro-Mediterranean University).

Extending cluster capacity across the Mediterranean

UfM support has primarily been building upon the WestMED Cluster Alliance, including through the support in expanding the current alliance overall cluster dialogue towards the eastern Mediterranean.

By building upon the current cooperation between the UfM and WestMED Initiative to foster maritime clusters in the region, this action might also support the follow-up to the Malta Roadmap for maritime clusters. As such, endorsement of dialogue between Mediterranean clusters across the two shores, and particularly of eastern and western North African countries, may be envisaged. This element is to be discussed jointly with the WestMED Cluster Alliance and the southern partners involved in it – in the south, Tunisia has established a maritime cluster and Mauritania is about to do so. Morocco and Algeria have too shown interest, and are actively involved in the 'Malta Roadmap'. In this respect, the newly published EMFAF call on cluster cooperation may offer a valuable support.

In terms of programmes and funding opportunities, the European Maritime, Fisheries and Aquaculture Fund (EMFAF) launched in October 2022 the call for projects "Maritime clusters as an innovative enabler for a Sustainable Blue Economy in the Mediterranean"<sup>222</sup>. This call focuses on establishing new national maritime clusters and enhancing cooperation between Northern and Southern clusters across the Mediterranean and among clusters, SMEs, academia and research centres, institutional actors and financial institutions. It also aims to improve the involvement of maritime clusters in policy-making at the regional/national levels, in particular as regards the definition/upgrade of smart specialisation strategies.

<sup>222</sup> shorturl.at/hLU07

In addition, with relation to the topic of skills, another call for proposals was launched under EMFAF, titled "Blue careers for a sustainable blue economy"<sup>223</sup>. With a budget of EUR 7.5 million, the blue careers call aims to contribute to the development of the next generation of blue skills and to provide opportunities for attractive and sustainable maritime careers.

Under the first EMFAF call on maritime clusters, the project **CALLMEBLUE – Cluster ALLiance MEd BLUE**<sup>224</sup> was awarded and kicked-off in December 2023. The project was conceived within the WestMED Cluster Alliance, aiming to strengthen existing clusters alliances in the Mediterranean area in order to accelerate north-south regional cooperation processes towards the emerging of strategic maritime clusters in the North African area. In particular, the project aims to prepare the ground for new maritime clusters to be established and enhance cooperation between northern and southern Mediterranean maritime clusters through detection of specific needs and barriers; organize tailored capacity building processes directed to emerging clusters and to the blue economy ecosystem at local level to set up structured regional networking processes. It is also aimed at engaging relevant regional, sub-regional public bodies and formulate recommendations through engagement plan design and implementation. Led by ForMare – Polo Nazionale per lo Shipping, participating clusters in the project include Cluster BIG – Blue Italian Growth; Federazione del Mare; Strategis Maritime ICT Cluster; Fórum Oceano; Clúster Marítimo-Marino de Andalucía (CMMA); Cluster Maritime Tunisien; Pôle Mer Méditerranée; ANIMA Investment Network; and SARL Leanovator. This project will also launch a Maghreb Maritime Cluster Allliance in the context of the WestMED and the broader Mediterranean maritime cluster collaboration.

It is important to note that the creation of a Libyan maritime cluster is being promoted and exchanges are ongoing to foster synergies across mediterranean Blue Clusters under the WestMED Alliance and CallMe Blue project - involving EU clusters as well as southern clusters in Tunisia, Mauritania and Morocco<sup>225</sup>.

Moreover, under the COSME Programme, the **MEDBAN** project (Mediterranean Blue Acceleration Network)<sup>226</sup>, B2B sessions successfully took place throughout the 2<sup>nd</sup> UfM SBE Stakeholders Conference, aimed at providing acceleration services to innovative SMEs and focusing on fostering internationalization, blue skills development, and capacity-building for a shared maritime cluster ecosystem in the Mediterranean basin. As a result, the **Tunisian Maritime Cluster and the Greek Blue Cluster Strategis signed an MoU** during the Conference, a clear example of successful cooperation aimed at boosting the Sustainable Blue Economy beyond the Western Mediterranean.

Beyond the topic of clusters, in the context of the Euro-Mediterranean cooperation in Research & Innovation, the Horizon Europe work programme 2023-2024 included a Mediterranean Initiative with around 37 topics with a budget of around €320 million under Calls for Proposals that are particularly relevant for cooperation with the Mediterranean region. This contributes to the R&I Roadmaps on the three priorities for EU-Mediterranean cooperation in research and innovation adopted at the UfM R&I Ministerial of 27 June 2022: health, renewable energy and climate change.

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<sup>&</sup>lt;sup>223</sup> https://cinea.ec.europa.eu/funding-opportunities/calls-proposals/emfaf-call-proposals-blue-careers-sustainable-blue-economy, en

<sup>224</sup> https://callme-blue.eu/about-project

<sup>&</sup>lt;sup>225</sup> https://westmed-initiative.ec.europa.eu/national-stakeholder-dialogue-in-morocco-paves-the-way-towards-a-national-sustainable-blue-economy-strategy/

https://magellancircle.eu/project/medban-mediterranean-blue-acceleration-network/

Under this framework, the UfM and the European Commission announced the launch of the **Euro-Mediterranean Hub for Research and Innovation (R&I)**<sup>227</sup> on 16-18 April 2024 in Brussels. Considered a groundbreaking initiative, it aims at providing a platform for fostering Mediterranean cooperation while advancing the UfM Regional Policy Dialogue on R&I. It is expected to facilitate the implementation of R&I roadmaps focusing on the three critical thematic areas mentioned above, among others. The Hub serves as a repository consolidating a wealth of resources including research findings, best practices, policy papers, and other publications. Moreover, it offers a comprehensive array of opportunities for R&I collaboration, ranging from funding opportunities to initiatives supporting cooperative Mediterranean R&I infrastructures, such as networks and cluster organisations as discussed above.

In addition to this, the **Partnership on Research and Innovation in the Mediterranean Area (PRIMA)**<sup>228</sup>, a European Partnership aimed to build research and innovation capacities and develop knowledge and common innovative solutions in the Mediterranean, has recently amended its basic act to continue working towards its goals and extended its for three more years (2025-2027), aligning this activity with the programme cycle under Horizon Europe. Algeria, Egypt, Jordan, Lebanon, and Morocco, who signed bilateral international agreements with the EU in 2017-2018 to participate in PRIMA, are expected to revise and sign their agreements to continue participating in PRIMA from 2025 to 2027. The Partnership launched several calls for proposals in 2024 around different thematic areas covering the food-water-agriculture- women nexus. Moreover, it created the "Woman Greening Food Systems Award" in March 2024, underscoring the indispensable role of women in cultivating sustainable food systems<sup>229</sup>.

When it comes to **blue skills and ocean literacy**, after the dedicated workshop held by the Sea Basins Assistance Mechanism in Denmark potentials for joint cross sea basin work on were discussed with EU-wide initiatives (SBEP, EU4Ocean coalition, EU Mission Oceans, and the Energy Transition Partnership). This may possibly be resulting in a new cross-sea basin Technical Group on this matter, including the Mediterranean, which would capitalise on international practices and state of the art and offer valuable insights for the Med basin.

Lastly, as acknowledged by the UfM and the European Commission, Smart Specialisation Strategies (S3) serve as a fundamental mechanism for regions to direct investment towards research, development, and innovation to drive the Sustainable Blue Economy approach. To leverage this potential, the European Commission (DG MARE in close collaboration with DG REGIO) inaugurated a S3 Thematic Platform for Sustainable Blue Economy<sup>230</sup> in 2022. Since then, this platform provided support to establishing a framework to encourage the formation of an interregional network of thematic S3 partnerships that collaborate in shared areas of smart specialization. DG REGIO launched a Call for expression of interest for new S3 partnerships by September 2023. As an outcome of this call, on 28-29 November 2023 in the context

 $<sup>{}^{227}\</sup>quad https://ufmsecretariat.org/catalyzing-innovation-euro-med-hub-research-innovation/$ 

 $<sup>{}^{228}~~</sup>https://research-and-innovation.ec.europa.eu/research-area/environment/prima\_en$ 

 $<sup>{}^{229} \</sup>quad \text{https://prima-med.org/prima-launches-the-woman-greening-the-food-systems-award-in-the-mediterranean/} \\$ 

<sup>&</sup>lt;sup>230</sup> https://ec.europa.eu/regional\_policy/policy/communities-and-networks/s3-community-of-practice/thematic\_sustainable\_blue\_economy\_en

of the S3 Forum held in Barcelona, **two new thematic partnerships** on Sustainable Blue Economy were officially initiated: 1) Smart Circular Aquaculture<sup>231</sup> and 2) Sustainable Blue Bioeconomy<sup>232</sup>.

In the table below, we summarise the outcomes and recommendations regarding this priority emerging from the 2<sup>nd</sup> UfM Stakeholders Conference on Sustainable Blue Economy, held in Athens on 19-20 February 2024.

# Outcomes and recommendations of Multi-stakeholder Workshop 1: Marine research and innovation for a Sustainable Blue Economy in the Mediterranean

- Integration of Research and Innovation: Participants emphasized the need for enhanced collaboration and integration of marine research and innovation efforts.
   Integration was identified as a crucial factor in addressing complex challenges such as climate change, biodiversity loss, and sustainable resource management.
- Technological Solutions: The workshop highlighted innovative technologies as
  essential tools for advancing sustainable practices in the Blue Economy. Discussions
  centered on the role of technology in monitoring and managing marine ecosystems,
  promoting efficient fisheries, and developing clean energy solutions.
- Cross-Sectoral Cooperation: Stakeholders emphasized the importance of crosssectoral cooperation, encouraging partnerships between academia, industry, and government. Such collaboration was deemed essential for creating comprehensive solutions balancing economic development with environmental conservation.
- Capacity Building and Education: there was large consensus on the central importance
  of capacity building and education to empower local communities and professionals.
   Strengthening knowledge and skills in marine research and innovation is seen as
  pivotal for the successful implementation of sustainable practices.
- Inclusivity and Stakeholder Engagement: Inclusivity emerged as a guiding principle, emphasizing the importance of involving all relevant stakeholders in decisionmaking processes. The workshop stressed the need for ongoing engagement with local communities, NGOs, and the private sector.
- Policy Frameworks: The discussion explored the role of effective policy frameworks in promoting sustainable practices. Participants highlighted the need for coherent policies that align with international standards and considering the unique challenges of the Mediterranean region.
- Economic Viability: Balancing economic interests with environmental sustainability
  emerged as a central theme. Participants discussed strategies to promote economic
  viability while safeguarding marine ecosystems and ensuring human well-being and
  livelihoods, thus acknowledging the delicate balance required.
- Call for Action: Participants underscored the urgency of immediate action to address
  pressing challenges in the Mediterranean's SBE. Workshop participants issued a
  collective call for stakeholders to actively engage in implementing sustainable
  solutions, practices, and policies. The outcomes of the session reflect a strong

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 $<sup>^{231}\,</sup>https://ec.europa.eu/regional\_policy/policy/communities-and-networks/s3-community-of-practice/partnership\_circular\_smart\_aquaculture\_en$ 

<sup>&</sup>lt;sup>232</sup> https://ec.europa.eu/regional\_policy/policy/communities-and-networks/s3-community-of-practice/partnership sustainable blue bioeconomy en

commitment towards collaborative, sustainable, and inclusive practices aimed at ensuring a thriving SBE across the region.

# Outcomes and recommendations of Multi-stakeholder Workshop 2: Blue skills, career pathways, and employment for a Sustainable Blue Economy

- Jobs and career opportunities across all Mediterranean SBE sectors have accelerated in the region over the past decade and virtually all SBE sectors (both traditional and emerging) are projected to grow in the years to come, until 2030 and beyond. The sectors and activities of the SBE in the Mediterranean also have the potential to play a central role in the green/blue transition in the region (decarbonization, furthering the energy transition, etc.). Steering and harnessing this potential to the benefit of our citizens, our environment, and our economies also requires us to face a number of challenges. While we are one of the youngest regions in the world (1 out of 3 Med citizens are under the age of 25), we also face one of the highest youth unemployment rates globally, compounded by a high incidence of youth not in Education, Employment, or Training (NEET).
- Key needs/challenges identified during the workshop included:
  - Enhancing our ability to capture/meet the demand in emerging sectors (i.e. offshore renewables, blue biotech, aquaculture, algae production, etc.).
  - Addressing the skills gap between the evolving needs of the market and the skills of the current workforce, namely through a demand-driven approach and by focusing on life-long learning; re-skilling and up-skilling; Technical and Vocational Education and Training (TVET); enhancing employability through certification; academic mobility; updating, standardizing, and diversifying educational curricula and training; boosting training on soft-skills; and enhancing interdisciplinarity.
  - Tackling brain drain and boosting local ecosystems' ability to support quality blue jobs and career pathways, especially in the South/East of the basin.
  - Significantly increasing private sector engagement (school-to-work transition, mentorship, matchmaking, etc.).
  - Improving communication and coordination between stakeholders at all levels (i.e. through sector-specific partnerships), and especially between academia and the private sector.
  - Communication/outreach/educational efforts should also aim to improve the perception of jobs/careers in SBE, especially among youth and women, and beginning at the early stages of education (i.e. in some SBE sectors women's integration is largely limited to the handling/processing and marketing stages of the value chain; significant barriers exist in traditionally male-dominated industries such as Energy/MRE). The relevance of ESD and ocean literacy were also stressed.
- Maritime Clusters were identified as important strategic actors to support sustainable growth and
  job competitiveness across the region. Clusters can play a 5 pivotal role in promoting the uptake
  of innovation, fostering internationalization, acting as nodes for knowledge transfer (i.e. N-S),
  enhancing access to finance, and ensuring that support provided is effective and locally
  grounded. In the Med, Maritime Clusters register a lack of competitive Managerial Staff often

- without specific innovation, entrepreneurial, and management skills or without specialization in specific but essential fields such as MSP.
- Consensus on the need to further promote knowledge/information exchange platforms at regional level. The Mediterranean Blue Economy Stakeholder Platform managed by the UfM Secretariat should play an increasing role in facilitating contacts between existing education networks, exchanging information including pedagogic tools, and serving as an interface for mobility programs.

As previously mentioned, on 27th June 2022, the Union for the Mediterranean held its first **Mediterranean Ministerial Conference on Research and Innovation**, which review and acknowledge progress made in research and innovation cooperation in the region since the Valletta Declaration on 'Strengthening Euro Mediterranean Cooperation through Research and Innovation' in 2017.

The supporting role of maritime clusters in fostering innovative blue economy value-chains has also become essential in the recent years. Dedicated UfM studies<sup>233</sup> have suggested that their presence is still limited in the Med and might require further support. More recently, the Malta Roadmap for Southern Clusters Collaboration<sup>234</sup> was endorsed as part of a joint discussion between the WestMED Initiative and the UfM. The initiative called for greater engagement of southern Mediterranean countries, both on western and eastern North African shores, in the uptake of clusters.

As such, extending cluster capacity across the Mediterranean has also been identified as an immediate/shot-term priority for the implementation of the Ministerial Declaration of Sustainable Blue Economy.

#### Subregional

 At the level of the EU, the Mediterranean Innovation Alliance to boost the Mediterranean leadership in transformative innovation of the blue economy was created under BLUEBIOMED project.

- **SEMED**, a digital platform that connects innovation ecosystems in the Euro-Mediterranean area and creates opportunities for the entire ecosystem.
- Also at EU level, the Joint Programming Initiative Healthy and Productive Seas and Oceans
  (JPI Oceans) is a platform that provides a strategic agenda and action plan to address complex
  ocean-related societal challenges that cannot be solved at national level.
- In the Western Mediterranean countries there are several initiatives, among which we can find the 5+5 Dialogue to ensure closer cooperation. The main objectives are structured into specific activities that are divided into three main axes (Networking, Research and Innovation, Higher Education).
- Building on the experience on the 5+5 dialogue, WestMED was launched. The countries involved collaborate and agree on a common roadmap for the development of a sustainable blue economy in the sub-basin to generate growth, create jobs and provide a better living environment for Mediterranean populations and is identified as a key priority skills development and circulation. Moreover, within the WestMED Conference 2021, some initiatives and good practices were

<sup>234</sup> https://westmed-initiative.ec.europa.eu/wp-content/uploads/2022/09/WestMED-Maritime-Clusters-Alliance-Malta-Roadmap-for-Southern-Clusters-18072022-published.pdf

 $https://ufmsecretariat.org/wp-content/uploads/2019/12/Maritime-Clusters-in-the-Mediterranean-Region\_Dec-2019.pdf$ 

- identified, particularly in relation to Mission Starfish 2030 implementation (such as BlueSkills project).
- Moreover, the Ocean Pact places a strong emphasis on advancing ocean research, knowledge, skills, and innovation, recognizing the importance of maintaining the EU's leadership in ocean science, technology, and data. The Pact aims to deepen understanding of the ocean and make this knowledge accessible to citizens, entrepreneurs, scientists, and policymakers, thereby supporting the restoration of marine and coastal habitats, fostering a sustainable blue economy, and enhancing climate change mitigation and adaptation. To achieve these goals, the European Ocean Pact proposes launching an EU ocean observation initiative underpinned by a dedicated research and innovation strategy, ensuring the operationalization of a European Digital Twin of the Ocean by 2030, and establishing an EU Ocean Youth and Intergenerational Ambassador Network to raise awareness about the significance of the ocean.

## Transnational and multi-country projects

- BLUESKILLS (West Med) <sup>235</sup>- It promotes opportunities for "Blue" marine and maritime careers by developing skills, exchanging knowledge and valorising research for more sustainable Mediterranean Sea. Its aim is to develop new curricula and increase employability in the marine and maritime sectors.
- **BLUEGROWTH INTERREG MED (North Med)** <sup>236</sup>- is the continuation of InnoBlueGrowth Interreg MED horizontal project (2016-2019) and aims to disseminate capitalized results and knowledge but also to create new knowledge, through dialogue among researchers, higher education, decision makers, representative of EU, national, regional, local institutions, stakeholders, citizens for evidence-based policy making as well as identify and implement new and best practices. Within its network, a number of projects related to research and innovation may be found (e.g. IBLUE, 4HELIX+)
- SEGRALCS Predictive tool of seagrass health to optimize the design of low crested structures in the Mediterranean Sea<sup>237</sup>. Coastal erosion is one of the major global threats to people, the economy, cultural assets and ecosystems in many regions of the world and also in Europe. Valuable coastal ecosystems, such as seagrass meadows, are particularly threatened by these erosion problems and effective protection measures for their conservation are urgently needed. Low-crested structures (LCS) are the typical coastal defence in Europe, with a design mainly based on their hydrodynamic and morphodynamic behaviour and little attention is usually paid to the ecological consequences of their construction. The construction of breakwaters can affect seagrasses by altering the circulation and sediment transport to the adjacent habitat, but fragmented and scientific-based criteria are difficult to manage in present engineering design and therefore ecological impacts are often not taken into account. Within this research project, the

<sup>&</sup>lt;sup>235</sup> **BLUE SKILLS countries covered:** Algeria, Italy, Malta, Mauritania, Morocco, Libya, Portugal, Spain, France, Tunisia <sup>236</sup> **BLUEGROWTH INTERREG MED countries covered:** Spain, France, Italy, Croatia, Greece, Montenegro, Albania, Malta, Cyprus

<sup>&</sup>lt;sup>237</sup> **SEAGRALCS** countries covered: Spain, France, Netherlands, Greece, and Italy

creation of a new quantitative prediction tool will be investigated to allow civil engineers and decision-makers to optimize the design of breakwaters and reduce the uncertainty related to their environmental performance, contributing to the preservation and conservation of seagrasses during the lifetime of breakwaters. In particular, the project will focus on the Mediterranean Sea to ensure the persistence of two characteristics seagrass species, Cymodocea nodosa and the most important endemic and slow-recovery Posidonia oceanica.

- IMAGINE-B5G Advanced 5G Open Platform for Large Scale Trials and Pilots across Europe

  238 aims to create an advanced and accessible end-to-end (E2E) 5G platform for Large-Scale Trials
  and Pilots, providing a set of B5G applications, enabled by the integration of advanced 5G
  disrupting technologies. The project will support 3GPP Rel-17 and beyond features which are
  crucial for implementation of private networks under real-life operational conditions to enable
  advanced 5G services which are driven by the industrial needs and requirements of a wide variety
  of verticals. The functionalities built into the B5G platform will enable these advanced 5G vertical
  applications to be demonstrated at scale and will allow the project to identify and validate new 5G
  KPIs (Key Performance Indicators) and KVIs (Key Value Indicators) across three different but
  equally fundamental domains societal, application and management. All KPIS and KVIs will be
  verified as relevant to the use cases supported, through demonstration of their importance to endto-end large-scale trials and pilots.
- WIN-BIG Women In Blue Economy Intelligence Gathering and Capacity Boosting

  239 develops female- and basin-tailored capacity-building to increase the participation and representation of women across EU geographies and BE sectors and work towards a gender balanced Blue Economy. The WIN-BIG project, backed by the European Maritime Fisheries and Aquaculture Fund through the "Women in the Blue Economy" call for proposals, wants to fill the knowledge gap and promote capacity building strategies for women.
- 2B-BLUE Boosting the Blue Biotechnology community in the Mediterranean<sup>240</sup> aims to capitalize on B-Blue positive results to: 1) Exemplify evidence-based best practices identified to help communities turn BBt research into practice, 2)Build national demonstration sites (DS) to experiment emerging technologies in local field conditions and bridge the gap among BBt research and industry for new technologies adaptation, 3) Establish strategic alliances of 5-helix stakeholders for the uptake of advanced blue biotechnologies by Med industries and 4)improve regional policies for enhancing sustainability, research and innovation capacities in Euro-Med area.
- Smart Twin Transition creates innovative tools (based on AI and other digital technologies) to support companies in the tourism chain in their digital and green transition. The project aims to strengthen the sustainable growth and competitiveness of businesses in the sector by making cross-border financing for MSMEs for the acquisition of qualified services structural and no longer occasional, redirecting existing instruments (mainstream calls for proposals) towards a shared standard model to be tested with Pilot Actions during the project period.

 $<sup>^{238}</sup>$   $\mathbf{IMAGINE}\text{-B5G}$  countries covered: Norway, Spain, Portugal, and France.

<sup>&</sup>lt;sup>239</sup> **WIN-BIG** countries covered: Portugal, Hungary, Germany, Ireland, Spain, Netherlands, and Italy

<sup>&</sup>lt;sup>240</sup> **2B-BLUE** countries covered: Spain, France, Slovenia, Italy, Albania, and Greece

## Assessment of regional coverage

Taking into account that Marine research and innovation, skills, careers and employment is a cross-cutting priority and, therefore, it is covered by many projects from different sectors, the regional coverage will only focus on the first two categories, regional frameworks and subregional processes. The figure below provides an overview of the distribution of such initiatives (frameworks, processes) across the various UfM countries in the different areas of the Mediterranean.

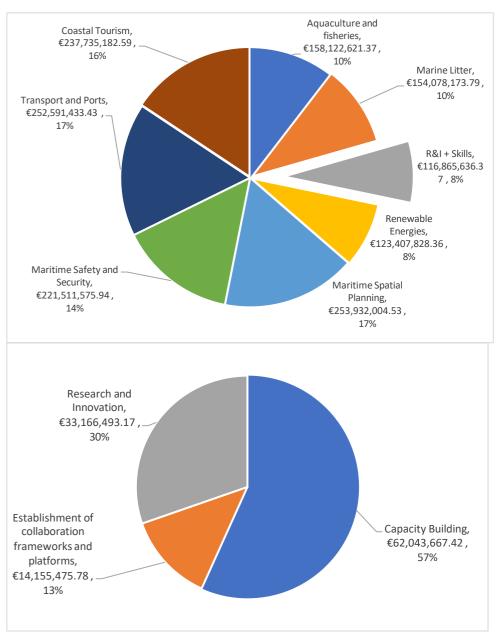
The regional coverage assessment allows for some observations:

- In general, there is a good coverage of regional frameworks across the Mediterranean, without
  relevant disparities between sub-regions. This is due, to a great extent, to the establishment of the
  BLUEMED Initiative and its Implementation Plan and Strategic Research and Innovation Agenda
  (SRIA). These instruments represent a comprehensive strategy with the views of all stakeholders
  in the Mediterranean Basin.
- Regarding subregional processes, there is relative polarization with North-West Mediterranean
  countries displaying greater presence, followed by South-West Mediterranean countries. As a
  consequence, this priority does not present a North-South divide, but rather an East-West, in part
  due to the pre-existing work of the WestMED Initiative in the Western Mediterranean.
- Another relevant finding is the low number of socioeconomic observatories in the
  Mediterranean, both at the regional and subregional level. There is a good coverage of marine
  observatories focused on biodiversity and coastal data (such as the Copernicus Marine Service,
  the European Marine Observation and Data network, citizens observatories from MedPan) but very
  few in the socioeconomic field, especially in the South.

## Expenditure of the priority

The figure below provides an overview of the expenditure of the sector compared to other SBE priorities and for different type of projects. It can be observed in Figure 2, Marine research and innovation, skills, careers and employment accounts for 10% of the overall spending on SBE priorities. As a consequence, it has the fourth highest expenditure, at the same level as Aquaculture and Fisheries.

Figure: Project expenditure per priority: Marine research and innovation, skills, careers and employment



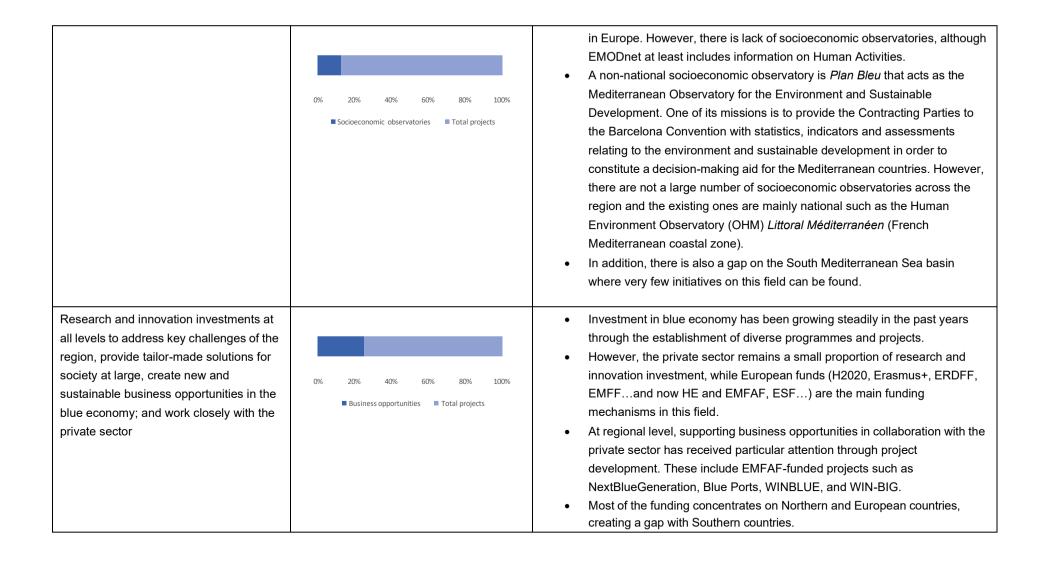
Source: Database of projects compiled for the UfM State of the Art of the Mediterranean Sustainable Blue Economy report

## 3.4.3 Stocktaking of the Ministerial Declaration: progress and opportunities

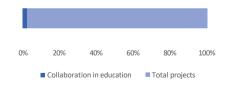
As a final step in the analysis, it is important to return to the main priorities put forward by the UfM Ministerial Declaration for the Marine research and innovation, skills, careers and employment cross-cutting priority. The table below provides a further analysis on the state of the art in advancing with the specific UfM priorities as sketched in the introduction to this chapter. It does so by building on the initiatives (frameworks/processes and projects) as reviewed earlier in this chapter and confronting those with each priority of the UfM Ministerial Declaration for this sector. The analysis allows for an assessment on the status of the implementation of each priority (a "visual check") to be used as a basis for the future UfM Roadmap.

Figure: Example of identification of opportunities per sectoral priority

UFM MINISTERIAL DECLARATION CALL	VISUAL CHECK OF CURRENT	JUSTIFICATION AND IDENTIFICATION OF OPPORTUNITIES AS PER THE MAPPING OF
FOR ACTION	IMPLEMENTATION	INITIATIVES
The uptake of the BLUEMED Implementation Plan and the continuation of the BLUEMED Initiative for Blue Jobs and Growth in the Mediterranean region under Horizon Europe, as a key element for an integrative implementation of the Research and Innovation Agenda for the Mediterranean through a coordinated multi-programme effort		<ul> <li>The BLUEMED Initiative was established in 2014 by 9 European countries with the aim of aiming at advancing a shared vision for a more productive and valued Mediterranean Sea and boosting economic growth and jobs. Afterwards, all countries of the European Union joined and with the Valetta Declaration (2017), this initiative involved all UfM countries.</li> <li>This initiative involves two main instruments, the SRIA and Implementation Plan that fosters the commitment of Mediterranean countries to address the main challenges and priorities identified. Thematic platforms are developed under this initiative engaging main national stakeholders towards the implementation of BlueMed agendas.</li> <li>Since 2014, a pilot action an A Healthy Plastic-Free Mediterranean Sea as well as Start-up Actions apart from the two key milestones (SRIA and Implementation Plan) have been developed.</li> </ul>
Invest in socioeconomic observatories and provide scientific evidence to support integrated approaches to the development of the sustainable blue economy		There are well-established and successful initiatives regarding observatories in the Mediterranean, however with a more scientific and biological approach. For example, the Copernicus Marine Service (further detailed in Maritime Safety and Security chapter) and EMODnet that offer information on the physical and biogeochemical state of the regional seas



The UfM countries to collaborate in the relevant international fora to adapt training and education requirements for maritime-related professions, stakeholders to work together in sector-specific partnerships to develop and implement strategies to address skill gaps and promote decent work and tailored training for blue economy sectors



- A variety of strategies and tools for blue career development are already in
  place in the form of transnational projects promoting the development of
  skills (BlueSkills), internship mobility between Mediterranean countries
  (HOMERe) or the integration of young people (MedNc). These seek to
  address the mismatch between the education *curricula* and the skillsets
  needed by the market as well as to promote skills and employment in
  specific sectors. The UfM has held webinars on women and blue skills,
  careers and job in Lebanon and digitalisation skills in the aquaculture and
  tourism sectors.
- However, there is a lack of regional frameworks and agreements among
  Mediterranean countries on maritime skills and academic *curricula* that
  could homogenise skills and educational requirements across the region,
  increasing employability. There are some regional fora such as 5+5
  dialogue in the West Mediterranean or UNIMED that enhance institutional
  cooperation among Mediterranean universities.
- Regarding the geographical coverage, the south, particularly the southeast is involved in fewer projects and initiatives. An increase in growth and employment opportunities in the southern countries would have positive implications for the entire region.

The establishment of blue economy clusters - including transnational ones, the strengthening of existing clusters, and increased cooperation between national clusters in the Mediterranean:



- Mediterranean clusters are in a relatively good position as most of them are growing or mature which involves that they might be rapidly reaching a stable level of maturity (growing ones) or are already well-established in their region or country (mature ones).
- However, there are geographical imbalances with the large majority of clusters being located in the North and West of the region, especially the mature ones, leaving southern clusters to be mostly very recent or even at an early stage of development and often not yet fully active.
- The western Mediterranean has enhanced the promotion of innovation in the Blue Economy through the set-up of clusters, with the EU being more regional-level while African countries are more national-level clusters.

	It seems to be a gap in southern clusters, which are also involved in less transversal clusters.
The promotion of the Startup Europe Mediterranean (SEMED) initiative, aiming, in partnership with BLUEMED, to connect all the actors of the innovation system in the Mediterranean area as well as other	<ul> <li>European and Southern Mediterranean start-ups, investors, corporates, universities, policymakers, research centres and incubators have a platform where stakeholders exchange information, ideas, experiences and build business links since 2019 thanks to SEMED initiative.</li> <li>Its implementation and support towards start-ups and SMEs promotion and</li> </ul>
instruments and initiatives to support the sustainable development, job creation and competitiveness of Blue economy SMEs	creation has been supported by the BLUEMED Start-up Actions and the SwitchMed. This last initiative offers direct support to the private sector (industry, start-ups and entrepreneurs) with a special focus on the South, where SMEs promotion may have a great impact on the employment and economy of the region.

## 3.4.4 Potential avenues for future cooperation: pilot actions / projects

Building on the overall assessment provided so far, this section provides key insights on the type of actions and support foreseen as part of the UfM Roadmap, in addressing marine research and innovation, skills, careers and employment opportunities across the Mediterranean.

Concerning the call for action "Invest in socioeconomic observatories and provide scientific evidence to support integrated approaches to the development of the sustainable blue economy" the analysis of the status of implementation carried out in the previous section points toward the following areas of potential future cooperation:

- Further development and investment on socioeconomic observatories, particularly transnational ones, but also capitalising from successful initiatives in Northern Mediterranean countries and transferring best practices to the South Mediterranean basin. Through continuously gathering data and their analysis, the region can foresee major socioeconomic needs and be prepared to meet these demands and avoid significant imbalances such as the current labour mismatch.
- Support towards ensuring the implementation of the projects that aim at developing socioeconomic observatories and their endurance, such as the EMIPO observatory under EMIPO project.

Concerning the call for action "Research and innovation investments at all levels to address key challenges of the region, provide tailor-made solutions for society at large, create new and sustainable business opportunities in the blue economy; and work closely with the private sector", the following paths for future cooperation are proposed:

- Further collaboration with the private sector is required to address the main challenges facing the region and create business opportunities, especially in relation with start-ups. The role of International Development Banks such as the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the Islamic Development Bank (IsDB) or the African Development Bank (AfBD), are particularly relevant for Southern Mediterranean countries, and are crucial for the development of the blue sectors in the region.
- Support Smart Specialisation Strategies<sup>241</sup> across the Mediterranean Sea basin. S3 is already
  an advanced process within EU Mediterranean countries, but some EU Neighbouring countries are
  also discussing the approach and piloting in their own regions. The example from north could help
  and be transferred to south Mediterranean countries. This would favour the identification of specific
  needs and innovations potentials to be promoted, as to reflect the specificities of the local valuechains across the sea basin.

 $<sup>^{241}</sup> https://s3platform.jrc.ec.europa.eu/documents/20125/247601/Smart+Specialisation+in+the+world+an+EU+policy+approach+help.pdf/126aeb09-aba3-517b-5759-aa732cd0be67?t=1621268542951$ 

Regarding the call for action "The UfM countries to collaborate in the relevant international fora to adapt training and education requirements for maritime-related professions, stakeholders to work together in sector-specific partnerships to develop and implement strategies to address skill gaps and promote decent work and tailored training for blue economy sectors":

- Further stimulating the ongoing regional dialogue process on "blue" skills, careers and jobs under the framework of UfM, with a special focus on women and youth, in particular through:
  - Bolstering relevant specific fora (such as the Higher Education Internationalisation, Academic Mobility and Vocational Education & Training processes);
  - Ensuring the continuation of the series of UfM webinars on Blue Skills held in 2021. In particular, the experience of the "Women and Blue Skills/Careers/Jobs in Lebanon" webinar could be replicated in other SEMED countries with a similar focus on gender; as well as "Digitalisation skills in the aquaculture and tourism sectors in the Mediterranean region" and "Women in blue economy in the Mediterranean" UfM webinars. Moreover, capitalising on the European Year of Youth 2022, a new (cycle of) webinar(s) could be organised with a focus on the upskilling and reskilling of young students and workers according to the needs of key Blue Economy sectors.
- Further support for EU4Ocean Coalition for Ocean Literacy, and building on this experience capitalise and extend towards the whole Mediterranean Sea basin, including Southern countries. Capitalise on the achievements of this project (Platform for organisations and individuals engaged in Ocean Literacy initiatives, a European Youth Forum for the Ocean and a Network of European Blue Schools, WG on Healthy and Clean Ocean) as well as the achievements of BlueSkills project once its implementation period ends
- Commissioning an ad-hoc Study on Blue Skills in the Mediterranean, focusing on the identification of gaps, needs and opportunities for a selected number of Blue Economy sectors and sub-sectors (in particular, green maritime transport, yachting and cruising, aquaculture, blue bioeconomy and marine renewable energy). This study shall place the emphasis on youth and gender equality, and especially address technical, digital and high skills. The main goal of this study is to provide an analysis and evaluation of the current situation and provide tailored suggestions to the gaps identified to be considered and taken into account by national authorities as well as regional and subregional initiatives.

Regarding the call for action "The establishment of blue economy clusters - including transnational ones, the strengthening of existing clusters, and increased cooperation between national clusters in the Mediterranean":

• Further promotion and establishment of transnational clusters as they are relatively unusual. Recent initiatives have promoted them such as Mediterranean Maritime Surveillance Cluster under PROteuS. Further support towards southern clusters, mostly at an early stage of development and often not yet fully active, so they can grow in number and size, thus be able to better engage with other regional counterparts. Building upon existing initiatives (WestMED Cluster Alliance) and projects (e.g. MISTRAL, BlueSkills, Culture & Creative Industry) which are aiming at the same cooperation purpose across the region – with the ambition to channel investments towards

innovation of business models and business ecosystems across the Mediterranean. Bring greater awareness on the role of maritime clusters in south-east countries so to accelerate their establishment. Promoting the development of existing clusters such as the Algerian or the Tunisian Maritime Clusters to grow and become mature in order to be able to scale-up to become regional.

3.4.5 Measuring progress of the Ministerial Declaration implementation: proposed indicators

## **Output (Process indicators)**

- +Number of actions, sets of activities and projects of regional cooperation **planned** in the area of Marine research and innovation, skills, careers and employment, particularly addressing the following sub-priorities:
  - Development of socioeconomic observatories
  - Promotion of business opportunities in collaboration with the private sector
  - Collaboration and agreements between countries on educational requirements
  - Ocean literacy
  - Clusters development
  - Smart specialisation strategies
- +Number of actions, sets of activities and projects of regional cooperation **being implemented** in the Mediterranean area in the field of Marine research and innovation, skills, careers and employment (with regards to the sub-priorities mentioned above)
- +Level of **financial support** committed/secured to support the development of Marine research and innovation, skills, careers and employment
- +Number and typology of partners and stakeholders involved in the actions/sets of activities/projects
  - Balanced representation of relevant stakeholders
  - · Balanced geographical representation

## **Outcomes (result indicators)**

- +Achieved and projected results of the different actions, sets of activities and projects underway or finished in the field of Marine Research and Innovation, mainly:
- Number/type of new/enhanced products/services developed;
- Number/type of new/enhanced collaboration networks and platforms being supported/activated;
- Number/type of stakeholders (businesses, research, CSOs, etc.) involved and benefitting from the action/activity/project;
- Number/type of regional policies influenced as a result of regional cooperation (mainstreaming).

#### 3.5 Tool: Maritime Spatial Planning and Integrated Coastal Zone Management

#### 3.5.1 Introduction

The UfM Declaration highlights the importance of Maritime Spatial Planning (MSP) and Integrated Coastal Zone Management (ICZM) as tools to support Sustainable Blue Economy, with ICZM being integrated in MSP as a way to ensure greater synergies through the land-sea interaction principle. Both tools have been recognised as significant enablers to attract investments and reduce impacts on the environment due to the increasing competition for the use of marine and coastal space and resources in the Mediterranean. Notably, the two tools are instrumental to an increased effort to control and minimize the impacts associated with the expansion of activities in coastal areas and at sea, with an ecosystem-based approach – an aspect making the tool truly cross-cutting.

#### 3.5.2 Stocktaking of the Ministerial Declaration and exploring ways forward and future actions

The UfM Ministerial Declaration addressed the need to support greater uptake of Maritime Spatial Planning and Integrated Coastal Zone Management in order to ensure a fully sustainable blue economy in the Mediterranean and address an increasing competition for marine and coastal space and resources.

In particular, the Declaration recognises some specific elements for consideration:

- Invites all countries to further use Maritime Spatial Planning in support of the development of the sustainable blue economy in the Mediterranean, including by addressing Land-Sea Interactions;
- Calls for their further development and update of ICZM national strategies, when necessary, through
  the provision of adequate financial and technical support, as well as for further involvement and
  coordination of national and local authorities on MSP/ICZM as appropriate.

The main frameworks and initiatives/projects currently ongoing across the Mediterranean are now briefly reviewed as a basis for further actions to be suggested towards the implementation of the UfM Directive.

## State of the art of activities

To briefly describe the state of the art of Sustainable Blue Economy (SBE) frameworks, initiatives and actions related to Maritime Spatial Planning (MSP) and Integrated Coastal Zone Management (ICZM) in the Mediterranean, a selection of relevant actions will be outlined in this section. The selection aims to be as illustrative as possible on the variety of subjects being addressed and has been carried out based on a combination of criteria, including:

- d) Relevance with respect to the calls for action set for this UfM Ministerial Declaration priority, as presented above;
- e) Geographical coverage;

f) In the case of projects, the incorporation of sustainability and innovation aspects in its approach;



Figure: Overview of regional frameworks, subregional processes, transnational projects on Maritime Spatial Planning (MSP) and Integrated Coastal Zone Management (ICZM)

#### Regional

- The Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (1995)<sup>242</sup> was initially endorsed in 1975 by 16 Mediterranean countries and the European Community adopted the Mediterranean Action Plan (MAP), and was the first-ever Regional Seas Programme under UNEP's umbrella. In 1995, the Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean (MAP Phase II) was adopted by the Contracting Parties to replace the Mediterranean Action Plan of 1975. Today, the Barcelona Convention involves 22 Contracting Parties determined to protect the Mediterranean marine and coastal environment while boosting regional and national plans to achieve sustainable development.
- The UNEP-MED Action Plan for the Implementation of the ICZM Protocol for the Mediterranean (2012-2019) is adopted by Contracting Parties (CPs) to focus on three major objectives further articulated into a series of actions, entrusting PAP/RAC and UNEP/MAP to support them in their implementation, namely:

 $^{242}\,\text{https://ec.europa.eu/environment/marine/international-cooperation/regional-sea-conventions/barcelona-convention/index_en.htm$ 

- Objective 1:Support the effective implementation of the ICZM Protocol at regional, national and local levels including through a Common Regional Framework for ICZM;
- Objective 2:Strengthen the capacities of CPs to implement the Protocol and use in an effective manner ICZM policies, instruments, tools and processes;
- Objective 3: Promote the ICZM Protocol and its implementation within the Region, and promote it globally by developing synergies with relevant Conventions and Agreements.
- The UNEP-MED Common Regional Framework for Integrated Coastal Zone Management (2019), identifies all appropriate measures to prevent, abate, combat and to the fullest possible extent to eliminate pollution of the Mediterranean Sea Area and to protect and enhance the marine environment and the natural resources in the region. As such it offers a valuable framework towards sustainable development for the Mediterranean sea basin, through the integrated management of coastal zones, taking into account the protection of areas of ecological and landscape interest and the rational use of natural resources. It does so by coordinating, where appropriate, bilaterally or multilaterally their national coastal strategies, plans and programmes related to contiguous coastal zones.
- The IOC UNESCO MSP Global Initiative (2018) is a three-year long initiative promoted in collaboration with the European Commission and calling on regional experts to develop guidance on international cross-border planning. In this context, two pilot projects were promoted, one of which in the West Mediterranean (while the other in the South-East Pacific). The initiative also aims to communicate and disseminate relevant results and advancements in this area.
- PAP/RAC's: Coastal Management Programme<sup>243</sup> mission is to support Mediterranean countries
  on their path towards sustainable coastal development. Contracting Parties defined the PAP/RAC's
  mission with their decision and that is to provide support to Mediterranean countries to ratify and
  implement the ICZM Protocol, as well as to implement the Mediterranean Strategy for Sustainable
  Development (MSSD).

## **MED-MSP-Community of Practice**

On January 26th, 2023, CINEA and DG MARE officially launched the Mediterranean MSP Community of Practice (MED-MSP-CoP) during a kick-off meeting in Brussels where the experts discussed the structure and the action plan for the next year. The main objective of the MED-MSP-CoP is to establish a permanent communication and dialogue across borders between experts on MSP (i.e. planners, technical experts, researchers), and to exchange knowledge and relevant experiences in the region, so as to reach a shared perspective on topics of common interest on MSP and enhance the cooperation between the north and the south of the Mediterranean. The MED-MSP-CoP support MSP and MSP- related processes by examining useful practices and tools, and being a place for exchanges to develop common language and suggesting coherent and harmonized approaches for using MSP as an enabler to a more sustainable blue economy and to improve protection of the marine environment.

<sup>243</sup> https://paprac.org/

Additionally, the MED-MSP-CoP formulates and provide recommendations that can support regional cooperation for MSP and, at the same time, national processes and decision making on the implementation of MSP plans in WestMED countries, and beyond as applicable. This group of experts help to anticipate changes of use in the WestMED region and avoid conflicts related to these changes, in line with the UfM Blue Economy roadmap and as described in the Framework for Action of the WestMed Initiative

Although the MED-MSP-CoP was initially conceived to be focused on the Western Mediterranean, as part of the efforts put in the implementation of the UfM Blue Economy Roadmap, links with experts from the wider Mediterranean basin have been established.

As a continuation of the discussions started at the WestMED Hackathon organized by the WestMED Assistance Mechanism in Malta on June 30th 2022 regarding the creation of an open Community of Practice for exchange on MSP in the framework of the WestMED Initiative and after a couple of events organised in the frame of the MSPMED project in Tunis (September 2022, Pan-western Mediterranean workshop) and Rome (October 2022, Final Conference) specific objectives of the CoP and the Action Plan for the first year of its establishment have been decided.

#### Short term

- Creation of the Coordination Team of the MED-MSP-CoP formed by a core group of experts (voluntary basis) and design of the annual plan of actions;
- Formalization of the MED-MSP-CoP within the WestMED framework;
- Identification of experts to be involved in the MED-MSP-CoP;
- Stocktaking of ongoing and upcoming projects and initiatives regarding the priority topics identified by the MED-MSP-CoP;
- Stocktaking of future events to capitalize on for the organization of back-to-back meetings
- Identification of major gaps and needs;
- Establishment of informal connections with the national MSP processes and the MSP competent authorities.

## Mid term

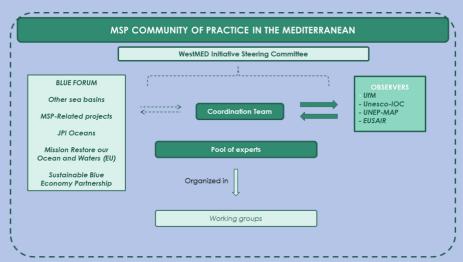
- Design of capacity building activities according to the identified gaps and needs and available funding and resources in the sea basin;
- Assessment of R&I as key driver to provide recommendations for MSP in the WestMED and for the wider Mediterranean Sea as applicable - and the way to address them;
- Assess how to include the private sector and the NGOs in the MED-MSP-CoP, i.e. pool of expert or within specific working groups.

## Long Term

- Collaboration on specific actions capitalizing on results of previous projects and project development on transboundary issues;
- Extension of the MSP-CoP to the entire Mediterranean

#### Governance and participation

The MED-MSP-CoP is composed of voluntary experts from EU and non-EU States, i.e. experts with technical knowledge on MSP issues and in good communication with decision-makers and planners involved in MSP process



Structure of the MED-MSP-CoP

## Scope of the MED - MSP - CoP

Key elements framing the scope of the MED-MSP-CoP are:

- Given the existing EU policy framework and the broader political will to work on MSP, as
  expressed at UfM level for the Mediterranean, there is a shared interest in an "enlarged MSPCoP". The MED-MSP-CoP is open for experts and observers around the Mediterranean, initially
  focusing on WestMED, and therefore UfM, areas of interest.
- Work on a multilevel approach (Mediterranean, sub-regional/WestMED, national and subnational) for MSP to ensure vertical integration, capitalising relevant on-going and upcoming initiatives, also to ensure the appropriate flow of information between the MED-MSP-CoP (building on the work of WestMED), and the UfM Working Group on Blue Economy (via its Focal Points), UNEP/MAP, MSP Global, BlueMed, and other regional and sub-regional initiatives.
- Establish links with other on-going and future MSP-related working groups (i.e. TEG on Data for MSP) and initiatives, as in particular the Blue Forum.
- Develop interactions and synergies with existing and upcoming MSP projects (e.g. REGINA, MSPGREEN, REMAP, eMSP-NSBR, Co-Evolve for Blue Growth, etc.).
- Ensure transfer of knowledge, good practices, tools, technics and research to planners and decision makers.
- Link with national and local actions related to MSP, ICZM and MPA in WestMED countries.
- Provide recommendations in relation to the most urgent/important emerging topics identified by the MED-MSP-CoP members and partners.
- Envisage exchanges with experts from other sea-basins.

In the table below, we summarise the outcomes and recommendations regarding this priority emerging from the 2<sup>nd</sup> UfM Stakeholders Conference on Sustainable Blue Economy, held in Athens on 19-20 February 2024.

Outcomes and recommendations of Multi-stakeholder Workshop 8: Ecosystem-based Integrated Coastal Zone Management (ICZM) and Maritime Spatial Planning (MSP) as cross-sector enablers

- First acknowledged by the EU (MSP Directive) MSP is now considered to be a
  relevant instrument to plan economic activities at sea while considering environmental
  and social impacts, also on the Southern/Eastern shores of the Mediterranean. The
  2021 UfM Ministerial Declaration on SBE and the 2023 WestMED Ministerial confirm
  that MSP is one of the key priorities on which Med countries wish to work, exchange,
  and establish cooperation upon.
- So as to make good use of the available marine space, both Integrated coastal zone
  management (ICZM) and MSP can support planning decisions, considering
  interactions between economic activities at sea and the impact of land-based
  activities on coasts and waters, integrating a concern for preserving biodiversity and
  mitigating the impact of our activities upon the environment.
- The regional dimension of MSP is crucial as to tackle the shared challenges facing our seas, and of the Mediterranean ecosystem. MSP is indeed also a useful instrument for cross-border cooperation and transboundary planning.
- The energy transition and the ecological transition (biodiversity targets, processes to
  establish and manage MPAs, etc.) requires us to shift towards new ways of thinking
  and planning, whereby multi-use and co-use, cumulative impacts, ecosystem-based
  MSP, will need to be considered.
- For MSP to be successful in practice, learning from each other's experiences; dialogue across sectors and borders; involving all stakeholders at national, subnational and local levels; and engaging coastal communities is crucial to ensure that policy decisions are understood and accepted, and that co-decision processes are put into practice.
- As ICZM, MSP and the establishment of MPAs share the same DNA as area-based approaches, the integration of planning for MPAs as part of the MSP process was identified as essential. Including marine conservation tools within MSP was identified as a key pathway to allow for integrated planning, and for synergies and coherence beyond the borders of zones and countries.
- Considering multiple sectoral needs and local interests, balancing sustainable
  economic goals and environmental needs for protection/restoration requires early
  engagement of stakeholders in the planning process. Examples were provided by the
  Israel Coastal Authorities Forum and by the Catalonian approach to MSP, making the
  case for ensuring that MSP fits to the geographical scale that matters and is applied
  through the appropriate governance approach.

- The panel underlined the importance of ecosystem approaches to MSP as well as the need engage in transboundary cooperation and collaboration across the Mediterranean.
- The importance of bridging the knowledge-gap between academia/science and
   (national, sub-national and local) authorities was also stressed. A science-policy
   dialogue around MSP, and a better integration of different legal instruments (MSP –
   MSFD) can help to enhance policy coherence and further ensure a true
   multidisciplinary approach to planning in the Med.
- The EC fully supports the exchange of knowledge and experience on MSP in the
  framework of the UfM Regional Platform on SBE and the WestMED Initiative Steering
  Committee. The value of the Med Community of Practice on MSP, supported by the
  UfM was highlighted, as well as the European Blue Forum that has been set up by
  DG MARF

## Subregional

- The EU Regulation No 1255/2011 to support the further development of an Integrated Maritime Policy contributes, among other objectives, to the development of cross-sectoral tools, namely Maritime Spatial Planning, the Common Information Sharing Environment (CISE) and marine knowledge on the oceans, seas and coastal regions within and bordering the Union. It does so, in order to develop synergies and to support sea or coast-related policies, particularly in the fields of economic development, employment, environmental protection, research, maritime safety, energy and the development of green maritime technologies, taking into account and building upon existing tools and initiatives.
- The EU Directive 2008/56/EC establishing a framework for Community action in the field of marine environmental policy (MSFD) focuses on the support of an ecosystem-based approach to the management of human activities related to the sea, while enabling a sustainable use of marine goods and services. Its main priorities are to achieving or maintaining good environmental status in the Community's marine environment, to continuing its protection and preservation, and to preventing subsequent deterioration.
- The EU Directive 2014/89/EU establishing a framework for maritime spatial planning is aimed at promoting the sustainable growth of maritime economies, the sustainable development of marine areas and the sustainable use of marine resources. Within the Integrated Maritime Policy of the European Union, the framework provides for the establishment and implementation by Member States of maritime spatial planning, by taking into account land-sea interactions and enhanced cross-border cooperation, in accordance with relevant UNCLOS provisions.
- EMODNet: European Marine Observation and Data Network<sup>244</sup> is a long-term marine data initiative developed through a series of projects launched by the European Commission's Directorate -General for Maritime and Fisheries (DG MARE) in 2009. It is a key implementation mechanism of its Marine Knowledge 2020 strategy. Essentially, EMODnet is a consortium of organisations assembling European marine data, data products and metadata from diverse

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https://maritime-spatial-planning.ec.europa.eu/projects/european-marine-observation-and-data-network

sources in a uniform way. The main purpose of EMODnet is to unlock fragmented and hidden marine data resources and to make these available to individuals and organisations (public and private), and to facilitate investment in sustainable coastal and offshore activities through improved access to quality-assured, standardised and harmonised marine data which are interoperable and free of restrictions on use.

- In the context of the existing EU policy framework and the broader political will to advance the MSP process in the Mediterranean, UfMS and WestMed Initiative have supported the establishment of an enlarged Mediterranean MSP Community of Practice (MED-MSP-CoP). A voluntary expert group from EU and non-EU countries working on MSP in the Mediterranean, with main objective to establish a permanent communication and dialogue across borders between experts on MSP (i.e. planners, technical experts, researchers), and to exchange knowledge and relevant experiences in the region, so as to reach a shared perspective on topics of common interest on MSP and enhance the cooperation between the north and the south of the Mediterranean.
- Given the existing EU policy framework and the broader political will to work on MSP, as expressed
  at UfM level for the MED, there was a shared interest in setting-up a group of Med MSP experts or
  enhancing the WestMed Community of Practice (CoP) on MSP. This has been identified as the, a
  new immediate/ short-term priority action for the implementation of the UfM Ministerial on the
  Sustainable Blue Economy.
- To achieve the targets set by the Ocean Pact, the Commission will present an Ocean Act by 2027, establishing a single framework to facilitate the implementation of the Pact's key objectives while reducing administrative burdens. This framework will be based on a revised Maritime Spatial Planning Directive, designed to enhance cross-sectoral coordination and sea basin management. As part of its commitment to protecting and restoring ocean health, the Commission will also evaluate and revise the Maritime Spatial Planning Directive to ensure it effectively supports these goals.

## Transnational and multi-country projects

- MESP: Managing the Environmental Sustainability of Ports for a durable development (2012-2015)<sup>245</sup> (Regional)<sup>246</sup> addresses the reduction of water, air and noise pollution deriving from port activities through the implementation of a multidisciplinary approach, which encompasses technological, regulatory and administrative solutions. By reinforcing the cooperation between port authorities, scientific organisations and public administrations, it fosters the transfer of sustainable management models for port areas developed by MESP project in the Mediterranean.
- CO-EVOLVE4BB: Co-evolution of coastal human activities & Med natural systems for sustainable tourism & Blue Growth in the Mediterranean (2019-2022)<sup>247</sup> (Regional)<sup>248</sup> looks at issues around the growth of tourism in the Mediterranean, by analysing and promoting the coevolution of human activities and natural eco-systems in touristic coastal areas. In order to protect

https://keep.eu/projects/4036/Managing-the-Environmental-S-EN/

<sup>&</sup>lt;sup>246</sup> MESP countries covered: Italy, Greece, Lebanon, Jordan

<sup>&</sup>lt;sup>247</sup> https://maritime-spatial-planning.ec.europa.eu/projects/co-evolution-coastal-human-activities-med-natural-systems-sustainable-tourism-blue

<sup>&</sup>lt;sup>248</sup> **COEVOLVE-B4G countries covered:** Greece, Italy, Spain, Tunisia, Lebanon

the environment and tackle climate change, Co-Evolve4BG is promoting the sustainable development of touristic activities using the principles of Integrated Coastal Zone Management (ICZM) and Maritime Spatial Planning (MSP).

- COMMON: Coastal Management and Monitoring Network for tackling marine litter in Mediterranean sea (2019-2022)<sup>249</sup> (Regional)<sup>250</sup> addresses the issue of marine litter though a global effort at basin level and a multi-institutional and multi-stakeholder approach ones that tackles the different and competing environmental, economic, social, cultural and recreational drivers that can affect marine ecosystems. The COMMON project is applying the Integrated Coastal Zone Management (ICZM) principles to the challenge of marine litter, improving knowledge of the phenomenon, enhancing the environmental performance of pilot coastal areas and engaging local stakeholders in marine litter management.
- MED4EBM: Mediterranean Forum For Applied Ecosystem-Based Management (2019-2022)<sup>251</sup> (Regional)<sup>252</sup> tackles Ecosystem Based Management, by assisting ICZM actors in four coastal areas to jointly develop and apply a common methodology to make ecosystem-based ICZM much easier to design and implement i.e. through innovative techniques and methods. A software tool helps institutional actors to better handle the complex multi-stakeholders analytical processes that characterize EBM applications and assess the relationships between ecosystem components, functions and services, as well as the associated human activities.
- PLASTIC-BUSTERS CAP<sup>253</sup> (2021-2023) (Regional)<sup>254</sup> entails actions to enhance and transfer knowledge, experience and best practice tools that address the entire management cycle of marine litter from monitoring and assessment to prevention and mitigation, towards an integrated and strategic approach (i.e. by coupling Ecosystem-based management and ICZM into local development planning). In the long-term, it will enhance ecosystem services via a reduced leakage of marine litter and marine plastic pollution in the Mediterranean Sea and less emissions of greenhouse gases by a wise-use and sustainable disposal of plastics.
- MedFund: Environmental Fund for Mediterranean Marine Protected Areas (MPAs)<sup>255</sup>

  <sup>256</sup>initiative is a Mediterranean cooperation platform which currently has 15 members including 6

  Mediterranean countries as well as regional civil society organizations. MedFund is composed, on the one hand, of Countries with an ambitious policy in favour of the creation of MPAs and having explicitly expressed their support for the initiative, while on the other is composed of several organizations such as the Prince Albert II of Monaco Foundation, the Oceanographic Institute Prince Albert 1st of Monaco Foundation, as well as regional organizations involved in the conservation of the marine and coastal ecosystems of the Mediterranean <sup>257</sup>. Since October 2019, the initiative benefiting from the Union for the Mediterranean label.

<sup>&</sup>lt;sup>249</sup> https://keep.eu/projects/22820/COastal-Management-and-MOni-EN/

<sup>&</sup>lt;sup>250</sup> **COMMON countries covered:** Italy, Tunisia, Lebanon

<sup>&</sup>lt;sup>251</sup> https://keep.eu/projects/22871/Mediterranean-Forum-For-App-EN/

<sup>&</sup>lt;sup>252</sup> MED4EBM countries covered: Jordan, Italy, Tunisia and Lebanon

<sup>&</sup>lt;sup>253</sup> https://www.enicbcmed.eu/projects/plastic-busters-cap

<sup>&</sup>lt;sup>254</sup> PLASTIC BUSTERS CAP countries covered: Italy, Greece, Spain, Egypt, Tunisia, Lebanon, Jordan

<sup>&</sup>lt;sup>255</sup> https://themedfund.org/en/about-us/

<sup>&</sup>lt;sup>256</sup> **MedFund countries covered:** France, Tunisia, Monaco, Morocco, Albania and Spain

<sup>&</sup>lt;sup>257</sup> The Specially Protected Area Regional Activity Centre – UN Environment -MAP, the Critical Ecosystem Partnership Fund, MedPAN network of Mediterranean MPA Managers, WWF Mediterranean, IUCN Mediterranean, the French coastal protection agency Conservatoire du Littoral and the Mediterranean Small Islands Initiative.

- COASTING: Coastal Integrated Governance for Sustainable Tourism (2018-2020)<sup>258</sup> (North Med)<sup>259</sup> is a capitalisation project based on the ICZM principles application, aiming at enhancing the effectiveness of a multilevel governance tool like Coast Contract, fully framing coastal management and tourism sustainability issues. COASTING transnational partnership activated synergies and cooperation to share specific solutions for an integrated and responsible management of coastal areas, particularly invested by tourism criticalities. The project capitalised on previous experiences related sustainable development and landscape recovery so that a new shared methodology was able to enhance the governance tool (Marseille Bay Contract) with activities focused on tourism qualification and sustainability.
- MPA Networks<sup>260</sup> (2019-2022) (North Med)<sup>261</sup> supports testing and adaptation of tools and recommendations from previous projects to improve marine conservation on selected pilot sites, as well as facilitate the transfer of lessons learned and best practices to the MPA community around the Mediterranean. Networks of MPA managers developed and reinforced at national, international and regional (Mediterranean) levels, and a regular thematic capacity building programme was set up. Networking activities facilitated exchanges between MPA managers and other actors, capitalisation of good practices and increased knowledge. This approach amplified by connecting networks. Through strong, active and connected networks of MPA managers, the MPA NETWORKS project helps to achieve effectively managed MPAs by providing sustainable solutions to relevant challenges (management effectiveness, small-scale fisheries management, mobile species conservation, as well as sustainable financing).
- Diving routes in marine protected areas of the Eastern Mediterranean Development of diving tourism network<sup>262</sup> (2018-2022) (Cross-border)<sup>263</sup> is a project aimed at developing a network of diving routes in marine areas as a tool for multiple purposes e.g. protecting the marine environment, preserving and promoting the natural and cultural heritage, raising public awareness, promoting the sustainable development of tourism, especially diving, as well as enriching and diversifying the provided tourist services.
- Cross-border Cooperation for Maritime Spatial Planning 2<sup>264</sup> (2018-2023) (Cross-border)<sup>265</sup> capitalises on the results of the previous Strategic Project THAL-CHOR: Cross-border Cooperation Maritime Spatial Planning Development, co-funded by the Interreg Greece-Cyprus 2007-2013 Programme. The capitalization is made at both the content and the corporate level, as it incorporates a new strategic partner, the Ministry of Environment and Energy of Greece, a competent authority for MSP in Greece. In terms of content in particular, the aim is no longer to prepare the two countries for the implementation of the Directive but to align with the requirements of the Directive and the gradual introduction of Maritime Spatial Planning by March 2021.

<sup>&</sup>lt;sup>258</sup> https://keep.eu/projects/21388/Coastal-INtegrated-Governan-EN/

<sup>&</sup>lt;sup>259</sup> **COASTING countries covered:** Italy, Spain, Greece, Croatia, Malta

<sup>&</sup>lt;sup>260</sup> https://maritime-spatial-planning.ec.europa.eu/projects/mpa-networks

<sup>&</sup>lt;sup>261</sup> MPA Networks countries covered: France, Italy, Croatia, Slovenia, Greece, Spain, Albania

 $<sup>{}^{262}\,</sup>https://maritime-spatial-planning.ec.europa.eu/projects/diving-routes-marine-protected-areas-eastern-mediterranean-development-diving-tourism$ 

<sup>&</sup>lt;sup>263</sup> **Diving routes countries covered:** Cyprus, Greece

https://maritime-spatial-planning.ec.europa.eu/projects/cross-border-cooperation-maritime-spatial-planning-2

<sup>&</sup>lt;sup>265</sup> Cross-border cooperation for MSP countries covered: Cyprus, Greece

- ARGOS: ShARed Governance of Sustainable fisheries and aquaculture activities as leverage to protect marine resources in the Adriatic Sea<sup>266</sup> (2020-2022) (Cross-border)<sup>267</sup> sets up a common framework for governance where all Institutions competent for fisheries and aquaculture in the Programme area acted as a whole in the management and protection of shared biological resources, under the best scientific guidance. Recommendations and final outputs came from results of multidisciplinary activities Maritime Spatial Planning studies to deepen the overlaps in the use of marine space; assessment of interactions between environmental management and social-economic impacts; standardisation of existing data on Adriatic biological resources; running of bioeconomic models for stock assessments; implementation of pilot actions. It also provides a cross border network to share project results and define the best practices for training operators towards environmental sustainability and the adoption of responsible practices in fisheries and aquaculture.
- MSPMED: Toward the operational implementation of MSP in our common Mediterranean Sea (2020-2022)<sup>268</sup> (North Med)<sup>269</sup> has the overarching objective to facilitate the MSP Directive's processes, currently at different stages of implementation in EU Member States (MS) surrounding the Mediterranean Sea, by supporting the establishment of coherent and coordinated maritime spatial plans across the Region. The MSP-MED project capitalises on the results of other EUfunded projects on MSP in the region, either recently carried out or still ongoing, and also promotes the active participation of both EU and non-EU Mediterranean countries, in a pan-Mediterranean approach. The MSP-MED project addresses specific issues regarding the national MSP implementation, tailored to the actual needs of each MS, and at the same time implements activities at basin scale, enhancing cooperation and knowledge sharing, finally ensuring coherence among the MS's plans.
- UNITED: Multi-Use Platforms and Co-Location Pilots Boosting Cost-Effective, and Eco-Friendly and Sustainable Production in Marine Environments (2020-2023)<sup>270</sup> (North Med)<sup>271</sup> aims to prove that the co-existence of different activities in the same marine space is a feasible option (from an economic, social and environmental perspectives) for European maritime industry and local ecosystems. The project promotes the design of multi-purpose platforms and the development of different activities in the same area across the North Sea, the Baltic and the Mediterranean. The main activities focus around 5 pillars defined through the BG-05 call (i.e. Technology, Economy, Legal/Governance/Policy, Society, and Environment). The project demonstrates the benefits of co-location of different combinations of marine activities (i.e. renewable energy, aquaculture, bio-resources, environmental restoration, maritime transport, and tourism services) in the same marine space.

<sup>&</sup>lt;sup>266</sup> https://maritime-spatial-planning.ec.europa.eu/projects/shared-governance-sustainable-fisheries-and-aquaculture-activities-leverage-protect

<sup>&</sup>lt;sup>267</sup> **ARGOS countries covered:** Italy, Croatia

 $<sup>{\</sup>it 268} \ https://maritime-spatial-planning.ec.europa.eu/projects/toward-operational-implementation-msp-our-common-mediterranean-sea$ 

<sup>&</sup>lt;sup>269</sup> MSPMED countries covered: Italy, France, Greece, Malta, Slovenia

<sup>&</sup>lt;sup>270</sup> https://maritime-spatial-planning.ec.europa.eu/projects/multi-use-platforms-and-co-location-pilots-boosting-cost-effective-and-eco-friendly

<sup>&</sup>lt;sup>271</sup> UNITED countries covered: Netherlands, Belgium, Germany, United Kingdom, Greece, France, Denmark, Ireland, Portugal

#### Assessment of regional coverage

Beyond the selected exemplary initiatives described so far, our analysis covered a wider number of projects (provided in the annexed "project database" tables).

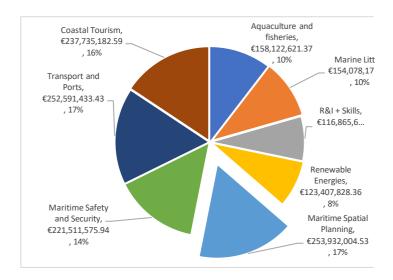
The main emerging findings with regards to the initiatives in place in this sector are as follows:

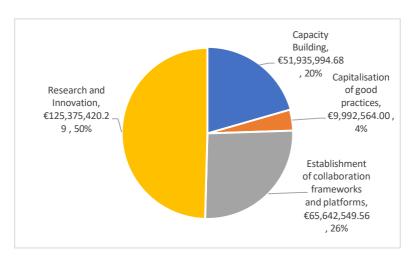
- Regional frameworks are fairly spread across countries, which in principle should imply strong
  commitment in the implementation of MSP/ICSM practices (e.g. Barcelona Convention) but in
  practice still remain a strong encouragement rather than a mandate to implement such tools;
- Subregional processes and strong requirements for MSP/ICZM implementation are mainly referred to the north (EU Directive on MSP, etc.);
- Capacity building and R&I support are increasingly being provided, with stronger support for northern Mediterranean Countries but some country exceptions in the south (e.g. WestMED);
- Capitalisation is slowly emerging although currently mostly focussed in northern countries;
- **Collaboration** projects seem to be more heavily distributed but still with some notable gaps (e.g. south-eastern -Mediterranean countries remaining largely unsupported in this area).

#### Expenditure of the sector

The figures below provide an overview of the expenditure of the sector compared to other SBE sectors and for different type of projects. We can observe in Figure 2, that MSP/ICZM accounts for 20% of the overall expenditure of SBE (basedon projects collected). Also, MSP/ICZM projects focus on platforms (36%) and capacity building (35%) which is expected given the transversality and novelty of the topic. As MSP/ICZM also is part of broader sectoral innovative projects (e.g. Horizon 2020) a relevant portion is nevertheless also related to R&I (24%). Capitalisation projects are still limited (5%) given the novelty of the topic but shows already an emerging trend in this direction.

Figure: Overview of expenditure on MSP/ICZM compared to other Sustainable Blue Economy Sectors (left) and breakdown by project types (right)





Source: Database of over 300 initiatives/projects collected for this UfM Roadmap

## Stocktaking of the Ministerial Declaration: progress and opportunities

As a final step in the analysis, we get back to the main priorities put forward by the UfM Ministerial Declaration for the support to MSP and ICZM. The table below provides a further analysis on the state of the art in advancing with the specific UfM priorities as sketched in the introduction to this chapter. It does so by building on the initiatives (regional, subregional, transnational/international) as reviewed earlier in this chapter and confronting those with each priority of the UfM Ministerial Declaration for this sector. The analysis allows for an assessment on the status of the implementation of each priority (a "visual check") to be used as a basis for the future UfM Roadmap.

Figure: Identification of opportunities per sectoral priority

UFM MINISTERIAL DECLARATION CALL FOR	JUSTIFICATION AND IDENTIFICATION OF OPPORTUNITIES AS PER THE MAPPING OF INITIATIVES
ACTION	
All countries to further use Maritime Spatial Planning in support of the development of the sustainable blue economy in the Mediterranean, including by addressing Land-Sea Interactions	<ul> <li>Overall frameworks exist at Mediterranean level through the recognition of MSP and ICZM as part of the Barcelona Convention and related protocols, making therefore binding to develop and make full use of such tools.</li> <li>In order to foster the knowledge creation on how to design and conduct MSPs, many projects have been deployed or are on-going within Europe and with Mediterranean neighbouring countries. A great majority of these projects are funded via various EU funding programmes and are often also of transnational nature by bringing the experience together from various partners across Europe or one specific sea-basin and/or region.</li> <li>The ambition is nevertheless not only to share experience and foster transfer and knowledge creation, but also to foster coherence among the various MSP attempts within the sea-basin and particularly a much greater understanding and recognition of the relevance of such tools for a fully sustainable development of the blue economy as a whole – particularly but not only in southern Mediterranean countries. Further efforts are still needed in this respect.</li> </ul>
Further development and update of ICZM national strategies, when necessary, through the provision of adequate financial and technical support, as well as for further involvement and	<ul> <li>Similarly to MSP, relevant frameworks exist such as for the Barcelona Convention, making the tool an essential policy requirement for sustainable blue economy development.</li> <li>Relevant ICZM oriented projects have been funded by the Interreg MED Programme and other Interreg and ENI CBC programmes including Southern Mediterranean partners.</li> </ul>

coordination of national and local authorities on MSP/ICZM as appropriate.

As for MSP further efforts are needed to strengthen the integration of ICZM with MSP and ensure capability of Local Authorities in such a critical policy for sustainable development.

#### Potential avenues for future cooperation: pilot actions / projects

Building on the overall assessment provided so far, this section provides some (preliminary) insights on the type of actions (frameworks processes, projects) and related support to be foreseen as part of the UfM Roadmap, in addressing Marine Litter opportunities across the Mediterranean. The calls for actions are grouped into two clusters, one related to frameworks and the other one related to projects.

The following potential avenues refer to the calls for actions related to framework initiatives:

- Support the policy uptake of MSP as an enabler of the Green Deal: development of a clean, circular blue economy, preserving and protecting biodiversity in the marine environment (in particular with spatial measures), facilitating the supply of clean, affordable and secure, energy, enabling the provision of healthy and environmentally friendly food from the sea. Climate proofing of MSP, including incorporating adaptation and mitigation actions and/or strategies into MSP, making MSP flexible and adaptive to respond to climate change.
- Applying the Ecosystems Based Approach (EBA) in MSP: designing maritime spatial plans to integrate
  objectives and measures of other EU instruments (e.g. the Marine Strategy Framework Directive) with
  the aim to reduce collective pressures and ensuring that marine ecosystems are in a healthy,
  productive and resilient condition.
- Support the development of national strategies and approaches to review/revise maritime spatial plans
  to make them future proof, more integrated and more coherent. At sea basing level: set-up common
  monitoring tools to assess the performance maritime spatial plans, establishing common procedures
  to assess/evaluate/revise plans and align them to the objectives of the European Green Deal.
- Promoting ocean governance policy uptake through MSP: incorporating oceans' governance tools into
  the MSP process and in maritime spatial plans. For example, by enabling stakeholder participation in
  governance schemes and instruments, by providing capacity building and facilitating joint and/or
  coherent planning, or by promoting cooperation with third countries in issues of common interest in a
  sea basin or a shared ocean space.

The following potential avenues refer to the calls for actions related to **project support**:

- Promote initiatives to address gaps and challenges in the collection, integration, use, re-use, access, including to data produced by non-public actors, of data in the MSP context: using best available data and instruments to prepare, monitor and revise maritime spatial plans. Developing data tools, models and infrastructures, allowing for interoperability and enabling Member States to share MSP data and information, especially in a cross-border and sea basin context (e.g. via EMODnet).
- Raise awareness on the need for MSP strategies to support the blue economic sectors (e.g. tourism and maritime/underwater cultural heritage, offshore wind energy, aquaculture) in the maritime domain: ex-ante assessments (Strategic Environmental Assessment, Environmental Impact Assessment); multi-use in project design and licensing/permits; development of a regulatory framework for multi-use; allocation of sufficient sea space, resolution of conflicts with other uses, enabling synergies with other sectors / activities, including Land Sea Interactions (LSI). Therefore, specific spatial plan or zoning should be considered for specific/relevant sectors (e.g. offshore wind energy), as part of the

overall maritime spatial plan. This specific plan could include provisions to allow for the long-term development of the sector, in particular as regards allocation of space and/or provisions for **co-uses**, **coexistence with other sectors.** Furthermore, greater efforts in strengthening the land-se interaction should be put in the future plans.

There are nevertheless a wide number of ongoing actions and initiatives on this matter and **the UfM role** may rather be that of a 'support' to the existing initiatives (e.g. IOC-UNESCO), by ensuring that the key challenges and principles expressed in this section are fully addressed, rather than an active promoter of such actions. Also, overall awareness should be promoted towards southern policymakers, as to foster sound MSP strategies for a fully sustainable blue economy development in each Mediterranean country.

3.5.3 Measuring progress of the Ministerial Declaration implementation: proposed indicators

## **Output (Process indicators)**

+Number of actions, sets of activities and projects of regional cooperation **planned** in the area of Marine Spatial Planning and Integrated Coastal Zone Management, particularly addressing the following sub-priorities:

- Marine and coastal protected areas
- Preserving inland wetlands
- Land-sea interactions

+Number of actions, sets of activities and projects of regional cooperation **being implemented** in the Mediterranean area in the field of Marine Spatial Planning and Integrated Coastal Zone Management (with regards to the subpriorities mentioned above)

+Level of **financial support** committed/secured to support the implementation and use of Marine Spatial Planning and Integrated Coastal Zone Management

+Number and typology of partners and stakeholders involved in the actions/sets of activities/projects

- Balanced representation of relevant stakeholders
- Balanced geographical representation

#### **Outcomes (result indicators)**

+Achieved and projected results of the different actions, sets of activities and projects underway or finished in the field of Marine Spatial Planning and Integrated Coastal Zone Management, mainly:

- Number/type of new/enhanced products/services developed;
- Number/type of new/enhanced collaboration networks and platforms being supported/activated;
- Number/type of stakeholders (businesses, research, CSOs, etc.) involved and benefitting from the action/activity/project;
- Number/type of regional policies influenced as a result of regional cooperation (mainstreaming).

## 4 Provisions for the monitoring system

## 4.1 Objective and purpose of the monitoring system

Monitoring is the continuing function that uses systematic collection of data on specific indicators to assess the progress of an intervention. It is carried out during the execution of the intervention with the intention of providing continuous feedback on the related activities of the intervention, outputs and results. This information permits an early identification of possible deviations from operational objectives. Monitoring generates data which is normally required for the evaluation of the intervention.

Monitoring aims to verify that (1) planned activities are being carried out as intended, (2) funds are correctly used and spent on delivering planned outputs and (3) result indicators evolve in the expected/desired direction. In that sense, a strong monitoring system helps to ensure that the concrete plan of action meets its main objectives and expectations.

Based on the above, the monitoring system planned to be deployed to assess general progress of the Roadmap to set the path towards the implementation of the 2021 UfM Ministerial Declaration on Sustainable Blue Economy will involve the following:

- The monitoring of the process of implementation to ensure that the activities outlined in the Roadmap are being accomplished and that resources are being allocated and used effectively.
- Monitoring the concrete outputs directly associated to the activities supported through the actions, sets of activities or projects carried out to implement the Roadmap.
- Assessment of the progress towards the achievement of the short, medium and long term
  objectives, assessing if the result indicators evolve in the expected/desired direction.
- Using the information collected to periodically review the overall strategy and to inform
  decision makers and stakeholders at different levels.

## 4.2 How a system for monitoring is going to be run in the context of the Ministerial Declaration on Sustainable Blue Economy?

## Implementation Arrangements

Monitoring of advancement towards addressing the priorities set in the Declaration and its Roadmap will be carried out by the UfM's Blue Economy Working Group, counting with the support of the Union for the Mediterranean Secretariat, which will steer the process and take ownership and coordination of this activity through time.

In this way, UfM's Blue Economy Working Group, counting with the support of the Union for the Mediterranean Secretariat, will carry out the following activities linked to the monitoring function described in this chapter of the Roadmap:

- Responsible for the overall coordination and monitoring of the implementation of the Roadmap;
- Approve and update the indicators to capture the implementation of the Roadmap.

• Ensuring the preparation of the Yearly summary reports on the progress in the execution of the Roadmap.

The simple and straight-forward Monitoring, Reporting & Evaluation system to monitor the implementation of the Roadmap towards the fulfilment of the UfM Ministerial Declaration will consist of the following concrete tasks:

- 1) First of all, the monitoring process will start with the delivery of synthetic presentations at the 13<sup>th</sup> UfM Working Group on Sustainable Blue Economy, tentatively scheduled for March 2023, and aimed in particular at monitoring progress on the accomplishment of the different Declaration Priorities. In this way, national focal points of the WG will prepare a summary of the main achievements (policies, strategies, initiatives, programs, projects, videos, etc.) according to the priorities set in the 2021 UfM Ministerial on SBE.
- 2) These presentations will constitute the baseline for the Yearly country updates on implementation, foreseen in 2024 and 2025, which will be duly enriched with hyper-links to key documents, will help to visualize progress made over time. The updates will focus on the following aspects:
  - a) Initiatives planned per each Declaration Priority and Call for Action.
  - b) Initiatives implemented (and status of implementation<sup>272</sup>) Declaration Priority and Call for Action.
  - Outputs (deliverables) and outcomes expected per each initiative (and status of achievements<sup>273</sup>).
  - d) Challenges and mitigation plans (with regards to issues and bottlenecks addressed/foreseen).
- 3) Finally, a mid-term evaluation will take place in the context of the preparation of a new Ministerial Declaration, expected possibly after 2025. The scope and focus of the evaluation will be agreed based on the inputs received by the Yearly country updates. This evaluation report should serve as an important element of information to support the preparation and the identification of the priorities of a new Ministerial Declaration.

All the above would help collect information on progress achieved and remain a reference for the policy makers at national level.

## Proposed indicators (output and outcomes)

Indicators are quantitative or qualitative variables that allow measuring changes produced by an intervention. They should provide a reasonably simple and reliable basis for assessing an intervention in terms of its activities, outputs and results.

A good indicator is defined as SMART:

Specific: the indicator should be direct, detailed and meaningful.

-

 $<sup>^{\</sup>rm 272}$  Starting date, expected end, main actors involved, financial allocations, etc.

<sup>&</sup>lt;sup>273</sup> Extent to which early outputs are already being delivered and outcomes are generated

- Measurable: the indicator should be quantifiable to track progress or success.
- Achievable: the goal should be realistic, and we must have the resources and tools to attain it.
- Relevant: it should align with the overall objectives and mission.
- Time-bound: there has to be a deadline in which the indicator should be achieved.

Indicators should preferably be quantitative and they should be measured over time to show changes. The system of indicators for the monitoring of the Roadmap to set the path towards the implementation of the 2021 UFM Ministerial Declaration on sustainable blue economy' will include both output (process) and outcome indicators.

#### Output (Process indicators)

They are closely connected to the activities, as the direct result of the activity. They refer to indicators to measure whether planned activities actually took place. They are also named Process indicators. Examples are the number of projects conceptualised, or the number of projects which have secured funded from EU and international agencies.

#### Result indicators

This category includes the **concrete products** describing immediate direct effects directly associated to the activities supported through the actions/sets of activities or projects developed in the context of the Roadmap. These indicators allow assessing whether these actions have been successfully implemented and they are very useful for monitoring the implementation of the intervention.

Some **preliminary** relevant indicators have been developed and included in all Declaration Priorities with the exception of the two cross-cutting Priorities considered as 'Enablers',following the structure described below (not in an exhaustive manner but as a way of example). This set of indicators will be closely aligned to the Yearly summary report on implementation and will be further developed over time.

#### Output (Process indicators)

- +Number of actions, sets of activities and projects of regional cooperation planned (per Declaration Priority)
- +Number of actions, sets of activities and projects of regional cooperation being implemented in the Mediterranean area per Declaration Priority
- +Level of financial support committed/secured to support each priority of the UfM Ministerial Declaration
- +Number and typology of partners and stakeholders involved in the actions/sets of activities/projects

#### Outcomes (result indicators)

- +Achieved and projected results of the different actions, sets of activities and projects underway or finished, mainly:
- Number/type of new/enhanced products/services developed;
- Number/type of new/enhanced collaboration networks and platforms being supported/activated;
- Number/type of stakeholders (businesses, research, CSOs, etc.) involved and benefitting from the initiative;
- Number/type of regional policies influenced as a result of regional cooperation (mainstreaming).

### 5. Overview of shortlisted actions for a concrete follow-up

The following table consists of a summary compilation of suggested key priorities for regional cooperation. This streamlining exercise has resulted in the shortlisting of 15 concrete follow-up actions, covering each of the Ministerial Declaration Priorities:

UfM call(s) for action	Status based on analysis	Action proposed	Concrete steps
Marine Litter			
Improve port reception facilities to ensure proper collection and recycling of waste coming from all maritime activities	Port reception facilities are being addressed only by the cooperation agreement between the UNEP and the Italian Ministry of Environment, Land and Sea Protection. No project has been identified tackling this issue.  At the same time, relevant successful initiatives supporting circular models and reduction of plastics exist (Plastic Busters CAP, Plastic Busters MPAs).  Stronger support could be needed to further capitalise those practices and strengthen the ability of port reception facility in introducing circular models.	Foster ability of Ports in adopting fully circular models – with a strong focus on supporting and sharing good practices for adoptions in southern countries.  Circularity is one of the key concepts related to marine litter and the mapping has shown a limited number of projects related to circularity, in different value chains.  It is particularly important to advance and build on existing efforts and ensure that the countries be involved even through different but interlinked, coordinated projects at regional level, maintaining a land-sea dimension.	<ul> <li>Identify a sample of interested Port Authorities</li> <li>Discuss with relevant regional/national projects on actions needed</li> <li>Set-up an action plan for implementation</li> </ul>
Maritime and Coastal To	urism		
Promote fiscal and investment policies to support sustainable	A larger amount of public grants covers tourism although mainly on the northern shore, with a wide number of	Systematic involvement and exchange between successful projects/initiatives in tourism diversification/digitalisation and	Identify relevant local/national     Development Agencies,     including regional ones (e.g.     African Development Bank)

coastal	and	marine
touriem		

Promote the digitalization of the sector

Promoting the diversification of the tourism offer, encouraging experience-based and sustainable tourism as well as associating the hinterland

good practices/projects being supported.

Access to finance nevertheless remain an issue for micro-SMEs to access innovation, technology towards digitalisation and sustainable diversification

Local/national development agencies are active in supporting sustainable tourism enterprises across the Mediterranean although often focus more on inland/city tourism then coastal/maritime (particularly for the southern shore).

## local/national Development Agencies / Investment Banks across the region.

The exchange would enable to identify 'corridors' and 'priorities of intervention' for the sector to fully innovate (digitalise and diversify) as a guidance for banks to support local micro/SMEs – on the basis of national and local strategies – and with a strong emphasis on youth and women entrepreneurship

- Engage with relevant successful tourism project/initiatives in the Mediterranean (so to get a clear view of priority needs and financial support for the sector)
- Set-up an exchange of ideas/success cases to raise awareness of Development Agencies (webinars, workshops, etc.)
- Identify priority innovation/technologies and bottlenecks in their access to micro-SMEs to be addressed

#### Maritime Ports and Transports

Mediterranean countries to actively cooperate and participate in the implementation of joint projects in the provision of clean energy and technology Mediterranean countries increasingly collaborate through a range of networks and relevant innovation projects.

Nevertheless, such collaboration is often benefitting mid- to large-scale ports linked to relevant maritime transport routes across the Mediterranean

A gap and an opportunity exist in jointly addressing the needs of smaller-scale ports across north and south of the Mediterranean, as to accelerate transformative innovation towards greater sustainability,

## Acceleration of transformative innovation for smaller-scale Mediterranean ports.

Build upon and adapt from other experience on acceleration of uptake of innovative technologies and business models by focussing on small-scale Mediterranean ports. Setting up a platform for sharing needs, opportunities and investment potentials for green and sustainable innovation for small ports.

Provide viable options to improve the potential of innovation and diversification through clean energy and technology through such Mediterranean platform. This would also include a broader support towards diversification of business models in small ports (link to maritime

- Identify the relevant interested ports to be engaged with (e.g. through MedCities and/or other similar regional/sectoral networks)
- Finetune and adapt 'acceleration' models including through examples from other seabasin (e.g. AspBAM in the Atlantic)
- Set-up an action plan for the identification and addressing of main needs, challenges and opportunities for diversification
- Implement a dedicated platform to allow for knowledge exchanges, sharing of practices

	resilience and socio-economic profitability.	tourism, aquaculture and fisheries in an energyefficient approach).	and attraction of finance/investments
Strengthening expertise and boosting investments in infrastructure taking duly into account the specific needs and priorities of Mediterranean countries; including investments on the provision of Onshore Power Supply and energy saving technologies for ports activities as well as on the development of alternative fuels, and transitional fuels as appropriate, and technical and operational energy efficiency for ships	A considerable number of projects in the north have been identified dealing with. Several projects have been funded by the EU, with a growing role of alternative energy technologies and means (electrification, hydrogen, etc.).  The role of ports as 'energy hubs' is essential as they offer a potential infrastructure for greater uptake of renewable energy (on and off-shore) and link with marine and inland transport activities.  Southern ports would benefit from greater access to innovative experiences being provided as a way to strengthen Mediterranean southsouth and north-south cooperation in this area.	Expand current initiatives in fostering ports as 'hubs' of clean and renewable energy.  Boost the uptake of innovative technologies and full digitalisation to promote smart ports, effective onshore power supply for the decarbonisation of maritime transport, and the roll-out of single-window maritime systems across all regional operators.  Expand to the whole Mediterranean the experience of the WestMED initiative's Technical Group on Sustainable Transport and Green Shipping and in particular the action for green ports in the western Mediterranean to act as a network of 'energy communities'.	Engage with the WestMED TG on Green Shipping and identify potentials for further expansion of their actions across the whole Mediterranean     Monitor advancement and disseminate progresses (e.g. project submissions)
Marine Renewable Energ	gies		
Offshore operations for renewable energy production to be carried out by taking safety precautions and considering environmental impacts	An increasing pressure is put on the ability of local relevant institutions in speeding up and simplifying the licensing processes for marine renewable energy technologies/practices – with an EU	Multi-use (MU) approaches to ecosystem- based MSP to allow for a proper planning of marine renewables zones/licensing.  Build on the upscaled interest of marine renewables (offshore wind, wave and solar) across the MED, the 2021 UfM Ministerial on	Identify Permission Agencies across Mediterranean countries (selected numbers)     Identify successful/advanced practices/initiatives in using MSP as a basis for MRE licensing (as emerging from

The enhancement of relevant regulatory frameworks and facilitation of licensing process while preserving adequate assessment and public consultation prior to installing MRE infrastructure	consultation currently ongoing on this matter. 274  At the same time, the licensing process would have to reflect upon a number of environmental challenges, as well as the need to carefully plan the zones dedicated to MREs practices in order to manage potential risks and conflict with other usages of the marine space.  The overall increasing interest in offshore technologies in the	Energy and the upcoming EU guidance on permitting for renewables (onshore/offshore).  Reflect on challenges and opportunities for marine renewable energy support as emerged from regional initiatives (Blue Deal, MISTRAL, MAESTRALE, PELAGOS).  Foster the conceptualisation and development of MSP as an essential prerequisite for maritime zoning for renewable energy deployment, also by capitalising on existing knowledge and good practices, such as MARIBE, MERMAID or TROPOS.	local experiences and sub/regional initiatives)  Define additional guidelines/initiatives to disseminate and uptake such good practices  Monitor advancements and increasingly expand the reach of the network and its ambition – to support sustainable uptake of renewable energy across the Mediterranean
	Mediterranean requires a thorough adoption of good practices, both in administrative capability and the use of MSP as an 'enabling tool' for sustainable MRE deployment regionally.	Include land-see interaction with regards to existing other inland renewable resources and grid connectivity requirements.	
Cooperation on research and innovation towards the development of technologies capable of fully exploiting the potential of MRE sources of the Mediterranean, including combining different marine activities in the same marine space	The sector is still emerging in the Mediterranean region, with a smaller number of initiatives as compared to other sectoral priorities.  An acceleration of initiatives at national/local scale is observed (mostly in EU Med countries), particularly but not only 'offshore'.  Nevertheless, there seems to be a gap on multi-country projects on MRE	Technical Assistance and Information Exchange (TAIEX) <sup>275</sup> or Twinning schemes between the most MRE-advanced EU countries and Mediterranean countries, in order to promote technology, know-how and good practices transfer  Given that the topic is quickly catching up in the Med, and since northern EU countries are amongst the most advanced in the world in terms of MRE Development (North Sea, Baltic	<ul> <li>Identify and select 5-10 best practices, preferably but not only in northern-EU countries</li> <li>Identify and engage national/ regional authorities and stakeholders to take part in the transfer exercise.</li> <li>Set up the "transfer teams", pairing model and learning regions.</li> </ul>

https://ec.europa.eu/info/news/public-consultation-launched-renewables-permitting-and-power-purchase-agreements-2022-jan-18\_en https://ec.europa.eu/neighbourhood-enlargement/funding-and-technical-assistance/taiex\_en

	in the Mediterranean sea basin, and very especially in the southern countries.	Sea and Atlantic), further exchange and cooperation is needed, bearing in mind the specificities of the various sea basins.  This knowledge transfer may be focused not only on technological aspects related to the deployment of MRE, but also on the existing evidence of environmental impacts of offshore and other types of blue energy, as well as on proven strategies to foster its social acceptance and co-existence with other maritime uses.	•	Tailored design of the transfer process according to the specificities of learning regions (including study visits, training activities, workshops, conferences, etc.)
Fisheries and Aquacultu				
Comply with the recommendations adopted by the GFCM with the view to sustainably manage key stocks in the region and develop sustainable aquaculture	Aquaculture growth is a means for ensuring the sustainability of regional fisheries stock, while developing fully sustainable food cycles.  In this context, to achieve sustainable food cycles, it is essential to ensure the full sustainability of aquaculture practices, while promoting circular innovation and diversification of food value chains across the Mediterranean.  A central role in this process is being played by the SFS-MED Platform, which is now at a pivotal point in time in defining the actors involved and outlining a clear timeline and key milestones to ensure implementation	Scale-up good practices on sustainable food value-chains.  Continue the work done under the topic of Sustainable Food Systems (particularly through the SFS-MED Platform), with a focus on finalizing national pathways <sup>276</sup> and start their implementation.  Address other good regional practices (e.g. WestMED AquaWest Technical Group, EU Aquaculture Assistance Mechanism, SwitchMED) in involving both southern and northern experts and practitioners in the sector, towards a fully circular and sustainable food cycle – and the main role of sustainable aquaculture in innovative food value-chains.	•	Ensure linkages with regional relevant actions (SFS-MED, WestMED TG on Sustainable Aquaculture, Aquaculture Assistance Mechanism, etc.) Identify living labs for relevant coastal cities as to promote multi-stakeholder exchanges to identifying areas for sustainable/circular innovation across local food chains Discuss hot topics for sustainable food chains are identified, while main challenges for adoptions at local level are identified with concrete actions

<sup>&</sup>lt;sup>276</sup> FAO, CIHEAM and UfM. 2021. Food systems transformation – processes and pathways in the Mediterranean: A stocktaking exercise. https://www.fao.org/3/cb7978en/cb7978en.pdf

	in future years, building on the 2021 UN Food Summit, the upcoming 3 <sup>rd</sup> Conference on Mediterranean Diet in September 2022, in Italy; and the PRIMA Community of Practice on WEFE.  Importantly, other sub-regional initiatives could be capitalized across the Mediterranean (e.g. WestMED AquaWest Technical Group), as a way to enhance the innovation capacity and diversification of value chains across the region.		•	Support twinning and other actions to implement innovative, circular and fully sustainable food systems
Establishment and strengthening of marine protected areas and fisheries restricted areas  Comply with the recommendations adopted by the GFCM with the view to sustainably manage key stocks in the region and develop sustainable	MSP is an essential crosscutting tool to ensure sustainable development of the blue economy. Under the multiuse perspective of MSP spatial limitation and planning for aquaculture sustainable development plays a crucial role.  In particular, identification of Allocation Zones is essential for a clear spatial planning and requires indepth analysis. This is therefore an	Principal Areas for Fisheries and Allocated Zones for Aquaculture (AZAs).  In the context of the development of national Marine Spatial Planning strategies, prioritise the identification of Principal Areas for Fisheries and Allocated Zones for Aquaculture (AZAs) at country level in the Mediterranean basin and increase their number by 2024.  This could be done through a dedicated series of exchanges of practices and sharing of good	•	Engage with responsible of national activities for MSP, as well as relevant local operators in the sector  Allow for exchange of experiences and practices towards the need of proper planning and MSP as a way to also ensure sustainable economic return for companies and attract sustainable investments (i.e. through a
aquaculture  Further support to the GFCM's Regional Plan of Action for Small-Scale Fisheries in the Mediterranean and Black Sea (RPOA-SSF) as a	area of pivotal importance.  In this context, some very specific tools, expertise and skill-sets are still largely lacking across the Mediterranean and are required in light of a sustainable development for the sector. This is a propaedeutic	practices amongst competent authorities and key stakeholders.	•	stable policy framework)  Draft and disseminate operational guidance material to support practitioners – by building on good examples previously identified

vital political commitment to strengthen and support sustainable SSF in the region as well as their resilience to shocks	activity also towards the support to sustainable food-value chain (as proposed in the action above).		
Maritime Safety and Sec	urity		
Mediterranean Coast Guard Functions Forum (MedCGFF) to develop training activities  Further facilitate exchange of information, expertise, technical assistance, training and best practices	Increasing cooperation has emerged across Coast Guard Functions and further support on sharing know how and capacity would allow for more effective actions.  A possible role of EMSA could be possibly discussed in fostering greater expertise. Also, greater connections between existing sub/regional initiatives and good practices should be capitalised.	Mediterranean Maritme Safety and Security Academy operated by the MedCGFF Secretariat.  With a flexible and virtual approach, promote the set-up of a Mediterranean Maritime Safety and Security Academy operated by the MedCGFF Secretariat, targeted at maritime safety officials, both civil and military.  This Academy may capitalise on the experience of the European Coast Guard Functions Training Network (ECGF) or the 5+5 Defence College, and shall especially consider gender equality by focussing on increasing the number of female trainees recruited.	UfM could advocate for the set-up of such initiative and foster exchanges/webinars on this matter.
	ovation, skills, careers and jobs		
The establishment of blue economy clusters – including transnational ones, the strengthening of existing clusters, and increased cooperation between national clusters in the Mediterranean	Maritime clusters act as catalysts for sustainable innovation, access to finance and overall technological development of the blue economy across the Mediterranean.	Mediterranean cluster alliance (s) to address sectoral needs and raise its profile towards sustainable investors.  Provide further support towards southern clusters, mostly at an early stage of development and often not yet fully active, so they can grow in number and size and be able to better engage with other regional counterparts.	Identify relevant initiatives at regional, subregional and international levels     Provide a platform for sharing experiences and opportunities amongst the initiatives     Identify specific means to further support the

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Research and innovation investments at all levels to address key challenges of the region, provide tailor-made solutions for society at large, create new and sustainable business opportunities in the blue economy; and work closely with the private sector  promotion of the Startup Europe Mediterranean (SEMED) initiative, aiming, in partnership with BLUEMED, to connect all the actors of the innovation system in the Mediterranean area as well as other instruments and initiatives to support the sustainable development, job creation and competitiveness of Blue economy SMEs	As reported <sup>277</sup> in a recent UfM study, although clusters in the sector have been growing and consolidating throughout the past decade, there is still room for support and reinforcement.  A wide range of alliances and networking initiatives, including through sub/regional projects exist in this respect and could be further capitalised. As a result, greater awareness and understanding of the role of cluster may allow for more effective local activities.	Build upon existing initiatives (WestMED Cluster Alliance) and projects (e.g. MISTRAL, BlueSkills, Culture & Creative Industry) which are aiming at the same cooperation purpose across the region – with the ambition to channel investments towards innovation of business models and business ecosystems across the Mediterranean.  Bring greater awareness on the role of maritime clusters in south-east countries so to accelerate their establishment.  Promoting the development of existing clusters such as the Algerian or the Tunisian Maritime Clusters (or Maghreb cluster) to grow and become mature in order to be able to scale-up to become regional.	development of maritime clusters on the southern shore  • Monitor advancements and increasingly expand the reach of the network and its ambition
Research and innovation investments at all levels to address key	Although not directly referred to in the UfM Ministerial Declaration, Ocean Literacy is a growing concept with	Capitalise existing practices and scale them up across the Mediterranean countries.	Either supporting the extension of the platform or ensuring an observe" membership for the UfM so to
challenges of the region,			strengthen/support ongoing actions.

 $<sup>^{277} \</sup>quad \text{https://ufmsecretariat.org/wp-content/uploads/2019/12/Maritime-Clusters-in-the-Mediterranean-Region\_Dec-2019.pdf}$ 

provide tailor-made solutions for society at large, create new and sustainable business opportunities in the blue economy; and work closely with the private sector  Collaborate in the relevant international I to adapt training and education requirements for maritime-related professions, stakeholders to work together in sector-specific partnerships to develop and implement strategies to address skill gaps and promote decent work and tailored training for blue economy sectors	high relevance to address the calls for action referred to in this section (left).  Ocean Literacy is in fact reportedly contributing <sup>278</sup> to overall awareness of challenges and opportunities offered by the sea (careers, jobs, skills, marine litter, etc.) and calls for a full engagement of all parties involved in the sustainable management of our ocean and seas (hence linking to fostering sustainable innovation and inclusion of blue economy actors).  Put ocean literacy high on the Mediterranean policy agenda would be a strong contribution by the UfM to the achievement of Sustainable Development Goals (SDGs).	Further support of EU4Ocean Coalition for Ocean Literacy, by building on this experience to capitalize and extend towards the whole Mediterranean Sea basin, including Southern countries.  Capitalize on the achievements of this project (Platform for organisations and individuals engaged in Ocean Literacy initiatives, a European Youth Forum for the Ocean and a Network of European Blue Schools, WG on Healthy and Clean Ocean) as well as the achievements of BlueSkills project.m	
Invest in socioeconomic observatories and provide scientific evidence to support integrated approaches to the development of the sustainable blue economy	There are low number of socioeconomic observatories in the Mediterranean, both at the regional and subregional level. There is a good coverage of marine observatories focused on biodiversity and coastal data (such as the Copernicus Marine Service, the European Marine Observation and	Capitalise and support existing initiatives, with a special focus on the South Mediterranean Sea basin.  Further support on socioeconomic observatories, particularly transnational ones, but also capitalising from successful initiatives at benefit of the whole region.	<ul> <li>Identification of relevant stakeholders and authorities willing to lead the process</li> <li>Stock taking exercise of state of the art with regards to the data availability to support the development of</li> </ul>

<sup>&</sup>lt;sup>278</sup> https://webgate.ec.europa.eu/maritimeforum/en/node/4484

	Data network) but very few in the socioeconomic field.  The main non-national socioeconomic observatory is Plan Bleu that acts as the Mediterranean Observatory for the Environment and Sustainable Development.  In addition, there is also a gap on the South Mediterranean Sea basin where very few initiatives on this field can be found.	Through continuously gathering data and its analysis, the region can foresee major socioeconomic needs and be prepared to meet these demands and avoid significant imbalances such as the current labour mismatch.	the sustainable blue economy  Development of the project following the logical framework approach)
The UfM countries to collaborate in the relevant internatiol fora to adapt training and education requirements for maritime-related professions, stakeholders to work together in sector-specific partnerships to develop and implement strategies to address skill gaps and promote decent work, promote the knowledge on project development and consortium building, and tailored training for blue economy sectors	A variety of strategies and tools for blue career development are already in place in the form of transnational projects promoting the development of skills (BlueSkills), internship mobility between Mediterranean countries (HOMERe) or the integration of young people (MedNc). These seek to address the mismatch between the education <i>curricula</i> and the skillsets needed by the market as well as to promote skills and employment in specific sectors.  The UfM has an important role regarding enhancing skills for better employability. Among the actions developed, in June 2021 a series of webinars on skills promotion were held.	Ensuring the continuation of the series of UfM webinars on Blue Skills, careers and jobs held in 2021 and capitalise on the European Year Youth 2022.  For example, the experience of the digitalisation webinar, could be continued and the "Women and Blue Skills/Careers/Jobs" webinar could be replicated in other SEMED countries with a similar focus on gender; but also "Digitalisation skills in the aquaculture and tourism sectors in the Mediterranean region" and "Women in blue economy in the Mediterranean" UfM webinars.  Moreover, capitalising on the European Year of Youth 2022, a new (cycle of) webinar(s) could be organised with a focus on the upskilling and reskilling of young students and workers according to the needs of key Blue Economy sectors	<ul> <li>Establish an ad hoc working group to facilitate the continuation of the series of webinars on the topic</li> <li>Analysis of similar type of events around the topic to assess potential synergies</li> <li>Preparation of a detailed planning for the organisation of the webinars</li> <li>Agenda design and conceptualization</li> <li>Upholding of the events</li> <li>Ensure communication and outreach, ex-ante, during and after the webinars</li> <li>Training for the promotion and development of operational partnerships</li> </ul>

Research and innovation investments at all levels to address key challenges of the region, provide tailor-made solutions for society at large, create new and sustainable business opportunities in the blue economy; and work closely with the private sector

Smart Specialisation, as a place-based and innovative approach to innovation, was conceiv"d as a "Ma"e in EU" concept associated to the European cohesion policy. Under this umbrella, it has triggered the development of more than 120 Smart Specialisation Strategies among European Union (EU) regions and Member States in recent years.

Nonetheless, the European roots of Smart Specialisation have gradually grown beyond EU borders. Smart Specialisation has started inspiring, at different levels, several countries and regions belonging to the European Enlargement Policy, the European Neighbourhood Policy and more widely.

The approach should be further expanded and shared across the whole Mediterranean Sea basin, by capitalizing on ongoing experiences in the EU but also in other non-EU Countries (5+5 dialogue).<sup>279</sup>

## Support Smart Specialisation Strategies<sup>280</sup> across the Mediterranean Sea basin.

S3 is an advanced process within EU Mediterranean countries but also some EU Neighbouring countries are discussing the approach and piloting in their own regions.

The example from north could help and be transferred to south Mediterranean countries and would favour the identification of specific needs and innovations potentials to be promoted, as to reflect the specificities of the local value-chains across the sea basin.

- Identify interested Countries and institutional actors in the south
- Provide a platform for sharing experiences and opportunities amongst EU and southern actors
- Identify specific means to further support the development of Smart Specialisation Strategies on the southern shore
- Foster a view on how the Innovation Integrated Investment (I3) Instrument<sup>281</sup> could be used to strengthen north-south and south-south cooperation
- Monitor advancements and increasingly expand the reach of the network and its ambition

Maritime Spatial Planning and Integrated Coastal Zone Management

Please bear in mind that several follow-up actions related to this cross-cutting priority are also included in relevant sectoral priorities

<sup>&</sup>lt;sup>279</sup> https://www.fiveplusfiverihe.org/research-and-innovation

https://s3platform.jrc.ec.europa.eu/documents/20125/247601/Smart+Specialisation+in+the+world+an+EU+policy+approach+help.pdf/126aeb09-aba3-517b-5759-aa732cd0be67?t=1621268542951

https://ec.europa.eu/regional policy/en/policy/themes/research-innovation/i3/

Welcome the work of the Intergovernmental Oceanographic Commission of UNESCO on Maritime Spatial Planning in the western Mediterranean and invite all UfM member countries to further use Maritime Spatial Planning in support of the development of the sustainable blue economy in the Mediterranean, including by addressing Land-Sea Interactions, as appropriate

Overall frameworks exist at
Mediterranean level through the
recognition of MSP and ICZM as part
of the Barcelona Convention and
related protocols, making therefore
binding to develop and make full use
of such tools

In order to foster the knowledge creation on how to design and conduct MSPs, many projects have been deployed or are on-going within Europe and with Mediterranean neighbouring countries

The ambition is nevertheless not only to share experience and foster transfer and knowledge creation, but also to foster coherence among the various MSP attempts within the seabasin

## Establishment of a UfM Maritime Spatial Planning (MSP) multi-stakeholder informal working group

This group may count on a strong involvement of IOC-UNESCO and involve relevant regional stakeholders

The group may provide a suitable forum for further transfer and knowledge creation (building on MSP MED, MSPGlobal and other initiatives). Additionally, it may facilitate result capitalisation on relevant multi-use projects and initiatives, with a focus on increasing policy coherence and harmonization at regional level.

The initial focus of the group may be on the integration of marine renewable energy in national MSP plans.

- Identification and engagement of key stakeholders in the Med
- Series of webinars/workshops on marine renewable energy with a focus on MSP (building on the MSP-Global and WestMED joint webinars on MSP for aguaculture and tourism)

# 6. Consolidated overview of progress in the implementation of the Ministerial Declaration as of September 2025

The table below aims at providing -in a snapshot- a summary overview of the progress observed in the implementation of the Ministerial Declaration as of June 2024, as explained throughout this document. For each of the UfM Ministerial Declaration priorities, the (lack of) relevant developments at the level of frameworks and initiatives is synthetically presented, where appropriate. In addition, a few examples of recently approved projects which are in line with the Ministerial Declaration priorities is provided.

In way, this June 2024 version of the Roadmap provides a number (non-exhaustive) of illustrative elements of progress in the implementation of the Ministerial Declaration, including concrete examples of new frameworks, initiatives and projects emerged since mid-2023.

Update initiati	e on progress as of June 2024 (frameworks and ves)	Illustrative examples of new projects
Food	from sea: fisheries, aquaculture	
•	At sub-regional level (EU), relevant developments can be observed, including a new package of measures to improve the sustainability of the sector.  No new regional frameworks have been detected, although as observed in previous analysis, this priority is already quite covered at this level. The GFCM Strategy for 2030 is currently in progress of implementation.  An Energy Transition Partnership (ETP) for the EU Fisheries and Aquaculture Sector was launched by the European Commission (DG MARE) in June 2023 with the objective of enhancing collaboration and mobilise resources to deliver solutions to challenges posed by the energy transition in the sector.  As of October 2023, GFCM has achieved 7 of the 20 commitments of the MedFish4Ever Declaration, 8 have been partially achieved and 3 have not progressed at all.  2024 marks the mid-term point in the implementation of the Regional Plan of Action for Small-Scale Fisheries in the Mediterranean and the Black Sea (RPOA-SSF) and the GFCM is organising a dedicated event on 6-7 July 2024 in Rome within the framework of the Small-scale fisheries Summit 2024 (SSF Summit 2024) to review its progress and reassess priorities towards 2028.  On 29 April 2024, WestMED's Aquaculture Technical Group "Aquawest" organised a meeting with the EU Aquaculture Assistance Mechanism and the FAO/GFCM with the aim of improving cooperation between the parties in the pursuit of shared goals.	SVC4MED FishEUTrust EU4Algae project BlueAquaEdu BOUTCAR WINBLUE EUFISH
Sustair	nable, climate-neutral and zero-pollution transport and por	ts
•	At the level of regional policy/regulatory frameworks, two new significant political commitments promoted by the UfM and in line with the SBE Ministerial Declaration priorities have been endorsed since the last update (i.e. the Ministerial Declaration on Transport, and the Regional Transport Action Plan (2021-2027).	NEMOSHIP CALLMEBLUE GREEN MARINE MED GREENMED BLUE PORTS

Update initiati	e on progress as of June 2024 (frameworks and ves)	Illustrative examples of new projects
•	At global level, the IMO Strategy on Reduction of GHG Emissions from Ships was updated in July 2023, including an enhanced commitment to reach net-zero emissions by or around 2050, a commitment to ensure an uptake of alternative zero and near-zero GHG fuels by 2030, as well as indicative checkpoints for 2030 and 2040. The MedPorts Forum will take place on the 31st May 2024, with the theme of discussion being focused around 'Resilience in Today's Agitated Waters'. Within the framework of the WestMED Initiative, in February an event on Green Shipping in Algeria was held in Oran in February 2024, increasing awareness of the developing blue economy in Algeria and with cooperation from the Green Shipping Technical Group.  The newly updated Med SOx ECA, entering into force in May 2025, has provisions to further limit air pollution from ships, and was adopted in 2022.  EUSAIR updated its Action Plan in April 2024 in line with EU strategies and objectives and the addition of a new pillar on social cohesion.	
Coast	al and maritime tourism	
•	At the level of international frameworks, the Barcelona Convention adopted the Post-2020 Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean Region (Post-2020 SAP BIO). At sub-regional level (EU), the European Commission presented the Transition Pathway for tourism as part of the Industrial Strategy Update. At the programming level, the INTERREG EURO-MED programme has incorporated specific objectives on Coastal and Maritime Tourism, and has expanded the associated partner status towards Southern Mediterranean countries.	STC TOUMALI EU WeMED_NaTOUR ECO-CRUISING FU_TOUR REBOOT MED
Marin	e renewable energies	
•	At the initiatives level, the creation of the Offshore Coalition for Energy and Nature' in the Mediterranean (MED OCEaN).  On a national level, Western Mediterranean countries such as France and Spain have developed their own strategies for the development of marine renewable energies.	NEXTFLOAT FLORES
Interac	ctions between marine litter and the blue economy	
•	On a global level, the negotiations led by UNEA to establish a an international legally binding instrument on plastic pollution, including in the marine environment, are still underway and are expected to come to a close by the end of 2024.  At the initiatives level, relevant initiatives have been promoted at the sub-regional level (EU) such as the EU Mission Restore our Ocean and Waters, including its Mediterranean Lighthouse.  On a regional level, MAP focal points met in Istanbul in September 2023 to commit to common goals, including tackling land-based pollution and its effects aquaculture, and ingraining a philsophy of sustainability in the blue economy.  Plastic Busters CAP launched a policy brief in the form of a	BlueMissionMED Plastic Busters CAP COMMON project SeaClear2.0 REMEDIES RHE-MEDIATION I-MERMAID

pdate iitiativ	e on progress as of June 2024 (frameworks and ves)	Illustrative examples of new projects
	instruments available at regional and subregional level, the most recent policy developments in this sector of the Mediterranean region and a set of recommendations to facilitate the incorporation of marine litter policies into local and national planning processes.	
laritin	ne safety and security of blue economy activities	
		EURMARS
•	On a regional level, in November 2023, GFCM adopted a binding recommendation for Mediterranean states, allowing the organisation to take action against member states which fail to adhere to measures which prohibit illegal fishing practices.  On a subregional level, as of January 2024, a new EU fisheries control system has been put in place, meaning that the IT tool for imported fish products' checks and verifications, CATCH, will be compulsory from January 2026.  The Mediterranean Coast Guard Functions Forum (MedCGFF) chaired by the Italian Coast Guard took place in 2022 on the 29th of September until the 1st of October in Naples, Italy.  The newly updated Med SOx ECA, entering into force in May 2025, has provisions to further limit air pollution from ships, and was adopted in 2022.  At subregional level, the EU Maritime Security Strategy (EUMSS) was updated in March 2023, with a renewed focus on traditional threats such as smuggling, as well as hybrid and newer threats of strategic interest such as cyber-attacks on submarine cables and security issues generated by climate degradation.  EMSA, EFCA and Frontex have jointly launched the first Coast Guard Capacity Building and Training Exchange Programme at European level in April 2024.  EMSA's CleanSeaNet service published its yearly Detections and Feedback data report fort he 2023 period, in	
	May 2024.	
over	nance and the future of sea basin strategies	
•	At programme level, the new Interreg EURO-MED (2021-2027) governance approach is now fully operational, with three "Institutional Dialogue Projects". The UfM labelled this governance approach.  The WestMED initiative will continue to be supported -as of October 2022- by a new Sea Basins Strategy Assistance Mechanism, seeking to achieve synergies with other EU sea basins (i.e. Atlantic, Black Sea).	Sustainable Blue Economy Partnership (SBEP) BlueMissionMED GOV4MED Go4Med Nature EUCLID
•	The new Coordination Support Action project "BlueMissionMED" funded by Horizon Europe will put in place a new coordination structure ("Lighthouse") to support the implementation of the EU Mission to Restore our Oceans and Waters in the Mediterranean. In parallel, the project to establish a "Sustainable Blue Economy Partnership"	
•	A new WestMED Ministerial Declaration was adopted in Malta in June 2023 by all involved countries, streamlining new priorities for its Framework for Action.	

Sustainable investment in the blue economy

## Update on progress as of June 2024 (frameworks and initiatives)

- At the regional level, The World Ocean Council (WOC) has partnered with the City and Port of Barcelona to develop the leading global hub for the Blue Economy.
- Regarding financial initiatives and investment tools, two new developments can be highlighted:
  - European Investment Fund (EIF)'s Mediterranean Investment Platform
  - Blue Economy Mediterranean Partnership.
- The European Investment Fund (EIF) has announced EUR 20 million under InvestEU for the Blue Revolution Fund to invest early-stage aquaculture enterprises.
- The European Investment Bank (EIB) launched the EIB EU Blue Champions Scheme with the aim of identifying and investing in 20 new and innovative projects supporting the sustainable blue econom under the Mission Restore out Oceand and Waters and BlueInvest. At COP28, partners and donors involved in the Blue Mediterranean Partnership reinforced their support for the sustainable blue economy in the Southern Mediterranean region with the Partnership becoming fully operational in 2024. Additional funding to the value of €9.5 million was announced with the aim of mobilising at least €1 billion in investments.
- The Türkiye Green Economy Financing Facility has been extended with an additional €750 million of EBRD financing and includes blue economy projects for the first time.
- The first call for Interreg NEXT MED project proposals took place in may 2024 with a budget of €103 million euros.
- The 4th call for proposals for the Interreg Euro-MED programme was opened between May and June 2024.
- 12 new investments were announced through the Katapult Ocean Accelerator's Katapult Ocean Deep Blue Fund.
- The 3rd call for PROBLUE funding will open in September 2024.
- SwitchMed is now in its second phase.

## Illustrative examples of new projects

The category of projects does not apply to this enabler.

#### Marine research and innovation, skills, careers and employment

- Regarding priorities, blue economy innovation ecosystems have been considered as essential drivers for transformative change in coastal and maritime regions.
- On a sub-regional level, The Euro-Mediterranean Conference on Science Diplomacy took place in Barcelona in October 2023, organised by UfM and the European Commission, with the participation of more than 80 people from 22 different countries.
- On a regional level, the Interreg NEXT MED Programme has released a new call for proposals which closes at the end of June 2024, with a key priority area being R&I, skills and job creation.
- As of April 2024, The European Partnership for Research and Innovation in the Mediterranean Area (PRIMA) has been extended by three years (2025-2027), with an increase of EUR 105 million from the EU budget.
- With the presence of the 5+5 Dialogue and in collaboration with UfM and the European Commission, a new Euro-Mediterranean Hub on Research and Innovation was launched in April 2024, serving as a learning and collaborative platform for Mediterranean cooperation in the area of R&I.

Pending EMFAF Call: Maritime clusters as an innovative enabler for a Sustainable Blue Economy in the Mediterranean

BlueAquaEdu

**BOUTCAR** 

NextBlueGeneration

Blue Bio Tech preneurs

uBlueTec

**BLUE PORTS** 

Turning Blue

COASTAL PRO

**FLORES** 

Update on progress as of June 2024 (frameworks and initiatives)	Illustrative examples of new projects		
<ul> <li>The OGS Summer School on Sustainable Blue Economy will take place in June 2024.</li> </ul>			
Maritime Spatial Planning and Integrated Coastal Zone Management			
<ul> <li>On a global level, MSPglobal 2.0, a UNESCO and DG MARE collaboration, was kicked off in September 2023. Its most recent activities include a workshop to consult experts on ocean data and Spatial Data Infrastructure in order to co-develop a Data Toolbox to support countries in developing their own SDI for MSP.</li> <li>At the sub-regional level (WestMED), the MSP Community of Practice has been launched and it will be implemented and possibly further expanded in the Mediterranean area during the following years.</li> <li>At regional level, MedPAN released a new call for interest for hope finites in March 2024, providing financial support</li> </ul>	Marine Protected Areas Europe COASTLINE TRANSEATION RESCUER		
for beneficiaries in March 2024, providing financial support by awarding grants to the management and co- management structures of Mediterranean MPAs.	Blue-Cloud 2026		