

Atlantic Action Plan 2.0

2021 Implementation Report

Atlantic Assistance Mechanism

Executive Summary

This report provides an analysis of the first year of implementation of the <u>Atlantic Action Plan 2.0</u> (AAP 2.0) following its adoption via the <u>EU Commission Communication</u> in July 2020. The objectives of this report are to present an overview of activities undertaken, results achieved and recommendations for future actions.

Findings presented are based on extensive research and information gathered by the Atlantic Assistance Mechanism (AAM), in cooperation with the Thematic Pillar Coordinators and the respective Taskforce members.

The report includes an introduction and overview of the four (4) thematic Pillars of the Atlantic Action Plan as well as a presentation on all activities carried out to promote and raise awareness of the plan's goals and objectives.

This report showcases projects that are in line with the objectives of the AAP 2.0 and which have been selected from the Maritime Monitoring Hub database of more than 500 projects that have already been financed in the Atlantic area.

The Conclusions section focuses on the next steps as well as the lessons learned from the first year implementation. In addition, recommendations on focus areas for the second year are also presented in order to guide the future work of the AAP 2.0

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List of Abbreviations

AAM/ AM	Atlantic Assistance Mechanism	
AAP	Atlantic Action Plan	
ASC	Atlantic Steering Committee	
ASPC	Atlantic Stakeholder Platform Conference	
CINEA	European Climate, Infrastructure and Environment Executive Agency	
СТ	Central Team	

DG MARE	Directorate General of Maritime Affairs & Fisheries	
EC	European Commission	
EU	European Union	
IMDO	Irish Maritime Development Office	
MS	Member States	
MSFD	Marine Strategy Framework Directive	



I

Introduction

1.1 Atlantic Strategy Committee Presidency

Dear Atlantic Colleagues,

Welcome to the 2021 Implementation Report of the Atlantic Action Plan 2.0 (AAP 2.0).

Since it was adopted on 23rd July 2020, the French Presidency of the Atlantic Strategy Committee (ASC) in 2020, the Irish Presidency of the ASC 2021, alongside fellow Member States Portugal and Spain, the EU Commission, Pillar Coordinators, Taskforce Members, Assistance mechanism, national coordinators and Regional stakeholders have been working toward its implementation and laying the groundwork for the development of the plan in the years to come.

Particular credit should be given to the Pillar Coordinators who have been identifying opportunities and obstacles, formulating ways to capitalise and minimise the effects of both, gathering information as they build Atlantic networks, and hosting taskforce meetings and workshops to address the specific issues laid out under the Pillars of the Action Plan.

The AspBan project –the first flagship project of the Atlantic Action Plan 2.0 – exemplifies the ambition, scope and influence projects being developed under this Plan can achieve and we look forward to seeing its continued progress as it matures.

In conclusion, the Atlantic Strategy Committee looks forward to building on the solid foundation and capitalising on the momentum that has been gained in this first year throughout the lifetime of the AAP 2.0.

Many thanks to everyone for their contributions in sustainably supporting, improving and developing our Atlantic Area.

Dymphna Keogh Irish Presidency of Atlantic Strategy Committee 2021

1.2 Atlantic Action Plan 2.0

Background

The revised <u>Atlantic Action Plan 2.0</u> was communicated in July 2020 in the form of an <u>EU Commission Communication</u>. The purpose of the Atlantic Action Plan 2.0 is to unlock the potential of the sustainable Blue Economy in the Atlantic area while preserving marine ecosystems and contributing to climate change adaptation and mitigation of environmental hazards.

The AAP 2.0 promotes the EU's <u>new approach to a sustainable blue economy</u>, adopted in May 2021, which provides a holistic vision for economic growth in sustainable, and environmentally friendly terms by promoting economic well-being and social equity. In the Atlantic Ocean, blue economy generated 73.4 billion € of Gross Value Added and employed 1.29 million people in 2017. The EU Commission Communication on the sustainable blue economy indicates the main parameters, such as blue skills and ocean knowledge/literacy, offshore renewable energy, coastal resilience, research and innovation, which also play a crucial role in achieving the AAP 2.0 vision.

The revised Atlantic Action Plan 2.0 objectives were designed in line with the Sustainable Development Goals and the European Commission's political priorities for 2019 - 2024, notably the <u>European Green Deal</u>. It sets out the guidelines on making Europe the first climate-neutral continent by 2050 and stresses the central role of blue economy as a critical enabling factor to reach these objectives. Blue economy sectors can contribute to the clean energy transition, notably via tapping into the growing potential of offshore renewable energy and managing maritime space more sustainably.

The EU Green Deal goals are fully aligned with the AAP 2.0 in:

• Promoting carbon neutral solutions through marine renewable energy

- Incentivizing organisations in the development of innovative renewable energy installations
- Addressing issues regarding marine pollution
- Engaging in activities that promote stronger coastal resilience

Atlantic Action Plan 2.0: Implementation Report

1.3 Governance Structure



1.3 Governance Structure

Governance Structure of the AAP 2.0

Political coordination is primarily conducted by the participating countries' designated Ministers responsible for maritime affairs. Member States define the broad political guidelines and guide the implementation of AAP 2.0, as well as also decide, in consultation with the European Commission, to expand membership of the Atlantic strategy to other interested States.

Operational coordination is ensured through the Atlantic Strategy Committee (ASC) that acts as a decision-making (executive) body and ensures the involvement of representatives from different coastal regions.

Representatives of relevant funding and financing institutions, as well as other relevant parties, can be invited as observers on a case-by-case basis. Additionally the Atlantic Assistance Mechanism, an EU funded project, aims at providing stakeholders with updated information on the revised AAP 2.0, its research and investment priorities, news, events and networking opportunities.

The Assistance Mechanism team consists of a <u>National</u> <u>Hubs</u> network, operating in France, Ireland, Portugal and Spain, coordinated by a <u>central team</u>. To enable the effective implementation of AAP 2.0, a number of key conditions must be met and clear decisions taken at an early stage:

- The Atlantic Strategy Committee proposes/approves flagship actions and may identify projects;
- The European Commission promotes the strategic approach at EU level, including coordination and funding alignment with existing EU-related initiatives and instruments relevant to AAP Pillars;
- Governments monitor and evaluate progress at country level and provide guidance for implementation;
- Key stakeholders involved include national, regional and local authorities, economic and social actors, civil society, academia and non-governmental organisations. Public events at national and EU level contribute to promoting stakeholder involvement.
- The Atlantic Strategy Committee monitors the AAP 2.0 progress periodically and is responsible for ensuring the plan's implementation.

1.3 Governance Structure

1.3.1 The Atlantic Strategy Committee

The Atlantic Strategy Committee (ASC) is the governing body of the AAP 2.0 and aims to ensure the political and operational coordination of the plan and provide the framework for its implementation. To that effect, each year the ASC Chair undertakes the organisation of the main Atlantic event – the Atlantic Stakeholder Platform Conference – on one of its coastal regions, seeking to bring together stakeholders to discuss the AAP 2.0 implementation and share new ideas and new innovations to promote the blue economy in the Atlantic sea-basin.

The Atlantic Strategy Committee Members

The ASC is comprised of representatives from the four (4) EU Member States (France, Ireland, Portugal and Spain) bordering the Atlantic Ocean as well as representatives from the European Commission, the Committee of the Regions, the Economic and Social Committee and also representatives from coastal regions, cities and other relevant economy and social stakeholders.

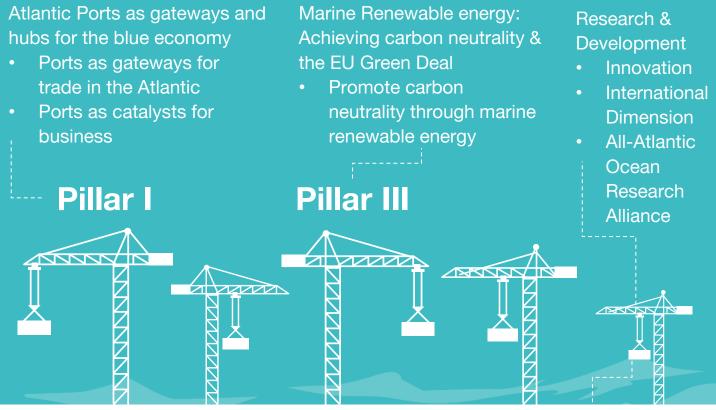


1.4 Atlantic Action Plan 2.0–Thematic Pillars

Pillars of the Atlantic Action Plan 2.0

In the revised action plan, four thematic Pillars were identified accompanied by concrete actions. These Pillars, which represent a practical way to make the common vision a reality, are interconnected and trans-regional by nature. They address key challenges and aim to foster a sustainable blue economy and contribute to greater territorial cooperation and cohesion in the EU Atlantic area.

Research & Innovation (R&I) and the International dimension underpin all other Thematic Pillars of the Atlantic Action Plan; the All Atlantic Ocean Research Alliance is an important example of these cooperative international R&I efforts.



Research and Innovation- International Dimension

Pillar II

Blue Skills & Ocean Literacy: Building a new generation of Atlantic citizens

- Quality training and lifelong learning
- Ocean literacy

Pillar IV

Coastal Resilience and healthy ocean: For societies & ecosystems

- Enhance coastal resilience
- Fight against marine pollution

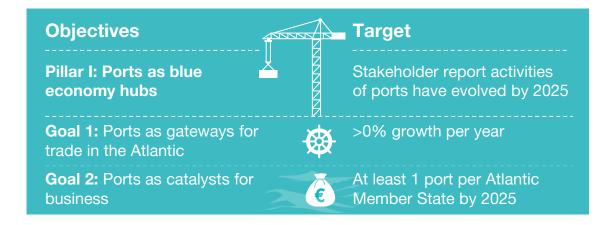


Current and Ongoing Pillar Activities

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

A key objective of Pillar I is to engage with port authorities and stakeholders in order to establish a transnational basis of support regarding project implementation, data collection and increasing the competencies of ports, which serve as the connection points of the Atlantic area.

Pillar I places a heavy focus on working in unison with the other Pillars due to the common grounds found in their goals. A crosspillar approach will be established to engage in common trends of environmental issues such as offshore renewable energy.



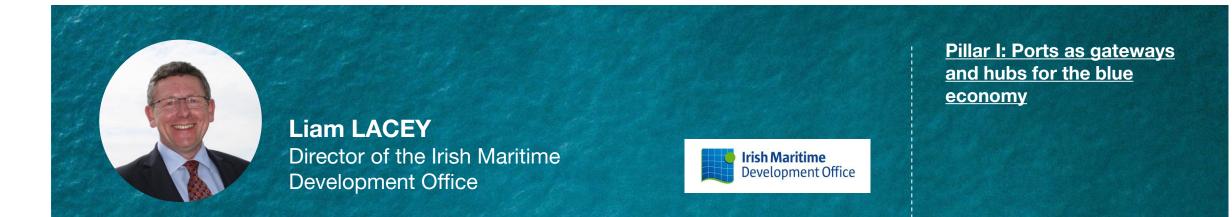
Goals

In alignment with the goals set by in the AAP 2.0, its activities are centred around the achievement of goals in 5 core areas:

- Increasing communication and availability of data on the economic potential of ports
- Aid in the enhancement of digitalisation of data and actions of Atlantic Ports
- Establish ports as hubs for other industries such as energy and facilitate engagement with port networks and SMEs
- Promote innovative technologies for the decarbonisation of maritime emissions
- Create a network of green Ports by 2025

Atlantic Action Plan 2.0: Implementation Report

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



Liam Lacey is Director of the Irish Maritime Development Office (IMDO) and formerly worked with Irish Continental Group as Managing Director of its Container and Terminal Division. He has extensive experience in shipping, chartering and port development. He is a Fellow of the Institute of Certified Public Accountants in Ireland and holds a Masters Degree in management from Trinity College, Dublin. Before joining the IMDO, Liam lectured in the area of strategic management and innovation in NUI Maynooth. Liam was a member of IBEC's Transport Council, which represents the views of industry in the area of transport and logistics.

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

Ports as hubs for business

Use ports as hubs for other industries such as offshore renewable energy and aquaculture

Green Ports

Development of good practice guidelines in areas of port sustainability and alternative fuels

Connectivity

Connecting short-sea shipping routes in the Atlantic area Develop a programme of actions to support existing routes and foster new short sea shipping routes

Digitalisation

Create a digital transport forum that can help facilitate green ports and connectivity

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

The roadmap implementation is supported by the Pillar coordinator together with the AAM support, CINEA and DG MARE and a Taskforce composed by representatives from the 4 member states appointed by the ASC.

The Taskforce members, experts in the Atlantic area, work closely with the Pillar Coordinator and aid in defining the strategy of the Pillar Coordinator's tasks. This is achieved through continuous communication to provide valuable input and most importantly to assist in the preparation of the Pillar Roadmaps every 6 months which outline the main priorities for the future.



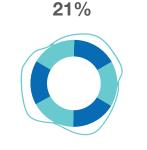
2.1 Pillar I Ports as gateways and hubs for the blue economy -Implementation

Workshops:

- 1. Digitalisation of ports June 12
- 2. Using Ports to catalyze a Green Recovery – July 8
- 3. Staying Connected for Trade, Tourism and Economic Growth – September 16

Objectives: bring together Atlantic stakeholders, including SMEs, improve knowledge and exchange of experiences on AAP 2.0 goals, and further promote cooperation in the **Atlantic area**.

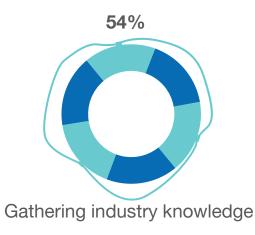
Pillar I Workshop Participants' Expectations



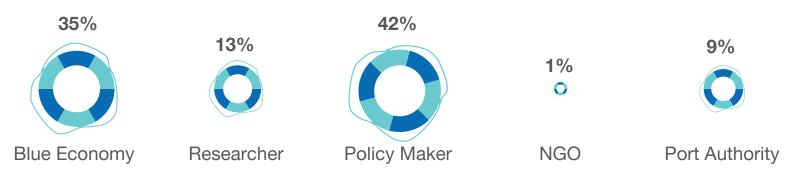
Networking with stakeholders



Sharing experiences



Pillar I Workshop Participants' Field/Industry



> 1000 Social media engagements (LinKedIN, Twitter, Facebook)

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

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

- Increased need for collaboration between small and large ports is a key factor in establishing best practices that can be shared with stakeholders
- Provide the means to build trust among the players including the providers of solutions
- Develop a way to learn more from best practices
- Teaming together to access funding removing barriers
- Re-iteration of the importance of the role of Regional Ports
- Importance of achieving scale (in and among Ports)
- Funding Mechanisms such as the Motorways of the Sea will need to adapt to the transition to new services and greener industries.
- More clusters / networks are one of the keys to a sustainable Blue Economy

Transformation of the Maritime Sector То From Partial situational awareness Enhanced situational awareness Reliable information quality Low information quality Standardised operations Short-term planning Sparse information exchange Consistent data exchange Sub-optimal operations Collaboration culture Just-in-time operations Time consuming operations Enhanced IT-systems and thirdparty innovation opportunities Low IT maturity

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Expected Results Grow and Accelerate your smart projects GALATEA in new value chains of the European blue Open innovation environment to **Key Steps** economy (GALATEA) ₫ 260 facilitate the emergence of ideas Challenges Emergence Identify customer's needs and Projects Emergence support directly SMEs in developing innovative projects GALATEA Innovation Support Address identified challenges, through targeted financial Monitoring mechanisms and services GALATEA aims at promoting cross-border and crossand Evaluation sectoral collaborations between innovation actors, notably Act directly on the industrial SMEs, in 4 key domains of Blue Growth with great Projects competitiveness of those sectors, Sustainability potential of development and uptake of innovative with positive and sustainable solutions by businesses: Smart port, Smart ship, Smart impacts on EU growth and jobs in shipyard, maritime surveillance. Blue Growth

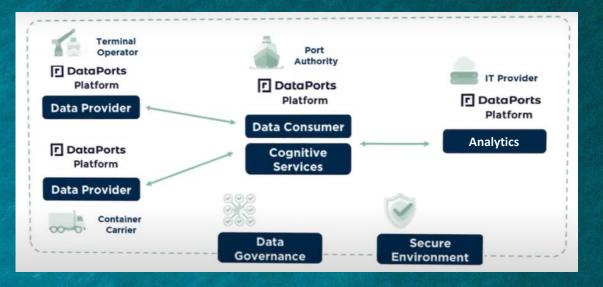
For more information click here

For more information click here

DataPorts: A Data Platform for the Cognitive Ports of the Future



The EU-funded DataPorts project will design an Industrial Data Platform. The Cognitive Ports Data Platform will connect existing digital infrastructures of seaports and their systems, will set rules on safe and reliable data sharing and trading, and offer powerful services of data analytics. That will allow the creation of different smart applications according to related requirements.



Expected Results

Contribute in making European seaports trusted, strong and integrated.

5G-LOGINNOV



5G-LOGINNOV's vision is to optimize freight and traffic operations at ports and logistics hubs by using new innovative concepts, applications and devices supported by 5G technologies, Internet of Things (IoT), data analytics, next generation traffic management, Cooperative, Connected and Automated Mobility (CCAM) and the 5G logistics corridor.







For more information click here

Expected Results

Minimize the environmental impact of ports

Reduce congestion around the port area and disturbance to the city

Represent a pillar of economic development and business innovation for the region

Facilitate the integration of the autonomous truck platoons of the future

GAMBAS





The objective of the GAMBAS project is to highlight how Galileo's specific features can benefit the maritime domain, to propose implementations and to support demonstrations and disseminations of associated services, for the benefit of maritime domain in terms of security, safety, protection of environment and resilience to major catastrophic events.

For more information click here

Expected Results

Address the modernisation of SSAS Cospas-Sarsat anti-piracy beacon, with unique Galileo returnlink features

Develop solutions for rescue operators

Address the expected future Emergency Warning Service

AspBAN- Pillar I Atlantic Awards Winner



Atlantic Smart Ports Blue Acceleration Network (AspBAN) aims to support Atlantic Ports to act as ecosystems in order to foster innovation in the blue economy, thus diversifying their business models and revenue sources. AspBAN has the support of a large and representative pool of **137 strategic partners and a total universe of 391 ports, from EU Atlantic, Norway, USA, Canada** Colombia, Morocco, Mauritania, India (Goa) and China (Macau):

 41 ports and 5 ports associations – 23 belonging to the 4 Atlantic Strategy Group member countries – AspBAN also has Port of Rotterdam as strategic partner as well as International Port and Harbors Association, the world's largest port association

- 16 investment funds and finance entities
- 33 companies
- 18 blue accelerators & clusters
- 8 business associations
- Policy entities, Municipalities, Research Institutes

For more information click here

Expected Results

Identify 10 common blue economy challenges in the Ports community

Attract 450 startups for the Acceleration program

Achieve a pool of 30 innovative start-up solutions to develop pilots in 30 ports

Attract 6 million € in direct private investment for the final pool of startups

Mobilize 5 billion € of potential private investment

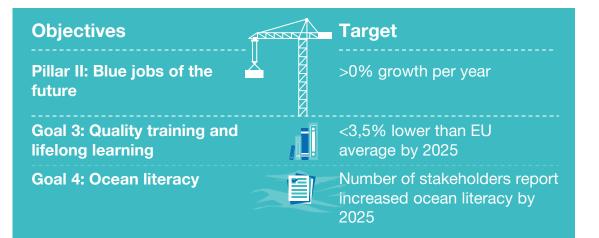
Achieve a reduction of at least 100.000 tons of CO2 in the operations of ports

2.2 Pillar II Blue skills of the future and ocean literacy

Pillar II is engaged in the promotion and enhancement of blue skills in the Atlantic region. This is being achieved by identifying best practices for matchmaking employers and job seekers.

It also identifies blue skill gaps that pose a serious threat to the maritime sector.

Its goals are aligned with the global commitments for sustainable development and are fully integrated in the European Commission's political priorities for 2019 - 2024, notably the "European Green Deal", the "Economy that works for people" and "a stronger Europe in the world".



Goals

The harmonisation of data collection in the area of blue careers and the creation of a business intelligence hub on blue skills topics, by taking advantage of existing information platforms for job opportunities, are some of the goals to be achieved on the Blue Skills of the Future topic. Specifically, Pillar II will provide support for projects that aim to:

- Analyse entry points for ocean literacy in official curricula
- Create 25 Atlantic blue schools by 2025
- Implement an ocean literacy component in relevant projects
- Engage with the All-Atlantic Ocean Young Ambassadors and the EU4Ocean Youth Forum to foster dissemination on marine topics
- Engage citizens in ocean-related actions in the EU Atlantic area, namely the European Maritime Day and World Ocean Day

2.2 Pillar II Blue skills of the future and ocean literacy - Pillar Coordinator



Ana Noronha is Executive Director of <u>Ciência Viva</u>, 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.

2.2 Pillar II Blue skills of the future and ocean literacy - Goals

Blue skills of the future and ocean literacy

What blue skills will we need in the future? How can we make Blue careers more attractive?

Identify upskilling and reskilling needs and offers and organise lifelong professional training, namely regarding digital skills

Create a business intelligence scheme and promote liaison centres for improved cooperation between businesses and training providers

Interact with MARENET project to look for possibilities of improving cooperation between business and training providers; also cooperate with EU Atlantic

List existing information / platforms for job opportunities and harvest their potential for blue jobs and link them to the hub platform

2.2 Pillar II Blue skills of the future and ocean literacy -Taskforce Support

The roadmap implementation is supported by the Pillar coordinator together with the AAM support, CINEA and DG MARE and a Taskforce composed by representatives from the 4 member states appointed by the ASC.

The Taskforce members, experts in the Atlantic area, work closely with the Pillar Coordinator and aid in defining the strategy of the Pillar Coordinator's tasks. This is achieved through continuous communication to provide valuable input and most importantly to assist in the preparation of the Pillar Roadmaps every 6 months which outline the main priorities for the future.



2.2 **Pillar II** Blue skills of the future and ocean literacy Implementation

Blue Skills of the Future and Ocean Literacy April 14

47 Panelists

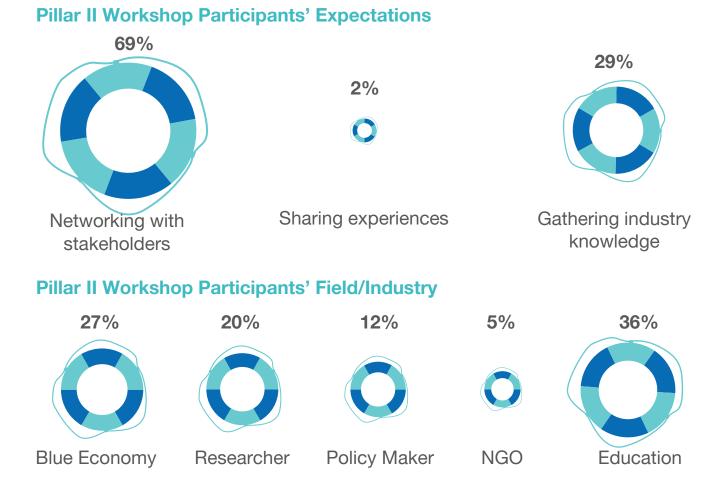
Representatives of key organisations and stakeholders from Portugal, and the European Commission

282 Attendees

13 Countries

Portugal, Spain, Ireland, France, Belgium, Germany, Sweden, Algeria, Morocco, Luxembourg, Denmark, Greece and the UK

Objectives: Networking, exchanging good practices and understanding more about upskilling techniques and methodologies resulting in a good knowledge transfer regarding the future of blue careers and blue skills



> 1000 Social media engagements (LinKedIN, Twitter, Facebook)

2.2 Pillar II Blue skills of the future and ocean literacy -**Recommendations**

How can we widen and mainstream ocean literacy? What is the relevance of Blue Schools to change behaviours and to increase awareness on blue careers?





curriculum

Create 25 Atlantic blue schools by 2025





by all Atlantic pillars

Connect with All-Atlantic Ocean Youth Ambassadors & EU4Ocean Youth Forum to mobilise European youth for ocean stewardship & Blue careers



Create a campaign

to attract youth to

Blue Careers





Mobilise stakeholders to promote "EMD in my country" and commemorate World Ocean Day.

For more information click here

iSOL-MET



iSOL-MET aims to bridge the gap between shipping world requirements in respect to human resources soft skills and competences, through developing innovative educational material based on the case study methodology. The project addresses the needs of the students for obtaining the required skills for entering the shipping market and provides educators with new educational tools. Furthermore, it addresses the needs of the shipping industry for qualified personnel.



iSOL - MET project: Innovative Soft SkilLs to Maritime Education and Training

Expected Results

Produce maritime skills courses for multidisciplinary and multicultural groups of students

Create a maritime Case Study Handbook

Develop guidelines for the development of soft skills educational material

Produce soft skills evaluation tools

For more information click here

Mari4 YARD

Mari4_YARD aims to implement a portfolio of worker-centric solutions, by relying on novel collaborative robotics and ubiquitous portable solutions, enabling modular, flexible, reconfigurable and usable solutions targeting the execution of key labour-intensive tasks by preserving industry-specific workers' knowledge, skills and biomechanics health status. It adopts a twofold strategy: technology-driven and barrier-driven.

Expected Results

Develop intuitive human-robot collaborative solutions allowing symbiotic integration of operators' skills and dexterity into flexible and reconfigurable solutions in shared workspaces.

Develop handheld and portable AR/MR tools for assisting shipyard workers.

Develop Al-assisted exoskeletons for reducing fatigue and physical stress.

Implement a portfolio of worker-centric tools assisting in the execution of the labour-intensive tasks by preserving industry-specific workers' knowledge and skills.

Demonstrate Mari4_YARD approach at real scale targeting both shipbuilding and retrofitting in SME-shipyards, fostering results exploitation and enabling EU wide manufacturing adoption.

For more information click here

All-Atlantic Forum



The "All-Atlantic R&I for a Sustainable Ocean: Ministerial High-level & Stakeholders Conference" aims at bringing to a new level the existing dialogue and cooperation undertaken under the All-Atlantic Ocean Research Alliance.The next edition is planned for 1st half of 2022 in the United States



Expected Results

Build -up on the science diplomacy efforts and related research and innovation actions implemented in the scope of transatlantic cooperation Strengthen the multi-stakeholder dialogue and knowledge sharing

Promote social innovation and an enhanced understanding of the value that the Atlantic Ocean brings to the communities living on its shores.

Support capacity and career development of young talents

Boost synergies and promote new forms of cooperation for a sustainable use of the Atlantic Ocean marine resources

Promote the development of new technologies, impactful solutions and disruptive innovation, with a special reference to affordable data collection and advanced information systems applied to Oceans sustainability

For more information click here

MATES PROJECT- Pillar II Atlantic Awards Winner



MATES' objective is to develop a skills strategy that addresses the main drivers of change in the maritime industry, in particular shipbuilding and offshore renewable energy. Both sectors are strongly linked and require new capacities to succeed in an increasingly digital, green and knowledge -driven economy.



Expected Results

Develop a long-term Strategy and Action Plan to tackle the current and future skills shortages. Identify future skills and competence needs and develop corresponding training and curricula.

Work on creating greater alignment of industry needs and occupational profiles with training and curricula.

Validate of training and education pathways for effectively increasing employability and career opportunities

Create a more competitive European maritime industry with increased attractiveness of maritime careers for graduates and early-career skilled workers.

Transfer and exploit knowledge in support of Blue Growth.

Portugal's Blue School Network (Escola Azul)

Blue School's goal is to bring ocean literacy to schools, engaging all school community to understand the importance of the ocean in their lives and their own impacts on it, framed by the Ocean Literacy principles and an Ocean Literacy multiperspective approach.

Through critical thinking and creative learning, students develop emotional bonding with the Ocean and are able to convert knowledge into decisionmaking and effective action towards the solution. This ultimate purpose is in line with Sustainable Development Goals 4, 14 and 17.



For more information click here

Expected Results

Reach 280 schools, 45.000 students, and 104 partnerships in the Portuguese Blue School network

Include an ocean literacy curriculum in schools fostering knowledge and pushing students to become ocean advocates

Have direct references of the Blue School programme in Science and Innovation priority intervention area of the Portuguese National Ocean Strategy 2021-2030

Achieve international recognition and create the stepstones to develop other Blue School networks around the Atlantic area

2.3 Pillar III Marine Renewable Energy

The EU Atlantic area is the leader in and testbed for the development of novel marine renewable energy, especially ocean energy and floating offshore wind. To reach the next step of development, namely the commercial maturity of successful prototypes, is essential to maintain technological leadership, retain talent and provide affordable clean energy while taking into account potential impacts on the marine environment and the way to mitigate them.

This Pillar responds to several interconnected challenges, which are to increase access to finance, obtain the necessary political support and public acceptance, facilitate knowledge sharing and make use of best practices across the region.

Objectives		∎ Target
Pillar III: Marine renewable energies		Increased installed capacity in the Atlantic area
Goal 5: Promote carbon neutrality through marine renewable energy	R	Increased investments in capacity and infrastructure in marine renewable energy

Goals

Based on the overarching goals set by the AAP 2.0, Pillar III was engaged in the following actions during the implementation period:

- Contribute to design a Marine Spatial Planning tool that will build upon existing tools and information on the marine renewable energy farms
- Identify and support opportunities for the promotion of collaboration incentives
- Design a dissemination and communication plan that will include the objectives, identified target audience and communicate the meeting to stakeholders
- Support projects and promote the cooperation between policymakers at a national and EU level with industry experts and academia

2.3 Pillar III Marine Renewable Energy - Pillar Coordinator



Chemical Engineer from the University of the Basque Country, graduated in European Master's in Project Management. She has been working in <u>EVE</u> for more than 14 years in areas of Renewable Energy, International Studies and Energy Planning for Local Councils. Olatz is currently working as Marine Energy Project Manager. The type of activities in which she is involved are: Elaboration of the Ocean Energy Plan for the Basque Country 2021-2024, bringing together the administration, the industry and academia through the Wave Energy Basque Country working group, management of the Mutriku Wave Power Plant, member of the team that designs BiMEP infrastructure's strategy at technical and dissemination levels. She is coordinating the CPMR-Atlantic Arc Commissions' working group on Marine Renewable Energies. The most relevant projects in which she is currently involved are: EuropeWave - Bridging the gap to commercialisation of wave energy technology using precommercial procurement, Marinet 2, Oceanera-net COFUND, OceanSET, OPERA

2.3 Pillar III Marine Renewable Energy - Goals

Marine Renewable energy

Set specific deployment objectives for marine renewable energy in the Atlantic regions taking into account their environmental impacts

Develop public awareness using appropriate communication tools on marine renewable energy in the Atlantic Define best sites for marine renewable energy farms (including offshore wind) and adjacent ports across the Atlantic, taking into account potential impacts on the marine environment

Pool together different marine renewable energy initiatives covering the EU Atlantic area, based on the philosophy and furthering the objectives of the Strategic Energy Technology plan (SET plan)

Strengthen cooperation in the European ocean energy community

Implement incentives for deployment of innovative renewable energy installations Develop a specific ocean energy framework for EU islands in the Atlantic

2.3 Pillar III Marine Renewable Energy - Taskforce Support

The roadmap implementation is supported by the Pillar coordinator together with the AAM support, CINEA and DG MARE and a Taskforce composed by representatives from the 4 member states appointed by the ASC. The Taskforce members, experts in the Atlantic area, work closely with the Pillar Coordinator and aid in defining the

strategy of the Pillar Coordinator's tasks. This is achieved through continuous communication to provide valuable input and most importantly to assist in the preparation of the Pillar Roadmaps every 6 months which outline the main priorities for the future.



2.3 Pillar III Marine Renewable Energy - Implementation

Fostering Blue Digitalisation for Marine Renewables in the Atlantic Area – May 27

12 Panelists

Representatives of key organisations and stakeholders from Spain, the E.U. and the European Commission

30 Attendees

Joined the event to gain business knowledge, to become informed on the Atlantic Action Plan goals and Agendas and to voice their own experiences

5 Countries Spain, Ireland, Portugal, France, Greece



> 1000 Social media engagements (LinKedIN, Twitter, Facebook)

Pillar III Workshop Participants' Expectations

2.3 **Pillar III** Marine Renewable Energy - Recommendations

Early BAD

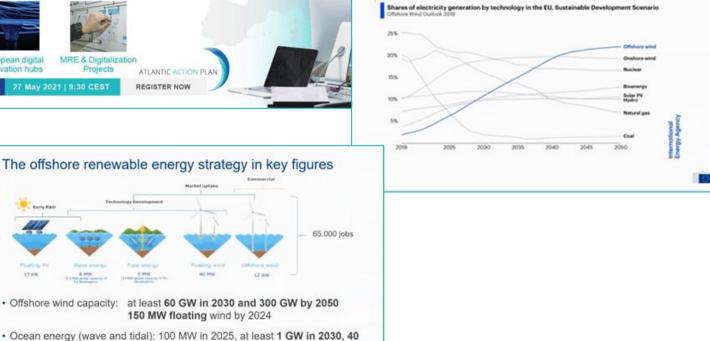
GW by 2050

EUR 800 billion investment needed by 2050

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

- Data management knowledge and sharing is ۲ essential for the open access and analytics of the data
- Create an overall legal and technical framework for data sharing between technological proprietary businesses and others so as to advance the process
- Increase / enhance public-private collaborations ۲
- Join efforts for fostering the digitalisation MREs (businesses, technological centres, knowledge centres, funders, etc.)
- Increase knowledge and practices exchange not only within the Atlantic, but also with other sea basins
- Increase funding opportunities for digitalising the MREs sector
- More pilot and demonstration projects to test new ۲ technologies and facilities
- Enhance the technological value chain of MREs within EU (not outsourcing it to third countries)





Contract Commission

EU strategy on offshore renewable energy

For more information click here

STEP4WIND



STEP4WIND aims at increasing the commercial readiness level of floating offshore wind energy through technological innovations across the supply chain. The main objective is to address both technological and economical challenges related to the development of floating offshore wind farms.



Expected Results

Deliver 10 PhD degrees, in joint supervision and training between the public and private sectors

Develop floating-specific tools, methods and infrastructures to tackle the technological and economical challenges of Floating Wind Turbines, from design to deployment, operation and scaling up

Deliver guidelines for large farm deployments, with a clear roadmap to commercialisation

SafeWAVE: Streamlining the Assessment of environmental efFEcts of WAVE energy



The aim of the SafeWAVE project consists of overcoming nontechnological barriers that could hinder the future development of one of the main pillars of the EU Blue Growth strategy.

Expected Results

Non-technological barriers are being addressed by the WESE project (http://www.weseproject.eu/) funded by EMFF in 2018. SafeWAVE builds on the results of the WESE project and aims to make further progress by focusing on the following specific objectives:

Develop of an Environmental Research Demonstration Strategy

Develop of a Planning and Consenting Strategy

Develop of a Public Education and Engagement Strategy

For more information click here

For more information click here

ATLANTIS

acantic Testing Platform for Maritime Robotics

The overall aim of the ATLANTIS project is to establish a pioneer pilot infrastructure capable of demonstrating key enabling robotic technologies for inspection and maintenance of offshore wind farms that will be installed in the Atlantic Ocean.





Expected Results

Connect the market needs and user's expectation to robotic applications from the research, technology developers and system integrators

Accelerate the roll-out of maritime robotic technology to end-users through real-world demonstrations open to all communities

Emphasise capabilities in a real offshore wind farming

ATOMS



ATOMS (Attachable Towable O&M System) project will complete the development, prototype, certification and full demonstration in real operative offshore conditions of a pioneer technology for turbines' Large Corrective Maintenance actions which will -for the first time- scope the monopoly of jack-up vessels and will drastically reduce the maintenance cost of bottom-fixed wind turbines.

Expected Results

Reduce costs and environmental impact due to its independence from scarce and costly jack-up vessels Reduce the unproductive time of turbines requiring maintenance

Develop an applicable technology to floating wind turbines

Develop technology suitable for deeper water wind farms

Develop technology directly applicable to new emerging markets

Improve circular economy by reducing the impact of the construction phase

Minimise impact of CO2 emissions and on local flora and fauna by not using large marine cranes and heavy-lift jackvessel

For more information click here

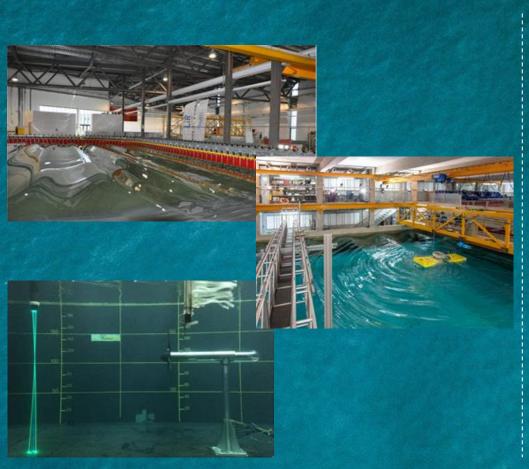


Marinet 2- Pillar III Atlantic Awards Winner



Evolving from MaRINET, MaRINET2 is working towards its vision of unlocking the energy potential of our oceans. Specifically, its goals could be described as:

- To enhance networking between different European research infrastructures
- To contribute to the improvement of knowledge transfer
- To understand the differences between facilities



For more information click here

Expected Results

Develop round robin testing quantifying & reducing uncertainty in testing

Produce academic publications

Report on marine renewable testing results

Develop E- Infrastructure

Provide guidance and training to stakeholders

2.4 Pillar IV Healthy Oceans and Resilient Coasts

Climate risk management and adaptation measures are necessary to protect the coastal habitats and biodiversity, as well as vulnerable infrastructure and economic activities. Marine and coastal habitats should be preserved and valorised, notably with the view to develop new forms of maritime and coastal tourism. In this particular economic sector, circular economy, zero pollution, energy efficiency and biodiversity preservation should be the guiding principles to develop more sustainable practices that benefit local development and local employment all over the year.

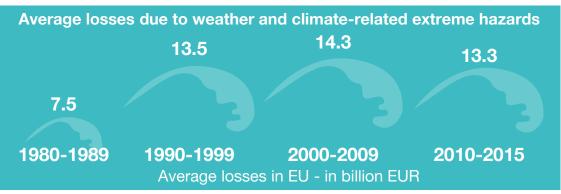
Materials, which could be recycled, are polluting Atlantic beaches and damaging the environment. They could be collected, reused and recycled adding to a more circular economy. Coastal regions and citizens can develop an Atlantic response to marine litter through a system of coordinated actions, adding to ongoing initiatives.

Objectives	Target
Pillar IV: Healthy ocean And resilient coasts	Improvement of the overall health of the EU Atlantic by the next Marine Strategy Framework Directive (MSFD) reporting round (2024) and next Ospar Assessment (Quality Status Report planned for 2023)
Goal 6: Enhance Coastal resilience	Lower than 10% by 2025

Goals

Specific actions planned for the implementation period included:

- Develop synergies between existing EU infrastructures for coastal observation and protection, and test spaces, pilot areas to test methods of coastal protection and promote nature-based solutions
- Compile an inventory of national and regional climate change coastal adaptation strategies and measures
- Create information campaigns for Atlantic coastal communities
- Map coastal wetlands for preservation and monitor their role as carbon sinks
- Develop a pilot project of 'litter-free' coastal communities
- Make use of available tools to identify major sources, pathways and hotspots of marine litter, as well as accidental or deliberate pollution
- Promote business actions based on the circular economy and develop incentives and environmental certification schemes
- Promote cooperation among sectors for a coordinated at-sea and shoreline response



2.4 **Pillar IV** Healthy Oceans and Resilient Coasts - Pillar Coordinator



Phil Monbet joined <u>Pole Mer Bretagne Atlantique</u>, a Sea Business Cluster dealing with innovation in the maritime sector as Head of European Affairs managing the European projets in 2010 and later in 2017 he was appointed Deputy Director in charge of the cluster management and international affairs. He has a background in chemistry from the University of Brittany, Philippe Monbet where he 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 stakeholder regarding the ecological monitoring of water around nuclear power plants waterfronts (Flamanville, Penly Paluel) and AREVA NC La Hague.

2.4 Pillar IV Healthy Oceans and Resilient Coasts - Goals

Healthy ocean and resilient coasts

Coastal resilience

Demonstrate a comprehensive alert and observing system for increased storms and floods due to climate change Develop synergies between existing EU infrastructures for coastal observation and protection, as well as for alerting and monitoring and increasing the development of in situ ocean observatories Compile an inventory of national and regional climate change coastal adaptation strategies and measures, linked to the risk assessments and risk management plans, share good practices

Ocean Health

Make use of available tools to identify major sources, pathways and hotspots of marine litter, as well as accidental or deliberate pollution Launch joint actions to promote a public perception of the problem, e.g. beach days where communities meet to clean the beach Promote coordinated and effective implementation of actions against marine litter and underwater noise required under the Marine Strategy Framework Directive (MSFD) for the EU MS

2.4 **Pillar IV** Healthy Oceans and Resilient Coasts -Implementation

Workshop on Resilience of coastal territories: From decision to action through observation and services – June 10

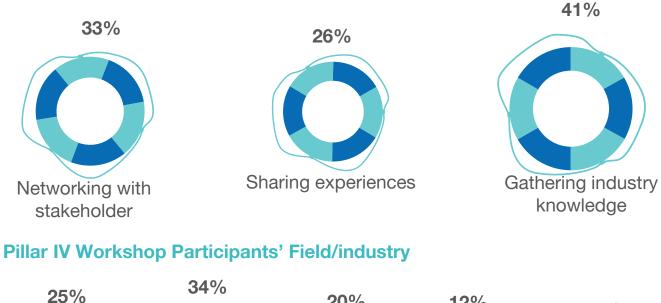
more than **300 Participants**

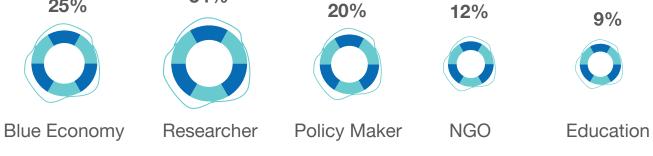
144 Attendees

on the live event

12 Panelists from public and private organisations

Pillar IV Workshop Participants' Expectations





> 3000 Social media engagements (LinKedIN, Twitter, Facebook)

2.4 Pillar IV Healthy Oceans and Resilient Coasts -Recommendations

The recommendations of Pillar IV 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.

This Pillar highlights the need to:

- Consider good practices and lessons learned from other sea basins.
- Integrate the promotion of a healthy ocean and resilient
 Atlantic coastal area into blue economy planning, civil protection (emergency), risk management, land planning, Maritime Spatial Planning, and Land Sea
 interactions
- Enhance collaborations and engagement between Member States and between public and private stakeholders
- Ensure science and innovation actors are fully involved to improve knowledge through observation, modelling and forecasting
- Support national, local and public authorities in planning, risk management and emergency awareness
- Utilize observation and monitoring networks (sea level, seashore) on land, sea and from space
- Improve the quality of products and services to support coastal resilience in particular big data management.

Science and innovation actors are fully involved to improve knowledge (observation, modelling, forecast). To this end it is proposed that:

- Public authorities are supported in **planning**, **risk management and emergency awareness**
- **Observation and monitoring networks** is used (sea level, seashore) on land, sea and from space
- Collaboration between public and private actors is enhanced
- Increased **participative contribution** (data crowdsourcing) is sought after.



Beyond the existing services, it is agreed that there are challenges in improving the quality of products and services to support coastal resilience with:

- **Big data management,** in particular with the management of data quantity, with potential high frequency update but also to ensure their quality control,
- Down scaling modelling to be closer to the ground which requires high resolution grid/data but also enhanced computing capacities,
- Modelling in particular its reliance to be as close as possible to reality
- Data sharing and access request dedicated portals easy to use

2.4 **Pillar IV** Healthy Oceans and Resilient Coasts - Taskforce Support

The roadmap implementation is supported by the Pillar coordinator together with the AAM support, CINEA and DG MARE and a Taskforce composed by representatives from the 4 member states appointed by the ASC.

The Taskforce members, experts in the Atlantic area, work closely with the Pillar Coordinator and aid in defining the strategy of the Pillar Coordinator's tasks. This is achieved through continuous communication to provide valuable input and most importantly to assist in the preparation of the Pillar Roadmaps every 6 months which outline the main priorities for the future.



CleanAtlantic- Pillar IV Atlantic Award Winner

CleanAtlantic aims to protect biodiversity and ecosystem services in the Atlantic Area by improving capabilities to monitor, prevent and remove (macro) marine litter. The project will also contribute to raising awareness and changing attitudes among stakeholders and to improving marine litter managing systems.



For more information click here

Expected Results:

Write > 40 Technical reports & Scientific papers

Create online map viewer & database

Develop marine litter Interfaces & apps

Monitor & model tools and protocols

Create maps of hotspots

Work on case studies & pilot actions

Produce awareness materials

CleanAtlantic

Tackling marine litter in the Atlantic Area

For more information click here

MINKE



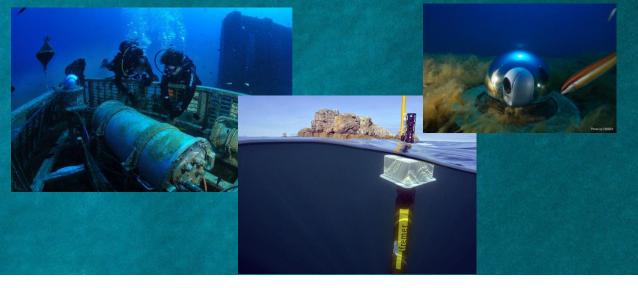
Minke aims to develop this multilayer monitoring strategy, in the framework of the quintuple helix model, to be linked with the three activities of the project: Networking, Transnational Access and Joint Research.

Minke proposes a new vision in the design of marine monitoring networks considering two dimensions of data quality, accuracy and completeness, as the driving components of the quality in data acquisition, to provide finally the most reliable measurements in Ocean & Costal Observation Systems.

Expected Results

Integrate key European marine metrology research infrastructures, to coordinate their use and development

Propose an innovative framework of "quality of oceanographic data" for the different European actors in charge of monitoring and managing the marine ecosystems.



NewTechAqua



The main goal of the NewTechAqua project is to expand and diversify European aquaculture production of finfish, molluscs and microalgae by developing and validating technologically advanced, resilient and sustainable applications.

Expected Results

Deliver solutions to improve fish and mollusc health and disease resistance

Improve performance and quality of farmed fish and microalgae

Make the aquaculture sector more sustainable and circular

Increase the efficiency of aquaculture production systems

Support diversification of fish species

Develop new eco-friendly fish and molluscs products

For more information click here

Raise awareness and train professionals



For more information click here



MArinE Litter SusTainable RemOval and Management (MAELSTROM) is a European Union funded project designed to develop and test sustainable technological solutions for the removal and treatment of litter within river ecosystems, intercepting litter before it enters the sea.



Expected Results

Design, manufacture and integrate scalable, replicable and automated technologies, copowered with renewable energy and second-generation fuel,

Identify, remove, sort and recycle all types of collected marine litter into valuable raw materials.

Mission Atlantic



MISSION ATLANTIC is an EU-funded project that will map and assess the present and future status of Atlantic marine ecosystems under the influence of climate change and exploitation. The Project aims to better people's understanding of Atlantic Ocean ecosystems and drivers of change that impact marine biodiversity and ocean resources, through the development of the Integrated Ecosystems Assessments.

Integrated Ecosystem Assessments (IEAs) help decision makers to balance the need for protecting the ocean and the need to use ocean resources, and as a result, develop better management plans.

Expected Results

Support managers and policy makers to balance the need for environmental protection with sustainable development,

Provide the necessary science to develop a novel narrative to secure a positive future for the Atlantic Ocean.

For more information click here



2.5 Research and Innovation - International Dimension

The **All-Atlantic Ocean Research Alliance** is the result of science diplomacy efforts, which aims at enhancing marine research and innovation cooperation across Atlantic Ocean countries, from the Arctic to Antarctica, and for jointly providing solutions to the big challenges of our times. Since 2013, the EU has been leading the efforts to foster the development of this Alliance, notably through the signatures of the EU-US-Canada Galway Statement on Atlantic Ocean Cooperation (2013) and the EU-Brazil-South Africa Belém Statement on Atlantic Ocean Research and Innovation Cooperation (2017). The signature of the bilateral Administrative Arrangements on marine research and innovation cooperation as part of the existing international Science and Technology agreements with Argentina, Cabo Verde (2018) and Morocco (2020) enlarged this Alliance further.

The goal is to further strengthen international marine research and innovation cooperation through the multilateral All-Atlantic Ocean Research Alliance, building on its successes, clustering its results and strengthening its pole to pole dimension. It has become the framework within which international Atlantic Ocean Research and Innovation Cooperation from Pole to Pole, while attracting interest from new partners to join including Namibia, Angola, Nigeria, Mexico and the Caribbean, the Benguela Current Commission, and the UN Abidjan Convention. This International Dimension cuts across all four Pillars of the revised Atlantic Action Plan 2.0.

The EU has invested over EUR 200 million from Horizon 2020 in 35 research and innovation projects to support implementing the All-Atlantic Ocean Research Alliance, making the EU a major investor and player in Atlantic Ocean research. This Alliance also provides a framework for other forms of cooperation, beyond EU-funded projects, which is also supported by our EU Member States and international partners.

The thematic focus fully reflects the areas identified in the Galway as well in the Belém Statements, and agreed with all partners.



ALL-ATLANTIC OCEAN RESEARCH ALLIANCE

Creating an Atlantic Ocean Community by Implementing the Galway and Belém Statements

2.5 Research and Innovation - International Dimension

Following a collaborative process among more than 70 stakeholders at the Atlantic level, the All-Atlantic Ocean Research Alliance Multi-Stakeholder Platform, divided into five sub-multi-stakeholders platforms, identified more than 1,000 initiatives towards strengthening marine research and innovation collaboration at the Atlantic level.

All-Atlantic Ocean Research Alliance - Youth Ambassador Programme

The highly successful Youth Ambassador Programme of the All-Atlantic Ocean Research Alliance offers opportunities for early -career ocean professionals to work along with international partners to show the influence of young generations on integrating science and citizen engagement in a creative way. The All-Atlantic Ocean Youth Forum, launched in Brussels in February 2020, aims at equipping a broader community of early-career ocean youth with the skills, education and training to enable them to drive movements of positive change and sustainable development along and across the Atlantic Ocean. The Youth Ambassador Programme will continue to create a community of young people and is going from strength to strength.

Based on the idea of collaboration, alignment, and use of existing resources, six ambitious and long-term collaborative Joint Pilot Actions have been developed



The current on-going and closed projects of the All Atlantic Ocean Research Alliance can be found in Annex A



2.2 Research and Innovation | International Dimension -Identified good practice examples

For more information click here

Atlantic Youth-International Cooperation Atlantic Awards Winner



The objective of the project is the development of the maritime culture among the youth, especially through watersports and maritime education in schools and clubs. It is also aimed at making the Atlantic Area become an excellence pole for the maritime culture of the youth.



Expected Results

Motivate decision-makers in favor of strong policies for the social and educational integration of young people, using the assets of territories Increase integration of sensitize population and stakeholders on marine and aquatic issues like environment, resources, economy etc.

Raise collective awareness of the contributions of the maritime environment to the education of young people.

Implement policies aimed at maritime education for young people

Boost European cooperation between youth and Blue economy professionals



3

Results achieved

3.1 8th Atlantic Stakeholder Platform Conference 2021

Conference Overview

The 8th Atlantic Stakeholder Platform Conference (ASPC) 2021, which took place this year both physically in Dublin and online, was dedicated to the Atlantic Action Plan 2.0 update and the presentation of the Atlantic Project Awards.

It also included keynote speeches, Ministerial messages and stakeholders' workshops and project pitches related to the AAP 2.0.

Through the presentation of the award winning projects for each Thematic Pillar, awareness was raised regarding good practices, new partnership models, funding opportunities and community platforms that aim to promote Blue Economy and EU Green Deal.

The ASPC 2021 was a great success providing participants, stakeholders and public authorities with the opportunity to review the updated Atlantic Action Plan 2.0 – A New Approach to the Atlantic Maritime Strategy, to discuss the next steps and boost collaboration



8th Atlantic Stakeholder Platform Conference 2021 3.1





Rialtas na hÉireann

3.2 Funding across the Member States

Period: Year 1*







> 4 million €



Atlantic Member States Ireland # of projects EU funds allocated 31 > 30 mil €



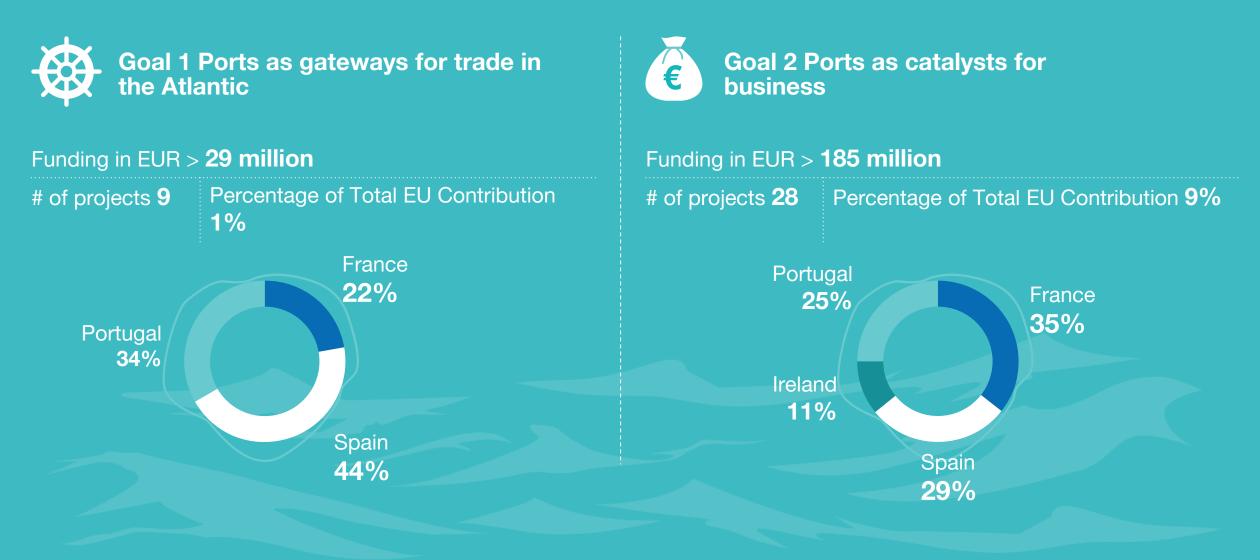
Atlantic Member States France # of projects EU funds allocated 130 <u>> 95 mil €</u>

Atlantic Member States Portugal # of projects EU funds allocated 255

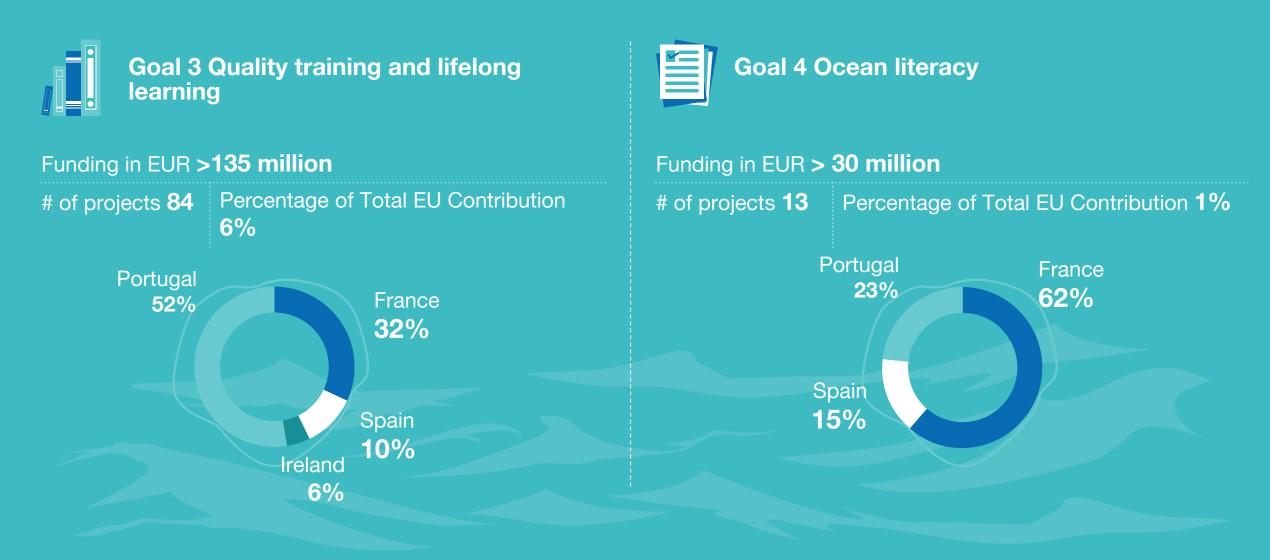
> 45 mil €

Atlantic Member States Spain # of projects EU funds allocated > 165 mil € 110

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



Pillar II - Blue skills of the future and ocean literacy



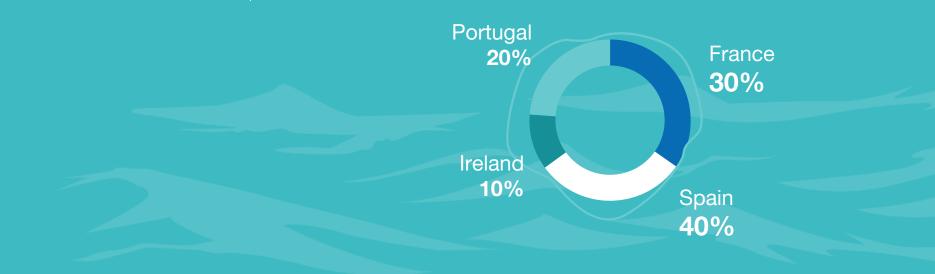
Pillar III - Marine Renewable energy



Goal 5 Promote carbon neutrality through marine renewable energy

Funding in EUR **> 1 billion**

of projects **73** Percentage of Total EU Contribution **72%**



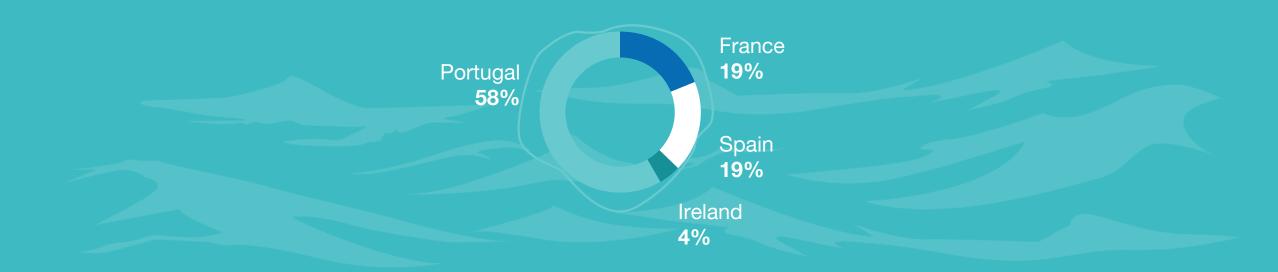
Pillar IV - Healthy Oceans and Resilient Coasts



Goal 6 Enhance coastal resilience

Funding in EUR > **250 million**

of projects **319** Percentage of Total EU Contribution **12%**



3.3 Key findings of the results achieved (1|4)

Pillar I

- Average funding per project approximately 5 mil. €, second highest recorded across all Thematic Pillars.
- The main Pillar stakeholders constitute a niche market within the Atlantic area.
- This Pillar comprises multi-country big infrastructure projects. Thus, significant funding is allocated on port clustering, digitalisation, green ports and trade initiatives
- It is important to further integrate regional and smaller ports in the Pillar initiatives so as to broaden the stakeholder base and integrate their different but valuable inputs to the whole Atlantic community.
- Maritime connectivity has become especially important in the context of lessons learned from recent events, i.e. Covid-19
 with regards to trade, tourism and economic growth
- A strong focus is placed on achieving connectivity through greener maritime transport which has become the prevailing method of transport compared to alternatives modes
- Ports are a key way to enforce employment growth in the tourism sector by increasing tourism product diversification as well as by reducing the seasonality aspect of the tourism product where feasible
- Climate challenges and emerging sectors like offshore energy bring the role of ports, especially as regards regional ports, into sharper focus for policy makers as they provide for significant competitive advantages

3.3 Key findings of the results achieved (2|4)

Pillar II

- Significant number of smaller collaborative projects
- Projects promote the Atlantic Area's increased need for valuable maritime education through increased collaboration amongst Atlantic Member States
- Maritime upskilling as a focus of this Pillar, is considered a cross-pillar topic, which encompasses and is important to all sectors of the AAP 2.0
- Ocean literacy and the creation of blue schools are the foundation for maritime employment in the Atlantic area, an issue that needs to be further addressed and promoted through EU and national funding instruments
- Digital transition will have a significant impact on blue professions, education as well as citizens' perceptions and decisions
- Substantial progress has been conducted for ocean modelling data mining but also for communication between communities through social media. In the year of the pandemic it has caused the rise of a number of innovations and initiatives with the goal of enhancing maritime education.
- Mobilizing stakeholders and promoting exchanges is essential to foster the creation of new collaborative projects.

3.3 Key findings of the results achieved (3|4)

Pillar III

- Marine renewables energies are emerging as one of the main transnational activities in the Atlantic Area; average funding per project is 13 mil. €, the highest recorded across all Pillars and the highest overall funding per Pillar
- Projects under this Pillar underline the importance placed on climate and environmental actions that are taking place in the Atlantic area as well as prove the connection of the AAP 2.0 to the goals of the EU Green Deal through increased investments in capacity and infrastructure in the marine renewable field
- An equal distribution of initiatives from all MS is found in this Pillar, indicating that marine renewables are a transnational priority receiving increased attention that will enable and enhance all ways that Atlantic stakeholders can harness renewable energy in the area
- The focus of funded projects is the contribution to the sustainable development of the maritime economy through cross-border cooperation and the enhancement of the link between implemented projects and guiding policies
- Important focus is placed on the co-development of Marine Energy Technology by many smaller stakeholders, which will
 increase the overall output of the sector with the use of low-cost and user friendly monitoring tools for marine energy sites in
 the Atlantic area.
- Data management is a key aspect of the projects regarding marine renewable energies, which has been enhanced during the past year of implementation through joined efforts between businesses and educational institutions.

3.3 Key findings of the results achieved (4|4)

Pillar IV

- Project's under Pillar IV make up for the majority of the monitored projects and receive the second highest total financial allocation per Pillar.
- Due to the large number of monitored projects as well as the amount of received funding it is clear that both the Atlantic Stakeholders as a whole and the EC are implementing and promoting actions on environmental and coastal health in line with the findings of Pillar III on the importance of the environment.
- It is clear that coastal and ocean health is a major topic of cooperation and all national stakeholders understand the need of working together so as to achieve an improvement on the overall "coastal health" of the Atlantic area.
- Main topics funded under this pillar include marine aquaculture with an emphasis on research and innovation as well as areas that heavily affect coastal resilience such as fisheries and pollution.
- Big data management and especially data sharing and access is a key area of the Pillar that enables the connection and the joined analysis of topics by multiple projects involved in resilient oceans' issues
- Projects involved in this Pillar provide means of navigation, observation, resource management, technical assistance and training, presenting an overarching topic that is common to all other Pillar.
- Investments in improved responses to coastal environmental hazards are also a main area that can provide reliable information to decision makers to act in due time.



Lessons learned

Lessons learned (1|2)

Through the interactions of the AAP 2.0 mechanisms with various stakeholders from the Atlantic area, workshops, events, consultations, have demonstrated in a clear manner what industries require and where significant effort should be placed. Specifically:

The importance of upskilling, reskilling and providing constant training is highlighted in order to be able to follow new trends. It is important to bridge the gap between academic and practical knowledge regarding Blue economy professionals, as the sector is becoming increasingly complicated and in need of specific expertise.

The **link between digitization and sustainability** is a theme that by its nature affects all Pillars of the AAP 2.0. In line with its goals, digitalisation will become the driving factor in bringing together stakeholders for innovative solutions, both operational and communicational, removing existing barriers and providing increased access to funding.

The variety of economic activities that is present now more than ever in the Atlantic area is growing with the emerging needs of a circular economy as an economic model oriented towards the **elimination of waste generated, efficient use of resources, recycling and recovery** that requires a multifaceted approach. For this reason the AAP 2.0 highlights the need for alliances between the various sectors of the Blue economy which is instigated by the actions of its distinct Thematic Pillars.

Lessons learned (2|2)

Through the interactions of the AAP 2.0 mechanisms with various stakeholders from the Atlantic area, workshops, events, consultations, have demonstrated in a clear manner what industries require and where significant effort should be placed. Specifically:

53

It is apparent that as the Pillars are not tied with the country that they are based in, more focused initiatives with regard to **transnational cooperation** need to be implemented. Joint actions between the AAP 2.0 Thematic Pillars who monitor projects that span in many Atlantic MS need to work closer together to best utilize the variety of stakeholder and better sharing of knowledge.

The past year of implementation has been successful in collecting information, and promoting the AAP 2.0. However it is apparent that from now on it is important to take concrete actions, actively coach and engage with those who are implementing the Atlantic Goals and promote the **projects' identities in line with the objective of the AAP 2.0.**

An area of improvement for the AAP 2.0 is the promotion of the international and multifaceted approach and sector that are involved in the Atlantic area. As a recommendation to both the Pillars and the Atlantic Assistance Mechanism, it is essential to **foster an environment of cooperation, sharing of knowledge** and using the accumulated data, information and knowledge more effectively in order to make an impact not only through individual projects or countries but as a whole

Next Steps

Following the first year of implementation, the AAP 2.0 is focused on enhancing the activities that provided the best overall results which are aligned with its goals. To that end our most important upcoming activities are:



After being considered by the Atlantic stakeholders as a successful networking mechanism, the next round of Pillar Workshops will be organized in order to continue to boost collaboration, enhance existing synergies and contribute to reach the expected results of the AAP 2.0.





New Spanish Presidency for the ASC

Following last year's Irish Atlantic Strategy Committee (ASC) presidency, this year's Spanish ASC presidency will 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.

Pillar Roadmaps

Each Pillar will create a Roadmap, planning the upcoming activities for the next 6 month period, identifying priorities, targets and the next actions that need to be undertaken. The roadmaps will outline the necessary actions for monitoring funding

opportunities, project ideas and success stories on a regional level, but will also expand on issues such as networking, capacity building, stakeholder engagement and guidance.



5

Conclusions



The implementation of the Atlantic Action Plan 2.0 throughout its first year has been successful in establishing a new governance structure with distinct Thematic Pillars that encompass all aspects of the marine economy. The Atlantic Stakeholder event organised in Dublin gave additional impetus to mobilize various stakeholders including innovative businesses to further advance the goals of the action plan.

The AAP 2.0 has successfully promoted major opportunities for the European Blue Economy and illustrates the positive impact that has been achieved and the value that is created on areas such as the co-existence of digitalization and the green economy, and the impact that smaller stakeholders can have on a continental scale when working towards the same joint goals.

Moving forward in the next year of implementation and taking note of the lessons learned, the aim is to increase our stakeholder engagement, giving emphasis to the integration of smaller stakeholders. At the same time our goal is to assists stakeholders in better accessing funding for projects and initiatives in line with the AAP 2.0 through continuously updating the Maritime Data Hub and our stakeholder databases and creating more opportunities for them to join forces, network and achieve the AAP 2.0 goals and milestones.

A final key area of increased attention will be the promoting of cross-cutting topics amongst Pillar and enhancing the synergies between them as well as examining ways that joint Pillar actions can have a positive impact on the atlantic stakeholders.

Disclaimer

This report has been prepared by the Atlantic Assistance Mechanism in the context of the project Atlantic Action Plan (EASME/2020/OP/0001). The product of this work is limited to supportive services offered, and features information on grants co-financed by a range of EU and Member States programmes that contribute to the implementation of the Atlantic Strategy and its action plan. Our goal is to keep this information up to date and accurate. However, the European Commission accepts no responsibility or liability whatsoever with regard to the information on this report. The current report is valid in its entirety. The legal review, interviews with stakeholders, data analysis wherever applicable, as well as the conclusions of the report that are presented in this document are indissociable from one another and the Atlantic Assistance Mechanism bears no responsibility for any potential fragmented use, which can lead to misinterpretations.

The information gathered is of a general nature only and is not intended to address the specific circumstances of any particular individual or entity, is not necessarily comprehensive, complete, and is sometimes linked to external sites over which the Atlantic Assistance Mechanism services have no control and for which they assume no responsibility.

Please note that the following limitations apply to project data:

- Number of projects per country: all projects are attributed only to the country of the coordinator.
- The amounts presented may not be accurate as they may be subject to rounding errors.
- The data presented in this report are based on latest at the time available figures and may be inconsistent with updated data.



Annex A

All-Atlantic Ocean Research Alliance on-going projects

Total EU Contribution for on-going projects: > 87 € million

Project Acronym	Project Title	Galway/ Belem	Theme	Website
AANChOR	All AtlaNtic Cooperation for Ocean Research and innovation	Belem	Coordination and Support	https://www.allatlanticocean.org/main
TRIATLAS	Tropical and South Atlantic climate-based marine ecosystem predictions for sustainable management	Belem	Healthy Oceans	https://triatlas.w.uib.no/
iAtlantic	Integrated Assessment of Atlantic Marine Ecosystems in Space and Time	Belem	Healthy Oceans	http://www.iatlantic.eu/
AquaVitae	New species, processes and products contributing to increased production and improved sustainability in emerging low trophic, and existing low and high trophic aquaculture value chains in the Atlantic	Belem	Food from the Ocean / Healthy Oceans	https://aquavitaeproject.eu/
INTAROS	Integrated Arctic observation system	Galway	Ocean Observation	www.intaros.eu

All-Atlantic Ocean Research Alliance on-going projects

Total EU Contribution for on-going projects: > 87 € million

Project Acronym	Project Title	Galway/ Belem	Theme	Website
SO-CHIC	Southern Ocean Carbon and Heat Impact on Climate	Belem	Healthy Oceans	http://www.sochic-h2020.eu/
MISSION ATLANTIC	Towards the Sustainable Development of the Atlantic Ocean: Mapping and Assessing the present and future status of Atlantic marine ecosystems under the influence of climate change and exploitation	Belem	Healthy Oceans	https://missionatlantic.eu/
AtlantECO	Atlantic ECOsystems assessment, forecasting & sustainability	Belem	Ocean Observation	https://www.atlanteco.eu/
ASTRAL	All Atlantic Ocean Sustainable, Profitable and Resilient Aquaculture	Belem	Aquaculture	https://www.astral-project.eu/

All-Atlantic Ocean Research Alliance completed projects' themes

Total EU Contribution for completed projects: > 128 € million

Developing in-situ Atlantic Ocean Observations for a better management and sustainable exploitation of the maritime resources

Optimising space availability for European Aquaculture

Towards a gradual elimination of discards in European fisheries

Enhancing the industrial exploitation potential of marine-derived enzymes

Consolidating the economic sustainability and competitiveness of European fisheries and aquaculture sectors to reap the potential of seafood markets

Preparing for the future innovative offshore economy

European polar research cooperation

Ocean literacy - Engaging with society - Social Innovation

All-Atlantic Ocean Research Alliance completed projects' themes

Total EU Contribution for completed projects: > 128 € million

Forecasting and anticipating effects of climate of Scientific basis and tools for preventing and mit			
	igating farmed mollusc diseases		
Improving the preservation and sustainable exp	loitation of Atlantic marine ecosystems	\succ	
More effective ecosystem restoration in the EU			
Multi-use of the oceans' marine space, offshore	and near-shore: compatibility, regulations	, environmental and legal issues	
Impact of Arctic changes on the weather and cl	imate of the Northern Hemisphere	\rightarrow \prec	
Large-scale algae biomass integrated biorefine	ries		
Integrating Activities for Advanced Communities	S		
Supporting international cooperation initiatives:	Atlantic Ocean Cooperation Research Alli	iance	



Thank you for your attention

Special thanks to all stakeholders involved in the development of this report. We look forward to the next year of AAP 2.0 implementation under the ASC Spanish Presidency.