

EUROPEAN PARTNERSHIP



**HORIZON  
EUROPE**



#HorizonEU

#EUpartnerships



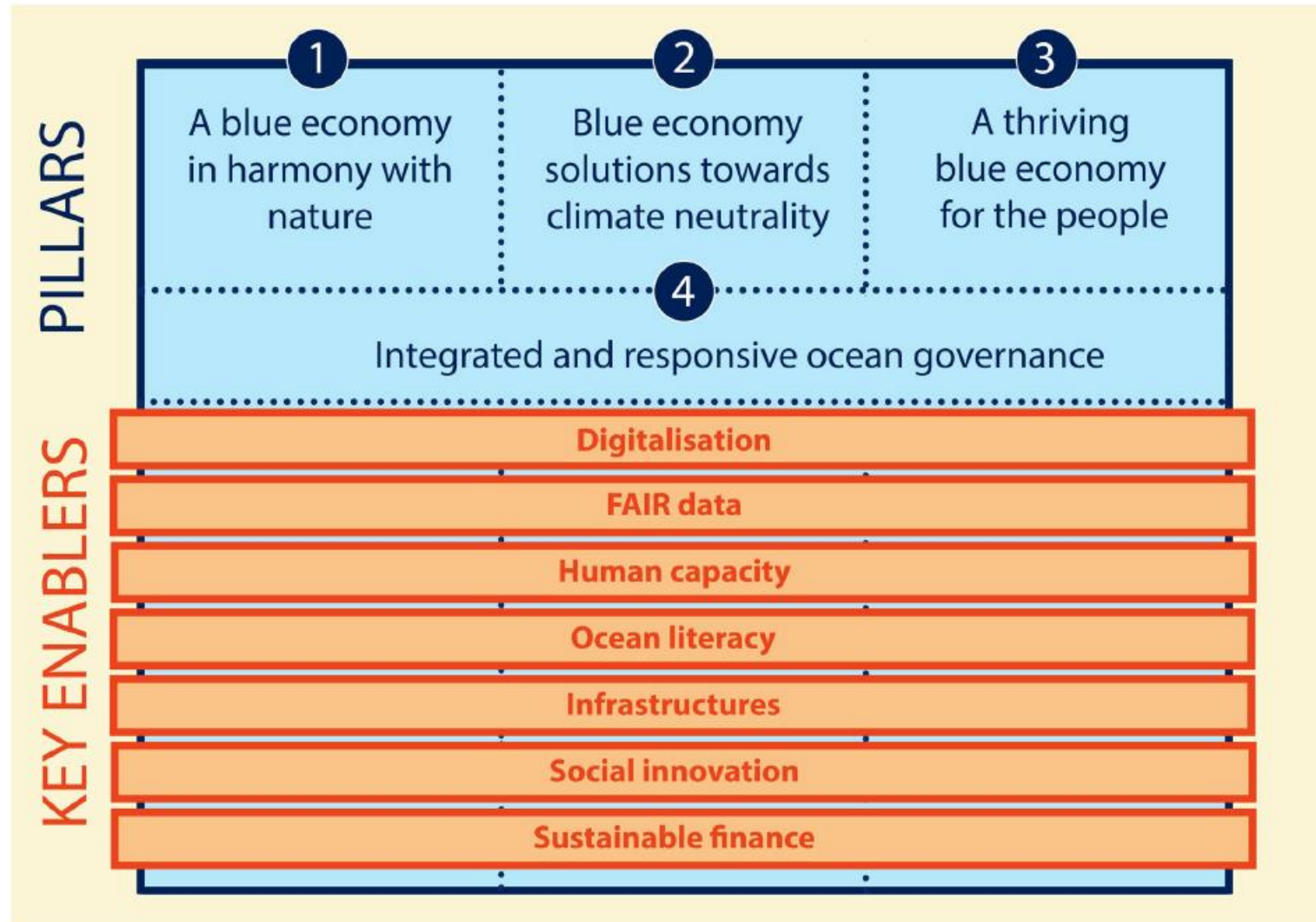
# SUSTAINABLE BLUE ECONOMY PARTNERSHIP

## The 4 Pillars of the SBEP Strategic Research and Innovation Agenda (SRIA)

*Matteo Ranalli*

Ecorys

# The 4 Pillars of the SBEP Strategic Research and Innovation Agenda (SRIA)



*Thematic pillar structure and underpinning key enablers*

# The BlueMed SRIA at a glance

- The BlueMed SRIA is structured around a set of challenges grouped under three pillars or enablers, and sustained by a cross-cutting and policy-driven fourth one (as similarly done by the SBEP SRIA)
  - High level of detail provided, with 186 actions identified within 34 goals
- The BlueMed Implementation Plan prioritises 13 specific SRIA goals, and contextualises them in a specific and operational manner (e.g. actions, defined timeframes and proposed funding schemes)
- The concepts of “development”, the coastal dimension, tourism and the maritime sector are particularly present in the BlueMed SRIA

Table 1 – Key challenges and the 4 pillars

| BLUEMED KEY CHALLENGES   |   |   |
|--|---|---|
| KNOWLEDGE  | ECONOMY   | TECHNOLOGY  |
| A. Mediterranean Sea ecosystems: characterize present dynamics, services, resources, vulnerability and resilience to natural and anthropogenic pressures   | A. Innovative businesses based on marine bio-resources in the Mediterranean | A. Smart, greener and safer maritime transport and facilities in the Mediterranean                            |
| B. Mediterranean Sea: forecast changes of the basin under climate and anthropogenic pressures and develop services in the field of sustainable adaptation to climate change and plans for mitigation | B. Ecosystem- based management of Mediterranean aquaculture and fisheries   | B. Observing systems and operational oceanography capacities in the Mediterranean                             |
| C. Hazards and protection of coastal areas and open sea in the Mediterranean   | C. Sustainable tourism and cultural heritage in the Mediterranean           | C. Innovative offshore industrial platforms including marine renewable energy and co-use                      |
| D. Innovative blue growth trajectories: biotechnologies, food, and the deep sea and offshore resources   | D. Maritime clusters in the Mediterranean                                   | D. Marine and coastal natural and cultural heritage in the Mediterranean: discovering, protecting and valuing |
|  | E. Governance of maritime space and marine resources in the Mediterranean   |   |
| <b>Cross-cutting enablers for Blue Jobs and Blue Growth</b>  |   |   |

Table 2 – The 13 priority goals as identified in the BlueMed Implementation Plan

| BLUEMED PRIORITY GOALS |   |
|------------------------|---|
| <b>THEMATIC</b>        | Understanding Pollution Impacts, Mitigation, and Remediation in the Mediterranean Sea |
|                        | Support solutions for sustainable production and consumption of food from the sea     |
|                        | Preparing to climate change and define adaptation / mitigation measures               |
|                        | Linking tourism, tourists and environment   |
|                        | Effective maritime spatial planning in the Mediterranean                              |
|                        | Greening vessels, facilities and services   |
|                        | Towards an observing system of systems  |
|                        | Exploring the potential of blue-biotech   |
| <b>CROSS-CUTTING</b>   | Promote the role of Marine Renewable Energies (MRE) in the energy transition phase    |
|                        | Open data, open science, open innovation  |
|                        | Building capacity, blue skills and blue professionals                                 |
|                        | Strengthen synergies among science, industry, policy- makers and society              |
|                        | From traditional maritime economy to blue growth activities                           |

# The 4 Pillars of the SBEP Strategic Research and Innovation Agenda (SRIA)

## Pillar 1 – A blue economy in harmony with nature

- Safeguarding and enhancing sustainable ecosystem services, at the base of the blue economy
- Preserving and increasing the quality status of ecosystems
- Putting biodiversity on a path to recovery by 2030 (EU biodiversity Strategy for 2030 and the Green Deal)
- Achieving UN SDGs by 2030



## Pillar 4 – Integrated and responsible ocean governance

- Ensuring the provision of ecosystem services by basing ocean governance on better, multi-disciplinary scientific knowledge and on an ecosystem approach to management
- Advancing ocean governance to effectively deal with the increased use of ocean space, resources, and the presence of emerging challenges
- Avoiding fragmentation, increasing coordination among sectoral policies

# The Partnership SRIA and BlueMed SRIA – Pillar 1

SBEP 1.A.1 - Enabling Good Environmental Status by characterising ocean health and cumulative impacts of blue economy activities from catchment to the deep sea

MED KNO A.1 – Understanding the functioning of the Mediterranean Sea ecosystem  
**MED KNO A.2** – Understanding Pollution Impacts, Mitigation, and Remediation in the Mediterranean Sea  
**MED KNO B.2** – Preparing to climate change and define adaptation/mitigation measures  
**MED ECO E.2** – Effective maritime spatial planning in the Mediterranean  
MED CRO A.2 – International Cooperation and Coordinated Transboundary Networks

Reduction of pollution and other forms of disturbance from the blue economy of the marine ecosystem.

SBEP 1.B.3 - Scientifically underpinning criteria for the responsible use of non-living marine resources (e.g. sand, gravel, minerals), including from the deep sea

MED KNO A.1 – Understanding the functioning of the Mediterranean Sea ecosystem  
**MED KNO A.2** – Understanding Pollution Impacts, Mitigation, and Remediation in the Mediterranean Sea  
MED KNO D.3 – Exploiting the Deep Sea  
**MED ECO E.2** – Effective maritime spatial planning in the Mediterranean

SBEP 1.C.2 - Achieving more effective and biologically relevant monitoring, surveying and sampling

MED KNO A.1 – Understanding the functioning of the Mediterranean Sea ecosystem  
MED KNO B.1 – Forecasting the Mediterranean Sea dynamics and climate  
MED ECO B.1 – Develop optimal fishing strategies, technologies and practices  
**MED TEC A.1** – Greening vessels, facilities and services  
**MED TEC B.1** – Towards an observing system of systems  
MED TEC B.2 – Tailor-made sensors and platforms  
MED TEC B.3 – Security and safety services and technologies in the Mediterranean supporting the Blue Growth  
MED TEC C.1 – Changing the rationale: one platform, multiple uses and activities  
MED CRO A.2 – International Cooperation and Coordinated Transboundary Networks  
MED CRO A.3 – Interaction between scientists, stakeholders, policy and decision makers, civil society  
**MED CRO A.4** – Building capacity, blue skills and blue professionals

## The Partnership SRIA and BlueMed SRIA – Pillar 4

SBEP 4.B.1 - Contributing knowledge to achieve coherence in policy implementation, including transboundary contexts, across sea-basins, between countries, between terrestrial, coastal and marine/maritime policies, and across sectors

**MED ECO E.1** – Strengthen synergies among science, industry, policy-makers and society

**MED ECO E.2** – Effective maritime spatial planning in the Mediterranean

**MED TEC A.1** – Greening vessels, facilities and services

**MED TEC B.1** – Towards an observing system of systems

**MED CRO A.2** – International Cooperation and Coordinated Transboundary Networks

**MED CRO A.4** – Building capacity, blue skills and blue professionals

SBEP 4.B.2 - Delivering data and scientific knowledge for coherent area-based management including Marine Protected Areas, Maritime Spatial Planning and multi-use of marine space

**MED KNO A.1** – Understanding the functioning of the Mediterranean Sea ecosystem

**MED KNO A.2** – Understanding Pollution Impacts, Mitigation, and Remediation in the Mediterranean Sea

**MED KNO B.1** – Forecasting the Mediterranean Sea dynamics and climate

**MED KNO C.1** – Reducing the coastal risk of disasters and their effects

**MED ECO E.1** – Strengthen synergies among science, industry, policy-makers and society

**MED ECO E.2** – Effective maritime spatial planning in the Mediterranean

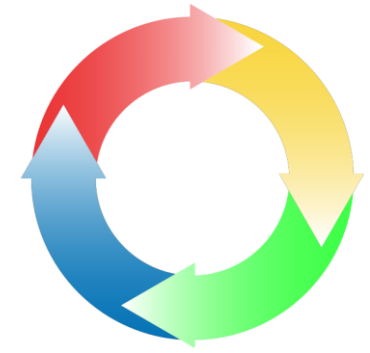
SBEP 4.B.3 - Developing operational assessment frameworks to evaluate the status of the marine environment and sustainability of human uses

**MED KNO A.1** – Understanding the functioning of the Mediterranean Sea ecosystem

**MED KNO C.1** – Reducing the coastal risk of disasters and their effects

**MED TEC C.1** – Changing the rationale: one platform, multiple uses and activities

# Opportunities



- The role of **Maritime Spatial Planning** is both directly and indirectly recognized in many elements of the 2 SRIAs, indicating strong convergence on the process.
- The SBEP SRIA also provides **opportunities** related to new EU-wide policy priorities which are not so explicitly covered by the BlueMed SRIA, such as **informing the reform of ocean-related subsidies** (SBEP 4.C.2).
- To the contrary, direct support tailored to the local socio-economic and production frameworks is essentially more evident in the BlueMed SRIA, e.g. support to **Mediterranean Blue start-ups** (MED ECO.D.2)

## EUROPEAN PARTNERSHIP



# HORIZON EUROPE



#HorizonEU

#EUpartnerships

# Q&A



© European Union 2022

Unless otherwise noted the reuse of this presentation is authorised under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

Image credits: © ivector #235536634, #249868181, #251163013, #266009682, #273480523, #362422833, #241215668, #244690530, #245719946, #251163053, #252508849, 2020. Source: Stock.Adobe.com. Icons © Flaticon – all rights reserved.



# The 4 Pillars of the SBEP Strategic Research and Innovation Agenda (SRIA)

## Pillar 2 – Blue economy solutions towards climate neutrality

- Having the blue economy contribute to climate neutrality & resilience by 2050



## Pillar 3 – A thriving blue economy for the people

- Having the blue economy support people's health, well-being and prosperity in a sustainable, resilient and equitable way. A thriving blue economy will be providing jobs, sustainable food and feed, bioactive compounds, and recreational opportunities while contributing to ecosystem protection and restoration

## The Partnership SRIA and BlueMed SRIA – Pillar 2

SBEP 2.A.1 - Underpinning innovation to upscale renewable ocean energy

**MED ECO E.2** – Effective maritime spatial planning in the Mediterranean

**MED ECO E.3** – Promote the role of Marine Renewable Energies (MRE) in the energy transition phase

**MED TEC B.2** – Tailor-made sensors and platforms

**MED TEC C.2** – Increase the fraction of installed marine renewable energy power plants

SBEP 2.B.1 - Developing sustainable and cost-efficient solutions for construction, maintenance, reuse and multi-use of off-shore platforms

**MED ECO E.3** – Promote the role of Marine Renewable Energies (MRE) in the energy transition phase

**MED TEC B.2** – Tailor-made sensors and platforms

**MED TEC C.1** – Changing the rationale: one platform, multiple uses and activities

SBEP 2.C.2 - Quantifying at regional-scale, and across basins, the impacts of climate change (acidification, sea-level rise, deoxygenation, ocean warmings and other stressors) to strengthen ocean and coastal resilience

**MED KNO B.1** – Forecasting the Mediterranean Sea dynamics and climate

**MED KNO B.2** – Preparing to climate change and define adaptation/mitigation measures

**MED TEC B.1** – Towards an observing system of systems

**MED TEC D.1** – Technology solutions for the Mediterranean natural and cultural heritage

## The Partnership SRIA and BlueMed SRIA – Pillar 3

SBEP 3.A.1 - Developing new and optimising existing blue bioeconomy and biotechnology value chains

**MED KNO D.1** – Exploring the potential of bluebiotech

**MED KNO D.2** – Support solutions for sustainable food production

MED ECO A.1 – Developing new methodologies and tools

MED ECO A.2 – Generating new products and services

SBEP 3.A.3 - Innovating sustainable seafood production systems, including offshore, closed, low- and multi-trophic aquaculture and low impact sustainable fisheries

**MED KNO D.2** – Support solutions for sustainable food production

MED ECO A.1 – Developing new methodologies and tools

MED ECO B.1 – Develop optimal fishing strategies, technologies and practices

MED ECO B.2 – Develop optimal aquaculture strategies, technologies and practices

SBEP 3.C.2 - Reducing human health risks from marine borne pathogens, toxins and toxicants

**MED KNO D.1** – Exploring the potential of bluebiotech

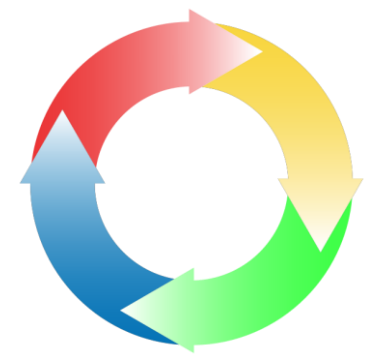
**MED KNO D.2** – Support solutions for sustainable food production

MED ECO B.2 – Develop optimal aquaculture strategies, technologies and practices

**MED ECO E.1** – Strengthen synergies among science, industry, policy-makers and society

MED TEC A.2 – Safer maritime transport

# Opportunities



- The attention to the offshore dimension, including **platforms** and **multi-use/co-use** is present in both SRIAs and accounted for under different angles.
- The SBEP SRIA focuses explicitly on '**blue carbon**' sequestration (SBEP 2.A.2): the BlueMed SRIA might build on that.
- The SBEP SRIA offers support to advance strategies to **minimise risk from novel maritime technologies** (SBEP 3.D.3), it links the **benefits of blue spaces to human health** (SBEP 3.C.1) and the use of **biodiscovery to improve well-being** (SBEP 3.C.3).
- To the contrary, the SBEP SRIA seems not to focus explicitly on **maritime cultural heritage** while embedding it in spatial planning and support to ocean governance. Opportunities to **promote blue biotech** are also highlighted – particularly with the Blue bioeconomy ERANET coming to an end.

## EUROPEAN PARTNERSHIP



#HorizonEU

#EUpartnerships



# Q&A



© European Union 2022

Unless otherwise noted the reuse of this presentation is authorised under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

Image credits: © ivector #235536634, #249868181, #251163013, #266009682, #273480523, #362422833, #241215668, #244690530, #245719946, #251163053, #252508849, 2020. Source: Stock.Adobe.com. Icons © Flaticon – all rights reserved.