

BlueDial Project

Activity 1.1 Mapping and Analysis of the Strategic Blue Economy Framework

D1.1 Report on State of the Art

Türkiye Country Report

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Introduction

Background and context

According to the European Union, the term blue economy includes both marine-based activities undertaken in the ocean, sea and coastal areas and marine-related activities that provide products and services to marine-based activities. It therefore covers capture fisheries, aquaculture, shipping, maritime transport, ports, shipbuilding, coastal and maritime tourism, offshore energy, marine biotechnology, maritime equipment, maritime services, marine education and research, environmental protection and public-sector functions directly linked to coastal and ocean stewardship. In this broad definition, the blue economy is not only a group of sectors, but also a policy approach that links economic development with the sustainable use of marine and coastal resources.

The concepts of blue economy and blue growth have gradually become a central policy and investment agenda since the United Nations Conference on Sustainable Development, Rio+20. In Europe, the concept has been further shaped through integrated maritime policy, maritime spatial planning, the sustainable blue economy approach, the European Green Deal and, more recently, the European Ocean Pact. These frameworks emphasize that marine sectors cannot be managed in isolation: maritime transport, ports, tourism, fisheries, aquaculture, coastal development, energy, research and environmental protection interact with each other in the same marine and coastal space.

For the Black Sea basin, this integrated approach is particularly important. The Black Sea is a semi-enclosed sea shared by several coastal states. Pressures such as land-based pollution, marine litter, eutrophication, biodiversity loss, coastal erosion, climate change and unsustainable resource use are transboundary which require cross border solutions. At the same time, the basin has significant economic assets: maritime transport corridors, ports, fisheries and aquaculture, coastal tourism, maritime skills, research institutions, shipbuilding capacity and emerging opportunities in blue technologies. The Common Maritime Agenda for the Black Sea (CMA) provides the principal regional cooperation framework for connecting these environmental and economic dimensions. Its three goals are: healthy marine and coastal ecosystems; a competitive, innovative and sustainable blue economy for the Black Sea; and fostering investment in the Black Sea blue economy. These goals are further translated into priorities and actions for voluntary cooperation among the participating countries. [7]

Türkiye is a major maritime country with coastlines on the Black Sea, the Marmara Sea, the Aegean Sea and the Mediterranean Sea. More than 8,500 kilometres of coastline, the Turkish Straits, a large coastal population, a diversified port system, a strong tourism industry, an expanding aquaculture

sector, significant shipbuilding and repair capacity, and growing marine research capabilities make the blue economy highly relevant to national and regional development. The Black Sea dimension is especially important for this report, both because Türkiye is a participating country in the CMA and because the Eastern Black Sea Region, including the TR90 region, has strong fisheries, aquaculture, logistics, tourism and marine research assets.

Türkiye does not approach blue economy development through a single, consolidated national blue economy strategy in the same way that the CMA does at the basin level. Instead, the relevant framework is composed of sectoral strategies, laws and programmes in transport, logistics, fisheries, aquaculture, tourism, environment, climate, spatial planning, research, innovation, regional development and investment promotion. This creates a strong sectoral base, but it also makes coordination, data sharing, funding alignment and CMA-oriented policy coherence critical and challenging issues. The emerging marine spatial planning agenda and the Sustainable Blue Economy Plan/Blue Plan discussions provide an important bridge between sectoral policies and integrated blue economy governance. [18]

Objectives of the report

The main objective of this report is to provide a state-of-the-art overview of Türkiye's blue economy framework and to identify practical priorities for CMA-aligned development. Specifically, the report aims to:

- map the institutional landscape of Türkiye's blue economy, with particular attention to national authorities, regional and local actors, research institutions, business support organizations, civil society and transnational cooperation platforms;
- analyse the legal and strategic framework that governs maritime and coastal activities, including its alignment with the Common Maritime Agenda for the Black Sea and wider EU sustainable blue economy approaches;
- review national, EU and international funding instruments that can support blue economy development, especially in the Black Sea and TR90 context;
- assess the main blue economy sectors relevant to Türkiye and the Black Sea, including coastal and maritime tourism, maritime transport, ports and logistics, fisheries and aquaculture, marine environmental protection, and emerging blue economy sectors;
- synthesize stakeholder needs and practical implementation challenges based on the supplied Türkiye country report, desk research and project context;
- identify potentials, gaps and strategic recommendations that can guide future CMA-aligned blue economy actions in Türkiye and in the Eastern Black Sea Region.

Scope and coverage

The report is national in scope but gives particular emphasis to the Black Sea and TR90 Region, because the BlueDial project is designed around the strategic blue economy framework of the Black Sea basin. The analysis therefore distinguishes between Türkiye's overall maritime profile and the specific opportunities and gaps of Black Sea coastal provinces such as Trabzon, Rize, Artvin, Giresun, Ordu, Samsun, Sinop, Kastamonu, Zonguldak and adjacent areas.

The report is based on several national, regional, local blue economy related reports, papers and data of Türkiye, especially for fisheries and aquaculture, blue business needs, support instruments, Eastern Black Sea (TR90 Region) case examples and cluster-oriented measures. Additional desk research was used to update and broaden the analysis around the Common Maritime Agenda, EU blue economy policy, Türkiye's strategic documents and recent sectoral statistics. Moreover, a set of BlueDial team developed surveys were applied with selected stakeholders and analysis of these are reflected in this report.

The analysis follows a practical policy-oriented methodology. Its purpose is to identify the current state of the art, the coherence of existing frameworks and the most relevant gaps for future blue economy policy dialogue, investment preparation, institutional cooperation and project development.

1. Institutional Mapping by Country and Sector: Türkiye

Blue economy governance in Türkiye is distributed across a broad group of ministries, agencies, local authorities, research institutions, business organizations and civil society actors. This distribution reflects the multi-sectoral nature of the blue economy. It also indicates that Türkiye's blue economy capacity is already significant, but not yet fully organized under a single cross-sectoral governance framework. As in many countries, public mandates remain sectoral: fisheries and aquaculture are primarily managed through agricultural and food policy; maritime transport and ports through transport and infrastructure policy; coastal development through environment, urbanization and spatial planning; tourism through culture and tourism policy; and research and innovation through universities, TÜBİTAK and EU-related research programmes.

The Common Maritime Agenda is useful for mapping these actors because it shifts the question from “which institution owns the sea?” to “which institutions must cooperate to deliver healthy ecosystems, competitive blue economy sectors and sustainable investment?”. In Türkiye, this cooperation needs to be both vertical, linking national, regional and local levels, and horizontal, linking ministries, chambers, universities, ports, municipalities, producers, exporters and environmental organizations.

1.1 National and Regional Authorities (Türkiye)

The national institutional framework includes several authorities with direct or indirect responsibilities for blue economy sectors. The Ministry of Transport and Infrastructure is central for maritime transport, port infrastructure, logistics corridors, ship traffic, maritime safety and coastal transport infrastructure. Its General Directorate of Maritime Affairs and related maritime units provide the regulatory and statistical backbone for ports, shipping, seafarers and maritime commerce. The Directorate General of Coastal Safety, port authorities and maritime safety bodies are also important operational actors.

The Ministry of Agriculture and Forestry, through the General Directorate of Fisheries and Aquaculture, is the principal authority for fisheries, aquaculture, fishery resources, fishing licences, aquaculture production areas, stock protection, fisheries infrastructure and sectoral data systems. The analyzed EMFAF-4BIZ Project Country Report Türkiye emphasizes the role of this General Directorate in protecting aquaculture resources and habitats, determining sustainable fisheries and aquaculture principles, supervising fishermen's shelters and infrastructure, and establishing information systems for fisheries and aquaculture. [20]

The Ministry of Environment, Urbanization and Climate Change is relevant for environmental protection, marine pollution control, environmental impact assessment, coastal planning, climate

adaptation, protected area considerations and integrated coastal zone management. The Ministry of Culture and Tourism is central for coastal and maritime tourism, destination promotion, accommodation policies, yacht tourism and tourism statistics. The Ministry of Industry and Technology, development agencies and regional investment support offices are important for blue industry, innovation, SME transformation, regional clusters and investment incentives. The Presidency of Strategy and Budget sets the national development-planning context through the Twelfth Development Plan 2024-2028. [10]

At the regional and local level, metropolitan municipalities, provincial municipalities, district municipalities, special provincial administrations, port cities, chambers of commerce and industry, regional development agencies and local fishery cooperatives are essential implementation actors. In the Eastern Black Sea region which cover cities of Giresun, Gümüşhane, Ordu, Rize and Trabzon (NUTS2 TR90 Region), Eastern Black Sea Development Agency (DOKA), Ortahisar Municipality, Trabzon Metropolitan Municipality, coastal district municipalities, Eastern Black Sea Exporters Association, marine and aquaculture faculties and vocational schools, Central Fisheries Research Institute (SUMAE) and provincial directorates of national ministries can support CMA-aligned action pipelines in tourism, aquaculture, logistics, coastal infrastructure, entrepreneurship and environmental awareness.

In this respect, it is worth to mention that DOKA which designated blue economy as a regional development priority and implementing three-year periods of Result Oriented Programmes to tap potential of blue economy sectors in TR90 region through certain technical and financial supports. DOKA also, develop/implement local/regional/international projects to support and unleash blue economy potential of the region through cooperating with and enabling other local actors. Cross-sectoral and catalyst role of regional development agencies with a dedicated blue economy unit and result oriented programme is an important factor to create comparative advantage of development in blue economy sectors if supported with local actor actions such as municipalities, universities and research centers as well as private sector investments.

Table 1. Sectoral allocation of responsibilities across key blue economy domains in Türkiye

Blue economy domain	Lead institution(s)	Supporting actors	Main responsibilities
Maritime transport, ports and logistics	Ministry of Transport and Infrastructure; General Directorate of Maritime Affairs	Port authorities, Coastal Safety, İMEAK Chamber of Shipping, TÜRKLİM, logistics firms	Port and maritime regulation, maritime safety, shipping, statistics, port development, logistics connectivity
Fisheries and aquaculture	Ministry of Agriculture and Forestry; General Directorate of Fisheries and Aquaculture	Provincial directorates, SÜRKÖOP, SUYMERBİR, DEMBİR, research institutes	Fisheries management, aquaculture licensing, stock protection, data systems, producer support and inspections
Coastal and maritime tourism	Ministry of Culture and Tourism Municipalities Ministry of Transport and Infrastructure	Municipalities, chambers, destination actors, marina/cruise operators, tourism SMEs	Tourism policy, promotion, accommodation, coastal tourism, yacht tourism, destination development and tourism statistics
Marine environmental protection	Ministry of Environment, Urbanization and Climate Change	Municipalities, water utilities, ports, NGOs, universities	Marine pollution control, EIA, waste management, coastal planning, climate adaptation and environmental monitoring

Regional development and investment	Ministry of Industry and Technology; Development agencies	DOKA, investment support offices, KOSGEB, chambers, OIZs	Regional competitiveness, SME support, clustering, feasibility, innovation and investment promotion
Research, innovation and skills	TÜBİTAK; universities; Ministry of National Education; Council of Higher Education	METU-IMS, KTÜ, DEHUKAM, maritime academies, technoparks	R&D, marine research, skills, innovation, project participation, science-policy interface

Source: Author's compilation based on institutional mandates, supplied project materials and desk research.

1.2 Research and Academia

Türkiye has a strong marine and maritime research base. Some of the major relevant institutions include Middle East Technical University Institute of Marine Sciences, Istanbul University Faculty of Aquatic Sciences, Istanbul Technical University, Central Fisheries Research Institute (SUMAE), Dokuz Eylül University, Ankara University National Center for the Sea and Maritime Law (DEHUKAM), Piri Reis University, Karadeniz Technical University Faculty of Marine Sciences, Rize Recep Tayyip Erdoğan University Faculty of Aquaculture, Ordu University Marine Sciences Faculty, and other universities with marine, fisheries, transport, environmental engineering, logistics, tourism and coastal planning expertise.

The Black Sea research dimension is especially strong through METU-IMS, Eastern Black Sea Development Agency (DOKA), Black Sea Technica University (KTÜ), Central Fisheries Research Institute (SUMAE, and Sinop University beside related regional research groups. These institutions contribute to policy and strategy shaping, design support mechanisms, do oceanographic observations, fisheries research, biodiversity, pollution monitoring, aquaculture technologies, marine spatial planning, maritime law and ecosystem-based management. The Black Sea Strategic Research and Innovation Agenda (SRIA), and its 2023 Implementation Plan, provide a regional scientific pillar for the CMA by linking research, industry, policy and society around shared Black Sea challenges. [17]

In addition to universities, TÜBİTAK and research centres such as TÜBİTAK MAM support applied research, technology development and innovation in areas relevant to the blue economy. Türkiye's association to Horizon Europe creates a significant opportunity for universities, municipalities, chambers, development agencies and private firms to participate in Black Sea research and innovation projects, including sustainable aquaculture, pollution monitoring, maritime digitalization, coastal resilience, marine observation and blue skills. [17]

Table 2. Selected research and academic actors relevant to the blue economy

Institution / actor group	Relevant blue economy contribution
METU Institute of Marine Sciences	Black Sea oceanography, ecosystem modelling, marine observation, EU research projects and SRIA-linked scientific cooperation
Karadeniz Technical University and Faculty of Marine Sciences	Fisheries, marine sciences, aquaculture, regional applied research and Black Sea human capital
DEHUKAM / Ankara University	Maritime law, marine spatial planning, legal and policy research for marine governance
Istanbul University, Dokuz Eylül University, ITU, Piri Reis University	Marine sciences, aquatic sciences, maritime transport, naval architecture, engineering and logistics
TÜBİTAK, Development Agencies (DOKA) and research centres	Applied R&D, innovation funding, environmental technologies, digital systems and commercialization

Vocational schools and maritime training institutions	Seafarer skills, aquaculture technicians, port logistics, tourism services and practical workforce development
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Source: Author's compilation based on desk research and Black Sea research ecosystem mapping.

1.3 Business Support Organizations

Business support organizations form the bridge between policy frameworks and the private sector. The Union of Chambers and Commodity Exchanges of Türkiye (TOBB), local chambers of commerce and industry, the Istanbul and Marmara, Aegean, Mediterranean and Black Sea Regions Chamber of Shipping (IMEAK Chamber of Shipping), TÜRKLİM, shipbuilders' associations, exporters' associations, organized industrial zones, technoparks and development agencies support blue economy firms through networking, advocacy, market intelligence, training, investment support and internationalization services.

In fisheries and aquaculture, the supplied Country Report Türkiye identifies three especially relevant umbrella organizations: the Central Union of Fisheries Cooperatives (SÜR-KOOP), the Aquaculture Growers Producer Central Association (SUYMERBİR) and the Seafood Hunters Central Producer Association (DEM-BİR). SÜR-KOOP is described as the largest organization representing fishermen, while SUYMERBİR and DEM-BİR are important producer associations for aquaculture and capture fisheries. These organizations can be crucial partners for improving traceability, marketing, producer organization, data collection, skills and sustainability practices. [20]

In the Eastern Black Sea, the Eastern Black Sea Exporters Association, chambers of commerce and industries, Eastern Black Sea Development Agency (DOKA) and sectoral producer groups are important for value-chain development as well as to mobilize and support blue economy sectors especially through cluster-based approaches/projects. 4BIZ Project Country Report Türkiye recommends cluster-based blue business development, emphasizing internationalization, coordination with national and international sector partners and a technical-management infrastructure that creates cooperation between companies. This cluster logic is strongly compatible with the CMA's investment and blue entrepreneurship priorities. [20]

1.4 Civil Society

Civil society organizations contribute to the environmental, social and awareness dimensions of the blue economy. Environmental NGOs, marine conservation groups, local associations, diving clubs, amateur fishers, coastal community organizations and educational initiatives can support marine litter campaigns, public awareness, citizen science, coastal clean-ups, environmental education, sustainable tourism practices and community participation.

Nationally visible actors such as TURMEPA, WWF-Türkiye and TEMA Foundation, together with local environmental organizations, can help connect the blue economy with ecosystem stewardship.

In the Black Sea, civil society engagement is important because many environmental pressures are locally visible but basin-wide in origin: marine litter, river-borne pollution, coastal erosion, invasive species and habitat degradation require public awareness and behavioural change as much as technical regulation.

Civil society is also relevant for blue skills and social inclusion. Women's cooperatives, youth organizations, vocational education providers and community-based tourism groups can be integrated into blue economy projects. This is particularly important in the TR90 Region, where local value chains, coastal tourism, gastronomy, fisheries heritage and community entrepreneurship can be combined with sustainable blue economy principles. Notable NGOs in TR90 region are Nature, History, Culture Association, Blue and Green Ecosystem Development Association, Sailing Clubs in Trabzon city (Akyazı, Akçaabat and Beşikdüzü Sailing Clubs).

1.5 Transnational Dimension: Black Sea Level

Türkiye participates in several transnational frameworks relevant to the Black Sea blue economy. The Common Maritime Agenda for the Black Sea is the primary sea-basin framework. It was endorsed in 2019 and aims to strengthen regional cooperation around shared maritime and blue economy challenges. The CMA is complemented by the Black Sea SRIA, which provides the research and innovation pillar for a healthy, resilient and productive Black Sea. [7]

Other relevant frameworks include the Organization of the Black Sea Economic Cooperation (BSEC), the Commission on the Protection of the Black Sea Against Pollution, the Black Sea Trade and Development Bank, Interreg NEXT Black Sea Basin Programme, Horizon Europe projects, Sustainable Blue Economy Partnership activities, EU Mission Restore our Ocean and Waters activities linked to the Danube-Black Sea lighthouse, and project-based initiatives such as 4BIZ, Blue Gates, BlueDial, BRIDGE-BS and DOORS. Digital hubs of these blue economy related international project is expected to create stakeholder interaction and communication, knowledge and experience share, and provide policy inputs for policymakers and other stakeholders across the Black Sea region if fully exploited.

These platforms are not only funding channels. They are also mechanisms for policy convergence, stakeholder networking, capacity building, joint research, pilot actions and visibility. Türkiye's strong institutional and private-sector capacity means that it can act not only as a participant but also as a regional driver for CMA implementation in areas such as blue entrepreneurship, aquaculture value chains, sustainable tourism, port decarbonization, maritime skills, marine spatial planning and Black Sea data cooperation.

1.6 Desk Research Summary: Institutional Mapping

The institutional mapping demonstrates that Türkiye already has a broad and capable blue economy ecosystem. The main strength is sectoral depth: there are mature institutions for ports, shipping, fisheries, aquaculture, tourism, research, investment and regional development. The main weakness is integration: mandates are distributed, coordination depends on projects or ad hoc mechanisms, and blue economy is not yet consistently used as a cross-sectoral policy framework.

For the CMA, the key challenge is to move from sectoral participation to coordinated implementation. This requires a stronger national and regional blue economy coordination mechanism, better links between research and investment, a more visible Black Sea project pipeline, and stronger involvement of municipalities, chambers, producer organizations and civil society. In the TR90 Region, this could be operationalized through a Black Sea Blue Economy Coordination Platform or a DOKA-led blue economy working group linked to the CMA National Hub, universities and sectoral clusters.

Mapping efforts indicates a limited development stage of cluster-based initiatives like Turkish Salmon which is an effective marketing platform supported by key institutions such as exporters association and chambers to mobilize aquaculture private sector companies' internationalization and export market expansion. Yet often clusters of this kind are limited to specific products marketing and lack of ecosystem development mentality which would create much greater impact and success for a medium and long term.

Some components of the blue economy such as fisheries, marine and water sports are lack of any coordination among local or regional basis which would enable them to create sufficient public sphere influence to tackle bottlenecks and problems they face. Institutional mapping indeed reveal that NGOs and private sector actors are very vaguely connected with each other which undermine blue economy sectors to attract attention they need and deserve from public authorities and policy making process. There is a strong need to unite and mobilize blue economy actors under several NGOs and public cooperation mechanisms.

2. Legal and Strategic Framework

Türkiye's legal and strategic framework for blue economy development is extensive but fragmented. Maritime transport, coastal planning, fisheries, aquaculture, tourism, environment, climate, investment and research are governed by different laws and strategies. This is not unusual; the blue economy is inherently multi-sectoral. However, the CMA and EU sustainable blue economy approach require these frameworks to become more coherent, particularly around ecosystem-based management, marine spatial planning, innovation, investment and cross-border cooperation.

This section reviews the EU and Black Sea policy context, Türkiye's national strategic framework, key laws governing maritime and coastal space, and the degree of alignment with the CMA. The overall finding is that Türkiye has many of the necessary components for a sustainable blue economy, but the components need stronger strategic integration and a more explicit Black Sea implementation pathway.

2.1 EU Policy Framework for the Blue Economy

The EU's blue economy framework rests on the Integrated Maritime Policy, the sustainable blue economy communication, maritime spatial planning, marine environmental protection and the European Green Deal. The Integrated Maritime Policy introduced a shift from isolated sectoral management toward coordinated maritime governance. It recognized that maritime sectors are interdependent and that policy coherence is needed to manage sea space, resources and economic activities efficiently. [4]

The sustainable blue economy approach, updated in 2021, linked marine economic development to climate neutrality, circularity, biodiversity protection, pollution reduction and resilience. It also emphasized innovation, skills, maritime security, ports, renewable energy, sustainable tourism, fisheries and aquaculture. For Türkiye, these priorities provide a benchmark for aligning national maritime and coastal policies with EU accession, research, investment and regional cooperation opportunities. [4]

At EU level environmental governance is anchored in the Marine Strategy Framework Directive, which introduced the objective of achieving good environmental status of marine waters through an ecosystem-based approach. Although Türkiye is not an EU Member State, the underlying principles are relevant for Black Sea cooperation: cumulative impacts, cross-border coordination, monitoring, target-setting and measures to reduce pressures on marine ecosystems. [5]

Maritime spatial planning is a central tool for connecting sectoral development with ecosystem limits. The EU Maritime Spatial Planning Directive requires coastal Member States to prepare maritime spatial plans that consider economic, social and environmental objectives, land-sea

interactions and cross-border cooperation. Türkiye's emerging MSP agenda is therefore directly relevant to CMA alignment, even if the EU directive is not directly applicable as national law. [6]

The European Ocean Pact, adopted in 2025, brings these strands together in a more integrated ocean-governance framework. It emphasizes ocean health, a thriving blue economy, coastal communities, research and innovation, maritime security and international cooperation. This reinforces the direction already visible in the CMA: marine ecosystems, competitiveness, innovation and investment must be treated as mutually reinforcing priorities rather than separate agendas. [2]

2.2 National Blue Economy Strategies: Türkiye

Türkiye does not have a single, long-established national blue economy strategy comparable to the CMA as a basin-level agenda. Instead, blue economy-related issues are addressed through the Twelfth Development Plan, transport and logistics plans, fisheries and aquaculture regulations, tourism strategies, environmental legislation, climate policies, spatial planning instruments, research and innovation programmes and regional development initiatives. This creates a wide policy base, but it also means that blue economy priorities can be implicit rather than explicitly coordinated.

The Twelfth Development Plan 2024-2028 provides the overarching development framework. It includes priorities relevant to green transformation, logistics, competitiveness, food supply, regional development, climate resilience, innovation and sustainable environment. These priorities are not labelled as a single blue economy package, but they are directly relevant to ports, fisheries, aquaculture, coastal tourism, coastal cities and marine environmental protection. [10]

The 2053 Transport and Logistics Master Plan is particularly important for the maritime economy. It aims to strengthen Türkiye's role as a logistics hub, improve international integration, support efficient and sustainable transport systems and prioritize infrastructure investments. Maritime transport, ports, hinterland connections, rail-port integration and logistics corridors are therefore central to Türkiye's blue economy competitiveness. [11]

Tourism policy is also a major blue economy driver. Türkiye's tourism economy is large and globally competitive, and coastal tourism remains one of the main sources of tourism revenue and employment. Recent tourism statistics show Türkiye's capacity to attract large visitor flows, but the blue economy approach requires the next stage to focus on value, sustainability, coastal carrying capacity, off-season diversification, marina and cruise governance, marine sports and local community benefits. [14]

Regional Development Plans which are being developed by regional development agencies in Türkiye for every NUTS 2 level regions define regional priorities in coherence with national

development plan. In this respect, Eastern Black Sea Development Plan for 2024-2028 is an important reference point highlighting blue economy's importance in regional development efforts.

Fisheries and aquaculture policies are a core component of the national blue economy. As emphasized in DOKA regional development plan and blue economy result-oriented programme aquaculture has a high and quickly growing potential sector in the Eastern Black Sea and that sustainability is the biggest concern for both marine and inland fisheries. It identifies overfishing, pollution, cold-chain capacity, feed costs, market organization, insufficient high value-added processing and monitoring gaps as strategic issues. [20] Blue Economy result oriented programme also recognize and promise to invest in coastal and marine tourism potential of the Eastern Black Sea region. Some components of coastal and marine tourism such as sailing and yacht sports/tourism require international cooperation and a black sea basin level synergies to be boosted to accelerate its potential growth quickly as boats/yachts require shelters in approximately every 40-50 kms to navigate and sail through different parts of the black sea basin.

The emerging marine spatial planning agenda is the most direct step toward integrated blue economy governance. MSPglobal2030 describes Türkiye's Sustainable Blue Economy Plan and marine spatial planning work as an approach to reduce conflicts, build synergies between marine activities, encourage investment through predictability and transparency, increase cross-border cooperation and identify opportunities for multi-use of marine space. At the same time, the source notes that national MSP legislation has not yet been adopted, which makes implementation and institutionalization important next steps. [18]

Recently established Marine Spatial Planning Coordination Committee established on 24th July 2025 official gazette via 2025/12 Presidential Decree is an important development. Accordingly, Committee head is Vice President and it is composed of Ministry of Foreign Affairs, Ministry of Environment Urbanization and Climate Change, Ministry of Energy and Natural Resources, Ministry of Interior, Ministry of Culture and Tourism, Ministry of Defense, Ministry of Agriculture and Forestry, Ministry of Transport and Infrastructures.

2.3 Legislative Analysis: Key Laws Governing Maritime and Coastal Space

Türkiye's maritime and coastal legal framework includes a wide range of laws, regulations and administrative instruments. Key legal areas include fisheries and aquaculture, coastal use, environmental protection, ports, maritime transport, safety, pollution response, tourism, spatial planning, climate and investment. These instruments provide the legal foundation for blue economy activities, but their integration varies across sectors.

The Fisheries Law No. 1380 and related regulations are central for the sustainable use of living aquatic resources. They regulate capture fisheries, aquaculture, licences, restrictions, fishing bans, minimum catch sizes, protection measures, inspections and related administrative procedures. The supplied Country Report Türkiye notes that fisheries policy has evolved through improvements in resource management, data collection, the establishment of the General Directorate of Fisheries and Aquaculture, vessel buy-back support, fishing bans, protected areas and vessel monitoring. [20]

The Coastal Law No. 3621 and spatial planning legislation regulate coastal areas, land-sea interactions, shoreline use and coastal development. These rules are essential for balancing tourism, ports, marinas, fishing infrastructure, public access, environmental protection and coastal urbanization. For the blue economy, the key question is not only whether coastal development is lawful, but whether it is planned in a way that supports ecosystem resilience, local economic value and long-term investment certainty.

The Environmental Law No. 2872, environmental impact assessment procedures, pollution prevention rules and waste management regulations provide the legal basis for protecting marine and coastal ecosystems. Marine pollution from vessels, land-based pollution, wastewater, solid waste, industrial discharges, agricultural runoff and marine litter require coordinated enforcement across ministries, municipalities, ports and producers. The CMA's first goal makes this environmental foundation central to all blue economy development. [7]

Port and maritime transport regulations govern port operations, maritime safety, shipping, ship-generated waste, seafarer standards, traffic management and maritime commerce. In a blue economy perspective, these legal areas increasingly need to incorporate green-port practices, energy efficiency, alternative fuels, port reception facilities, digital port community systems and climate-resilient infrastructure.

Table 3. Main strategic and legal instruments relevant to Türkiye's blue economy

Instrument / framework	Relevance to blue economy	CMA alignment issue
Twelfth Development Plan 2024-2028	Green transformation, competitiveness, logistics, regional development, innovation and sustainable environment	Provides national development context but blue economy integration should be explicit
2053 Transport and Logistics Master Plan	Ports, maritime logistics, international corridors, infrastructure and service quality	Should be linked with green ports, decarbonization, marine environment and CMA connectivity
Fisheries Law No. 1380 and related regulations	Capture fisheries, aquaculture, stock protection, licensing and inspection	Needs stronger ecosystem-based, traceability and data-driven implementation
Coastal Law No. 3621 and spatial planning rules	Coastal use, public access, coastal infrastructure and land-sea interactions	Should be better connected to marine spatial planning and investment certainty
Environmental Law No. 2872 and EIA/waste rules	Pollution control, environmental impact, waste and marine ecosystem protection	Should support integrated monitoring and cumulative impact assessment
Emerging MSP / Sustainable Blue Economy Plan	Conflict reduction, multi-use planning, investment predictability and cross-border cooperation	Requires institutionalization, stakeholder engagement and legal clarity
Eastern Black Sea Regional Development Plan 2024-2028	Recognize potential of blue economy sectors in regional development efforts	Contribute to sustainable development and investments in blue economy sectors.

Source: Author's compilation based on national strategic documents, legislation and desk research.

2.4 Alignment with the Common Maritime Agenda and Regional/Local Policy Coherence

Türkiye's existing framework is broadly compatible with the CMA at the level of objectives, but alignment is uneven at the level of implementation. The country has strong sectoral capacity in each CMA goal area: environmental regulation and monitoring, ports and logistics, tourism, fisheries and aquaculture, research and innovation, investment support and regional development. However, these capacities are not always packaged as CMA-oriented actions, and therefore the visibility of Türkiye's contribution to the CMA can be lower than its actual capacity.

Goal I of the CMA, healthy marine and coastal ecosystems, aligns with Türkiye's environmental legislation, climate adaptation policies, Zero Waste and marine litter initiatives, fisheries management, EIA procedures and research capacity. The implementation gap is mainly around integrated monitoring, land-sea pollution management, shared Black Sea datasets, ecosystem-based management and stronger local participation.

Goal II, a competitive, innovative and sustainable blue economy, aligns with Türkiye's ports, logistics, tourism, aquaculture, shipbuilding, maritime education and R&I capacity. The implementation gap is around cross-sector innovation, blue skills hubs, cluster development, SME digitalization and stronger commercialization of research. Eastern Black Sea Development Agency blue economy programme and 4BIZ Project Country Report Türkiye's recommend to create blue business clusters in TR90 directly to supports this goal. [20, 22]

Goal III, fostering investment in the Black Sea blue economy, aligns with development agencies, investment incentives, IPARD, KOSGEB, TÜBİTAK, Horizon Europe, Interreg and private investment in ports, aquaculture and tourism. The gap is not the absence of funds, but project preparation capacity, investment pipeline quality, blended finance, bankable feasibility studies and cross-border project structuring.

Table 4. Türkiye's alignment with the three CMA goals

CMA goal	Türkiye's relevant strengths	Key gaps	Priority actions for Türkiye / TR90
Goal I: Healthy marine and coastal ecosystems	Environmental legislation, EIA, fisheries management, universities, marine monitoring experience	Fragmented data, land-sea pollution pressures, limited shared Black Sea monitoring, marine litter	Joint monitoring, marine litter prevention, coastal resilience, environmental indicators in projects
Goal II: Competitive, innovative and sustainable blue economy	Ports, tourism, aquaculture, shipbuilding, research, Horizon Europe association	Weak cross-sector innovation, limited high value-added processing, skills gaps	Blue skills hubs, aquaculture cluster, green ports, blue tourism products, technology pilots
Goal III: Fostering investment	Development agencies, IPARD, investment incentives, private ports/tourism/aquaculture capital	Project preparation, co-financing, bankable feasibility, blended finance	Blue project preparation desk, investment pipeline, matchmaking, BlueInvest-style readiness

Source: Author's compilation based on CMA goals and Türkiye sectoral mapping.

2.5 Desk Research Summary: Legal and Strategic Framework

The legal and strategic mapping shows that Türkiye has a mature but sectoral blue economy framework. Maritime transport, fisheries, aquaculture, tourism and environmental protection are

each governed by specialized institutions and rules. The CMA and EU sustainable blue economy agenda point toward a more integrated model: ecosystem health, maritime competitiveness and investment should be managed together.

The main strategic opportunity is to convert existing sectoral strengths into a CMA-aligned national and regional blue economy roadmap. This roadmap does not need to replace existing strategies. Instead, it can serve as an integrating layer that identifies priority actions, responsible institutions, funding sources, data needs, pilot regions and measurable indicators. The TR90 Region can become a practical implementation laboratory for such an approach, especially in aquaculture, sustainable tourism, marine and water sports, port-city logistics, innovative ship/boat building, marine research and blue entrepreneurship.

Recent development such as establishment of Marine Spatial Planning Coordination Committee and publicly spoken and discussed Blue Homeland legislation indicates that Turkish State recognize to need to regulate and shape blue economy policies in a more coordinated and planned approach.

Also, regional development efforts shaped around blue economy sectors such as DOKA's blue economy result oriented programme are important strategic instruments which can be instrumental to increase convergence of CMA priorities to be respected and processed at regional/local levels as these kind of programme highlight the importance of sustainability principles and preservation of marine and coastal ecosystems in line with CMA.

3. Funding Instruments

Funding for blue economy development in Türkiye is available through a wide set of national, EU, international and private instruments. However, the instruments are not always labelled as blue economy funds. They support blue economy development through sectoral windows: fisheries and aquaculture subsidies, rural development grants, regional development programmes, innovation and R&D funding, investment incentives, export and clustering supports, municipal infrastructure budgets, EU cross-border programmes, Horizon Europe and international financial institutions.

The funding challenge is therefore twofold. First, stakeholders need to identify which instruments can support which blue economy priority. Second, institutions need to develop bankable, CMA-aligned project pipelines that combine grants, technical assistance, loans, equity, guarantees and private investment.

3.1 National Public Funding and State Support

The Ministry of Agriculture and Forestry provides direct and indirect supports for fisheries and aquaculture. State authorities in Türkiye provide processed fisheries support, livestock/aquaculture supports, rural development investment supports and species-based support schemes. It notes that Turkish salmon, trout, sea bream, sea bass, carp, yellowfish and tilapia are among supported species under relevant support mechanisms, and that processing, packaging and chilled/frozen sale to chain markets can be supported under processed fisheries support.

The Agriculture and Rural Development Support Institution (TKDK) and IPARD are highly relevant for fish processing and rural blue value chains. IPARD III for Türkiye covers the 2021-2027 period and was adopted with a budget of EUR 430 million. Fishery product processing and marketing, rural enterprise diversification, cold chain, packaging, quality systems and value-added production can be relevant for blue economy actions, especially in regions where fisheries and aquaculture are central to rural livelihoods. [16]

Development agencies are important regional instruments. They can support feasibility studies, innovation, institutional capacity, SME competitiveness, tourism product development, local value chains, entrepreneurship, technical assistance and pilot projects. For the TR90 Region, DOKA can play a coordinating role by preparing blue economy project pipelines, supporting cluster governance, linking municipalities and chambers with EU funds, and developing model pilot projects that can be scaled to other Black Sea regions.

TÜBİTAK and the Ministry of Industry and Technology can support R&D, innovation, commercialization, digital transformation and industry-university cooperation. These instruments are relevant for aquaculture technology, marine monitoring sensors, AI-based stock assessment, port

digitalization, green shipping technologies, marine biotechnology, algae, circular economy products, traceability systems and cold-chain innovation.

The Ministry of Trade's UR-GE and export support instruments can be used for seafood exporters, shipbuilding firms, yacht manufacturers, maritime equipment producers, port services, marine technology SMEs and tourism operators. 4BIZ Project Country Report Türkiye emphasizes the need for internationalization, target-market training, overseas marketing and procurement committee organization. These measures are directly compatible with export-oriented support instruments. [20]

Table 5. Funding instruments and relevance for blue economy development

Funding source	Typical use	Relevance for blue economy
Ministry of Agriculture and Forestry supports	Aquaculture and processed fisheries support	Sustainable aquaculture, processing, packaging, domestic market development
TKDK / IPARD III	Rural development, processing, marketing and diversification	Fish processing, cold chain, value-added seafood, rural coastal enterprises
Development agencies	Feasibility, technical assistance, SME competitiveness, local development	Regional blue economy pipelines, clusters, tourism, innovation and local pilots
TÜBİTAK / Horizon Europe	Research, innovation, international R&I cooperation	Marine monitoring, aquaculture technology, digital systems, blue biotechnology
Interreg NEXT Black Sea Basin	Cross-border cooperation	Marine litter, coastal resilience, blue tourism, skills, institutional cooperation
Ministry of Trade export supports	UR-GE, market access, fairs, branding, export readiness	Seafood exports, shipbuilding, maritime equipment, tourism promotion and clusters
Private investment / PPP	Ports, marinas, tourism, aquaculture, shipyards, logistics	Revenue-generating infrastructure and services, with sustainability conditions

Source: Author's compilation based on supplied Country Report Türkiye, national instruments and EU programme information.

3.2 EU and International Financial Instruments

Interreg NEXT Black Sea Basin Programme is one of the most relevant EU instruments for Black Sea blue economy cooperation. It supports cross-border cooperation among participating countries by addressing shared challenges and sustainable and inclusive development. Projects can support environmental monitoring, coastal resilience, sustainable tourism, blue skills, innovation networks, circular economy, marine litter reduction and institutional cooperation. [16]

Horizon Europe is another critical instrument. Türkiye has been fully associated to Horizon Europe since January 2021, which enables Turkish entities to participate under the same conditions as entities from EU Member States in many calls. This creates opportunities for research institutions, SMEs, municipalities, ports and development agencies to join consortia on marine ecosystems, blue growth, climate adaptation, food systems, transport decarbonization, ocean observation and innovation. [17] Beside Interreg NEXT and Horizon programmes EMFAF, COSME and Erasmus + funds are also, available to Turkish applicants which provide certain project level supports to selected blue economy sectors and themes.

The Sustainable Blue Economy Partnership, EU Mission Restore our Ocean and Waters, Black Sea SRIA-related projects, LIFE, IPA III, technical assistance mechanisms, and other EU cooperation tools can support targeted blue economy priorities. The Black Sea SRIA Implementation Plan is

particularly important because it links scientific priorities to concrete actions and funding opportunities. [9]

International financial institutions and development banks can finance larger investments such as ports, marinas, wastewater treatment, coastal resilience, green shipping, renewable energy, climate adaptation and tourism infrastructure. Relevant institutions include the European Bank for Reconstruction and Development, World Bank Group, International Finance Corporation, Black Sea Trade and Development Bank and other development finance actors. These funds generally require bankable projects, environmental and social safeguards, credible revenue models and strong institutional ownership.

3.3 Private Investment and Public-Private Partnerships

Private investment is already significant in Türkiye's blue economy. Ports, logistics terminals, shipyards, marinas, aquaculture farms, seafood processing facilities, tourism accommodation, yacht services and marine equipment firms are primarily driven by private capital. This private base is a major strength, because public funds alone cannot deliver blue economy transformation.

Public-private partnerships can be relevant for ports, marinas, coastal tourism infrastructure, cruise terminals, wastewater and waste management facilities, renewable energy, cold-chain logistics, fishery landing infrastructure and research-to-market innovation platforms. However, PPPs require clear project preparation, revenue models, environmental safeguards, risk sharing and long-term maintenance arrangements.

For the Eastern Black Sea, private investment opportunities include Turkish salmon value chains, high value-added seafood processing, cold-chain logistics, sustainable coastal tourism, marina and cruise-related services, marine sports, blue technology start-ups, port-hinterland logistics, coastal heritage routes and green port services. The main constraint is not only finance, but the lack of prepared investment sites, feasibility studies, permits, cluster governance and coordinated investment promotion.

In the potential segments of blue economy sectors such as coastal tourism, water and marine sports there is lack of or very limited supports. Since these sectors are underdeveloped and there is no developed market though they possess and offer an important potential private sector attention is very scarce and public investment attention is low. Apart from Eastern Black Sea Development Agency supports, there is no dedicated attention given to these sectors which limit their growth.

3.4 Accessibility and Funding Gaps

Despite the availability of multiple funding instruments, stakeholders often face accessibility barriers. SMEs and cooperatives may lack proposal-writing capacity, co-financing, technical feasibility studies, environmental documentation, foreign-language capacity, data and project management systems. Municipalities may lack specialized blue economy project pipelines or staff dedicated to international funds. Universities may have strong research capacity but limited commercialization pathways. Investors may perceive uncertainty where permits, coastal uses, environmental obligations or market access conditions are unclear.

The supplied 4BIZ Project Country Report Türkiye identifies gaps that are particularly relevant for funding design: high feed costs, high quality-management and marketing expenses for small businesses, insufficient monitoring and data collection, cold-storage deficiencies, inadequate coastal structures and piers for offshore aquaculture logistics, bureaucratic delays and the need for a comprehensive policy framework. These gaps suggest that future funding should prioritize shared infrastructure, digital traceability, cluster services, cold chain, high value-added processing, training, certification and environmental monitoring. [20]

A major funding gap is the absence of a single blue economy investment pipeline. Funding is more effective when projects are grouped into a portfolio: small grants for capacity building, feasibility funding for project preparation, innovation grants for pilots, investment incentives for private firms, loans for infrastructure and export supports for market access. A CMA-aligned portfolio for TR90 could include aquaculture logistics and processing, blue tourism routes, port-city green logistics, marine litter monitoring, blue skills hubs and a regional blue economy data platform.

3.5 Desk Research Summary: Funding Instruments

Türkiye's funding environment is relatively rich, but fragmented. There are national grants, EU programmes, research funds, development agency instruments, investment incentives, private capital and international finance. The critical issue is coordination: blue economy stakeholders need advisory support and technical supports to match project ideas with the right instrument, prepare strong applications, combine funding sources and measure CMA-relevant impacts.

For BlueDial and future regional cooperation, the most practical recommendation is to establish a blue economy project preparation and investment readiness function. This function could help municipalities, firms, cooperatives, universities and NGOs define project concepts, select funding instruments, prepare feasibility studies, build partnerships and submit proposals under Interreg NEXT Black Sea Basin, Horizon Europe, EMFAF, COSME, IPA-related instruments, national supports and private investment mechanisms.

4. Target Group Mapping and Sector Analysis

Türkiye's blue economy is diversified. Established sectors include coastal and maritime tourism, maritime transport, ports and logistics, fisheries and aquaculture, shipbuilding, repair, maritime services and marine education. Environmental protection, ecosystem management and coastal resilience are not only public functions; they are enabling conditions for all other sectors. Emerging sectors such as marine renewable energy, marine biotechnology, blue carbon, marine data, ocean observation, algae, circular economy and maritime digital technologies can create new value if linked to research, entrepreneurship and investment.

This section focuses on five areas with high relevance to the CMA and Türkiye's Black Sea context: coastal and maritime tourism; maritime transport, ports and logistics; fisheries and aquaculture; marine environmental protection and ecosystem management; and emerging blue economy sectors.

Table 6. Target groups and sector priorities in Türkiye's blue economy

Sector	Main target groups	Key opportunities	Priority gaps
Coastal and maritime tourism	Tourism SMEs, municipalities, marina/cruise operators, DMOs, community entrepreneurs	Blue routes, cruise, marina, sports, gastronomy, coastal heritage	Seasonality, waste, carrying capacity, destination governance
Maritime transport and ports	Port operators, logistics firms, exporters, shipping agencies, local governments	Green ports, smart logistics, Black Sea corridors, port-city services	Hinterland links, emissions, digital systems, resilience
Fisheries and aquaculture	Fishers, aquaculture firms, processors, cooperatives, exporters, research institutions	Turkish salmon, processing, cold chain, certification, export growth	Feed costs, monitoring, site conflicts, high value-added processing
Marine environment	Environmental authorities, municipalities, ports, NGOs, universities, communities	Marine litter reduction, joint monitoring, citizen science, resilience	Fragmented data, land-based pollution, enforcement and behaviour change
Emerging blue sectors	Researchers, start-ups, technoparks, investors, ports, SMEs	Marine biotech, algae, digital ocean, robotics, renewable energy services	Commercialization, test sites, venture finance, regulatory clarity

Source: Author's compilation based on sectoral analysis and supplied project inputs.

4.1 Coastal and Maritime Tourism

Tourism is one of Türkiye's strongest economic sectors and a major component of the national blue economy. In 2024 Türkiye reached approximately 62.3 million visitors and USD 61.1 billion in tourism revenue, confirming the sector's scale and resilience. [14]

The established coastal tourism model is strongest in the Mediterranean and Aegean regions, but the Black Sea has a different profile. It is based less on mass beach tourism and more on nature, culture, highlands, gastronomy, coastal cities, cruise potential, yachting, marine heritage, fishing culture, water sports and combined coastal-mountain experiences. This gives the Black Sea an opportunity to develop a more diversified, lower-density and sustainability-oriented tourism model.

For the Eastern Black Sea and TR90 Region, coastal and maritime tourism can be linked to Trabzon's urban and cultural assets, Rize's nature and adventure tourism, Artvin's coastal-mountain interface, Giresun and Ordu's coastal heritage, and regional gastronomy and crafts. Cruise tourism, marina

services, sailing, diving, rowing, coastal cycling, fishing tourism, seafood gastronomy, marine museums and blue routes can help extend stays and diversify visitor spending.

The main sustainability issues are seasonality, coastal carrying capacity, wastewater and solid waste management, marine litter, public access to the coast, pressure on sensitive ecosystems, climate risks and the need to distribute benefits to local communities. The blue economy approach requires tourism to be planned together with coastal management, port development, mobility, protected areas, local entrepreneurship and environmental monitoring.

The target groups include tourism SMEs, accommodation establishments, tour operators, marina and cruise operators, municipalities, destination management organizations, gastronomy businesses, coastal community groups, women and youth entrepreneurs, cultural heritage organizations, maritime sports clubs and environmental NGOs. A CMA-aligned tourism strategy should prioritize value-added, low-impact and community-linked products rather than only increasing visitor numbers.

For a marine and water sport sector potential to be fulfilled there is a need to organize a public-private sector joint venture initiatives as the yacht/sailing sector needs marine or boat piers which are costly and difficult to be realized due to limited coastal space available for them. In Türkiye undertaking an investment over coastal areas are very difficult to be managed which has very strict conditions for any investments due to the restrictions on coastal law. Moreover, existing coastal shelters which could have been utilized for yacht/boat services to a large extent are occupied with largely idle fisherman cooperatives. There is a need for hybrid fisherman/sailing clubs utilization model in coastal shelter areas which needs public bodies' intervention. If a public intervention would secure areas to invest, public-private partnership model investment could have been realized. Since sailing sports needs piers to anchor in all over the black sea basin coast similar to Mediterranean basin there is a need for not only at local, regional and national level but also, there is need for international cooperation and incentives to be provided in all Black Sea basin countries to be provided to develop this blue economy sector. According to research conducted by DOKA, established capacity for mooring in the Black Sea Basin is only 2869 with 26 marinas in whole of the basin. This number is 0 over black sea coasts of Türkiye while it is 22 000 over Marmara and Mediterranean coasts. Also, there are in total 606 711 mooring capacities in the entire Mediterranean basin which is a huge capacity in comparison to tiny 2869 capacity in the Black Sea Basin. Thus, there is a big room for development of water and sailing sports through new investments in the Black Sea basin which needs to supported and prioritized at national and international level programmes like Interreg NEXT Black Sea Basin.

4.2 Maritime Transport, Ports, and Logistics

Maritime transport and ports are among Türkiye's most strategic blue economy sectors. Turkish ports handled about 531.7 million tonnes of cargo in 2024, and container throughput reached around 13.5 million TEU. This places Türkiye among the most important maritime logistics countries in Europe and its surrounding region. [13]

The Black Sea port system is important for national connectivity, trade, energy, grain, minerals, project cargo, containers and regional logistics. Ports such as Samsun, Trabzon, Rize, Filyos, Zonguldak and others connect the Black Sea with Anatolia, the Caucasus, Central Asia and international maritime routes. The Eastern Black Sea has additional potential through Rize-Iyidere logistics investments, Trabzon's port-city functions, coastal road connections and links with Georgia and the Caucasus.

The 2053 Transport and Logistics Master Plan emphasizes Türkiye's role as a logistics hub, international integration, infrastructure investments and improved service quality. For the blue economy, this means port-hinterland integration, rail and road connectivity, digital logistics, green port practices, safety, resilience and value-added logistics services. [11]

The CMA perspective adds two priorities. First, maritime transport should contribute to competitiveness and connectivity while reducing environmental impacts. Second, ports should become blue economy platforms, not only cargo-handling points. They can support cruise tourism, seafood logistics, offshore services, renewable energy, ship waste reception, innovation pilots, maritime training and port-city regeneration.

Target groups in this sector include port authorities, private port operators, logistics companies, shipping agencies, customs brokers, exporters, chambers of shipping, local governments, rail and road infrastructure authorities, universities, maritime training institutions, environmental regulators and technology providers. Key needs include green-port transformation, digitalization, alternative fuel readiness, efficient hinterland links, environmental monitoring and investment-ready logistics projects.

4.3 Fisheries and Aquaculture

Fisheries and aquaculture are central to Türkiye's blue economy and particularly important in the Black Sea. The supplied Country Report Türkiye states that the Eastern Black Sea Region is Türkiye's leading region in marine fisheries and that both sea fishing and aquaculture activities are carried out. It also emphasizes that the biggest concern for both marine and inland fisheries is sustainability, because fish stocks are renewable but not infinite. [20]

Aquaculture has become the growth engine of Türkiye's fisheries economy. Recent sectoral sources report that Türkiye's total fisheries and aquaculture production in 2024 was approximately 933,200 tonnes, including about 577,124 tonnes from aquaculture and 356,070 tonnes from capture fisheries. Aquaculture capacity is supported by a large number of marine and inland facilities, hatcheries, feed suppliers and export-oriented firms. [23]

The Black Sea and Eastern Black Sea are especially important for Turkish salmon, trout, anchovy, capture fisheries, fishmeal and fish oil, cold-chain logistics and export growth. The supplied Country Report Türkiye identifies strong growth in Trabzon: aquaculture production rose from approximately 6,500 tonnes in 2018 to about 12,906 tonnes in 2022, while Trabzon's fisheries export amount increased eight times and export value more than ten times between 2018 and 2022. [20]

The same report identifies a critical value-added gap. Despite strong production and export growth, the region has not yet achieved enough high value-added processed seafood production. Processed products remain concentrated in fish flour, fish oil and fish fillets, and efforts to establish a specialized organized industrial zone for fisheries in Trabzon have been constrained by topography and site availability. This is a strategic issue because higher value-added processing, branding, certification and cold-chain logistics can significantly increase regional income. [20]

Sustainability challenges include overfishing, stock pressure, illegal and unreported fishing, pollution, climate change, invasive species, feed costs, disease risks, spatial conflicts with tourism and coastal users, cold-storage gaps, market volatility and insufficient data. The Country Report Türkiye specifically notes deficiencies in monitoring, auditing, recording and data collection, as well as bureaucratic processes and inter-sectoral conflicts that hinder aquaculture, especially in marine areas. [20]

Target groups include capture fishers, aquaculture farmers, hatcheries, feed producers, processors, exporters, cold-chain companies, fish markets, cooperatives, SÜR-KOOP, SUYMERBİR, DEMBİR, research institutions, provincial directorates, municipalities, retailers and certification bodies. Future CMA-aligned actions should focus on ecosystem-based fisheries management, digital traceability, producer organization, high value-added processing, cold-chain investment, logistics infrastructure for offshore aquaculture, blue skills and cluster-based export development.

4.4 Marine Environmental Protection and Ecosystem Management

Healthy marine and coastal ecosystems are the first goal of the CMA and the foundation for all blue economy development. In Türkiye, environmental protection is relevant to every sector: fisheries depend on healthy stocks and habitats; tourism depends on clean coasts and landscapes; ports depend

on safe and resilient coastal infrastructure; aquaculture depends on water quality; and coastal communities depend on climate resilience.

The Black Sea faces multiple environmental pressures. These include land-based pollution, river-borne nutrients and contaminants, wastewater, solid waste, marine litter, microplastics, coastal erosion, habitat degradation, invasive species, climate change, extreme weather and cumulative impacts from coastal development. Because the Black Sea is semi-enclosed, pressures can accumulate and spread across borders. This makes regional monitoring and cooperation particularly important.

Türkiye has relevant environmental laws, EIA procedures, waste management policies, marine pollution response systems, protected area instruments, coastal planning rules and public campaigns. However, an integrated blue economy approach requires more systematic connection between environmental data and economic planning. Marine litter data, water quality, biodiversity status, fish stock assessments, coastal erosion data, tourism pressures and port emissions should inform investment decisions and spatial planning.

The Marmara Sea mucilage crisis, although outside the Black Sea, offers an important lesson for all Turkish seas: land-based nutrient loads, wastewater treatment, monitoring, enforcement and cross-sector coordination are critical for ecosystem resilience. For the Black Sea, early warning, basin-level cooperation, river-sea linkages and local monitoring networks can help prevent or reduce similar systemic risks.

Target groups include environmental ministries and agencies, municipalities, water and wastewater utilities, port operators, industrial zones, tourism operators, fishers, aquaculture firms, universities, NGOs, schools and coastal communities. Priority actions include marine litter prevention, port reception facilities, wastewater treatment, citizen science, joint monitoring, coastal resilience projects, environmental education and integration of ecosystem data into marine spatial planning.

4.5 Emerging and Underdeveloped Blue Economy Sectors

Emerging blue economy sectors offer opportunities for innovation and diversification. In Türkiye, the most relevant emerging areas include marine renewable energy, offshore wind services, wave and current energy research, marine biotechnology, algae and new aquatic biomass, blue carbon, circular economy products from marine waste, maritime digital technologies, marine robotics, autonomous monitoring systems, smart ports, green shipping and underwater cultural heritage.

Marine renewable energy is still at an early stage, but Türkiye's shipbuilding, engineering, ports and energy sectors can provide capabilities for future offshore wind and marine energy services. The Black Sea's wave, wind and deep-water characteristics require careful feasibility and environmental

assessment, but the sector can create long-term opportunities in ports, engineering, maintenance, vessels, cables and maritime services.

Marine biotechnology and algae can link research institutions with food, feed, cosmetics, pharmaceuticals, environmental remediation and circular economy. The opportunity is not limited to high-tech laboratories. It can include applied pilots such as algae cultivation, alternative feed inputs, bioactive compounds, wastewater-linked biomass production, blue bioeconomy education and SME product development.

Digital blue economy technologies are especially promising because they can be applied across sectors. Sensors, satellite data, remote sensing, vessel monitoring, electronic logbooks, AI-based stock assessment, cold-chain tracking, port community systems, digital twins, marine data platforms and tourism digital tools can improve productivity, safety and sustainability. The supplied Country Report Türkiye already highlights sensors, optical cameras, radio-frequency identification, remote-control platforms, data collection platforms and DNA technologies as useful tools for aquaculture and product traceability. [20]

The main barriers for emerging sectors are weak commercialization pathways, limited pilot funding, unclear regulation, lack of sector-specific incubators, limited access to marine test sites, insufficient venture capital and limited cooperation between researchers and SMEs. A CMA-aligned approach should therefore prioritize blue innovation pilots, testing environments, university-industry matchmaking, start-up acceleration, intellectual property support and international cooperation under Horizon Europe and Interreg.

4.6 Desk Research Summary: Sector Analysis

Türkiye has strong established blue economy sectors and significant emerging potential. Though coastal tourism is not so much developed, ports and logistics, fisheries and aquaculture already have scale. Research, shipbuilding, maritime services and innovation capacity provide a platform for higher value-added development. The Black Sea and TR90 Region have a distinctive profile based on fisheries, Turkish salmon, logistics, port-city functions, coastal-mountain tourism, marine research and cross-border connections. There is a need to develop water sports and sailing tourism through supporting investments with public-private models as well as increasing number of blue flag beaches to improve connectivity of people with sea and increase social life and quality of life.

The main challenge is to transform sectoral growth into sustainable and integrated blue economy value. This means moving from production volume to value-added processing, from visitor numbers to sustainable tourism value, blue flag ports, marinas, from port throughput to green and smart ports,

from isolated research to market-oriented innovation, and from environmental protection as a compliance issue to ecosystem health as a development condition.

In aquaculture sector, there is need to;

- there is a need to develop investment sites. E.g. through dedicated aquaculture industry zones establishment,
- diversify product portfolio with more added value products,
- decrease number fish loss through diseases,
- increase digital traceability and quality image of products,
- domestic market needs to be increased for farmed products,
- there is a need to improve production ecosystem through equipment and machinery sectors to be developed as well,
- Circular economy investments such as collagen and protein hydrolysate production investments from fish waste should incentivized.

In shipbuilding sector, there is need to;

- transform traditional fishermen boat producers to be producer capable of producing more added value products such as electricity ships/boats and luxury yachts/boats,
- there is a need to develop new industrial investment zone near to or over sea coast,
- there is a need to attract investors outside of region for quick development,
- there is need to improve training facilities/schools of blue collar type to improve human capital.

In coastal tourism there is need to;

- invest by municipalities/central ministries to undertake biological treatments centers to improve marine water quality
- investments by municipalities for better quality beaches (blue flag beaches)
- investments by municipalities and public-private sector schemes needed for marina, boat piers development to establish a basis to develop water and marine sports and yacht/sailing tourism development
- there is need to provide supports for sailing clubs and NGOs working for coastal/marine environment protection and coastal tourism development

5. Stakeholder Interviews: Field Research

This section replaces the generic interview and workshop guide with a synthesis of the stakeholder responses collected for the BlueDial State of the Art study. The analysis is based on nine completed questionnaires submitted between 4 and 24 June 2026 by regional and local authorities, development agency representatives, universities, research institutes and municipal actors in Türkiye. The responses were reviewed as qualitative field evidence and were used to validate the desk-research findings on the institutional, legal, strategic, funding and sectoral dimensions of the blue economy.

The findings should be read as an expert and institutional perception analysis rather than as a statistically representative survey. Nevertheless, the responses are valuable because they come from actors directly involved in fisheries and aquaculture, marine sciences, coastal and maritime tourism, water sports, local government, regional development, environmental management and Black Sea cooperation projects.

5.1 Respondent and Institutional Profile

The field research covered a balanced group of stakeholders from the Eastern Black Sea and wider Black Sea blue economy ecosystem. Public-sector and regional development perspectives were represented by the Eastern Black Sea Development Agency, Trabzon Metropolitan Municipality and Ortahisar Municipality. Research and academic perspectives were represented by the Aquaculture Research Institute (SUMAE), Central Fisheries Research Institute (SUMAE), Karadeniz Technical University Marine Sciences Faculty, Ordu University and Trabzon University. This mix allowed the field analysis to capture both implementation problems faced by local authorities and technical-sector priorities identified by research institutions.

Table 7. Stakeholder responses reviewed for the field research synthesis

Institution / respondent group	Institutional perspective	Main contribution to the analysis
Eastern Black Sea Development Agency	Regional development and project implementation	Highlighted the absence of a single coordination body, the need for dedicated blue economy investment incentives, and the value of Interreg NEXT projects such as Blue Gates and REBLUE.
Trabzon Metropolitan Municipality and Ortahisar Municipality	Local authority, coastal management and municipal implementation	Emphasized coastal filling, wastewater and industrial pollution, municipal funding needs, weak enforcement and the importance of protecting coastal ecosystems.
Aquaculture Research Institute (SUMAE) and Central Fisheries Research Institute (SUMAE)	Applied research, fisheries, aquaculture and marine monitoring	Confirmed the strength of sector-specific fisheries and aquaculture policies, while underlining the need for better coordination, data systems, advanced technologies and long-term project continuity.
Karadeniz Technical University Marine Sciences Faculty	Marine sciences and environmental policy	Stressed the importance of effective MSFD-type practices, competent human resources,

		international regulations and stronger administrative initiative.
Ordu University respondents	Academic research and fisheries perspective	Pointed to research funding gaps, insufficient coordination between authorities and research centres, the need to make scientific evidence a mandatory part of sectoral decision-making, and fisheries investment needs.
Trabzon University, Faculty of Sport Sciences / Recreation	Coastal recreation, sports, tourism and blue skills	Drew attention to underdeveloped blue economy segments beyond fisheries and tourism, especially blue energy, marine biotechnology, ecosystem services, innovation and marine spatial planning.

Source: Author's synthesis based on BlueDial stakeholder questionnaire responses submitted in June 2026.

5.2 Overall Assessment of the National Blue Economy Framework

Stakeholders assessed the maturity of Türkiye's national blue economy framework between 2 and 4 on a five-point scale, with an approximate average of 3.0. This indicates a moderately developed but fragmented framework. The relatively positive assessments were generally linked to the existence of sector-specific policies, public supports, research capacity and strong fisheries and aquaculture institutions. Lower assessments were linked to the absence of an integrated national blue economy strategy, the lack of a clearly mandated coordination body, weak inter-institutional communication, limited blue economy-specific funding and insufficient implementation of integrated marine and coastal planning.

A recurring message was that Türkiye has many relevant policies and institutions, but they are organized mainly through separate sectoral channels. Fisheries and aquaculture are addressed through agricultural and food-related policy; maritime transport and ports through transport and logistics policy; coastal areas through spatial planning and environmental policy; tourism through tourism policy; and research through universities and specialized institutes. Stakeholders did not generally describe a complete absence of regulation. Instead, they emphasized fragmentation, weak enforcement, overlapping mandates and the absence of a practical mechanism that can translate the Common Maritime Agenda into a coordinated national and regional action pipeline.

5.3 Alignment with the Common Maritime Agenda

The responses confirm that Türkiye has a meaningful basis for alignment with the three goals of the Common Maritime Agenda for the Black Sea, but that the level of alignment differs across sectors. The strongest alignment was associated with fisheries and aquaculture, marine environmental protection, maritime transport, coastal tourism and Black Sea cooperation projects. Stakeholders referred to the strength of aquaculture institutions in Trabzon, the competitiveness of export-oriented aquaculture, existing environmental and fisheries laws, and the experience gained through Interreg, CBC, Erasmus and other EU-supported cooperation projects.

The clearest disconnections relate to CMA Goal I on healthy marine and coastal ecosystems and Goal III on investment. Several respondents underlined that coastal and marine environmental responsibilities are spread across many bodies, while implementation checks and enforcement are not always sufficient. Local authority responses placed particular emphasis on unplanned coastal fillings, wastewater and industrial discharges, inadequate inspection of fishing and marine aquaculture activities, and the need for stronger protection of coastal flora and fauna. For investment, stakeholders stated that general national support mechanisms exist, but dedicated blue economy incentives for emerging sectors, blue tourism infrastructure, marine technologies, monitoring systems and blue energy remain limited.

Marine Spatial Planning was the most frequently emphasized cross-cutting gap. Stakeholders described the absence or insufficient application of a binding Marine Spatial Planning approach as a key obstacle because it limits the capacity to balance coastal tourism, ports, aquaculture, fisheries, ecosystem protection, marine renewable energy and local community needs in the same marine and coastal space.

5.4 Institutional Coordination, Legal Gaps and Governance Bottlenecks

Institutional coordination emerged as the central governance challenge. Stakeholders repeatedly noted that no single lead body is responsible for the blue economy at national, regional and local levels. This creates a situation in which different public bodies approach blue economy resources from their own mandates, without a shared roadmap, common indicators or joint investment priorities. Respondents also stated that finance, data and technical capacities are distributed across different institutions and are not always connected to a common blue economy vision.

- establishing a national or regional blue economy coordination mechanism with a clear mandate;
- developing an integrated national blue economy strategy linked to the CMA and to Türkiye's Blue Plan discussions;
- operationalizing Marine Spatial Planning and connecting it with coastal land-use decisions;
- strengthening enforcement against illegal or poorly planned coastal filling, untreated wastewater discharge and industrial pollution;
- creating shared marine data, monitoring and decision-support systems; and
- improving coordination between research institutions, municipalities, ministries, the private sector and development agencies.

These findings support the desk-research conclusion that Türkiye's blue economy challenge is not the lack of sectoral assets. Rather, the main challenge is converting sectoral assets into an integrated

governance and investment system that can manage land-sea interactions and cumulative environmental pressures.

5.5 Funding, Investment and Business Environment

Funding accessibility was generally assessed as low to moderate. Respondents mentioned EU and international programmes such as Interreg NEXT Black Sea Basin, Horizon Europe, LIFE, Erasmus+, EU investment instruments and national/local grants. However, access barriers were repeatedly identified: complex application procedures, administrative burden, co-financing requirements, lack of awareness, lack of project-preparation experience, insufficient international networks and limited technical knowledge for consortium building.

The sectors most frequently associated with funding gaps were coastal and maritime tourism - especially sailing, water sports, marina or small-pier infrastructure and youth sailing clubs - fisheries, marine transport, ecosystem health and sustainable use of resources, blue energy, marine biotechnology, advanced aquaculture technologies and digital monitoring systems. Municipalities were also identified as an important target group because many coastal environmental and infrastructure problems require local implementation capacity but exceed ordinary municipal budgets.

From a business and investment perspective, the field responses reinforce the need for a more targeted blue economy project pipeline. General investment mechanisms are useful, but emerging blue economy sectors require patient financing, feasibility preparation, public-private partnerships, scientific validation and specialized infrastructure. Without these, Türkiye's strong research and private-sector potential may remain underutilized, particularly in the Eastern Black Sea.

5.6 Blue Skills, Research-Industry Links and Innovation Capacity

Stakeholders identified several skills and innovation gaps. The most common themes were vocational training, modern physical and digital infrastructure, project-writing and consortium-building capacity, industry-academia cooperation, technical expertise for data-driven monitoring, and the translation of research findings into practical or commercial applications. Academic and research respondents emphasized that scientific evidence should be more systematically embedded in sectoral decisions, especially in fisheries, aquaculture, coastal planning and ecosystem monitoring.

The field research also suggests that blue economy awareness is still uneven. Some respondents noted that in Türkiye the blue economy is often understood narrowly as fisheries or tourism, while marine renewable energy, blue biotechnology, ecosystem services, maritime digitalization, blue carbon and marine-based innovation receive less attention. This indicates a need for awareness-

raising, curricula development, professional training, certification schemes and demonstration projects that make emerging sectors visible to local institutions and firms.

5.7 Transnational Cooperation in the Black Sea

Transnational cooperation was generally assessed as moderate to strong, but mostly project-based rather than institutionalized. Stakeholders cited Interreg NEXT multilateral projects, CBC and Erasmus cooperation, regional research and capacity-building projects, and the Blue Gates and REBLUE projects as positive examples. These projects support knowledge exchange, equipment investments, training, research cooperation and partnerships with actors from Greece, Bulgaria, Romania, Ukraine, Georgia and other Black Sea or European regions.

The main barrier is continuity. Several respondents noted that cooperation often depends on short-term funding cycles and project calls. When the project ends, the cooperation network can weaken unless there is a long-term institutional mechanism, shared data platform, regular policy dialogue or basin-level action plan. This confirms the importance of the CMA as a stable policy framework and of BlackBlueNET-type platforms for maintaining stakeholder interaction beyond individual projects.

5.8 Priority Actions Emerging from Field Research

The stakeholder responses point to the following priority actions for Türkiye and the TR90 Region:

- Prepare an integrated national blue economy strategy or roadmap that connects sectoral laws, funding instruments and CMA goals under a shared implementation framework.
- Create a dedicated coordination mechanism for blue economy governance, with clear links between national ministries, regional development agencies, municipalities, universities, chambers, ports, producer organizations and civil society.
- Accelerate Marine Spatial Planning and connect it to coastal land-use planning, environmental monitoring, aquaculture siting, tourism infrastructure and port development.
- Strengthen enforcement and monitoring against unplanned coastal filling, untreated wastewater discharge, industrial pollution and unsustainable resource use.
- Design dedicated funding windows for blue economy sectors, especially sustainable coastal tourism, sailing and water sports, blue energy, marine biotechnology, advanced aquaculture, ecosystem monitoring and municipal coastal infrastructure.
- Institutionalize science-policy dialogue by making scientific research, baseline data and monitoring evidence mandatory inputs for major coastal and marine investments.
- Develop blue skills programmes, vocational training and industry-academia cooperation mechanisms, including training on project preparation, digital monitoring, sustainable aquaculture, marine tourism and emerging blue economy technologies.

- Turn project-based Black Sea cooperation into a more continuous institutional network through shared platforms, regular thematic working groups and joint project pipelines.

Overall, the field research validates the main findings of the report. Türkiye has strong blue economy assets, especially in fisheries and aquaculture, maritime transport, tourism, research and regional cooperation. The next development step is to connect these assets through integrated planning, stronger coordination, dedicated investment tools, better enforcement, more systematic data use and sustained Black Sea-level cooperation.

5.9 Other Stakeholder Inputs and Field Research Synthesis

The synthesis focuses on practical implementation barriers and opportunities identified in 4BIZ Project with different stakeholder groups which are likely to need in order to contribute to CMA-aligned blue economy development.

5.9.1 Respondent and Institutional Profile

4BIZ Project Country Report Türkiye includes detailed references to the Ministry of Agriculture and Forestry, the General Directorate of Fisheries and Aquaculture, SÜR-KOOP, SUYMERBİR, DEMBİR, TKDK/IPARD and a list of marine aquaculture companies in Trabzon that have growth and innovation potential. [20]

5.9.2 Summary of Stakeholder Perspectives

The first recurring perspective is the need for coordination. Stakeholders operate through sectoral channels, but blue economy opportunities are cross-sectoral. Aquaculture needs coastal infrastructure, logistics, environmental monitoring, export support and research. Tourism needs coastal planning, waste management, local entrepreneurship and transport links. Ports need hinterland infrastructure, digital systems, environmental compliance and workforce skills. Without a coordination platform, project ideas remain fragmented.

The second perspective is the need for stronger value-chain development. In aquaculture, the supplied 4BIZ Country Report Türkiye shows that production and exports have grown strongly, particularly in Trabzon, but the region still lacks sufficient high value-added processing and product diversification. Stakeholders therefore need support for processing, packaging, branding, certification, cold storage, market research, product development and internationalization. [20]

The third perspective is the need for infrastructure and spatial planning. Offshore aquaculture, ports, marinas, fishery landing facilities, cold-chain logistics, tourism routes and coastal public spaces all compete for limited coastal space. The Eastern Black Sea's topography makes flat industrial and

logistics sites difficult to find. A marine spatial planning and integrated coastal planning approach can reduce conflicts and improve investment predictability.

The fourth perspective is the need for data and monitoring. The Country Report Türkiye identifies deficiencies in monitoring, auditing, recording and data collection. This affects fisheries management, traceability, food safety, investment decisions and environmental protection. Stakeholders need shared data systems that are practical and trusted, not only formal reporting obligations. [20]

The fifth perspective is skills and human capital. Blue economy transformation requires technical skills in aquaculture health, feed, processing, cold chain, certification, port logistics, maritime safety, digital systems, tourism experience design, environmental monitoring, project management and foreign trade. The CMA's emphasis on blue skills and careers is therefore highly relevant for Türkiye's Black Sea region.

The sixth perspective is funding access. Many stakeholders know that funding exists, but they struggle to prepare strong applications, meet co-financing requirements, develop feasibility studies, and comply with environmental and procurement rules. A project preparation support mechanism would increase the absorption of EU, national and development finance instruments.

5.9.3 Areas for Improvement

The first area for improvement is institutional coordination. A Türkiye Black Sea Blue Economy Platform could meet regularly, include public, private, academic and civil society actors, and monitor CMA-aligned actions. It should not duplicate existing mandates; it should connect them around priorities, projects and indicators.

The second area is project pipeline development. Instead of isolated project applications, the region should prepare thematic pipelines: sustainable aquaculture and processing; green and smart ports; coastal and maritime tourism; marine environmental monitoring; blue skills and entrepreneurship; and marine spatial planning/data. Each pipeline should include concept notes, feasibility needs, potential partners, funding sources and impact indicators.

The third area is cluster governance. The supplied 4BIZ Country Report Türkiye recommends cluster management capacity, technical capacities and internationalization measures. These should be translated into a practical Blue Fisheries and Aquaculture Cluster programme in the Eastern Black Sea, potentially linked to ports, cold chain, processing facilities, exporters, universities and development agencies. [20]

The fourth area is sustainability integration. Environmental protection should be built into business support instruments, not treated only as a regulatory obligation. For example, aquaculture support

can include water-quality monitoring and feed efficiency; tourism support can include waste reduction and local ecosystem awareness; port support can include green-port indicators; and SME support can include circular economy and resource efficiency.

The fifth area is Black Sea cooperation. Türkiye's institutions and firms can gain from joint projects with Georgia, Bulgaria, Romania, Moldova and Ukraine in areas such as marine litter, fisheries sustainability, tourism routes, port digitalization, blue skills and marine research. These should be explicitly linked to the CMA so that local projects also contribute to basin-level visibility.

6. Potentials and Gaps: SWOT Analysis

The SWOT analysis summarizes the main strengths, weaknesses, opportunities and threats identified through desk research, 4BIZ Project Türkiye country report, CMA priorities and sectoral analysis. The focus is Türkiye's blue economy with emphasis on the Black Sea and TR90 Region.

The analysis uses a policy and implementation perspective. Strengths and weaknesses refer mainly to internal characteristics of Türkiye's blue economy ecosystem. Opportunities and threats refer mainly to external trends, funding windows, regional dynamics, market developments and environmental pressures.

6.1 Overview of the SWOT Approach

The SWOT approach is useful because blue economy development is not only a technical issue. It depends on institutional capacity, market conditions, environmental status, skills, data, infrastructure, finance and cooperation. A region can have strong production capacity but weak value-added processing; strong research but weak commercialization; strong tourism assets but weak environmental management; or strong funding opportunities but weak project preparation capacity.

For Türkiye, the analysis shows that the main strategic task is not to create a blue economy from zero. Türkiye already has major blue economy sectors. The task is to integrate them under a sustainable, CMA-aligned framework that increases value, reduces environmental pressure, improves coordination and strengthens Black Sea cooperation.

6.2 SWOT Matrix

Table 8. SWOT matrix for Türkiye’s blue economy with emphasis on the Black Sea and TR90 Region

Strengths	Weaknesses
Strategic maritime location and long coastline; diversified ports and logistics capacity; strong tourism economy; growing aquaculture sector; shipbuilding and maritime services; capable universities and research centres; Horizon Europe association; regional development agencies and investment support structures; active producer organizations and exporters.	Fragmented governance; no fully consolidated national blue economy strategy; limited CMA visibility in national/regional project pipelines; insufficient high value-added seafood processing in the Eastern Black Sea; cold-chain and logistics gaps for smaller firms; limited data integration and monitoring; skills gaps; complex permits and coastal-space conflicts; limited project preparation capacity.
Opportunities	Threats
CMA and SRIA cooperation; Interreg NEXT Black Sea Basin and Horizon Europe; emerging MSP and Blue Plan; green ports and maritime decarbonization; Turkish salmon and seafood export growth; Black Sea blue tourism routes; marine digital technologies; blue skills hubs; algae, biotechnology and circular economy; DOKA-led regional pilots; international investment interest in ports, marinas and logistics.	Marine pollution and litter; climate change, extreme weather and coastal erosion; overfishing and stock decline; feed cost volatility; market and exchange-rate risks; regional geopolitical uncertainty; biodiversity loss and invasive species; unplanned coastal development; competition for coastal space; weak enforcement or data gaps undermining sustainability claims.

Source: Author’s synthesis based on desk research, CMA priorities and supplied Türkiye country report.

6.3 Key Strategic Implications of the SWOT

The first implication is that Türkiye should position the blue economy as an integrating policy layer rather than a new sector. The country already has strong maritime transport, tourism, fisheries, aquaculture, shipbuilding and research capacity. The value of a blue economy framework is to connect these assets around ecosystem health, innovation and investment.

The second implication is that the Black Sea should be treated as a strategic blue economy implementation area. Compared with the Mediterranean and Aegean tourism model, the Black Sea offers a different combination of fisheries, aquaculture, logistics, coastal cities, research, culture, nature and cross-border cooperation. This allows for a more diversified and sustainability-oriented model.

The third implication is that value-added transformation is central. Production volume in aquaculture and cargo throughput in ports are important, but future competitiveness will depend on processed

products, certification, branding, cold chain, digitalization, green ports, skilled labour, technology and environmental performance.

The fourth implication is that environmental protection is an economic condition. Marine litter, pollution, climate risks, stock depletion and coastal degradation directly threaten tourism, fisheries, aquaculture and port-city attractiveness. CMA Goal I should therefore be embedded in every sectoral project.

The fifth implication is that project preparation capacity is a bottleneck. Funding opportunities exist, but stakeholders need help to transform ideas into feasibility studies, partnerships, budgets, permits, procurement plans, environmental safeguards and measurable indicators.

7. Conclusions and Recommendations

Türkiye has a broad and dynamic blue economy base. Its maritime geography, port system, tourism economy, fisheries and aquaculture capacity, shipbuilding industry, research institutions and regional development structures provide a strong platform for CMA-aligned blue economy development. The main issue is not the absence of sectors, but the need for stronger integration, sustainability, value-added transformation and investment readiness.

The Black Sea and TR90 Region are particularly relevant for pilot implementation. Trabzon and the wider Eastern Black Sea have fisheries and aquaculture growth, port and logistics assets, coastal tourism potential, universities, export organizations and development agency capacity. At the same time, the region faces constraints such as topography, limited industrial sites, coastal-space conflicts, environmental pressures, cold-chain needs, high value-added processing gaps and fragmented coordination.

7.1 Key Conclusions

First, Türkiye's blue economy governance is institutionally rich but sectorally fragmented. Ministries, agencies, municipalities, chambers, universities and producer organizations all have relevant roles, but no single platform consistently connects them around CMA implementation.

Second, Türkiye's legal and strategic framework is broadly compatible with the CMA. Environmental protection, fisheries management, transport planning, tourism, research and investment policies all support elements of CMA goals. However, a specific CMA-aligned implementation roadmap would improve coherence and visibility.

Third, the marine spatial planning agenda is a strategic opportunity. MSP can help reduce conflicts, improve investment certainty, integrate environmental data and connect coastal development with marine uses. The next step is institutionalization, stakeholder engagement and practical links to investment and local planning.

Fourth, aquaculture is a major opportunity for the Eastern Black Sea, but the sector needs high value-added processing, certification, cold chain, logistics infrastructure, data systems and environmental monitoring. Cluster-based development can address many of these needs.

Fifth, coastal and maritime tourism should move toward value and sustainability. The Black Sea can develop a differentiated tourism model based on coastal-city experiences, nature, maritime heritage, gastronomy, cruise and marina services, sports and community entrepreneurship.

Sixth, funding opportunities exist but require stronger project preparation. Interreg NEXT Black Sea Basin, Horizon Europe, IPARD, national supports, development agencies and international finance

can all support blue economy actions, but stakeholders need structured advisory support and investment-ready project pipelines.

7.2 Recommendations

The recommendations are grouped under four headings, following the structure used in the Georgia example: policy improvements, institutional strengthening, funding optimization and enhancement of Black Sea-level cooperation. Together, they aim to translate the CMA goals into practical actions for Türkiye and the Eastern Black Sea.

Table 9. Suggested CMA-aligned action plan for Türkiye and TR90

Recommendation	Lead / partners	Time horizon	Indicative output
Türkiye CMA-aligned Blue Economy Roadmap	Relevant ministries, CMA National Hub, universities, DOKA	Short term	Roadmap with priorities, indicators, funding sources and pilot actions
TR90 Blue Economy Working Group	DOKA, municipalities, chambers, universities, producer organizations	Short term	Regional coordination mechanism and project pipeline
Eastern Black Sea Aquaculture Cluster Programme	DOKA, exporters, SUYMERBİR, firms, KTÜ, chambers	Short-medium term	Cluster governance, training, certification, market access and processing projects
Blue Economy Project Preparation Desk	DOKA, municipalities, chambers, consultants, universities	Short term	Concept notes, feasibility studies and funding applications
Marine Monitoring and Litter Reduction Pilot	Environmental authorities, municipalities, NGOs, universities	Medium term	Monitoring protocol, citizen science, clean coast action and data dashboard
Green and Smart Port Pilot	Port operators, Ministry of Transport, municipalities, tech firms	Medium term	Green-port action plan, digital tools and investment package
Black Sea Blue Tourism Route	Tourism authorities, municipalities, SMEs, cultural actors	Medium term	Joint route, branding, local products and sustainable tourism standards

Source: Author's proposed action framework based on the report analysis.

7.2.1 Policy Improvements

Prepare a CMA-aligned Türkiye Blue Economy Roadmap. This should not duplicate the Twelfth Development Plan, transport plans, tourism plans or fisheries strategies. It should act as an integrating layer that maps priority actions, responsible institutions, funding instruments, data needs and indicators under the three CMA goals.

Strengthen marine spatial planning and integrated coastal management. Türkiye's emerging MSP and Sustainable Blue Economy Plan should be connected with coastal planning, port development, aquaculture site planning, tourism, environmental monitoring, climate adaptation and investment promotion. Stakeholder consultation should include municipalities, ports, fishers, aquaculture firms, tourism SMEs, universities and NGOs.

Develop a Black Sea Sustainable Aquaculture and Fisheries Value Chain Strategy. The strategy should focus on stock sustainability, aquaculture planning, high value-added processing, cold chain, certification, branding, export markets, traceability, feed innovation, logistics infrastructure and environmental monitoring.

Integrate environmental indicators into blue economy investment decisions. Projects in tourism, ports, aquaculture and coastal infrastructure should include indicators for waste reduction, water quality, emissions, biodiversity, climate resilience and circularity.

Create a blue economy data and monitoring dashboard. The dashboard should bring together data on ports, fisheries, aquaculture, tourism, marine litter, water quality, funding, projects, stakeholders and CMA indicators. It should be designed for decision-makers and project developers, not only researchers.

7.2.2 Institutional Strengthening

Establish a Türkiye Black Sea Blue Economy Coordination Platform. The platform could be linked to the CMA National Hub and include ministries, DOKA, municipalities, chambers, universities, producer organizations, ports, exporters and NGOs. It should meet regularly, review project pipelines and monitor CMA alignment.

Create a TR90 Blue Economy Working Group. This working group can focus on practical regional actions: aquaculture cluster development, coastal tourism routes, green port-city logistics, marine litter reduction, blue skills and project preparation.

Support a Blue Fisheries and Aquaculture Cluster in the Eastern Black Sea. Building on the supplied Country Report Türkiye, the cluster should provide governance, training, technical consultancy, internationalization, marketing, documentation, member services, R&D links and joint infrastructure planning. [20]

Strengthen university-industry-municipality cooperation. Universities should be integrated into pilot projects, not only research publications. Applied projects can include water-quality sensors, aquaculture disease management, alternative feeds, marine litter analysis, tourism carrying capacity, port emissions and blue entrepreneurship.

Develop blue skills hubs. Vocational schools, universities, chambers and firms should create modular training programmes for aquaculture technicians, seafood processing, cold chain, port logistics, green ports, maritime safety, tourism experience design, foreign trade and project management.

7.2.3 Funding Optimization

Establish a Blue Economy Project Preparation Desk. This desk could help stakeholders prepare concept notes, partner searches, feasibility studies, budgets, environmental safeguards and applications for Interreg, Horizon Europe, IPARD, national supports and investment incentives.

Create a TR90 Blue Economy Project Pipeline. The pipeline should include a limited number of high-quality project concepts under five themes: sustainable aquaculture and processing; green and

smart ports; coastal and maritime tourism; marine environmental monitoring and litter reduction; and blue skills and entrepreneurship.

Use blended finance for larger investments. Grants should fund feasibility, capacity building and pilots. Loans and private investment should finance revenue-generating infrastructure. Public funds should reduce risk where projects create public benefits such as environmental monitoring, shared logistics or skills.

Increase SME and cooperative access to funding. Small aquaculture firms, fishers, tourism SMEs and cooperatives need simplified guidance, training, mentoring and shared services to access funding. Cluster organizations and development agencies can act as intermediaries.

Link export support to sustainability and value-added production. Internationalization measures should not only increase exports, but also improve certification, branding, product development, packaging, market diversification and compliance with environmental and food safety standards.

7.2.4 Enhancing Black Sea-Level Cooperation

Use the CMA as the reference framework for cross-border projects. Turkish stakeholders should explicitly map project objectives to CMA goals and priorities when preparing Interreg, Horizon Europe or other cooperation proposals.

Develop joint Black Sea monitoring and data projects. Türkiye can cooperate with Georgia, Bulgaria, Romania, Moldova and Ukraine on marine litter, pollution, biodiversity, fisheries data, climate risks and coastal resilience.

Create Black Sea blue tourism routes. Coastal cities and tourism stakeholders can cooperate on cruise, gastronomy, maritime heritage, sailing, diving, coastal culture and nature-based routes that connect ports and communities across the basin.

Promote regional blue skills and mobility. Universities, maritime academies, vocational schools and firms can develop exchange programmes, joint training modules, traineeships and certification schemes for blue economy skills.

Increase visibility of Turkish blue economy pilots in CMA platforms. Successful projects in aquaculture, green ports, marine research, blue tourism and environmental monitoring should be submitted to CMA events, awards and project showcases to strengthen regional learning and replication.

7.3 Final Conclusion

Türkiye is well positioned to become one of the leading drivers of sustainable blue economy development in the Black Sea basin. Its sectoral capacity, private investment base, research institutions, strategic location and regional development infrastructure are strong assets. The next stage should focus on coordination, integration and implementation: turning sectoral strengths into CMA-aligned projects, turning production growth into value-added transformation, turning environmental compliance into ecosystem stewardship, and turning funding opportunities into bankable blue economy investments.

For the BlueDial project, the most practical path forward is to use this report as a basis for stakeholder validation and action planning. The recommended focus should be a Türkiye and TR90 blue economy roadmap built around sustainable aquaculture and seafood value chains, green and smart port-city logistics, sustainable coastal and maritime tourism, marine environmental monitoring, blue skills and investment-ready project pipelines. This would make the Common Maritime Agenda not only a strategic reference, but a practical framework for local and regional transformation.

8. Annexes and Implementation Tools

The following annexes translate the report's findings into operational tools. They are designed for use during stakeholder consultations, project preparation workshops and CMA-aligned action planning in Türkiye and the TR90 Region. The annexes do not replace detailed feasibility studies. They provide a structured starting point for identifying partners, funding sources, risks, indicators and potential pilot actions.

The tools are organized around the same logic as the Common Maritime Agenda: healthy ecosystems, competitive and innovative sectors, and investment. They are also adapted to Türkiye's institutional reality, where many blue economy responsibilities are distributed across sectoral ministries, municipalities, development agencies, chambers, universities and private-sector organizations.

8.1 Detailed CMA-Türkiye Alignment Matrix

The CMA contains ten priorities under its three goals. Türkiye has assets and institutions relevant to each priority. The matrix below identifies practical action options, with emphasis on the Black Sea and TR90 Region. The purpose is to make the CMA usable as a project-development framework rather than only a strategic reference document.

The matrix can be used in workshops by asking three questions for each priority: which Turkish institutions already work on this topic, which gaps prevent implementation, and what project concept could be prepared within twelve months. This helps translate policy alignment into bankable actions.

Table 10. Detailed alignment of CMA priorities with Türkiye/TR90 action options

CMA goal	Priority	Türkiye / TR90 assets	Main gaps	Possible action package	Indicative partners
Goal I	1. Ensure protection and sustainability of the marine ecosystem	Environmental legislation, universities, marine research, fisheries controls, local authorities	Fragmented monitoring, limited integration of ecological data into investment decisions	Black Sea ecosystem monitoring pilot; coastal habitat mapping; integration of ecosystem indicators into regional project appraisal	Ministry of Environment, universities, municipalities, NGOs, CMA hub
Goal I	2. Address marine pollution and plastic litter	Zero Waste experience, municipal waste systems, NGOs, port reception facilities	Land-based pollution, marine litter, weak behavioural change and inconsistent data	TR90 Clean Coast and Marine Litter Action; citizen science; port waste coordination; school-based ocean literacy	Municipalities, TURMEPA/NGOs, ports, schools, DOKA
Goal I	3. Support sustainable fisheries and aquaculture	Strong aquaculture production, Turkish salmon, producer organizations, KTÜ and research capacity	Monitoring, feed costs, spatial conflicts, cold chain, high value-added processing	Sustainable aquaculture cluster; digital traceability; value-added processing; offshore logistics planning	Ministry of Agriculture, SUYMERBİR, SÜR-KOOP, firms, DOKA, KTÜ
Goal I	4. Support innovative marine research infrastructures	METU-IMS, KTÜ, TÜBİTAK, DEHUKAM, Black Sea projects	Research infrastructure not always connected to SMEs or municipalities	Shared Black Sea data and test-site network; applied pilot calls; research-to-market brokerage	Universities, TÜBİTAK, technoparks, municipalities, firms
Goal I	5. Encourage production, management and sharing of marine and coastal knowledge	National statistics, research datasets, port/fishery data, regional universities	Data silos, limited public dashboards, weak standardized indicators	Türkiye Black Sea Blue Economy Dashboard; harmonized regional indicators; open data protocols	DOKA, ministries, TÜİK, universities, CMA/BSAM
Goal II	1. Foster innovative business models, R&I, sustainable growth and jobs	Strong SMEs, exporters, technoparks, development agencies, Horizon Europe association	Weak commercialization, limited blue start-up ecosystem, fragmented clusters	Blue business accelerator; aquaculture and marine-tech innovation vouchers; university-industry pilots	DOKA, TÜBİTAK, technoparks, chambers, firms
Goal II	2. Promote transport and digital connectivity	Major port system, Black Sea logistics, 2053 transport plan, private port capacity	Green-port transition, digitalization, hinterland links, climate resilience	Green and smart port pilot; port community systems; port-city logistics and alternative-fuel readiness	Ministry of Transport, ports, logistics firms, municipalities
Goal II	3. Promote blue skills and blue careers	Universities, maritime education, vocational schools, firms needing skilled labour	Skills mismatch, limited modular blue training, low youth visibility	Black Sea Blue Skills Hub; internships; joint vocational modules; blue careers campaign	Universities, vocational schools, firms, chambers, İŞKUR
Goal III	1. Improve access to finance and promote sustainable investment	Development agencies, IPARD, Horizon, Interreg, private capital	Project preparation, co-financing, weak bankable feasibility	Blue Economy Project Preparation Desk; investment-readiness training; blended finance pipeline	DOKA, ministries, banks, IFIs, chambers, municipalities
Goal III	2. Promote maritime entrepreneurship and clusters	Existing producer organizations, exporters, SMEs, chambers and clusters	Weak cluster services, limited blue entrepreneurship, insufficient cross-sector networking	Eastern Black Sea Blue Cluster; blue start-up labs; matchmaking with investors and buyers	DOKA, chambers, exporters, SUYMERBİR, technoparks, ports

8.2 TR90 Blue Economy Project Pipeline - Draft Fiches

A project pipeline is a portfolio of structured project ideas that can be developed under different funding instruments. The following fiches are preliminary and should be validated with stakeholders. They were designed to reflect CMA priorities, the supplied Türkiye country report and the development needs of the Eastern Black Sea Region.

Each fiche includes a rationale, possible partners, target groups, activities, funding options and expected outputs. The projects can be implemented separately, but their impact would be greater if they are coordinated under a TR90 Blue Economy Working Group.

Table 11. Draft project fiches for TR90 blue economy pipeline

Project concept	Rationale	Core activities	Possible funding	Expected outputs / indicators
Eastern Black Sea Sustainable Aquaculture and Seafood Value Chain Cluster	The region has strong aquaculture growth but insufficient high value-added processing, cold-chain integration and joint market development.	Cluster governance; member needs analysis; certification and food-safety training; processing feasibility; export market mentoring; shared branding; R&D matchmaking.	Development agency support; IPARD; Ministry of Trade UR-GE; Horizon/Interreg for innovation elements.	Cluster established; 30+ firms reached; 10 feasibility or consultancy packages; export and certification action plans; at least 3 joint market activities.
TR90 Marine Litter and Clean Coast Action	Marine litter undermines tourism, fisheries and ecosystem health and is a core CMA priority.	Baseline assessment; beach and port litter monitoring; school and community campaigns; fisherman engagement; data dashboard; circular economy pilots.	Interreg NEXT BSB; municipal budgets; CSR; LIFE/IPA-related calls.	Monitoring protocol; 6 coastal municipalities engaged; annual litter report; awareness campaigns; reduction pilots in priority hotspots.
Green and Smart Port-City Pilot	Ports are strategic assets but need digitalization, green operations and stronger port-city integration.	Green-port baseline; emissions and waste review; digital workflow assessment; stakeholder workshop; investment concept for port reception, energy efficiency or digital systems.	Interreg; national transport programmes; IFI loans; private port investment; development agency feasibility support.	Green-port action plan; digitalization roadmap; feasibility for at least one investment; port-city coordination mechanism.
Black Sea Blue Tourism Route and Maritime Heritage Network	The Black Sea needs differentiated, high-value and sustainable tourism products beyond mass coastal tourism.	Route design; gastronomy and seafood branding; small cruise/yachting concept; maritime heritage inventory; SME training; digital promotion.	Development agency; Ministry of Culture and Tourism; Interreg; municipal budgets; private sponsorship.	At least 5 route nodes; tourism product manual; 50 SMEs trained; joint promotional content; pilot visitor packages.
Blue Skills and Careers Hub	Skills gaps are a cross-cutting constraint in aquaculture, ports, tourism, marine monitoring and project management.	Skills needs survey; modular curriculum; internships; training of trainers; blue careers events; digital learning materials.	Erasmus+; Interreg; national vocational funds; İŞKUR; development agency technical assistance.	Skills hub operational; 6 modules; 150 trainees; 30 internships; annual blue careers event.
Black Sea Blue Data and Investment Dashboard	Stakeholders need shared, practical information on sectors, projects, funding, indicators and contacts.	Data model; institutional data agreements; dashboard design; funding calendar; project pipeline tracker; CMA indicator reporting.	Interreg; development agency; technical assistance; university contribution.	Online dashboard; 100+ stakeholders registered; quarterly funding updates; project pipeline database; CMA alignment reports.

Source: Author's proposed project pipeline for stakeholder validation.

8.3 Risk Management and Sustainability Plan

Blue economy projects face several risk categories: institutional, financial, technical, environmental, social and market risks. A CMA-aligned project should identify these risks at concept stage rather than after approval. Risk management is especially important in coastal and marine projects because they involve multiple permits, environmental conditions, public assets and private investment expectations.

Sustainability also requires an exit strategy. Training programmes should create institutions that continue after the project. Data platforms should have maintenance owners. Clusters should have member services and income models. Pilot technologies should have market pathways. Environmental campaigns should become local routines rather than one-off events.

Table 12. Main risks and mitigation measures

Risk	Potential effect	Mitigation measure	Owner
Weak institutional ownership	Platform becomes informal discussion without implementation	Formal terms of reference, rotating but accountable secretariat, annual work plan	Lead regional institution / CMA hub
Insufficient co-financing	Good project concepts cannot be submitted or implemented	Early finance screening, blended finance, municipal/private commitments	Project preparation desk
Data sharing reluctance	Dashboard and monitoring remain incomplete	Define data-sharing protocols, aggregate sensitive data, start with public indicators	Dashboard lead and data providers
Permit and spatial conflicts	Aquaculture, tourism or port investments delayed	Use MSP/ICZM consultations, early environmental screening, stakeholder mapping	Relevant ministries and municipalities
SME participation fatigue	Training and cluster activities have low attendance	Offer practical services: certification, buyers, market access, diagnostics, not only meetings	Cluster management
Environmental non-compliance	Projects lose legitimacy or funding eligibility	Integrate environmental indicators and safeguards from design stage	Project owners and regulators
Market volatility	Aquaculture or tourism investments face revenue uncertainty	Market diversification, value-added products, export readiness and risk analysis	Firms, chambers, exporters
Project ends without continuity	Outputs disappear after funding	Business model for cluster services, dashboard maintenance plan, institutional budget line	Lead institutions

Source: Author's risk assessment based on report findings.

8.4 Suggested Implementation Timetable

The timetable below assumes a three-year implementation horizon following approval of a Türkiye/TR90 blue economy action programme. It is indicative and should be adapted to the selected funding instrument. The sequencing principle is simple: first build governance and project-preparation capacity; then launch pilot actions; then scale, finance and internationalize the most successful pilots.

The timetable can also be used by a regional coordination platform to monitor whether activities are moving from discussion to implementation. Each activity should have a lead institution, a small technical team, a budget source and an agreed output.

Table 13. Indicative implementation timetable for a three-year blue economy action programme

Phase	Months	Key activities	Outputs
Phase 1: Governance and validation	0-6	Establish TR90 Blue Economy Working Group; validate this report; conduct stakeholder interviews; define priority project themes; map funding calls.	Validated report, stakeholder list, coordination terms of reference, first project pipeline.
Phase 2: Project preparation	6-12	Prepare concept notes; conduct feasibility pre-screening; identify partners; organize funding workshops; prepare applications for Interreg/Horizon/IPARD/national funds.	10+ concept notes, 3-5 funding applications, feasibility needs list, partner agreements.
Phase 3: Pilot implementation	12-24	Launch aquaculture cluster services; start marine litter monitoring; conduct green-port baseline; implement blue skills modules; prepare tourism route pilots.	Operational pilots, training outputs, monitoring data, cluster services, baseline reports.
Phase 4: Investment readiness	18-30	Prepare detailed feasibility studies; develop PPP or private investment packages; connect firms with finance; organize investor and buyer matchmaking.	Investment memoranda, feasibility studies, buyer meetings, investor pipeline.
Phase 5: Scaling and regional cooperation	24-36	Replicate successful pilots; submit projects to CMA platforms; organize Black Sea cooperation events; update dashboard and roadmap.	Scaled projects, CMA visibility, regional partnerships, updated action roadmap.

Source: Author's proposed sequencing for a CMA-aligned TR90 action programme.

8.5 Suggested Terms of Reference for a TR90 Blue Economy Working Group

A working group would provide the practical coordination mechanism that is currently missing between sectoral policy areas. It should not be a new heavy bureaucracy. Its function should be to connect existing mandates, validate project priorities, identify funding opportunities and ensure that blue economy activities are aligned with the Common Maritime Agenda. The group could be hosted by a regional development institution and operate through thematic sub-groups on aquaculture, ports and logistics, tourism, marine environment, skills and investment.

The working group should meet quarterly and maintain a simple project pipeline. Each meeting should review three items: progress on existing actions, new project and funding opportunities, and institutional bottlenecks requiring escalation. Outputs should include meeting notes, a shared stakeholder list, project fiches, data requests and a dashboard of indicators. This structure would make coordination continuous rather than event-based.

Recommended members include provincial public institutions, coastal municipalities, port authorities, producer organizations, chambers, exporters, universities, vocational schools, NGOs and private investors. Participation should be practical: members should bring project ideas, implementation capacity and data, rather than only general opinions. This will help transform the report into a living roadmap.

8.6 Draft Blue Economy Dashboard Fields

A dashboard would make the blue economy visible and measurable. Türkiye already has national statistical systems, port statistics, fisheries data, tourism data and regional development information; however, these data are not always presented together as a blue economy picture. A TR90 dashboard should combine a small number of indicators that can be updated regularly and used in board meetings, project monitoring and policy dialogue.

Suggested fields include coastal tourism arrivals and overnight stays, marina and cruise indicators, port cargo and passenger volumes, aquaculture production and exports, fishing fleet and landing data, seafood processing capacity, blue economy firms and employment, marine litter observations, water quality indicators, R&D projects, funding applications and training outputs. The dashboard should also include a project pipeline tab showing project idea, lead institution, partners, funding source, estimated budget and status.

The dashboard should be designed as a management tool rather than an academic database. It should use clear definitions, annual and quarterly updates where possible, and responsibility for each indicator. Over time, it can support impact evaluation, investment promotion, gap analysis and regional comparison across Black Sea partners.

8.7 Communication and Visibility Plan

Blue economy communication should connect technical policy with public understanding. In Türkiye and the Black Sea region, the concept can be made concrete through stories about clean coasts, sustainable seafood, modern ports, blue tourism, young people in blue careers and successful SMEs. Visibility is also important for the Common Maritime Agenda, because regional cooperation becomes stronger when local actors see practical examples.

The communication plan should have four layers. The first is institutional visibility through reports, policy briefs and stakeholder events. The second is business visibility through success stories, buyer meetings and cluster promotion. The third is public awareness through coastal clean-up campaigns, school activities, ocean literacy and local media. The fourth is international visibility through CMA events, Interreg platforms, Horizon Europe networking and Black Sea partner exchanges.

Messages should be evidence-based and simple. For example, sustainable aquaculture should be communicated as a value chain that includes clean production, traceability, processing, employment and exports. Green ports should be communicated as both environmental and competitiveness projects. Blue skills should be communicated as future jobs for young people in coastal regions.

8.8 Capacity Building Programmes

Capacity building should be modular and practical. A single generic training programme would not be sufficient because municipalities, firms, producer organizations, researchers and NGOs have different needs. A blue economy curriculum should therefore combine common modules with sector-specific clinics. The common modules should explain the CMA, sustainable blue economy principles, project preparation, funding sources, monitoring and stakeholder engagement.

Sector-specific modules should cover sustainable aquaculture and seafood value chains, green-port planning, coastal tourism product development, marine litter and pollution monitoring, maritime entrepreneurship, digital tools, certification, export readiness and investment feasibility. Each module should include case examples, templates, checklists and a small assignment that produces a concrete output, such as a project fiche, market action plan or data collection form.

Training should be linked to implementation. Participants should not only receive certificates; they should develop project concepts, identify partners and prepare funding applications. Universities and vocational schools can host technical modules, while chambers and development agencies can focus on business, export and project finance components.

8.9 Additional Project Ideas for Future Funding Calls

In addition to the main project fiches listed above, several smaller project ideas can be prepared quickly for future calls. These include a blue careers campaign for coastal youth, a sustainable seafood labelling pilot, a port waste reception and digital reporting improvement project, a coastal carrying-capacity study for tourism destinations, a marine litter citizen-science network and a Black Sea blue tourism storytelling platform.

Other potential ideas include training for seafood processors on certification and packaging, a shared cold-chain needs assessment, a feasibility study for value-added fish products, an offshore aquaculture logistics plan, a green procurement guide for coastal tourism enterprises, and a data-sharing protocol between universities and regional institutions. These ideas can be combined or separated depending on funding rules.

The project-development principle should be selectivity. Türkiye and TR90 have many possible blue economy topics, but limited coordination and preparation capacity. Therefore, the first funding cycle should prioritize projects that are feasible, visible, measurable and strongly aligned with the CMA. Successful pilots can then be expanded into larger investment or cross-border cooperation projects.

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