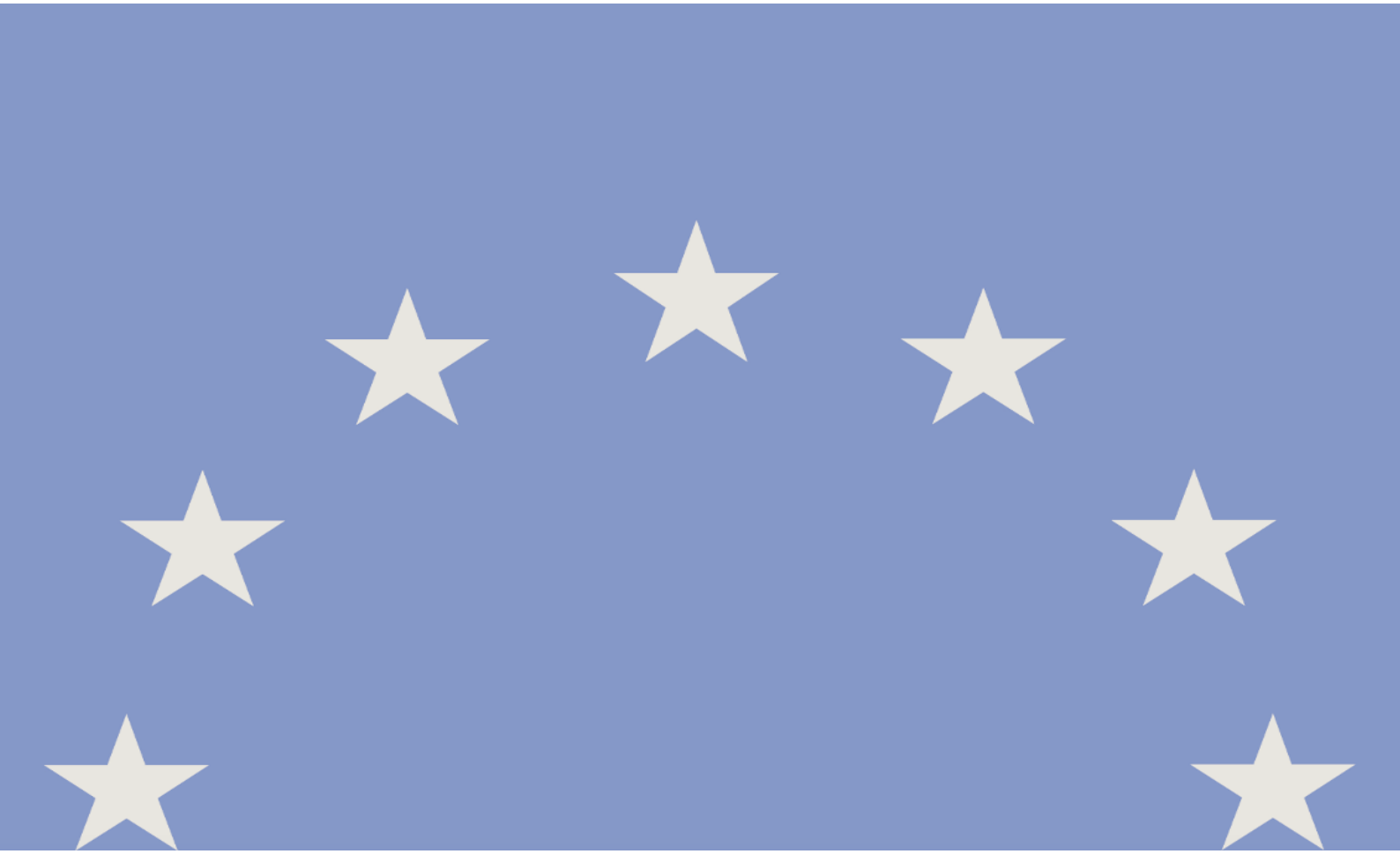
European Commission

European Climate, Infrastructure and Climate Executive Agency - CINEA

Studies in Support to the Implementation of the Mission

Report – Technical assistance to Mission Communities



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Studies in Support to the Implementation of the Mission

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European Climate, Infrastructure and Environment Executive Agency

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Abstract

This report presents the main findings from the feasibility studies conducted under the Horizon Europe Work Programme 2021-2022[1] to support the implementation of the EU Mission: Restore our Ocean and Waters. The contract is managed by the European Climate, Infrastructure and Environment Executive Agency (CINEA). The project delivered Technical Assistance to 34 beneficiaries across 17 countries, including ports, islands, and fisheries communities. Most beneficiaries (76%) were non-governmental organisations, local authorities, and port authorities, complemented by participation from early-stage companies and research institutions. These actors are grouped by target community (ports, fisheries, islands) and geographical basin (Mediterranean Sea, Atlantic-Arctic, Baltic & North Sea, and Danube River and Black Sea basin). Collectively, the projects addressed all three Mission objectives, with a strong emphasis on ecosystem restoration and blue economy innovation[2].

The report provides and overview of the profiles of Technical Assistance beneficiaries, the recurring feasibility barriers, and the types of support measures delivered. Technical Assistance packages were tailored to address five main areas:

- **Economic/financial:** difficulties accessing viable funding, business case development, and navigating complex co-financing structures.
- **Technical/environmental**: low technological maturity, local constraints, and fragmented ecological data.
- **Operational**: internal weaknesses in planning, coordination, and stakeholder engagement.
- **Commercial**: lack of market intelligence and value propositions.
- **Regulatory**: limited understanding of permitting procedures and overlapping administrative competences.

The study documents the distribution of Technical Assistance packages as follows: 26 financial, 23 technical, 19 operational, 18 regulatory, and 15 commercial, often combined to meet specific needs. The report also provides details of the geographic and thematic coverage of the Technical Assistance, the challenges faced by beneficiaries, as well as the concrete support provided to enhance project feasibility.

[1] European Commission (2021). Horizon Europe Work Programme 2021–2022: 1. General Introduction. European Commission Decision C(2021)4200 of 15 June 2021. Available at: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-1-general-introduction_horizon-2021-2022_en.pdf.

[2] European Commission (2025). EU Mission: Restore our Ocean and Waters. Research and Innovation Directorate-General. Available at: https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/restore-our-ocean-and-waters_en.

Executive summary

This report presents the main findings and recommendations from the feasibility studies conducted to support communities of actors to achieve the EU Mission: Restore our Ocean and Waters (the Mission), managed by the European Climate, Infrastructure and Environment Executive Agency (CINEA)[3]. The Technical Assistance provided through this project aimed to empower local actors such as ports, islands, and fisheries communities to advance the Mission's objectives of restoring aquatic ecosystems and biodiversity, preventing pollution, and fostering a carbon-neutral, circular blue economy.

The Technical Assistance was delivered to 34 beneficiaries across 17 countries, representing a mix of ports, islands, and fisheries communities. Most beneficiaries were NGOs, local authorities, and port authorities, with some participation from early-stage companies and research institutions. The projects addressed all three Mission objectives, with a strong focus on ecosystem restoration and blue economy innovation.

The Technical Assistance was tailored to improve the feasibility of the beneficiaries' projects across five main areas:

- **Financial**: Over half of projects ranked financial barriers as their top challenge, including uncertainty around funding options and reliance on grants. Other financial challenges most frequently cited as a barrier included difficulty in preparing investment cases and navigating complex co-financing landscapes.
- **Technical**: Many projects lacked technical expertise and faced challenges with the integration of innovative technologies. Other technical and environmental challenges included low technology readiness, site-specific complexities, and fragmented ecologic data.
- **Operational**: Coordination among stakeholders and capacity building were common challenges.
- **Commercial**: Early-stage projects struggled to develop business models and attract investment. These challenges were often due to limited market engagement and weak communication or outreach efforts.
- **Regulatory**: Unclear regulatory frameworks and complex permitting processes delayed implementation in some cases. Another common regulatory barrier was a lack of internal legal expertise.

A key strength of the Technical Assistance was its adaptability, with solutions carefully tailored to the specific needs of beneficiaries throughout all phases, from inception to closure. This adaptive approach often required adjustments to the original Technical Assistance plans during implementation to ensure relevance and impact. Solutions included the mapping of funding landscapes, business model refinement, feasibility and TRL assessments, stakeholder engagement strategies, regulatory gap analyses, and market research.

As a result of the support provided, beneficiaries' projects demonstrated enhanced feasibility and readiness for implementation. Many are now positioned to deploy solutions with strong potential for replication across different regions and project types, especially those designed

[3] European Climate, Infrastructure and Environment Executive Agency (CINEA). Available at: https://cinea.ec.europa.eu/index_en (Accessed: 24 November 2025).

to be modular and adaptable. However, the replicability depends on factors such as project maturity, local context, data availability, and institutional capacity.

The Technical Assistance delivered under this contract also complemented existing support mechanisms at European, national, and regional levels. It reached stakeholders and project types who might not otherwise have had access to specialised expertise and guidance to strengthen the feasibility and implementation potential of their initiatives.

A central theme emerging from this study is the replicability of solutions developed through the Technical Assistance. Solutions that are modular, well-documented, and supported by clear guidance are more likely to be adopted in new contexts. Successful replication also relies on accessible templates, reliable data, and sufficient institutional capacity. Limitations arise when solutions are highly context-specific, untested, or face complex regulatory barriers.

Key lessons learned from the delivery of the Technical Assistance include:

- Beneficiaries faced similar challenges, while coming from diverse contexts and settings.
- Integrated support and opportunities for peer learning within the Mission network are valuable.
- The most successful Technical Assistance packages involved beneficiaries who were actively engaged in an iterative and collaborative process.
- A participatory approach enabled the Technical Assistance to be closely adapted to local realities.

There was a high variation in the starting point and preparedness of different beneficiaries. Early identification of beneficiary needs and institutional coordination were often greater barriers than technical complexity. Based on these lessons, the report recommends that future Technical Assistance should be designed to be easily replicable and have a long-term impact. Technical Assistance packages should be replicable by design, with modular, well-documented, and accessible solutions to facilitate adaptation. Flexibility in beneficiary selection and enhanced knowledge transfer will be critical to maximise the impact of Technical Assistance and ensure that successful approaches can be scaled across the Mission Ocean and Waters community.

1. Introduction

1.1. Objective of the Study Report

The purpose of this study report is to provide an overview of the Technical Assistance ("TA") provided to Mission communities, analysing and consolidating the findings emerging from the feasibility studies conducted with selected TA beneficiaries from those Communities across the EU's Sea and river basins.

The main objectives of this report are to:

- Summarise the scope, content, and outcomes of the TA delivered to Mission communities - namely **Ports, Islands, and Fisheries communities** - selected through the two cycles of the Calls for Expression of Interest.
- Assess how the TA provided has addressed **financial, technical, regulatory, operational, commercial, and environmental challenges** faced by TA beneficiaries, thereby enhancing the feasibility, design, implementation, and replication potential of their Mission-aligned projects.
- Draw cross-cutting insights and lessons from the feasibility studies to support the implementation of successful approaches and projects as well as assess their potential for replication and scaling-up across other communities and regions.
- Inform future support measures and recommendations for the second phase of deployment and upscaling of the Mission (2026–2030).

In doing so, the report also aims to support the European Commission in monitoring the relevance, quality, and effectiveness of the TA delivered under the Mission framework. It provides a structured synthesis of the feasibility studies conducted during the first phase of the implementation of the Mission (2021–2025), thereby contributing to the overall assessment of the Mission's progress toward its objectives and targets.

1.2. Role of TA feasibility studies in the Mission Ocean and Waters Framework

Within the broader framework of the **EU Mission "Restore our Ocean and Waters by 2030"**, the TA studies represent a key operational instrument for enabling local and regional actors to contribute effectively to the Mission's three specific objectives:

1. **Objective 1**: Protect and restore marine and freshwater ecosystems and biodiversity,
2. **Objective 2**: Preven and eliminate pollution of our ocean, seas and waters
3. **Objective 3**: Making the sustainable blue economy carbon-neutral and circular.

The Mission operates through an integrated, place-based approach centred around **four Lighthouses** – the Atlantic-Arctic, Baltic and North Seas, Mediterranean Sea, and Danube River and Black Sea Basin – and relies on the **mobilisation of communities and actors at local level**. TA plays a pivotal role in this framework by translating Mission objectives into actionable, locally relevant projects.

The TA feasibility studies are designed to help **actors in ports, islands, and fisheries communities translate their ambitions into feasible and impactful initiatives** that align with the Mission's objectives. In doing so, they aim to strengthen the implementation capacity of local and regional stakeholders through tailored expert support covering legal, technical, financial, and operational dimensions. The studies also play a key role in facilitating access to funding and investment by providing feasibility analyses that can underpin applications to EU, national, and regional programmes such as EMFAF, Interreg, LIFE, and ERDF. Beyond individual projects, the **TA promotes coherence and replication by identifying solutions and approaches that can be shared and scaled** across Mission Lighthouse areas and associated regions. Equally important, the TA process enhances community engagement and ownership, reinforcing the Mission's commitment to co-creation and bottom-up implementation.

In this sense, the TA studies constitute a **bridge between policy and practice**. They help ensure that the Mission's ambitions are translated into implementable and investable actions, tailored to local contexts and capable of generating tangible environmental, social, and economic benefits. The cumulative knowledge generated through the feasibility studies and their synthesis in this report is therefore an essential building block of the Mission's first implementation phase, providing evidence to guide the forthcoming **deployment and upscaling phase (2026–2030)**.

Building on the experience of two cycles of Calls for Expression of Interest, this report:

- Provides an analytical overview of the TA provided in Chapter 2, showing how the TA addressed financial, technical, regulatory, operational, commercial, and environmental challenges, enhancing the feasibility, design, implementation, and replication potential of Mission-aligned projects.
- Draws cross-cutting insights and lessons from the feasibility studies to inform the implementation of successful approaches and assess their potential for replication and scaling-up across other communities and regions in Chapter 3.
- Provides recommendations to inform future support measures under the second phase of deployment and upscaling of the Mission (2026–2030) in Chapter 4.

2. Overview of Technical Assistance provided

2.1. Technical Assistance process overview

2.1.1. Selection of Applicants

The call for Expressions of Interest (EoI), launched in two phases, targeted three Mission communities**, ports, islands and fisheries** - inviting them to submit proposals for TA to support their projects aimed at advancing the Mission's objectives.

The selection process of applicants for TA was based on a structured, multi-step evaluation framework designed jointly with the Mission Secretariat to guarantee impartiality and methodological consistency. An initial **eligibility check** verified that all applications complied with the formal requirements of the Call, including completeness of the form, adherence to the Mission Charter, and appropriate targeting of one of the three communities of actors (ports, islands or fisheries). Applicants with unclear eligibility were contacted for clarification, resulting in a total of 95 eligible applications over two cycles for evaluation and five exclusions.

Each eligible application was assigned to **two independent evaluators**, selected considering relevant expertise and language skills. Evaluators received detailed guidance, templates, and a preparatory webinar to ensure consistency in scoring and interpretation.

Applications were assessed against the following weighted criteria:

Table 1 - Assessment criteria

Criterion	Description	Weight
Project description	Specificity, clarity, and achievability of objectives; identification of replicability and scalability opportunities	15%
Understanding and contribution to Mission objectives	Alignment with Mission Ocean & Waters objectives and related EU policy synergies	25%
Project feasibility	Financial and operational soundness; identification of resources and barriers	30%
Relevance and added value of TA	Appropriateness of the requested TA and its contribution to project outcomes	30%

Each evaluator provided individual scores and qualitative justifications. A **completeness and coherence check** followed to ensure scoring consistency across applications. Following scoring, internal workshops (June 2024 for Cycle 1; January 2025 for Cycle 2) examined ranking results and strategic coverage. Both cycles applied a **mixed selection model** combining merit-based ranking with considerations of geographic and thematic balance, also **limiting the total number of beneficiaries per Member State to three**. Final shortlists were validated by the European Commission (in June 2024 and February 2025 for cycle 1 and cycle 2 respectively).

From 95 applications received over two cycles, 37 were selected for TA by the Mission Secretariat. Three projects were subsequently discontinued, resulting in **34 beneficiaries from 17 countries** ultimately receiving TA support - **19 in Cycle 1** and **15 in Cycle 2**. Out of the discontinued projects two beneficiaries withdrew during the inception phase due to insufficient support from local key stakeholders, while one beneficiary withdrew during the notification phase as a result of the sudden unavailability of essential equipment.

Figure 1 - Awardees of Cycle 1 at Mission Forum 2025

2.1.2. Technical Assistance process

The TA process constitutes the core implementation phase following the evaluation and selection of applicants under the Calls for Expressions of Interest (EOI). It provides tailored, expert support to successful beneficiaries of the EU Mission *Restore our Ocean and Waters by 2030* to strengthen the feasibility, impact, and investment-readiness of their project concepts.

The process is **structured, iterative, and demand-driven**, ensuring each project receives the type and intensity of assistance corresponding to its needs, capacity, and maturity. The TA model is intentionally flexible to accommodate **diverse needs, capacities, and interests** across the three Mission communities of actors. The type and scope of support depend on:

- **Needs**: Ranging from highly specific technical or regulatory advice to broader strategic guidance.

- **Capacity**: Adjusted according to project maturity, organisational resources, and prior experience.
- **Interest and availability**: Recognising varying levels of engagement and ambition among beneficiaries.

This flexibility allows the design of distinct "**TA journeys**", ranging from light-touch advisory support to full-scale feasibility studies.

Technical Assistance Implementation

Once the evaluation and selection phases were completed and the successful applicants formally notified, the TA phase was launched. This stage began with a **"handshake meeting"** - an initial coordination session bringing together the TA team, the beneficiary, and representatives of the Mission Secretariat. The meeting served to establish a shared understanding of the project concept, objectives, and expected outcomes, and to define the overall framework for collaboration.

During the handshake meeting, the scope of the TA was clarified and adjusted to the specific context and maturity of the beneficiary's project. Deliverables, milestones, and the indicative timetable were jointly agreed, forming the **basis for the tailored TA package.** This ensured that each beneficiary received the most relevant mix of services in line with its identified needs, available capacity, and level of readiness.

Each TA assignment started with the preparation of a **draft TA Plan**, which detailed the objectives, methodological approach, and division of responsibilities between the TA providers and the beneficiary. Once validated, the plan guided the mobilisation of a multidisciplinary team of experts drawn from relevant technical, financial, regulatory, and operational fields.

Over the course of implementation, the TA teams carried out a combination of targeted support activities. Where relevant, **study visits and peer-to-peer exchanges** were organised to facilitate learning from comparable projects and promote transfer of good practices across the Mission's communities of actors.

Each TA package culminates in a **feasibility study** consolidating the main findings, analyses, and recommendations emerging from the support process, while also assessing the justification and viability of the project concept. The studies cover a comprehensive range of aspects of services provided, spanning across TA packages of **regulatory, technical, economic/financial, operational, and commercial** assistance.

The outcomes enable beneficiaries to validate or refine their project concept, strengthen technical and business planning, identify investment opportunities and potential partners, and **make evidence-informed decisions on how to advance their projects**; and improve alignment of their projects with Mission Objectives and European Green Deal objectives. Finally, the results are jointly reviewed and validated with the beneficiary, and the feasibility study is formally signed off, marking the completion of the TA package.

The process concludes with the **closure and feedback stage**, during which the final feasibility reports are submitted to both the beneficiary and CINEA. In addition, beneficiaries are invited to provide **follow-up feedback within six months from the completion of their TA**, allowing the consortium and the Mission Secretariat to capture outcomes, lessons learned, and any further capacity-building needs identified in the course of implementation.

2.2. Descriptive statistics

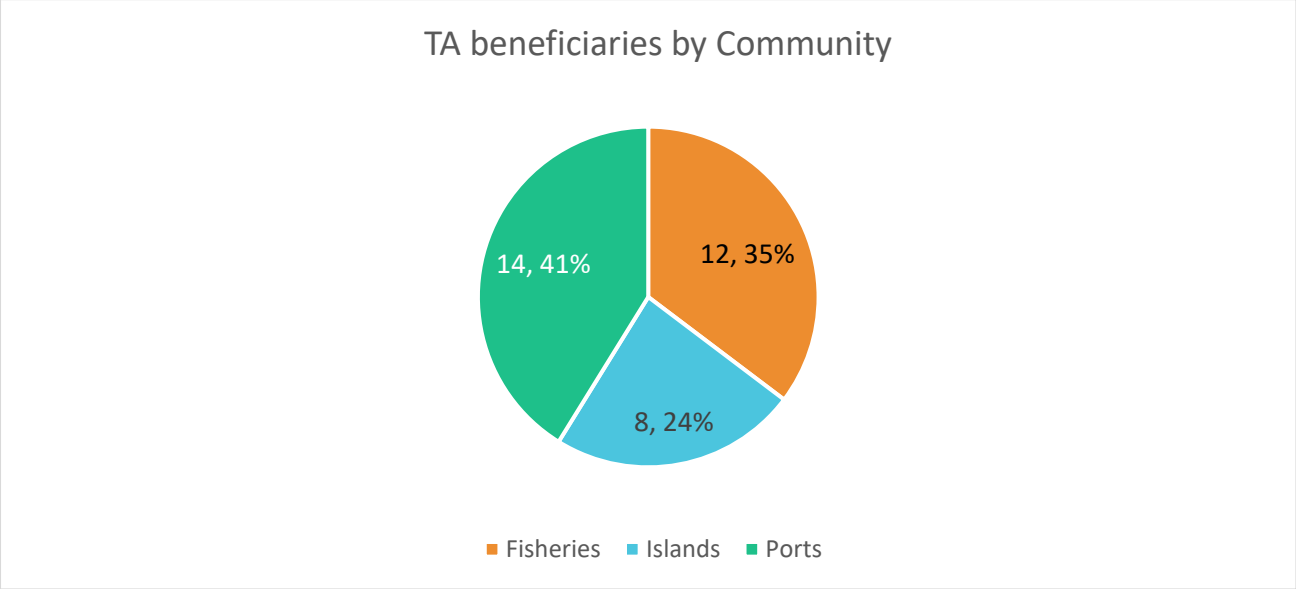
This section presents **quantitative insights into the TA delivered**, covering the numbers and representation figures of Mission target communities, geographical distribution by lighthouse basin, types of organisations supported, Mission objectives addressed, and key challenges identified by beneficiaries at the application stage. It also summarises the TA packages provided, their volume, their distribution by actors supported, and the main thematic areas covered in them.

Chapter 3 offers a more qualitative analysis of the TA support delivered – identifying solutions for each type of TA package, their potential for replication, and key considerations for ensuring the solutions can be adapted and replicated.

2.2.1.1. General overview of TA beneficiaries

In terms of Community of Actors representation among the TA beneficiaries, most of the TA beneficiaries represent a Port community (41%, 14 beneficiaries), following by Fisheries with 12 beneficiaries (35%) and 8 (24%) beneficiaries as part of the Islands Community.

Figure 2 - TA beneficiaries by Community



The distribution of TA beneficiaries by basin indicates a clear predominance in the **Mediterranean Sea**, which accounts for **13 beneficiaries (38%)**. The **Baltic and North Seas** and the **Atlantic–Arctic basin** also feature prominently, with **9** (26%) and **7** (21%) **beneficiaries** respectively, reflecting relatively balanced participation across northern and western marine regions. In contrast, the **Danube River basin** is less represented, with only **4 beneficiaries** (12%). The **cross-basin** category (3%) includes an organisation leading a **Europe-wide scope** project focused on the restoration and strengthening of salmonid fish stocks across Europe.

Figure 3 - Types of activities performed by beneficiaries by Community of Actors

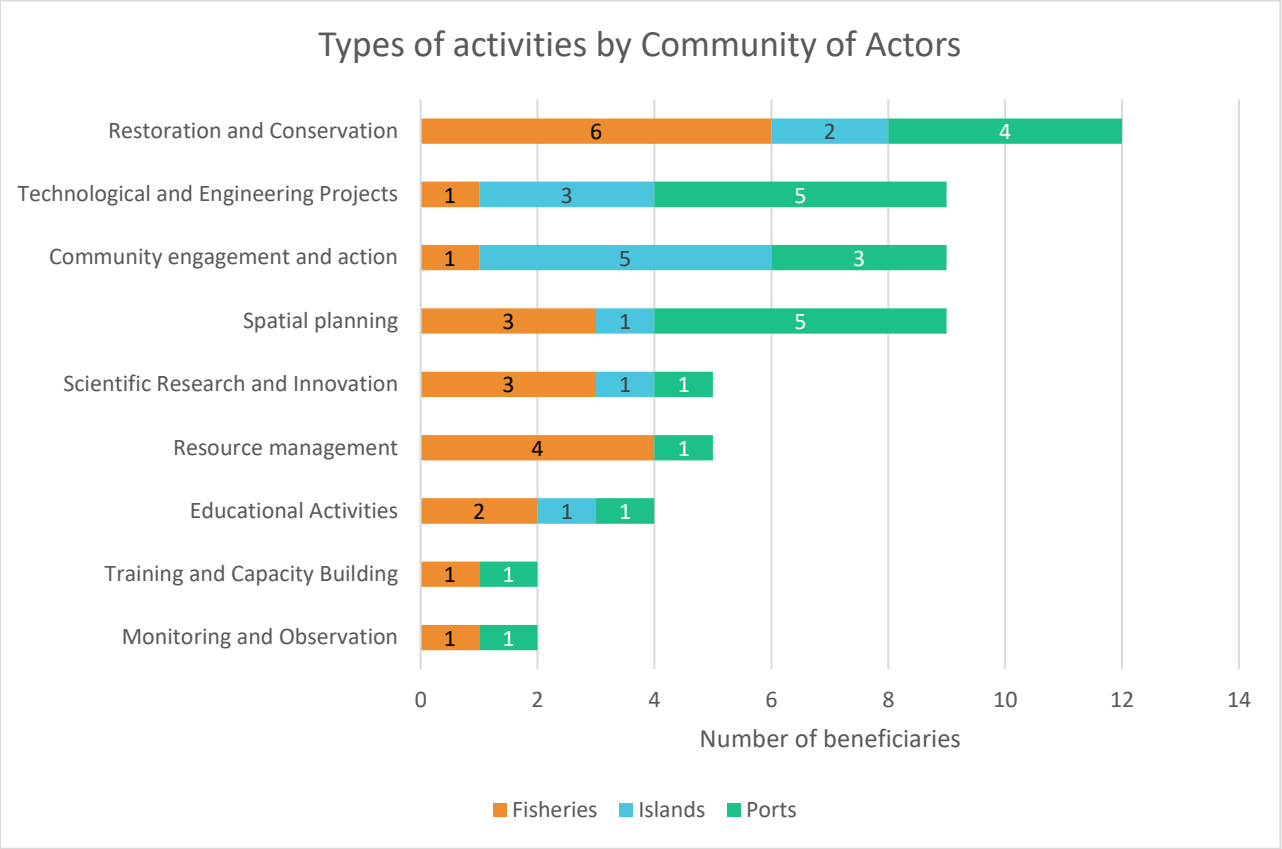
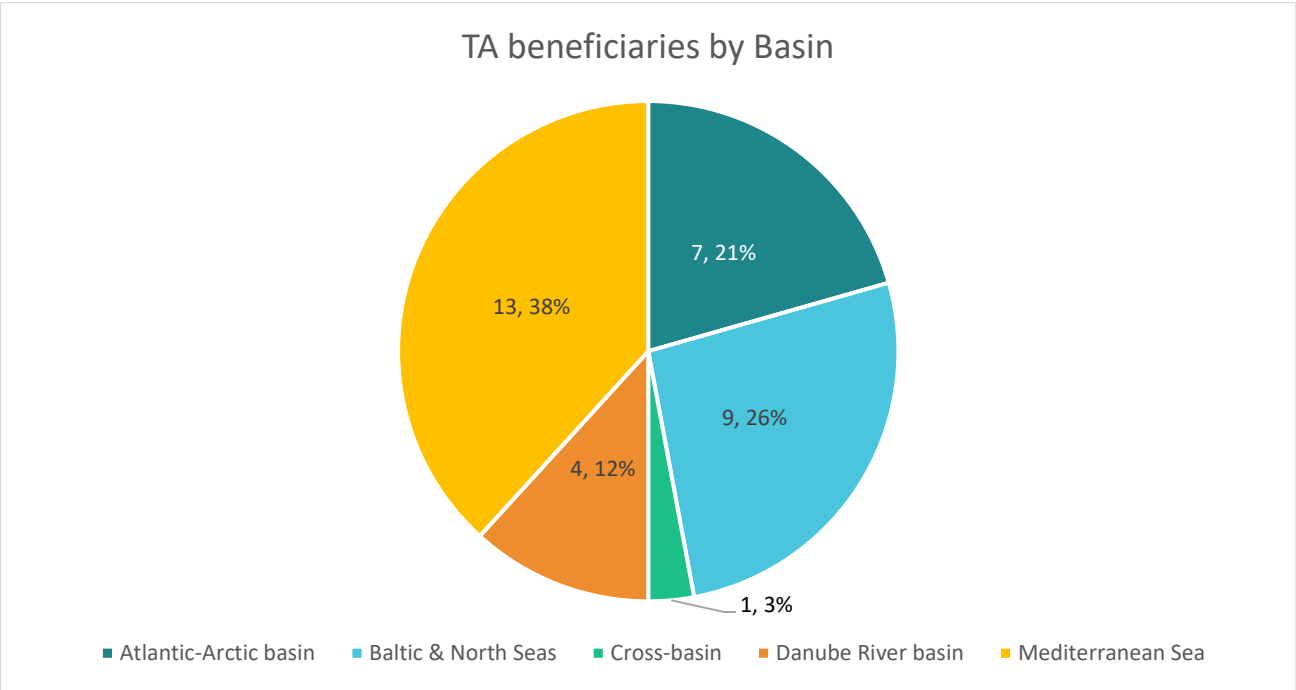


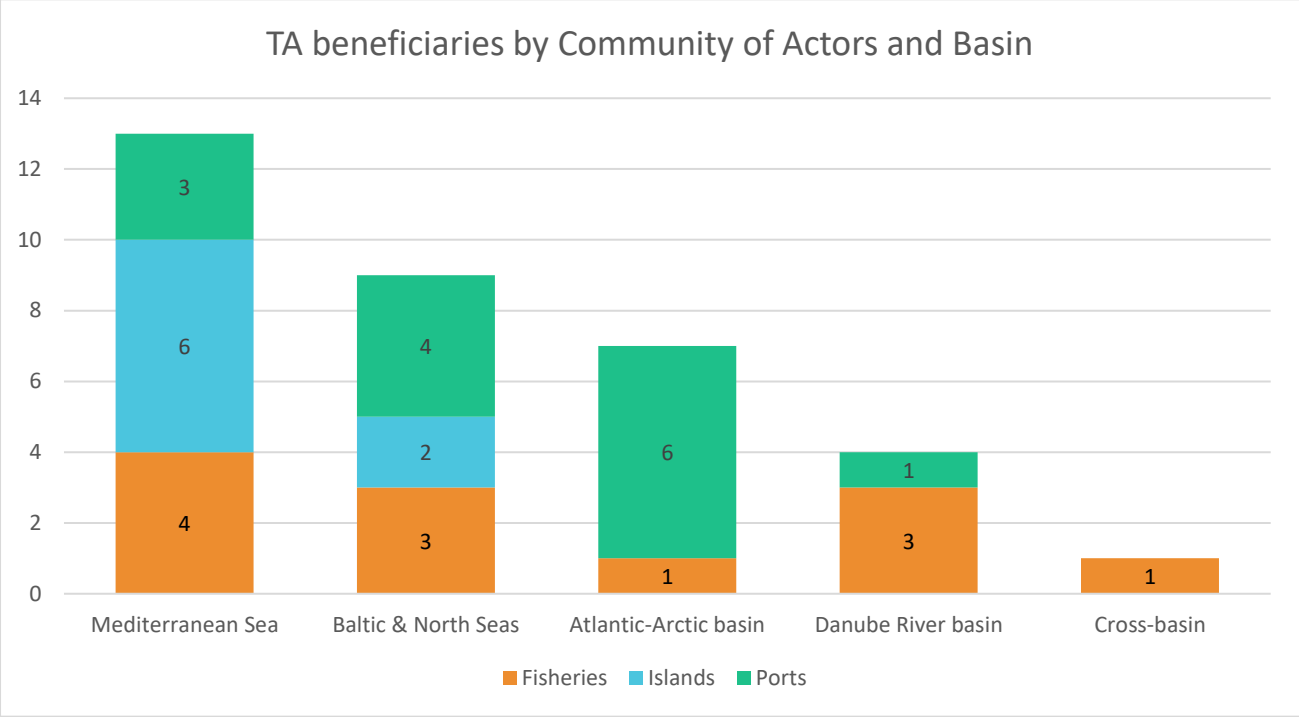
Figure 4 - TA beneficiaries by Basin



In terms of representation by basin, **Ports and Fisheries Communities** are well represented across all five marine basins. In contrast, more than **75% of Island actors** are located in the **Mediterranean basin**, with only two originating from the **Baltic and North Sea basin**. The

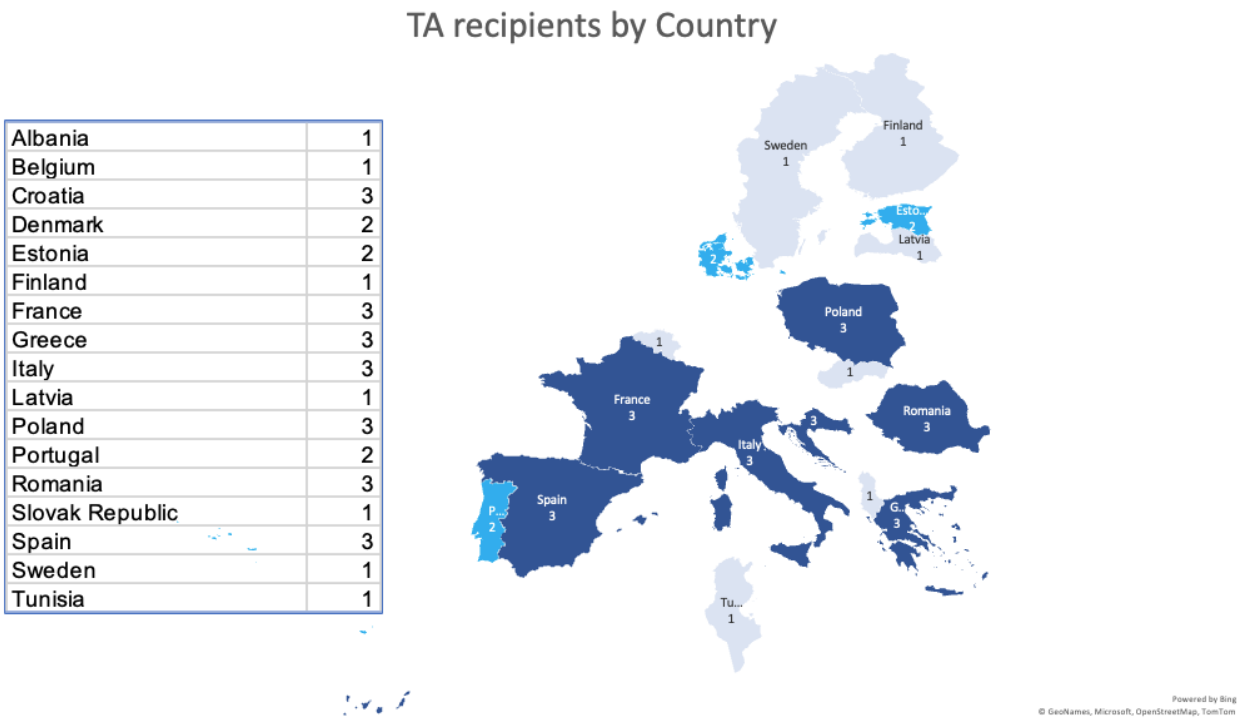
absence of island representation in the **Danube River basin** is expected, given the limited number of islands along this river system. However, no island actors from the **Atlantic-Arctic basin** were among the TA beneficiaries either. It is also noteworthy that, while the **Mediterranean basin** accounts for the largest share of both **Islands** and **Fisheries** beneficiaries, this pattern does not hold for **Ports**. Most Port beneficiaries are, in fact, based in the **Atlantic-Arctic basin**.

Figure 5 - TA beneficiaries by Community of Actors and Basin



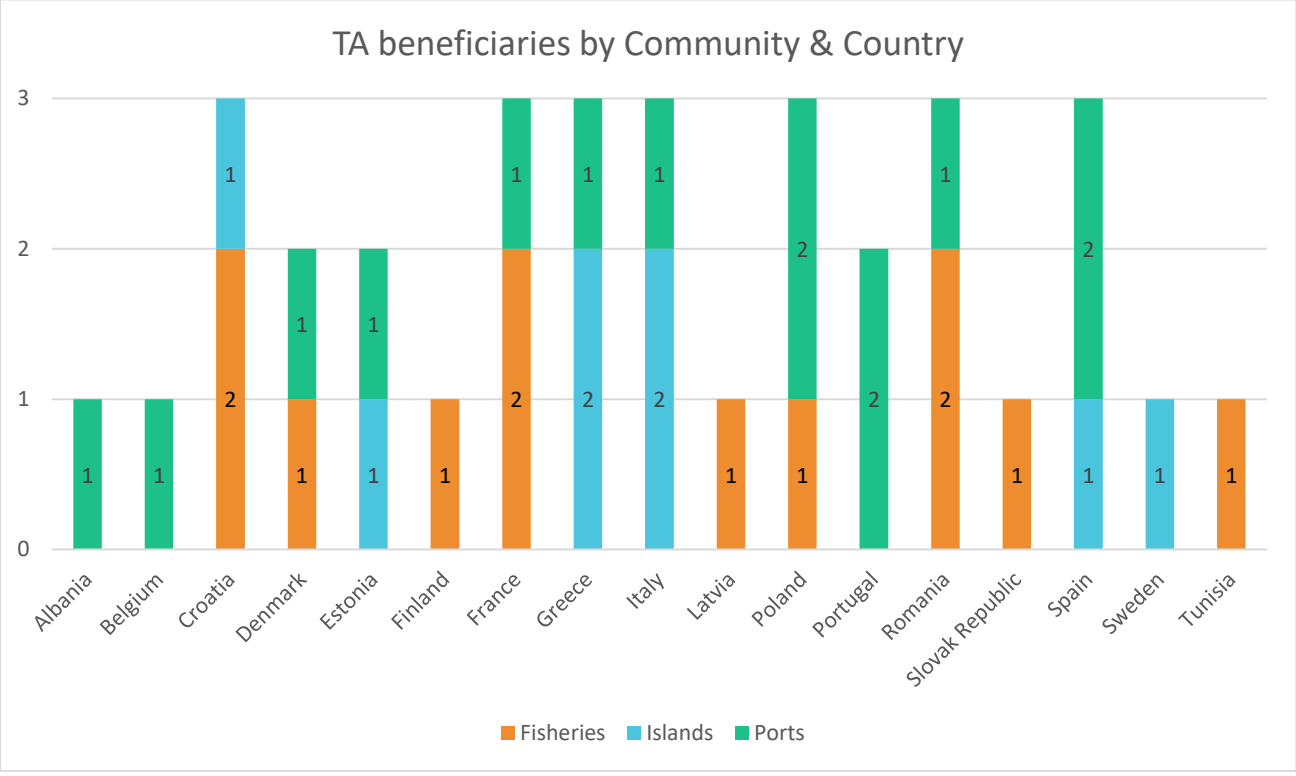
In terms of country representation, the seven countries with the highest participation, each represented by three beneficiaries, account for **62% of all beneficiaries**. Reflecting the overall distribution by basins, most of these highly involved countries border the **Mediterranean Sea** (Spain, France, Italy, Croatia, and Greece). Except for the **Danube Basin**, project participation within each basin is relatively evenly distributed among several countries. In the Danube Basin, however, **Romania** stands out, accounting for three of the four TA cases provided in that region.

Figure 6 - TA beneficiaries by Country



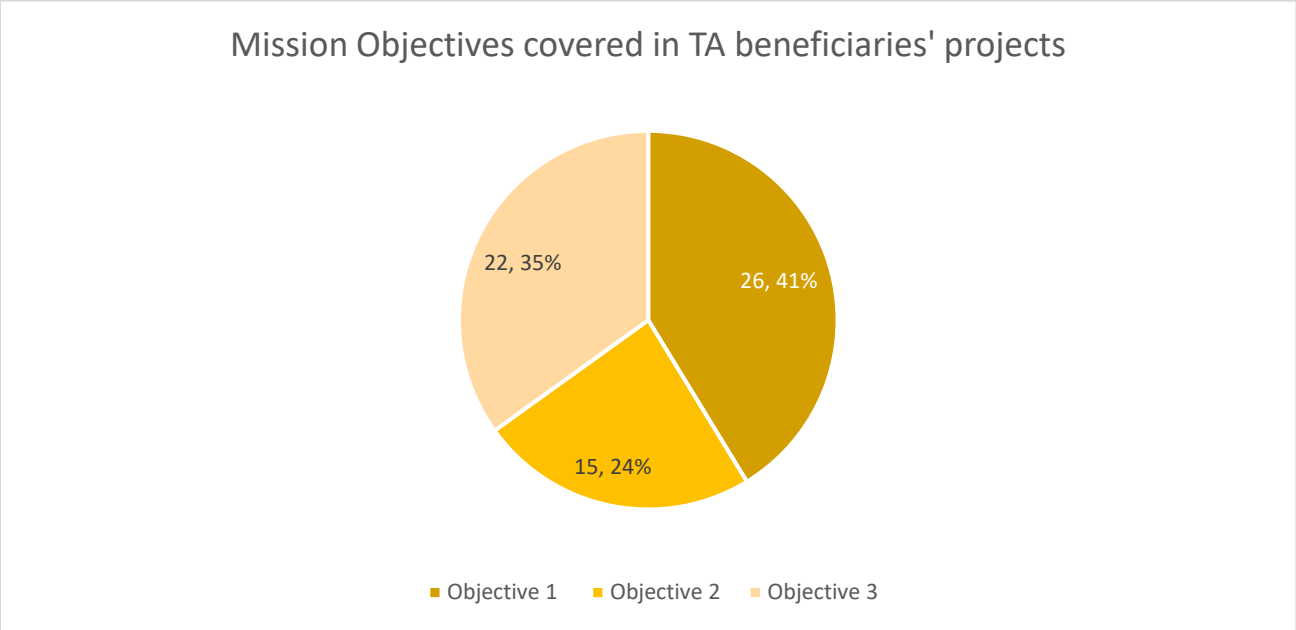
It is interesting to note that there is no country in which all three Communities of Actors are represented. **Ports** are the most widely distributed community, with beneficiaries present in **11 of the 17 participating countries**, followed by **Fisheries**, represented in **9 countries**.

Figure 7 - TA beneficiaries by Community and Country



In terms of Mission Objectives - and keeping in mind that each project may contribute to more than one - the distribution shows that most projects (**26, 41%)** address challenges related to **Mission Objective 1**. **22 projects** (35%) contribute to **Mission Objective 3** and **15 projects** (24%) to **Mission Objective 2**.

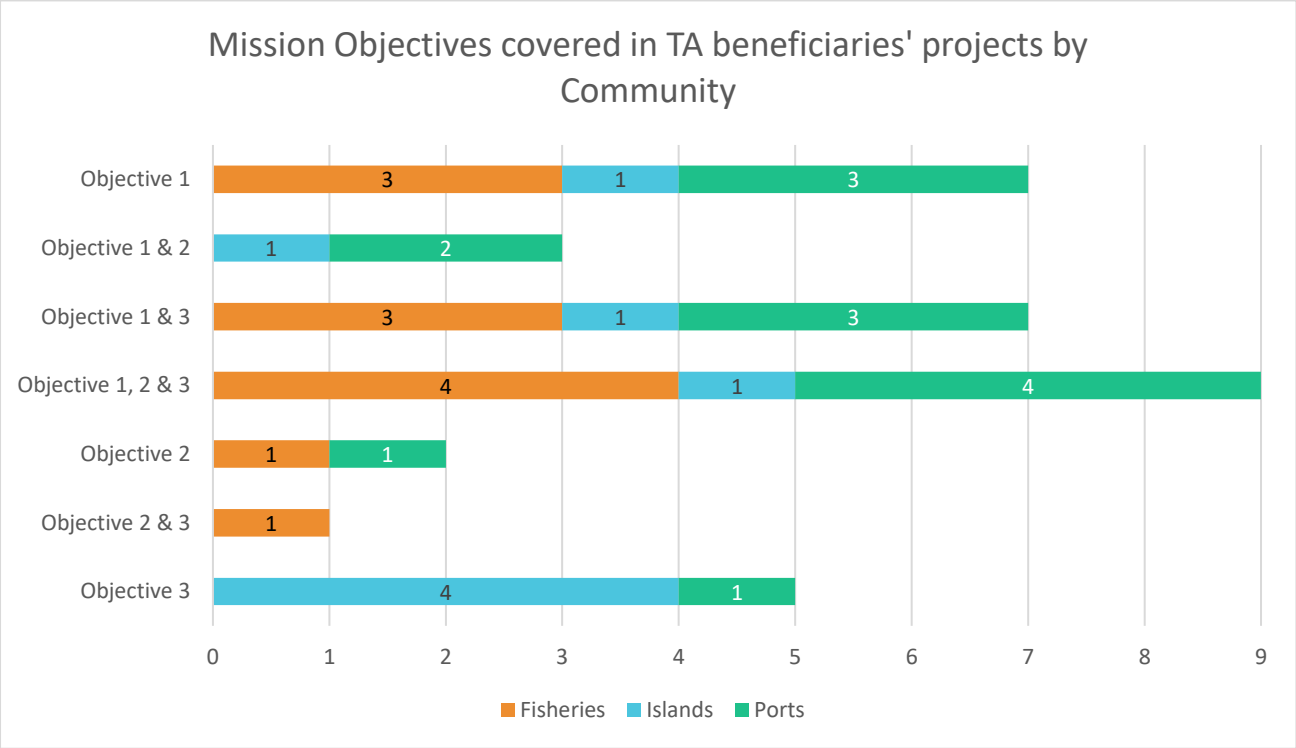
Figure 8 - Mission Objectives coverage in TA beneficiaries' projects



In terms of how the Mission Objectives are bundled within projects, it is interesting to note that most initiatives address more than one objective, and approximately one quarter target all three:

- **Objectives 1 and 3** are frequently pursued together, appearing jointly in **seven projects** (20%).
- Overall, **Objective 1** - protecting and restoring biodiversity - is the most common focus, featured either alone or in combination in **26 projects** (70%).
- **14 projects** (41%) concentrate on a single Mission Objective, most commonly **Objective 1** (20.5%, seven projects), followed by **Objective 3** (15%, five projects) and **Objective 2** (6%, two projects).
- Notably, island-led projects exhibit the most concentrated thematic focus, with half addressing exclusively **Objective 3**, related to carbon neutrality and circularity.

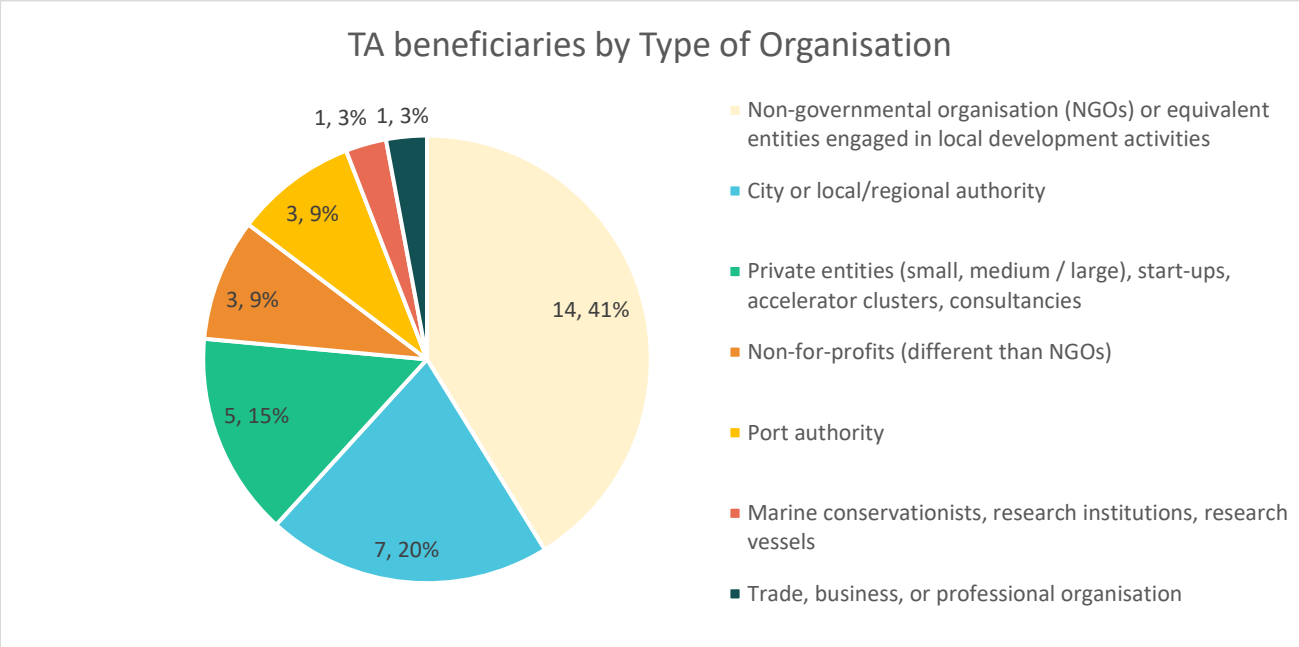
Figure 9 - Mission Objectives coverage in TA beneficiaries' projects by Community



Within each Community of Actors (Ports, Islands and Fisheries) different type of organisations took a leading role in the beneficiary projects. The **analysis of the organisations leading the projects** shows that:

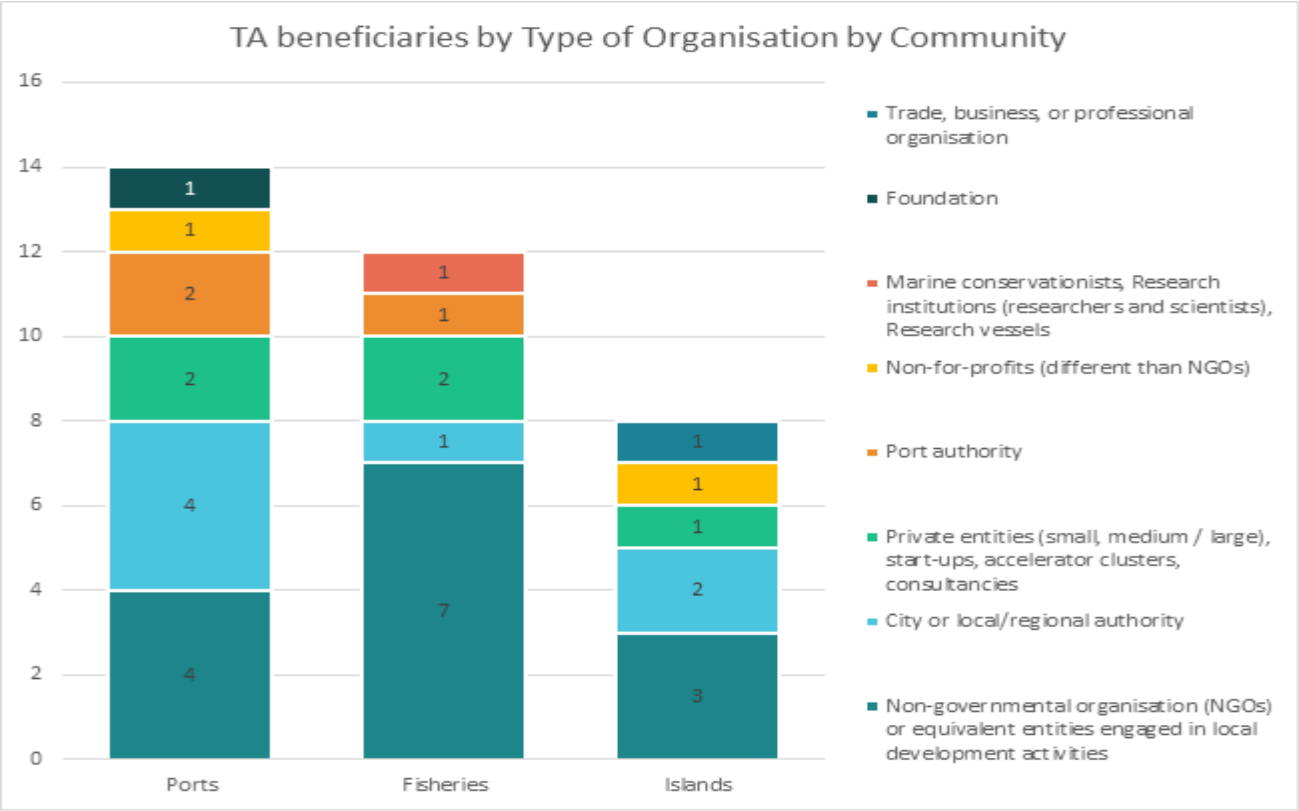
- 76% are coordinated by non-governmental organisations (NGOs), local or regional authorities, or private entities.
- NGOs are by far the most common lead entities, coordinating 14 projects, (41%) followed by cities and local or regional authorities with 7 projects (20.5%), and port authorities with 3 projects (9%).
- Five projects (15%) are led by private entities, start-ups, or consultancies, while research and conservation institutions and business or professional organisations play a more limited role in leadership positions.

Figure 10 - TA beneficiaries by type of organisation



A closer look at the data shows that within the **Ports** and **Islands Communities**, projects are fairly evenly distributed across different types of lead organisations. In contrast, within the **Fisheries Community**, **non-governmental organisations (NGOs)** clearly dominate, leading **60%** of the projects. Notably, none of the island projects are led by port authorities.

Figure 11 - TA beneficiaries by type of organisation by community

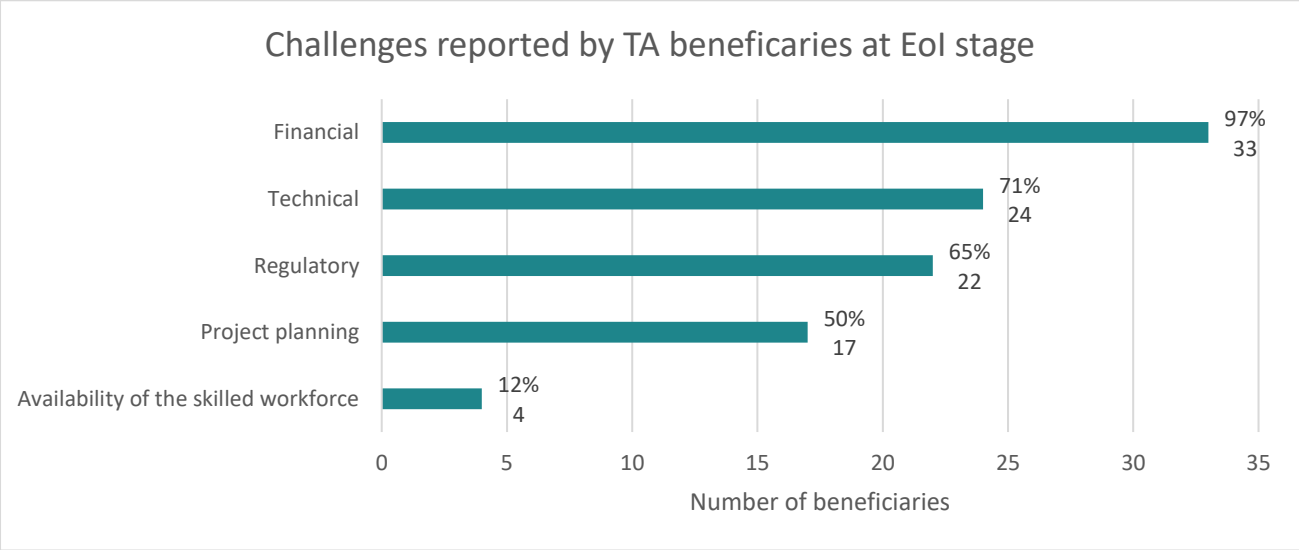


Looking at the types of activities representing the focus of the projects, the predominance of Restoration and Conservation activities (12, 50% of beneficiaries) is in line with the high contribution of beneficiaries to Objective 1 of the Mission. Looking at specific communities, **Islands** focus on **Community engagement**, while **Ports** mostly engage in **Technological** and **engineering** projects and **Spatial planning**. **Fisheries** are mostly involved in **Restoration** and **Conservation** activities.

2.2.1.2. General overview of challenges reported by TA beneficiaries

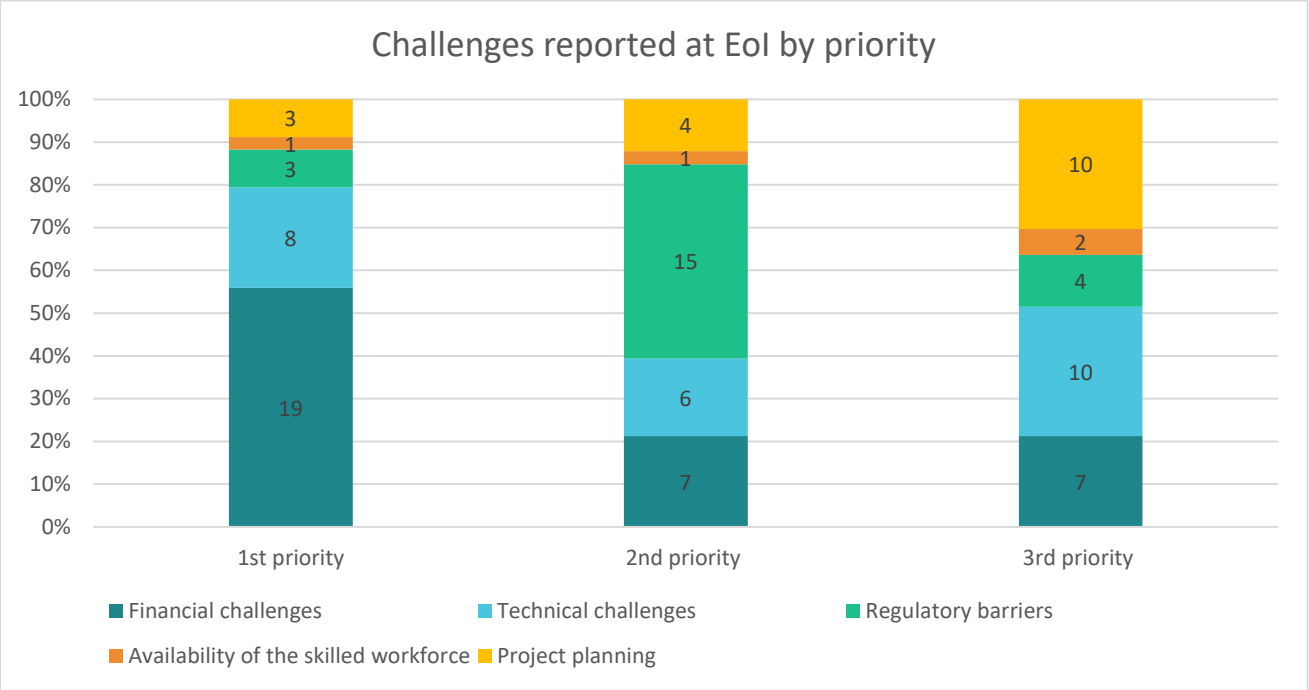
At the Expression of Interest (EoI) stage, all beneficiary except one identified a **financial challenge** in their project**. Technical challenges (24 projects)** and **regulatory barriers** (**22 projects**) were also identified by the majority of projects**. Project planning** represented was considered problematic by **17 projects,** while few beneficiaries mentioned **availability of skilled workforce** (**4 projects**).

Figure 12 - Challenges reported by TA beneficiaries at EoI stage



When reporting their challenges at the **Expression of Interest (EoI)** stage, TA beneficiaries were asked to rank them by priority (i.e., from the most to the least pressing). As shown in the figure below, **financial challenges** were the most frequently cited overall, as well as the most common **first-priority issue**, identified as such by **55% of projects**. **Regulatory barriers** were most often cited as a **second-priority challenge (44% of projects). Technical barriers** were also frequently mentioned, although their prioritisation varied across projects. While **financial** and **regulatory** challenges dominated the first and second priority rankings, projects displayed greater diversity in identifying their **third-priority** concerns. Overall, only a small number of projects mentioned the **availability of skilled labour** as a significant constraint.

Figure 13 - Challenges reported at EoI by priority (labels are absolute values)

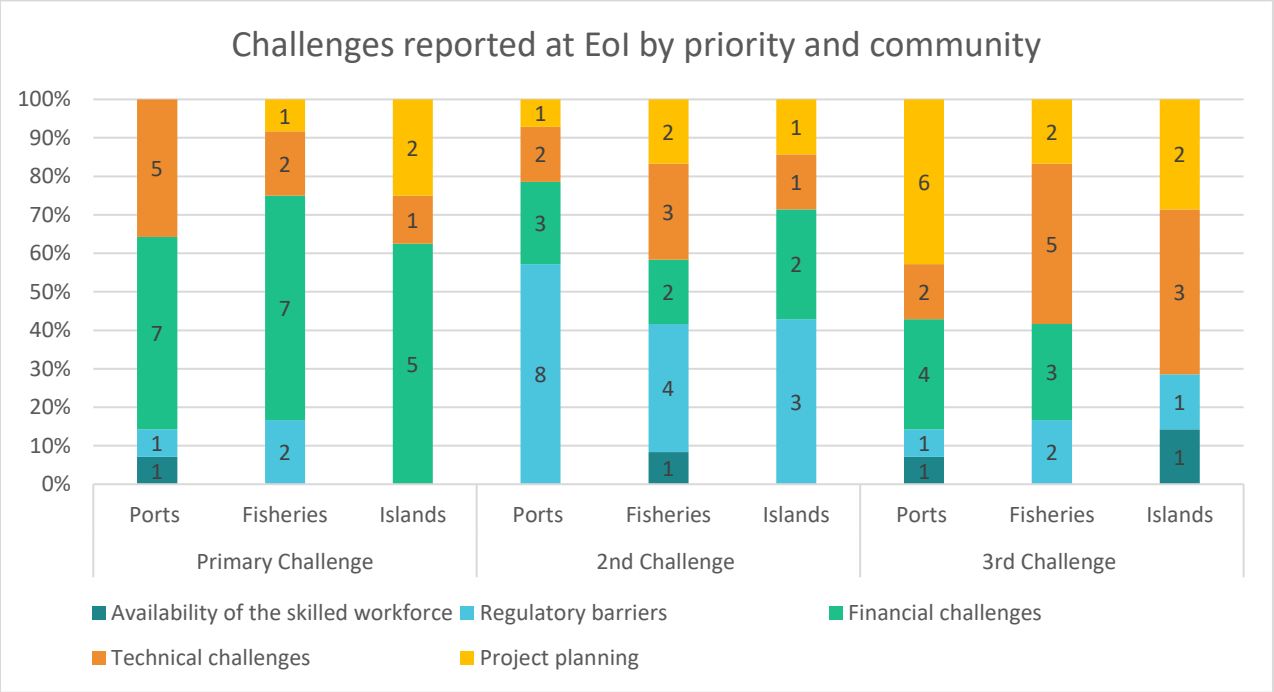


In terms of their distribution by Communities of Actors, **Financial challenges** were recognised as the top constraint by most projects, regardless of the Community of Actors. The financial challenge is closely linked to the limited maturity of the projects, many of which lack a fully developed business case. As several initiatives are led or supported by NGOs, accessing funding remains particularly difficult. This issue reflects a broader challenge within the blue economy, where a significant financing gap persists.

For **Ports**, however, **technical challenges** also frequently rank as a first-priority issue. Regarding second-priority challenges, the predominance of **regulatory barriers** in this category is largely driven by responses from port actors. In other words, ports consistently rank regulatory issues as their **second priority** more often than other communities. Similarly, the predominance of **project planning** barriers in the **third priority category** is driven by **Port** projects, whereas the other two communities primarily identify technical challenges within this category.

Aside from this outlier, **second- and third-priority challenges** are relatively evenly distributed across the different Communities of Actors.

Figure 14 - Challenges reported at EoI stage by priority and community



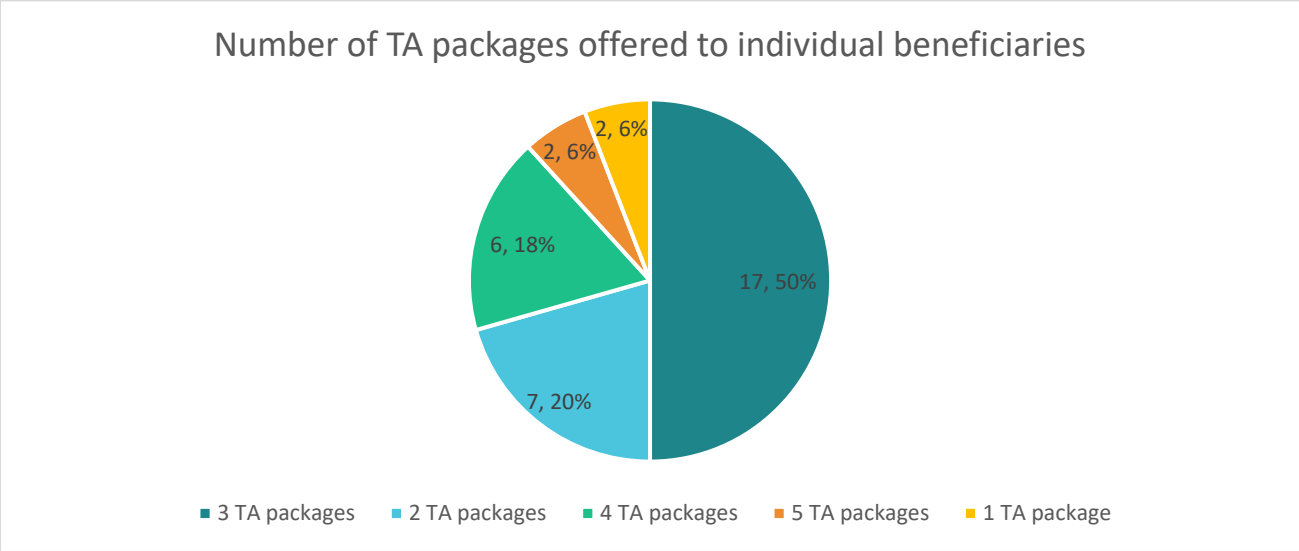
2.2.1.3. General overview of TA packages offered to beneficiaries

While TA beneficiaries could select up to three types of TA packages at the **Expression of Interest (EoI)** stage - from among **Technical, Operational, Financial/Economic, Regulatory,** and **Commercial** - the final TA packages were defined after a detailed assessment of their specific challenges and needs. These were then agreed upon during the TA planning stage and formalised in the **TA Plans**, which were countersigned by both the TA beneficiaries and the TA providers.

It is important to note that several **beneficiaries only became aware of certain challenges** during the first iteration of the process and through more in-depth project assessments, which led to the tailoring of the TA packages offer at the planning phase rather than responding directly to their TA preference indicated at the EoI stage.

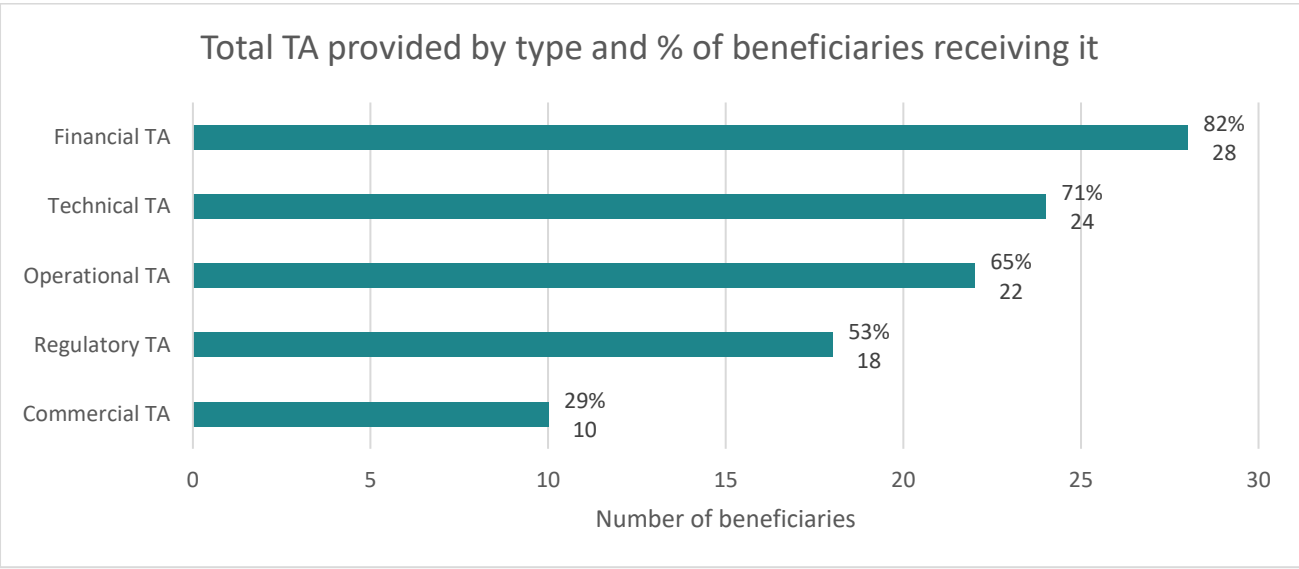
Exactly **half of the beneficiaries** ultimately received **three TA packages**, representing three distinct types of support from the thematic areas of the packages offered – technical, economic and financial, regulatory, operational and commercial.

Figure 15 - Number of TA packages offered to individual beneficiaries



Across all projects, **financial** and **technical TA packages** were the most frequently assigned types of TA, provided respectively to **82%** and **71%** of beneficiaries. Both **operational assistance** was provided to roughly **65%** of beneficiaries, followed by **regulatory assistance** received by 53% of beneficiaries. **Commercial assistance** was the least common, assigned in **29%** of cases. The relatively even distribution across types suggests that the TA portfolio addressed a broad and balanced range of beneficiary needs.

Figure 16 - Total TA packages provided by type



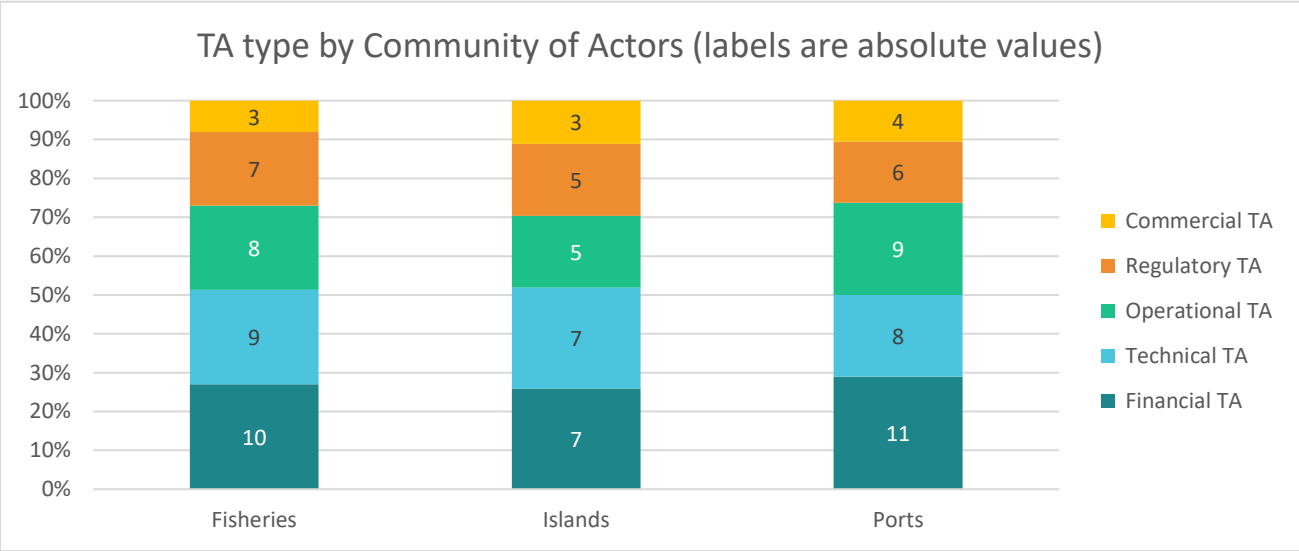
In terms of how TA was packaged for beneficiaries, the analysis of recurring combinations shows that **financial assistance** was most frequently paired with **technical (18 times)**, **operational (17 times) and regulatory (16 times) assistance**. It was combined with **commercial assistance** less often (**10 times**). The most common pairing **not involving financial assistance** were between **technical** and **operational** (**13 times)** and **technical** and **regulatory** (**12 times**) assistance. **Regulatory assistance** was also frequently combined with both **operational** support (**11 times**).

Table 2 - TA combination frequency in packages

	Financial	Technical	Commercial	Regulatory	Operational
Financial	x				
Technical	18	x			
Commercial	10	6	x		
Regulatory	16	12	5	x	
Operational	17	13	5	11	x

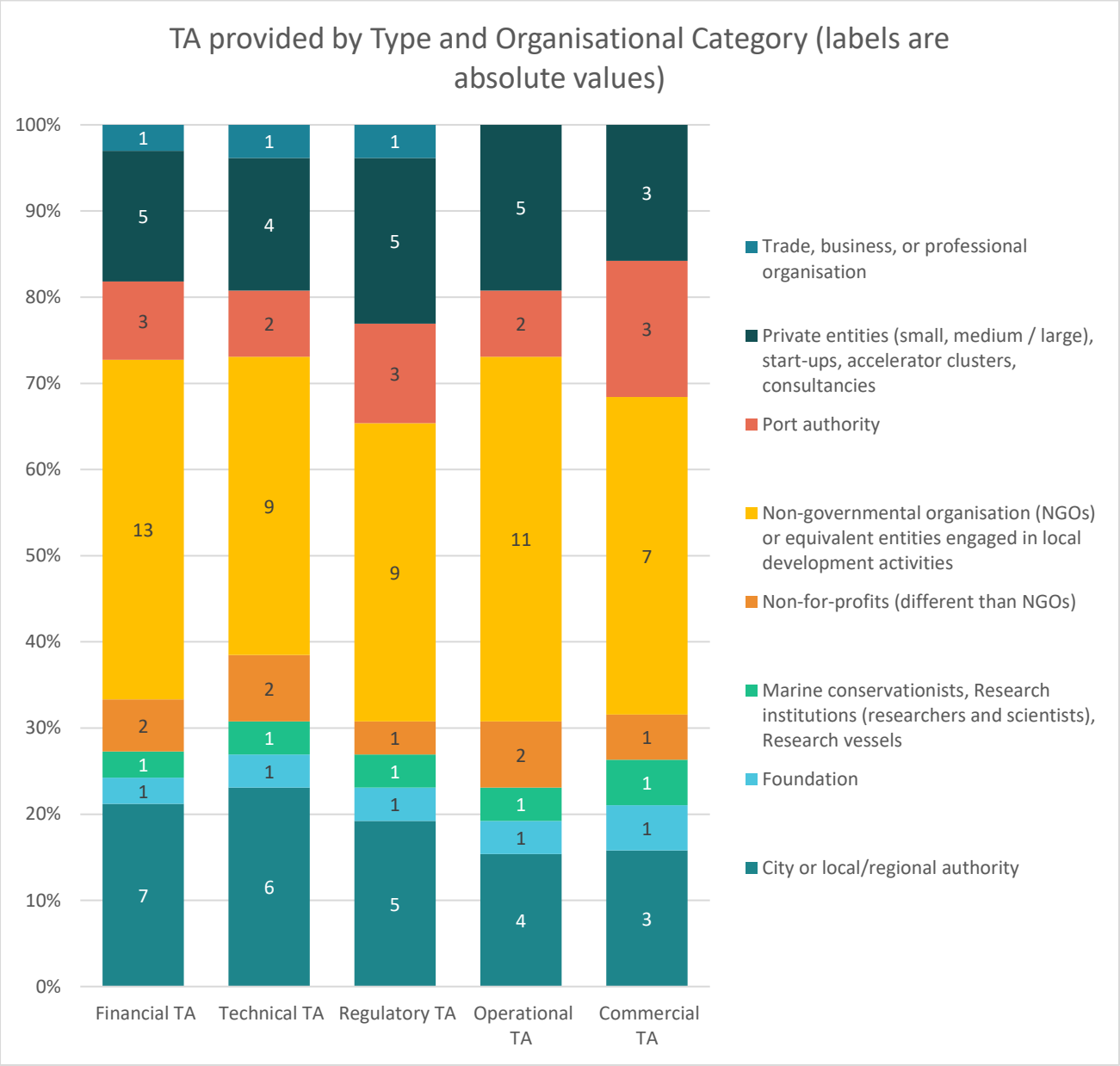
The distribution of TA types across the Communities of Actors is very similar. **Ports** rely slightly more on **Financial** and **Operational** TAs and less on Commercial compared to the other two CoA. **Islands** display the most **balanced** distribution across all TA types. Overall, **financial** and **technical TA** emerge as the most recurrent forms of support across all communities.

Figure 17 - TA type by Community of Actors



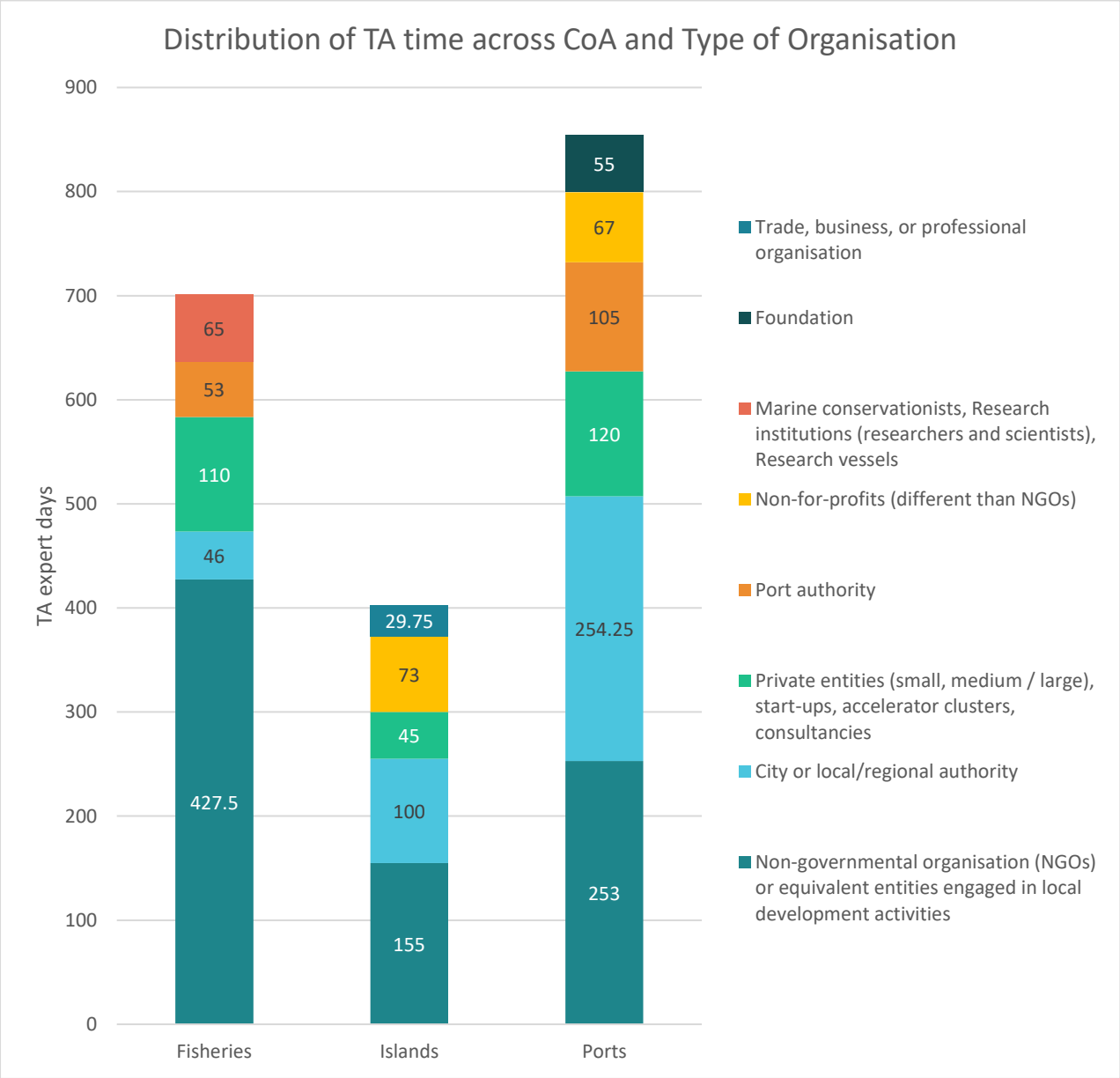
The distribution of TA types by organisational category highlights the central role of **non-governmental organisations (NGOs)** across all types of assistance packages. **Cities** and **local or regional authorities** also feature prominently, particularly in relation to **financial**, **technical**, and **regulatory** support. **Port authorities** were the predominant recipients of **technical** and **commercial assistance**, while **trade, business and professional organisations**, as well as **conservation and research institutes**, are less represented overall.

Figure 18 - TA provided by Type and organisational category



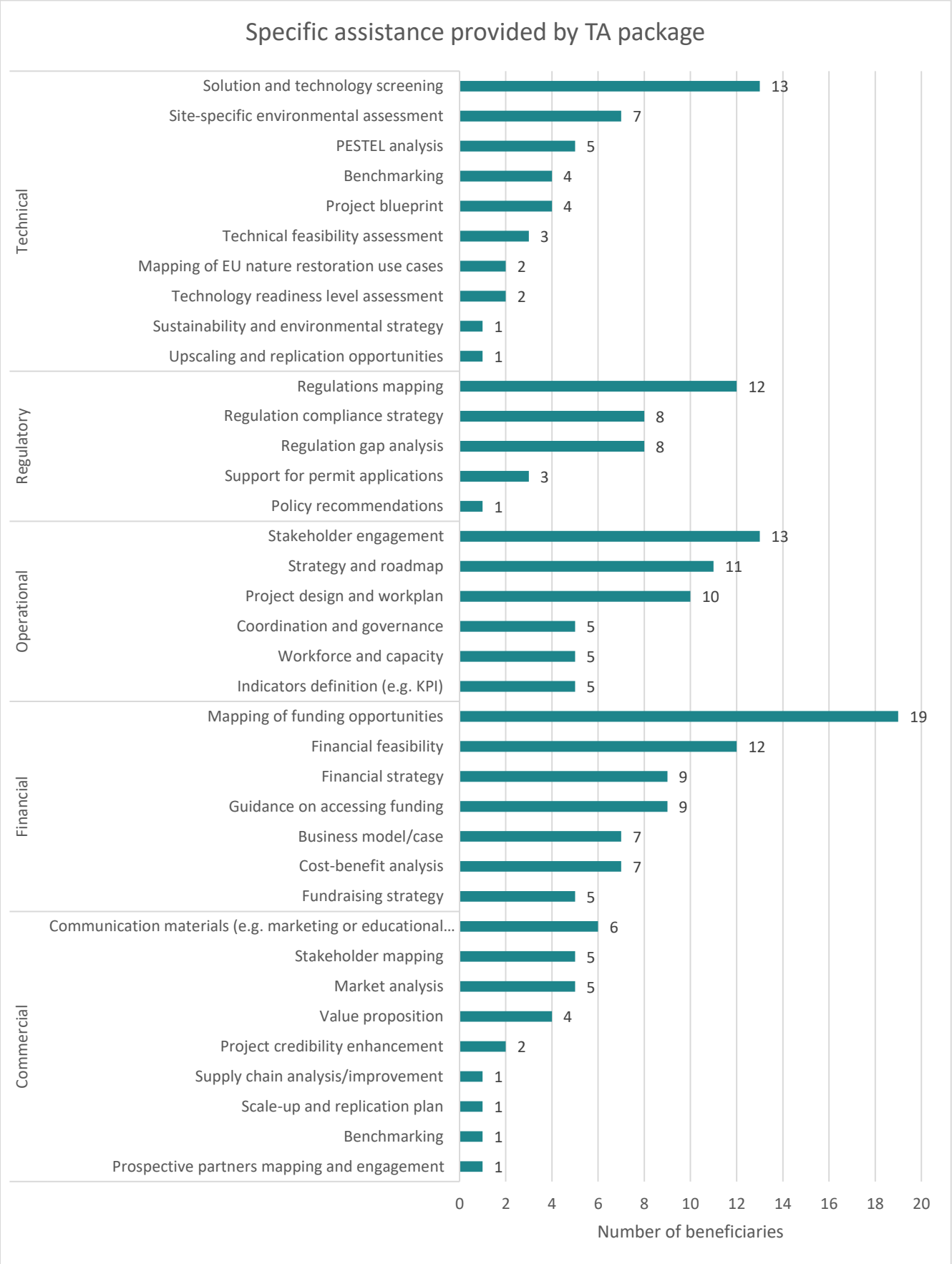
The distribution of TA in terms of expert days dedicated to delivery broadly mirrors the relative complexity of the projects supported as well as the overall distribution of beneficiaries across the **Communities of Actors** and **type of organisations**, with **Ports** and the **NGOs** receiving the largest share of support days. **NGOs** in **Fisheries** (7 beneficiaries) received the highest number of expert days, followed by **cities** and **NGOs** in **Ports** (4 beneficiaries each).

Figure 19 - Distribution of TA time across CoA and Type of Organisation (in days)



In broad terms, the types of solutions provided within each TA package - with further details and qualitative insights presented in the following chapter - reveal clear priorities across different forms of TA. **Mapping of funding opportunities** (**20 cases**) and **solution and technology screening** (**17 cases**) were the most frequently provided forms of support. Other common activities included **stakeholder mapping and engagement** (**13 cases**) and **regulations mapping** (**11 cases**).

Figure 20 - Specific assistance provided by TA package



3. Main findings from TA provided

3.1. Summary of Findings across TA activities

The TA delivered strategic value by addressing barriers that hinder project development. Rather than offering isolated fixes, TA interventions have tackled cross-cutting challenges that recur across diverse project types - from restoration and aquaculture to vessel electrification and port regeneration. The benefits observed are not always immediate but foundational, as TA primarily helped long-term projects identify and plan solutions, which require time to implement before the programme's impact can be observed.

An analysis of the lead organisations across the portfolio reveals a diverse and balanced mix of actors engaged in blue economy innovation as well as demonstrates how TA is calibrated to different needs:

- **NGOs and civil society organisations**: These actors seek support to transform grassroots initiatives such as beach-cleaning, citizen science and blue literacy into structured, replicable models. TA built operational capacity, codified methodologies and prepared these initiatives for scaling or institutional uptake.
- **Municipal and regional authorities**: They required assistance to produce bankable feasibility plans for nature-based solutions, climate action and zero-emission transport. TA supported the design of procurement routes, financing stacks and governance roadmaps to move from intent to implementation.
- **Early-stage companies**: Business beneficiaries were often early-stage. They seek support to de-risk and mature their solutions. TA focused on pilot readiness, grant mapping, investor engagement and refinement of business models and value propositions.
- **Port authorities and development bodies**: They needed diagnostics to inform infrastructure and environmental planning and decision-making. TA delivered hydrodynamic modelling, water quality assessments, biodiversity restoration strategies and permitting gap analyses.
- **Research and public institutes**: They wanted to translate scientific outputs into deployment protocols. TA helped develop standards, monitoring methods, permitting roadmaps and training packs for adoption by authorities and SMEs.

TA interventions addressed five categories of persistent obstacles:

- **Economic and financial:** Many projects struggled to identify viable funding sources, prepare robust investment cases, or navigate complex co-financing landscapes. TA responded with tailored financial mapping, business model refinement, and investment-readiness tools. These interventions demystified the funding environment and enabled beneficiaries to align their financial strategies with relevant investment opportunities.
- **Technical and environmental:** Projects often faced low technology readiness, site-specific complexities, and fragmented ecological data. TA provided feasibility

frameworks, TRL assessments, and integrated design methodologies that helped bridge the gap between engineering ambition and ecological reality.

- **Operational:** A significant number of projects revealed internal weaknesses in planning, coordination, and stakeholder engagement. TA addressed these through skills-gap analyses, governance frameworks, and participatory planning tools.
- **Commercial:** Promoters frequently lacked market intelligence and struggled to articulate compelling value propositions. TA delivered market analyses, pitch coaching, and customer segmentation strategies.
- **Regulatory:** Nearly half of the projects encountered opaque permitting and fragmented, overlapping competences across multiple authorities. TA offered regulatory mapping and guidance on compliance.

The main findings also address the replicability of the solutions developed through the TA. Replicability refers to the ability of the TA solutions to be adapted and applied to other context beyond the TA, whether geographic, institutional, or thematic. Replicable solutions are modular, well-documented, and flexible, thereby enabling their implementation by other actors facing similar challenges. Replicability is important to maximise the impact of the TA and scaling successful approaches across Mission communities.

In the following sections, these findings are further detailed.

3.2. Main findings by TA package

3.2.1. Economic / Financial

This section examines the key economic and financial challenges faced by TA beneficiaries, the solutions proposed in feasibility studies to address these issues, and the potential for replicating these solutions. Specific case examples are also used to illustrate how these solutions were applied to projects that received TA as part of the Mission Studies.

See the table below for a summary of the economic and financial challenges faced by the specific project beneficiaries, and the solutions offered as part of the economic/financial TA package. Further sections of this report provide more detail on these.

Table 3 - Summary of TA recipients challenges and solutions offered as part of Economic/Financial TA package

Project Title	Key Economic / Financial Challenge Faced	Key Economic / Financial Solutions Offered
AQUAGEN: Aquatic Genetic Resources Management for Ecosystem Sustainability	• Uncertainty around financing options and access to European Structural Funds. • Difficulty securing resources for project development and long-term sustainability without a clear budget and funding strategy.	• Detailed budget estimate (person-months, personnel costs, total budget) and evaluation of alternative structuring (by cost categories, work packages) • Mapping and analysis of EU funding sources (Horizon Europe, LIFE, Interreg, EMFAF, Biodiversa+, ERC) • Proposed a diversified funding strategy
Baltic Bio Stimulants (BBS)	• Limited market precedent hinders financially viable business models. • Unclear cost projections and investment needs due to few comparable cases. • Funding delays or gaps risk project continuity and replication	• Developed financial projections with cost, revenue, CAPEX estimates, and funding gap analysis, supported by KPIs. • Refined business model: value proposition, optimised costs via municipal partnerships, diversified revenues, and mapped distribution channels. • Conducted risk assessment and mitigation for financial, supply, funding, and regulatory uncertainties.
Baltic Islands and Costal communities Connect - Implementing the Circular Economy in Baltic Islands through Sustainable Tourism Practices	• Limited experience identifying relevant funding opportunities and calls. • Limited experience applying to EU structural funds for international cooperation. • Proposal writing support needed to better achieve project objectives.	• Evaluated how Leader Gute can improve the structure of future national and EU funding proposals.
Ceinture bleue des îles de Houat et Hoedic	• Difficulty in mobilising and coordinating multi-level (EU, national, regional, local) and private funding. • Unclear requirements and need for specialised expertise hinder access to operational funding.	• Mapped relevant public funding sources (EMFAF, regional subsidies, offshore wind tax). • Refined financial model to prioritise seaweed farming for faster returns and partnerships. • Supported funding applications and engagement with the Pays d'Auray FLAG (EMFAF).
Coastal Upgrading, Regeneration and Resilience of Astakos	• Dependence on external funding sources, such as EU programs, creates uncertainty in budget security and implementation timelines.	• Mapped cross-sector funding opportunities.
Decarbonisation of maritime transport between the Sicilian Region and its minor islands	• High investment needs for developing and deploying zero-emission maritime infrastructure. • Significant upfront costs for R&D and vessel construction with advanced propulsion (fuel cells, batteries).	• Conducted techno-economic feasibility study comparing environmental and economic performance of zero-emission technologies vs. current solutions. • Assessed CAPEX and OPEX for existing and future transport services.
Den Levende Fiskerihavn	• Difficulty crafting compelling proposals • Difficulty identifying funders.	• Mapped funding sources at EU, national, and regional levels. • Provided funding matrix and multi-source financing strategy. • Recommended creation of a funding roadmap.

Project Title	Key Economic / Financial Challenge Faced	Key Economic / Financial Solutions Offered
Empowering Small-Scale Fisheries in the sustainable tourism value chain and marine biodiversity in Zembra MPAs. (ESTeM: Empowerment (E), Small-scale fisheries (S), Tourism value chain (T), and Marine biodiversity (M))	• Difficulty securing stable, diversified funding for rollout and replication. • Challenges aligning financial strategy and costs with donor and investor expectations. • Limited access to private partnerships and long-term tourism investments. • Risk of funding gaps delaying implementation and limiting scalability.	• Aligned project costing with funding expectations via ASPEN consultations. • Mapped funding sources and eligibility, including private and development partners. • Identified long-term tourism investment opportunities. • Matched financial needs with potential funding sources for implementation.
EUMission4WaterPollution	• Difficulty securing funding amid competing municipal priorities and limited local budgets. • Challenges accessing external funding (EU grants, PPPs, donor support). • Lack of financial sustainability for long-term monitoring and mitigation. • Risk of project stagnation from unsecured funding and limited fundraising capacity.	• Assessed funding needs with BGG and local partners for implementation and long-term monitoring. • Mapped funding sources (EU programs, PPPs) with grant and donor engagement recommendations. • Developed costed project outline with detailed budgets by category and work package. • Aligned financial strategy with implementation and replication goals.
GATEWAY: Green And Technological European Waterway	• High investment needs requiring mobilisation of diverse funding sources.	• Mapped EU funding (CEF/AFIF, Innovation Fund) • Advised on eligibility and phased investment logic.
Green Guardians of the Baltic: Seagrass Restoration for a Healthier Sea	• Funding challenges for pilot projects without proven results. • Difficulty attracting investment without feasibility or impact evidence. • Limited financial planning capacity. • Risk of delays from unsecured funding and uncertain sustainability. • No clear business model for commercial uptake.	• Defined funding objectives with phased financial strategy. • Evaluated capital options: philanthropy, service contracts, ecosystem payments, blended finance. • Assessed risks and recommend phased funding and stakeholder engagement. • Prepared financial feasibility briefing for investors and donors.
HUB Costa Atlântica da Região de Coimbra	• Competitive and time-consuming application processes for funding.	• Mapped relevant EU and national funding sources. • Produced multi-phase investment strategy for Hub setup and expansion. • Developed financial scenarios and sustainability models benchmarked against global Blue Hubs. • Recommended five-year business plan integrating revenues, costs, and KPIs.

Project Title	Key Economic / Financial Challenge Faced	Key Economic / Financial Solutions Offered
Indagini batimetriche e correntometriche e realizzazione di interventi di protezione e ripascimenti del litorale dell'area di comata a torre Sibiliana	• Difficulty identifying suitable EU and national funding aligned with coastal restoration needs.	• Mapped EU, national, and regional funding opportunities (ERDF, LIFE, FSC, PNRR, ReNDiS). • Provided guidance for accessing funds and aligning with eligibility criteria. • Suggested phased investment and co-financing approaches to increase feasibility and leverage local resources.
Mare nostrum	• Difficulty in identifying and mobilising sufficient funding aligned with restoration needs. • Limited capacity to structure and submit strong applications to EU/national programmes.	• Mapped funding sources (ERDF, LIFE, FSC, PNRR) with recommendations on access and co-financing.
Micro habitats ports de plaisance côte basque	• Difficulty identifying funding sources for eco-engineering.	• Analysed project cost structures • Analysed financing options, compiling funding sources at local, national, and EU levels. • Proposed a multi-source co-financing model based on precedents from Mediterranean projects.
Mykonos Blue: Empowering Environmental Stewardship through Beach Clean-ups, Education, and Citizen Science	• Reliance on grants and sponsorships limits scalability.	• Mapped cross-sector funding sources (EU, national, private, philanthropic). • Proposed cruise levy mechanism. • Identified partnerships for multi-year financing. • Provided scalability and sustainability roadmap.
Oczyszczanie dna Bałtyku z wraków i innych konstrukcji stalowych	• Lack of necessary funding and investment-readiness gaps.	• Mapped the funding and financing landscape (EU, national, international). • Outlined commercial, promotional, and public financing options. • Recommended steps to build bankability including market validation, permits, and piloting.
Planet Ruhnu Experimental Seaweed Farm	• Challenges in financial forecasting and profitability assessment, hindering business plan validation and funding access.	• Developed business model canvas with recommendations on core activities, regulatory aspects, key resources, and risk management. • Delivered financial model with preliminary budget, statements, and key metrics, including two progress meetings and one final validation workshop.
Postav svoju hrádzku	• Funding reliance solely on internal resources (membership fees, 2% tax), creating uncertainty for covering key costs; beneficiary' project team lacks fundraising experience.	• Developed budget estimating CAPEX and OPEX. • Reviewed potential funding sources (national, corporate philanthropy, EU). • Prioritised and select the most relevant funding opportunities. • Engaged local stakeholders for joint applications and provided application templates.

Project Title	Key Economic / Financial Challenge Faced	Key Economic / Financial Solutions Offered
Prikupljanje i uklanjanje odbačene ribolovne opreme i otpada iz mora	• Share costs between local governments or other donors.	• Assessed costs of selected options to identify feasible, sustainable, and transferable waste management solutions. • **Support**ed **project team in mapping and analysing available funding options.**
Renewable energy sources for electric ships	• Project costs are high and the Energy Community's members, including the municipality, are generally unwilling to cover them with their own capital.	• Conducted cost–benefit analyses. • Mapped funding opportunities under EU and national programmes. • Developed fundraising strategy and investor mapping. • Recommended financial risk mitigation via blended financing and long-term PPAs.
Save the Adriatic undersea lives	• Insufficient financial resources to sustain project operations.	• Prepared estimates of capital and recurrent expenditures. • Estimated financial income and non-financial benefits. • Developed cost-effective mooring management strategy. • Mapped funding opportunities.
Sustamare	• Uncertainty regarding the economic viability of various IMTA (Integrated Multi-Trophic Aquaculture) options.	• Performed cost/revenues assessment of different IMTA systems • Assessed economic viability of IMTA options compared to monoculture through cost–benefit and profitability modelling. • Provided estimation on capital investment costs and production costs, revenue potential, and diversification benefits
The port of Kerteminde - an attractive sustainable marine, maritime and food environment	• Lack of expertise in securing external funding.	• Benchmarked EU-funded projects. • Mapped cross-sector funding sources. • Proposed cruise levy mechanism. • Identified multi-year financing partnerships. • Provided sustainability roadmap.
Training of Commercial Fishermen on the banks of the Prut River	• Funding challenges for training in a resource-limited region. • Limited access to EU, national, and regional funding. • Lack of multi-year financial planning. • Risk of underfunding due to low visibility and fundraising capacity.	• Assessed training needs and financial goals. • Developed cost model with baseline and advanced scenarios. • Prepared draft budgets with contingencies. • Mapped funding opportunities and criteria. • Provided guidance for successful funding applications.
TRESOILPower2X Danube Waste Plastic to Hydrogen	• Project deemed non-bankable under standard banking and VC rules. • Insufficient investment raised due to high perceived risk. • Reliance on EIC Blended Finance as critical to unlock further funding and de-risk the project	• Reviewed business plan. • Improved business model via workshops/interviews focusing on value proposition, customers, operations, partners, and financials.

Project Title	Key Economic / Financial Challenge Faced	Key Economic / Financial Solutions Offered
Usunięcie wraku MV Alta z wybrzeży Irlandii	• Challenge in securing financing for wreck recovery.	• Mapped public and private funding sources (EMFAF, LIFE, Horizon Europe). • Outlined co-funding models for wreck removal and remediation. • Identified strategic investors. • Assessed economic viability and market potential, highlighting profitability barriers.

3.2.1.1. Key issues and barriers faced by TA beneficiaries

At both the EoI and TA planning stages, TA beneficiaries reported a wide range of economic and financial challenges that impeded project feasibility, investment-readiness, and long-term sustainability. Overall, many projects faced difficulties in identifying appropriate financing options, diversifying their financial strategies beyond grants or subsidies, and securing funding. The following subsections summarise the most recurrent issues and barriers encountered across the Economic / Financial TA portfolio.

Identifying financing options

A recurring challenge among TA beneficiaries was the difficulty in identifying appropriate financing options to support their project ambitions. This issue manifested in two distinct ways:

1. Projects that struggled to locate suitable funding mechanisms aligned with their sector, scale, or geographic context, and
2. Projects that needed to diversify their financing strategies due to overreliance on limited sources such as grants or public subsidies.

Difficulty identifying suitable financing option

Several projects reported uncertainty or confusion regarding which funding instruments, whether EU, national, regional, or sector-specific, were most appropriate for their needs. This was particularly evident in initiatives operating in emerging or cross-sectoral domains, where the funding landscape is often fragmented and eligibility criteria complex. For example, in the case of Danish *Den Levende Fiskerihavn* project, the lack of experience in identifying funders for coastal regeneration activities limited project's ability to identify appropriate financial resources. *GATEWAY,* a large-scale maritime corridor initiative in Spain, required substantial investment and faced difficulties in mobilising **diverse funding sources** across public and private domains. Meanwhile, the Italian *Indagini batimetriche* project encountered obstacles in aligning its coastal restoration goals with EU and national funding programme requirements.

Similarly, the *AQUAGEN* project in Estonia, focused on aquatic genetic resource management, highlighted uncertainty around identifying financing options and evaluating which instruments could support its €7.5M budget. The lack of a clear financing roadmap made it difficult to match project needs with available EU programmes.

Additionally, *Ceinture bleue des îles de Houat et Hoedic* in France faced challenges in coordinating funding across **multiple governance levels,** including European, national, regional, departmental, and inter-municipal sources. The complexity of navigating this multi-tiered landscape hindered the municipality's ability to structure a coherent financial strategy.

Difficulty identifying alternative financing options

In several cases, TA beneficiaries had already secured initial funding, typically through grants, sponsorships, or public subsidies, but **struggled to identify alternative financing options** to ensure long-term viability and scale-up. Their financial strategies were often **insufficiently diversified**, leaving them **overdependent on specific instruments** and vulnerable to market fluctuations. While these projects were not necessarily underfunded at

the outset, their narrow financial approach limited their resilience and ability to attract complementary investment.

For example, the *Mykonos Blue* project in the Cyclades was primarily **dependent on grants and sponsorships**. While this model enabled early implementation, it created **financial fragility** and limited the project's capacity to expand or secure multi-year support. The challenge lies in transitioning from short-term donor support to a more resilient and diversified financial model. Similarly, the Greek *Sustamare* aquaculture initiative reported **dependence on EMFAF grants**, noting that grants funding alone were insufficient to cover full operational costs. The project required **continuous fundraising efforts** and matching contributions from stakeholders to maintain financial stability, highlighting the risks of grant dependency in capital-intensive sectors. Additionally, in Romania, the *TRESOILPower2X* waste-to-hydrogen initiative anchored its **financial strategy in EIC Blended Finance**. Although this instrument provided critical early-stage support, the project's **reliance on a single mechanism created uncertainty** around future investment rounds and scalability. The **challenge** was not in securing initial funding, but in **identifying complementary financing option** to sustain growth beyond the pilot phase.

The *Postav svoju hrádzku* project in the Slovak Republic, instead, **relied solely on internal resources**, such as membership fees and 2% tax allocations. While this enabled initial implementation, it created **uncertainty in covering essential costs,** and the beneficiary's **team lacked experience in fundraising**. The project's long-term viability thus depended on developing a more diversified and resilient funding strategy.

Accessing and securing funds

In addition to identifying suitable financing options, many TA beneficiaries faced challenges in **accessing and securing** the funds necessary to implement or scale their projects. These barriers typically fell into two categories:

1. Internal limitations, and
2. Procedural difficulties related to application processes.

Internal limitations

Some projects **lacked the internal capacity or tools** required to prepare compelling financial documentation, assess feasibility, or engage effectively with funders. These gaps often undermined their ability to demonstrate investment-readiness or meet the expectations of funding bodies.

The *Planet Ruhnu Experimental Seaweed Farm* in Estonia faced such constraints struggling with the **difficulty of making financial forecasts and predicting profitability** of the project. This limitation hindered the development of a validated business plan and reduced the project's credibility with potential funders, particularly in the absence of market validation or detailed financial projections. As a result, securing funding opportunities and demonstrating the project's long-term viability proved challenging.

In Estonia, the *AQUAGEN* project reported difficulty securing resources for project development and long-term sustainability due to the **absence of a clear budget review and financing strategy**. Without robust financial planning, the project struggled to match its needs with available EU instruments.

In Italy, the *Mare Nostrum* initiative highlighted **limited capacity to structure and submit strong applications** to EU and national programmes. This procedural weakness reduced the project's competitiveness and hindered its ability to secure external support.

Similarly, the Green Guardians of the Baltic: Seagrass Restoration for a Healthier Sea project in Latvia encountered the **challenge of securing funding** for a pilot initiative, as most marine restoration funds prioritise proven, result-guaranteed projects. The **absence of a feasibility study or demonstrated impact** further complicated efforts to attract corporate or philanthropic investment.

Procedural difficulties in application process

Other projects encountered challenges related to the **complexity, competitiveness, or administrative burden of funding applications**. These procedural barriers often delay implementation or discouraged beneficiaries from pursuing certain instruments. In France, the *Ceinture bleue des îles de Houat et Hoedic* initiative cited **unclear requirements** and the **need for specialised expertise** as key obstacles to securing operational funding. These gaps made it difficult to move from planning to execution. The *HUB Costa Atlântica da Região de Coimbra* in Portugal saw applications to multiple EU programmes as **time-consuming and highly competitive**, with **administrative demands** stretching their resources and **slowing progress**. The **administrative burden** strained internal resources and slowed progress.

3.2.1.2. Solutions proposed in TA Studies for economic / financial challenges

The Economic / Financial TA packages provided a wide range of tailored solutions to address the financial and investment-readiness challenges faced by beneficiaries. These solutions were adapted to the specific needs and contexts of each project, but several recurring types of support emerged across the portfolio. The following subsections summarise the most commonly proposed interventions.

Financial oriented solutions

Funding landscape mapping and investor identification

A core component of the financial TA support involved **mapping relevant funding opportunities**. TA providers identified and analysed EU, national, regional, and, in some cases, private or philanthropic funding sources aligned with each project's scope and thematic focus. This mapping helped beneficiaries navigate complex funding landscapes and target instruments suited to their objectives.

For example, in Portugal the *HUB Costa Atlântica da Região de Coimbra* project was guided through a **comprehensive mapping of EU-level programmes** (Horizon Europe, Mission Ocean, LIFE, ERDF, CEF) and national instruments including PRR and Blue Hub funding. Similarly, the Italian *Indagini batimetriche* project was supported in identifying relevant programmes such as ERDF, LIFE, FSC, PNRR, and ReNDiS. The Polish *AQUAGEN* project received targeted support through the **mapping and analysis of EU funding sources**, including Horizon Europe, LIFE, Interreg, EMFAF, Biodiversa+, and ERC. In addition, the French *Ceinture bleue des îles de Houat et Hoedic* project was assisted in mapping relevant public funding sources, such as EMFAF, regional subsidies, and offshore wind taxes, to ensure alignment with project objectives.

In some cases, in addition to the mapping of funding opportunities, TA providers also supported the **identification of private funding sources**, particularly for projects with commercial or scale-up potential. For instance, in Ireland, the *Usunięcie wraku MV Alta* initiative was supported in identifying **both public and private funding sources**, including strategic investors from the maritime and offshore engineering sectors, to strengthen its investment-readiness for wreck recovery and recycling.

Financing strategy and investment planning

In addition to identifying relevant funding sources, TA providers frequently supported beneficiaries in developing **strategic financing plans** tailored to their project ambitions and operational contexts. This support focused on improving financial coherence and long-term sustainability by introducing **multi-source financing models**, **phased investment logic**, and **hybrid funding architectures**. These approaches helped beneficiaries structure their financial strategies around realistic funding pathways, combining public grants, private co-investment, and revenue-generating mechanisms where appropriate.

In Portugal, the *HUB Costa Atlântica da Região de Coimbra* project received one of the most comprehensive financing strategy packages. The TA team proposed a **hybrid funding architecture** combining public grants, private co-investment, and service-based revenue generation. A **multi-phase investment strategy** was developed, estimating total needs of approximately €20 million and outlining staged deployment across 2026–2030. The project also benefited from benchmarking against international Blue Hubs in Norway, Denmark, and the Netherlands.

In Greece, the *Mykonos Blue* initiative, which had previously relied on grants and sponsorships, was supported in transitioning toward a more resilient financial model. TA providers helped produce a **funding matrix**, **proposed the use of cruise levy revenues** for beach-waste logistics, and identified **multi-year financing partnerships** to support long-term sustainability.

Additionally, in Latvia, the *Green Guardians of the Baltic* project underwent an **evaluation of capital structure options, prioritising philanthropic funding, service contracts, payment for ecosystem services, and blended finance**. This was complemented by a sequenced financial strategy, moving from non-repayable capital to blended finance mechanisms designed for regional scaling, ensuring alignment with the beneficiary's operational context and risk-return profile.

Guidance on accessing funds

In addition to identifying relevant funding sources, TA providers frequently supported beneficiaries in navigating complex funding landscapes. This included **aligning project proposals with eligibility criteria**, understanding funder expectations. These efforts helped beneficiaries **unlock financing opportunities** and improve their strategic positioning.

For example, the *Indagini Batimetriche e Correntometriche* project in Italy, received targeted support to access EU and national funding aligned with coastal restoration needs. The TA team provided practical **guidance on how to align project measures with eligibility criteria.** This systematic approach enabled the municipality to pursue phased investment and co-financing strategies, leveraging local resources effectively. Similarly, in France, the *Ceinture bleue des îles de Houat et Hoedic* project received **support for funding applications and engagement** with the Pays d'Auray FLAG (EMFAF), facilitating access to relevant financing instruments. In the Slovak Republic, the *Postav svoju hrádzku* project was

assisted in engaging local stakeholders for joint applications and provided with templates for application preparation, helping the beneficiary's project team navigate funding processes despite limited prior experience.

Additionally, in Sweden, the Baltic Islands and Coastal Communities Connect initiative, benefited from an **evaluation** of how Leader Gute could **improve the structure** of future national and EU **funding proposals**, strengthening its ability to secure long-term financing.

Economic oriented solutions

Business plan and business model refinement

TA providers supported beneficiaries in refining their business plans and business models to improve financial and economic viability and strategic coherence. This included reviewing revenue streams, cost structures, and operational strategies to ensure long-term sustainability and funder alignment.

For instance, the Portuguese HUB Costa Atlântica da Região de Coimbra project received one of the most comprehensive business planning packages. TA providers recommended a **five-year business plan** integrating projected **revenue streams, operational costs, and key performance indicators**. This plan was designed to support the Hub's phased expansion and ensure financial sustainability. The Planet Ruhnu Experimental Seaweed Farm in Estonia received support in developing a **business model canvas** with recommendations on core activities, regulatory considerations, key resources, and risk management. The TA team also delivered a **financial model** including a **preliminary budget, statements, and key metrics**, accompanied by two progress meetings and a final validation workshop to guide strategic decision-making.

Similarly, the Polish AQUAGEN project benefited from a detailed budget estimate, covering person-months, personnel costs, and total budget, as well as an evaluation of alternative structuring by cost categories and work packages. Meanwhile, the TRESOILPower2X Danube initiative improved its business model through workshops and interviews focused on **value proposition, customer segments, operations, partnerships, and financials** In Finland, the Baltic Bio Stimulants (BBS) project **refined its business model** by clarifying the **value proposition** of beach cast-derived bio-stimulants, **optimising cost** structures through municipal partnerships, **diversifying revenue streams**, and mapping **distribution channels** to strengthen market positioning.

Cost-Benefit Analysis

TA providers also supported cost-benefit analysis to help beneficiaries understand the economic implications of their projects and strengthen their investment narratives.

For example, for the Greek Renewable Energy for Electric Ships TA providers conducted cost–benefit analyses to demonstrate long-term savings from fuel and maintenance cost reductions compared to traditional diesel systems. At the same time for the French Micro Habitats Ports de Plaisance project the TA involved a detailed **analysis of project cost structures and financing options.** TA providers estimated lifecycle costs and proposed a co-financing model based on precedents from Mediterranean eco-engineering projects. Similarly, in Italy, the Decarbonisation of Maritime Transport between the Sicilian Region and its Minor Islands project received support through a **techno-economic feasibility study** comparing the environmental and economic performance of zero-emission technologies against current solutions. The TA team also assessed CAPEX and OPEX for existing and

future transport services to inform investment and operational planning. In Romania, the *Training of Commercial Fishermen on the banks of the Prut River* project benefited from the development of a **cost modelling tool**, with unit rates benchmarked through desk research and validated by local experts. This included both a **baseline and advanced delivery scenario**, alongside **draft budget estimates** covering fixed and variable costs, operational needs, and contingencies.

Figure 21 - Experimental seaweed farm in Romania

SWOT and economic viability assessments

Some projects received support in conducting SWOT analyses and assessing economic viability, particularly where financial feasibility was uncertain, or market conditions were evolving.

In Ireland, the *Usunięcie Wraku MV Alta* project was supported in assessing its economic viability and market potential. TA providers identified **key profitability barriers** and outlined **co-funding models** to improve feasibility and attract strategic investors.

In France, the *Ceinture Bleue des Îles de Houat et Hoedic* project benefited from a SWOT analysis and action plan. This helped guide implementation and improve the financial viability of maritime initiatives such as aquaculture and seaweed farming.

Not all projects required the full suite of economic and financial support measures described in this report. TA was tailored to the specific needs, scale, and strategic maturity of each initiative. For example, the *Coastal Upgrading, Regeneration and Resilience of Astakos* project received targeted support focused solely on **mapping cross-sector funding opportunities**, without further development of business models or investment strategies. Similarly, the *Sustamare* initiative benefited from **cost-benefit analysis and comparative modelling** to assess aquaculture viability but did not require broader financial architecture or investor outreach. These "light-touch" interventions were designed to address specific gaps and improve project viability within their operational contexts. In contrast, more complex initiatives, such as *HUB Costa Atlântica da Região de Coimbra, Mykonos Blue,* and *Oczyszczanie*, received comprehensive TA packages that included **hybrid funding architecture design, multi-phase investment planning, business model refinement, and investor pitch development**, tailored to support long-term financial sustainability and strategic positioning.

Table 4 - TA beneficiary project example - HUB Costa Atlântica da Região de Coimbra

TA beneficiary project example - HUB Costa Atlântica da Região de Coimbra
Title: HUB Costa Atlântica da Região de Coimbra
Lead organisation: Comunidade Intermunicipal da Região de Coimbra (CIM-RC)
Type of organisation: City or local/regional authority
Country: Portugal
Community of Actors: Ports
Basin: Atlantic-Arctic basin
Objectives covered: Objective 3
Description: The project aims at the operationalisation of an intelligent innovation ecosystem focussed on the blue economy in the coastal area of the Coimbra region. The project supports the development of the economy of the sea, contributing to sustainable competitiveness of the social, entrepreneurial, industrial and training dynamics in the region.
Economic / Financial challenges identified: The HUB Costa Atlântica project faced a complex financial landscape, where navigating competitive and time-consuming funding application processes posed a significant barrier to implementation. As a multi-stakeholder initiative requiring approximately €20 million in phased investment, the project struggled to structure a coherent financial strategy that could integrate public grants, private co-investment, and service-based revenue.
TA package offered to project: Economic/Financial; Operational
TA provided (Economic / Financial TA solutions):
To strengthen the HUB Costa Atlântica's financial strategy and investment readiness, the TA package included the following solutions:

- **Mapping of funding opportunities** across EU and national programmes (e.g., Horizon Europe, Mission Ocean, EMFAF, LIFE, ERDF 2021–2027, CEF, PRR), including regional innovation calls.
- **Guidance on accessing funds**, with tailored advice on eligibility criteria and evaluation standards under major EU calls, particularly those aligned with Blue Economy and Mission Ocean priorities.
- **Financing strategy and investment planning**, including the design of a hybrid funding architecture that combines public grants, private co-investment, and service-based revenue generation (e.g., consulting, innovation support, training).
- **Development of a multi-phase investment roadmap**, estimating total investment needs of approximately €20 million and outlining staged deployment across 2026–2030.
- **Benchmarking and financial modelling**, drawing on international examples from Blue Hubs in Norway, Denmark, and the Netherlands to inform operational and financial design.
- **Business plan refinement**, resulting in a five-year plan that integrates projected revenue streams, operational costs, and performance indicators.
- **Strategic coordination mechanisms**, including the recommendation to establish a financial coordination unit within the Hub to manage project bundling, funding diversification, and investor engagement.

Solutions replicability **(Economic / Financial TA package)**: High

The TA package delivers a robust and replicable framework for regional innovation hubs. The blended finance model, phased investment planning, and benchmarking methodology are broadly transferable to other coastal regions seeking to develop blue economy infrastructure. While specific funding instruments may vary by country, the strategic approach is adaptable across contexts.

Table 5 - TA beneficiary project example - Decarbonisation of maritime transport between the Sicilian Region and its minor islands

TA beneficiary project example - Decarbonisation of maritime transport between the Sicilian Region and its minor islands
Title: Decarbonisation of maritime transport between the Sicilian Region and its minor islands
Lead organisation: Regione Siciliana - Assessorato del territorio e dell'ambiente (Sicilian Region - Department of Land and Environment)
Type of organisation: City or local/regional authority
Country: Italy
Community of Actors: Islands
Basin: Mediterranean Sea
Objectives covered: Objective 3
Description: The project aims to establish zero-emission maritime transportation in the Sicilian Region, specifically serving connections with the 11 smaller Sicilian islands (see attached map of the connections currently served by diesel ferries). This involves developing a passenger ferry with full electric propulsion, powered by fuel cells and/or batteries, and featuring a controlled hydrofoil system to minimize resistance drag and energy usage during cruising. The project promotes sustainable maritime transportation while supporting Sicily's economic and environmental goals, positioning the region as a leader in advanced marine transport technologies. The Sicilian region contracts the maritime transportation service and is entitled to request a techno-economic feasibility analysis for the decarbonization of the maritime transport service. Politecnico di Torino will support the Region in identifying the demand framework and technical requirements necessary for implementing zero-emission ferries.
Economic / Financial challenges identified: The project faces significant financial hurdles due to the high upfront investment required for R&D and the construction of advanced vessels. The challenge lies in managing capital expenditure (CAPEX) and operational expenditure (OPEX) for deploying zero-emission infrastructure, especially in a context where traditional diesel-powered services are still dominant. The lack of a clear financial strategy and the complexity of integrating innovative technologies into public transport systems further complicate implementation.
TA package offered to project: Economic/Financial; Technical, Operational; Regulatory
TA provided (Economic / Financial TA solutions):
To strengthen the Port of Kerteminde project's **financial strategy and investment readiness**, the TA package included the following solutions:

- **Techno-economic feasibility study** to evaluate the viability of zero-emission maritime services, comparing environmental and economic outcomes of proposed technologies versus current diesel-based solutions.
- **CAPEX and OPEX assessment** for both existing and future transport services, including total cost of ownership (TCO) analysis across different propulsion systems (fuel cells, batteries, hybrid).
- **Scenario modelling** to explore various deployment strategies, including phased investment and fleet renewal timelines.
- **Funding strategy guidance,** identifying potential EU and national funding sources (e.g., EMFAF, Horizon Europe, CEF) and advising on eligibility and application processes.
- **Stakeholder engagement support,** facilitating dialogue between regional authorities, technology providers, and potential investors to align technical and financial planning.
- **Strategic roadmap development,** outlining steps for procurement, pilot deployment, and scaling across all island routes.

Solutions replicability **(Economic / Financial TA package)**: Moderate

The techno-economic framework developed through the TA package, including CAPEX/OPEX analysis, scenario modelling, and funding strategy, is moderately replicable across other island regions. While the specific transport routes and vessel requirements may vary, the methodology for assessing and planning zero-emission maritime services is broadly applicable. Adaptation to local contexts and regulatory environments is necessary for full scalability.

3.2.1.3. Replicability of solutions proposed

The economic and financial instruments developed within the TA, such as **funding landscape mapping, CAPEX/OPEX models, co-financing strategies, and governance frameworks**, demonstrate a **high degree of replicability**, as they are grounded in recognised financial planning and investment-readiness methodologies. Their applicability is maximised when conceived as modular, transparent, and comprehensively documented tools, and depends on **several enabling factors and contextual conditions**, outlined below.

- ***Early-stage maturity and financial structuring***

Replicability is lower when **financial models** are developed at an early stage, as they tend to **rely on context-specific assumptions and unverified data**. Designing modular tools with adjustable parameters, documented assumptions, and clear investment phasing improves usability and transferability.

- ***Funding access and data availability***

Funding mapping and financial planning require **up-to-date, reliable information** on available instruments, eligibility rules, and co-financing requirements. **Limited data or unclear access conditions can hinder replication**. Providing standardised funding templates and maintaining shared repositories or guidance notes facilitates adaptation across contexts.

- ***Governance and coordination mechanisms***

Integrating **governance frameworks** into financial planning supports long-term financial viability and enhances replicability. Clearly defined responsibilities, coordination structures, and monitoring processes **make financial methodologies easier to adopt and scale in other institutional settings.**

- ***Contextual limitations and adaptation needs***

Differences in funding eligibility, administrative capacity, and regulatory frameworks often require adjusting the financial architecture. Replication should therefore rely on **instrument-agnostic methodologies** that can accommodate different funding mixes and compliance

conditions. Early context scanning, covering available instruments, state-aid thresholds, and regional priorities (e.g., Smart Specialisation Strategies) ensures alignment with local investment environments and improves the likelihood of replication.

Figure 22 Jiu River, Romania

3.2.2. Technical and environmental TA package

The Technical and Environmental TA package was designed to **help beneficiaries assess and strengthen the technical feasibility, scalability, and implementation readiness of their products, services, or technologies**. The integration of technical and environmental support in a single TA package was based on the acknowledgement that technical feasibility and environmental sustainability are deeply intertwined, especially in the context of Mission Ocean objectives.

This package includes support for identifying appropriate technologies or services, assessing technology readiness levels (TRLs), analysing technical requirements and resource capacities, benchmarking against peers, and evaluating the replicability and scalability of proposed solutions. Environmental considerations have been systematically embedded within the technical TA package, particularly where environmental performance and compliance were integral to the technical feasibility of a solution. This included the application of methodological approaches to assess environmental impact, the definition of baseline indicators (e.g. GHG emissions, waste reduction), and alignment with Mission Ocean and Waters objectives.

Overview of the technical and environmental TA package

This section explores the key technical challenges faced by TA beneficiaries, the tailored solutions proposed to address them, and the potential for replicating these solutions in other contexts. Case examples are provided to illustrate how technical and environmental TA were applied to unlock the implementation potential of supported projects.

The table below summarises the technical and embedded environmental challenges faced by specific project beneficiaries, along with the solutions provided through the technical TA package. Further sections of this report provide detailed insights into these cases.

Table 6 - Summary of TA recipients challenges and solutions offered as part of Technical/Environmental TA package

Project Title	Key Technical / Environmental Challenge Faced	Key Technical / Environmental Solutions Offered
Baltic Bio Stimulants (BBS)	• Challenge developing low-impact, cost-efficient harvesting methods. • Difficulty performing full life cycle assessments for minimal environmental impact. • Limited infrastructure for scalable processing and storage. • Uncertainty in biomass composition and seasonal variability.	• Developed methodology for monitoring biomass, contaminants, and environmental impacts, addressing seasonal variability. • Recommended low-impact harvesting, decentralized processing hubs, and adaptive storage solutions.
Ceinture bleue des îles de Houat et Hoedic	• Ensuring technical feasibility and environmental compatibility of hatchery and protection measures while balancing economic and ecological goals.	• Benchmarked protection initiatives across France and Europe. • Refined project concept via stakeholder interviews and SWOT analysis, prioritizing seaweed farming. • Proposed phased scaling, species diversification, and academic partnerships (e.g., University of Southern Brittany). • Provided environmental safeguards: impact studies, good practice charters, and zoning.
Coastal Upgrading, Regeneration and Resilience of Astakos	• Limited local expertise in hybrid coastal defences and marina development; • Rising sea levels and extreme weather complicate resilience planning.	• Reported best practices for Zero Emission Port Standards. • Evaluated electrification potential through case studies. • Conducted pre-feasibility on vessels, batteries, and shore infrastructure. • Created topographic digital map and geospatial database.
Decarbonisation of maritime transport between the Sicilian Region and its minor islands	• Technical challenges in propulsion system design, control systems, sensing technologies, and communication protocols. • Limited expertise and specialised knowledge hindering the development and integration of advanced propulsion systems.	• Reviewed hybrid-powered vessel technologies (fuel cells, batteries, hydrofoils). • Customized solutions for Sicilian context. • Compared noise and CO_2 impacts of conventional vs. hybrid vessels. • Held expert interviews on ship design and emission reduction.
Empowering Small-Scale Fisheries in the sustainable tourism value chain and marine biodiversity in Zembra MPAs. (ESTeM: Empowerment (E), Small-scale fisheries (S), Tourism value chain (T), and Marine biodiversity (M))	• Challenge adapting incubator models to Tunisia. • Difficulty building inclusive supply chains. • Limited capacity for sustainability labeling. • Need to track environmental and socio-economic impact. • Challenge preserving biodiversity and ecosystem integrity. • Difficulty ensuring benefits through community engagement. • Need for locally aligned sustainable practices.	• Performed feasibility check of BlueSeeds incubator model for Tunisia. • Conducted desk research on replication, scaling, and best practices. • Developed Terms of Reference and compliance rules for a local sustainability label. • Designed monitoring approach with tailored socio-economic and environmental indicators.

Project Title	Key Technical / Environmental Challenge Faced	Key Technical / Environmental Solutions Offered
EUMission4WaterPollution	• Challenge creating cost-effective microplastic monitoring. • Limited access to labs and technical infrastructure. • Insufficient data and capacity for hotspot identification. • Need scalable, resource-feasible technical solutions.	• Designed tailored macroplastic monitoring methodology for rivers and bathing areas. • Validated sampling strategy with site visits and stakeholder engagement. • Drafted baseline pollution assessment, identify hotspots, and guide municipal planning
GATEWAY: GREEN AND TECHNOLOGICAL EUROPEAN WATERWAY (SPAIN)	• Integration of next-gen fuels and green infrastructure; • Lack of experience and infrastructure for alternative fuels; • Need for interoperability.	• Identified corridor technologies and infrastructure needs. • SWOT analysis of port and vessel options. • Benchmarked low/zero-emission fuels and recommended transition pathways. • Selected deployable technologies based on feasibility and replicability.
Haapsalu Tagalahe keskkonnaseisundi parandamine	• Uncertainty due to lack of similar projects; • Limited sediment data; • Risk to habitats from sediment removal.	• Evaluated ecological impacts and alternative measures. • Applied ecosystem services valuation and expert elicitation. • Reviewed international best practices for sediment removal and reuse.
Hydrodynamic feasibility study to bring back brackish water to the docks in Antwerp port platform	• Challenge complying with EU Water Framework Directive. • Limited data complicates hydrodynamic model calibration. • Infrastructure changes in operational industrial zone. • Need to simulate discharge scenarios balancing ecology and thermal risks. • Challenge managing ecological risks from human activities. • Difficulty ensuring long-term marine conservation.	• Developed 3D hydrodynamic model for cooling water dispersion. • Collected and preprocess relevant environmental and operational data. • Conducted temperature measurements to fill data gaps. • Simulated scenarios to assess thermal impacts and compliance. • Integrated ecological assessment with species vulnerability mapping.
Indagini batimetriche e correntometriche e realizzazione di interventi di protezione e ripascimenti del litorale dell'area di comata a torre Sibiliana	• Pollution (especially plastics), invasive species, human activity impacts, and coastal erosion	• Identified good practices: soft-engineering, ecosystem-based interventions, pollution monitoring. • Provided planning guidance across Coastal Use Plan, MSP, and Natura 2000. • Recommended local implementation strategies with Mediterranean examples.
Mare nostrum	• Biodiversity loss, pollution, invasive species, port impacts, and fragmented restoration efforts.	• Analysed ecological challenges and defined restoration actions. • Documented tools: citizen science, robotics, sonar mapping, filtration barriers. • Linked to EU projects (Nautilos, MAELSTROM, etc.). • Drafted pilot restoration concepts for Gulf of Palermo.

Project Title	Key Technical / Environmental Challenge Faced	Key Technical / Environmental Solutions Offered
Planet Ruhnu Experimental Seaweed Farm	• Project aims to implement novel algae cultivation technology that has not been previously tested.	• Developed TRL assessment tool with expert input (Estonian Marine Institute).
Postav svoju hrádzku	• Limited technical expertise to ensure proper and legally compliant implementation of the project's technical activities, such as water retention measures.	• Analysed best practices for similar measures in other countries using defined criteria and the project description. • Prepared a summary report and comparative analysis of the findings. • Assessed conditions, requirements, and opportunities for implementing small-scale natural water retention measures
Prikupljanje i uklanjanje odbačene ribolovne opreme i otpada iz mora	• Identify the most strategic port for the marine litter purchasing centre. • Predict marine litter quantity and sources to assess cost-benefit distribution.	• Designed methodology for mapping, characterising, and quantifying fishers and waste via surveys. • Mapped fisheries and waste. • Analysed end-of-life management options for fishing gear.
Renewable energy sources for electric ships	• Project beneficiary requires support in refining the concept due to limited technical expertise within its team.	• Reviewed electric ship and port infrastructure solutions. • Recommended renewable energy sources for clean operations.
RESHABAY Portocolom	• Challenge navigating complex environmental regulations and securing permits. • Difficulty aligning restoration with EU water, marine, and biodiversity standards. • Need proactive engagement with regulatory authorities. • Risk of delays from multi-level approvals and changing legal contexts.	• Reviewed and adapted DESSIN ESS Evaluation Framework for Portocolom Bay's ecological and regulatory context. • Aligned study with EU and national regulations (WFD, MSFD). • Documented framework adaptations with synthesis table for internal and external use.
Save the Adriatic undersea lives	• Limited knowledge on user zoning and identifying fixed mooring areas for nature and cultural heritage protection.	• Assessed current boating tourism and mooring in Nečujam Bay and Šolta to identify issues and forecast pressures. • Mapped legal and illegal mooring and anchoring sites. • Analysed tourism data and trends to predict future pressures.
Seagrass aquaculture at scale	• Lack of research on low-carbon materials; • Difficulty with robotic swarm tech implementation requiring further R&D.	• Evaluated farm sites using technical and ecological criteria. • Provided EIA guidance and risk management strategies. • Advised on infrastructure dismantling and restoration compliance.

Project Title	Key Technical / Environmental Challenge Faced	Key Technical / Environmental Solutions Offered
STUDIU PRIVIND POTENȚIALUL DE IMPLEMENTARE A UNOR MĂSURI INTEGRATE PENTRU PROTEJAREA BIODIVERSITĂȚII DE-A LUNGUL CURSURILOR DE APĂ DIN VALEA JIULUI	• Lack of integrated biodiversity measures; pollution and habitat degradation.	• Used PESTEL analysis and mapped regional restoration actions. • Validated findings through stakeholder meetings.
Sustamare	• Ensuring reliability of new tech and integrating complex IMTA systems.	• Benchmarked IMTA systems for Adriatic. • Assessed species combinations and environmental compatibility. • Developed conceptual models and phased testing approach.
Tejo Vivo: restauro ecológico das zonas portuárias do estuário do Rio Tejo	• Severe habitat degradation, water quality decline, sedimentation, and invasive species.	• Applied PESTEL analysis and mapped restoration use cases. • Validated findings through stakeholder engagement.
Training of Commercial Fishermen on the banks of the Prut River	• Environmental instability from climate change, pollution, and habitat degradation hinders implementation and long-term planning.	• Conducted PESTEL analysis of Prut River macro-environment, including EU and national legal frameworks.
TRESOILPower2X Danube Waste Plastic to Hydrogen	• First-of-a-kind (FOAK) modular technologies for plastic and tire conversion.	• Conducted benchmarking with peers. • Designed the production process flow and assessed the technology readiness level.

3.2.2.1. Key issues and barriers faced by TA beneficiaries

At both the EoI and TA planning stages, TA beneficiaries reported a diverse set of technical challenges that affected project feasibility, implementation readiness, and long-term sustainability. These challenges ranged from uncertainty in technical design and lack of expertise, to complex infrastructure requirements and the integration of novel technologies. In many cases, the technical ambition of the projects exceeded local capacity or precedent, requiring external support, iterative development, and adaptive management strategies.

Overall, the most recurrent technical barriers included difficulties in validating feasibility, accessing specialized knowledge, managing environmental restoration in degraded ecosystems, integrating complex systems across operational domains, and deploying first-of-a-kind or experimental technologies. These issues often intersected with financial and regulatory constraints, further requiring more support.

The following subsections summarise the most prominent technical challenges encountered across the TA portfolio, grouped into five thematic categories based on content similarity and project clustering.

Feasibility and technical expertise gaps

Many TA beneficiaries faced uncertainty about the technical feasibility of their interventions, often due to limited internal expertise or access to specialised knowledge. These gaps affected project design and implementation, causing delays and the need for external validation.

For example, the *Haapsalu Tagalahe* project in Estonia faced challenges due to the **absence of similar** sediment removal **initiatives** in the region. The beneficiary **struggled with identifying appropriate techniques and equipment** and lacked clarity on how to safely handle or dispose of removed sediment. Additionally, in Croatia, the Save the Adriatic Undersea Lives initiative encountered significant **gaps in knowledge and experience** related to user zoning and the identification of areas for fixed mooring, particularly in the context of nature conservation and cultural heritage protection. Meanwhile, the *Renewable energy sources for electric ships* project required refinement of its concept due to the beneficiary's **insufficient technical expertise**, highlighting the need for mentoring and external advisory support.

Environmental restoration and biodiversity protection

Projects in this category faced complex ecological challenges, including habitat degradation, pollution, and biodiversity loss. While their goals were ambitious, the technical demands of restoring sensitive ecosystems often exceeded local capacity.

The *Mare Nostrum* initiative aimed to restore Mediterranean habitats affected by pollution, invasive species, and coastal erosion. However, scaling from fragmented efforts to a coherent restoration framework proved difficult, especially given the **need for significant resources and coordination.** Similarly, the *Tejo Vivo* project in Portugal faced severe **habitat degradation**, with only 1% of the estuary remaining in a natural state. Restoration required advanced sediment management and water quality interventions, which were technically demanding. In Romania, the Training of Commercial Fishermen on the banks of the Prut River project faced **environmental instability** driven by **climate change, pollution, and habitat degradation,** complicating the implementation of new practices and long-term planning.

Figure 23 - Estuary, River Tejo, Portugal

Infrastructure and system integration

Several projects aimed to implement large-scale infrastructure or integrate complex systems across multiple domains. These efforts were often hindered by interoperability issues, infrastructure gaps, and the need for innovative engineering solutions.

The *GATEWAY* project between Tenerife and Huelva sought to establish a green maritime corridor but faced challenges in **adopting next-generation fuels** and building supporting infrastructure from scratch. Similarly, the *Decarbonisation of maritime transport* project in Italy struggled with propulsion system design and integration of control and sensing technologies.

Innovative technologies

Projects in this category explored cutting-edge technologies for marine applications, often venturing into untested territory. While innovation was a core strength, it also introduced uncertainty and required extensive R&D.

The French *Seagrass aquaculture* at scale project aimed to deploy underwater robotic swarm technology for large-area monitoring but faced difficulties due to **limited prior research** and the need for low-carbon materials suitable for marine environments. Similarly, the Estonian *Planet Ruhnu Experimental Seaweed Farm* relied on **novel algae cultivation methods** that **had not been previously validated**.

3.2.2.2. Solutions proposed in TA Studies for technical and environmental challenges

Solution and technology screening and benchmarking

Many TA beneficiaries required support in identifying and evaluating technical solutions aligned with their environmental goals, operational constraints, and regional contexts. TA providers conducted desktop reviews, feasibility assessments, and expert consultations to help beneficiaries' teams screen technologies and select the most appropriate options for deployment.

For example, the Italian *Decarbonisation of maritime transport* project faced the challenge of selecting propulsion systems that would reduce emissions and noise while remaining operationally viable in Mediterranean conditions. TA support included a comprehensive review of hybrid-powered vessels, such as fuel cells, batteries, and hydrofoils, and a high-level **comparison of their environmental impacts**. The beneficiary also received expert input on ship design and propulsion innovations, helping them assess compatibility with local infrastructure and biodiversity protection goals.

Similarly, the Spanish *GATEWAY* project required screening of low- and zero-emission fuels for deployment across a maritime corridor between Tenerife and Huelva. TA providers **benchmarked options** including bio-LNG, methanol, hydrogen, and ammonia, and recommended transition pathways based on technical feasibility, port compatibility, and replicability. The project also received a **SWOT analysis** of port-side and vessel-side technologies, helping refine its infrastructure strategy.

The French *Seagrass aquaculture* at scale and *Ceinture bleue des îles de Houat et Hoedic* projects also benefited from solution screening, particularly in selecting suitable sites and ensuring environmental compatibility. TA teams applied technical, ecological, and regulatory criteria to evaluate feasibility and compliance, including proximity to donor beds, maritime traffic, and protected areas.

In the aquaculture sector, the *Sustamare* project was supported in evaluating Integrated Multi-Trophic Aquaculture (IMTA) systems. TA providers assessed species combinations (e.g., sea bass with bivalves or seaweed), **environmental performance**, and operational constraints such as seed availability and water quality. A phased testing approach was recommended to reduce risk and build capacity incrementally.

These **solution screening** efforts helped beneficiaries avoid unsuitable technologies, align their choices with sustainability goals, and improve implementation readiness. They also supported strategic decision-making by clarifying trade-offs and identifying scalable, context-sensitive options.

Technology Readiness Level assessment

Some TA beneficiaries proposed innovative or modular technologies that required validation before deployment. TA support focused on assessing the maturity of these technologies using TRL (Technology Readiness Level) frameworks, helping their teams understand whether their concepts were ready for pilot implementation or needed further development.

For example, the *TRESOILPower2X* project in Romania aimed to deploy a **first-of-a-kind modular system** to convert plastic waste and end-of-life tires into hydrogen, electricity, ammonia, and carbon black. Given the novelty and complexity of the integrated process chain, TA providers supported the beneficiary with a **TRL assessment** to evaluate the readiness of each technological component. The TRL analysis helped the beneficiary prioritise development stages and align their technical roadmap with investment-readiness goals.

Similarly, *the Planet Ruhnu Experimental Seaweed Farm* in Estonia proposed modular algae growth units that had not been previously tested. TA support included the development of a TRL assessment tool in collaboration with marine biologists from the Estonian Marine Institute. This tool allowed their team to e**valuate the biological, technical, and operational maturity** of the cultivation system, ensuring that deployment would be both feasible and ecologically sound.

In both cases, TRL assessments were critical for de-risking innovation, improving technical credibility, and preparing projects for pilot implementation and scale-up. They also helped beneficiaries communicate their progress to funders and stakeholders using standardised metrics.

Site-specific environmental assessment

Projects operating in sensitive ecosystems or requiring restoration permits often faced challenges in evaluating local environmental conditions and ensuring compliance with environmental regulations. TA support in this category focused on conducting detailed site assessments, identifying ecological risks, and aligning project activities with legal and technical standards.

For example, the *Coastal Upgrading, Regeneration and Resilience of Astakos* project in Greece required a thorough evaluation of its port and coastal environment to implement hybrid coastal defences and electrification measures. TA providers developed a topographic digital map and geospatial database to **assess site-specific conditions**, including shoreline morphology and infrastructure constraints. This analysis informed decisions on vessel electrification potential and sustainable marina development, ensuring that interventions were technically feasible and environmentally compatible.

Similarly, the Italian *Decarbonisation of maritime transport* project faced the challenge of integrating hybrid propulsion systems into existing maritime routes without harming marine biodiversity. TA support included a **high-level comparison** of noise and CO_2 emissions from conventional hydrofoils versus hybrid vessels, as well as **expert interviews** on ship design innovations. These assessments helped the beneficiary's team select technologies that minimised ecological disruption while meeting operational requirements.

The *Haapsalu Tagalahe keskkonnaseisundi parandamine project* in Estonia required site-specific analysis to address severe sedimentation and water quality decline in Tagalaht Bay. TA providers evaluated the ecological consequences of sediment removal, assessed **alternative restoration measures**, and introduced **ecosystem service valuation methods**. International best practices were reviewed to guide large-scale sediment removal and explore options for reusing marine mud in economic activities, ensuring that interventions were both environmentally safe and economically viable.

These site-specific assessments were critical for reducing ecological risks, streamlining permitting processes, and improving stakeholder confidence in the sustainability of proposed interventions. By tailoring technical solutions to local conditions, TA support enabled projects to balance environmental integrity with operational feasibility.

PESTEL analysis and mapping of EU nature restoration use cases

Some TA beneficiaries required support in identifying relevant EU-level restoration initiatives and best practices to guide local implementation. TA providers conducted mapping exercises to connect projects with successful approaches, policy frameworks, and technical tools already tested across Europe. This helped beneficiaries avoid duplicating efforts and align

with broader restoration objectives under EU strategies such as the Biodiversity Strategy and Mission Ocean. For example, in Romania, the Training of Commercial Fishermen on the banks of the Prut River project included a **PESTEL analysis** of macro-environmental conditions in the Prut River basin, covering EU and national legal aspects such as river basin and flood risk management plans, CAP Strategic Plans, and the Lower Prut Floodplain Natural Park's management plan.

Additionally, the *STUDIU PRIVIND POTENȚIALUL* project in Romania was supported through a comprehensive **mapping of riverine restoration actions** across Europe. TA providers identified comparable initiatives focused on biodiversity corridors, pollution reduction, and habitat connectivity. These insights were validated through **stakeholder workshops**, enabling the project to adopt integrated measures for species protection and water quality improvement. The mapping exercise also highlighted EU-funded programs such as LIFE and Interreg, which could serve as models for governance and financing. Similarly, the *Tejo Vivo* project in Portugal benefited from mapping coastal and marine restoration use cases implemented in other European estuaries. TA providers analysed examples of port ecological restoration, sediment management, and invasive species control, ensuring that Tejo Vivo's strategy was informed by proven methodologies. This mapping process also facilitated alignment with EU Mission Ocean objectives and regional Natura 2000 requirements.

Figure 24 - Area covered by the estuary restoration in the Tejo Vivo project

By leveraging EU restoration use cases, these projects improved technical robustness, policy alignment, and replicability. Mapping exercises provided actionable insights, reduced uncertainty, and strengthened stakeholder confidence by demonstrating that proposed interventions were grounded in successful European practices.

Table 7 - TA beneficiary project example - Ceinture bleue des îles de Houat et Hoedic

TA beneficiary project example - Ceinture bleue des îles de Houat et Hoedic
Title: Ceinture bleue des îles de Houat et Hoedic
Lead organisation: Mairie île de Houat
Type of organisation: City or local/regional authority
Country: France
Community of Actors: Fisheries
Basin: Atlantic-Arctic basin
Objectives covered: Objective 1,3
Description: The Blue Belt project around Houat and Hoedic Islands in Mor Braz (Morbihan, Brittany) aims to create a one-nautical-mile fishery management zone. The project seeks to improve the management and exploitation of fishery resources by fishermen and shellfish farmers. It includes a reseeding initiative (reviving an old lobster hatchery) for molluscs such as scallops, flat oysters, and abalones, as well as the development of seaweed cultivation.
Technical / Environmental challenges identified: The project faced challenges in ensuring the **technical feasibility** and **environmental compatibility** of its proposed hatchery and protection measures. Balancing aquaculture development with the preservation of marine habitats required careful planning, technical benchmarking, and local stakeholder engagement. Additionally, the project needed a structured approach to scale up operations responsibly, diversify aquaculture species, and align with regulatory requirements for marine protected areas.
TA package offered to project: Regulatory; Economic/Financial; Operational; Technical
TA provided (Technical / Environmental TA solutions):
To ensure the project's technical soundness and environmental sustainability, the TA package included the following solutions: • **Comparative benchmarking** of marine protection and aquaculture initiatives in France and Europe, identifying best practices in technical solutions, environmental safeguards, and governance.
• **Project concept refinement**, based on stakeholder interviews and a SWOT analysis that prioritised seaweed farming as a sustainable and locally appropriate development path.
• **Design of the hatchery project blueprint**, ensuring technical feasibility, economic viability, and environmental compatibility with the project's conservation objectives.
• **Recommendation of a phased approach** for implementation, starting with small-scale operations, then diversifying species and expanding activities in line with environmental monitoring results.
• **Partnership model development**, encouraging collaboration with academic and research institutions such as the University of Southern Brittany for ongoing technical guidance and innovation support
• **Environmental safeguard guidance**, including the design of impact studies, establishment of good practice charters, and zoning measures to minimise habitat disruption and pollution.
Solutions replicability **(Technical / Environmental TA package)**: Moderately High
The TA package provides a replicable framework for balancing marine conservation with sustainable aquaculture in small island or coastal contexts. The governance and technical benchmarking phased scale-up logic, and university partnership model can be effectively applied in other regions seeking to integrate ecological protection with blue economy development. While specific environmental regulations may vary, the structured and participatory approach ensures adaptability across different contexts.

Table 8 - TA beneficiary project example - Renewable energy sources for electric ships

TA beneficiary project example - Renewable energy sources for electric ships
Title: Renewable energy sources for electric ships
Lead organisation: Energy Community of Chalki
Type of organisation: Non-for-profits (different than NGOs)

Country: Greece

Community of Actors: Islands

Basin: Baltic & North Seas

Objectives covered: Objective 3

Description: The project aims to identify necessary coastal and civil works prior to the installation of renewable energy systems. It will assess the suitability of various wave energy conversion systems for the port of Kania and explore the installation of multiple small-scale wind turbines along the coastal front. Additionally, the project will investigate the integration of solar thermal and Ocean Thermal Energy Conversion (OTEC) systems.

Technical / Environmental challenges identified: The beneficiary's project team had limited technical expertise in electric ship design and integration with port RES infrastructure. Challenges included identifying feasible technical solutions, selecting appropriate energy storage and generation systems, and ensuring environmental compliance and operational efficiency. Additionally, the project needed guidance on cost-effective implementation and modular design to enable replication in other regions.

TA package offered to project: Economic/Financial; Technical/Environmental, Operational;

TA provided (Technical / Environmental TA solutions):

To strengthen the project's technical feasibility and environmental sustainability, the TA package included the following solutions:
• **Solution and technology screening**, providing an in-depth review of existing technical solutions for electric ship design and port infrastructure, including cost-benefit and performance analyses.

• **Project concept refinement** for both (i) port infrastructure (energy storage, existing photovoltaic installations, and other RES systems) and (ii) electric ship design.

• **Recommendations on additional renewable energy sources**, ensuring clean power supply for ship operations while meeting environmental standards and efficiency targets.

• **Integration guidance**, outlining modular design options for combining electric ferries, RES-based port systems, and charging infrastructure for scalable implementation.

Solutions replicability **(Technical / Environmental TA package)**: High

The TA package delivers a replicable framework for electrifying maritime transport in small island or coastal regions. The **integrated design of electric ships and RES port infrastructure** is modular and adaptable to other contexts with similar energy and maritime needs, though successful replication may require some pre-existing infrastructure or upfront investment.

3.2.2.3. Replicability of solutions proposed

The technical and environmental solutions developed across the reviewed projects including technology screening, TRL assessment, environmental diagnostics, and restoration benchmarking, demonstrate **high methodological replicability** rather than direct technical transferability. Their main value lies in providing **tested analytical frameworks and data-driven methodologies** that can be adopted by regions or communities facing comparable environmental challenges. Replication therefore occurs primarily through the **transfer of structured processes, indicators, and evidence**, enabling others to design and implement interventions based on validated approaches rather than replicating specific technologies or designs. **Standardised and structured framework for feasibility assessment, technology comparison, and environmental evaluation** offer a **common reference base** for addressing similar coastal, marine, or ecosystem management issues. When well-documented and supported by accessible datasets, these methodologies foster cross-regional learning, reduce transaction costs for new projects, and enhance the overall consistency of technical and environmental planning practices across the EU.

While the methodologies are mostly replicable, several elements must be considered:

Technology maturity and validation needs

Replicability is limited when solutions rely on early-stage or first-of-a-kind technologies whose performance remains untested. **Methodologies for technology readiness assessment (TRL), risk analysis, and pilot validation are transferable**, but underlying technologies require contextual testing before deployment. Ensuring replication therefore depends on integrating **technical validation and adaptive development roadmaps**, supported by partnerships with research institutions, innovation clusters, or test-before-invest facilities.

Data availability and environmental variability

Replication of technical and environmental tools requires access to **reliable, site-specific data** on ecological, hydrological, and infrastructural conditions. In data-poor regions, projects should complement desk-based analyses with **targeted field surveys and stakeholder consultations** to establish local baselines. Developing **shared environmental databases and regional monitoring frameworks** would further facilitate replication, reduce data collection costs, and strengthen alignment with EU monitoring initiatives such as Mission Ocean.

Contextual adaptation and site-specificity

Analytical frameworks for feasibility and environmental assessment are replicable, but their **practical application must reflect local conditions**, including regulatory frameworks, ecological baselines, and available infrastructure. Replication should therefore follow a **modular approach**, reuse core analytical methods while adjusting technical parameters and environmental assumptions to local realities.

Integration of environmental and technical components

Replicability improves when environmental and technical dimensions are treated as **interconnected elements of the same process**. Integrating ecological indicators, such as biodiversity recovery or water quality, into technical design and performance monitoring enables a more holistic and transferable approach. Projects should document this integration through **shared templates, indicator sets, and evaluation protocols**, ensuring alignment with EU environmental standards and facilitating cross-project learning.

Institutional capacity and governance alignment

Successful replication requires **institutional ownership and coordination mechanisms** that ensure continuity beyond the project scope. Embedding technical and environmental tools within **regional strategies and governance frameworks** such as Smart Specialisation Strategies or Integrated Coastal Zone Management plans enhances sustainability and transferability. In contexts with limited administrative capacity, TA support should include **capacity-building modules and clear governance guidance** to sustain long-term application.

3.2.3. Operational TA package

The Operational TA package aims at supporting beneficiaries in dealing with issues related to **day-to-day management, coordination, logistics, and execution of project activities** that can delay progress, increase costs, or reduce effectiveness. Most Operational TAs focused on project planning, governance and coordination, social acceptance and capacity assessment/building.

This section outlines the main operational challenges encountered by beneficiaries, along with the solutions proposed by TA experts and an assessment of the replicability of these solutions. See table below for a summary on operational challenges reported by selected TA beneficiaries and the corresponding support measures delivered under this package.

Table 9 - Summary of TA recipients challenges and solutions offered as part of Operational TA package

Project Title	Operational Challenges Faced	Solutions Offered
AQUAGEN	• Difficulty in setting up stakeholder collaboration	• Work Plan and work packages • Validation workshop with stakeholders
Baltic Islands and Costal communities Connect - Implementing the Circular Economy in Baltic Islands through Sustainable Tourism Practices	• No expertise on how to set up a collaboration with other islands and how to structure our project	• Clarified the project's objectives, solutions and tools • Identified risks and suggested strategies to mitigate or address them. • Created a stakeholder engagement strategy • Developed roadmap
Ceinture bleue des îles de Houat et Hoedic	• High number of stakeholders to consult • Difficulty coordinating implementation roadmap across multiple governance	• Established a permanent Consultative Committee for the project • Tools and guidance for stakeholder consultation • Project roadmap
Decarbonisation of maritime transport between the Sicilian Region and its minor islands	• Limited coordination among stakeholders • No expertise in stakeholder coordination	• Mapping and engagement of stakeholders • Provided recommendations for awareness-raising campaigns
Empowering Small-Scale Fisheries in the sustainable tourism value chain and marine biodiversity	• Challenge of integrating socio-economic and environmental indicators • Need for structured community outreach and engagement strategy	• Structured monitoring approach • Stakeholder engagement during site visit • Support for logistical coordination and task design
EUMission4WaterPollution	• Limited human resources and local expertise • Difficulty coordinating multi-stakeholder engagement	• Mapping of available human and financial resource • Stakeholder coordination during site visit • Development of outreach activities
GATEWAY	• Not identified at EoI stage	• Assessed local skills/capacity • Identified role/skill gaps • Outlined training needs
Green Guardians of the Baltic: Seagrass Restoration for a Healthier Sea	• Difficulty in setting up the project • Difficulty in identifying and engaging strategic partners or funders	• Looked for best practices • Prepared stakeholder analysis tool to collect their details, evaluate interest and track inputs throughout the participatory process.
HUB Costa Atlântica da Região de Coimbra	• Coordination between multiple stakeholders • Alignment of project timelines with funding opportunities	• Explored possible governance structures and consortium agreements • Identified a preliminary project structure • Recommended capacity-building measures
Micro habitats ports de plaisance côte basque	• Low social acceptance • Lack of service providers	• Mapped stakeholders • Developed evidence-based communication material • Identified and assessed service providers
Mykonos Blue: Empowering Environmental Stewardship through	• Not identified at EoI stage	• Revised project implementation roadmap • Proposed a framework for volunteer engagement.

Project Title	Operational Challenges Faced	Solutions Offered
Beach Clean-ups, Education, and Citizen Science		
Oczyszczanie dna Bałtyku z wraków i innych konstrukcji stalowych	• Lack of experience in international projects	• SWOT analysis to guide strategic decisions
Postav svoju hrádzku	• Difficulty in mobilising enough volunteers • Challenge in engaging with public authorities to validate project assumptions and ensure implementation.	• Stakeholder analysis • Workshops and participatory meetings • templates for partnership agreements
Postav svoju hrádzku	• Difficulty in mobilising enough volunteers. • Challenge in engaging with public authorities to validate project assumptions and ensure implementation.	• Conducted workshops and participatory meetings to align stakeholders • Supported in planning for volunteer mobilisation • Provided guidance and templates for partnership agreements and public authorities engagement
Renewable energy sources for electric ships	• Lack of technical and managerial skills	• Identified technical expertise and skill sets required • Recommended capacity-building measures • Developed a project implementation roadmap
RESHABAY Portocolom	• Need for stakeholder alignment and community engagement to ensure project relevance and support.	• Conducted stakeholder mapping and engagement • Assisted with Forum organisation
Seagrass aquaculture at scale	• Managing project risks	• Risk Management Strategy • SWOT analysis
Studiu privind potențialul de implementare a unor măsuri integrate pentru protejarea biodiversității de-a lungul cursurilor de apă din valea jiului	• Low local community involvement • Limited stakeholders' collaboration	• Developed stakeholder engagement tool • Ideation workshop with stakeholders • Developed restoration plan proposal
Tejo Vivo: restauro ecológico das zonas portuárias do estuário do Rio Tejo	• Difficulty managing governance complexity • Low stakeholder engagement	• Developed a stakeholder engagement methodology • Conducted an ideation workshop with stakeholders • Developed a restoration action plan proposal including suggestion on governance
The port of Kerteminde - an attractive sustainable marine, maritime and food environment	• Lack of coordination	• Provided recommendations on governance structure, feedback mechanisms and communication pathways. • Roadmap development
Training of Commercial Fishermen on the banks of the Prut River	• Community resistance to the project • Need for tailored training on how to build trust within local communities.	• Developed stakeholder analysis tool to map and evaluate key community groups • Planed, developed, and delivered "Training of Trainers" session
Ulysses Data For Science	• Coordination between multiple stakeholders	• Mapped and analysed the institutional ecosystem • Developed an engagement logic
Usunięcie wraku MV Alta z wybrzeży Irlandii	• Project design and progress assessment • Lack of skilled labour	• Developed implementation roadmap and KPIs • Identified skills and capacity needs, • Recommended partnerships to close capacity gaps.

3.2.3.1. Key issues and barriers faced by TA beneficiaries

Operational challenges are distributed across several beneficiaries and relate primarily to human resources and project management. Approximately 35% of beneficiaries reported facing such issues, which include the following examples:

Lack of experience in project coordination and planning

The most recurring operational challenge identified among beneficiaries relates to **limited experience in project coordination**, especially in projects involving environmental, technical, and regulatory components. These coordination gaps often result in unclear division of roles, inefficient allocation of time and resources. For example, in three projects (*Port of Kerteminde*, *Sustamare* and *Tejo Vejo)* efforts to engage multiple stakeholders were hampered by weak coordination mechanisms, resulting in fragmented implementation and inconsistent progress. The *Ceinture bleue* project also faced difficulties in setting up **implementation roadmap** covering multiple **governance** levels.

Several projects faced operational challenges stemming from the fact that this was their first experience participating in initiatives with an **international scope**. For instance, in the *Baltic Islands and Coastal Communities Connect* project, beneficiaries reported difficulties in structuring activities to ensure both **international relevance** and **local effectiveness**.

Lack of skills

Multiple beneficiaries reported a lack of **specific technical know-how** within their teams, particularly in engineering-oriented initiatives, making them reliant on external consultants and experts. This challenge was most pronounced in projects focused on electrification of infrastructures, such as *Renewable Energy Sources for Electric Ships* and *GATEWAY*, where beneficiaries highlighted the **limited availability of qualified experts and operational experience** in emerging maritime energy technologies. Similar gaps were observed in projects dealing with Restoration and Conservation, where the shortage of specialised profiles **constrained decision-making on how to progress** with project implementation. Other projects, like the *Prut River* project, lacked experience on how to engage and train locals to new, sustainable practices. These workforce limitations reduce the robustness of project implementation and increase dependence on external partners or consultants, potentially affecting project ownership and long-term sustainability.

Low acceptance and engagement by local stakeholders

Ten projects reported challenges related to **low acceptance among local stakeholders**. In these projects, citizens and local stakeholders have shown resistance or indifference, undermining the perceived legitimacy of the project itself. For example, in the *Micro Habitats Ports* project, local actors expressed concerns about potential negative impacts of the initiative on both the marine ecosystem and port operations. Similarly, in the *Prut River* project, fishermen showed high attachment to traditional methods and fear of economic disruption. This hesitation largely stems from **limited awareness** and **understanding** of the project's objectives and expected benefits by affected stakeholders. The *Baltic Islands and Coastal Communities Connect* project, for instance, **struggled to demonstrate the tangible benefits** of sustainable tourism to local communities - both in economic and ecological terms. In other cases, as in the *Postav svoju hrádzku* project, **public authorities** proved to be hard to engage, making it difficult to validate the project and ensure its implementation.

3.2.3.2. Solutions proposed in the TA studies for operational challenges

Operational assistance was provided to 20 projects, **including two projects that had not explicitly identified operational challenges during the Expression of Interest (EoI) phase**. In these, such support emerged beneficial during the TA planning phase, as overarching guidance to strengthen project planning, coordination, and implementation readiness. The operational assistance primarily focused on the clarification of objectives and strategy, the development of project workplans and monitoring systems, the engagement of local stakeholders and the assessment of required skills to ensure effective implementation.

Strategy and roadmap definition

Operational TA activities strengthened the readiness of beneficiary projects by helping them define their strategies and roadmaps. With the use of tools like SWOT analysis, the TA provided helped beneficiaries refine project objectives, identify opportunities and risks, and guide strategic decisions and next steps.

For instance, in the *Clean the Baltic project,* the TA team used the SWOT analysis to identify internal and external factors likely to **influence the feasibility** of the project roadmap, like technical complexity, funding availability, and regulatory procedures. In the *Mv Alta* project, the SWOT analysis helped build an **implementation roadmap** structured around four main phases, each addressing a specific dimension of the operation. In the *Built Your Own Dam* and the *Baltic Islands and Costal communities Connect* projects the operational TA provided played a pivotal role in enabling the beneficiary to **refine their project's focus**, making it easier for the beneficiary to build a strategy to fulfil the project's objectives. In the *Kerteminde* project the roadmap was developed with the specific intent of aligning local initiatives with EU Mission Ocean and Waters objectives.

The operational assistance equipped the beneficiary with essential tools, including templates and processes, which can be used for the preparation of upcoming projects.

Workplans

Eight operational TAs helped projects in translating strategic concepts into operational activities, developing detailed workplans or clear implementation frameworks. TAs identified key milestones and activity sequencing to guide project execution.

In two projects, *AQUAGEN* and *HUB-RC*, a **mapping exercise** was developed between the Work Packages (WP) defined in the operational plan and the Key Programmes & Activities structured in the Theory of Change to ensure coherence between practical implementation, medium-term objectives and expected impacts. For most projects, **Gantt charts** were produced to visualise the sequence, duration, and interdependencies of project phases, supporting efficient planning, coordination, and monitoring.

Coordination and governance structures

As several beneficiaries were new to the dynamics of multi-stakeholder project implementation, multiple TAs provided support in **strengthening coordination and governance structures**. This involved defining clear roles and responsibilities, establishing coordination mechanisms, and creating accountability structures to guide decision-making and ensure effective delivery.

In the *HUB Coimbra* project, the TA identified suitable governance models and **proposed a consortium framework** outlining partners' roles, communication channels, and decision-making processes. These arrangements helped enhance operational efficiency and support long-term project sustainability.

Similarly, in the *Micro Habitats Ports de Plaisance Côte Basque* project, the TA clarified the roles of key actors and identified coordination challenges that could hinder progress. To address these, experts proposed the establishment of a dedicated **coordination platform** to facilitate ongoing collaboration among stakeholders. Similarly, the *Houat et Hoedic* project adopted a more long-term governance model, establishing a **permanent Consultative Committee** that brings together municipalities, fishers, NGOs, and Natura 2000 managers to ensure continuous dialogue. Alongside this structure, the TA provided practical tools and guidance to support ongoing stakeholder consultation.

By providing these solutions, TA supported projects in building institutional capacity, ensuring a long-term beneficial effect to the addressed community.

Stakeholder engagement

To improve stakeholder participation, many TA assignments adopted a two-step approach consisting of **stakeholder analysis** followed by **direct engagement.**

In both the *RESHABAY Portocolom project,* the *Postav svoju hrádzku* project and the *Prut River* project, the TA conducted a **stakeholder analysis** to identify key actors and understand their roles, motivations, and needs. This analytical step was essential for determining which incentives and messages would most effectively encourage participation.

Following this, TA experts designed **mechanisms for direct engagement**. Four projects organised **workshops or participatory meetings** to align local actors, validate project assumptions, and foster collaboration. In the *Tejo Vejo* project, the workshop led to the **co-development** of actionable restoration measures, strengthening ownership and support among participants.

For the *EUMission4WaterPollution* the TA focused on developing **citizen science campaigns** and **educational initiatives.**

An additional method to secure structured cooperation with stakeholders was followed in the *Postav svoju hrádzku* project, where the TA provided **guidance and templates for partnership agreements** with key operational partners (e.g., land associations, local government). This included the description of legal and administrative steps for engaging public authorities, supporting the preparation of necessary documentation and agreements for project approval.

Skills gap assessment and training proposition

Five operational TA provided strategic guidance on the **human resource requirements** necessary for effective project implementation. In *GATEAWAY* and *Renewable energy sources for electric ships* projects (both focusing on infrastructure electrification), the TA assessed the available skills and expertise, identified gaps in roles and competencies and outlined targeted training needs. In the *Prut River* project, the TA delivered a “Training of Trainers” to form the beneficiary on how to best design a training for local fishermen communities.

Indicators development

Across the supported projects, Key Performance Indicators (KPIs) were developed to **monitor project progress** and ensure **alignment with broader strategic initiatives**, helping projects with evidence-based decision-making, coordination, and strategic coherence.

In technically complex and multi-stakeholder projects such as the *MV Alta* and *HUB-RC projects,* KPIs were developed to **track progress**, **measure impact**, and demonstrate **accountability**. In the *Port of Kerteminde* initiative, instead, indicators were used to verify the **alignment** of the project objectives with regional and local strategies, identifying synergies, overlaps, and integration pathways with other ongoing initiatives.

In the Tunisian project (ESTeM), the TA developed a structured monitoring approach, combining **socio-economic** and **environmental** metrics for the evaluation of the Marine Protected Area.

Table 10 - Example of Operational TA package delivered as part of TA – Ports community

TA beneficiary project example - Micro habitats ports de plaisance côte basque
Title: Micro habitats ports de plaisance côte basque
Lead organisation: Open Lande Biarritz
Type of organisation: Non-governmental organisation
Country: France
Community of Actors: Ports
Basin: Atlantic-Arctic basin
Objectives covered: Objective 1
Description: The project aims to contribute to marine biodiversity regeneration in the Basque Country by assessing the feasibility of installing micro-habitats in the three marinas along the Basque coast. While widely used in the Mediterranean, these structures are rare in Atlantic ports. If validated, the project will identify technical and financial partners to install and maintain the habitats, monitor biodiversity evolution, and raise public awareness on marine ecosystem restoration.
Operational challenges identified: Acceptance of the project by local stakeholders is very low, as they are scared of possible negative effects of the initiative both on the ecosystem and on the ports' activities. Moreover, Open Lande Biarritz didn't know service providers with the technical expertise required to design, construct, install, and maintain the proposed micro-habitats.
TA package offered to project: Economic/Financial; Operational
TA provided (Operational TA solutions): • **Consolidating social acceptance:** the TA provided the beneficiary with a robust scientific state of the art on marine restoration initiatives, with specific focus on port-related actions. This evidence-based document was designed to support stakeholder engagement by providing credible scientific foundations and addressing potential concerns or opposition to project implementation. • **Identification and involvement of local stakeholders:** To ensure engagement of relevant stakeholders with formal responsibilities and decision-making authorities, the TA carried out the following activities subsequential activities: (1) comprehensive stakeholder mapping to identify relevant actors; (2) desk research and pre-analysis to assess each stakeholder's formal responsibilities, current strategies and potential alignment with the project; (3) semi-structured interviews to explore compatibility between the micro-habitat initiative and stakeholders' strategic frameworks, their perceptions and interest levels, potential integration pathways and contributions, and barriers or constraints influencing project viability; (4) Online survey to port managers; (5) Participatory workshop. • **Identification of technical service providers**: Interviews were conducted with 5 companies, with the aim to evaluate their specific technical solutions, focusing on their performance, adaptability, reliability, sustainability, and associated costs. Consolidated with desk-research, this allowed for the elaboration of a comparative analysis of their relevance to the Basque context, providing the beneficiary with a short-list of the most fitted providers.
Solutions replicability **(Operational package)**: High
The TA package is replicable for other ports and marinas. The analysis of scientific literature is an effective and replicable way to prepare arguments and supporting materials to build institutional awareness and strengthen acceptance of the project. Mapping local stakeholder and identifying technical service providers are also replicable and effective activities.

Table 11 - Example of Operational solutions delivered as part of TA – Fisheries community

TA beneficiary project example - Renewable energy sources for electric ships
Title: Renewable energy sources for electric ships
Lead organisation: Energy Community of Chalki

Type of organisation: Non-for-profit organisation

Country: Greece

Community of Actors: Islands

Basin: Mediterranean Sea

Objectives covered: Objective 3

Description: The project aims to identify necessary coastal and civil works prior to the installation of renewable energy systems. It will assess the suitability of various wave energy conversion systems for the port of Kania and explore the installation of multiple small-scale wind turbines along the coastal front. Additionally, the project will investigate the integration of solar thermal and Ocean Thermal Energy Conversion (OTEC) systems.

Operational challenges identified: The energy community did not have the required capacity in terms of experienced management and technical staff.

TA package offered to project: Financial/Economic; Technical; Operational

TA provided (Operational TA solutions):

- **Identify and address skill gaps:** The TA team provided strategic guidance on the organisational and human resource requirements necessary for effective project implementation. This included the identification of the technical expertise and skill sets required within the beneficiary's project team, as well as recommendations on capacity-building measures to ensure adequate readiness.

Solutions replicability **(Operational TA package)**: the approach to identifying skill gaps and providing guidance on organisational and human resource needs is **universally applicable** across projects.

3.2.3.3. Replicability of solutions proposed

The operational solutions offered by the TAs are **highly replicable**, mostly due to the universality of the methods employed (e.g. workplans, roadmaps, KPIs). Most of the approaches used to address issues on capacity building, stakeholder engagement and governance can be well replicated since they focus on **how** the project is organized rather than on **what** the project delivers. There are just a few elements to consider when replicating these solutions:

Stakeholder participation

Participation in workshops and engagement activities is **unpredictable** and strongly influenced by local context dynamics. Stakeholder engagement and public acceptance strategies therefore need to be carefully tailored to **local attitudes**, priorities, and communication/cultural norms to be effective. It is also essential to assess whether the beneficiary has the **appropriate channels** and **capacity** to reach and mobilise a meaningful number of stakeholders, ensuring inclusive participation and stronger community ownership.

Figure 25 - Stakeholder meeting during site visit

Institutional maturity

When new governance or coordination structures are proposed it is important to assess whether the recipient is ready to accept and implement such structures. In fact, institutional maturity differs significantly between beneficiaries, affecting their **ability to sustain new governance arrangements** over time. Moreover, governance structures must gain **local legitimacy** to be effective; acceptance depends on trust, previous collaboration experiences, and broader socio-political conditions.

3.2.4. Commercial TA package

The Commercial TA package is primarily designed to help beneficiaries strengthen their value propositions, engage with key stakeholders and the broader business ecosystem, secure strategic partnerships, and improve overall market readiness**.** In the context of feasibility studies, commercial TA has played a crucial role for solutions that required **validation of their business potential and readiness for scale-up**. This section examines the main commercial challenges and barriers faced by TA beneficiaries, the solutions proposed within feasibility studies to address these issues, and the replicability potential of those solutions. It also presents illustrative case examples demonstrating how these approaches were applied to specific projects supported under the Mission Studies. It should be noted, however, that **certain measures aimed at enhancing a project's commercial potential or value were also provided through the broader financial and economic TA components** (See chapter 3.2.1) due to frequent interlinkage between commercial and financial challenges and solutions, especially for more mature projects.

The table below summarises key commercial-type challenges reported by selected TA beneficiaries and corresponding solutions delivered through the commercial TA package. Subsequent sections of this report provide a more detailed analysis of these cases.

Table 12 - Summary of TA recipients challenges and solutions offered as part of commercial TA package

Project Title	Commercial Challenges Faced	Solutions Offered
Baltic Islands and Costal communities Connect	• Lack of expertise on how to make it both internationally and locally relevant in a smooth and efficient way	• Benchmarked against successful case studies of blue regenerative business models. • Mapped current situation and stakeholder
Coastal Upgrading, Regeneration and Resilience of Astakos	• Dependence on external funding sources, creating uncertainty in project sustainability	• Conducted SWOT analysis to refine market positioning and strengthen the investment narrative
Den Levende Fiskerihavn	• Difficulty identifying funders and preparing compelling proposals for coastal regeneration activities.	• Benchmarked similar marine innovation centres (market analysis); • Helped articulate the project's value proposition to attract partnerships and investment.
Empowering Small-Scale Fisheries in the sustainable tourism value chain and marine biodiversity in Zembra MPAs. (ESTeM: Empowerment (E), Small-scale fisheries (S), Tourism value chain (T), and Marine biodiversity (M))	• Challenge of creating market value for sustainably sourced fish products through a local sustainability label. • Difficulty in linking small-scale fisheries with tourism-driven demand	• Mapped the supply chain • Developed sustainability label • Provided recommendations for commercialisation solutions
Mykonos Blue: Empowering Environmental Stewardship through Beach Clean-ups, Education, and Citizen Science	• Reliance on sponsorships limiting the project's financial and operational scalability.	• Helped with project visibility, advocacy and raising institutional credibility • Helped plan for projects for long-term sustainability and visibility.
Oczyszczanie dna Bałtyku z wraków i innych konstrukcji stalowych	• Lack of sufficient investor engagement for large-scale marine clean-up.	• Developed investor pitch and project teaser; • Outlined options for commercial financing and investment
Planet Ruhnu Experimental Seaweed Farm	• Difficulty validating a business model because of unproven technology and lack of go-to-market strategy due to early stage.	• Conducted market analysis on seaweed import and export trends at the local EU, and global levels. • Mapped Product demand among EU companies active in the consumable seaweed market was • Tested market demand through a targeted market questionnaire. • Refined project's value proposition using a SWOT analysis.
Sustamare	• Limited pilots and research activities on the commercial viability of IMTA (Integrated Multi-Trophic Aquaculture).	• Benchmarked international IMTA experiences for market demand analysis and market pricing;
TRESOILPower2X Danube Waste Plastic to Hydrogen	• Difficulty attracting conventional investors and industry partners due to FOAK (first of a kind) status. • Increased complexity and slower partnership formation due to the need to establish new SPVs for each project.	• Reviewed and refined value proposition and pitch material; • Developed market and stakeholder/ecosystem mapping for Romania and Bulgaria; • Enhanced communication and investor outreach material

Project Title	Commercial Challenges Faced	Solutions Offered
Ulysses Data For Science	• Difficulty standardising and replicating the model across regions. • Limited understanding of stakeholder ecosystem • Complexity in identifying and prioritising strategic partners • Challenges in effectively engaging potential partners	• Mapped and ranked 50+ private-sector prospects, profiling top targets. • Developed outreach tools: teaser, evidence deck, and first-contact emails. • Refined value proposition and trained the beneficiary's project team on consistent pitching. • Identified key conferences and events for engagement and sponsorships

3.2.4.1. Key issues and barriers faced by TA beneficiaries

At both the EoI and TA planning stages, TA beneficiaries reported a wide range of commercial and market-related challenges that impeded project implementation and scale-up. Overall, many projects faced concerns related to financial viability, unproven business models, limited market engagement, insufficient communication and visibility, and internal skill gaps in commercial matters. The following subsections summarise some of the issues and barriers.

Financing and investment risk linked to unproven business models

Among the recurrent commercial challenges for beneficiaries were the **difficulty of attracting investment due to perceived financial risk and uncertainty** regarding profitability. This was particularly acute for **first-of-a-kind** or **early-stage innovation projects**, where technologies and business models had not yet been validated under real market conditions. Without a proven track record or bankable guarantees, investors were reluctant to engage, while project promoters struggled to demonstrate viability and expected returns.

For example, the *TRESOILPower2X* waste-to-hydrogen project in Romania faced significant obstacles in **securing partners and investments** due to its FOAK status and limited technological validation. Similarly, the *Planet Ruhnu Experimental Seaweed Farm* reported **challenges in proving commercial feasibility**, as it sought to cultivate untested algae species with no available market data. Across such cases, the **"validation gap"** emerged as a key barrier to investment, highlighting the need for early pilot testing, third-party verification, and tailored de-risking mechanisms to enhance project bankability and investment readiness.

Market knowledge and Stakeholder identification

Limited understanding of market dynamics and stakeholder ecosystems was another commonly reported issue. Many project teams faced difficulties in identifying and engaging appropriate partners, clients, or end-users. The *Haapsalu Tagalahe Environmental Improvement Project (Haapsalu Tagalahe keskkonnaseisundi pirandamine)* in Estonia, for example, encountered **challenges in communicating potential market opportunities** to local businesses - particularly regarding the reuse of removed sediment to develop new products and revenue streams. In several cases, projects also **lacked comprehensive stakeholder / ecosystem understanding and engagement strategies**, which constrained their ability to build effective partnerships, thus also hindering their commercial potential.

Communication and visibility constraints

Weak communication and outreach capacity further limited projects' ability to generate support and attract external interest. Some beneficiaries suffered from **low visibility and ineffective dissemination strategies, undermining their capacity to appeal to investors, partners, or customers**. The Finnish bio-product initiative *Baltic Bio Stimulants (BBS)* reported having struggled with **limited public awareness and unclear value communication**. In several cases, TA beneficiaries acknowledged that their project narratives were overly technical, poorly packaged, or insufficiently adapted to non-specialist audiences. The **absence of well-developed marketing materials** (e.g. websites, pitch decks, promotional content) was also frequently noted as a barrier to generating commercial buy-in.

Capacity and skills gaps

Finally, several beneficiaries highlighted **gaps in business and commercial competencies** within their project teams. Many projects were led by technically or environmentally oriented experts who lacked experience in product development, marketing, or business planning. These **capacity gaps** limited the ability of the beneficiaries' teams to articulate convincing business cases, design viable revenue models, and engage effectively with market stakeholders. As a result, basic capacity-building support in commercial and financial management was often required.

3.2.4.2. Solutions proposed in TA studies for commercial challenges

The TA studies formulated a variety of solutions to address commercial challenges faced by TA recipients. Commercial TA support was typically customised to each project's needs, ranging from market assessments to business model refinement (for commercial purposes) and project communication enhancement. Here are some of the solutions proposed:

Market research and analysis

A foundational element of TA support involved **market research and contextual analysis**. TA teams conducted in-depth assessments of sector-specific demand, competitive landscapes, and customer bases, enabling project teams to better understand their operating environments and ground their strategies in evidence. As part of the *TRESOIL Power2X* project, TA conducted a **detailed market study** covering Romania and Bulgaria, analysing regulatory frameworks, **key market actors, and sectoral drivers** in the energy and waste management sectors. This evidence base helped identify viable commercial pathways and informed the project's strategic positioning. Similarly, for *SUSTAMARE*, TA providers assessed **market potential, demand and market prices** for products from innovative Integrated Multi-Trophic Aquaculture (IMTA) systems, helping determine market readiness and strategic positioning. Such analyses helped close critical knowledge gaps and informed more strategic, data-driven decision-making.

Business model and value proposition refinement

Another central area of support concerned **business model and value proposition refinement** for commercial purposes. TAs guided beneficiaries in articulating their value propositions, refining revenue streams, and strengthening operational and sustainability strategies. For instance, TA for *Planet Ruhnu project* focused on refining the project's

business model and value proposition through a SWOT analysis and Business Model Canvas. This process helped identify potential customers, relevant partners, and funding prospects to strengthen feasibility and bankability. A **dedicated workshop with the beneficiary and experts** was held to co-design the business model, test assumptions, and clarify the project's unique selling points. The *Den Levende Fiskerihavn* project's TA also helped **articulate the project's value proposition** to attract partnerships and investment, strengthening its credibility and turning it into a more commercially viable business case. In the Tunisian project focusing on Small-Scale fisheries (ESTeM), the TA examined opportunities to develop a **local sustainability label** as a way to sell fish products from the protected area at higher value.

Communication and marketing enhancement

Similarly, as many projects faced **challenges in communicating their narratives to non-technical audiences**, communication and outreach support became a key component of the TA provided. TA teams helped projects refine their narratives, clarify key messages, and prepare professional materials to engage investors and partners.

For example*, TRESOIL Power2X* received support to strengthen its communication and investor outreach capacities through the review and improvement of presentation materials and online content, refinement of key messages and communication channels, pitch training, and identification of relevant industry events. The *Ulysses Data for Science* project received similar support in preparing outreach tools such as a teaser, evidence deck, and introductory emails, along with **training on consistent pitching**. By strengthening communication capacities, the TA interventions significantly enhanced the visibility, credibility, and mobilisation potential of the supported projects.

Stakeholder and ecosystem mapping

As part of Commercial solutions offering, TA also carried out comprehensive **stakeholder and ecosystem mapping** to inform strategic positioning and partnership development. For instance, as part of TA provided for *TRESOIL Power2X,* TA teams **identified key ecosystem actors** including competitors, potential suppliers, technology partners (digital twin providers), investors, and local authorities, clarifying market dynamics and collaboration opportunities. Similarly, for the *Planet Ruhnu* project, the TA mapped **Estonia-based companies active in the consumable seaweed market** to gauge potential demand and identify early adopters and buyers. *Ulysses Data for Science* project TA service included mapping and ranking of 50+ private-sector prospects, profiling top targets for its tool's **uptake and replication**. Together, these mappings provided a clear picture of the market and stakeholder landscape, supporting informed decision-making on partnerships, investment targeting, and market entry strategies.

Benchmarking and best practices

Finally, TA interventions frequently incorporated **benchmarking and best-practice synthesis**. Advisors identified and analysed relevant case studies and precedents to inform the development of the supported projects. These benchmarking exercises enabled project teams to learn from **comparable initiatives, adapt established models, and avoid common difficulties**. Drawing on international and regional experience, this comparative perspective added strategic depth and connected otherwise isolated efforts to a broader ecosystem of practice. As an example, TA for the *Den Levende Fiskerihav* project included **comparative analysis and benchmarking** of marine research and innovation centres across Europe to identify effective business and partnership models. In *SUSTAMARE*,

providers benchmarked integrated aquaculture systems and cost structures from several international markets to assist project's commercial planning.

It should be noted that not all projects required the full range of commercial support measures described above and did not receive a Commercial TA package per se. TA was tailored to address the specific gaps and contextual needs of each initiative. In several cases, particularly where the project did not have an inherently commercial orientation - such as community-led volunteer programmes or educational campaigns - support focused on "**light" commercial assistance, or pre-commercial support** in other cases. This typically involved **strengthening strategic positioning, enhancing advocacy capacity, and improving the project's overall credibility**, rather than developing detailed market entry or revenue generation strategies (such as the *Mykonos Blue* example). Nonetheless, even in such instances, the TA contributed to reinforcing the project's viability and potential for long-term financing or even replication.

Table 13 - Example of Commercial TA solutions delivered as part of TA – Ports community

TA beneficiary project example - TRESOILPower2X Danube Waste Plastic to Hydrogen
Title: TRESOILPower2X Danube Waste Plastic to Hydrogen
Lead organisation: Tresoil Biofuels SRL
Type of organisation: Private entities
Country : Romania
Community of Actors: Ports
Basin: Danube River & Black Sea
Objectives covered: Objective 1; Objective 2; Objective 3
Description: The project aims to convert End-of-life tires and unrecyclable plastic waste into electricity, hydrogen, ammonia and black carbon through a waste-to-energy process. The project's stated goals are to reduce landfill waste, avoid polluting incineration, and generate clean energy.
Commercial challenges identified: Commercial challenges facing TRESOILPower2X is attracting sufficient private investment for a *First of a Kind (FOAK)* technology that turns waste plastic into hydrogen. As a high-risk, capital-intensive project, it falls outside standard banking and venture capital criteria. The need to demonstrate technical viability and commercial scalability adds further complexity, needing support to bridge the funding gap and attract industry partners for future investment rounds.
TA package offered to project: Commercial ; Economic/Financial
TA provided (Commercial TA solutions): To strengthen the TRESOILPower2X project's feasibility and investment readiness, the TA approach in this package included the following solutions: • Collecting and reviewing all project materials (presentations, technical overviews, stakeholder and partner information, and past funding data). • Conducting a market analysis in Romania and Bulgaria to assess regulations, key players, and drivers in the energy and waste sectors. • Refining the project's value proposition through a SWOT analysis, mapping potential customers, and identifying relevant stakeholders such as digital twin providers, strategic partners, and local authorities. • Enhancing communication and visibility by reviewing and improving existing materials and online presence. • Strengthening outreach and investor appeal through refined messaging, targeted communication channels, pitch training, and participation in key industry events.
Solutions replicability (Commercial TA package): Medium- High The TA delivers a standard, reusable toolkit - market sizing, demand mapping, ecosystem mapping (buyers, suppliers, funders), and a multi-channel marketing & sales strategy (events, tenders, direct outreach, digital assets). These approaches

generalise well to other context and projects with similar type of challenges. However, some technical and knowledge might be needed to appropriately apply this to waste-to-energy context.

Table 14 - Example of Commercial TA solutions delivered as part of TA – Islands community

TA beneficiary project example - Planet Ruhnu Experimental Seaweed Farm
Title: Planet Ruhnu Experimental Seaweed Farm **Lead organisation:** Ruhnu Cultural Space (Ruhnu Kultuuriruum) **Type of organisation:** Non-governmental organisation (NGOs) **Country** : Estonia **Community of Actors:** Islands **Basin:** Baltic & North Sea **Objectives covered:** Objective 3 **Description:** Located on Ruhnu Island in the Gulf of Riga, the project aims to establish an experimental seaweed farm in collaboration with local fishermen and the Planet Ruhnu movement. This cultural hub will engage artists, scientists, and the community, including educational institutions. The project plans to cultivate Ulva intestinalis and Fucus vesiculosus. Activities include identifying optimal growth sites by analysing environmental impacts, selecting suitable farm types and materials, performing strength and durability calculations, and testing solutions in challenging wave conditions at Kuressaare College's model test pool. **Commercial challenges identified**: Securing investments is a challenge, as investors and support programmes require validated business plans, which are difficult to produce for untested algae species. Without prior data on yields or profitability, the project remains too experimental for traditional financing until results from the pilot farm confirm its technical and economic viability. **TA package offered to project**: Commercial ; Economic/Financial **TA provided (Commercial TA solutions):** • **Market analysis:** the TA assessed EU seaweed trade flows, product demand, and stakeholder mapping to identify viable market entry points. A focused assessment of Estonia and Latvia was undertaken due to their proximity to the beneficiary's project site on Ruhnu Island, located in the Gulf of Riga. • **Product demand** To assess product demand a mapping exercise was undertaken to identify EU-based companies active in the consumable seaweed market that may represent potential buyers of the beneficiary's product. To further assess local market demand, a questionnaire was developed for the beneficiary, targeting the restaurant industry. • **Value proposition refinement:** a SWOT analysis was performed to better define the value proposition of the seaweed farm. **Solutions replicability (Commercial TA package)**: Medium-High The combination of market analysis, demand assessment, and value proposition refinement through SWOT **is a** standard and transferable methodology for early-stage business. While the specific sectoral focus and geographic scope (e.g., seaweed markets in the Baltic region) are context-dependent, the analytical framework can be readily applied to other emerging marine or bioeconomy sectors.

Figure 266 - Local fishermen at Ruhnu, Saaremaa, Estonia

3.2.4.3. Replicability of solutions proposed

The commercial solutions used in TA provision - such as value proposition refinement, market mapping, investor engagement tools, and investment strategy development - are **largely replicable**, as they rely on established methodologies from business development and investment readiness practices. However, their effectiveness depends on project maturity, market characteristics, and the degree of innovation or technological novelty involved. Solutions like **business model improvement**, **SWOT-based value proposition refinement, pitch deck development**, and **investor communication materials** are highly transferable tools that can be adapted for other early-stage or high-risk ventures to increase their bankability and reduce risk for investors. Tools for **market analysis**, and **benchmarking** can also be easily adapted to projects in different thematic or regional contexts, provided that local market data are available. These approaches are especially valuable for emerging blue

economy sectors or innovative technologies/solutions where market structures are still forming. While the solutions, namely methodologies and tools, are mostly replicable, several elements must be considered:

Early-stage innovation risk

Investor engagement and business model tools are less effective when the underlying technology is not yet validated or demonstrably scalable. For early-stage ventures this becomes most efficient when delivered hand in hand with **technical solutions** (technical feasibility studies, pilot demonstrations). Partnering with or seeking help from **innovation accelerators (e.g., test-before-invest facilities)**, or **research institutions** can also help bridge the gap between concept and commercial readiness. Additionally, using **phased investment approaches**, such as starting with small-scale proofs of concept, can reduce perceived risk and attract initial capital or investment.

Data availability

Market and demand mapping depend on reliable data; in emerging markets, limited data can limit replicability. Where reliable market data are lacking, projects should combine **secondary data collection** (industry reports, policy analyses) with **primary research** (stakeholder interviews, surveys, expert panels). Collaboration with **sectoral associations** or **public authorities** can help access needed data. Developing shared data repositories or regional market intelligence hubs would further facilitate replication across similar contexts, however, this requires going beyond what TA can offer but rather institutional effort.

Local market and ecosystem differences

Local market conditions and stakeholder ecosystems vary across regions, influencing how commercial solutions are structured, adopted, and scaled. Projects should **assess the local business landscape early in the design phase** to identify relevant actors, market niches, and enabling frameworks at local, regional, and EU levels. Engaging local stakeholders - such as through targeted market surveys (e.g. the approach used in the Planet Ruhnu project TA) - can help tailor business models and ensure alignment with regional demand and specific customer or investor segments.

Communication sensitivity

Investor communication and pitch materials should be carefully adapted to reflect the expectations, priorities, and terminology of different investor segments and sectors. Tailored messaging ensures that the project's value proposition aligns with the specific motivations of each audience, for instance, **innovation potential** for venture capital funds, **long-term financial performance** for institutional investors, or **measurable environmental and social impact** for philanthropic and impact investors. Incorporating **context-specific evidence**, such as relevant case studies or demonstrable metrics, can enhance credibility and strengthen the investment narrative.

3.2.5. Regulatory TA package

Regulatory TA packages are aimed at helping project beneficiaries navigate legal and regulatory landscape such as permitting, compliance with regulations, and coordination across multiple governance levels. This chapter examines the key regulatory challenges and barriers faced by TA beneficiaries, solutions proposed in the feasibility studies to address

these issues, and, if or how these solutions can be replicated. Specific case examples are used to illustrate how regulatory TA solutions were applied to projects to address their regulatory-specific challenges. See below for an overview of projects for which regulatory TA support package was offered to address their specific challenges.

Table 15 - Summary of TA recipients challenges and solutions offered as part of Operational TA package

Project Title	Regulatory Challenges Faced	Solutions Offered
AQUAGEN: Aquatic Genetic Resources Management for Ecosystem Sustainability	• Challenge of limited familiarity with EU and national legal frameworks for international cooperation • Navigating complex EU and national regulations for fish stocking, habitat restoration, and genetic conservation	• Identified and assessed relevant EU and national regulatory areas affecting project activities • Conducted a regulatory review and mapped applicable laws, licensing processes, and legal constraints
Baltic Bio Stimulants (BBS)	• Challenge of confirming legal safety and classification for bio-stimulant use. • Complexity in navigating regulations on marine biomass harvesting and product compliance.	• Legal mapping across local, national, and EU levels, covering marine biomass harvesting, bio-stimulant processing, and product classification. • Identification of regulatory gaps and risks, including waste legislation, environmental directives, and permit requirements.
Baltic Islands and Costal communities Connect - Implementing the Circular Economy in Baltic Islands through Sustainable Tourism Practices	• Not identified at the EoI stage	• Reviewed regional, national, and European regulatory frameworks to ensure compliance and strategic alignment.
Ceinture bleue des îles de Houat et Hoedic	• Aligning with a complex set of national, subnational, and European regulatory frameworks • Challenges in reinstating pre-1956 fishing regulations and aligning current trawling limits with historical legal frameworks	• Targeted analysis of national, subnational, and European regulatory frameworks for alignment • Facilitation of dialogue with the State, Natura 2000 Steering Committee, and local fishers to build consensus and ensure compliance
Decarbonisation of maritime transport between the Sicilian Region and its minor islands	• Difficulty establishing rules and regulations for hybrid vessels combining fuel cells and batteries. • Need to obtain certification for controlled hydrofoil systems	• Conducted analysis of the regulatory and legal framework for hybrid vessels relevant to the Sicilian context.
Den Levende Fiskerihavn	• Navigating legislation and adhering to local zoning regulations • Lack of legal expertise	• Reviewed institutional and governance frameworks relevant to harbour regeneration, marine research, and blue economy development • Clarified planning, permitting, and local authority collaboration requirements & recommended coordination with municipal and national bodies

Project Title	Regulatory Challenges Faced	Solutions Offered
EUMission4WaterPollution	• Challenge of navigating national and EU legislation on plastic pollution, waste management, and marine protection. • Limited enforcement capacity at the local level to meet compliance and reporting obligations.	• Mapping of relevant Albanian and EU legislation • Policy analysis and legal needs assessment, identifying obligations, enforcement gaps, and compliance challenges.
Gateway: Green And Technological European Waterway to Establish a Sustainable Maritime Corridor Between the Ports of Tenerife and Huelva (Spain)	• Lack of harmonised regulations for the production, storage, and use of alternative fuels in ports • Lengthy and complex permitting processes for infrastructure development • Insufficient policy support and incentives	• Reviewed EU/national frameworks (AFIR, FuelEU Maritime, RED III/RFNBO, EU-ETS, IGF Code/class rules) and their specifics for maritime decarbonisation, port operations, alternative fuels • Mapped gaps/barriers and implications for deployment of technologies and fuels at the ports
Indagini batimetriche e correntometriche e realizzazione di interventi di protezione e ripascimenti del litorale dell'area di comata a torre Sibiliana	• Lack of a clear and coherent regulatory framework to support MPAa and special conservation zones.	• Conducted a gap analysis of the applicable regulatory framework for coastal protection rules • Provided guidance for harmonising planning tools for regulatory compliance • Recommended strategies for integrating environmental objectives into urban and port development instruments for regulatory compliance
Mare nostrum	• Fragmented and unclear MPA and protected areas regulatory framework and competences. • Weak long-term, enforceable restoration actions.	• Mapped protected area frameworks and national–regional competencies. • Identified fragmentation in MPA and Natura 2000 management. • Diagnosed governance gaps and proposed good practices. • Developed recommendations for an integrated Coastal Environment Strategy and Plan.
Mykonos Blue: Empowering Environmental Stewardship through Beach Clean-ups, Education, and Citizen Science	• Navigating local and EU regulations • Compliance with legal requirements and obtaining necessary permits	• Reviewed regulatory and permitting requirements for clean-ups, citizen science, and educational activities • Identified regulatory constraints related to authorisations for coastal interventions
Oczyszczanie dna Bałtyku z wraków i innych konstrukcji stalowych	• Unclear legislations on ownership of abandoned vessels on the bottom and recycling of mid-sized units	• Reviewed relevant international and EU regulatory frameworks related to shipwreck removal • Assessed permitting and liability aspects linked to recovery of steel from shipwrecks, hazardous metals and waste management • Outlined compliance requirements for environmental impact

Project Title	Regulatory Challenges Faced	Solutions Offered
Prikupljanje i uklanjanje odbačene ribolovne opreme i otpada iz mora	• Lack of knowledge on legislations and their implications	• Review of EU and national legislation and compliance implications for collecting and managing marine plastic litter and end-of-life (EOL) fishing gear
RESHABAY Portocolom	• Difficulty aligning restoration activities with the European Water Framework Directive and biodiversity credit standards.	• Integration of EU and national regulatory parameters, including biodiversity credit frameworks and water policy instruments.
Save the Adriatic undersea lives	• Need help in obtaining concession for ecofriendly mooring systems	• Reviewed policies and legislation on boating tourism infrastructure and concessions for use of marine public good
Seagrass aquaculture at scale	• Challenge in obtaining aquaculture permits at the required scale • Difficulty navigating government competences for permitting	• Provided analysis of legislation and permitting processes in France and Spain for cultivating seagrass in modular mid-water farm pods, clarifying steps, key contacts, and regional/provincial specifics
The port of Kerteminde - an attractive sustainable marine, maritime and food environment	• Lack of clarity on project alignment with Mission Ocean and Waters and how to integrate with other existing strategies and plans	• Assessed project's strategic alignment with key initiatives via evaluation matrix with indicators from these initiatives • Identified synergies, overlaps, and potential conflicts with other initiative, and proposing integration pathways and shared indicators
Usunięcie wraku MV Alta z wybrzeży Irlandii	• Understanding legal aspects for activities related to abandoned shipwrecks and liability • Lack of understanding of competent institutions for subject of wreckage	• Reviewed applicable EU and national maritime safety and environmental laws, • Highlighted key legal bottlenecks for implementation

3.2.5.1. Key issues and barriers faced by TA beneficiaries

At both the Expression of Interest (EoI) stage and during TA planning, many beneficiaries identified regulatory and legal obstacles that impeded project implementation. Roughly half of the TA projects reported regulatory challenges, with the following being the examples:

Unclear or fragmented regulatory frameworks

Several projects reported challenges operating in contexts where the **legal framework was fragmented, overlapping, or insufficiently developed** to support innovative actions. For example, coastal restoration initiatives in Italy (e.g. *Indagini batimetriche* and *Mare Nostrum*) faced incoherent regulations within marine protected areas and conservation zones, as well as fragmented competences among national, regional, and local authorities, leading to overlaps and gaps in environmental and protected areas' management. In such cases, the absence of a clear regulatory framework made it difficult for the beneficiaries' project teams to ensure compliance, creating uncertainty and increasing the risk of conflicts between different regulations or authorities.

In other instances, issues arose from **vertical regulatory fragmentation** between governance levels. For example, *GATEWAY* project reported that regulations governing the production, storage, and use of alternative fuels in ports varied between EU directives and national or local port rules, creating inconsistencies that hindered the development of maritime corridors. Similarly, efforts to remove marine pollution and shipwrecks in the Baltic and Atlantic (e.g. wreck removal projects in Poland and Ireland) exposed jurisdictional ambiguities – for instance in the case of the *MV Alta* wreck removal, project teams encountered difficulties interpreting the **interplay between international maritime law, national law, and EU law** in defining liability and identifying the competent authority responsible for abandoned shipwrecks.

Complex permitting and licensing processes

Almost all projects with a physical intervention component encountered **lengthy or complex procedures to obtain permits and licenses**. This was particularly a case for first-of-a-kind or innovative activities, technologies used or products. The *Seagrass Aquaculture at Scale* project, for instance, faced unclear permitting processes due to seagrass being an uncommon aquaculture crop, requiring approvals from multiple departments in different jurisdictions. Similarly, the Spanish-led *GATEWAY* maritime corridor project reported lengthy permitting procedures for infrastructure development to support production, storage, and use of alternative fuels in ports. In several cases, beneficiaries found that **permit applications were slowed by unclear requirements or procedural hurdles**, delaying project implementation. These permitting hurdles not only caused timeline delays but also created uncertainty that could deter investors or partners.

Lack of supporting regulatory framework

In some cases, permitting challenges reported by beneficiaries stemmed from the **absence of regulatory frameworks for emerging technologies**. For instance, the *Decarbonisation of Maritime Transport* initiative in Sicily required standards for hybrid fuel-cell vessels and hydrofoil certification, but no harmonised regulations existed to cover such cases. The *AQUAGEN* project in Estonia also faced regulatory barriers related to stocking and restoration efforts. For example, the use of cages in lakes to rear coregonids before restocking is legally prohibited in most EU countries. Although the project itself was designed

to contribute to ecological restoration, the absence of a supporting regulatory framework hindered its implementation.

Figure 277 - Rødvig, Denmark

Limited internal regulatory capacity

Finally, many beneficiaries' project teams **lacked in-house expertise to navigate the complex legal environment**, leading to compliance challenges. TA beneficiaries often reported regulatory challenges but little experience in legal analysis to overcome them. This skills gap meant projects struggled to interpret zoning laws, environmental regulations, or funding guides on their own. Small island or community-led projects (e.g. *Mykonos Blue* in Greece) also reported resource constraints on navigating compliance with legal requirements and obtaining necessary permits for beach clean-ups and educational activities. In some cases (e.g. *Baltic Bio Stimulants* in Finland, *Den Levende Fiskerihavn* in Denmark), beneficiaries acknowledged the need for legal expertise to ensure they complied with local zoning and environmental rules.

3.2.5.2. Solutions proposed in TA studies for regulatory challenges

The TA feasibility studies proposed a range of solutions to address the above regulatory challenges, typically tailored to each project's situation. Regulatory assistance often went hand-in-hand with technical or financial support, reflecting the intertwined nature of legal and implementation issues. Common types of regulatory TA solutions included:

Regulatory mapping and gap analysis

Among the common support activities was the **regulatory mapping of relevant laws, regulations, and institutional competencies** affecting the project, and then identification of gaps or overlaps. TA experts reviewed international, EU, national, and local regulations in the project's domain to create a clear picture of the "regulatory landscape", often revealing inconsistencies or grey areas that needed attention. For instance, the TA for *Indagini batimetriche* (Italy) conducted an analysis of coastal protection laws across municipal, regional, and national levels, pinpointing where rules were inconsistent. Similarly, the *GATEWAY* study reviewed EU directives on alternative fuels (such as the AFIR and FuelEU Maritime regulations) alongside Spanish and Canary Islands laws, mapping barriers that could affect the green corridor implementation (including special exemptions in outermost regions). By performing these mappings and gap analyses, TA helped projects understand exactly which rules applied and where modifications or clarifications were needed. For the Tunisian project on Small- Scale fisheries (ESTeM), the identification of legal gaps was instrumental in anticipating possible developments and, consequently, positioning the project partners advantageously. This approach was one of the most frequently provided support measures across the regulatory TA portfolio.

Regulatory compliance

Similarly, in multiple projects, TA teams analysed the necessary steps for the projects to be compliant with national and international laws. For example, in the *Baltic Bio Stimulants* project, the TA developed a **requirement compliance matrix** on product and environmental safety, also identifying competent authorities for early engagement. In the *Prikupljanje i uklanjanje odbačene ribolovne opreme i otpada iz mora* project, the TA experts identified **legal implications** for the collection and management of marine litter and end-of-life fishing gear.

Permitting process support

Given the prevalence of permitting hurdles, three TA teams **provided guidance to help beneficiaries navigate and streamline permitting processes**. This support often included compiling step-by-step roadmaps for permit applications and clarifying competent authorities and contact points. For example, under the Seagrass Aquaculture at Scale pilot, the TA

developed a **detailed guide to aquaculture permitting procedures** in France and Spain, outlining major permitting pathways, common principles, required approvals at each administrative level, and key regional nuances. Similarly, the *Save the Adriatic Undersea Lives* project focuses on addressing illegal mooring and anchoring in Nečujam Bay, with the TA reviewing relevant policies and legislation governing boating tourism infrastructure and the granting of concessions for the use of marine public goods.

In more complex cases, TA teams helped analyse **multitude of permitting requirements, including environmental compliance aspects**. This was the case for the Shipwreck Removal project in Poland, where uncertainties surrounding waste handling, and metal neutralisation or recovery required a thorough analysis of permitting obligations and liabilities as well as environmental impact assessment considerations. By partially offloading the administrative burden, such TA support accelerated regulatory approvals and strengthened beneficiaries' capacity to secure permits successfully. Often, this strategy was **coupled with legal advisory support**: interpreting specific clauses, advising on how to apply for exemptions or variances if needed, and ensuring that project plans are adjusted to meet regulatory standards.

Policy and institutional recommendations

In several feasibility studies, TA teams went a step further by suggesting **policy-level measures to support project goals, particularly when beneficiaries were public authorities.** For instance, the TA for *Mare Nostrum* (Palermo) concluded with recommendations for an integrated coastal environmental management plan and governance structure, advising local authorities on improving long-term regulatory coordination. In the *Mykonos Blue* project in Greece, the TA proposed how to integrate local policy measures for waste management and coastal protection based on citizen science data on waste patterns. Similarly, the *Decarbonisation of Maritime Transport* study highlighted the need to update technical standards and certification protocols for hybrid vessels, enabling public authorities to convey these needs to maritime regulators. In such cases, TA studies helped bridge project-level implementation with broader policy frameworks and agenda-setting.

Across projects, **TA experts frequently recommended establishing dialogue with relevant (maritime) authorities to clarify responsibilities and accelerate approvals**. Strengthening regulator–project communication was therefore a recurring recommendation in regulatory TA, ensuring that solutions were both actionable and institutionally supported. See below some concrete examples on TA assistance and solutions provided to beneficiaries.

Table 16 - Example of Regulatory solutions delivered as part of TA – Ports community

TA beneficiary project example - Removal of the wreck of the MV Alta from the Irish coast
Title: Removal of the wreck of the MV Alta from the Irish coast
Lead organisation: Albatros sp. z o.o.
Type of organisation: Private entities
Country : Poland
Community of Actors: Ports
Basin: Atlantic-Arctic basin
Objectives covered: Objective 1
Description: The project involves leveraging the experience and innovative approach of the Polish company Albatros sp. z o.o., specialized in maritime disaster response in the Baltic Sea, to safely remove the wreck of MV Alta from the coast of

Ireland and to clean up the surrounding coastal area from the vessel's debris. The MV Alta was washed ashore on the coast of Ireland in 2020, and its continuous degradation poses several unacceptable risks, especially in terms of safety hazard, underlining the urgency and necessity of the planned intervention. The removal operation will be carried out in a manner that ensures safety for both people and the environment.

Regulatory challenges identified: Albatros sp. z o.o. struggled in merging the legal aspects of international maritime law, national law and EU law relating to abandoned shipwrecks and establishing liability for them. It was also difficult to determine who holds responsibility in Ireland for wreckage originating from the country's coast.

TA package offered to project: Economic/Financial; Regulatory; Operational

TA provided (Regulatory TA solutions): To clarify the legal and institutional landscape in which Albatros operates, the TA included the following actions:

- **Regulatory analysis on ownership of shipwrecks in Poland and Ireland**: The TA compared the two national legal systems, highlighting the distinct approaches to wreck ownership and identifying the competent authorities (Maritime Offices in Poland and the Receiver of Wreck in Ireland). This comparative analysis enabled the framing of the complex *MV Alta* case - a vessel without owner or flag - within the Irish legal system.
- **Administrative permits and approvals required in Ireland**: The TA outlined the regulatory and procedural landscape for wreck removal and recycling. It provided the foundation for a permit schedule, risk assessment, and stakeholder communication plan, summarising the required permits, competent authorities, and key practical considerations.

Solutions replicability **(Regulatory TA package)**: Medium

The TA is methodologically replicable and represents a strong model for similar regulatory analyses in maritime or environmental projects. Its content (specific legal rules, authorities, and case) is jurisdiction-specific, but the analytical framework - combining comparative legal analysis with administrative permitting and implementation planning - is widely transferable to other contexts and sectors.

Table 17 - Example of Regulatory solutions delivered as part of TA – Fisheries community

TA beneficiary project example - Seagrass aquaculture at scale
Title: Seagrass aquaculture at scale
Lead organisation: Seagrass Blue
Type of organisation: Private entity
Country : France
Community of Actors: Fisheries
Basin: Mediterranean Basin
Objectives covered: Objective 1; Objective 3
Description: The project aims to establish a 10-hectare seagrass farm using innovative aquaculture techniques to reduce costs and improve yields. Recognizing the crucial role of seagrass in ocean ecosystems and carbon removal, the initiative addresses the rapid loss of natural seagrass meadows. By utilizing floating farm pods and precision aquaculture techniques, the project ensures robust growth and maximizes the potential of seagrass, overcoming the challenges of traditional restoration methods.
Regulatory challenges identified: The project faces major regulatory hurdles due to the lack of a clear permitting framework for seagrass aquaculture, fragmented approval processes across authorities, and the absence of established criteria for environmental assessments. The use of novel technologies, including low-carbon materials and underwater robotic systems, further complicates compliance and delays investment readiness.
TA package offered to project: Regulatory; Operational
TA provided (Regulatory TA solutions): • **Clarification of permitting process:** As the SEAGRASS Blue project is considering installing semi-submerged structures within French jurisdictional waters, specific permits issued by national authorities are necessary. The TA described in details several types of permits differentiating them by rights and obligations (e.g. length of occupancy, taxation, etc.) and clarifying roles and responsibilities of key administrative authorities. Because of its innovative nature, the SEAGRASS Blue project does not specifically fit into one of the existing permitting categories. However, the TA identified 4 different administrative pathways to obtain permits.
Solutions replicability **(Regulatory TA package)**: Low-Medium
The methodological approach of mapping and clarifying permitting procedures, identifying administrative pathways, and defining institutional responsibilities is widely transferable to other innovative or cross-sectoral projects. However, the specific

legal and administrative details are country- and sector-specific, meaning replication requires adaptation to each national regulatory framework.

3.2.5.3. Replicability of solutions proposed

Most TA activities employed structured analytical tools and comparative assessments that can be readily adapted to other regulatory contexts, provided that multi-level legal and institutional specificities are duly considered.

Approaches such as **regulatory gap analysis, competence mapping, and environmental regulatory assessments** proved effective in supporting planning and management processes and can be replicated in other coastal protection and marine management initiatives. Similarly, **systematic reviews of EU and national legislation** offer practical frameworks for analysing sector-specific requirements and identifying policy or implementation gaps.

Permitting and compliance mapping tools also demonstrate high transferability, particularly for projects operating across multiple governance levels and complex authorisation systems. Combined with legal reviews to address issues like liability, ownership, and management in operations can likewise be adjusted to meet project-specific conditions. Overall, while these are well established replicable methodologies, their application requires consideration of several factors:

Legal differences across countries

Differences in national and regional legal frameworks require careful **tailoring of analytical templates**. This is particularly important in **multi-country projects** - for instance, initiatives aiming to establish a **maritime corridor between ports located in different countries**. In such cases, national transpositions of EU legislation and port-level regulations may differ significantly. For example, while the *Gateway* project explored the establishment of a **green maritime corridor between two ports in Spain**, a similar initiative connecting ports in **two different countries** would require a **country-by-country assessment** of safety requirements, national maritime codes, and understanding of how EU law has been transposed into national legislations.

An effective way to address these challenges could be to also **engage local legal experts** from each country's competent authorities to validate interpretations and ensure that compliance recommendations remain contextually accurate and legally sound.

Institutional complexity

Overlapping competences (e.g., multiple public authorities or agencies hold overlapping or intersecting responsibilities for the same policy area - such as environmental permitting, maritime safety, or spatial planning) can cause delays, inconsistent guidance, or duplication of efforts for projects. To mitigate these challenges, it is most effective to introduce **governance mapping tools early in the project** to clearly outline the roles and responsibilities of all relevant institutions - for example, identifying which authority grants permits, enforces regulations, or oversees funding.

Permitting complexity

While permitting and compliance mapping tools to identify permitting needs and compliance standards for project implementation are highly replicable, variability in permitting durations and procedural transparency can reduce predictability. Many TA studies recommended adding **an early consultation step with competent authorities** to ensure smoother

permitting processes. In practice, authorities themselves often face challenges navigating complex or overlapping permitting rules. For **innovative or first-of-a-kind approaches**, this complexity can be even greater. Therefore, establishing an open dialogue with (and between) authorities can significantly improve mutual understanding and facilitate clearer, more efficient permitting pathways.

Vertical coordination

When beneficiaries are public authorities, there is scope for using the TA process to promote **governance and coordination improvements**. Instruments such as policy alignment matrices can serve as standard tools to ensure consistency between project objectives and broader policy frameworks at EU, national, and regional levels. However, these tools may be less effective where local development plans are outdated or have not yet integrated considerations related to innovation and emerging technologies. In such contexts, public authorities have a key role in updating policy frameworks, enhancing inter-institutional coordination, and strengthening overall policy coherence to enable innovation-driven projects to scale effectively.

4. General conclusions and recommendations

4.1. Diversity and reach of the TA

Participation in TA calls was geographically uneven, with the Mediterranean basin over-represented and other sea basins less visible. While beneficiaries represented a broad spectrum of public, non-profit, and research actors, engagement from private enterprises and innovation-driven SMEs remained limited, despite these being the third most common beneficiary type.

This uneven participation raises questions about proportionality in applications across countries and basins. While this pattern could be influenced by factors such as differences in population density, existing funding ecosystems, or familiarity with EU instruments, it suggests the value of exploring whether additional engagement or awareness-raising efforts in certain sea basins might be beneficial.

The **profile of beneficiaries** was diverse, including non-governmental organisations (NGOs), local and regional authorities, port authorities, early-stage private companies, and research institutes. This diversity suggests that actors **across sectors recognise the relevance of the Mission and share similar capacity-building needs**. While start-ups and private companies may have been less represented - possibly due to limited resources or competing priorities - this distribution may also partly stem from the design of the support instruments, which appeared more attractive to public and non-profit actors.

Recommended policy actions:

- **Broaden participation mechanisms**: Allow more flexible allocation of TA support across countries, exploring approaches that complement fixed quotas with proportional thresholds based on project quality and demand[4]. Coupled with targeted outreach and enhanced project preparation support, this could help ensure more balanced participation and higher-quality applications across the board.
- **Targeted outreach**: The European Commission should consider targeted information and mentoring actions in those EU Member States and sea basins that showed comparatively lower participation levels in this study, making use of national contact points and EU representations.
- **Private-sector engagement**: Develop incentives for SME and industry participation (e.g. co-funding mechanisms[5], innovation vouchers[6], or simplified access pathways to

[4] The current limit of a maximum of three beneficiaries per EU Member State should be reconsidered. While this threshold ensures non-discriminatory access to Technical Assistance (TA), it does not adequately reflect demand or the potential to support high-quality projects across multiple regions. Relaxing this threshold would enable broader uptake of TA services.

[5] SME-friendly instruments like the EIC Accelerator, Eurostars, and cascading grant approaches, with reduced administrative and financial barriers for SME uptake.

[6] Examples include national schemes such as the Flanders Innovation Subsidies (Belgium) or Ireland's Innovation Voucher Programme, which allow SMEs to access financial support, external expertise, research capabilities, or feasibility studies for innovation activities.

TA offer) and connect to a network of investors (e.g. through existing CO-WATERS CSA, or Smart Cities Marketplace or City Climate Capital Hub).

4.2. Effectiveness and delivery of support

TA delivery teams acknowledged that the most effective assignments were those in which beneficiaries were actively involved, used iterative processes and explored options collaboratively. This approach allowed the **TA support to be more closely tailored to local realities**. Such collaborative exchanges also contributed significantly to **capacity building and institutional learning**, enabling beneficiaries to gain a clearer understanding of methodologies, data use, and project development processes. As a result, they were better able to act on recommendations, implement project phases with stronger internal capacity, and rely less on external expertise in the future.

Overall, the **value of in-person engagement** was widely acknowledged, with site visits seen as moments of genuine exchange and an essential part of TA for trust-building and deeper understanding. However, some noted that the in-person exchange was not as efficient when it was limited to the end of the process (e.g., aligning on final results or presenting the findings).

It should be noted that the **initial level of preparedness varied significantly across projects**. Some beneficiaries submitted well-developed and clearly scoped Expressions of Interest (EoIs), while others struggled to define precise needs or realistic objectives. In several cases, this led to **re-scoping and delays during implementation**. Among the main barriers to effective delivery were often not in 'technicality' but in the early definition of what the TA should achieve. Some projects faced confusion about the boundary between feasibility support and detailed design.

Despite their diversity, TA beneficiaries faced a broadly similar set of financial, technical, operational, and regulatory challenges. Funding constraints, capacity gaps, and coordination difficulties were among the most frequently reported issues across actor types. These shared difficulties demonstrate the value of exchanging experiences and lessons learned among projects.

Across all thematic areas, the TA approach proved to be highly integrated. Most beneficiaries received a combination of three or more TA packages, reflecting the interconnected nature of their challenges. Financial and technical support were the most frequent forms of assistance, followed by operational and regulatory help, while commercial support was more targeted toward projects seeking to scale into viable enterprises. The interventions collectively addressed barriers through financial, technical, operational, commercial, and regulatory measures.

These findings suggest that TA schemes should adopt comprehensive and integrated approaches to better capture the interdependencies between these dimensions and maximise impact. Given the similarities in needs across beneficiaries, working with groups of actors facing comparable challenges could also enhance peer learning and the efficiency of support delivery. It is important to mention that offering more intensive assistance (3 packages or more) to fewer beneficiaries can strengthen impact and ownership, though it may also create over-reliance on TA and reduce beneficiaries' internal effort toward project success. Finding a balanced approach – one that provides meaningful support while encouraging beneficiaries to stay proactive – will help sustain impact over time.

Recommended policy actions:

- **Phased delivery model:** Introduce a two-phase TA process combining
  - a tailored readiness or diagnostic phase (instead of the current short handshake phase) and
  - an implementation or investment-preparation phase.
- **Flexible contracting:** Keep enabling extensions or modular delivery (in terms of number of days allocated and modularity of TA services) in the TA Plans to allow iterative engagement and a reasonable adaptation to beneficiary needs.
- **Peer learning mechanisms:** Institutionalise peer exchange through Mission Communities or connect to the annual "Mission Forum" supported by the European Commission. Strengthening communication and peer learning within the Mission network could help amplify impact, improve access to solutions, and accelerate progress toward shared objectives.

4.3. Governance and institutional capacity

The TA provided meaningful contributions to local institutional learning and coordination. Yet governance fragmentation and unclear mandates from the beneficiaries often limited uptake of outputs or risk leading to the interruption of the assistance. To capitalise on the success achieved in engaging target stakeholders and advancing Mission Charter pledges, tailored, hands-on support should be provided to help stakeholders translate formal commitments into tangible implementation, measurable results, and demonstrable impacts.

Recommended policy actions:

- **Capacity-building programmes:** Connect the delivery of TA to existing structured training and mentoring opportunities for local authorities and project promoters – for example, by mapping available programmes, instruments and mechanisms, and establishing connection or MoUs for mutual recognition and coordination of support, ensuring the most suitable form of assistance in line with beneficiaries' needs. Such mechanisms already exist, including examples under other Horizon Europe (Co-Waters CSA) and complementary initiatives such as Clean Energy for EU Islands TA, BlueInvest, EIB Blue Champions, Sea Basin Assistance Mechanisms (e.g., WestMED / Atlantic), the Maritime Spatial Planning Assistance Mechanism, and others.

4.4. Replicability and knowledge transfer

Many of the methodologies and outputs developed through the TA have strong potential for reuse and adaptation in other contexts. Financial models, funding matrices, mapping templates, and monitoring tools were often designed in standard formats, enabling easy transfer across projects and regions. However, successful application depends on **project maturity, local conditions, data availability, and institutional capacity**, with strong local teams being key for effective uptake. To enhance transferability, TA solutions should be **modular, well-documented, and easily accessible**.

Recommended policy actions:

- **Replication planning and mainstreaming:** Require each supported project to include a replication and scale-up roadmap, defining how methodologies can be adapted across target communities. Such a roadmap should be developed by first identifying which elements of the project are suitable for replication. This could be achieved through an exercise to outline the steps required to adapt and transfer the methodologies or tools of the project, highlighting any necessary adjustments and identifying possible challenges to successful replication. Since each beneficiary and target community is different, the roadmap would have to be flexible, allowing beneficiaries to tailor the approach according to their unique circumstances and objectives.
- **Invest in knowledge transfer, not just dissemination:** A key barrier to replication is the limited visibility of TA-delivered solutions. Tools and methodologies should be translated into clear, user-friendly formats, such as handbooks, toolkits, or implementation guides, and made accessible through open-access channels and repositories. However, simply publishing these materials is not sufficient. Structured knowledge exchange mechanisms, such as peer learning sessions, mentoring or technical support helpdesk may be additional solutions to equip future users with practical know-how to apply the solutions. As an additional recommendation, future TA activities should include a systematic check of existing solutions before developing new ones. Experts should assess whether similar approaches have already been used in previous TA, to avoid duplication and build on proven practices.
- **Knowledge sharing**: Systematically connect relevant solutions produced by the supported projects - as well as those offered by TA delivery teams - with the Knowledge Hub of the Mission Implementation Platform, to facilitate dissemination of tools, methodologies, and case studies accessible by the target communities across Member States and beyond. For instance, standardise outputs (e.g. templates, models, and toolkits) and publish them in open, multilingual formats to facilitate adoption.

4.5. Strategic positioning and future orientation

TA engagement patterns varied across actor types, reflecting differences in capacity, scope, and readiness. In several cases, **ports** used TA to de-risk and finance large-scale pilots. **Islands** often sought broader capacity support for complex local transitions. **Fisheries communities** frequently relied on TA as both a technical facilitator and a platform for stakeholder coordination around shared goals. Across these categories, **NGOs and local authorities** were the most common beneficiaries, though their needs differed: public bodies typically required expertise to align projects with strategic and funding frameworks, while NGOs benefited more from support that strengthened credibility and organisational capacity. Overall, **tailored and differentiated TA responses** proved essential for addressing varied starting points and enabling diverse communities to contribute effectively to the Mission's objectives.

Overall, the TA provided as part of the Mission Studies has shown that **targeted, place-based support can be an effective tool** for turning local ambitions into practical projects. Beyond producing feasibility studies, the TA process has helped different actors across Europe strengthen local partnerships, build institutional capacity, and create conditions for more impactful local action. This demonstrates that a tailored, demand-driven model can

respond effectively to a wide variety of organisation types and different local realities. In addition:

- The TA framework proved **flexibility in being suitable for in-depth technical or financial analysis for mature initiatives and more basic structuring support for those at earlier stages of development.** Some beneficiaries entered the process with clear project concepts and advanced plans, while others started from early ideas. This adaptability ensured that all participants benefited, regardless of their starting point.
- The TA produced **benefits that go beyond individual project feasibility.** Many beneficiaries strengthened their internal planning, governance, and stakeholder engagement capacities as a result of the process. This institutional learning effect is an important contribution to building long-term local capacity for implementing the Mission's objectives.

Finally, the feedback received from the beneficiaries shows the **TA's potential to catalyse further action**. Several delivery teams reported that beneficiaries were able to integrate TA findings into new project proposals or partnership opportunities. In some cases, beneficiaries were included in project proposal consortia with the help of TA teams, demonstrating a clear leverage effect of the TA.

The TA provided has proven instrumental in transforming local ambitions into implementable projects. To fully realise its potential, the TA support must evolve into a systemic policy instrument supporting regional transformation, Mission integration, and investment mobilisation.

Recommended policy actions:

- **Integrate TA into regional policy frameworks**: Embed TA systematically within Smart Specialisation Strategies, national reform programmes, and cohesion policy funding instruments.
- **Investment readiness**: Include investment pathway mapping in the outputs of the beneficiaries' projects, supported by a new service focusing on the configuration of available funding and/or financing that links EU, national, and private instruments (e.g. CEF, InvestEU, EMFAF, LIFE).
- **Cross-Mission alignment:** Coordinate the TA provided with other EU Missions (e.g. Climate-Neutral and Smart Cities, Climate Adaptation) through inter-service collaboration and shared calls. This could also promote integrated approaches to coastal resilience, climate-neutral ports, and water-sensitive urban planning.
- **Local expert mobilisation**: Maintain flexible expert pools at national or sea-basin level to ensure context-sensitive delivery and alignment with local regulatory frameworks.
- **Knowledge connectivity**: Link TA deliverables to EU data and monitoring infrastructures such as the Digital Twin Ocean and Mission Climate Adaptation Knowledge Portal.

Most TA were designed for local contexts addressing specific local needs to achieve impact, and replication or scale-up potential was not always part of the beneficiaries' ambitions. From this point of view, in addition to delivering local impact that will contribute to achieving the Mission's objectives, **a complementary dimension of the added value of the TA concerns the identification and enhancement of replicability potential in the projects supported**. Accordingly, several interlinked recommendations emerge that respond directly to known barriers encountered across the TA, including:

1. **Design with replication in mind from the outset:** Replication must be a **deliberate design choice** from the outset. Solutions are far more likely to be reused when replicability is embedded in their logic and planning. This means allocating time early on to assess and prepare for replication, identifying potential contexts for scale-up, and securing beneficiary agreement on these ambitions. TA should systematically incorporate **capitalisation or "After-TA" plans** to ensure potential reuse beyond the initial implementation.
2. **Allow flexibility and give guidance:** One key barrier to replication is the variability in institutional, legal and technical contexts across EU regions. Successful replication therefore depends on identifying which components of a tool or methodology are standardisable, and which require contextual adaptation. The most transferable solutions are modular and standardised, featuring parameter-based options, clear assumptions and implementation guidance.

Annex 1 - TA provided under Cycle 1 and 2

Project title	Lead organisation country of origin	Location	Basin	Project Description	TA combination	TA duration (in days)
AQUAGEN: Aquatic Genetic Resources Management for Ecosystem Sustainability	Poland	Olsztyn	Cross-basin	The project seeks to restore and strengthen salmonid fish stocks in Europe through innovative stocking programs that enhance genetic diversity and ensure sustainable populations. By utilizing advanced breeding techniques such as sperm cryopreservation and outbreeding strategies, the initiative focuses on key species, including huchen, marble trout, grayling, and Atlantic salmon. Genetic analysis, eDNA, and environmental assessments will guide adaptive stocking efforts, supporting biodiversity conservation, stabilizing fisheries, and promoting environmental sustainability across European aquatic ecosystems.	Financial TA, Regulatory TA, Operational TA	65
Baltic Bio Stimulants (BBS)	Finland	Åland Islands	Baltic & North Seas	The project aims at addressing the issue of eutrophication in the Baltic sea, a phenomenon triggered by nutrient overload. It aims at removing and processing beachcast (accumulation of dead and decaying macroalgae) and fresh macroalgaes to develop soil improvers and biostimulants. It addresses issues related to several Mission objectives, from biodiversity preservation to GHG reduction and stimulation of local economies (aquaculture).	Financial TA, Technical TA, Regulatory TA	65
Baltic Islands and Costal communities Connect - Implementing the Circular Economy in Baltic Islands through Sustainable Tourism Practices	Sweden	Gotland	Baltic & North Seas	In 2024, stakeholders from Gotland, Åland, the Archipelago Sea, and Saaremaa collaborated to address the challenges of sustainable tourism. This project aims to develop regenerative tourism models that benefit island and coastal communities both ecologically and economically. By creating blue regenerative business models and raising awareness about sustainable practices, the initiative seeks to make tourism a positive force. Local and visiting schools will be involved in education and hands-on experiences to support this blue transition.	Financial TA, Commercial TA, Regulatory TA, Operational TA	45
Ceinture bleue des îles de Houat et Hoedic	France	Houat and Hoedic islands	Atlantic-Arctic basin	The Blue Belt project around Houat and Hoedic Islands in Mor Braz (Morbihan, Brittany) aims to create a one-nautical-mile fishery management zone. The project seeks to improve the management and exploitation of fishery resources by fishermen and shellfish farmers. It includes a reseeding initiative (reviving an old lobster hatchery) for mollusks such as scallops, flat oysters, and abalones, as well as the development of seaweed cultivation.	Financial TA, Technical TA, Regulatory TA, Operational TA	46

Project title	Lead organisation country of origin	Location	Basin	Project Description	TA combination	TA duration (in days)
Coastal Upgrading, Regeneration and Resilience of Astakos	Greece	The city of Astakos at Xiromero	Mediterranean Sea	The project aims to develop and implement an integrated coastal management and resilience plan for the municipality of Xiromero, combining engineering, urban design and ecosystem restoration.	Financial TA, Technical TA, Commercial TA	65
Decarbonisation of maritime transport between the Sicilian Region and its minor islands	Italy	All the Sicilian minor islands (Islands of Lampedusa and Linosa, Island of Pantelleria, Aegadian Islands, Island of Ustica, Aeolian Islands)	Mediterranean Sea	The project aims to establish zero-emission maritime transportation in the Sicilian Region, specifically serving connections with the 11 smaller Sicilian islands (see attached map of the connections currently served by diesel ferries). This involves developing a passenger ferry with full electric propulsion, powered by fuel cells and/or batteries, and featuring a controlled hydrofoil system to minimize resistance drag and energy usage during cruising. The project promotes sustainable maritime transportation while supporting Sicily's economic and environmental goals, positioning the region as a leader in advanced marine transport technologies. The Sicilian region contracts the maritime transportation service and is entitled to request a techno-economic feasibility analysis for the decarbonization of the maritime transport service. Politecnico di Torino will support the Region in identifying the demand framework and technical requirements necessary for implementing zero-emission ferries.	Financial TA, Technical TA, Regulatory TA, Operational TA	70
Den Levende Fiskerihavn	Denmark	Stevns Municipality and other local communities in Denmark, Sweden and Germany.	Baltic & North Seas	The Living Fisheries Harbor project aims to restore local fisheries and small harbors, emphasizing their vital cultural, historical, and economic roles in community identity and their crucial part in restoring the sea's biodiversity and balance. This initiative involves universities (RUC, AAU, SDU), the Danish Technological Institute, local fishermen, commercial interests, Stevns Municipality, Stevns Business, the Coastal Directorate, and stakeholders from Sweden, Germany, and other Danish communities. By creating an international marine center in Rødvig, the project seeks to revitalize these sectors through sustainable development and collaboration around the Baltic Sea. Rødvig Harbor will be the starting point for this model, which will support sustainable production, research, and education, featuring research facilities, production systems, and innovation hubs. Stevns will serve as the model for how this initiative can be implemented within an entire local community.	Financial TA, Commercial TA, Regulatory TA	53
Empowering Small-Scale Fisheries in the sustainable tourism value	Tunisia	El Haouaria, Cap Bon	Mediterranean Sea	The project aims to support the small-scale fisheries community in El Haouaria-Cap Bon, within the MPA of Zembra and Zembretta, in transitioning to a circular blue economy. By	Financial TA, Technical TA,	70

Project title	Lead organisation country of origin	Location	Basin	Project Description	TA combination	TA duration (in days)
chain and marine biodiversity in Zembra MPAs. (ESTeM: Empowerment (E), Small-scale fisheries (S), Tourism value chain (T), and Marine biodiversity (M))				integrating them into the sustainable tourism value chain, the initiative strengthens socio-economic resilience while ensuring responsible seafood sourcing. It promotes fisheries management measures, such as seasonal closures, selective fishing techniques, and MPA-labeled seafood products, to balance economic benefits with marine conservation. Through capacity-building, eco-friendly fishing practices, and waste-to-resource initiatives, the project fosters a model where fisheries thrive, marine ecosystems are protected, and Tunisia's tourism industry advances in sustainability.	Commercial TA, Regulatory TA, Operational TA	
EUMission4WaterPollution	Albania	Durres	Mediterranean Sea	The project addresses the issue of plastic and microplastic pollution in the Mediterranean, particularly in Durrës Municipality. It aims to develop a comprehensive marine waste management framework to enhance coastal resilience by identifying pollution hotspots, assessing vulnerabilities, and implementing tailored mitigation measures.	Financial TA, Technical TA, Regulatory TA, Operational TA	67
GATEWAY: GREEN AND TECHNOLOGICAL EUROPEAN WATERWAY TO ESTABLISH A SUSTAINABLE MARITIME CORRIDOR BETWEEN THE PORTS OF TENERIFE AND HUELVA (SPAIN)	Spain	Canary Islands, Andalusia	Atlantic-Arctic basin	The projects aims at establishing a sustainable maritime corridor between the ports of Tenerife and Huelva. It aims at introducing innovative technologies in vessels, as well the associated infrastructures.	Financial TA, Technical TA, Regulatory TA, Operational TA	89.25
Green Guardians of the Baltic: Seagrass Restoration for a Healthier Sea	Latvia	Various coastal communities	Baltic & North Seas	The project aims to implement a pioneering seagrass restoration pilot in the Latvian economic zone of the Baltic Sea, marking the first initiative of its kind in Latvia. Given that eelgrass, commonly used in restoration projects, is unlikely to thrive in local conditions, the project will focus on identifying and testing alternative seagrass species suited to the region. Seagrass restoration provides significant ecological benefits, including enhanced biodiversity, improved water quality, carbon sequestration, and coastal protection. By revitalizing the seabed, the initiative aligns with EU biodiversity strategies, the UN Decade on Ecosystem Restoration, and global efforts to promote sustainability and marine conservation.	Financial TA, Operational TA	65
Haapsalu Tagalahe keskkonnaseisundi parandamine	Estonia	Haapsalu, Lääne-Eesti	Baltic & North Seas	The project aims at supporting the improvement of the ecological status of the Haapsalu Bay, to restore and achieve good environmental status. The projects focuses on	Technical TA	65

Project title	Lead organisation country of origin	Location	Basin	Project Description	TA combination	TA duration (in days)
				hydromorphological measures related to the mud at the bottom of the bay, leading to eutrophication. The requested TA would support in conducting the study for mud removal and reuse (in aquaculture), before an implementation phase. The projects addresses both environmental aspects, but also sustainable economic activities.		
HUB Costa Atlântica da Região de Coimbra	Portugal	Região de Coimbra (NUTS III)	Atlantic-Arctic basin	The project aims at the operationalisation of an intelligent innovation ecosystem focussed on the blue economy in the coastal area of the Coimbra region. The project supports the development of the economy of the sea, contributing to sustainable competitiveness of the social, entrepreneurial, industrial and training dynamics in the region.	Financial TA, Operational TA	60
Hydrodynamic feasibility study to bring back brackish water to the docks in Antwerp port platform	Belgium	Antwerp	Baltic & North Seas	The project focuses on reducing water losses from the docks in the port of Antwerp, thus improving water quality standards. The project supports both the continuity of services during drought, as well as improved water quality, to avoid an increase of reliance on sea water, then discarded in the Scheldt river. It aims at undertaking hydrodynamic modelling to return the cooling waters into the dock operations.	Technical TA	55
Indagini batimetriche e correntometriche e realizzazione di interventi di protezione e ripascimenti del litorale dell'area di comata a torre Sibiliana	Italy	Sicily/Marsala	Mediterranean Sea	The project involves bathymetric and currentometric surveys of the coastline from the Port of Marsala to Torre Sibiliana, followed by protective interventions and nourishment of the coastal area. This includes the creation of an artificial beach, preceded by the formation of a submerged breakwater and the construction of the artificial beach behind it. Beach nourishment entails the artificial deposition of sand or gravel on an eroded coast to maintain an adequate amount of sediment. This intervention aims to counteract natural erosion, protect the area from storm surges, and maintain or extend the beach's width for tourism and recreational purposes.	Financial TA, Technical TA, Regulatory TA	30
Mare nostrum	Italy	Sicily, Palermo	Mediterranean Sea	The Municipality of Palermo, in collaboration with the Metropolitan City, Port Authority, universities, research centers, and the "River and Coast Contract" Forum, aims to regenerate and, where possible, restore the coastal and marine ecosystem from Isola delle Femmine to the second major commercial port of Termini Imerese. This public action plan includes regional policies, local regulations, and experimental practices with research and development conducted with private partners. Key objectives are waste management (reducing marine and terrestrial waste), renaturalization (reducing coastal artificialization), implementing natural solutions within the port	Financial TA, Technical TA, Regulatory TA	40

Project title	Lead organisation country of origin	Location	Basin	Project Description	TA combination	TA duration (in days)
				area and surroundings, and creating protected zones or undertaking restoration interventions within and around the port areas.		
Micro habitats ports de plaisance côte basque	France	Pyrénées-atlantiques	Atlantic-Arctic basin	The project aims to contribute to marine biodiversity regeneration in the Basque Country by assessing the feasibility of installing micro-habitats in the three marinas along the Basque coast. While widely used in the Mediterranean, these structures are rare in Atlantic ports. If validated, the project will identify technical and financial partners to install and maintain the habitats, monitor biodiversity evolution, and raise public awareness on marine ecosystem restoration.	Financial TA, Operational TA	80
Mykonos Blue: Empowering Environmental Stewardship through Beach Clean-ups, Education, and Citizen Science	Greece	Mykonos	Mediterranean Sea	The project aims at enhancing sustainable beach management practices through the mobilisation of the community. It involves education, clean-up activities and citizen-science data.	Financial TA, Technical TA, Commercial TA, Regulatory TA, Operational TA	45
Oczyszczanie dna Bałtyku z wraków i innych konstrukcji stalowych	Poland	Gdansk, Tricity and surroundings, Baltic Sea	Baltic & North Seas	The planned project aims to clean the Baltic Sea floor of shipwrecks, devices, and steel structures using modern technologies (such as advanced underwater cutting methods, underwater drones, and sonars) and materials like hypalon and glass-reinforced plastic. The project will develop and validate a cost-effective wreck removal procedure that could make steel recycling economically viable for maritime companies. It will proceed in three stages: designing, testing, implementing, and promoting the method for extracting wrecks and steel structures from the Baltic Sea floor.	Financial TA, Commercial TA, Regulatory TA, Operational TA	58
Planet Ruhnu Experimental Seaweed Farm	Estonia	Ruhnu, Saaremaa	Baltic & North Seas	Located on Ruhnu Island in the Gulf of Riga, we aim to establish an experimental seaweed farm in collaboration with local fishermen and the Planet Ruhnu movement. This cultural hub will engage artists, scientists, and the community, including educational institutions. The project plans to cultivate Ulva intestinalis and Fucus vesiculosus. Activities include identifying optimal growth sites by analysing environmental impacts, selecting suitable farm types and materials, performing strength and durability	Financial TA, Technical TA, Commercial TA	60

Project title	Lead organisation country of origin	Location	Basin	Project Description	TA combination	TA duration (in days)
				calculations, and testing solutions in challenging wave conditions at Kuressaare College's model test pool.		
Postav svoju hrádzku	Slovak Republic	Kysucké Nové Mesto	Danube River basin	The project aims to revitalise a part of a watercourse through water retention measures. It will involve using timber to implement water retention measure to make the watercourse suitable for artificial restocking.	Financial TA, Technical TA, Operational TA	75
Prikupljanje i uklanjanje odbačene ribolovne opreme i otpada iz mora	Croatia	Karlobag, Lopar and the castles of Senj, Novalja and Rab	Mediterranean Sea	This project aims to establish a designated, regulated land-based site for storing waste collected during fishing and eco-actions. Located within the port area and managed by local authorities, the site will be fenced, marked, and accessible only to authorized personnel. The initiative will assess marine waste for recyclability or proper disposal and identify active landing sites and fishing ports for separate collection of marine waste and old nets. Implemented in partnership with county port authorities and municipal companies in the LAGUR Tramuntana area, the project will also secure necessary funding.	Financial TA, Technical TA, Regulatory TA	58
Renewable energy sources for electric ships	Greece	Chalki island	Mediterranean Sea	The project aims to identify necessary coastal and civil works prior to the installation of renewable energy systems. It will assess the suitability of various wave energy conversion systems for the port of Kania and explore the installation of multiple small-scale wind turbines along the coastal front. Additionally, the project will investigate the integration of solar thermal and Ocean Thermal Energy Conversion (OTEC) systems.	Financial TA, Technical TA, Operational TA	73
RESHABAY Portocolom	Spain	Balearics, Mallorca, Felanitx, Portocolom	Mediterranean Sea	Embark on a 36-month, €550,000 initiative to restore Portocolom's Bay, mitigating anthropogenic impacts, reversing habitat degradation, and fostering sustainable coastal management. Collaborating with local public and private entities, engaging citizens, fostering a 25% improvement in sustainability, contributing to the restoration of 75 hectares of a Nature 2000 Site. This comprehensive endeavor aspires to set a benchmark for lasting ecological, economic, and societal benefits, ensuring the sustainable development of coastal communities in the Balearic Islands.	Technical TA, Operational TA	50

Project title	Lead organisation country of origin	Location	Basin	Project Description	TA combination	TA duration (in days)
Save the Adriatic undersea lives	Croatia	County of Split and Damatia, island of Šolta, Municipality of the island of Šolta	Mediterranean Sea	To protect the environment and prevent pollution of the Adriatic Sea, the company Komunalno Basilija d.o.o. has been organizing ecological seabed cleaning actions for several years in the ports and coves of the island of Šolta. The island of Šolta has 4 small ports and about twenty coves where, during the season, sailors anchor without any control or regulated moorings, leaving behind a disturbed seabed with large amounts of discarded waste. The seabed is cleaned every year, and we notice that the amount of waste increases each year, while marine organisms, algae, and shellfish are decreasing. Consequently, there is also a reduction in the fish population because natural habitats and food sources have disappeared. The devastation is evident and has become widespread. Through this project, we aim to clean the seabed of waste and involve the local residents in this effort. Furthermore, we plan to inform the broader public and tourists about this ecological action to educate them on proper waste disposal methods on the island of Šolta and the importance of preserving the sea and the marine environment.	Financial TA, Technical TA, Regulatory TA	29.75
Seagrass aquaculture at scale	France	Mediterranean coast along France and Spain	Mediterranean Sea	The project aims to establish a 10-hectare seagrass farm using innovative aquaculture techniques to reduce costs and improve yields. Recognizing the crucial role of seagrass in ocean ecosystems and carbon removal, the initiative addresses the rapid loss of natural seagrass meadows. By utilizing floating farm pods and precision aquaculture techniques, the project ensures robust growth and maximizes the potential of seagrass, overcoming the challenges of traditional restoration methods.	Technical TA, Regulatory TA, Operational TA	45
STUDIU PRIVIND POTENȚIALUL DE IMPLEMENTARE A UNOR MĂSURI INTEGRATE PENTRU PROTEJAREA BIODIVERSITĂȚII DE-A LUNGUL CURSURILOR DE APĂ DIN VALEA JIULUI	Romania	Valea Jiului	Danube River basin	In the Jiu Valley, the devastating impact of mining on the environment and biodiversity is a painful reality. Natural habitats have been displaced, and pollution and fragmentation of ecosystems have become the norm. The proposed project aims to identify, map, and classify critical biodiversity protection areas along the tributaries of the Jiu River, considering the harmonization of the natural and urban environments specific to the region. The next step involves designing a comprehensive set of measures for restoring biodiversity in these areas, with the direct involvement of responsible stakeholders. This set of measures will include concrete actions aimed at rehabilitating and sustainably managing the affected ecosystems.	Technical TA, Operational TA	50

Project title	Lead organisation country of origin	Location	Basin	Project Description	TA combination	TA duration (in days)
				The ultimate goal is to develop an integrated portfolio of projects that actively involves the community in the decision-making process and includes the necessary funding sources for their future implementation.		
Sustamare	Croatia	Zadar	Mediterranean Sea	The project focuses on advancing environmentally sustainable aquaculture through rigorous water quality monitoring using satellite systems and multifunctional Smart Buoys. It includes experimental fields for shellfish with biodegradable materials to replace plastics, and alternative species like sea urchins and sea cucumbers on the sea bottom. These initiatives aim to optimize resource use, reduce environmental impact, and enhance ecosystem resilience to climate change. Emphasizing biodegradability, the project aims to minimize marine plastic pollution while innovating in sustainable aquaculture. By testing polyculture with various species, it explores the potential of integrated multi-trophic aquaculture (IMTA) as a key direction for sustainable development.	Financial TA, Technical TA, Commercial TA	44.5
Tejo Vivo: restauro ecológico das zonas portuárias do estuário do Rio Tejo	Portugal	Lisbon Metropolitan Area - Lisbon, Póvoa de Santa Iria, Alverca do Ribatejo, Alcochete, Montijo, Moita, Barreiro, Seixal and Almada.	Atlantic-Arctic basin	The project aims to contribute to the conservation and restoration of riparian ecosystems in the Tagus Estuary that border the municipalities of the Lisbon Metropolitan Area. The Port of Lisbon has an intrinsic relationship with the Tagus Estuary, as the entire port zone of the estuary falls under the jurisdiction of the Lisbon Port Administration (APL). APL will be a key stakeholder for potential restoration interventions. The Tagus Estuary is the most threatened in Portugal and one of the most important estuaries in Europe. Currently, only 1% of its area consists of natural zones, which host priority habitats such as salt marshes and seagrass beds and a great diversity of species. Technical assistance in regulatory, environmental, and financial aspects will be crucial to prepare a project proposal that includes the phases of assessment, planning, and design to develop a restoration plan for priority areas of the Tagus Estuary, including the port areas.	Technical TA, Operational TA	50
The port of Kerteminde - an attractive sustainable marine, maritime and food environment	Denmark	Region of Southern Denmark, Fyn, Kerteminde	Baltic & North Seas	The project aims to transform Kerteminde Port into a dynamic hub for innovative and sustainable marine, maritime, and food activities. Aligning with the vision of Kerteminde Havneudviklingsforening, the initiative focuses on creating an ACTIVE, ATTRACTIVE, and FULLY UTILIZED port environment through collaboration, innovation, and knowledge	Financial TA, Regulatory TA, Operational TA	50

Project title	Lead organisation country of origin	Location	Basin	Project Description	TA combination	TA duration (in days)
				sharing. By developing and scaling sustainable cultivation, harvesting, and fishing of bio-resources, the project seeks to protect and restore local marine ecosystems and biodiversity. Building on Kerteminde Municipality's long-standing strategy for sustainable local food production on land, this initiative extends the approach to the sea, utilizing the port as a central platform. Through community engagement and commercial scaling, Kerteminde Port will serve as a model for sustainable blue economy practices, fostering local economic growth while ensuring the protection of the marine environment.		
Training of Commercial Fishermen on the banks of the Prut River	Romania	Galati	Danube River basin	The project aims at training fisherman in rural communities along the Prut river on sustainable practices, with the integration of ecological restoration practices into local fishing practices. It wants to educate fishermen on eco-friendly fishing techniques.	Financial TA, Technical TA, Operational TA	65
TRESOILPower2X Danube Waste Plastic to Hydrogen	Romania	Bucharest, Danube River and Danube Delta	Danube River basin	The project aims to convert unrecyclable plastic waste into hydrogen and ammonia through a waste-to-energy process. The project's stated goals are to reduce landfill waste, avoid polluting incineration, and generate clean energy.	Financial TA, Technical TA, Commercial TA	60
Ulysses Data For Science	Spain	Basque Country	Atlantic-Arctic basin	The Ulysses Project is a pioneering scientific initiative aimed at understanding and mitigating plastic pollution in the seas. It uses technologically equipped fleets and satellite tracking to map marine plastic drifts in the Gulf and studies the flow of plastics from rivers to the sea. Additionally, it includes educational and engagement components to drive effective actions for ocean preservation.	Financial TA, Commercial TA, Operational TA	55

Project title	Lead organisation country of origin	Location	Basin	Project Description	TA combination	TA duration (in days)
Usunięcie wraku MV Alta z wybrzeży Irlandii	Poland	Ballycotton, Cork, Ireland Tricity, Grudziądz, Poland	Atlantic-Arctic basin	The project involves leveraging the experience and innovative approach of Albatros company to safely remove the wreck of MV Alta from the coast of Ireland, in a manner that is safe for both people and the environment. Theoretical preparation, practical experience, and knowledge of the construction and design of steel ships, along with the technological capabilities for adapting them for removal by land, combined with the comprehensive technical support provided by the project partners, allow for the effective removal of the wreck. This will help restore the natural environment of the cliffs while significantly reducing the costs of the operation. Removing such a large and deteriorating wreck will protect the natural environment from further damage and degradation of the local ecosystem, as well as restore the natural beauty of Ireland's unique cliff areas.	Financial TA, Regulatory TA, Operational TA	60

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