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BLUEAIR

BLUEBOOK

FULL VERSION

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BLUE BOOK
FULL VERSION

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Introduction

Advancing a greener blue economy is a key to achieving the EU's ambitious goal of becoming climate neutral by 2050. In this respect, research and innovation actors and investors have a crucial role to play in the transformation needed to achieve the Green Deal goals.

By working together in a networked innovation community, quadruple-helix innovation actors can seize this opportunity and shape a future where innovation and sustainability thrive hand in hand to foster innovation and cooperation and the sustainable use of blue resources in the Adriatic-Ionian macro-region.

In this Bluebook, we present the main outputs developed within the BLUEAIR project, which could have a transformative potential to address the global challenges of the Blue Economy in the Adriatic-Ionian Macro-Region.

Through the establishment of an *Innovation Strategy*, the BLUEAIR project contributes to the improvement of administrative capacities, innovation capacity and development of the Blue Economy for the participating territories as well as for the whole Adriatic-Ionian area.

In these pages you will also find the *Innovation Strategy Roadmap* and *the Action Plan* for the period up to 2027, which will bridge the gap between vision and implementation, promoting meaningful and sustainable results for our planet and future generations.

These strategic documents are complemented by two relevant tools: t*he Pilot Entrepreneurial Discovery Process for Blue Growth and the Technology Foresight*, which have been tested to support regional and national administrations in identifying new attractive activities and innovations and gaining insights into the future of Blue Economy sectors.

Finally, this book also provides a comprehensive guide to understanding the role of quadruple helix innovation actors in shaping the future of the Blue Economy in the Adriatic-Ionian region. In this respect, the *BLUEAIR Innovation Community* takes center stage, acting as an open platform that invites existing frameworks and initiatives, as well as new stakeholders (both organizations and individuals representing government, research and education, business and civil society) from the macro-region and beyond, to collaborate and advance the blue economy, leveraging the work already done, pooling existing resources and avoiding duplication of efforts.

By working together, this Community can create a more coherent and effective innovation ecosystem that benefits all stakeholders of the Blue Economy in the Adriatic and Ionian region.

Innovation Strategy of the Macro Regional S3 on Blue Growth

Purpose and vision

Marine and maritime research and innovation hold the key to achieving the EU's goal of becoming climate-neutral by 2050[1]**.** By protecting and restoring marine ecosystems and fostering sustainable innovation, the blue economy can become a hub of ideas and action. Innovative technologies such as big data, artificial intelligence, advanced modelling, robotics, sophisticated sensors, and autonomous systems are poised to revolutionize the blue economy, driving progress and sustainability across sectors.

Research and innovation play a crucial role in the transformation needed to achieve the Green Deal. Investment in research and innovation will pave the way for sustainable blue economy value chains and facilitate the green and digital transitions. Smart specialization strategies further boost innovation through various funding opportunities, developing European value chains. Additionally, support for low-carbon technology demonstration projects in the marine environment is available.

It's time to embrace the call for innovation in the sustainable blue economy. By working together in a purposefully networked innovation Community, we can seize this opportunity and shape a future where innovation and sustainability thrive hand in hand to promote innovation and cooperation and a sustainable use of the blue resources. Through the development of an Innovation Strategy, the BLUEAIR project contributes to improve administrative capacities, innovativeness, and blue economy development for participating territories as well as for the whole Adriatic-Ionian area.

[1]Communication COM(2021) 240: A new approach for a sustainable blue economy in the EU - Transforming the EU's Blue Economy for a Sustainable Future

The purpose of this strategy is to provide direction, coherence, and resource optimization, ensuring that stakeholders thrive in competitive environments while preserving the sustainability of the environment and natural habitats. By setting clear goals, developing action plans, and mobilizing resources, organizations (within innovation ecosystems) can ensure their survival, sustainability, and growth. Strategic objectives serve as a compass, guiding desired outcomes and impacts. Translating strategic goals into practical steps through action plans ensures progress towards the vision of the desired future. By mobilizing and focusing resources, efficiency is optimized, distractions are minimized, and success is maximized. The vision of the Innovation strategy is as follows:

Built vibrant Adriatic-Ionian Innovation Community composed by all Q-Helix actors that pursues macro regional transformative activities toward Smart and Sustainable Blue Economy making the most of opportunities provided by its seas, lakes and rivers!

Simply put, a vision is a summary of the desired future that we believe will be possible through the implementation of the strategy. The vision of the Innovation strategy is a concise, understandable, and clear description of the ambitious, inspirational, and achievable desired impact over time in the field of Sustainable Blue Economy at the macro-regional level. Aligned with the strategic framework, it contributes concretely to the development of the Blue Economy, ensuring success and progress towards a vibrant and sustainable future. The vision of the Innovation strategy will be realized through the key elements – long-term goals, short-term objectives, initiatives (activities), inputs (tools and resources), and expected results, outcomes and impacts.

Concept and framework

In the second decade of the 21st century, the concept of the Blue Economy has emerged as exceedingly important, with significant effects on wealth, the labour market, and the organization of coastal regions. It emphasizes the need for sustainable economic growth, social inclusion, and environmental preservation to meet the growing demands on ocean resources.

In the Adriatic-Ionian regions Sustainable Blue Economy Innovation policies are characterized by a fragmented situation, with pioneering and lagging regions searching for a joint knowledge-based approach to their innovation strategies to enhance the Blue Economy sectors in their territories. Moreover, regions and countries overlooking the same seas and rivers need harmonized Blue Economy policies to plan future innovation initiatives on topics such as sea (and waterborne) transport, water pollution, energy connectivity, marine environment protection, as well as promotion of sustainable tourism.

The innovation strategy concept in a fragmented macroregional context unleashes collaboration, creativity, and boundary-breaking ideas among diverse stakeholders. The innovation strategy concept in macroregional fragmented context should acknowledge and embrace the diversity of stakeholders' capabilities and strives to create an enabling environment that encourages experimentation and learning, even risk-taking. It promotes the development of mechanisms such as value chain approaches over the traditional and emerging sectors that connect stakeholders and community through thematic innovation hubs, innovation challenges, or collaborative projects, that facilitate interaction, knowledge exchange, and the exploration of new ideas across stakeholder boundaries.

The innovation strategy concept seeks to create a collaborative and inclusive environment where stakeholders can contribute their expertise, ideas, and resources towards a common goals of driving innovation. In a fragmented context of innovation policies and stakeholders' capabilities, an innovation strategy concept refers to a deliberate and systematic plan that aims to bridge the gaps and harness the diverse capabilities of different stakeholders to foster innovation. It recognizes that stakeholders, such as individuals, organizations, communities, or regions, possess unique knowledge, expertise, resources, and perspectives.

By aligning the innovation strategy in the Blue Economy of the Macro-Regional with resources and targets outlined in regional and national Smart Specialization Strategies (S3), the BLUEAIR project aims to enhance the institutional capabilities of ADRION territories. It aims to achieve this by establishing a dedicated Innovation Community and enhancing the coordination of local initiatives both with the EUSAIR strategy and regional or national S3 resources. The project's objective is to promote the synergies between macroregional S3

policies in the development of the Blue Economy emphasizing the significance of the future relationship between innovation strategy and Smart Specialization Strategies in driving regional progress.

For this purpose, Roadmap for Innovation Strategy and accompanying Action plan were developed, for the period until 2027.

Roadmap is a holistic innovation strategy - a method for strategic long-term planning and a link between strategy (diagnostics, vision and goals) and action plan. It describes and clearly communicates (and visualizes) the key outcomes or prerequisites that must be achieved within a certain time frame in order to successfully achieve the strategic vision. This document defines the tools and activities that are necessary for the effective activation of macroregional innovation potentials through the cooperation of stakeholders of the Quadruple Helix (Q-Helix). The roadmap indicates how to realize the goals in terms of achieving the desired transformations and innovations to increase the competitiveness and resilience of the targeted industries of the blue economy in relation to global changes caused by (re)globalization, decarbonization and technological changes, and in order to transform the targeted traditional industries into sustainable blue economy.

Figure 1. Strategic roadmap: the link between strategy and execution.

Roadmap includes the concept of Theory of Change, and elaboration in which way and why the desired change of the observed industries is expected through research, development and innovation (R&D&I). It includes also the policy mix concept and is based on the methodology of strategic planning.

Action plan is a sort of an extension of the Innovation strategy and Roadmap – it contain proposals of potential initiatives (activities) in the innovation ecosystem of the Adriatic-Ionian macro-region to fill the gaps in the identified regional

value chains in the Blue Growth areas of the Adriatic-Ionian macro-region and activities to achieve the goals set by the Innovation Strategy, Roadmap and frameworks of future activities of the EUSAIR macro-regional strategy and the Interreg ADRION program 2021-2027.

The Strategy comprehensive description consists of six parts, as follows. After first two parts on purpose, vision, concept and framework, in third part follows overview of the methodology used for the preparation of the Roadmap for Innovation strategy and accompanying Action plan for innovation activities. The fourth part presents focus areas identified through research, analysis and diagnostic of relevant analytical documents (project deliverables). The fifth part presents long-term goals and short-term objectives are presented in sixth part.

Separate document elaborates the Action plan for innovation activities, as well with assumptions and preconditions and inputs as in tools and resources needed for the implementation of the strategy.

Long-term goals

Long-term goals of the Innovation strategy and Roadmap entail five goals for the long-term period until 2027, with which it is intended to realize the vision of the Innovation strategy as well as the Innovation strategy itself:

- **Transformation and transition:** *Enhancing Adriatic Ionian Region's Sustainable Blue Economy in the long-term through the sustainable exploitation of marine resources, green technologies, and green operations.*
- **Aligned framework(s):** *Alignment of institutional framework with current needs of the Q-Helix related to macro-regional cooperation and blue innovation.*
- **Innovation Community:** *Establishment of a macro-regional innovation community for strengthening cooperation among all Q-Helix actors in the Adriatic Ionian Region.*
- **Skills and capacities:** *Capacity building on blue skills and technologies with multi-use applications.*
- **Pooled funds:** *Pooling relevant funding opportunities.*

These five goals represent the building blocks of the Innovation strategy and establishing an integrated common approach towards the development of Blue Growth at the macro-regional level, as well as building a capable and agile transnational innovation community with a strong international collaboration that engages all Q-Helix actors.

Figure 2. Long-term goals – building blocks of Innovation strategy

All long-term goals and short-term goals, in their more related aspects, contribute to the following sustainable development goals: *SDG 8. Decent work and economic growth; SDG 9. Industry, innovation and infrastructure; SDG 10. Reduce inequalities; SDG 11. Sustainable cities and communities; SDG 12. Responsible consumption and production; SDG 13. Climate action; SDG 14. Life below water; SDG 17. Partnerships.*

In a broader sense, the implementation of each goal can also be addressed to *SDG 1. No poverty; SDG 2. Zero hunger; SDG 3. Good health and wellbeing; SDG 6. Clean water and sanitation; SDG 7. Affordable and clean energy; SDG 16. Peace, justice and strong institutions.*

In the further content of the chapter, the elaboration of long-term goals follows.

LONG-TERM GOAL 1: Enhancing Adriatic Ionian Region's Sustainable Blue Economy in the long-term through the sustainable exploitation of marine resources, green technologies, and green operations

Considering the increasing demand for green technologies and the current challenges towards the alignment of blue technologies with the requirements for the marine environment (i.e., conservation of the marine biodiversity, elimination of the pollution of the marine environment, climate change, etc.), the exploitation of the existing marine resources of the Adriatic-Ionian Region can facilitate the green transition of its blue economy sectors and the competitiveness of its regions. Digital solutions (i.e., Artificial Intelligence, Internet of Things, etc.) may play a viable role, while their integration into activities towards conservation of the marine environment can enhance blue economy sectors' sustainability. Their use should focus on the investigation and in timely addressing climate change impacts on marine and coastal areas (i.e., data collection, monitoring).

LONG-TERM GOAL 2: Alignment of institutional framework with current needs of the Q-Helix related to macro-regional cooperation and blue innovation

The integration of appropriate actions, measures and solutions into relevant institutional frameworks (i.e., Smart Specialization Strategy platforms) is necessary for addressing the common challenges of the Adriatic-Ionian Region. The integration of common guidelines and tools for facilitating and accelerating green and digital transition, adopting circular economy, enhancing macro-regional cooperation and for better allocation of financial resources towards macro-regional cooperation and blue innovation are indicative specific recommendations that can effectively address those challenges (i.e., the need for adapting blue technologies thus protecting the marine environment, the alleviation of high costs for the development of blue technologies, the adoption of innovative processes and methods in blue economy sectors, etc.). It can also reduce regulatory uncertainties linked to blue innovation.

LONG-TERM GOAL 3: Establishment of a macro-regional Innovation Community for strengthening cooperation among all Q-Helix actors in the Adriatic-Ionian Region

A Macro-Regional Innovation Community should engage all Q-Helix actors related to blue innovation and facilitate the identification and addressing of related common challenges and opportunities. Its establishment can be based on existing relevant efforts and on existing cooperation between industry and academia. It can also motivate actors involved in joint blue projects that aim at the development of products and services adapted to macro-regional challenges and needs or the creation of partnerships for the use of shared infrastructures (i.e., ports) improving Q-Helix actors environmental and economic performance. Its establishment will stimulate cooperation for the development of solutions that can address the specific needs of the Adriatic-Ionian Region related to blue innovation and will facilitate knowledge transfer among all Q-Helix actors and all the Adriatic-Ionian Region countries and regions (i.e., dissemination of products, services, and best practices), thus exploiting the current opportunities for capacity building in the macro-region. This recommendation is fundamental as it supports the implementation of all others.

LONG-TERM GOAL 4: Capacity building on blue skills and technologies with multi-use applications

The increasing demand for green technologies as well as the existing opportunities for capacity building in the blue economy can support the integration of blue technologies and new, innovative methods in relevant value chains and the enhancement of capacity building in the entire blue economy. The appropriate use of those blue technologies can accelerate the green transition of the blue economy sectors and support the investigation of the impact of climate change at the macro-regional scale with emphasis on how to monitor them. Emphasis is recommended to be placed on the promotion and integration of such technologies to “traditional” blue economy sectors, which need to modernize their

operations and approaches. It is also suggested that research activities should focus on blue innovation, further development and improvement of blue technologies, and current Q-Helix actors' needs in alignment with the requirements for the conservation of the marine environment (i.e., social innovation, development of an open monitoring system for the investigation and identification of climate change impacts on marine and coastal areas, enabling the sharing of and access to knowledge, information, data, and technologies). The establishment of a macro-regional blue career network and catalogue for connecting relevant centres would enhance capacity building and especially the competences and blue skills of the relevant human capital, while it would also enable knowledge transfer between the Adriatic-Ionian Region countries and regions. Capacity building can be enhanced through appointing innovation experts that can provide consultation on blue innovation, on how to exploit the increasing demand for blue technologies, and how to align those technologies' capabilities with the requirements for conserving the marine environment and its resources.

LONG-TERM GOAL 5: Pooling relevant funding opportunities

Relevant funding opportunities for blue innovation projects already exist to a large extent. Resources may also become available through other initiatives and funding instruments (i.e., Circular Economy initiatives, Blue Sustainable Ocean Strategy by the European Investment Bank, regional programmes, etc.). Their exploitation can address the limited development of blue technologies and the high costs that accompany them as well as the limited blue innovation entrepreneurship in the Adriatic-Ionian Region. To improve access of all Q-Helix actors to these funds, having a one-stop-shop providing support on how to apply to relevant calls for projects is recommended.

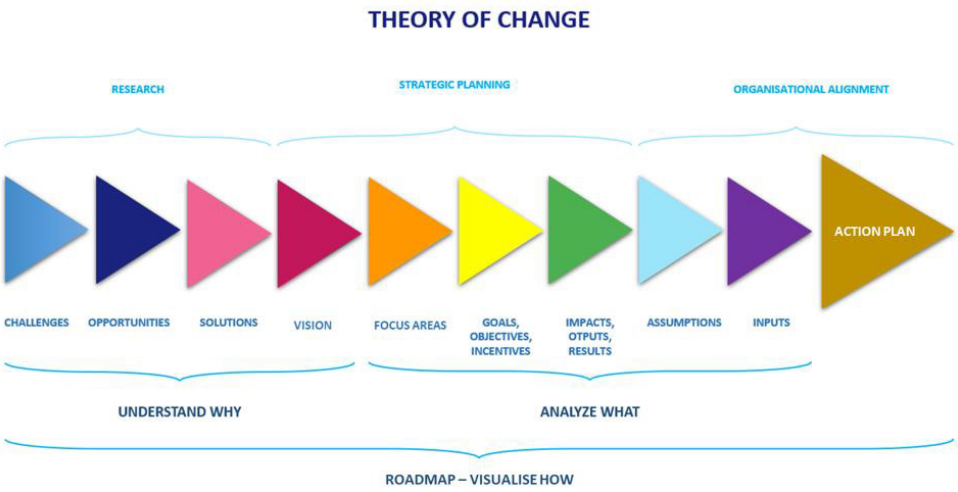
The full version of the Innovation Strategy is available here:
DT2.3.3.-Innovation-Strategy_final.pdf (adrioninterreg.eu)

Innovation Strategy: from Goals to Investments

Introduction to the Action plan

An action plan serves as a crucial framework for translating a deep comprehension of the driving forces of change and the routes to achieve desired results into a strategic roadmap. By integrating the action plan within the roadmap, innovation organizations or communities can ensure that their objectives, interventions, and milestones are firmly rooted in a comprehensive understanding of the context, stakeholders, and the cause-and-effect dynamics at play. This empowers strategic decision-making that not only relies on evidence and analysis but also encompasses a clear comprehension of how actions and interventions will contribute to the desired transformation. By harnessing the power of the action plan within the strategic roadmap, organizations can forge a more resilient and impactful approach that effectively bridges the gap between vision and implementation, ultimately leading to meaningful and sustainable outcomes.

Figure 3. Development context of Action plan



Assumptions and preconditions

The first assumption and precondition for the successful implementation of the Innovation strategy is the development of this Roadmap and Action plan, and through it the definition of a shared vision for the stakeholders through which the desired change will be achieved. The successful establishment of an integrated common approach towards the development of Blue Growth at the macro-regional level will be achieved primarily by building a capable and agile **transnational innovation community** with a strong international collaboration that engages all Q-Helix actors. These ambitions can only be achieved through collaboration, coordination and communication-based team-work.

After cooperation being the second building block for achieving the desired change, establishing an inclusive and open space and community for fostering culture of research, development and innovation, creativity, perseverance, brainstorming and sharing insights, knowledge, technology and infrastructure is an essential next step forward. Extremely important is also ensuring constructive feedback and building transparency and trust, which will establish good relationships and strong links throughout the value chain of Blue Growth.

Furthermore, it is necessary to establish a strong and reliable structure that enables the development of innovation and new projects, as well as methodologically based system for data collection, monitoring, reporting and evaluating all achieved results, outcomes and impacts on the regional level, ideally based on library of indicators for monitoring on the regional level. Besides assessing the current state, fixing bottlenecks and building strengths and opportunities throughout the process of strategic planning, activities of defining, monitoring, measuring, analysing, evaluating, improving and controlling efforts and achieved results is the prerequisite for expected impact to be achieved, while continuously identifying, analysing, managing and mitigating potential risks in the process for ensuring the optimum results and success.

Nonetheless, for the desired change to be achieved, it is necessary to have essential resources at disposal, such as national, regional, and EU current and future funding opportunities, as well as human, material, operative and financial capacities and resources, with specific expert competences and know-how, and ultimately the collaboration of all Q-Helix actors.

Inputs - tools and resources

As previously elaborated, and besides the tangible assets considered to be the key assumptions and preconditions for achieving the desired change envisioned by the Roadmap, there are several inputs in regard to tools and resources that are necessary for the successful implementation of the Strategy, Roadmap and Action plan, and for achieving the desired results, outcomes and impacts. These are the following:

- *National, regional, and EU current and future funding opportunities*
- *Human, material, operative, financial capacities and resources*
- *Competences and know-how*
- *Q-Helix collaboration.*

Furthermore, it is proposed to establish a **library of indicators** at regional level, as an essential tool for facilitating not just the implementation of the Innovation strategy, Roadmap and Action plan, but also for establishing an institutional structure and paving the way for further successful strategic planning on regional levels. Namely, the Roadmap and Action plan entail a proposal of potential indicators for monitoring on the regional level (impact indicators for long-term goals, outcome indicators for short-term objectives and result indicators for initiatives). For each indicator it is necessary to define an initial value and target value, keeping in mind that it has to be enabled to collect data on each indicator on the regional level, and also monitor the defined indicators on the regional level, for the purpose of successful monitoring and reporting on the progress of the implementation of the goals and the strategy itself. Establishing a regional library of indicators will enable successful defining, monitoring, measuring, analysing, evaluating, improving and controlling efforts and achieved results as the prerequisite for expected results, outcomes, impacts and overall changes to be achieved, as well as continuous identifying, analysing, managing and mitigating potential risks in the process for ensuring the optimum results and success.

Action plan for innovation activities

Table 1. Action plan for innovation activities – Long-term goal 1: Enhancing Adriatic-Ionian region's sustainable blue economy in the long-term through the sustainable exploitation of marine resources, green technologies, and green operations

LONG-TERM GOAL 1	ENHANCING ADRIATIC-IONIAN REGION'S SUSTAINABLE BLUE ECONOMY IN THE LONG-TERM THROUGH THE SUSTAINABLE EXPLOITATION OF MARINE RESOURCES, GREEN TECHNOLOGIES, AND GREEN OPERATIONS

Expected impact - proposal of potential indicator for monitoring (on the regional level)

Enhanced ADRIATIC-IONIAN REGION's Sustainable Blue Economy in the long-term through the sustainable exploitation of marine resources, green technologies, and green operations - number of innovative solutions developed for sustainable exploitation of marine resources, green technologies, and green operations

ROADMAP TO ACHIEVING THE LONG-TERM GOAL (solutions and key steps)

Short-term objectives	Initiatives (activities)	Expected result - proposal of potential indicator for monitoring *(on the regional level)*	Responsibility	Inputs	Due date
- Exploitation of the available marine resources, blue technologies and clean operations for sustaining and enhancing in the long-term the competitive advantages of the Adriatic - Ionian Region's sustainable blue economy	- Development and implementation of collaborative R&D&I projects for exploitation of available marine resources, blue technologies and clean operations	- Collaborative R&D&I projects for exploitation of the available marine resources, blue technologies and clean operations (number)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and r esources - Competences and know-how	- 2027 (recurring: frequency biennially, 2023 – 2024; 2025 – 2026)
- Exploitation of digital solutions (i.e., Artificial Intelligence, Internet of Things, etc.) for conservation of the marine environment and enhancing blue economy sectors' sustainability	- Development of collaborative R&D&I projects for the development and integration of digital solutions (i.e., Artificial Intelligence, Internet of Things, etc.) into activities towards conservation of the marine environment for enhancing enhance blue economy sectors' sustainability, particularly in the means of investigating and timely addressing climate change impacts on marine and coastal areas (i.e., data collection, monitoring)	- Collaborative R&D&I projects for the development and integration of digital solutions into activities towards conservation of the marine environment for enhancing enhance blue economy sectors' sustainability (number) - Digital solutions developed and integrated into activities towards conservation of the marine environment for enhancing enhance blue economy sectors' sustainability (number)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and resources - Competences and know-how	- 2027 (recurring: frequency biennially, 2023 – 2024; 2025 – 2026)

Table 2. Action plan for innovation activities – Long-term goal 2: Alignment of institutional framework with current needs of the Q-Helix related to macro-regional cooperation and blue innovation

LONG-TERM GOAL 2	ALIGNMENT OF INSTITUTIONAL FRAMEWORK WITH CURRENT NEEDS OF THE Q-HELIX RELATED TO MACRO-REGIONAL COOPERATION AND BLUE INNOVATION

Expected impact - proposal of potential indicator for monitoring (on the regional level)

Increased alignment of institutional framework with current needs of the Q-Helix related to macro-regional cooperation and blue innovation - number of national and macro-regional action plans and policy/strategy frameworks developed for aligning with current needs of the Q-Helix related to macro-regional cooperation and blue innovation

ROADMAP TO ACHIEVING THE LONG-TERM GOAL (solutions and key steps)

Short-term objectives	Initiatives (activities)	Expected result - proposal of potential indicator for monitoring *(on the regional level)*	Responsibility	Inputs	Due date
- Development of an open cross-border monitoring system for the investigation and identification of climate change impacts on marine and coastal areas, enabling the sharing of and access to knowledge, information, data, and technologies	- Development and implementation of collaborative R&D&I projects for the development of an open monitoring system for the investigation and identification of climate change impacts on marine and coastal areas, enabling the sharing of and access to knowledge, information, data, and technologies	- Collaborative R&D&I projects for the development of an open monitoring system for the investigation and identification of climate change impacts on marine and coastal areas, enabling the sharing of and access to knowledge, information, data, and technologies (number) -Open monitoring system developed for the investigation and identification of climate change impacts on marine and coastal areas, enabling the sharing of and access to knowledge, information, data, and technologies (number)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and resources -Competences and know-how	- 2027 (recurring: frequency biennially, 2023 – 2024; 2025 – 2026)
- Adoption of circular economy into national and macro-regional action plans and policy/strategy frameworks of blue economy	- Development and implementation of collaborative R&D&I projects for development of national and macro-regional action plans and policy/strategy frameworks of blue economy for circular economy, or with circular economy included	- Collaborative R&D&I projects for development of national and macro-regional action plans and policy/strategy frameworks of blue economy for circular economy, or with circular economy included (number) - National action plans and policy/strategy frameworks of blue economy developed for circular economy, or with circular economy included (number) - Macro-regional action plans and policy/strategy frameworks of blue economy developed for circular economy, or with circular economy included (number)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration -Human, material, operative, financial capacities and resources -Competences and know-how	- 2027 (recurring: frequency biennially, 2023 – 2024; 2025 – 2026)
- Development of common guidelines and tools for adaptation to climate change in blue economy	- Development and implementation of collaborative R&D&I projects for development of common guidelines and tools for adaptation to climate change in blue economy	- Collaborative R&D&I projects for development of common guidelines and tools for adaptation to climate change in blue economy (number) - Common guidelines developed for adaptation to climate change in blue economy (number) - Common tools developed for adaptation to climate change in blue economy (number)	- All partners	-National, regional, and EU current and future funding opportunities -Q-Helix collaboration -Human, material, operative, financial capacities and resources -Competences and know-how	-2027 (recurring: frequency biennially, 2023 – 2024; 2025 – 2026)

Table 3. Action plan for innovation activities – Long-term goal 3: Establishment of a macro-regional innovation community for strengthening cooperation among all Q-Helix actors in the ADRIATIC-IONIAN REGION

LONG-TERM GOAL 3	ESTABLISHMENT OF A MACRO-REGIONAL INNOVATION COMMUNITY FOR STRENGTHENING COOPERATION AMONG ALL Q-HELIX ACTORS IN THE ADRIATIC-IONIAN REGION

Expected impact - proposal of potential indicator for monitoring (on the regional level)

Established macro-regional Innovation Community for strengthening cooperation among all Q-Helix actors in the ADRIATIC-IONIAN REGION - number of members of macro-regional innovation community for strengthening cooperation among all Q-Helix actors in the ADRIATIC-IONIAN REGION

ROADMAP TO ACHIEVING THE LONG-TERM GOAL (solutions and key steps)

Short-term objectives	Initiatives (activities)	Expected result - proposal of potential indicator for monitoring *(on the regional level)*	Responsibility	Inputs	Due date
- Shared infrastructure on land or in maritime ports through partnerships between cross-cutting blue sectors for increasing efficiency through reduced costs and/or environmental impacts	- Development and implementation of collaborative R&D&I projects for sharing infrastructure on land or in maritime ports through partnerships between cross-cutting blue sectors for increasing efficiency through reduced costs and/or environmental impacts	- Collaborative R&D&I projects for sharing infrastructure on land or in maritime ports through partnerships between cross-cutting blue sectors for increasing efficiency through reduced costs and/or environmental impacts (number) -Partnerships between cross-cutting blue sectors for sharing infrastructure on land or in maritime ports, and increasing efficiency through reduced costs and/or environmental impacts(number) -Infrastructure shared on land or in maritime ports for increasing efficiency through reduced costs and/or environmental impacts (number)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and resources - Competences and know-how	- 2027 (recurring: frequency biennially, 2023 – 2024; 2025 – 2026)
- Setting up transnational cooperation between S3 regions/countries on common S3 priorities in blue economy for finding joint solutions that can address macro-regional challenges and opportunities	Development and implementation of collaborative R&D&I projects for setting up transnational cooperations between S3 regions/countries on common S3 priorities in blue economy for finding joint solutions that can address macro-regional challenges and opportunities	- Collaborative R&D&I projects for setting up transnational cooperations between S3 regions/countries on common S3 priorities in blue economy for finding joint solutions that can address macro-regional challenges and opportunities (number) - Joint solutions developed by transnational cooperations between S3 regions/countries on common S3 priorities in blue economy that can address macro-regional challenges and opportunities (number)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and resources - Competences and know-how	- 2027 (recurring: frequency biennially, 2023 – 2024; 2025 – 2026)
- Setting up transnational "Blue Economy Innovation Community"	- Development and implementation of collaborative R&D&I projects for setting up and strengthening transnational "Blue Economy Innovation Community" through forming new thematic partnerships	- Collaborative R&D&I projects for setting up transnational "Blue Economy Innovation Community" (number) - Transnational specific SBE thematic partnerships formed within "Blue Economy Innovation Community" setup (number)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and resources - Competences and know-how	- 2027 (recurring: frequency biennially, 2023 – 2024; 2025 – 2026)

Table 4. Action plan for innovation activities - Long-term goal 4: Capacity building on blue skills and technologies with multi-use applications

LONG-TERM GOAL 4	CAPACITY BUILDING ON BLUE SKILLS AND TECHNOLOGIES WITH MULTI-USE APPLICATIONS

Expected impact - proposal of potential indicator for monitoring (on the regional level)

Capacities built on blue skills and technologies with multi-use applications - number of R&D&I projects resulting with blue skills and technologies with multi-use applications

ROADMAP TO ACHIEVING THE LONG-TERM GOAL (solutions and key steps)

Short-term objectives	Initiatives (activities)	Expected result - proposal of potential indicator for monitoring *(on the regional level)*	Responsibility	Inputs	Due date
- Skills and technologies with multi-use applications for sustainable blue economy value chains exploiting the potential for applying new methods (e.g. big data applications), land-sea technology and economic "cross-overs" and renewing the skills base of the blue economy	- Development and implementation of collaborative R&D&I projects for developing skills and technologies with multi-use applications for sustainable blue economy value chains exploiting the potential for applying new methods (e.g. big data applications), land-sea technology and economic "cross-overs" and renewing the skills base of the blue economy	- Collaborative R&D&I projects for developing skills and technologies with multi-use applications for sustainable blue economy value chains exploiting the potential for applying new methods (e.g. big data applications), land-sea technology and economic "cross-overs" and renewing the skills base of the blue economy (number) - Skills and technologies developed with multi-use applications for sustainable blue economy value chains exploiting the potential for applying new methods (e.g. big data applications), land-sea technology and economic "cross-overs" (number)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and resources -Competences and know-how	- 2027 (recurring: frequency biennially, 2023 - 2024; 2025 - 2026)
- Designation of innovation experts for consulting on innovation and support its implementation in blue economy sectors	-Development and implementation of collaborative R&D&I projects for development of virtual innovation hub/platform for development and implementation of innovation in blue economy sectors, with provided designation of innovation experts for consulting on innovation and support to its implementation	- Collaborative R&D&I projects for development of virtual innovation hub/platform for development and implementation of innovation in blue economy sectors, with provided designation of innovation experts for consulting on innovation and support to its implementation (number) - Virtual innovation hub/platform developed for development and implementation of innovation in blue economy sectors, with provided designation of innovation experts for consulting on innovation and support to its implementation (number) - Designated innovation experts for consulting on innovation in blue economy sectors and support to its implementation (number)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and resources -Competences and know-how	- 2027 (recurring: frequency biennially, 2023 - 2024; 2025 - 2026)

Short-term objectives	Initiatives (activities)	Expected result - proposal of potential indicator for monitoring *(on the regional level)*	Responsibility	Inputs	Due date
- **Establishment of a blue career network communities' for connecting relevant centers**	- Development and implementation of R&D&I collaborative projects for establishment of virtual innovation hub/platform „Blue Career Network Communities" for connecting relevant centers	- Development and implementation of collaborative R&D&I projects for establishment of virtual innovation hub/platform „Blue Career Network Communities" for connecting relevant centers (number) - Virtual innovation hub/platform „Blue Career Network Communities" established for connecting relevant centers (number)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and resources -Competences and know-how	- 2027 (recurring: frequency biennially, 2023 - 2024; 2025 - 2026)
- Integration of modern blue technologies to "traditional" blue economy sectors	- Development and implementation of collaborative R&D&I projects for the integration of modern blue technologies to "traditional" blue economy sectors	- Collaborative R&D&Iprojects for the integration of modern blue technologies to "traditional" blue economy sectors (number)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and resources -Competences and know-how	- 2027 (recurring: frequency biennially, 2023 - 2024; 2025 - 2026)
- Building capacities of all Q-Helix actors for developing strong international collaboration and value chain links for strengthening Blue Growth and enhancing sustainable Blue Economy at the macro-regional level	- Development and implementation of activities (workshops, trainings, educations, educational materials) for building capacities of all Q-Helix actors for developing strong international collaboration and value chain links for strengthening Blue Growth and enhancing sustainable Blue Economy at the macro-regional level	- Activities (workshops, trainings, educations, educational materials) implemented for building capacities of all Q-Helix actors for developing strong international collaboration and value chain links for strengthening Blue Growth and enhancing sustainable Blue Economy at the macro-regional level (number)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and resources -Competences and know-how	- 2027 (recurring: frequency biennially, 2023 - 2024; 2025 - 2026)
	- Development and implementation of activities for raising awareness (conferences, roundtables, panels, promotion campaigns) for developing strong international collaboration and value chain links for strengthening Blue Growth and enhancing sustainable Blue Economy at the macro-regional level	- Activities for raising awareness (conferences, roundtables, panels, promotion campaigns) implemented for developing strong international collaboration and value chain links for strengthening Blue Growth and enhancing sustainable Blue Economy at the macro-regional level (number)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and resources -Competences and know-how	- 2027 (recurring: frequency biennially, 2023 - 2024; 2025 - 2026)

Table 4. Action plan for innovation activities - Long-term goal 4: Capacity building on blue skills and technologies with multi-use applications

LONG-TERM GOAL 5	POOLING RELEVANT FUNDING OPPORTUNITIES

Expected impact - proposal of potential indicator for monitoring (on the regional level)

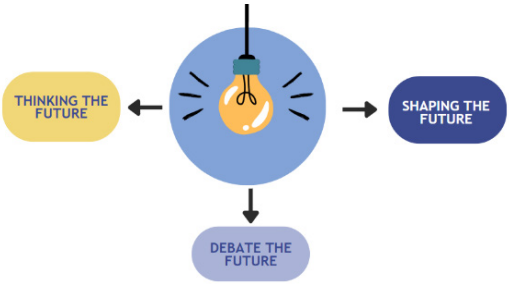
Increased pooling of relevant funding opportunities - number of collaborative R&D&I sustainable blue projects in the field of blue economy

ROADMAP TO ACHIEVING THE LONG-TERM GOAL (solutions and key steps)

Short-term objectives	Initiatives (activities)	Expected result - proposal of potential indicator for monitoring *(on the regional level)*	Responsibility	Inputs	Due date
- Current and future financing opportunities for sustainable blue projects	- Development and implementation of collaborative R&D&I projects in the field of blue economy through current and future financing opportunities for sustainable blue projects	- Collaborative R&D&I projects in the field of blue economy through current and future financing opportunities for sustainable blue projects (number) - Total value of collaborative R&D&I projects in the field of blue economy financed through current and future financing opportunities for sustainable blue projects (EUR) - Total value of funding awarded to sustainable blue projects (EUR)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and resources -Competences and know-how	-2027 (recurring: frequency biennially, 2023 - 2024; 2025 - 2026)
- Pooling funding from regional programming instruments	- Development of virtual hub/platform for pooling and compiling in one place (1) all available current financing opportunities for sustainable blue projects, (2) all future financing opportunities for sustainable blue projects, and (3) provision of support on how to apply to relevant calls for projects, to improve access of all Q-Helix actors to these funds and efficient absorption of the funds	- Virtual hub/platform developed for pooling and compiling in one place (1) all available current financing opportunities for sustainable blue projects, (2) all future financing opportunities for sustainable blue projects, and (3) provision of support on how to apply to relevant calls for projects, to improve access of all Q-Helix actors to these funds and efficient absorption of the funds (number)	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and resources -Competences and know-how	- 2027 (recurring: frequency biennially, 2023 - 2024; 2025 - 2026)
	- Development and implementation of collaborative R&D&I partnerships and projects in the field of blue economy through pooling opportunities from regional programming instruments, such as **European Partnerships in Horizon Europe**, and on example of **Sustainable Blue Economy Partnership**	- Collaborative R&D&I partnerships and projects in the field of blue economy through pooling opportunities from regional programming instruments, (number	- All partners	- National, regional, and EU current and future funding opportunities - Q-Helix collaboration - Human, material, operative, financial capacities and resources -Competences and know-how	- 2027 (recurring: frequency biennially, 2023 - 2024; 2025 - 2026)

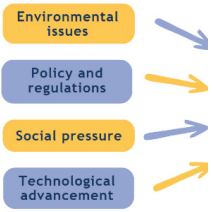
Technology Foresight

Introduction to the Action plan



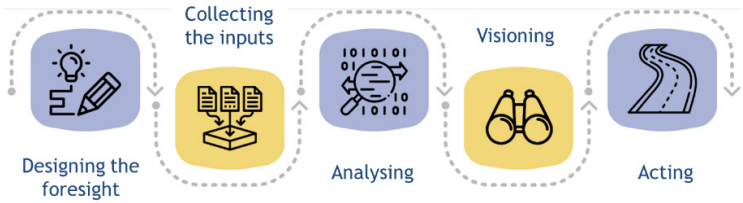
Foresight science is a systematic approach to generate visions of the future for its planning and management in the present. A Foresight exercise is:

- ***Structured**: the foresight study needs to follow a systematic approach;*
- ***Debated**: it should include interaction with relevant actors;*
- ***Complex**: it should be applied to different spheres of the reality, from environmental to sociological drivers, from technological to political outlook;*
- ***Plural and participated**: it should be conceived as an open view on different paths into the future with several possible alternatives.*



BLUEAIR technology foresight provides quality information on global forces, research and industry trends that are likely to shape the **current and future technologies and products** in selected **blue economy areas** in the **Adriatic Ionian region.**

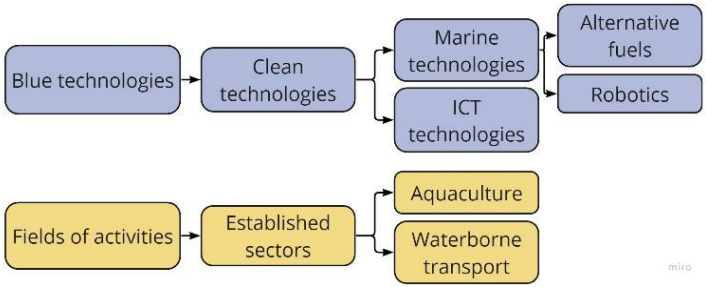
Within the scope of the technology foresight exercise, a **five steps methodology** was developed to better address the complexity of the study.



Designing the foresight

To set the perimeter of our study by identifying:

- The users, addressing the quadruple helix actors and in particular policy makers;
- The objectives, improving the competencies of innovation players in blue economy;
- The focus on the technologies and their development;
- The approach, adopting the methodology and selecting the information and data to be used in the foresight exercise;
- The scope, identifying marine and maritime technologies and fields of activities which are **clean,** and **ICT supported** and share **decarbonisation and sustainability** as a common objective: alternative fuels, robotics, ICT technologies, aquaculture and waterborne transport, as in the scheme below:



- The time frame and time horizon: from 2018 to 2050.

Collecting the Inputs

To identify "things to come" through the collection of information about new science and technology, including socio-economic information, environmental issues, and other small signals from:

- Scientific publications
- Patent analysis
- Market analysis
- Other desk analyses

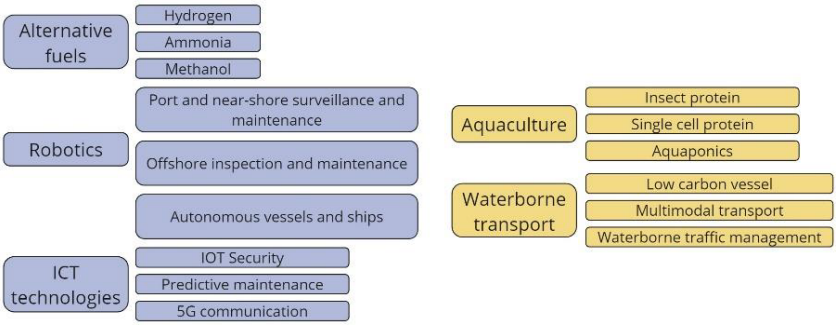
Analysing

To understand the dynamics and drivers of technological areas so as to identify critical issues and develop possible solutions from:

- Emerging trends, drivers, system dynamics and model potential impacts;
- Interaction with sectoral experts.

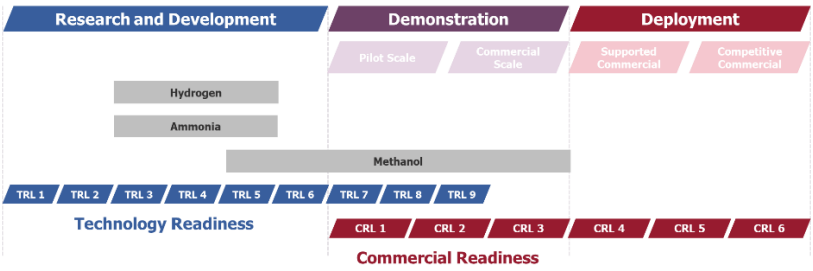
Visioning

To illustrate the results of the technology foresight exercise on common key technologies through 3 product or technology profiles for each analysed sector, as listed below:



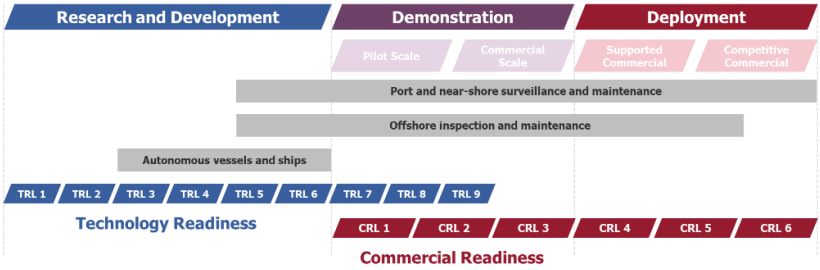
Among the key results of the analysis the technological status of the investigated profiles could give a powerful overview of the rate of technological advancements.

Alternative fuels



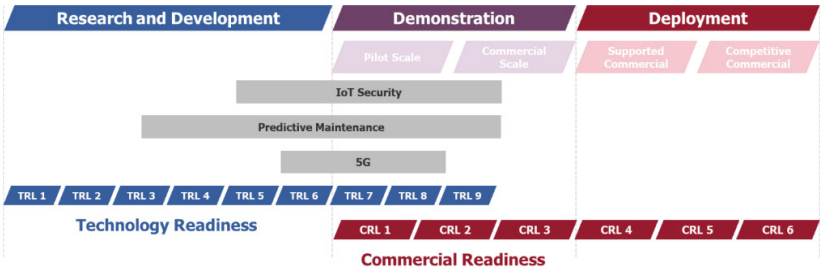
Hydrogen and Ammonia as maritime fuel are still at early stages of development. While fuel cells have been piloted and are slightly ahead of the spark ignition engines, neither variation are commercial yet. Dual-fuel methanol engines are commercially mature, but a 100% drop-in replacement methanol engine is not yet commonplace. E-methanol through green pathways is still quite immature with development geared towards weeding out commercial challenges associated to its production and end-use.

Robotics



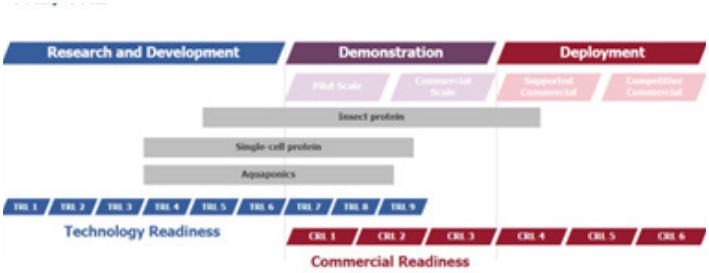
Emerging trends in energy transition and digital transformation, dubbed industry 4.0, have given a powerful impetus to the application of robotics across the entire value chain of the maritime industry. Starting from seamlessly carrying out maintenance and surveillance operations at ports to swiftly integrate with the logistics on one end and voyager fleet on the other, to safeguarding the shoreline against pollution-related threats such as oil spills, illegal fishing, leading up to oil and gas operations in the deeper shelf, the playing canvas for robots has grown and will continue to grow. Although full autonomy will require a significant shift in mindset and much refined regulatory control to grab a sizable market share, rapidly evolving technological leaps and industrial push will continue to impregnate robotics further. The Adriatic-Ionian region sits at a crossroad where regional demand meets, technical knowhow of the EU-led projects and commercial experiences from Norway, which allows the host nations to not just employ and leverage but to develop, test, scale and commercialize new robotic technologies for their oceans.

ICT



Given the short history and variability within the technology itself, IoT security and Predictive Maintenance show quite a variable range in terms of their maturity status. Some of the more state-of-art variations using well established methods of analysis are commercially available and are already being demonstrated and deployed in maritime industry, the more advanced versions using deep learning and image classification lag behind and are still at concept stages. 5G is commercially available but not adopted at scale everywhere, whereas certain operators such as China Mobile have already implemented it on selected ports commercially.

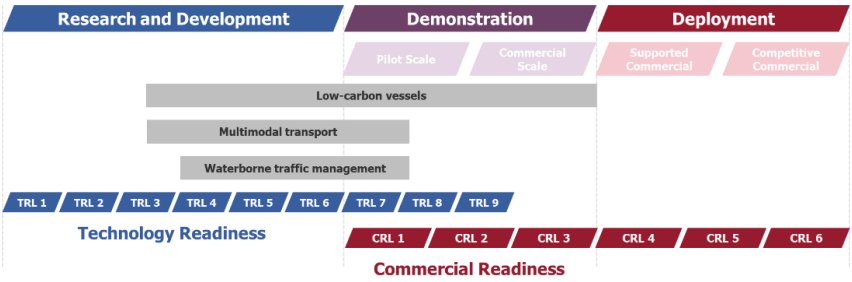
Aquaculture



Insect protein production has achieved large-scale commercial levels in the last 2-3 years, but mainly limited to a few players in the Adriatic-Ionian region.

Many insect protein companies are currently building their first facility to meet the increasing demand. Hence, to impact the fish meal market significantly, substantial quantities of insect protein must be produced but few developers have pilot facilities, making commercialization timelines uncertain. Single-cell protein production has gained interest in various industries over the past five years but the high production facility costs, product validation, and sourcing feedstocks are still great challenges. However, the growth in the Adriatic-Ionian aquaculture industry will drive demand for fish meal alternatives like single-cell protein. Aquaponics cultivation offers water conservation and year-round food production advantages. However, managing production and marketing of two products and technical issues hinder large-scale aquaponic success, requiring further assessment in the region.

Waterborne transport



There are multiple low-carbon vessels in operations or development, given the overabundance of fuel choices. While methanol engines and battery or fuel-cell power ferries are ahead of the curve and are already operational, ammonia or hydrogen-powered vessels are still in the early stages of development. As digital technologies expand, multimodal transport will continue to evolve. Depending on the end-use and complexity of the nodes hosting multimodal transport, some areas, such as ocean-road, are witnessing more development than others. Proper waterborne traffic management has principally stayed in silos thus far and has only recently started to evolve following the maturity of multimodal transport. However, most of these technologies remain at demonstration or pilot scales.

Acting

To summon policy makers and all stakeholders involved, draw their attention to the scenarios outlined and prompt and align their acting on the basis of shared knowledge and outlook and common objectives of decarbonisation and sustainability.

The analyses were conducted with the assistance of the external consultant Lux Research

The full version of the Technology Foresight report is available here:
DT2.3.1_TF-on-key-common-technology.pdf (adrioninterreg.eu)

Pilot Entrepreneurial Process (EDP)

The entrepreneurial discovery process (EDP) is an interactive and inclusive bottom-up approach involving quadruple helix participants from different sectors. It aims to identify potential new activities and attractive innovations through collaboration, with policymakers facilitating the realization of these opportunities. Traditional EDP surveys cover a wide range of thematic areas, while the macro-regional Blue Growth EDP survey focuses specifically on Blue Growth domains in the ADRION macro-regional area.

The EDP has a trans-regional dimension and is a key policy concept for innovation within the Europe 2020 strategy and smart specialization strategy. It promotes multi-level governance involving European institutions, member states, regions, and local stakeholders. EU funds play a significant role in strengthening the trans-regional dimension by facilitating cooperation based on shared priorities and complementary interests.

Entrepreneurial agents, including companies, R&D experts, and education institutions, are crucial in the EDP. Their engagement and knowledge in technological, economic, and scientific domains help in identifying specialization areas and driving economic transformation.

The BG-EDP tool aims to develop a structured modular survey for conducting pilot EDP exercises in the Blue Growth areas. It supports projects' implementing partners, facilitators, policymakers, and the development of the Blue Growth Innovation strategy.

The BG-EDP survey focuses on exploring innovation drivers, barriers, growth restraints, capacities, and skills specific to the Blue Growth sector. The survey targets primarily SMEs involved in or connected to the Blue economy value chain activities, along with research communities, education institutions, and relevant public administration representatives.

Total of 2013 participants have entered the survey fallowing provided links from the respective invitation letters received from implementing and supporting partners. 228 valid surveys were collected across all 9 regions/countries giving the response rate of 11%. Most valid inputs have been collected from the industry entities (60%, 136 entities), followed by higher education institutions & research institutions (23%, 91 entities).

The survey results indicate the following key points:

Innovation Drivers and Support:

- ADRION countries/regions share similar innovation drivers, emphasizing the importance of horizontal support policies.
- ADRION entities recognize the available macro-regional public innovation support programs, but improvements can be made.

Financial Barriers and Access to Finance:

- Access to finance remains the most significant barrier to innovation and growth in ADRION organizations.

Collaboration and Networking:

- Collaboration is prevalent among ADRION entities, fostering cooperation within SMEs/enterprises and with scientific institutions.
- Trust and cooperation with the public sector and BSIs need improvement to further support innovation.

Blue Growth Activities and Diversification:

- Blue Growth activities in the ADRION region primarily focus on traditional sectors, indicating a need to explore and support innovation in emerging sectors.
- Complementarity exists among ADRION countries/regions in Blue Growth technologies, with potential for further development in marine biotechnology & bioprocessing.

Digital Transformation:

- ADRION countries increasingly recognize the importance of digital transformation, with the main challenge being the alignment of strategy and execution.

This chapter is based on documents (deliverables)
D.T.2.2.2. Blue growth EDP tool and D.T.2.3.2. Pilot EDP for Blue Growth.

BLUEAIR Innovation Community

The BLUEAIR Innovation Community is an open platform that aims to enhance and streamline innovation collaboration at both regional and macro-regional levels in order to drive a sustainable blue economy in the Adriatic and Ionian Region.

The BLUEAIR Innovation Community invites existing frameworks and initiatives, as well as new stakeholders (both organizations and individuals representing government, research and education, business, and civil society) from the macro-region and beyond, to collaborate on its mission to advance the blue economy, leverage the work that has already been done, pool existing resources and avoid duplication of effort. By working together, the Community can create a more coherent and effective innovation ecosystem that benefits all stakeholders in the blue economy in the Adriatic and Ionian Region.

The main tasks of the BLUEAIR Innovation Community include building innovation capacity across the Adriatic and Ionian Region for a new wave of transformative innovation policies, promoting collective innovation actions, exploiting cooperation opportunities, and strengthening the macroregional innovation ecosystem in the blue economy. The Community facilitates the development of innovative solutions, encourages knowledge sharing, and promotes networking opportunities. It also serves as a platform for stakeholders to engage with policymakers and funding bodies and influence policy and funding decisions that support innovation, cross-regional smart specialisation and sustainable blue economy development in the Region.

Objectives of the BLUEAIR Innovation Community

BLUEAIR Innovation Community is committed to supporting the Adriatic and Ionian Region's blue economy in its transition towards a more sustainable, inclusive and innovative approach to economic and social growth by:

- ***Promoting collective innovation actions*** by facilitating collaboration between different stakeholders in the blue economy, identifying areas of common interest and opportunities for collective action to drive innovation and growth.

- ***Building strong partnerships across sectors and disciplines*** to leverage our collective expertise and resources and ensure the coherence of local initiatives with EU priorities.
- ***Building innovation capacity*** across the macro-region, developing skills, knowledge, and resources needed to support transformative innovation in sustainable blue economy sectors.
- ***Increasing the visibility of blue innovation and its potential at the transregional scope***, by highlighting new products, services, and technologies that contribute to a more sustainable future and sharing experiences and best practices while strengthening the macro-regional innovation ecosystem.
- Supporting the development of a macro-regional innovation system for the Adriatic and Ionian Region.
- ***Advocating for policies and practices*** that support innovation and transregional S3 collaboration, entrepreneurship, and social and environmental impact in the blue economy, addressing the main challenges of the Region.
- ***Empowering and supporting*** the next generation of innovators and leaders in the blue economy through education, mentorship, and access to resources, while promoting concrete actions at the regional, national and macroregional levels.
- ***Fostering cross-regional collaboration*** by engaging with innovation ecosystems, communities, and actors from other sea basins to drive sustainable innovation in the blue economy.

Principles that shape the BLUEAIR Innovation Community

The BLUEAIR Innovation Community is shaped according to the following pillars:

- ***A multilevel governance pillar,*** which connects existing transnational frameworks, networks, and initiatives already in place with territorial realities.
- ***A quadruple helix pillar,*** which brings together government, research and education, business and civil society, and bridging organisations to facilitate collaboration.
- ***A transformative innovation policy pillar***, which aims to address grand societal challenges and align with the European Green Deal.
- ***A sustainable development pillar,*** which takes the United Nations' 2030 Sustainable Development Goals as a reference framework.

The BLUEAIR Innovation Community's functioning is grounded on the following principles:

- ***Collaboration and Co-creation:*** To enhance the success of the BLUEAIR Innovation Community, it promotes collaboration and co-creation among quadruple helix stakeholders from diverse sectors, regions, and countries. This requires involving all stakeholders in the design and implementation of innovation projects.
- ***Inclusivity:*** The BLUEAIR Innovation Community welcomes all quadruple helix stakeholders from the Adriatic and Ionian Region, both organizations and individuals and regardless of their size or level of development. This inclusive approach ensures that all stakeholders can contribute to and benefit from the collective knowledge and experience of the community.
- ***Sustainability:*** The BLUEAIR Innovation Community is committed to fostering a sustainable blue economy in the Adriatic and Ionian Region. To achieve this goal, it supports innovation projects that are environmentally, socially, and economically sustainable.
- ***Innovation:*** The BLUEAIR Innovation Community aims to build innovation capacity across the macro-region, promote collective innovation actions, and seize cooperation opportunities. This approach strengthens the macro-regional innovation ecosystem.
- ***Networking:*** Networking is a crucial factor in the success of the BLUEAIR Innovation Community. It provides a platform for stakeholders to connect, share ideas, and collaborate on innovation projects, increasing the visibility of innovations in sustainable blue economy sectors relevant to the Adriatic and Ionian Region.
- ***Flexibility:*** The BLUEAIR Innovation Community is flexible and adaptable to the evolving needs of its stakeholders. It welcomes diverse stakeholders and focuses on building a dynamic and collaborative innovation ecosystem that responds to changing needs and priorities.
- ***Governance:*** The BLUEAIR Innovation Community operates under a transparent, participatory, and accountable governance model. This approach facilitates collaboration, co-creation, and collective decision-making among stakeholders.

The governance model of the BLUEAIR Innovation Community

The Community is an open platform that brings together all quadruple helix stakeholders in the blue economy from across the Adriatic and Ionian Region and beyond:

- ***Governments and local authorities*** promote inclusive economic growth and job creation in the blue economy, as well as address environmental challenges and social issues related to the sector.
- ***Universities and research centres*** collaborate with other stakeholders and contribute to the development of innovative solutions for the blue economy.
- ***Companies and clusters*** access new business opportunities, expand their networks, and collaborate with other stakeholders in the sector.
- ***Civil society and NGOs*** contribute to the development of a more sustainable and equitable blue economy and ensure that different voices are heard and represented.

The governance model of the BLUEAIR Innovation Community is designed to facilitate collaboration and communication across different levels of the Community and ensure that activities are aligned with the priorities and strategies of relevant stakeholders at the local, regional, and macro-regional levels:

- ***At the micro-level***, individual stakeholders collaborate within thematic/working groups to develop innovative solutions and projects related to sustainable blue economy sectors/value chains.
- ***At the meso-level***, thematic/working groups collaborate with other stakeholders to scale up innovative solutions and projects, promote collaboration and networking, and share best practices.
- ***At the macro-level***, the BLUEAIR Innovation Community works with regional and national governments, macro-regional actors, the European Union, and international initiatives to influence policy, develop funding opportunities, and promote the macro-regional innovation ecosystem.

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Interreg ADRION ADRIATIC-IONIAN

European Regional Development Fund - Instrument for Pre-Accession II Fund

BLUEAIR

Join the Community

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