

# Implementation Report 2023

Revised Atlantic Action Plan 2.0

**Atlantic Strategy**

Atlantic Assistance Mechanism



# List of Abbreviations

<b>AAM</b>	Atlantic Assistance Mechanism	<b>EU</b>	European Union
<b>AANCHOR</b>	All AtlaNtic Cooperation for Ocean Research and innovation	<b>EMFAF</b>	Maritime, Fisheries and Aquaculture Fund
<b>AAORIA</b>	All-Atlantic Ocean Research & Innovation Alliance	<b>EMFF</b>	European Maritime and Fisheries Fund
<b>AAP</b>	Atlantic Action Plan	<b>EU</b>	European Union
<b>ASC</b>	Atlantic Steering Committee	<b>MRE</b>	Marine Renewable Energy
<b>ASPC</b>	Atlantic Stakeholder Platform Conference	<b>MS</b>	Member States
<b>CT</b>	Central Team	<b>NH</b>	National Hub
<b>CINEA</b>	European Climate, Infrastructure and Environment Executive Agency	<b>R&amp;I</b>	Research & Innovation
<b>EC</b>	European Commission	<b>PT</b>	Portuguese
		<b>SME</b>	Small and Medium-sized Enterprises

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# 1.

## Introduction



# 1.1 Message from the ASC PT Presidency

Dear Atlantic Colleagues,

Welcome to the 2023 Implementation Report of the Atlantic Action Plan 2.0 (AAP 2.0)!

In 2023, the revised Atlantic Action Plan (AAP 2.0) completed three years of implementation, and it's time to take stock of the achievements made so far regarding its objectives, namely, to unlock the potential of sustainable blue economy in the Atlantic area while preserving marine ecosystems and contributing to climate change adaptation and mitigation.

During the past year, the Portuguese Presidency intended to promote the discussion about the achievements of the AAP 2.0 and blue economy challenges in the Atlantic Sea Basin. Special focus was given to enlarge this debate to all stakeholders, including national, regional and local authorities, economic and social actors, civil society, academia and non-governmental organisations. One of the main goals of this year's Portuguese Presidency was to organise a Ministerial meeting with the members of government responsible for Maritime Affairs of the Atlantic Strategy Members States and the European Commission resulting in a joint Ministerial Declaration.

The AAP 2.0 brought along novel features such as the four thematic pillars and related Task Forces, each led by a Pillar Coordinator. The Presidency closely followed up the work of the Pillars, bearing in mind that the development of a Sustainable Blue Economy in the Atlantic Sea Basin lies at the heart of the AAP 2.0, i.e., combining sustainable transformation with a high job creation potential in the Atlantic coastal communities. Another goal was related to the international dimension of the AAP 2.0, especially since the Research and Innovation (R&I) activities implemented as part of the Galway and Belém Statements and the All-Atlantic Ocean Research Alliance cut across all Pillars. The Portuguese Presidency agrees that only a “better understanding of the changing Atlantic Ocean and its effects on coastal communities can provide innovative solutions”. Therefore, further deepening the international dimension of the AAP 2.0 was one of the major goals of the Portuguese Presidency, as it intended to bring new stakeholders from different geographies to share their experience and best practices.

Portuguese Presidency of Atlantic Strategy Committee 2023

## 1.2 Executive Summary

The AAP 2.0 Implementation Report 2023 provides an analysis of the third year of implementation of the [Atlantic Action Plan 2.0 \(AAP 2.0\)](#). The overall objective of this document is to present the progress and the results achieved within 2023, while showcasing the specific activities undertaken, the key takeaways and lessons learnt as well as recommendations for the next year. All data and key findings presented within this report are a result of desktop research and information gathered by the Atlantic Assistance Mechanism (AAM), in cooperation with the ASC Presidency, the Pillar Coordinators, the Atlantic National Hubs and the respective Taskforce members.

The report includes an introduction to AAP 2.0 governance, presents the activities organised by the AAM, the Pillar Coordinators and the National Hubs to promote and raise awareness of the AAP 2.0's goals and objectives and gives an overview of selected projects that are in line with AAP 2.0 priorities and which have been identified as good practice examples from the [Maritime Data Hub](#).

In a nutshell, the main results and achievements of 2023 are the organisation by the Portuguese Presidency of the annual Atlantic Stakeholder Platform Conference (ASPC) and the first Atlantic Ministerial Meeting, whose results are presented in this report. Also, in 2023 dedicated workshops and national events have been organised by the Pillar coordinators and the Atlantic National hubs in collaboration with the AAM. These workshops/events aimed to showcase the most important issues around AAP 2.0, share knowledge and developments around the AAP areas of work and exchange opinions on how to solve important challenges. In addition, the AAM continued to map funded projects around the AAP Thematic Pillar Goals throughout 2023 and the ASC Committee Atlantic Strategy Committee continued to monitor, report and evaluate the different aspects of the AAP 2.0 and highlight important concerns.

Lastly, pertinent conclusions, valuable recommendations and insightful respective lessons learnt from the third year of AAP implementation have been gathered and pointed out in this implementation report to guide the future work of the AAP 2.0. These findings can serve as crucial guides for shaping the future strategy implementation and for maximizing the AAP's impact in fostering sustainable blue economy across the Atlantic Region.

# 1.3 Presentation of AAP 2.0 Pillars and Pillar Coordinators

## Introduction to AAP 2.0

The Atlantic Maritime Strategy was originally adopted in 2011 in order to support the sustainable development of blue economy in the EU Member States bordering the Atlantic ocean.

In 2013, the European Commission (EC) put forward an Atlantic Action Plan (AAP) to implement this strategy. Few years later, with the aim to give a new boost to a sustainable maritime economy, the EC updated the priorities for regional cooperation by releasing a [Communication](#) which acted as a fresh contribution to Europe's recovery from the COVID-19 pandemic crisis. This Communication outlined the updated AAP 2.0 for a sustainable, resilient and competitive blue economy in the EU Atlantic area.

The AAP 2.0 has the ambition to achieve seven goals under four thematic Pillars through concrete actions mobilising all relevant Atlantic stakeholders across sectors, coastal regions and countries. The governance structure of the AAP 2.0 is depicted in the graph on the right.

Besides the four thematic Pillars, Research & Innovation (R&I) - the International dimension underpins all Thematic Pillars of the AAP; the All-Atlantic Ocean Research Alliance is an important example of these cooperative international R&I efforts.



 For more information on AAP 2.0 click [here](#)

# 1.3 Presentation of Pillar Coordinators (1/2)

## Pillar 1 Coordinator

Ports as gateways and hubs for the blue economy



**Carlos Botana LAGARÓN**

Head of sustainability department  
in Port Authority of Vigo

**Carlos Botana LAGARÓN** is the Head of Sustainability and Development Policies in the port of Vigo (Spain) and Chairman of the blue growth network “European Sea Ports Organisation (ESPO)” and, since 2022, Member of Climate and Energy Committee of International Association of Ports and Harbors (IAPH).

He holds a PhD in Climate Change and an MSc. Sciences of the Seas. Carlos has over 19 years of experience in management in commercial, fishing and port environment in the port of Vigo.

He has worked in more than sixteen European projects about environment and development in several programs (FP7-THEME 7, LIFE, LIFE+, Feder, and others). He is an expert in environmental implementation, quality, and security systems, and a member of the Sustainability and Development Committee of ESPO “European Sea Ports Organisation” since 2013.

## Pillar 2 Coordinator

Blue skills and ocean literacy



**Ana NORONHA**

Executive Director of Ciência Viva

**Ana Noronha** is Executive Director of Ciência Viva, the Portuguese agency for scientific culture. At Ciência Viva, she coordinates initiatives about education and public awareness of science at national and international level, particularly on space science and ocean literacy.

A physicist with a PhD on Non-Linear Dynamics, she coordinates the ESERO Portugal, European space resource office established with ESA at Ciência Viva, Co-Chair of the Ecsite Space Group and is a member of the ESA Advisory Committee on Education. Presently she is serving as coordinator of “Blue Skills & Ocean Literacy” Pillar of the Atlantic Strategy and as a Member of the Ocean Decade Communications Advisory Group.



For more information on the  
AAP Pillars and Pillar  
Coordinators click [here](#)



# 1.3 Presentation of Pillar Coordinators (2/2)

## Pillar 3 Coordinator Marine Renewable Energy



**Kerrie SHEEHAN**

Head of Research and Technology Department  
in Sustainable Energy Authority of Ireland (SEAI)

**Kerrie Sheehan** has over 17 years' experience in the management of EU and National funded research of which 9 years have been in the sustainable energy field, and during the last 5 years specifically on offshore/ocean. The roles have been in central university functions, within research performing units and as National funder, covering programme management, finance and governance. She holds a BA in Mathematics and Geography, a Master's in Environmental Public Policy and is an FCCA accountant.

Kerrie is currently Head of Research and Technology Department in Sustainable Energy Authority of Ireland (SEAI). She oversees the SEAI offshore/ocean team, which supports ORE National test sites, research funding, delivering Interreg and H2020 research performing projects, and undertaking national coordination of policy makers, industry and researchers.

## Pillar 4 Coordinator Healthy Oceans and Resilient Coasts



**Phil MONBET**

Director Pôle Mer Bretagne Atlantique

With a background in chemistry from the University of Brittany, **Philippe Monbet** completed a thesis "Marine Chemistry" at the European Institute of the Sea (IUEM, Brest) and then joined Ifremer and Ineris "National Institute of Industrial Risks Environment" for missions on marine environmental research, expertise and consulting.

His research activities have taken him to the AIMS "Australian Institute of Marine Science", Melbourne Monash University and Plymouth University in the UK and he has provided consultancies for major French energy stakeholders regarding the ecological monitoring of water around nuclear power plants waterfronts (Flamanville, Penly Paluel) and AREVA NC La Hague. In 2010, he joined Pôle Mer Bretagne Atlantique, a Sea Business Cluster dealing with innovation in the maritime sector as Head of European Affairs managing the European projects and later he was appointed Director in charge of the cluster management and international affairs.



For more information on the  
AAP Pillars and Pillar  
Coordinators click [here](#)

# 2.

## AAP 2.0 Progress



# 2.1 Overview of AAP 2.0 Progress (2020 - 2023)

In the context of preparing the annual Implementation Reports from 2020-2023, the AAM has been monitoring and keeping track of the the AAP 2.0 overall progress. Utilising this monitoring activity, the data presented below constitute the aggregated results achieved around AAP 2.0 during those three years of implementation.



**>830**

Total projects related to AAP identified

**21**

Total projects awarded in the context of Atlantic Project Awards

**15**

National Events related to AAP Pillar themes and objectives

**4**

Atlantic Stakeholder Platform Conferences

**>4000**

People registered in the monthly Atlantic newsletter

**>60**

Identified Good Practices/Success stories since 2020



# 2.2 Stakeholder Engagement Activities

## Pillar I - Ports as gateways and hubs for the blue economy

### Pillar I National Event (30 June 2023):

Ports as Gateways and Hubs for the Energy Transition: Potential sources of Energy and prototype's analysis

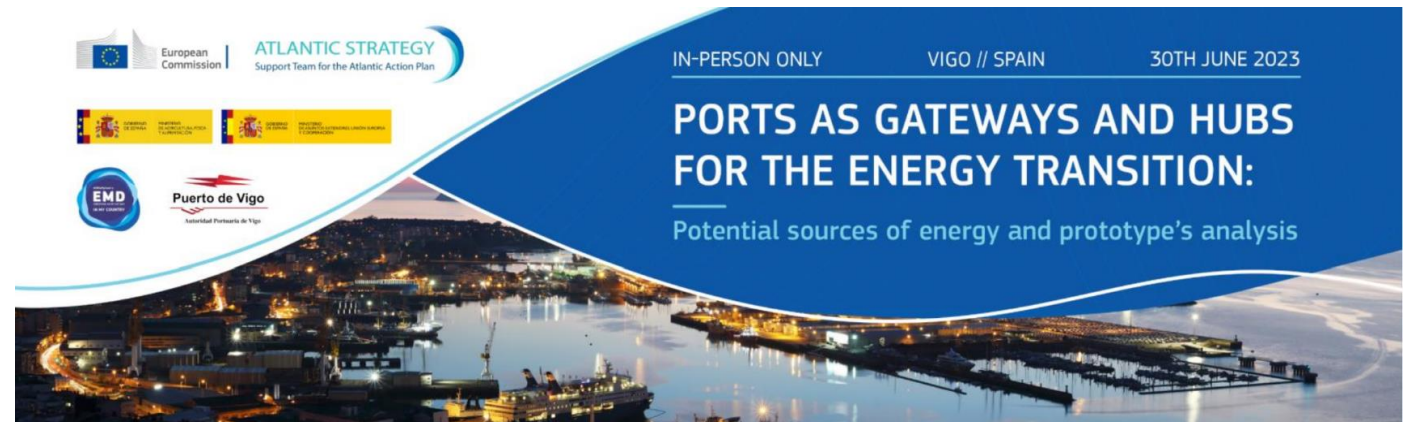
**Overview:** The event consisted in a workshop with the aim to gather the efforts developed throughout the years by the AAP Pillar I task force members towards discussing and potentially creating a guidance document on what are the potential energy sources and technological solutions for each type of fleet, ranging from maritime transport to fishing fleets and/or recreational vessels. Participants discussed the main challenges encountered when finding oriented solutions on sources of energy and prototypes for adapting the various maritime fleets towards the energy transition needs.



10  
Speakers



36  
live participants



# 2.2 Stakeholder Engagement Activities

## Pillar II – Blue Skills and Ocean Literacy & Pillar III – Marine Renewable Energy

### Pillar II and III National Event (7 November 2023):

#### Fostering the Atlantic's blue economy: Skills for Marine renewable energy

**Overview:** The webinar aimed to explore the importance of developing skills and fostering ocean literacy in the context of Marine Renewable Energy (MRE) and was organised in the scope of both Pillar II and Pillar III of the Atlantic Strategy Action Plan, and by the National Hubs of Portugal and Ireland.

#### Conclusions:

- Offshore renewable energy has the potential to serve as a beacon of hope in the green transition and mitigation of climate change, and to bring jobs and economic opportunities to Europe in a time when the world is faced with not only unprecedented environmental challenges, but also cost of living and energy crises. It's therefore of utmost importance that we foster the skills needed to be a leader in this sector.
- Synergies and cooperation across the pillars, in particular pillars II and III, are the key to developing the skills needed in the European population to support the green and digital transitions in the blue economy. We must find ways to work together to make careers in the blue economy attractive to both the younger generation when they are making career and educational decisions, and to those who are looking to upskill or reskill later in life.



15  
Speakers



35  
live participants



# 2.2 Stakeholder Engagement Activities

## Pillar III – Marine Renewable Energy

### Atlantic Strategy – Meeting of the Irish Task Force Representatives from each Pillar of the Atlantic Action Plan 2.0 (4 April 2023)

**Topic:** Introduction of all Irish task force members in the AAP 2.0/ future outlook for Ireland’s role and ambition in the AAP 2.0 and beyond.

**Overview:** This meeting gave an opportunity for the first time for all Irish Taskforce Members of the four pillars of the AAP to meet and connect. Taking place in the Marine Institute in Galway, eighteen people including the taskforce members as well as other interested parties from government and research came together to listen, learn, engage and discuss relevant issues.

The agenda for the day included informative presentations on each of the Pillar activities as well as introductions and overviews from the National Hub, the Maritime Affairs Attaché and from the Director of the Marine Institute.



6  
Speakers



18  
live participants



## 2.2 Stakeholder Engagement Activities

### Sea basins Assistance Mechanism

#### Sea basins Assistance Mechanism Workshop (May 24<sup>th</sup>):

##### Path to decarbonisation of the blue economy: cross-sea basin synergies

**Overview:** The full decarbonisation of the blue economy is a relevant and cross-cutting challenge for the EU and its neighboring countries. By taking advantage of the recently established Sea basins Assistance Mechanism contract, the workshop offered a unique opportunity to discuss the support provided by the EU sea basin strategies in the Atlantic, WestMED and Black Sea.

In the first part of the discussions, a number of relevant success stories were shared as concrete deliverables and contributions towards the implementation of the EU sea basin support – i.e. towards fostering a full decarbonisation of the blue economy.

In the second part, a reflection on **the best way forward for a strengthened cooperation amongst the sea basins** was facilitated, in order to accelerate a fully sustainable blue economy across the EU.

As a result of this Workshop, relevant opportunities for stronger cross-sea basin coordination and synergies, both at policy and technical levels, have been identified – i.e. amongst stakeholders, projects but also Steering Groups. This way it will be possible to further streamline overall cross-sea basins cooperation across the EU towards decarbonisation.



4  
Speakers



Moderated by the Sea  
Basins Assistance  
Mechanism Team  
Leader



**Workshop**  
**Path to decarbonisation of the blue economy: cross-sea basin synergies**

24/05/2023. 12.15 - 13.30 CET  
Brest Expo - Parc de Penfeld, Brest, France

[Register now](#)

ATLANTIC STRATEGY  
Supporting the Atlantic Action Plan

WESTMED  
blue economy initiative

Common Maritime Agenda  
for the Black Sea

EMD  
EUROPEAN MARITIME DAY

## 2.2 Stakeholder Engagement Activities

### Synergies Identification

#### Pillar II National Event (14 December 2023):

Blue Synergies between sea basins and blue economy sectors

**Overview:** As part of the series of national events organised by the Assistance Mechanism, Portugal's National Hub for Atlantic Strategy and WestMED Initiative, in close cooperation with the National Coordinator Directorate General for Marine Policy - DGPM, hosted a National event aiming to present the main achievements of the Atlantic Strategy Portuguese presidency (2023), lessons learned and challenges and drivers for the Portuguese WestMED co-presidency (2024-2025).

#### Conclusions:

- Addressed challenges and opportunities in both sea basins (Atlantic and WestMED), targeting the national and regional blue economy stakeholders
- Focused on identifying the blue synergies, areas, and fields of cooperation between the Atlantic Strategy and WestMED Initiative
- Explained on how the Portuguese regions perceive and address the blue economy in their regional strategies.



15  
Speakers



30  
live participants



Online National Event - Portugal  
**Blue synergies between sea basins and blue economy sectors**  
14 December 2023 | 10:00-12:00 (Lisbon time)  
Language: Portuguese



# 2.2 Stakeholder Engagement Activities

## 10th Atlantic Stakeholder Platform Conference 2023

### Conference Overview

ASPC 2023 took place three years after the launch of the AAP 2.0 – A New Approach to the Atlantic Maritime Strategy. The Conference was held on the 18th and 19th of October 2023 in Porto Cruise Terminal in Oporto, Portugal and online.

The theme of this year's conference was "Atlantic Future: New synergies and innovations for a sustainable Ocean Economy".

The conference mainly focused on providing insights of the key AAP 2.0 activities and challenges of achieving sustainable blue growth and contributing to greater territorial cooperation and cohesion in the Atlantic area, both in EU as well as internationally. Special focus was also given in synergies identification and promotion.

### Goals of ASPC 2023

- Provide an overview of the current status of the AAP 2.0 implementation.
- Focus on Atlantic cooperation opportunities and challenges both in the EU and international context.
- Showcase projects, best practices, new partnership models, funding opportunities and community platforms that promote the Blue Economy and the EU Green Deal.
- Foster collaboration between stakeholders, existing and new players that will unlock opportunities and accelerate the implementation of the AAP 2.0 – contributing to an impact-driven networked innovation ecosystem in the Atlantic.



# 2.2 Stakeholder Engagement Activities

10th Atlantic Stakeholder Platform Conference 2023



More than 170  
Participants



Participants from  
>10 countries

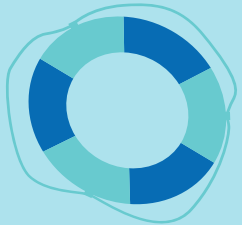


27 Speakers

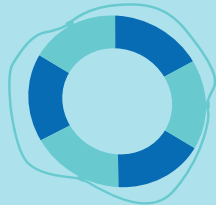


3 pre- and post-  
related events

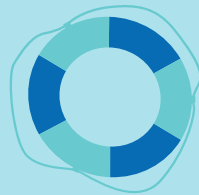
## Participants' Organisations



22,3% Public  
Authorities and  
EU institutions



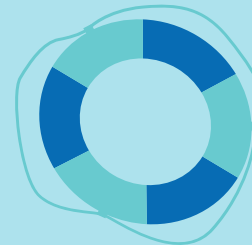
18,5% Academia,  
Research  
institutions/centres



14,8%  
Associations,  
NGOs,  
Foundations



14,2%  
Private Sector



30,2%  
Other

**81,4%** Satisfaction with the  
overall event

**83,7%** Satisfaction with the  
speakers and the presentations  
made during the event

**81,4%** Satisfaction with the  
balance of stakeholders represented  
during the event

## 2.3 Key results per Pillar along Good Practice Examples

### Pillar I - Ports as gateways and hubs for the blue economy

#### Key findings

- 1 Regarding the progress of the Pillar I goals, special attention should be put on identifying and analysing new available sources of energy, emerging designs of prototype vessels and any related preliminary roadmaps. An analysis of the creation of a green ports network has also been prioritised.
- 2 Port activities continue to be vital since they provide the basic infrastructure and services for many sectors including marine living resources, maritime transport, marine non-living resources, marine renewable energy, coastal tourism and maritime defense. Therefore, they also play a vital role in the process of achieving the climate change targets.
- 3 A just and ecological transition of the Atlantic ports should be prioritised, since their importance in supporting marine transport is significant. Also, the need for connection and collaboration between Atlantic ports has been increasing in order to achieve the goals set for the Pillar.

#### Synergies Identified

Strong synergies between Pillar I and Pillar III have been identified so far. Specifically, the activities of Pillar III can support significantly Pillar I goals set and particularly in relation to the greening of ports and to the development of eco-incentive schemes to upgrade port infrastructure.

## 2.3 Good Practice Examples per Pillar

Pillar I - Ports as gateways and hubs for the blue economy



### Identified good practice example – Living Ports

Funding Source: Horizon 2020 Research and Innovation programme



Ports require environmentally friendly, and structurally sound infrastructure for daily operations. Living Ports Project will showcase marine infrastructure engineered for this goal, and encourage the adoption of this flexible technology in maritime construction best practices.



#### Expected Results

##### Improved infrastructure

Increase of concrete's compressive strength by 5% and chloride resistance by 10%, improving durability and longevity.

##### Best practice adoption

Raise awareness of global ports and local communities aiming to include ecological infrastructure as in marine construction best practices.

##### Enhanced value proposition

Save on future marine developments costs, from reduced environmental mitigation costs (18,750€ per hectare) to less frequent maintenance.

##### Community outreach

The Nautilus observatory will offer visitors a unique experience of witnessing first-hand the development of biodiversity on the EConcrete seawalls.



## 2.3 Good Practice Examples per Pillar

Pillar I - Ports as gateways and hubs for the blue economy



### Identified good practice example – Sustainability EducationAI programme for greenER fuels and enerGY on ports (SEANERGY)

Funding Source: Horizon 2020 Research and Innovation programme



The SEANERGY project aims to go towards zero-emission ports, becoming clean energy hubs for integrated electricity systems, hydrogen, and other low-carbon fuels, as much as testbeds for waste reuse and the circular economy through the creation of the SEANERGY Master Plan.

#### Expected Results

Create a SEANERGY Master Plan meant to be an aggregator of information and guidelines that will allow all the port industry's stakeholders to assess, plan and execute the necessary activities towards transforming ports into clean energy hubs.

Develop a SEANERGY Handbook which will serve as a tool for Master Plan users to help them navigate through the information.

The above tools will guide all EU ports toward a zero-emission transition.



## 2.3 Good Practice Examples per Pillar

Pillar I - Ports as gateways and hubs for the blue economy



### Identified good practice example – European flagship Action for cold ironING in ports (EALING) Funding Source: Connecting Europe Facility



The Action, being the first phase of the Global project “European flagship action for cold ironing in ports” (EALING), is a study proposing a common EU harmonised and interoperable framework – from a technical, legal and regulatory point of view – for the transition to electrification for at least 16 of the EU maritime ports involved in the EALING consortium, facilitating the implementation phase of OPS infrastructures and equipment. The idea of the EALING Global Project – and the related first phase EALING Studies – comes from the need to move towards a more competitive and sustainable TEN-T Maritime Network.

#### Expected Results

Ensure that a common harmonised and interoperable framework is brought forward in order to facilitate the implementation phase of OPS infrastructure in the ports of the consortium, in line with the EU technical, legal and regulatory framework.

Ensure the port to vessel compatibility in the TEN-T Maritime Network, for vessels calling at the ports of the consortium.

Lead all the necessary technical, financial, legal and environmental studies to prepare and accelerate the effective launch of cold ironing and electric bunkering infrastructure and equipment in the ports.



**36** months

**16** ports

**22** partners

**1** Global project

## 2.3 Good Practice Examples per Pillar

Pillar I - Ports as gateways and hubs for the blue economy



### Identified good practice example – Sustainability and Resilience for Infrastructure and Logistic network- SARIL

Funding Source: Horizon 2020 Research and Innovation programme



SARIL aims to complement the classic definition of resilience, which focuses on threat prevention, robustness and system recovery, by green aspects. Key Performance Indicators will be defined which quantify both the system resistance against disruptions as well as the environmental burden of freight transport. The approach focuses on an investigation around 3 scenarios: regional, national & global. Each scenario will address different threats and disruptions to different types of transportation networks, including cyber-attacks, climate change-derived phenomena etc.

#### Expected Results

Develop a holistic modelling concept of the European transportation network by connecting three scenarios at different geographical scales.

Establish a “green resilience” management including safety and security aspects for logistics.

Evaluate and develop new mitigation measures, employing simulations to predict their effectiveness.



## 2.3 Good Practice Examples per Pillar

Pillar I - Ports as gateways and hubs for the blue economy



### Identified good practice example – Implementing Fuel Cells and Hydrogen Technologies in Ports - H2Ports

Funding Source: Horizon 2020 Research and Innovation programme



H2Ports aims to boost the transition of the European port industry towards an effective low-carbon/zero-emission and safe operative model, piloting, evaluating and demonstrating new Fuel Cells (FC) technologies oriented to increase energy efficiency, decarbonisation and safety of port terminals. The main objective is to deploy port equipment equipped with FC technologies and the use of hydrogen as zero-emission fuel through innovative market sided solutions to be ready for market adoption by the end of the project.

#### Expected Results

Demonstrate and validate in real port operations two innovative solutions based on FC technologies.

Facilitate the transition of the existing European port terminals towards low carbon and local zero emission operative models.

Promote the exchange of knowledge, ideas, experiences, and best practices on the use of hydrogen in the port-maritime sector.





## 2.3 Key results per Pillar along Good Practice Examples

### Pillar II - Blue skills and ocean literacy

#### Key findings

- 1 At basic and secondary level, most curricula are ocean blind and at the university level, and courses are sometimes organised as silos where the students are not exposed to different disciplines.
- 2 European citizens have a significant role in the process of achieving the ambitious EU Climate and Blue Economy objectives. Their everyday choices, their children educative direction and their endorsement of EU policies have a significant effect in the success of EU policies. Therefore, ocean literacy is of outmost importance so as EU citizens to be able to adapt their everyday behavior and to make responsible informed decisions.
- 3 Promoting the interest of especially young people regarding the ocean and showing the importance of a sustainable blue economy for the green transition are essential for the future of EU. Transferable skills are particularly important to ensure resilience and adaptation to novel situations.

#### Synergies Identified

Strong synergies between Pillar II and Pillar IV have been identified. Specifically, blue schools and ocean literate citizens can be actively mobilized for coastline stewardship, contributing to the attainment of some of the Pillar IV goals and actions. As such, Pillar II is a cornerstone by providing the knowledge and insights that should drive innovation and strategies to use the oceans, seas and marine resources sustainably.

## 2.3 Good Practice Examples per Pillar

Pillar II – Blue skills and ocean literacy



### Identified good practice example – seaThings - Learning Objects for Promoting Ocean Literacy

Funding Source: PO Açores 2020 and Regional Directorate for Science and Technology



The seaThings project aims to increase quality scientific production oriented towards smart specialization, leverage literacy about the sea and the marine environment in schools, science centers and society in general, making scientific dissemination content available on the web. The project ensures the active involvement of researchers from different universities, schools and science centers in the region, in creation of Learning Objects (LO) about the oceans and making them available on the web through open access repositories. Using artificial intelligence technologies, tools will be developed to support research, creation and management of Learning Objects (Los).

#### Expected Results

Train citizens aware of the need to conserve the environment, oriented towards the sustainable exploitation of marine resources.

Strengthen the external links of the Azores as an intercontinental platform: Europe, America and Africa, in the area of knowledge about the oceans.

Reinforce collaborative practices between regional entities, namely between research centres at the University and between them with schools and centres for scientific dissemination.



## 2.3 Good Practice Examples per Pillar

Pillar II – Blue skills and ocean literacy (Synergies with Pillar IV Healthy Oceans and Resilient Coasts)



### Identified good practice example – Promoting ocean and water literacy in school communities (ProBleu)

Funding Source: Horizon Europe - Coordination and Support Actions



ProBleu aims to mobilise and engage students, school communities, and the wider community across the EU and associated countries to enhance understanding, stewardship, and literacy about oceans and waters, with a focus on restoring them by 2030 and growing the Network of European Blue Schools. ProBleu recognises that a significant change in environmental education is needed to foster broad societal responsibility towards oceans and waters and to encourage related behavioral change.

#### Expected Results

Develop and offer a pool of innovative, practical resources based on methodologies of Open Schooling.

Increase ocean and water literacy among children, youth, teachers, and schools. Develop a deeper understanding of the value of oceans and waters.

Empower young individuals to become advocates for their protection and sustainable use.

Ramp up accreditation for schools within the Network of European Blue Schools, encouraging their active engagement in related activities.



# 2.3 Good Practice Examples per Pillar

Pillar II – Blue skills and ocean literacy

 For more information click [here](#)

## Identified good practice example – Ocean Citizen



To promote biodiversity, ecosystem functioning, and to enhance carbon sequestration, OCEAN CITIZEN project will implement and scale up an advanced regeneration program that joins ecological perspectives with societal commitment, providing clear economic benefits and improving resilience of the local communities. In the end, cooperation between science and citizens will support the successful recovery, adaptation and conservation of coastal marine ecosystems.

### Expected Results

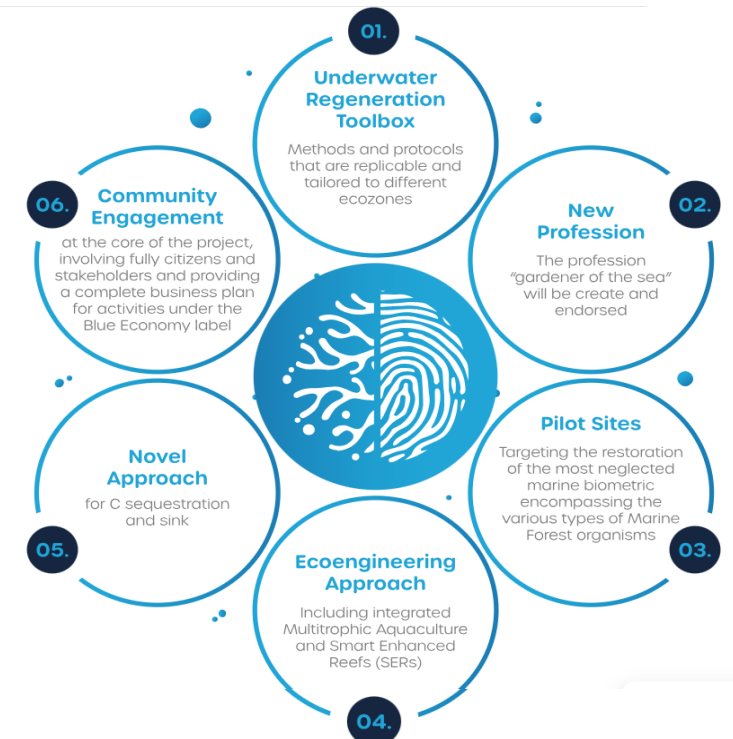
Develop a replicable marine restoration protocol that combines habitat, carbon immobilization and biodiversity regeneration with social engagement and economic benefits to all the local communities.

Consolidate and evaluate an ecosystem-based business model for marine preservation.

Boost the creation of an ocean-literate society and engage local communities.

Create and endorse a new profession (“gardeners of the sea”) through sustainable exploitation of ocean resources.

Funding Source: Horizon Europe Research and Innovation programme



# 2.3 Good Practice Examples per Pillar

Pillar II – Blue skills and ocean literacy



## Identified good practice example – PREP4BLUE

Funding Source: Horizon Europe - Coordination and Support Actions



PREP4BLUE overarching objective is to facilitate a successful first phase (2022-2025) of the Mission, by developing the co-creation and co-implementation of R&I modalities required to achieve the Mission objectives and preparing the ground for inspiring and engaging citizens and stakeholders. The project is designed to deliver a series of tools, guidelines, methodologies and recommendations tested through pilots, which will interlink, leverage and optimise activities among the projects funded under the Mission.

### Expected Results

Develop a dedicated structure to ensure alignment and connectivity.

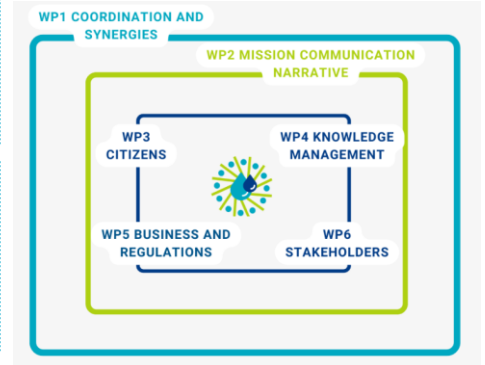
Provide recommendations for creation of an enabling environment from a regulatory and economic perspective.

Test and validate methodologies to ensure active engagement and participation of EU citizens in the co-design and co-implementation of the Mission's core R&I activities.

Create a database of relevant projects and their innovative solutions with high potential to contribute to the achievement of the Mission objectives in each of the Lighthouse sites.

Best practice knowledge management system, supported by AI digital tools.

Elaborate an inspiring and innovative communication strategy to encourage citizens & stakeholders to engage with Mission activities.



## 2.3 Good Practice Examples per Pillar

Pillar II – Blue skills and ocean literacy (Synergies with Pillar IV Healthy Oceans and Resilient Coasts)



### Identified good practice example – Advancing understanding of Cumulative Impacts on European marine biodiversity, ecosystem functions and services for human wellbeing (ACTNOW)

Funding Source: Horizon Europe - Research and Innovation programme



ACTNOW is a state-of-the-art work programme that provides regulators and decision-makers the knowledge and fit-for-purpose tools they need to combat bio-diversity loss in coastal and marine habitats threatened by climate change interacting with other local and regional drivers.

#### Expected Results

Co-create regionalized 'what if' scenarios of multiple interacting drivers and management actions to forecast impacts on the biodiversity and ecosystem functioning in European coastal and marine regions.

Develop a systemic approach for the integrated impact assessment of coastal and marine ecosystem processes and services.

Increase understanding of the biological mechanisms determining the response of organisms and ecosystems to environmental changes.

Enhance awareness and understanding of links between marine biodiversity, ecosystem functioning and human health through capacity building, public outreach and by creating decision-support tools.



## 2.3 Key results per Pillar along Good Practice Examples

### Pillar III - Marine Renewable Energy

#### Key findings

- 1 Effective deployment of Marine Renewable Energy (MRE) requires use of supporting grid infrastructure and may involve use of complementary technologies such as hydrogen production.
- 2 National EU MS' targets and roadmaps for MRE deployment already exist or are under development. It is essential that an assessment should be made specialising on how these national plans compare to each other and what is their combined contribution to EU renewables targets.
- 3 Development of MRE requires a detailed understanding of the impacts on the environment. Gathering and analysing of environmental data requires large amount of time and is a significant part of the development of MRE projects.

#### Synergies Identified

A synergy between Pillar III & IV activities has been identified, especially as regards the ways to better address the current challenges that marine renewable energies have in delivering sustainability and improving the health of the oceans.

## 2.3 Good Practice Examples per Pillar

### Pillar III – Marine Renewable Energy

#### Identified good practice example – H2 OPS Punta Salinas

Funding Source: Port Authority de Tenerife, co-financed by the EU



The project aims to address two main problems. Firstly, it aims to tackle the emissions generated by vessels when they are in berth through the burning of fossil fuels. This contributes to air pollution and environmental degradation in port areas. Secondly, the project aims to demonstrate the potential of on-site generation of renewable energy using hydrogen fuel as a clean and sustainable alternative. By showcasing this technology, the project seeks to promote the adoption of hydrogen as a viable solution for reducing emissions and transitioning to more environmentally friendly energy sources in the maritime sector.

#### Expected Results

Demonstrating the feasibility and functionality of a hydrogen-powered genset for providing clean and sustainable energy supply to maritime vessels.

Demonstrating the feasibility and functionality of a hydrogen-powered genset for providing clean and sustainable energy supply to maritime vessels.

Address the emissions generated by conventional power systems and promoting the use of hydrogen as a viable alternative in the maritime industry.





## 2.3 Good Practice Examples per Pillar

### Pillar III – Marine Renewable Energy



#### Identified good practice example – WEDUSEA

Funding Source: Horizon Europe - Grant Agreement



Waves are a hugely powerful source of renewable energy. However, wave generation has yet to reach its full commercial potential. The WEDUSEA project will demonstrate a grid connected 1MW OE35 floating wave energy converter at the European Marine Energy Centre's test site in Orkney, Scotland. The innovative actions taken in this programme aim to improve the efficiency, reliability, scalability and sustainability of wave energy technology, and reduce the Levelised Cost of Electricity of the technology by over 30%. This will help to de-risk investments in wave energy.

#### Expected Results

Demonstrate that wave technology is on a cost reduction trajectory, thus stimulating larger commercial array scale up and further industrialisation, through de-risking larger scale investments.

Boost the development of the wave energy industry worldwide, by creating awareness of the potential of wave energy amongst interested stakeholders.

Disseminate results and outcomes which enable the capitalisation and exploitation of the results through new innovations, products and services, as well as feeding both environmental databases and worldwide technical standards.



## 2.3 Good Practice Examples per Pillar

### Pillar III – Marine Renewable Energy



#### Identified good practice example – Seawing4blue

### Seawing4blue

Every year, 940 million tons of CO<sub>2</sub> – about 13% of EU Green House Gas emissions and nearly 3% of the global worldwide emissions – are emitted from the shipping industry. The SEAWING4BLUE project, co-funded by the European Union, aims to tackle this challenge by supporting the scaling up of the next break-through sustainable alternative to fossil energy in the shipping industry.

#### Expected Results

Finalise the development of the product called “Seawing” and fine-tuning the system to be ready for industrialisation and serial production.

Generate 150 FTEs and a portfolio of 12 patents filed worldwide by 2026 while saving 7 million CO<sub>2</sub> emissions per year.

Contribute to the development of specific standards and regulations for wind propulsion as well as methods for measuring the performance of wind propulsion.



## 2.3 Good Practice Examples per Pillar

### Pillar III – Marine Renewable Energy



#### Identified good practice example – xROTOR

Funding Source: Horizon 2020 - Research and Innovation Programme



Wind power can make a significant contribution to Europe's electricity needs as well as to its ambitious goals for CO2 emissions reduction. Offshore winds are often more reliable sources of stronger gusts than onshore winds. X-ROTOR will develop a highly innovative wind turbine design to directly target cost of energy reduction and scalability of wind turbines.

#### Expected Results

Determine the performance of the X-Rotor concept by designing the mechanical structure, operational strategy, and carrying out a performance assessment.

Design a power take-off and conversion system, which provides full freedom of choice of operating strategy cost, environmental and socio-economic impact aspects.

Estimate the reduction in levelised cost of energy (LCOE) including both the CAPEX and OPEX



## 2.3 Good Practice Examples per Pillar

### Pillar III – Marine Renewable Energy



#### Identified good practice example – Development of a novel wave energy converter based on hydrodynamic lift forces (LiftWEC)

Funding Source: Horizon 2020 - Research and Innovation Programme



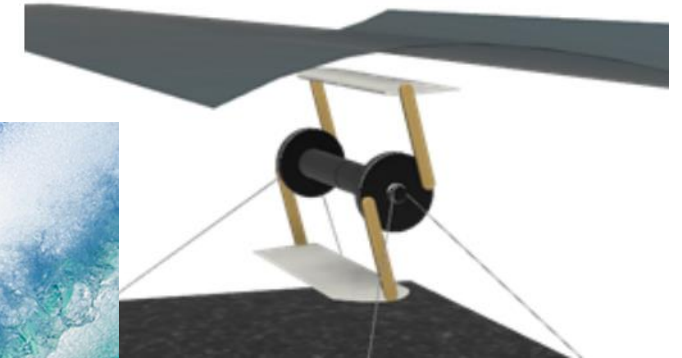
Although significant effort has been spent in the last 50 years in searching for a commercially-viable technology for extraction of energy from ocean waves, this objective remains unfulfilled. The EU-funded LiftWEC project focuses on the development of LiftWEC, a novel type of wave energy converter. Specifically, it will develop a new concept based on the exploitation of lift forces generated by wave-induced water velocities.

#### Expected Results

Untap the potential of wave energy converters driving innovation in marine renewable energy.

Design robust, energy-efficient wave designs following numerical and analytical modelling.

Demonstrated the viability of rotor-driven wave converters. Specifically, demonstrate that placing 2 MW rotor-driven wave converters in the Atlantic Ocean could be viable.



## 2.3 Key results per Pillar along Good Practice Examples

### Pillar IV - Healthy Oceans and Resilient Coasts

#### Key findings

- 1 Oceans, seas and coastal waters play a critical role in regulating Earth's climate and as the planet's largest and most important carbon sink. In order to reverse today's marine and nutrient pollution, resource depletion and climate change a variety of timely actions from different stakeholders is required.
- 2 Pillar IV priorities are strongly aligned with many recently launched European initiatives, since they share goals and expected results in common. Additionally, a plethora of EU funded projects aim to achieve results that are fully synchronised with Pillar IV efforts to boost regional cooperation to implement actions dedicated to the Atlantic area coasts.
- 3 Climate risk management and adaptation measures are necessary to protect the coastal habitats and biodiversity, as well as vulnerable infrastructure and economic activities.

#### Synergies Identified

A strong synergy between Pillar I and IV has been identified since for both Pillars ocean health as well as coastal resilience are considered the backbone of their activities and goals. Specifically, in order to ensure the maintenance and development of the role of Atlantic ports as hubs for the blue economy, it is then critical to be able to assess risk and vulnerability related to the ports themselves and their related activities. As such pillar IV is highly relevant with actions dedicated related to observation and monitoring systems.

# 2.3 Good Practice Examples per Pillar

Pillar IV – Healthy Oceans and Resilient Coasts



## Identified good practice example – BlueMissionAA

Funding Source: Horizon Europe - Research and Innovation Programme

BLUEMISSION AA



The EU-funded BlueMissionAA will be the coordination hub that will support the implementation of the Mission in the Atlantic and Arctic basins. It will focus on the restoration of marine and coastal ecosystems and increased climate resilience. The project will mobilise a wide community of stakeholders and empower EU citizens to engage in preservation and restoration. It will also design a monitoring framework to assess progress. Six case studies will be selected across a range of restoration approaches, like active restoration and sustainable harvesting.

### Expected Results

Benefit academia and industry with new life-sensing technologies and methods for research and exploitation.

Support governments by providing improved observational systems and accessible data to be used in environmental management.

Empower civil society through participative technologies and collaborative networks.

Improve research infrastructures (RI) by integrating new generation of instruments and training staff for their use.



# 2.3 Good Practice Examples per Pillar

## Pillar IV – Healthy Oceans and Resilient Coasts

 For more information click [here](#)

### Identified good practice example – MAELSTROM

Funding Source: Horizon 2020 - Innovation Action



MAELSTROM designs, manufactures and integrates scalable, replicable and automated technologies co-powered with renewable energy and second-generation fuel, to identify, remove, sort and transform all types of collected marine litter into valuable raw materials.



#### Expected Results

Identify litter accumulation hotspots and provides environmental assessments to understand its impacts in the ecosystem.

Provide solutions and tools to remove litter in a sustainable manner.

Increase Stakeholder Engagement from multiple sectors working together to create a virtuous recycling network which gives litter a new life.

Create Social Awareness through the adoption of responsible practices, behaviors and choices, essential for sustainable societies.



# 2.3 Good Practice Examples per Pillar

Pillar IV – Healthy Oceans and Resilient Coasts

 For more information click [here](#)

## Identified good practice example – ANERIS

Funding Source: Horizon Europe - Research and Innovation Programme



The ANERIS project aims to tackle the rapid loss of ocean biodiversity by developing innovative tools and technology for monitoring, research and management of marine life, and introducing the concept of Operational Marine Biology (OMB). OMB is a biodiversity information system which allows long-term routine measurements of ocean and coastal ecosystems and their quick interpretation and dissemination to all relevant stakeholders.

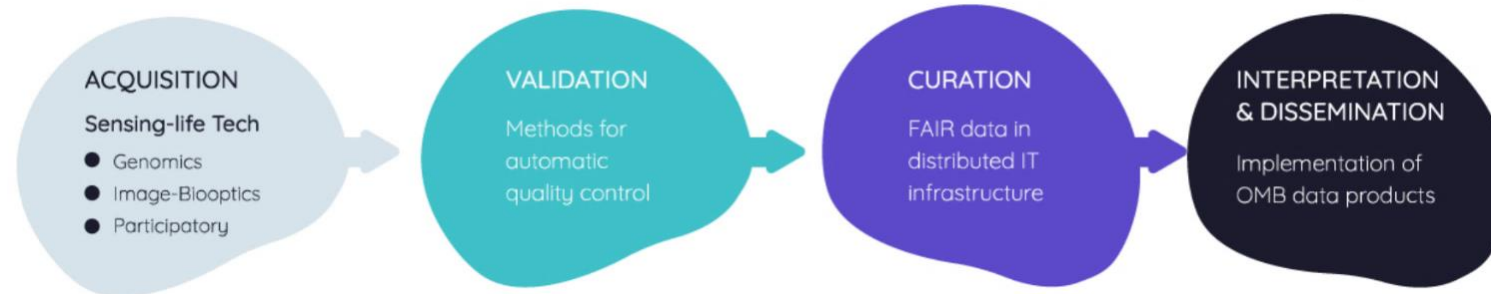
### Expected Results

Benefit academia and industry with new life-sensing technologies and methods for research and exploitation.

Support governments by providing improved observational systems and accessible data to be used in environmental management.

Empower civil society through participative technologies and collaborative networks.

Improve research infrastructures (RI) by integrating new generation of instruments and training staff for their use.





# 2.3 Good Practice Examples per Pillar

## Pillar IV – Healthy Oceans and Resilient Coasts



### Identified good practice example – AtlantECO

Funding Source: Horizon 2020 - Research and Innovation Programme



The EU-funded AtlantECO project aims to develop and apply a novel, unifying framework that provides knowledge-based resources for a better understanding and management of the Atlantic Ocean and its ecosystem services. AtlantECO will engage with citizens and actors from the industry and policy sectors in order to stimulate responsible behavior and Blue Growth.

### Expected Results

Assess the status of ecosystem structures, functions, health & services at regional, basin and all Atlantic scales and provide high quality gridded data products and maps.

Enhance knowledge and innovate by adopting standard optical and genetic observations protocols, cutting-edge network analysis methods, and better parameterisation of connectivity and biogeochemical models.

Assess drivers and stressors of change and forecast their impact on tipping points and recovery of ecosystem structures, functions and services, and develop eco-socio-economic models to predict their future states.

Share and use capacity and knowledge across the four continents bordering the Atlantic Ocean ensuring a seamless engagement between science, industry, policy, and society.



## 2.3 Good Practice Examples per Pillar

### Pillar IV – Healthy Oceans and Resilient Coasts



#### Identified good practice example – MARine Coastal BiOdiversity Long-term Observations (MARCO-BOLO)

Funding Source: Horizon Europe - Research and Innovation Programme



Coastal and marine areas are incredibly dynamic and productive oceanic regions, providing significant resources and services for both wildlife and people. They are also subject to intense pressures from agricultural and industry pollution in waterways, dredging and building development. MARCO-BOLO will connect existing initiatives, optimising and improving methods, and further innovating technologies to structure and strengthen European marine, coastal and freshwater biodiversity observation capabilities, linking them to global efforts to understand and restore ocean health.

#### Expected Results

Enable technologies for cost-effective, timely and accurate biodiversity observations.

Test new tools, technologies and models to better understand biodiversity decline.

Improve acquisition, coordination and delivery of marine, coastal and freshwater biodiversity observations to relevant users.

Empower European biodiversity observatory operators, data producers and users by creating and sharing best practice guidelines.



## 2.3 Key results per Pillar along Good Practice Examples

International dimension, Research & Innovation (R&I)



During 2023, the All-Atlantic Ocean Research and Innovation Alliance (AAORIA) has booked progress in implementing the AAORIA Declaration which was signed in Washington DC, USA on 13 July 2022. The Declaration has set forward the path for the next decade of the work of this international science diplomacy network, directly contributing to the Atlantic Strategy's horizontal international dimension.

In particular, in July 2023 high level leaders from the Canada, the EU and the USA gathered in Dublin to celebrate the 10th anniversary of the signature of the Galway Statement. The AAORIA conference in Galway has shown the progress of the work and agreement was also reached on the [Terms of Reference of the functioning of the Alliance](#), thereby opening the door for new partners and supporters to join or support the future work of AAORIA.

The yearly Forum of AAORIA in South Africa, which took place on 21-22 November 2023 allowed advancement on the prioritisation of the future work of AAORIA and resulted in a statement about the future priorities of this network.

The coordination and support action of All Atlantic Cooperation for Ocean Research and innovation (AANCHOR) finished in 2023 and a new activity under Horizon Europe is foreseen to support the work of the Alliance.

Lastly, South Africa has handed over chairmanship to Canada for next year.




# ALL-ATLANTIC OCEAN RESEARCH AND INNOVATION ALLIANCE

Creating an All-Atlantic Ocean Community

## 2.3 Key results per Pillar along Good Practice Examples

International dimension, Research & Innovation (R&I) – Synergies with Pillar II

 For more information click [here](#)

The All-Atlantic Blue Schools Network (AA-BSN) was founded in 2019 and is an international network implemented under the All-Atlantic Ocean Research and Innovation Alliance. The participating countries are: Angola, Argentina, Brazil, Canada, Cape Verde, Ireland, Mexico, Morocco, Namibia, Nigeria, Portugal, Sao Tome And Principe, South Africa, United Kingdom, USA.

The All-Atlantic Blue Schools Network connects schools from Atlantic countries to raise and promote ocean literacy and social awareness with no geographical, cultural, social and language boundaries. The Blue School approach increases awareness about the ocean and inspires students, educators, and citizens from different countries to deepen their connection with the sea. By promoting critical thinking, experiential learning, and community-based projects, students are encouraged and supported to translate their knowledge into positive action to ensure a healthy future ocean.

In particular, All-Atlantic Blue Schools Network is based on a bottom-up process, where each school builds its own project based on its socio-cultural and economic reality. By linking all schools together, knowledge will be enhanced and synergies will be created.

While All-Atlantic Blue Schools Network schools developed its activities in 2022, the network participated in international events to give voice to students from different Atlantic countries talking on global issues: the All-Atlantic Forum, the UN Ocean Conference, the Ocean Literacy Dialogues, and projects like AtlantECO, UNESCO Campus and others.

Also, in October 2022, we held the first in-person AA-BSN week-long workshop and meetings to evaluate the project and exchange experiences and learnings.



## 2.3 Key results per Pillar along Good Practice Examples

International dimension, Research & Innovation (R&I)

### Key findings

- 1 There is a need to strengthen internal cooperation and improve communication between science, education, and outreach efforts across All-Atlantic communities and working groups.
- 2 It is important that regional and local communities are involved in the monitoring and data collection process. Then, the collected and processed data should be used to develop and disseminate didactic materials for wider use in the community.
- 3 Identified good practices at all levels (local, national, regional etc.) need to be disseminated amongst partners and Member States in order to share knowledge, foster collaborations and support local and regional conversations aiming to build stronger relationships.

### Synergies Identified

The international dimension, R&I has strong synergies with all AAP 2.0 Pillars since they give an international dimension to the AAP 2.0. R&I supports the AAP implementation by improving understanding of the changing Atlantic Ocean and its effects on coastal communities and by developing innovative solutions.

# 2.3 Good Practice Examples per Pillar

Cross-cutting dimension – International Cooperation



## Identified good practice example – ASTRAL

Funding Source: Horizon 2020 - Research and Innovation Programme



In integrated multi-trophic aquaculture (IMTA), multiple aquatic species from different trophic levels are farmed together. Thus, waste from one species can be used as input (fertiliser and food) for another species. The EU-funded ASTRAL project will develop IMTA production chains for the Atlantic markets. Focusing on a regional challenge-based perspective, it will bring together labs in Ireland and Scotland (open offshore labs), South Africa (flow-through inshore) and Brazil (recirculation inshore) as well as Argentina (prospective IMTA lab).



### Expected Results

Develop and innovate techniques and species combinations to validate 4 cost-effective IMTA processes.

Assess the environmental, social and environmental impact of IMTA labs in Ireland, South Africa, Scotland and Brazil.

Carry out cross-Atlantic governance assessments and IMTA value chain consumer perceptions and social license assessments.

Provide a collaborative ecosystem for understanding and applying a sustainable harnessing of Atlantic Ocean resources.

Provide farmers with a profitable IMTA production system, bringing revenue diversification and increasing profitability by at least 30%.



## 2.3 Good Practice Examples per Pillar

Cross-cutting dimension – International Cooperation (Synergies with Pillar IV – Healthy Oceans and Resilient Coasts)



### Identified good practice example – CLIMAREST

Funding Source: Horizon Europe - Innovation Action



Coastal Climate Resilience and Marine Restoration Tools for the Arctic Atlantic basin (CLIMAREST) explores the potential of restoration actions in various coastal areas on the Arctic-Atlantic scale, and particular attention will be paid to the most fragile and vulnerable habitats, such as Arctic oligotrophic coastal areas, seagrass meadows, shallow-water rocky bottoms, oyster reefs and soft bed benthic habitats – all of which are connected by the coastal context in which they exist, their sensitivity to disturbance and their general role as major drivers of habitat complexity and foundations of biodiversity in the ocean.

#### Expected Results

Develop, test and optimise a modular toolbox for restoring and monitoring a wide range of diverse coastal habitats

Bridging the gap between research and restoration actions with an open toolbox that will link knowledge and practice.

Addresses some of the main challenges linked to the operationalisation of marine restoration actions (scarcity of data and information sources, low awareness and engagement among stakeholders and the general public, unreliable quantification of costs and benefits and ineffective dissemination of success stories)



# 2.3 Good Practice Examples per Pillar

Cross-cutting dimension – International Cooperation (Synergies with Pillar IV – Healthy Oceans and Resilient Coasts)



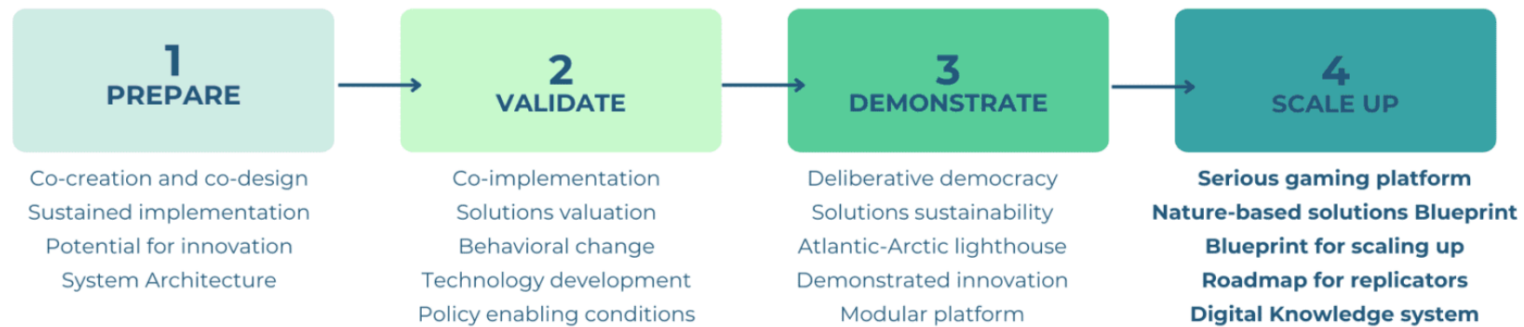
## Identified good practice example – A-AGORA

Funding Source: Horizon Europe - Research and Innovation Programme



The EU Mission "Restore our Ocean and Waters by 2030" (Mission Ocean) aims to protect and restore the health of our ocean and waters. The EU-funded A-AGORA project will demonstrate via technological, social, logistic and economic innovation actions the reduction of pressures in coastal areas, through the application of ecosystem-based management and nature-based solutions to boost resilience to climate change and mitigate its impacts. A-AGORA will carry out demonstration activities in the Atlantic and Arctic basin and co-identify areas and locations where the solutions are replicable.

### Expected Results





# 2.4 Data on funding

## Funding in the Atlantic Region

Period: 2020 – 2023

The information and data presented in this slide derives from the internal monitoring process and calculations of the Sea Bas in Assistance mechanism. The information has been gathered in the context of the Maritime Datahub mapping and updating task between September 2020 to October 2023.

Information and data on the projects are collected from the very local level, involving the entire AAP team (NHs and the AAM). It is also noted that in the cases where a project has more than one implementing partners/organisations, the origin of the coordination/leading party indicates also the Project's main country.



>830 projects



**Approx. 3,7 billion €**  
EU Contribution



Average contribution  
per project\*



**5 million €**

Atlantic Member State:  
**Ireland**

# of projects  
**44**

EU funds allocated  
**> 141 million €**

Atlantic Member State:  
**France**

# of projects  
**198**

EU funds allocated  
**> 968 million €**

Atlantic Member State:  
**Portugal**

# of projects  
**302**

EU funds allocated  
**> 326 million €**

Atlantic Member State:  
**Spain**

# of projects  
**218**

EU funds allocated  
**> 612 million €**

\* This number represents the average funding received by a project based on the total amount identified from all funding sources/ programs monitored in the Maritime Datahub (EMFF, EMFAF, Horizon 2020, Horizon Europe, Interreg, National Funds etc.)

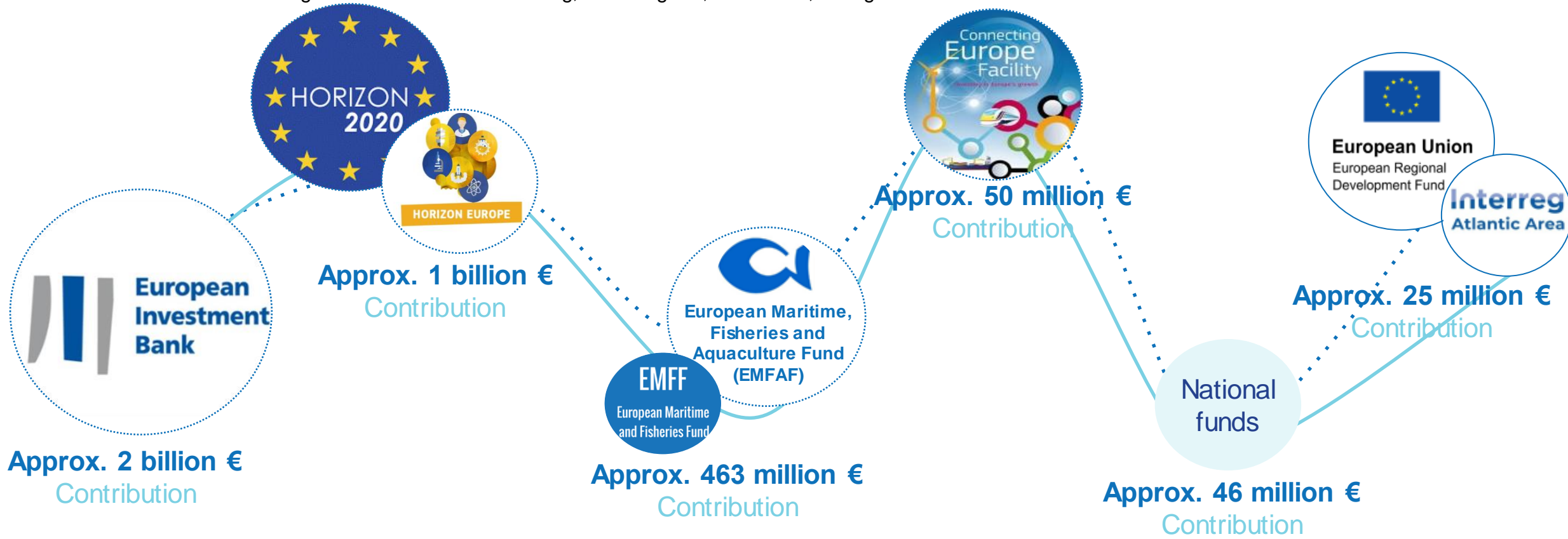
# 2.4 Data on funding

## Main funding instruments

Period: 2020 – 2023

The information and data presented in this slide derives from the internal monitoring process and calculations of the Sea Basin Assistance mechanism. The information has been gathered in the context of the Maritime Datahub mapping and updating task between September 2020 to October 2023.

For the purposes of this report, the five funding instrument with the largest contribution in the projects mapped have been included below. However, it is noted that the AAM also monitors other funding instruments such as Interreg, Life Program, Erasmus+, EEA grants etc.



## 2.5 Monitoring Indicators Table

AAP 2.0 Pillar Goals	Progress since AAP2.0 launch	Notes/Comments
<p><b>Monitoring Indicator 1</b> Short Sea Shipping – gross weight of goods transported to/from main ports of the Atlantic regions.</p>	<p>849 million tonnes of goods were handled in the main EU ports in the fourth quarter of 2022*.</p> <p>Regarding the AAP MS main ports, they handled 476,1 million tonnes in 2021.</p>	<p>*According to Eurostat data (available <a href="#">here</a>)</p>
<p><b>Monitoring Indicator 2</b> Number of ports that have developed a blue growth strategy*.</p>	<p>Port of Vigo has pioneered in Europe the integral implementation of the Blue Growth strategy as a collective effort by all the port's users, under the principle that the Blue Economy must be fostered equally by all stakeholders. In this context, Port of Vigo has created a comprehensive strategy with specific blue growth objectives and actions.</p> <p>In addition, Port of Castello has integrated the transition to a blue growth strategy in its mission. Its Business Plan is also framed within the EU's Blue Growth strategy.</p>	<p>In the meantime, many other ports in all 4 MS (e.g. Ports of Marseille Fos, Cork, Leixões, Santa Cruz de Tenerife) have included references to Blue Economy and Blue Growth strategy in their strategies/business plans.</p> <p>* Based on research of the AAM for 63 ports in all four AAP MS.</p>
<p><b>Monitoring Indicator 3</b> Participation rate in education and training for people over 18 in the Atlantic Member States.</p>	<p>In 2022, the average participation rate in education and training for people over 18 in the Atlantic Member States was 15,9% (while the EU27 Average was 14,3%)*.</p>	<p>*According to Eurostat data (available <a href="#">here</a>)</p>

## 2.5 Monitoring Indicators Table

AAP 2.0 Pillar Goals	Progress since AAP2.0 launch	Notes/Comments
<p><b>Monitoring Indicator 4</b> Perceived ocean literacy in coastal regions.</p>	<p>Ocean literacy and citizen engagement are fundamental enablers of the All-Atlantic cooperation. The European Ocean Coalition (EU4Ocean) connects diverse organisations, projects &amp; people that contribute to ocean literacy and sustainable management of the ocean. Supported by the EC, this bottom-up inclusive initiative aims at uniting the voices of Europeans to make the ocean a concern of everyone.</p>	<p>In the meantime, EU4Ocean “European Blue Schools” initiative (More information <a href="#">here</a>) brings the ocean into the classroom. The initiative aims to improve teachers’ and pupils’ understanding of the ocean and develop a sense of responsibility towards our shared planet.</p>
<p><b>Monitoring Indicator 5</b> Investments in the offshore wind and ocean energy sectors (sites, technology, machinery etc.).</p>	<p>At the end of 2022, European sea basins were hosting around 50% of the world’s total installed capacity in Offshore wind energy. More specific, the EU now has a total installed offshore wind capacity of 17.5 GW across 11 Member States. According to EU’s Blue Economy report, in 2022, 1.2 GW of new capacity were added to the grid.</p>	<p>The main sources of EU funding instruments supporting marine renewables sector are: Invest EU, RRF, Connecting Europe Facility, Horizon Europe &amp; all the structural and regional funds which now have ring-fenced amounts to support EU Green Deal objectives.</p>
<p><b>Monitoring Indicator 6</b> Percentage of coast vulnerable to erosion.</p>	<p>According to EU’s Blue Economy report, already by 2050 approximately 2000–2.300 km<sup>2</sup> of the coastal zone could erode, depending on the emission scenario (moderate or high emissions). By 2100, erosion is projected to reach 3.800–5.000 km<sup>2</sup>.</p>	<p>In effect, the loss of 1-1.3% of land and inland waters would result in a 4.3-5.4% decline in the value of ecosystem services, i.e., from €360 to 341–344 billion per year.</p>

## 2.6 Future orientation of the AAP 2.0 (1/3)

### Discussions and information from the Ministerial Declaration



The Portuguese ASC Presidency organised a Ministerial Meeting with representatives of all four Atlantic MS and the European Commission on the 18<sup>th</sup> of October 2023 in the context of the ASPC2023.

As a result of this Ministerial meeting, the four Atlantic MS and EC representatives signed a ministerial declaration jointly committing to:

- 1 Steer the dialogue between the different actors and sectors to support the prosperity of people living in the coastal areas.
- 2 Continue cooperating on the implementation of the AAP 2.0 in an integrative and transversal approach to promote complementarity between its pillars and in partnership with the European Commission, with a view to making progress towards its set goals.
- 3 Work towards decarbonization, where ports have a major role in the sustainable development of sectors like coastal tourism, aquaculture, shipbuilding and marine renewables.
- 4 Attract new talents for the Blue Economy, upskilling and reskilling workers and ensuring their interoperability in the Atlantic region, recognising these as crosscutting priorities for a strong and sustainable blue economy.
- 5 Acknowledge and increase the efforts to a) engage citizens and raise social awareness about the impacts of climate change in coastlines and risk mitigation and adaptation, namely through Citizen Science; b) support cooperation on research initiatives and infrastructure to increase capacity for ocean observation in the Atlantic area.
- 6 Pave the way for the further expansion of offshore renewable energy, reaffirming their commitment to work together on the deployment of our offshore renewable energy potential.

## 2.6 Future orientation of the AAP 2.0 (2/3)

Discussions and information from the Ministerial Declaration



The Portuguese ASC Presidency organised a Ministerial Meeting with representatives of all four Atlantic MS and the European Commission on 18<sup>th</sup> of October 2023 in the context of the ASPC23.

As a result of this Ministerial meeting, the four Atlantic MS and EC representatives signed a ministerial declaration jointly committing to:

7

Considering climate risk management and adaptation measures are necessary to protect the coastal habitats and biodiversity, as well as vulnerable infrastructure and economic activities, they reaffirm the need to reduce marine pollution through a joint approach between the four Pillars to develop synergies by sharing the work done so far by the Pillar IV task force.

8

Enhance the international dimension of the action plan, as this is fundamental to understand the changing Atlantic Ocean and its effects on coastal communities and to boost sustainable blue economy.

9

Consider smart specialisation strategies as enablers or facilitators to support interregional partnerships for Sustainable Blue Economy and welcoming the thematic platform set up by the European Commission for this purpose.

10


Secure adequate funding by emphasising that increased public and private investment is essential for achieving an innovative and Sustainable Blue Economy in the Atlantic sea-basin. Therefore, they strongly call for the continued and increased mobilisation of available private and public funding sources in support of the Atlantic Maritime Strategy, notably programmes funded by the European Structural and Investment Funds in the 2021-2027 programming period.

11

Pave the way for the better use of living resources, and therefore reaffirming that they will work together on promoting offshore aquaculture and its digitalisation and the important role of sustainable fisheries and aquaculture in the blue economy.

## 2.6 Future orientation of the AAP 2.0 (3/3)

Discussions and information from the Ministerial Declaration

 For the full text of the Ministerial declaration click [here](#)

Based on the discussions on the future of AAP 2.0 and the conclusions of the Ministerial Meeting the four MS and the European commission representatives jointly called for:

1

Cooperation, synergies, exchanges of know-how and best practices with other Sea Basin Strategies on identified common challenges and priorities including through reflecting on a cross-sea basin policy dialogue, noting the new approach for a coordinated technical assistance covering the three Sea-basin strategies set up at the end of 2022.

2

Participation in the Energy Transition Partnership of the EU fisheries and aquaculture, in order to enable the dialogue for the energy transition in the sector.

3

All stakeholders to engage on a voluntary basis with EU Mission 'Restore our Ocean and Waters', together with the EU Mission on Adaptation to Climate Change and the EU Mission on Climate-Neutral and Smart Cities for their relevant actions relating to coastal resilience and Atlantic coastal cities and join efforts to deliver on the Missions' objectives by joining with concrete actions to the Missions' Charters.



# 3

## Conclusions and Recommendations





# 3.1 Pillar I Ports as gateways and hubs for the blue economy

## Recommendations

The recommendations on Pillar I priorities stem from the combined information that has been collected through roadmaps, reports and input from experts in workshops as well as through observations of the Atlantic Area by the Pillar I Coordinator's team.

### Prioritised Actions

**Technological Development:** Developing and implementing the necessary technologies for alternative fuel generation, energy storage, and efficient energy use.

**Infrastructure Upgrades:** Upgrading existing infrastructure and building new infrastructure to support the generation, storage, and distribution of alternative fuels.

**Funding and Investment:** Securing diverse funding and investment to support the research, development, and implementation of sustainable energy solutions in ports and maritime sectors.

**Policy and Regulation:** Developing and implementing supportive policies and regulations that encourage the adoption of renewable energy solutions and incentivise sustainable practices.

**Stakeholder Engagement:** Engaging and involving various stakeholders, including port authorities, businesses, local communities, and government agencies, to foster collaboration and ensure the successful implementation of sustainable energy solutions.

## 3.1 Pillar II Blue skills and ocean literacy

### Recommendations

The recommendations on Pillar II priorities stem from the combined information that has been collected through reports, meetings and input from experts in workshops as well as through observations of the Atlantic Area by the Pillar II Coordinator's team.

### Prioritised Actions

**Training Development:** Creating training modules focusing on environmental impacts and ocean literacy in Vocational and Tertiary Education Courses.

**Resources and Entrepreneurship:** Creating new digital resources to support blue education and fostering entrepreneurial skills for the Blue Economy.

**Community Engagement:** Identifying ways to engage citizens and communities in learning the impacts of climate change in ocean and coastlines, while promoting engagement in risk mitigation and adaptation, namely through Citizen Science (Synergies with Pillar IV).

**International Cooperation:** Enhancing the visibility of the European ocean literacy initiatives, in cooperation with the EU4Ocean Coalition in order to promote synergies identification and international cooperation for Pillar II related activities.

# 3.1 Pillar III Marine Renewable Energy

## Recommendations

The recommendations on Pillar III priorities stem from the combined information that has been collected through reports, meetings and input from experts in workshops as well as through observations of the Atlantic Area by the Pillar III Coordinator's team.

### Prioritised Actions

**Marine Renewables Area:** Utilising the capabilities that arise from the fact that the Atlantic is home to innovative technologies in particular regarding floating wind, wave energy, tidal energy or a combination of these technologies but also in the aquaculture and blue biotechnologies sectors, as well as in established sectors of the Blue Economy in order to achieve progress in the MRE area.

**Stakeholder Engagement:** Focusing on developing social acceptance and local engagement in the Atlantic MS, since these are paramount in overcoming the challenges in the area. The early and often community and stakeholder engagement is thus considered a priority.

**Collaboration:** Enhancing the collaboration of more partners regarding the marine renewable energy sector, as collaboration is key to success and progress in the area.

**Investments:** Securing diverse funding sources to support the research, development, and implementation of marine renewable energy is considered important. Private investors however need more and better understanding of Blue Economy and its sectors, objectives and challenges in order to clearly identify their Return on Investment.

# 3.1 Pillar IV Healthy Oceans and Resilient Coasts

## Recommendations

The recommendations on Pillar IV priorities stem from the combined information that has been collected through reports, meetings and input from experts in workshops as well as through observations of the Atlantic Area by the Pillar IV Coordinator's team.

### Prioritised Actions

**Biodiversity Priority:** Disseminating that there is urgency for action due to the loss of biodiversity but also climate change effects. The AAP 2.0 is a core EU strategy for cooperation providing the base to work together to recover the environmental status of the Atlantic ocean.

**EU Framework:** Enhancing alignment with *EU Mission Restore our Ocean and Waters by 2030* as it is pivotal in order to identify, develop and strengthen synergies related to the protection of our ocean and coasts.

**Collaboration:** Promoting coordinated and effective implementation of actions against marine litter and underwater noise under the EU Marine Strategy Framework Directive (MSFD) for the EU MS.

**Investments and Synergies:** Identifying funding opportunities and working on developing synergies between existing EU infrastructures for coastal observation and protection, as well as for alert and monitoring and increasing the development of in-situ ocean observatories.

## 3.2 Next Steps



### Next year's Workshops/webinars

Following this year's National Events/Webinars and aiming to continue boosting synergies and collaborations, the AAM along with the Atlantic NHs has already started planning the next round of Pillar Workshops, which will share knowledge and/or produce outputs in order to reach the expected results of the AAP 2.0.

### New French Presidency for the ASC

Following 2023 Portuguese Atlantic Strategy Committee (ASC) presidency, next year France will hold the ASC presidency and be in charge of the organisation and overseeing of the AAP 2.0 activities in order to present innovative approaches in addition to increased visibility and community engagement.

### New Pillar Coordinators and updated Pillar Roadmaps

During the second semester of 2024, the ASC will choose the new Pillar Coordinators for each Pillar who will create the new Pillar Roadmaps, planning the upcoming activities for the next 6 month period, identifying priorities, targets and the next actions that need to be undertaken.

## 3.3 Conclusions

The implementation of the AAP 2.0 throughout its third year has been successfully progressing towards the fulfillment of the AAP 2.0 goals as well as in growing the Atlantic stakeholder database, while utilising further the established governance structure with the four distinct thematic pillars.

This year's Atlantic Stakeholder Platform Conference (ASPC) was organised in Oporto, Portugal. Its goals were to assemble traditional stakeholders as well as new ones from different geographies to discuss future cooperation on blue economy, investment, innovation and sustainability. The theme of this year's conference was "Atlantic Future: New synergies and innovations for a sustainable Ocean Economy". The conference focused on providing insights of the key AAP 2.0 activities and challenges of achieving sustainable blue growth and contributing to greater territorial cooperation and cohesion in the Atlantic area, both in EU as well as internationally. Special focus was also given in synergies identification and promotion.

The Portuguese Presidency organised a Ministerial Meeting with representatives of all four Atlantic MS and the European Commission on the 18th of October 2023 in the context of the ASPC23. As a result of this Ministerial Meeting, the four Atlantic MS and EC representatives signed a Ministerial Declaration jointly committing to actions for boosting EU's blue growth and the implementation of AAP 2.0.

Moving forward in the next year of implementation and taking note of the key findings, lessons learned and prioritised actions, the aim is to choose the next Pillar Coordinators, create new Pillar Roadmaps, boost collaboration and further join forces with the ultimate aim of achieving the goals and milestones set in the framework of AAP 2.0.



# Disclaimer

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