Advancing the Blue Economy: Global Developments, EU Strategies, Blue Finance, and Opportunities for Türkiye

Rasim YILMAZ¹

¹Prof.Dr., Tekirdağ Namık Kemal University, Faculty of Economics and Administrative Sciences rasimyilmaz@nku.edu.tr, ORCID: 0000-0002-1084-8705

Abstract: The Blue Economy has emerged as a strategic framework for promoting sustainable economic development in marine and coastal regions while preserving the ecological integrity of the world's oceans. As pressures on marine environments intensify due to overexploitation, pollution, climate change, and habitat degradation, the Blue Economy provides a pathway to balance economic growth with environmental protection and social well-being. This study examines the evolution of the Blue Economy concept, global and European Union approaches—particularly the EU Blue Growth Strategy and recent financing mechanisms such as blue bonds and sustainable ocean investment frameworks—and explores their implications for national policy and sectoral development. The paper places specific emphasis on Türkiye, a country with extensive coastlines and significant maritime potential across fisheries, aquaculture, tourism, maritime transport, shipbuilding, and emerging offshore renewable energy. While Türkiye holds considerable opportunities to expand its Blue Economy, challenges remain, including governance fragmentation, marine pollution, and regional ecological risks, especially in the Black Sea. Strengthening marine spatial planning, enhancing regulatory coordination, and mobilizing blue finance are identified as key priorities for advancing sustainable ocean-based growth. The study concludes that with comprehensive and integrated policy action, Türkiye is well-positioned to unlock long-term economic value while safeguarding marine ecosystems for future generations.

Key Words: Blue Economy; Sustainable Marine Development; Marine Spatial Planning; Blue Finance; Türkiye

1. INTRODUCTION

Oceans and seas cover about 72% of the Earth's surface and hold 97% of its total water. They sustain economies across the globe and host some of the planet's most diverse ecosystems. Coastal regions are home to nearly 40% of the world's population. Beyond serving as vital habitats for marine life, oceans and seas play a crucial role in supporting human well-being and driving economic prosperity worldwide (Narwal et al., 2024; PWC, 2024).

Throughout history, the sea has played a central role in the economic life of civilizations—serving as a vital source of food, a route for transportation, and a foundation for global trade. Today, ocean and sea resources continue to drive the world economy, providing essential opportunities in areas such as shipping, fisheries, energy production, mineral extraction, biotechnology, coastal habitation, tourism, and scientific research (Martínez-Vázquez et al., 2021). The oceans yield a wide range of valuable products, including agar, alginate, carrageenan, ecteinascidin, salinosporamide A, antifouling agents, luminase, ambergris, feed and fertilizers, and carotenoids. They also support offshore energy development, sustain the tourism and shipping industries (Narwal et al., 2024).

Oceans make life on Earth possible and sustain the livelihoods of billions of people worldwide. An estimated 3.1 billion people rely on the sea for about 20% of their animal protein through seafood,

while around 500 million people depend directly on ocean-related employment. The combined market value of coastal and marine resources, along with associated industries, is estimated at USD 3–5 trillion annually—representing nearly 5% of global GDP (Tirumala and Tiwari, 2022; Narwal et al., 2024).

Oceans also play a vital role in regulating the Earth's climate and maintaining environmental balance. They absorb nearly one-third of the carbon dioxide (CO_2) emitted by human activities and release over 90% of the excess heat generated by global warming, thereby helping to control global temperatures and stabilize the climate. As the planet's largest carbon sink—comparable in scale to terrestrial ecosystems—the ocean is essential for mitigating climate change. Furthermore, coastal ecosystems such as coral reefs and mangroves serve as natural barriers, protecting shorelines and communities from extreme weather events, including floods and storms (Narwal et al., 2024).

Once vast and largely untouched, the oceans are now attracting unprecedented attention from a growing range of industries and actors. Beyond traditional fishing and shipping, sectors such as energy, biotechnology, aquaculture, and deep-sea mining are rapidly expanding their presence, seeking to exploit marine resources. From enclosing mangrove forests for carbon markets to pursuing deep-sea oil, renewable energy, and new fishing grounds, the oceans are increasingly being

transformed into arenas of intense economic competition and commodification (Bennett et al., 2021).

The rapid and often unregulated expansion of economic activities in the oceans is placing immense pressure on already fragile marine ecosystems. Coastal regions face growing threats from pollution and habitat degradation, with nearly 80% of marine pollution originating from land-based sources such as plastics, sewage, pesticides, and industrial waste. These pollutants severely damage marine life, endanger human health, and undermine local and global economies (PWC, 2024).

Human activities—including overfishing, habitat destruction, and unsustainable coastal development—are accelerating the decline of ocean health. Rising sea temperatures, ocean acidification, coral bleaching, and the loss of biodiversity further exacerbate the crisis, leaving coastal communities increasingly vulnerable to storms and sea-level rise (Narwal et al., 2024).

At the same time, new industries such as seabed mining and marine energy production add additional stress to marine systems, often without a full understanding of their cumulative impacts. Climate change compounds these pressures, disrupting natural processes like thermohaline circulation and contributing to harmful algal blooms and the spread of invasive species (Tirumala and Tiwari, 2022).

Together, these interconnected challenges—pollution, overexploitation, and climate-related pressures—are eroding the oceans' capacity to serve as vital carbon sinks, diminishing biodiversity, and reducing their economic and ecological value. Unless addressed through sustainable and precautionary management, the deteriorating health of the oceans will jeopardize both environmental stability and the foundation of the global ocean's economy.

Currently, around 72,000 people in the EU are affected by coastal flooding each year, causing an estimated EUR 1.2 billion in annual economic damages—about one-sixth of the total EMFAF budget. However, without stronger coastal protection measures, the situation is expected to worsen significantly as global warming intensifies. By 2100, annual damages could rise to as much as EUR 1 trillion, with up to 3.9 million Europeans exposed to coastal flooding each year. These projections highlight the urgent need for enhanced mitigation and adaptation strategies to protect coastal communities and economies across the EU (European Commission, 2025).

2. BLUE ECONOMY

Given the immense economic value of the oceans and seas, preserving marine and coastal ecosystems is essential to sustain global economic activity. In this context, the concept of the Blue Economy has emerged as a comprehensive approach to sustainable development. It emphasizes the integration of ocean and coastal sustainability into national growth strategies, recognizing that long-term economic prosperity depends on protecting marine biodiversity and addressing the growing threats of pollution, habitat loss, and climate change (PWC, 2024).

Over the past decade, the concept of the Blue Economy has gained significant global attention as a strategy for protecting and sustainably utilizing the world's oceans and water resources (Lee et al., 2020). The idea was formally introduced during the United Nations Conference on Sustainable Development (Rio+20) in 2012, reflecting the growing recognition of the oceans' economic and ecological importance (Midlen, 2021).

Building on momentum that began with the 1992 Earth Summit and strengthened by the adoption of Sustainable Development Goal 14: Life Below Water in 2015, the Blue Economy has since evolved into a widely discussed framework (Narwal et al., 2024). The United Nations has designated the period 2021–2030 as the Decade of Ocean Science for Sustainable Development, aiming to unite global efforts to restore ocean health and promote the sustainable use of marine resources. This initiative seeks to reverse the ongoing decline of the world's oceans by fostering international collaboration, advancing scientific research, and bringing together diverse stakeholders under a shared framework for sustainable ocean management (Lee et al., 2020).

While definitions vary, the concept universally emphasizes the sustainable management of marine resources to balance economic environmental protection, and social well-being. While the United Nations defines the Blue Economy as an ocean-based economy that seeks to "improve human well-being and social equity while significantly reducing environmental risks and ecological scarcities", the World Bank describes it as "the sustainable use of ocean resources for economic growth, improved livelihoods, and jobs, while preserving the health of ocean ecosystems" (Lee et al., 2020).

The Blue Economy (BE) represents a holistic and sustainable approach to ocean-based economic development that seeks to balance prosperity with environmental stewardship. It promotes job

creation, inclusive growth, and innovation in marine-related sectors—such as fisheries, aquaculture, tourism, and renewable ocean energy—while ensuring the long-term health of marine and coastal ecosystems (PWC, 2024; Narwal et al., 2024).

The Blue Economy encompasses a broad range of interconnected sectors that harness the potential of oceans and seas while promoting sustainability and innovation. Key industries include fisheries and aquaculture, maritime transport, coastal and marine tourism, renewable ocean energy, and marine biotechnology, including ocean-based pharmaceuticals. These sectors play a vital role in driving economic growth, generating employment, and supporting technological advancement, all while emphasizing the sustainable use and preservation of marine ecosystems. As the Blue Economy continues to evolve, areas such as sustainable fisheries, aquaculture, marine biotechnology, and ocean energy are expected to expand further (PWC, 2024).

At its core, the Blue Economy aims to reconcile two often competing objectives: economic growth and environmental protection. It recognizes that ocean resources are finite and increasingly stressed by human activity, making sustainable management essential. The concept is built around three key aspirations: meeting the rising global demand for food, energy, and marine services; fostering economic and social development; and safeguarding ocean health and biodiversity (Stephenson and Hobday, 2024; Martínez-Vázquez et al., 2021; Tirumala and Tiwari, 2022).

The Blue Economy shares many conceptual foundations with the Green Economy, as both emphasize the use of market-based instruments to address environmental challenges while promoting sustainable growth. Just as the green growth paradigm seeks to decouple economic expansion from resource depletion and carbon emissions through technological innovation, the blue growth model aspires to achieve similar outcomes in the marine realm—stimulating prosperity while safeguarding ocean ecosystems (Ertör and Hadjimichael, 2020; Midlen, 2021).

Similar to the Green Economy, the Blue Economy embodies a fundamental tension between two competing narratives: the ocean as a source of wealth and opportunity to alleviate poverty and inequality, and the ocean as a fragile ecosystem under increasing threat from climate change, pollution, overfishing, and habitat destruction. Like green growth, blue growth carries the risk of reproducing existing inequalities if not managed

equitably. Ocean-based economic development, while potentially lucrative, can marginalize coastal communities, erode traditional livelihoods, and exacerbate social and environmental injustices (Bennett et al., 2022).

3. EUROPEAN UNION AND THE BLUE ECONOMY

In 2012, the European Union introduced its Blue Growth (BG) Strategy as a central framework for managing and promoting sustainable development across Europe's vast marine and maritime domains. The strategy aims to foster cooperation among diverse stakeholders while ensuring the long-term sustainability of the marine environment (Tirumala and Tiwari, 2022). The EU Blue Growth Strategy, detailed further in the 2017 report "Towards More Sustainable Growth and Jobs in the Blue Economy," identifies key priority areas for action, including blue energy, aquaculture, coastal and maritime tourism, marine biotechnology, and seabed mineral resources. It also emphasizes the importance of data analytics, maritime spatial planning, and surveillance to support informed decision-making and resource management (Tirumala and Tiwari, 2022).

The strategy categorizes the Blue Economy into five main sectors—biotechnology, renewable energy, coastal and maritime tourism, aquaculture, and mineral resources—while integrating traditional maritime activities such as fishing, transport, offshore oil and gas extraction, and shipbuilding and repair. Together, these interconnected sectors form the backbone of the EU's effort to achieve sustainable economic growth, job creation, and environmental protection within the marine domain (Martínez-Vázquez et al., 2021).

In 2025, the European Ocean Pact was introduced to provide a unified framework for all ocean-related policies. The Pact aims to strengthen Europe's competitiveness in the Blue Economy, enhance maritime security, restore ocean health, and improve the well-being of coastal communities by ensuring that economic development and environmental protection advance hand in hand. From fisheries to maritime transport and coastal tourism, a range of innovative approaches have been developed across the EU. These include sustainable marine fuels, autonomous maritime systems, wind-assisted technologies, floating photovoltaic and offshore wind solutions, as well as nature-based approaches such as seaweed farming for bioremediation, and the use of digital twin technologies to enhance planning and management. The adoption of such sustainable technologies and practices not only strengthens competitiveness but also enhances resilience to external shocks and the growing impacts of climate change (European Commission, 2025).

The EU's most recent Blue Economy Report identifies seven primary sectors that make up the Blue Economy: marine living resources, marine non-living resources, marine renewable energy, port activities, shipbuilding and repair, maritime transport, and coastal tourism. Each of these sectors is further divided into more specific subsectors, reflecting the diversity and complexity of economic activities linked to the oceans and seas. This classification provides a clear framework for analyzing the contribution of ocean-related industries to employment, innovation, and sustainable economic development across the EU (European Commission, 2025).

Marine Living Resources: Primary production, Processing of fish products, Distribution of fish products

Marine Non-living Resources: Oil and gas, Other minerals, Desalination

Marine Renewable Energy: Offshore wind energy

Port Activities: Cargo and warehousing, Port and water projects

Shipbuilding and Repair: Shipbuilding, Equipment and machinery

Maritime Transport: Passenger transport, Freight transport, Services for transport

Coastal Tourism: Accommodation, Transport, Other expenditure

The Blue Economy sectors aim to supply Europeans with healthy, sustainable food, clean and affordable marine-based energy, and vital maritime transport links that connect Europe with the rest of the world. These sectors also serve as hubs of blue innovation, driving the development of next-generation maritime technologies and industries.

4. BLUE FINANCE

Financing the ocean economy currently relies largely on official development assistance and grant-based funding. However, the availability of such funding is often limited by factors such as uncertain revenue prospects, investor perceptions, and regulatory or legal challenges, including unclear property rights and policy instability over the lifespan of projects. As a result, there is growing emphasis on mobilizing private adopting capital and innovative financial instruments to support sustainable

initiatives. In recent years, for example, oceanfocused bonds and other blue finance mechanisms have emerged as promising tools to expand funding while encouraging responsible and sustainable marine development (Tirumala and Tiwari, 2022).

In recent years, the issuance of sustainability-linked financial products, such as Sustainability-Linked Bonds (SLBs), has expanded rapidly. These instruments generally require that the funds raised be directed toward initiatives aligned with goals such as the United Nations Sustainable Development Goals (UN SDGs). Among these products, green bonds—whose proceeds are dedicated to environmentally or climate-related investments—have grown particularly quickly. Europe has led this growth, which has contributed to the creation of the EU Green Bond Standard. As a result, green bonds have attracted significant attention as an important tool for financing sustainable development (Rogge, 2025).

In many regions with extensive marine and coastal ecosystems the use of blue bonds is gaining traction. These bonds are specifically aligned with UN SDG 14 (Life Below Water), which focuses on the conservation and sustainable use of oceans, seas, and marine resources. The funds raised through blue bonds can be directed toward a wide range of activities, including coastal climate adaptation, marine ecosystem protection and restoration, sustainable fisheries and aquaculture, marine renewable energy, and improvements across the sustainable marine value chain.

As such, blue bonds are emerging as a key financial instrument for supporting sustainable ocean management and fostering environmentally responsible growth. Coastal countries are increasingly issuing blue bonds to advance their blue economy objectives and promote long-term sustainable development.

Blue finance refers to financial instruments, investments, and mechanisms that support sustainable economic activities connected to oceans, seas, and coastal areas. Its core objective is to ensure the conservation and responsible use of marine resources while enabling sustainable growth in marine-related industries. Blue finance can contribute to projects such as marine conservation and restoration, sustainable fisheries and aquaculture, offshore renewable energy, resilient coastal infrastructure, and reducing marine pollution (McBain et al., 2024; PWC, 2024).

Labeling and promoting investments as "blue finance" helps direct capital toward environmentally responsible ocean-based activities

by making these projects more visible to financial markets. This, in turn, can attract a wider range of investors and enable more favorable financing conditions. In addition to funding from international financial institutions, blue finance mechanisms include instruments such as blue bonds, blue carbon offsets, green-blue taxonomies, and other financial products designed to channel investment into the blue economy. These initiatives parallel the broader rise of green finance, reflecting a growing global commitment to sustainability, climate resilience, and the long-term health and productivity of marine ecosystems (McBain et al., 2024; PWC, 2024).

Public and policy interest in ocean conservation through blue bonds has increased significantly since the first sovereign blue bond was issued in 2018. To help reduce the overall debt burden of participating countries, blue bond issuance can be combined with debt-for-nature swaps—an innovative financing mechanism in which a portion of a country's debt is restructured or forgiven in exchange for commitments to protect and conserve the natural environment, specifically marine and coastal ecosystems in this context (McBain et al., 2024).

As interest in the Blue Economy and sustainable coastal development continues to grow, the need for clear guidance on financing responsible ocean activities has become increasingly important. In response, the Sustainable Blue Economy Finance Principles were introduced in 2018 as the world's first global framework for banks, insurers, investors, and public institutions to align financial decisions with SDG 14: Life Below Water. Developed by the European Commission, WWF, the World Resources Institute (WRI), and the European Investment Bank (EIB), these fourteen principles provide direction on ensuring environmental integrity, responsible resource use, transparency, and science-based investment practices (McBain et al., 2024; PWC, 2024).

These principles emphasize that all financial actors—whether public or private—have a role to play in building a sustainable ocean economy. They are complemented by additional frameworks such as the UN Global Compact Sustainable Ocean Principles, WWF's Sustainable Blue Economy Principles, and the Taskforce on Nature-related Financial Disclosures (TNFD), which collectively offer standards, accountability tools, reporting metrics, and certification guidance. Together, these initiatives help ensure that blue economy investments support ocean health while promoting long-term, inclusive economic growth (McBain et al., 2024; PWC, 2024).

BlueInvest, launched in 2019 as a key investment initiative of the European Commission, aims to accelerate innovation and unlock investment opportunities within the sustainable blue economy. By supporting early-stage and growing companies, BlueInvest helps bring forward solutions in areas such as sustainable aquaculture, marine renewable energy, biotechnology, and advanced desalination provides technologies. The initiative comprehensive support framework, including investment-readiness coaching, community and network building, investor matchmaking, specialized training, and access to market insights. To date, BlueInvest has awarded approximately EUR 43.8 million in grants, offered technical assistance to more than 70 companies, and facilitated blended finance instruments that help blue economy startups and scale-ups attract private investment and commercialize their innovations (PWC, 2024; European Commission, 2025).

5. BLUE ECONOMY AND TURKEY

Financing Türkiye, with its extensive coastlines along the Mediterranean, Aegean, Marmara, and Black Sea, holds substantial potential for advancing a sustainable Blue Economy. The country already demonstrates significant activity in marine-related sectors such as fisheries and aquaculture, coastal and maritime tourism, maritime transport, shipbuilding and repair, and increasingly marine renewable energy and biotechnology (PWC, 2024). Coastal tourism currently represents the largest share of Türkiye's Blue Economy, similar to patterns observed in the EU, with strong concentration in key regions such as istanbul, izmir, Muğla, and Antalya (Yavan and Kalelioğlu, 2022).

By harnessing its abundant marine resources, Türkiye can diversify and expand ocean-based economic activities while promoting responsible resource management, environmental protection, and long-term economic resilience (Karlı, 2024). However, this potential is challenged by overfishing, marine pollution (particularly in the Black Sea), fragmented governance structures, and limited cross-sectoral coordination (Seyhan et al., 2025).

The Black Sea region stands out as both a strategic opportunity and a high-risk ecosystem. While it supports activities such as small-scale fisheries, aquaculture (notably trout farming), maritime transport, and coastal tourism, it is also affected by over-exploitation, eutrophication, habitat degradation, marine litter, and climate change impacts. Nevertheless, emerging opportunities in offshore renewable energy (wind, wave, and floating solar), sustainable tourism, and multi-use offshore platforms could drive future growth—

provided that environmental sustainability and regional cooperation are prioritized (Seyhan et al., 2025).

Recent steps toward more integrated marine spatial planning (MSP) demonstrate growing institutional attention to sustainable ocean governance in Türkiye (Keskinkilic and Sevencan, 2025). Supported by regional initiatives such as the EU's EMODnet Black Sea Checkpoint, which identified key challenges in sustainable fisheries, offshore development, and climate adaptation, Türkiye is gradually strengthening the frameworks needed to expand its Blue Economy (Seyhan et al., 2025).

With enhanced governance, infrastructure investment, ecosystem restoration, and international cooperation, Türkiye is well-positioned to unlock greater value from its seas—creating new economic opportunities and jobs while safeguarding marine ecosystems for future generations.

6. CONCLUSION

The Blue Economy represents a strategic approach to harnessing the economic potential of oceans and seas while safeguarding marine ecosystems and ensuring social well-being. As global pressures on marine environments intensify due to climate change, pollution, and resource overexploitation, sustainability into integrating ocean-based economic activities has become both urgent and International essential. initiatives, policy frameworks. and innovative financing instruments—such as blue bonds and sustainabilitylinked investment standards—are increasingly guiding efforts to align ocean-related development with environmental protection.

The European Union has taken a leading role in advancing the Blue Economy through coordinated strategies, sector-specific priorities, and support mechanisms such as BlueInvest, which promote innovation and facilitate access to finance. These experiences offer valuable lessons for other maritime nations, including Türkiye.

Türkiye possesses significant Blue Economy potential due to its extensive coastlines and well-established maritime sectors such as fisheries, aquaculture, coastal tourism, shipbuilding, and maritime transport. Emerging opportunities in offshore renewable energy, marine biotechnology, and ecosystem restoration further strengthen this potential. However, realizing these opportunities requires addressing key challenges, including fragmented governance, marine pollution, overfishing, and limited cross-sectoral coordination.

Strengthening marine spatial planning, enhancing regulatory and institutional cooperation, expanding access to blue finance, and prioritizing ecosystem health will be critical steps. With a comprehensive and sustainable policy approach, Türkiye can generate long-term economic growth, improve coastal community resilience, and protect its marine ecosystems for future generations.

REFERENCES

- Bennett, N. J., Blythe, J., White, C. S., & Campero, C. (2021). Blue growth and blue justice: Ten risks and solutions for the ocean economy. Marine Policy, 125, 104387.
- Bennett, N. J., Villasante, S., Espinosa-Romero, M. J., Lopes, P. F., Selim, S. A., & Allison, E. H. (2022). Social sustainability and equity in the blue economy. One Earth, 5(9), 964-968.
- Ertör, I., & Hadjimichael, M. (2020). Blue degrowth and the politics of the sea: Rethinking the blue economy. Sustainability Science, 15(1), 1-10.
- European Commission (2025). The EU Blue Economy Report 2025. Publications Office of the European Union. Luxembourg.
- Karlı, A. (2024). Sustainable Blue Economy Policy in Turkey: Challenges and Opportunities. In: Abubakar, I.R., da Silva, I., Pretorius, R., Tarabieh, K. (eds) SDGs in Africa and the Middle East Region. Implementing the UN Sustainable Development Goals Regional Perspectives. Springer, Chambridge.
- Keskinkilic, B., & Sevencan, S. (2025). 1st academic study on Türkiye's Marine Spatial Planning published. https://www.aa.com.tr/en/turkiye/1st-academic-study-on-turkiye-s-marine-spatial-planning-published/3540035?utm_source=chatgpt.com
- Lee, K. H., Noh, J., & Khim, J. S. (2020). The Blue Economy and the United Nations' sustainable development goals: Challenges and opportunities. Environment international, 137, 105528.
- Martínez-Vázquez, R. M., Milán-García, J., & de Pablo Valenciano, J. (2021). Challenges of the Blue Economy: evidence and research trends. Environmental Sciences Europe, 33(1), 61.
- McBain, D., Reitmeier, L., & Kyriacou, G. (2024). What is blue finance? https://www.lse.ac.uk/granthaminstitute/explainers/what-is-blue-finance/
- Midlen, A. (2021). What is the Blue Economy? A spatialised governmentality perspective. Maritime Studies, 20(4), 423-448.
- Narwal, S., Kaur, M., Yadav, D. S., & Bast, F. (2024). Sustainable blue economy: Opportunities and challenges. Journal of Biosciences, 49(1), 18.
- PWC (2024). Sailing Towards Sustainability via Blue Economy: Unlocking Türkiye's Potential. https://www.pwc.com.tr/tr/Hizmetlerimiz/yonetim-danismanligi/kamu-dan%C4%B1%C5%9Fmanl%C4%B1k
 - hizmetleri/yay%C4%B1nlar/pdf/sailing-towardssustainability-via-blue-economy-2024-rev2.pdf
- Rogge, E. (2025). Blue bonds: Sustainable financing for the Blue Economy around the Indian Ocean. Jindal Global Law Review, 1-23.

- Seyhan, K., Dürrani, Ö., Papadaki, L., Akinsete, E., Atasaral, Ş., Özşeker, K., ... & Stanica, A. (2025). Bridging the gaps for a thriving Black Sea Blue Economy: insights from a multi-sectoral forum of Turkish stakeholders. Frontiers in Marine Science, 12, 1491983.
- Stephenson, R. L., & Hobday, A. J. (2024). Blueprint for blue economy implementation. Marine Policy, 163, 106129.
- Tirumala, R. D., & Tiwari, P. (2022). Innovative financing mechanism for blue economy projects. Marine Policy, 139, 104194.
- Yavan, N., & Kalelioğlu, M. R. (2022). The Blue Economy and its Geographies: The Case of Turkey. In Heidkamp, C.P., Morrissey, J.E., Duret, C.G. (eds) Blue Economy: People and Regions in Transitions (pp. 83-100). Routledge.