Interreg

Co-funded by the European Union

Italy – Croatia

BlueDiversity

INTERREG ITALY-CROATIA PROGRAMME 2021– 2027

BlueDiversity – ITHR0200404

Deliverable 4.3.1 BlueDiversity Policy Paper

Activity 4.3 – BlueDiversity policy recommendations development
(Version 1.0 – August 2026)

AUTHORS

PP5 - PIDNC; LP1 - University of Salento; PP2 - Sea&Karst; PP3 - Eduforma; PP4 - IOF; PP6 - BMS; PP7 - UniPD

Interreg Co-funded by the European Union

Italy – Croatia

BlueDiversity

BlueDiversity

Shared BLUE knowledge and skills to sustain BIODIVERSITY in mariculture

Project Details

Project Acronym	BlueDiversity
Project Title	Shared BLUE knowledge and skills to sustain BIODIVERSITY in mariculture
Programme	Interreg Italy-Croatia 2021-2027 Programme
Priority	2 – Green and resilient shared environment
Specific Objective	SO 2.2 – Protection of nature and biodiversity
Start Date	1 March 2024
End Date	31 August 2026

Deliverable Details

WP4	Blue Capitalisation
Activity 4.3	BlueDiversity policy recommendations development
Deliverable 4.3.1	BlueDiversity Policy Paper
PP in charge	PP5 - PIDNC
Author(s)	PP5 - PIDNC; LP1 - UniSalento
Due Date	31 August 2026
Submission Date	31 August 2026
Version	Version 1.0
Availability	Public
PP contributors	LP1 - University of Salento; PP2 - Sea & Karst; PP3 - Eduforma; PP4 - IOF; PP6 - BMS; PP7 - UniPD



REVISION TABLE

Version	Name(s)	Date	Description
V 0.1	PP5 - PIDNC; LP1 - UniSalento	March 2026	Instruction to all co-authors, Bibliographic research
V 0.2	PP5 - PIDNC; LP1 - UniSalento	May 2026	1st draft internally reviewed
V 0.3	PP5 - PIDNC; LP1 - UniSalento	July 2026	Deliverable revised
V 1.0	PP5 - PIDNC; LP1 - UniSalento	August 2026	Deliverable submission

DISCLAIMER NOTE
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible.

ABOUT THE **BlueDiversity** PROJECT

The **BlueDiversity** project is part of the Interreg Italy-Croatia 2021-2027 Programme, co-funded by the European Union. The **BlueDiversity** project's priority is priority 2 (Green and resilient shared environment). The Specific Objective is SO2.2: improve the protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reduce all forms of pollution. In light of this, the **BlueDiversity** project aims at enhancing the ecosystem services-based practices, which allow the sustainment of local ecosystems' preservation through reducing human activities' impacts on biodiversity, while enhancing and developing economic and territorial opportunities.

To achieve the project's objectives, the Project Partners have the need to assess the State of the Art about the main biodiversity threats identified in the pilot areas, by analysing biodiversity, non-indigenous species, marine litter, and lagoon litter. The State of the Art analysis will also target, experiment and screen existing practices, innovations, resources available and attitudes of the ecosystem services end users in the context of the Adriatic Sea.

The Adriatic socio-eco-cultural features represent the common thread for the project actions, bringing relevant stakeholders of the blue economy and blue research to work together towards best and innovative practices with the common scope to develop a green and sustainable transition in the blue sector. In particular, the **BlueDiversity** project targets small and medium enterprises aiming to establish "living laboratories", providing institutional support on the one hand, and placing them as didactic examples at the much-needed interface with schools and younger generations, enhancing the framework of the blue economy with a multilateral approach that includes institutional actors and citizens.

The Adriatic Sea, shared by Italy and Croatia, represents one of the best examples of natural backgrounds in ecological terms, where the dynamics of co-creation, based on an intertwinement of tradition and innovation, can be established. The project aims to develop pilot activities that will experiment with innovative fishing gear to tackle the presence of non-indigenous species that seriously threaten the Adriatic coasts' aquatic ecosystems.

The **BlueDiversity** project is modular, aiming at fully replicable successful experiences, representing the actions' legacy and the core of a shift towards the blue economy. Such elements will be strategically disseminated targeting different institutional and non-institutional entities focusing on the capitalization of the knowledge, know-how and innovative instruments developed throughout the project and aimed at building a sound ground for future major innovative developments.

D 4.3.1 - EXECUTIVE SUMMARY

The BlueDiversity Policy Paper presents a strategic framework for strengthening biodiversity protection and promoting sustainable blue growth across the Italy–Croatia Adriatic area. Building upon the results generated through project research activities, pilot actions, stakeholder engagement processes, and transnational cooperation, the document provides evidence-based recommendations to support the transferability and long-term sustainability of project outcomes.

The findings demonstrate that the Adriatic Sea is currently exposed to significant environmental and socio-economic pressures, including biodiversity loss, habitat degradation, marine litter accumulation, and the increasing spread of non-indigenous species. These challenges directly affect fisheries, aquaculture, tourism, and coastal communities, highlighting the need for integrated solutions that simultaneously address ecological protection and economic resilience.

The project demonstrated the potential of innovative and ecosystem-based approaches to support biodiversity management and sustainable development. Pilot activities confirmed the value of advanced biodiversity monitoring tools such as environmental DNA (eDNA), selective fishing technologies for invasive species management, and circular economy approaches for recovering and recycling end-of-life fishing gear. Results also highlighted the importance of strengthening blue skills, supporting SMEs in the green transition, and creating new economic opportunities linked to sustainable tourism and biodiversity-based value chains.

Particular attention was given to the development of collaborative approaches through Living Labs, which enabled the active participation of research institutions, public authorities, businesses, and local communities in co-designing and testing practical solutions. The cross-border dimension of the project further strengthened knowledge exchange and facilitated the identification of transferable practices applicable beyond individual pilot areas.

Based on these findings, the Policy Paper proposes recommendations focused on strengthening circular economy solutions, promoting innovation in fisheries and aquaculture, supporting sustainable market development, investing in education and capacity building, and reinforcing cross-border governance mechanisms. The proposed actions aim to support the long-term transition toward a more resilient, competitive, and environmentally sustainable Adriatic blue economy while contributing to broader European policy objectives, including the European Green Deal and the EU Biodiversity Strategy for 2030.

D 4.3.1 - LINKS WITH OTHER PROJECT ACTIVITIES

The policy frameworks detailed in this document represent the operational synthesis of an integrated multi-year work plan that moves from initial baseline mapping to final transnational capitalization. The core of this transition is rooted in the technological innovations of WP2. Within this work package, the piloting of selective gear and the execution of environmental DNA common

surveys provided the scientific justification for the smart mitigation standards proposed in this paper. These field actions were intrinsically coupled with the chemical and biological characterization of target species. This created a direct evidentiary link between the project findings and the commercial safety mandates required for market uptake.
Furthermore, the logistical recommendations for circular waste management are a direct evolution of the supply-chain mapping and industrial database development. These efforts identified the precise economic and mechanical bottlenecks currently hindering the recycling of marine polymers. This technical foundation is rendered sustainable through its alignment with WP3 by utilizing the established educational curricula and vocational training modules to ensure the regional workforce possesses the skills necessary to implement these new protocols. Ultimately, these policy recommendations act as the connective tissue for the entire project lifecycle as they transform localized pilot successes into a permanent cross-border strategy for Adriatic governance.

SUMMARY

1. DELIVERABLE 4.3.1 - INTRODUCTION **9**
1.1. Deliverable overview 9
1.1.1. Objectives *9*
1.1.2. Key findings *9*
1.2. Materials and Methods 9
2. PROJECT FINDINGS **10**
2.1. STATE OF THE ART: THE ECOLOGICAL AND ECONOMIC NEXUS OF THE ADRIATIC SEA 10
2.2. Biodiversity Challenges AND ecosystem pressures 10
2.2.1. The Molecular Blind Spot in Biodiversity Monitoring *11*
2.2.2. Market Failure and Safety Uncertainty *11*
2.3. SMEs and the Green Transition 12
2.4. The Living Lab as a Driver for Innovation 12
2.4.1. The Quadruple Helix: Co-Designing Adriatic Solutions *12*
2.4.2. Transnational Capitalization and Mirrored Testing *13*
2.4.3. Knowledge Transfer and Social Acceptance *13*
2.5. Marine Litter and Circular Economy Approaches 13
2.5.1. Theoretical Foundation: The Shift from Linear Waste to Regenerative Materials *13*
2.5.2. Logistical and Regulatory Directives *14*
2.5.3. Quantitative Mapping of Nylon 6 Feedstock *14*
2.5.4. The 2-Ton Economic Mass Threshold *15*
2.5.5. Logistical Mapping and Organizational Structures *15*
2.5.6. Infrastructural and Logistical Requirements for Industrial Scaling *15*
2.6. Skills Development and Workforce Adaptation 16
2.6.1. Harmonizing "Blue Skills" for the Adriatic Workforce *16*
2.6.2. Strengthening the "Triple Helix" Model *17*
2.6.3. Community Engagement and Citizen Science *17*
2.7. Blue Tourism and New Economic Opportunities 17
2.7.1. Theoretical Framework: The "Eat-to-Beat" Strategy as Management *18*
2.7.2. Nutritional Profile and Chemical Safety Verification *18*
2.7.3. Market Integration and Commercial Planning *19*
2.8. Added Value of Cross-Border Cooperation 20
3. POLICY recommendations **21**

3.1. Strengthening Circular Economy Solutions for Fishing Gear 21
3.2. Supporting SMEs in the Green and Blue Transition 21
3.3. Promoting Innovation in Fisheries and Aquaculture 22
3.4. Encouraging Sustainable Market Development 23
3.5. Investing in Education and Capacity Building 23
3.6. Strengthening Cross-Border Governance and Cooperation 24
4. Transferability of Results 25
4.1. Transferability Potential of the BlueDiversity Approach 25
4.2. Transferable Practices and Solutions 25
4.2.1. Biodiversity Monitoring and Management 25
4.2.2. Sustainable Fisheries and Aquaculture Solutions 26
4.2.3. Skills Development and Capacity Building 26
4.2.4. Blue Tourism Development 26
4.3. Conditions for Successful Replication 26
4.4. Opportunities for Wider Adriatic and European Uptake 27
5. Conclusions 28
6. References 29

1. DELIVERABLE 4.3.1 - INTRODUCTION

1.1. Deliverable overview

1.1.1. Objectives

The objective of this Policy Paper is to provide policy recommendations that support the uptake and transferability of the project results across the Italy–Croatia cross-border area. The document aims to promote biodiversity protection, facilitate the green transition of SMEs, strengthen workforce skills, and foster innovation and sustainable economic opportunities through enhanced cross-border cooperation and coordinated policy action.

1.1.2. Key findings

The project findings highlight the importance of integrating biodiversity conservation, SME competitiveness and workforce development into a common policy framework. SMEs show increasing interest in sustainable and innovative business practices but require targeted support, access to knowledge and appropriate policy incentives. The results also demonstrate that cross-border cooperation can facilitate knowledge exchange, strengthen institutional capacities and create added value for sustainable regional development. Finally, the findings underline the need for coordinated public policies to ensure the long-term impact and scalability of the project's outcomes

1.2. Materials and Methods

The recommendations presented in this Policy Paper are based on the results achieved within the project, including analyses conducted in previous work packages, stakeholder engagement activities, and discussions among project partners. The collected evidence was reviewed to identify common challenges and opportunities related to biodiversity, green transition and SME innovation, forming the basis for the proposed policy recommendations.

2. PROJECT FINDINGS

2.1. STATE OF THE ART: THE ECOLOGICAL AND ECONOMIC NEXUS OF THE ADRIATIC SEA

The Adriatic Sea is a unique semi-enclosed basin characterized by high geological vulnerability and a delicate ecological balance that supports significant biodiversity and vital economic sectors, particularly small-scale fisheries (SSF) and tourism (Shauer et al., 2025). Within the Mediterranean "hotspot," the Adriatic is subject to intense anthropogenic pressures, where climate-driven environmental changes and overexploitation have led to a marked decline in the biomass and mean body size of key ecological indicators. Parallel to these biological shifts, the proliferation of marine litter, predominantly synthetic polymers like Nylon 6 and polyethylene, has emerged as a critical threat. Research indicates that the Adriatic contains some of the highest concentrations of plastic waste on the seafloor in Europe, posing severe risks to marine biota through ingestion and entanglement in "ghost nets" (Forleo & Romagnoli, 2021).

In response to these pressures, the global aquaculture sector is undergoing a transition toward Integrated Multi-Trophic Aquaculture (IMTA). This model is recognized as a superior ecological approach that mimics natural systems by recycling waste nutrients across different trophic levels, thereby enhancing system efficiency and reducing localized pollution (Chopin et al., 2012). However, the implementation of such systems in the Adriatic requires a foundational restoration of the marine environment, starting with the mitigation of plastic pollution and the management of biological invasions.

2.2. BIODIVERSITY CHALLENGES AND ECOSYSTEM PRESSURES

The analyses carried out during the initial phases of the BlueDiversity project highlighted a range of environmental pressures affecting coastal and marine ecosystems across the Adriatic area. Biodiversity loss, climate-related impacts, habitat degradation, marine pollution, and the increasing presence of non-indigenous species have emerged as common challenges shared by both Italian and Croatian coastal regions.

Despite its ecological and economic importance, the Adriatic basin faces a systemic threat from environmental deterioration that transcends localized concerns. The primary challenge lies in a fundamental disconnect between current management practices and the emerging ecological reality. The BlueDiversity project identifies critical "bottlenecks" that currently impede the transition to a sustainable Blue Economy.

Particular attention was devoted to the spread of the Blue Crab (Callinectes sapidus), which has become one of the most visible examples of how environmental changes can disrupt ecosystem balance and affect economic activities linked to fisheries and aquaculture. Stakeholder

consultations and research activities confirmed that the impacts of invasive species are no longer limited to ecological concerns but increasingly represent socio-economic challenges requiring coordinated responses.

The rapid expansion of the invasive Blue Crab (Callinectes sapidus) has reached an exponential "expansion phase," characterized by an average of 31.53 new registrations per year in the Mediterranean (Shauer et al., 2025). Current management efforts are hampered using traditional fishing gear that lacks "innovative stimuli," leading to low capture efficiency and high rates of native species bycatch. Without the integration of advanced technological attractants, such as the Submarine LED Systems (Green and Blue LEDs) pioneered in Activity 2.2, selective removal remains unfeasible, and the invasion continues to negatively correlate with the biomass of native lagoon species like the eel and green crab (Deliverable 2.2.1).

The findings also highlighted the need for improved monitoring systems, stronger integration of scientific evidence into policy-making, and greater involvement of local stakeholders in biodiversity management. At the same time, the project demonstrated that biodiversity conservation should be considered not only as an environmental objective but also as a strategic investment capable of supporting long-term economic resilience and sustainable territorial development.

2.2.1. The Molecular Blind Spot in Biodiversity Monitoring

Effective policymaking is currently hindered by an "invisibility" of underwater biological shifts. Traditional monitoring methods are spatially limited and slow to detect the early arrival of Non-Indigenous Species (NIS). There is a critical absence of a unified, high-resolution monitoring framework. Without the adoption of innovative molecular tools, such as the environmental DNA (eDNA) common surveys developed in Output 2.2, institutional actors are forced to manage biodiversity based on incomplete or outdated distribution data.

2.2.2. Market Failure and Safety Uncertainty

The problem is compounded by a failure to valorise biological threats into economic resources. Even when invasive species like the Blue Crab are caught, they remain an "environmental cost" rather than a "commercial resource." This is due to a lack of comprehensive Commercial Plans and a lack of baseline data regarding the nutritional properties and chemical safety (e.g., heavy metal contaminants) of Adriatic populations (Deliverable 2.3.1). Furthermore, the transition to tech-driven fishing (e.g., LED traps) introduces a new risk of secondary pollution from hazardous waste, such as exhausted batteries, if robust "Gear Stewardship" protocols are not legislated (Deliverable 2.2.2).

2.3. SMEs and the Green Transition

The project confirmed the central role of small and medium-sized enterprises (SMEs) in supporting the transition towards more sustainable coastal and marine economies. SMEs operating in fisheries, aquaculture, seafood processing, tourism, and related sectors represent key actors in implementing environmentally responsible practices and promoting innovation.

However, the assessments conducted throughout the project identified several barriers limiting the capacity of SMEs to actively contribute to biodiversity protection and sustainable development. These include limited access to innovation, insufficient technical knowledge, regulatory complexity, and difficulties in identifying economically viable pathways towards greener business models.

While the industrial capacity to recycle high-value marine polymers like Nylon 6 exists, the supply chain is currently broken at the logistical level. Feasibility studies reveal that small-scale fisheries generate significant waste (up to 20,450 kg in certain sectors), yet this material predominantly ends up in landfills (Deliverable 2.5.1). The systemic failure is twofold: a lack of mandated, standardized port infrastructure for sorting and a failure to reach the Economic Mass Threshold of 2 tons per year per site required to make industrial regeneration (e.g., the ECONYL process) cost-effective (Deliverable 2.5.2).

At the same time, interactions with stakeholders revealed interest among SMEs in adopting sustainable practices, provided that adequate support mechanisms, access to training, and targeted financial incentives are available. The findings suggest that public policies should increasingly focus on enabling SMEs to become active contributors to environmental objectives while maintaining competitiveness and creating new market opportunities.

2.4. The Living Lab as a Driver for Innovation

The success of the BlueDiversity project is predicated on the Living Lab approach, a user-centred, open-innovation ecosystem that moves scientific research into the real-world environments of Adriatic lagoons and coastal ports. Rather than utilizing top-down mandates, the project utilized these "labs" as the primary vehicle for co-designing, testing, and validating the technical and socio-economic solutions proposed.

2.4.1. The Quadruple Helix: Co-Designing Adriatic Solutions

The Living Lab methodology transformed pilot areas into dynamic testbeds where four key stakeholder groups; Public, Private, Academic, and Civil Society**,** were integrated into a unified workflow. This "Quadruple Helix" model ensured that project outputs were not merely scientifically sound but practically applicable.

- **Stakeholder Co-Creation:** Scientists and fishers worked in tandem to refine the nine selective trap prototypes (Section 3.1). By integrating Traditional Ecological Knowledge (TEK) with behavioral biology, the project ensured that the gear was both ecologically effective and ergonomically viable for daily professional use.
- **Real-Life Empirical Testing:** The identification of the 2-ton Economic Mass Threshold for Nylon 6 (Section 4.1) was not a theoretical calculation. It was an empirical finding derived from managing actual waste flows and logistical barriers in active ports like Chioggia.

2.4.2. Transnational Capitalization and Mirrored Testing

A defining feature of the BlueDiversity Living Labs was their mirrored structure. By operating simultaneous labs across the Italy-Croatia border, the project was able to test the transferability of solutions across different regulatory frameworks and ecological contexts.
This cross-border iteration allowed the partnership to identify "bottlenecks" (such as divergent waste codes) that would have remained hidden in a single-site study. Consequently, the methodology provides the scientific justification for the policy recommendations that follow: the "Adriatic Model" is an institutional upscaling of proven, localized successes harvested directly from these collaborative laboratories.

2.4.3. Knowledge Transfer and Social Acceptance

Beyond technical data, the Living Labs served as a platform for Social Acceptance. By involving local communities and fishing cooperatives in the "Eat-to-Beat" strategy and circular economy mapping, the project reduced the friction typically associated with new environmental regulations. This created a sense of "shared ownership" over the Adriatic's biological heritage, turning stakeholders into active participants in the region's ecological restoration.

2.5. Marine Litter and Circular Economy Approaches

The persistent accumulation of "ghost nets" and discarded fishing gear represents a critical failure in current waste management, resulting in a linear loss of high-value polymers and profound ecological degradation. Central to the BlueDiversity project is the transition from a linear "extract-use-dispose" model to a regenerative circular economy specifically targeting Nylon 6 (Polyamide 6). This polymer is a high-market-value secondary raw material, yet it currently constitutes a significant portion of the Adriatic's seafloor litter (Forleo & Romagnoli, 2021; Vidal et al., 2022).

2.5.1. Theoretical Foundation: The Shift from Linear Waste to Regenerative Materials

Current academic discourse emphasizes that the transition to a circular economy in the maritime sector is not merely an environmental necessity but a strategic industrial opportunity for regional resilience (Vidal et al., 2022). Historically, the "extract-use-dispose" model in fisheries has resulted in

the chronic accumulation of "ghost nets", predominantly high-tenacity Nylon 6 (Polyamide 6), which currently accounts for a significant portion of the seafloor litter in the Adriatic basin (Forleo & Romagnoli, 2021). The BlueDiversity project identifies that the persistence of this problem is not due to a lack of material value, but a failure in the structural recovery chain.

By treating these polymers as "secondary raw materials" rather than refuse, the regional economy can mitigate the significant financial burden of waste management on coastal municipalities while providing high-quality inputs for the textile and technical manufacturing sectors. The theoretical framework of the project is built upon the "closed-loop" concept, where end-of-life fishing gear is harvested from the marine environment and reintegrated into the industrial value chain. As documented in the project's supply-chain database (Deliverable 2.5.2), this transition is supported by the existence of advanced regeneration technologies, such as the ECONYL process, which can chemically recycle Nylon 6 back to its original purity without loss of quality.

The justification for prioritizing Nylon 6 within this policy framework lies in its unique properties: it is highly resistant, widely used in small-scale fisheries (SSF), and possesses a high market demand when properly sorted. Consequently, Section 2.1 establishes that the biological restoration of the Adriatic is inextricably linked to an industrial shift that redefines "marine litter" as a strategic resource for the transborder Blue Economy.

2.5.2. Logistical and Regulatory Directives

The transition from a linear waste model to an industrial circular supply chain is fundamentally dependent on the consistent availability of high-quality feedstock. A primary bottleneck identified in maritime circularity is the "collection-regeneration gap," where the costs of recovering dispersed marine litter exceed the market value of the resulting secondary raw materials. The BlueDiversity project addressed this impasse by conducting an exhaustive mapping of dismissed gear across its transnational pilot areas.

2.5.3. Quantitative Mapping of Nylon 6 Feedstock

Field data generated during the project's pilot actions (Deliverable 2.5.1) confirms the existence of a significant, yet previously uncoordinated, material resource. Small-scale fisheries (SSF) across the Italy-Croatia border generate substantial quantities of high-tenacity Nylon 6 gillnets. In specific pilot sectors, the project mapped totals as high as 20,450 kg of dismissed nets, with additional contributions from trawl and specialized net types. This quantitative evidence disproves the notion that marine plastic recovery lacks the volume necessary for industrial interest, provided that the collection is centralized rather than fragmented.

2.5.4. The 2-Ton Economic Mass Threshold

The most significant empirical finding of the project's feasibility study (Deliverable 2.5.2) is the identification of the Economic Mass Threshold. For advanced chemical regeneration processes, such as the ECONYL® initiative, which transforms Polyamide 6 back into its original monomeric state, logistical operations must reach a minimum of 2 tons (2,000 kg) of sorted material per year, per site.
Achieving this threshold is the "tipping point" for cost-neutrality. Below this mass, the carbon footprint and financial overhead of transportation and mechanical pretreatment (e.g., cutting and removal of non-polymer leads and floats) render the cycle industrially unviable. Consequently, this data provides the scientific justification for the policy mandate to move away from small, localized "clean-up" events toward a permanent, port-based recovery infrastructure capable of aggregating these critical volumes.

2.5.5. Logistical Mapping and Organizational Structures

The project also evaluated the organizational readiness of various pilot sites, revealing a disparity in "storage granted" access (Deliverable 2.5.1). While some areas have successfully integrated fishing associations and cooperatives into the recovery chain, others lack "suitable storage areas," leading to the immediate loss of high-value polymers to landfills. These findings emphasize that the solution to marine pollution in the Adriatic is not merely a matter of material availability, but of institutionalizing the logistical nodes (the ports and collection centres) required to bridge the 2-ton threshold.

2.5.6. Infrastructural and Logistical Requirements for Industrial Scaling

The transition from opportunistic marine litter collection to a stable industrial supply chain requires the institutionalization of specific "Blue Infrastructure" at the port level. The BlueDiversity project identifies that even when material availability is high, the absence of granted storage and standardized handling procedures leads to the immediate classification of gear as unsorted waste, thereby exiting the circular loop (Deliverable 2.5.1).
To bridge the gap between small-scale fisheries (SSF) and high-tech regeneration plants, ports must be legislatively mandated to provide dedicated, standardized recovery nodes. The "Chioggia Model," developed as a best practice in Output 2.2, serves as the reference for these facilities. These centres must be equipped to handle:

- **Granted Temporary Storage:** Designated areas protected from environmental degradation where dismissed nets can be aggregated until the 2-ton economic mass threshold is reached.
- **Mechanical Pre-treatment Nodes:** Facilities designed for the initial cleaning and mechanical cutting of gear. This stage is critical for the removal of non-polymer

"contamination," such as lead lines, cork floats, and organic debris, which otherwise renders the chemical recycling of Nylon 6 impossible (Deliverable 2.5.2).

The operational success of these centres depends on a "Standard Operating Procedure" (SOP) that ensures the purity of the material stream. Policy directives should mandate:

- **Separation at Source:** Instructions for fishers to separate Nylon 6 (Polyamide) from other synthetic polymers (e.g., Polyethylene) at the point of dismissal to prevent cross-contamination.
- **Digital Material Traceability:** Implementing a tracking system that documents the material from the port of origin to the industrial recycler. As mapped in the project's supply-chain database, this traceability provides the transparency required for institutional actors to issue "Circular Economy Credits" or tax incentives to participating fishers and cooperatives (Deliverable 2.5.2).

Finally, the logistics of these centres must account for the full lifecycle of modern fishing gear. With the introduction of "smart" selective traps (as seen in Activity 2.2), recovery centres must evolve to manage secondary hazardous waste, specifically Submarine LED batteries. Section 2.3 justifies the creation of integrated stewardship points where damaged high-tech gear and exhausted electronics are collected separately, ensuring that the technological shift toward better biodiversity management does not inadvertently create new streams of lagoon pollution (Deliverable 2.2.2).

2.6. Skills Development and Workforce Adaptation

The transition to a sustainable Blue Economy in the Adriatic is not merely a technical challenge; it is an educational imperative. The BlueDiversity project recognizes that the systemic failures identified in previous sections, logistical bottlenecks, invasive species expansion, and waste mismanagement, are often exacerbated by a "Blue Skills" gap. Without a workforce and a younger generation equipped with specialized environmental and technological competencies, the innovations developed within the project cannot be institutionalized. Here, the project's strategy for the "transnational capitalization" of knowledge through targeted educational frameworks is outlined.

2.6.1. Harmonizing "Blue Skills" for the Adriatic Workforce

Current vocational training in the maritime sector often lacks the interdisciplinary approach required for modern ecosystem management. The project addressed this by developing a standardized transnational curriculum (Deliverable 3.1.1) aimed at both professional fishers and university-level students.

- **Technical Upskilling:** Training modules focus on the operation of "smart gear" (LED traps) and the protocols for eDNA sampling, ensuring that fishers transition from simple extractors to proactive data-providers for biodiversity monitoring.
- **Circular Literacy:** Education on waste classification (EWC codes) and the 2-ton economic mass threshold (Section 2.2) is integrated to ensure that port workers and cooperatives understand the industrial value of the materials they handle.

2.6.2. Strengthening the "Triple Helix" Model

A core achievement of the project is the strengthening of the **Triple Helix** relationship, the synergy between academia, industry, and government.

- **Knowledge Transfer:** By involving students in pilot actions (Activity 3.1), BlueDiversity ensures that the next generation of marine biologists and policymakers are trained on field-tested Adriatic solutions rather than theoretical models.
- **Transnational Capitalization:** The project justifies the need for a unified "Adriatic Education Hub" (Deliverable 3.1.2) where best practices from Italy and Croatia are shared, preventing the duplication of efforts and ensuring a harmonized response to regional environmental crises.

2.6.3. Community Engagement and Citizen Science

Beyond professional training, the project highlights that the management of the Adriatic is a shared social responsibility.

- **Public Awareness:** Educational campaigns focused on the "Eat-to-Beat" strategy (Section 4.1) were designed to normalize the consumption of invasive species among the general public, effectively using education to drive market demand.
- **Citizen Science Protocols:** By training non-professional stakeholders in identifying Non-Indigenous Species (NIS), the project expands the monitoring network established in Section 3, turning local communities into the "eyes of the sea."

2.7. Blue Tourism and New Economic Opportunities

One of the most significant findings of the project concerns the potential of biodiversity-based economic diversification through sustainable blue tourism initiatives. Building upon the knowledge generated during the research and pilot phases, project partners identified opportunities to connect environmental protection with tourism development and local economic growth.
The mapping of new blue tourism routes demonstrated how fisheries, aquaculture, local food production, cultural heritage, and biodiversity conservation can be integrated into attractive

tourism experiences. These initiatives create opportunities for generating additional income for local communities while increasing public awareness of marine ecosystems and sustainable resource management.

2.7.1. Theoretical Framework: The "Eat-to-Beat" Strategy as Management

Research and environmental management models increasingly recognize that once an invasive species like *Callinectes sapidus* reaches its "expansion phase" in a basin as complex as the Adriatic, total eradication is often biologically impossible and economically prohibitive. The BlueDiversity project therefore adopts the "Eat-to-Beat" strategy, a pragmatic management paradigm where human consumption acts as a biological control mechanism. By creating a commercial value for the species, the project provides a self-sustaining financial incentive for fishers to maintain high extraction pressure, effectively "crowding out" the invader to protect native biodiversity.

This strategy, however, requires a "Dual-Use" solution: the crab must be treated simultaneously as an environmental threat and a nutritional resource (Vadalà & Cicero, 2024). The justification for this framework is rooted in the "Invasive Species-Circular Economy" nexus, where the cost of ecological restoration is offset by the revenue of the catch. For this to succeed without incentivizing the long-term presence of the invader, the project's framework mandates that commercial exploitation must be strictly coupled with the selective trapping technologies (Section 3.1) and molecular monitoring (Section 3.2) to ensure that harvesting remains a tool for restoration rather than a permanent industry.

2.7.2. Nutritional Profile and Chemical Safety Verification

The primary barrier to institutionalizing the "Eat-to-Beat" strategy has been a lack of standardized baseline data regarding the safety and quality of C. sapidus within the Adriatic's specific environmental conditions. To unlock commercial pathways, the BlueDiversity project conducted a rigorous chemical and biological characterization of the Adriatic populations, effectively acting as a scientific "safety-gate" for market entry.

As documented in Deliverable 2.3.1, the project's biochemical analysis confirms that the Adriatic blue crab is a high-value nutritional resource. The findings indicate:

- **Protein Profile:** A high biological value protein content (averaging 18-20%), rich in essential amino acids (e.g., leucine and lysine).
- **Lipid Composition:** A favourable ratio of Omega-3 to Omega-6 fatty acids, which positions the product as a "heart-healthy" alternative to traditional proteins, supporting the project's goal of high-end market integration (Vadalà & Cicero, 2024).

Crucially, the project addressed the risk of bioaccumulation, a common concern for benthic crustaceans in lagoon environments. Through exhaustive screening for heavy metals and organic pollutants, the project verified that:

- **Inorganic Contaminants:** Concentrations of Cadmium, Mercury, and Lead consistently remained below the Maximum Levels (MLs) established by **Commission Regulation (EU) 2023/915**.
- **Organic Pollutants:** Levels of polychlorinated biphenyls (PCBs) and dioxins were found to be negligible, confirming that the environmental management of the species does not pose a risk to human health.

This empirical verification provides the legal and scientific justification for the subsequent commercial recommendations. By proving that the Adriatic blue crab meets the highest safety standards, the BlueDiversity project allows policymakers to confidently promote its consumption, transforming a biological threat into a certified, high-quality food resource for the transborder region.

2.7.3. Market Integration and Commercial Planning

With safety and nutritional standards verified, the final hurdle for the "Eat-to-Beat" strategy is the creation of a stable, resilient market. Historically, the commercialization of *C. sapidus* in the Adriatic has been hindered by inconsistent supply and a lack of consumer familiarity. The BlueDiversity project resolves this through a structured Commercial Plan (Deliverable 2.4.1) designed to bridge the gap between small-scale fishers (SSF) and the final consumer.

To prevent market saturation during peak harvest months, the project advocates for a shift away from exclusively selling "live-in-shell" specimens. Market analysis suggests that industrial stabilization depends on:

- **Advanced Processing:** Integrating the species into the local agri-food industry through the production of frozen meats, specialized pâtés, and ready-to-cook products.
- **High-Value Derivatives:** Exploiting the high chitin content in crab shells for the pharmaceutical and cosmetic industries, ensuring that even "waste" from the food processing line is valorised within a circular framework.
-

The project identifies the "Short Supply Chain" (Km 0) as the most effective route for socio-economic return. By prioritizing the integration of blue crab into the local HORECA (Hotel, Restaurant, and Café) sector, particularly within the context of "Blue Tourism", the Adriatic can:

- **Reduce Carbon Footprint:** Minimize the environmental impact of transport, aligning with the sustainability goals of the Green Deal.

- **Maximize Local Revenue:** Ensure that the added value of the "invasive-to-delicacy" narrative stays within the coastal communities most affected by the invasion.

A core recommendation of the project is the creation of a unified Italy-Croatia certification or labelling system. This label would inform consumers that the crab they are purchasing was harvested using the Selective LED Traps (Section 3.1) and monitored via eDNA protocols (Section 3.2). Such a "Biodiversity-Friendly" brand allows for premium pricing, as it transforms a simple food purchase into an act of environmental stewardship. This strategic branding is essential for differentiating the Adriatic product from imported competitors and securing long-term market interest.

2.8. Added Value of Cross-Border Cooperation

A key finding emerging from the BlueDiversity project is that the environmental and economic challenges affecting the Adriatic area require coordinated responses that go beyond national borders. Biodiversity loss, invasive species management, sustainable fisheries, skills development, and blue economy opportunities are shared issues that cannot be effectively addressed through isolated interventions.

The project provided a valuable platform for cooperation between Italian and Croatian stakeholders, facilitating knowledge exchange, joint learning processes, and the development of common approaches to environmental management and sustainable development. This cooperation enabled partners to compare experiences, identify transferable practices, and jointly explore innovative solutions applicable across different territorial contexts.

The cross-border dimension of the project also strengthened stakeholder networks and created the foundations for future collaboration beyond the project lifetime. The findings demonstrate that integrated Adriatic-level approaches can generate greater impacts than individual local initiatives and contribute to the development of more coherent and effective policies supporting biodiversity protection, economic resilience, and sustainable growth.

3. POLICY RECOMMENDATIONS

Based on the evidence generated through pilot actions, stakeholder engagement activities, and technical assessments conducted within the BlueDiversity project, the following policy recommendations are proposed to support biodiversity protection, circular economy development, and sustainable blue growth in the Adriatic region.

The technical and socio-economic solutions validated by the BlueDiversity project demonstrate that a resilient Adriatic is achievable through targeted, transnational intervention. However, the transition from "project-based success" to "regional standard" requires a formal shift in maritime policy. This section outlines the mandatory legislative and administrative steps required to institutionalize the project's outputs into a permanent Adriatic Model of Biodiversity Governance.

3.1. Strengthening Circular Economy Solutions for Fishing Gear

Project findings generated through the recycling feasibility assessment (Deliverable 2.5.1) and the development of the Gillnets Circular Supply-Chain Database (Deliverable 2.5.2) demonstrate that significant quantities of end-of-life fishing gear are generated across Adriatic fishing communities, while logistical and organisational barriers continue to limit their recovery and recycling potential.

The project also highlighted the importance of reaching economically viable collection volumes and establishing traceable supply chains for Nylon 6 regeneration processes (Deliverables 2.5.1 and 2.5.2).

Particular attention should be given to creating standardized collection systems that facilitate the aggregation of sufficient quantities of recyclable materials and improve the efficiency of recycling processes. The project highlighted the importance of reaching economically viable collection volumes, particularly for materials such as Nylon 6 fishing nets, whose regeneration depends on stable and predictable supply chains.

Policymakers should also encourage harmonised waste classification procedures, traceability systems, and cooperation among fishers, port authorities, waste management operators, and recycling industries. Such measures can strengthen circular value chains, reduce marine litter, and create new economic opportunities within the blue economy sector.

3.2. Supporting SMEs in the Green and Blue Transition

The rapid spread of non-indigenous species, particularly the Atlantic blue crab (Callinectes sapidus), requires integrated and adaptive management approaches. Project results indicate that selective harvesting techniques and innovative fishing technologies can contribute to effective population management while reducing unintended impacts on native species. Results obtained through

biodiversity assessments (Deliverable 2.1.1) and the testing of innovative selective traps (Deliverable 2.2.1) indicate that selective harvesting technologies can contribute to more effective management of invasive species while reducing impacts on native fauna.

Regional authorities should consider supporting the wider uptake of selective fishing solutions and environmentally responsible harvesting practices through pilot programmes, financial incentives, and knowledge-sharing initiatives. These measures can enhance biodiversity protection while creating additional economic opportunities for coastal communities affected by biological invasions. Operational recommendations presented in the Report on Trapping Best Practices (Deliverable 2.2.2) provide a useful basis for the wider adoption of environmentally responsible harvesting approaches.

The project also demonstrated the importance of integrating biodiversity management objectives with socio-economic considerations. Sustainable utilisation and valorisation of invasive species may contribute to long-term population control while simultaneously generating new income streams for local fisheries and related businesses.

3.3. Promoting Innovation in Fisheries and Aquaculture

Effective environmental management requires timely and reliable information on ecosystem changes. The BlueDiversity project demonstrated the potential of innovative monitoring approaches, including environmental DNA (eDNA) methodologies, to complement conventional monitoring techniques and improve the detection of non-indigenous species and biodiversity changes. The biodiversity assessments carried out within Deliverable 2.1.1 and the common eDNA monitoring activities implemented under Output 2.2 demonstrated the potential of advanced monitoring methodologies for the early detection of biodiversity changes and non-indigenous species.

Policymakers should support the gradual integration of advanced monitoring tools into existing environmental management frameworks and monitoring programmes. Strengthening cooperation among research institutions, environmental agencies, and public authorities can facilitate data sharing, improve decision-making processes, and support coordinated responses to emerging ecological threats. The integration of molecular monitoring tools into existing environmental management frameworks could significantly improve the quality and timeliness of biodiversity information available to decision-makers.

At the transnational level, the development of shared monitoring protocols and common databases could contribute to a more harmonised and effective approach to biodiversity management across the Adriatic basin.

3.4. Encouraging Sustainable Market Development

The project demonstrated that environmental challenges can also create opportunities for innovation and economic diversification. In particular, the sustainable utilisation of non-indigenous species offers potential for developing new products, services, and local value chains that support both biodiversity management and economic development. The nutritional characterisation and chemical safety assessment of Atlantic blue crab populations (Deliverable 2.3.1) confirmed the species' potential for safe consumption and market valorisation.

Public authorities and business support organisations should facilitate market development through awareness-raising activities, support for product innovation, and promotion of sustainable seafood consumption. The development of quality schemes, regional branding initiatives, and biodiversity-friendly certification mechanisms could further strengthen consumer confidence and enhance market uptake.

Building upon the market analysis and commercial scenarios developed within the Commercial Plan (Deliverable 2.4.1), public authorities and business support organisations should facilitate the development of sustainable value chains based on biodiversity-friendly products and services. Particular opportunities exist within the tourism, gastronomy, and hospitality sectors, where sustainable and locally sourced products can contribute to both environmental objectives and regional competitiveness.

3.5. Investing in Education and Capacity Building

The successful implementation of biodiversity protection measures and circular economy solutions depends on the availability of appropriately skilled professionals and informed stakeholders. The project highlighted the importance of strengthening blue skills related to sustainable fisheries, biodiversity monitoring, circular economy practices, and environmental management. The educational materials and training programmes developed within Deliverable 3.1.1 demonstrated the importance of strengthening blue skills related to biodiversity monitoring, circular economy practices, and sustainable fisheries management.

Educational institutions, vocational training providers, and public authorities should collaborate to integrate relevant topics into formal education programmes and lifelong learning opportunities. Continuous capacity-building initiatives can facilitate the adoption of innovative practices and strengthen the ability of local communities to respond to environmental challenges.

The establishment of long-term knowledge-sharing mechanisms, as envisaged through Deliverable 3.1.2, could further support capacity building and knowledge transfer across the Adriatic region. Particular attention should be given to fostering cooperation between academia, industry, and

public institutions in order to ensure that educational programmes reflect evolving labour market needs and support the long-term development of the blue economy.

3.6. Strengthening Cross-Border Governance and Cooperation

The transboundary nature of marine ecosystems requires coordinated governance approaches that extend beyond national borders. The BlueDiversity project demonstrated the added value of cross-border cooperation in addressing shared environmental challenges, developing common methodologies, and exchanging knowledge among stakeholders. The Living Lab approach implemented throughout the project and the transnational knowledge exchange activities carried out within WP2 and WP3 demonstrated the added value of coordinated cross-border action in addressing shared environmental challenges.

Building upon the partnerships established through the project, policymakers should continue supporting collaborative governance mechanisms, regular stakeholder exchanges, and joint environmental initiatives. The establishment of shared knowledge platforms, common monitoring frameworks, and coordinated management measures could significantly improve the effectiveness of biodiversity protection efforts across the Adriatic region.

Continued cooperation between Italy and Croatia will be essential for ensuring the long-term sustainability and transferability of project results and for supporting the broader objectives of the European Green Deal and sustainable blue economy policies.

4. Transferability of Results

4.1. Transferability Potential of the BlueDiversity Approach

One of the key strengths of the BlueDiversity project lies in the transferability of its results beyond the immediate project area. The challenges addressed by the project—including biodiversity loss, invasive alien species management, skills shortages, sustainability transition of SMEs, and the need for new economic opportunities—are not unique to the Italian and Croatian Adriatic regions. Similar issues are faced by coastal and maritime regions throughout Europe and beyond.

The project has developed a set of approaches, tools, and cooperation mechanisms that can be adapted and replicated in different territorial contexts. The integrated approach adopted by BlueDiversity, combining biodiversity protection, business innovation, skills development, and stakeholder engagement, provides a practical framework that can support sustainable regional development across various coastal and marine areas.
The transferability potential is further strengthened by the project's emphasis on stakeholder participation, cross-sectoral cooperation, and evidence-based decision-making, which are applicable regardless of local administrative and governance structures.

4.2. Transferable Practices and Solutions

The BlueDiversity project offers transferable, standardized methodologies for sustainable coastal management, focusing on technical innovations like low-impact, selective gear and biodegradable alternatives to reduce plastic pollution. Additionally, it provides adaptable frameworks for SME upskilling and stakeholder-driven "living laboratories" designed to foster regional, cross-border cooperation in the Adriatic and beyond. These living laboratories will be maintained even after the expiration of the project through annual virtual conferences to keep sharing ideas amongst all stakeholders while keeping up with issues around the management of biodiversity and plastic pollution in the Adriatic.

4.2.1. Biodiversity Monitoring and Management

The methodologies used for assessing biodiversity-related challenges and identifying ecosystem pressures can be adapted by other regions seeking to improve environmental management and support evidence-based policy development.

The experiences gained in addressing invasive species, particularly the Blue Crab, may provide valuable guidance for other coastal areas facing similar ecological and economic impacts associated with non-indigenous species.

4.2.2. Sustainable Fisheries and Aquaculture Solutions

The innovative approaches tested through pilot activities offer practical examples of how environmental sustainability can be integrated into fisheries and aquaculture operations. These solutions can support the reduction of environmental impacts while maintaining economic viability and competitiveness.

4.2.3. Skills Development and Capacity Building

The project's training and knowledge-transfer activities provide a replicable model for supporting workforce adaptation to the green and blue transition. The cooperation established between educational institutions, research organisations, businesses, and public authorities can serve as a reference for other regions seeking to address emerging skills needs.

4.2.4. Blue Tourism Development

The methodology used to identify and map blue tourism routes can be replicated in other coastal territories aiming to diversify local economies through sustainable tourism. By combining biodiversity conservation, cultural heritage, local food production, and community engagement, the BlueDiversity approach offers a practical model for generating new economic opportunities while promoting environmental awareness.

4.3. Conditions for Successful Replication

While the project results are highly transferable, their successful replication depends on several enabling conditions. First, strong stakeholder engagement is essential throughout the planning and implementation process. Public authorities, SMEs, research institutions, educational organisations, and civil society actors must be actively involved to ensure ownership and long-term sustainability.

Second, access to scientific knowledge and reliable environmental data is necessary to support informed decision-making and adaptation to local conditions.

Third, adequate financial and institutional support mechanisms should be available to facilitate investments in innovation, training, biodiversity conservation, and sustainable business development.

Finally, policy coherence across different governance levels is required to ensure that environmental, economic, education, and innovation policies reinforce rather than contradict one another.

4.4. Opportunities for Wider Adriatic and European Uptake

The experiences generated through BlueDiversity provide a valuable foundation for future cooperation initiatives at both Adriatic and European levels.

The project's results could be further integrated into regional development strategies, biodiversity action plans, blue economy initiatives, and vocational education programmes. Furthermore, the approaches developed through the project align closely with broader European policy objectives, including the European Green Deal, the EU Biodiversity Strategy for 2030, the Sustainable Blue Economy Strategy, and the European Skills Agenda.

By supporting the wider adoption of the project's methodologies and solutions, policy-makers can contribute to stronger biodiversity protection, more resilient coastal economies, and enhanced cooperation among regions facing similar environmental and socio-economic challenges.

5. Conclusions

The BlueDiversity project demonstrated that biodiversity protection and economic development should not be considered competing objectives but complementary components of a sustainable blue economy. The evidence generated through project activities confirmed that environmental challenges affecting the Adriatic region, including biodiversity loss, marine litter accumulation, invasive species expansion, and increasing pressures on coastal ecosystems, require integrated and coordinated responses that combine scientific knowledge, technological innovation, and stakeholder engagement.

The project findings highlight that innovative approaches can simultaneously contribute to environmental restoration and create socio-economic opportunities. Advanced monitoring methodologies, selective fishing technologies, circular economy solutions for fishing gear, and the sustainable utilisation of invasive species all demonstrated significant potential to support biodiversity management while strengthening local economic resilience and creating new value chains.

The project also confirmed the importance of SMEs and local communities as key actors in the transition toward more sustainable practices. However, the successful implementation of these solutions depends on enabling conditions, including access to knowledge, skills development, supportive policy frameworks, and appropriate financial and institutional mechanisms.

Furthermore, the cross-border cooperation established between Italian and Croatian stakeholders generated added value that extends beyond the project lifetime. Shared learning processes, common methodologies, and strengthened stakeholder networks created the foundations for long-term collaboration and more harmonised governance approaches across the Adriatic basin.

The transferability potential of the BlueDiversity approach further increases its strategic relevance. The integrated methodology developed throughout the project can support other coastal and maritime regions facing similar environmental and socio-economic challenges. By promoting evidence-based decision-making, stakeholder participation, and stronger links between environmental protection and economic development, the project contributes to broader European objectives related to biodiversity conservation, sustainable blue growth, and regional resilience.

Ultimately, BlueDiversity provides a practical foundation for transforming project-level achievements into long-term policy action, supporting the development of a more sustainable, innovative, and resilient Adriatic region.

6. References

- **BlueDiversity (2025).** *Deliverable 2.5.1: Report on recycling process.* Activity 2.5 – Analysis of logistical readiness.
- **BlueDiversity (2025).** *Deliverable 2.5.2: Gillnets circular supply-chain database.* Activity 2.5 – Mapping the industrial value chain and 2-ton mass threshold.
- **BlueDiversity (2025).** *Deliverable 3.1.2: Cross-border capitalization report.* Evaluation of the Living Lab methodology and transferability.
- **BlueDiversity (2026).** *Deliverable 2.1.1: Mapping and Monitoring Protocol for the Blue Crab.* Standardization of eDNA and molecular surveillance.
- **BlueDiversity (2026).** *Deliverable 2.2.1: Selective traps for the Blue Crab.* Technical specifications and efficiency data for LED-prototype traps.
- **BlueDiversity (2026).** *Deliverable 2.2.2: Report on trapping best practices.* Guidelines for gear stewardship and battery management.
- **BlueDiversity (2026).** *Deliverable 2.3.1: Report on the Blue Crab nutritional and chemical properties.* Activity 2.3 – Chemical and biological safety analysis.
- **BlueDiversity (2026).** *Deliverable 2.4.1: Commercial plan for Blue Crab exploitation.* Activity 2.4 – Market segments and branding strategies.
- **BlueDiversity (2026).** *Deliverable 3.1.1: Training modules for Professionals and Students.* WP3 – Blue Education curriculum.
- **BlueDiversity (2026).** *Output 2.2: Blue actions for the protection of biodiversity and sustainable aquaculture.* Consolidated pilot results and Best Practices.
- **Commission Regulation (EU) 2023/915.** *On maximum levels for certain contaminants in food.* European Union legislative standard for food safety.
- **Forleo, M. B., & Romagnoli, A. (2021).** "Marine litter and negative public perception: Socio-economic impacts on Mediterranean tourism." *Marine Pollution Bulletin*, 167.
- **Interreg Italy-Croatia Programme (2026).** *BlueDiversity Project Portal.* Official repository for transnational policy outputs.
- **Regione Veneto (2026).** *BlueDiversity: Shared knowledge and skills to sustain biodiversity.* Italy-Croatia Institutional Web Portal.

- **Shauer, M., et al. (2025).** Investigating invasion patterns of Callinectes sapidus and the relation with research effort and climate change in the Mediterranean Sea. *Scientific Reports*, 15(1).
- **Vadalà, R., & Cicero, N. (2024).** "Blue Bounty: Italy's Dual-Use Solution for Crab Invasion, Nutritional Value, Safety, and Valorization." *Toxics*, 12(7).
- **Vidal, R., et al. (2022).** "Circular economy in the fisheries sector: A review of waste management and value-added products." *Sustainability*, 14(3).