

World Bank, 2020.

1818 H Street NW, Washington DC 20433

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Cover image: Albes Fusha, 2019: Porto Palermo, Ionian coast, Albania.

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### **Glossary**

AFL Aquaculture and Fisheries Laboratory

AKPT National Territorial Planning Agency of Albania
ALL Albanian Lek/ Currency of Republic of Albania

ARKA Albanian Plastic Convertors Association

AUT Agricultural University of Tirana
AZA Allocated Zone for Aquaculture

Blue Economy

**BEDF** Blue Economy Development Framework

CCCFA Central Consultative Commission for Fisheries and Aquaculture

**CCSTER** Commission for Co-ordinating Scientific, Technological and Economic Research

CMA The Common Maritime Agenda

CO2 Carbon Dioxide

DCM Government Decision

**DGMARE** EC Directorate-General for Maritime Affairs and Fisheries

**EC** European Commission

€ Euro/the currency of 19 of the 27 member states of the European Union

EMFF European Maritime & Fisheries Fund EPR Extended Producer Responsibility

**ESPON** EU Program in support of policy development in territorial development and spatial planning

**EU** European Union

**EU MSFD** European Union's Marine Strategy Framework Directive

**EEZ** Exclusive Economic Zone

FAO Food and Agriculture Organization of the United Nations

**FMO** Fisheries and Aquaculture Research Fund Fisheries Management Organization

**GDP** Gross Domestic Product

General Fisheries Commission for the Mediterranean

**GoA** Government of Albania

ICZM Integrated Coastal Zone Management

IMP Integrated Management Plan

IMOC Inter-Institutional Maritime Operational Center

**INSTAT** Institute of Statistics

IPA Instrument for Pre-accession Assistance of EU

IPARD Instrument for pre-accession assistance for rural development of the EU

IUUF Illegal, unreported and unregulated fishing

JRC Joint Research Center

MSFD EU Marine Strategy Framework Directive

MOARD Ministry of Agriculture and Rural Development

MTE Ministry of Tourism and Environment

MPA Marine Protected Area
MSP Marine Spatial Planning
MSW Municipal Solid Waste

**OECD** The Organization for Economic Co-operation and Development

PA Protected Area

PPE Personal Protective Equipment

PO Producers Organization RC Recommended catch

SDGs Sustainable Development Goals
SIDS Small Island Developing States

SECO State Secretariat for Economic Affairs of Switzerland

SUP Single Use plastic
TAC Total Allowable Catch

**UNCED** United Nations Conference on Environment and Development

UNCLOS United Nations Convention on the Law of the Sea

UNESCO United Nations Educational, Scientific and Cultural Organization

**UNEP** United Nations Environment Program

**UNWTO** The World Tourism Organization (UNWTO)

USD United States DollarWBG World Bank Group

WHO World Health Organization

W2E Waste-to-energy

WTTC World Travel and Tourism Council

**WWF** World Wildlife Fund

#### **Foreword**

Over the last decades, the economy of Albania has undergone a major socio-economic transition. Coastal and marine resources, being valuable economic assets, have underpinned this process. The Blue Economy concept is being embraced by Albania as an avenue for preventing environmental degradation and ecological imbalances in the use of coastal and marine resources. Defined as a 'sustainable use of maritime resources for economic growth, improvement of livelihoods and jobs and marine ecosystem health", Blue Economy offers new and growing opportunities for Albania. These opportunities include a transition to sustainable fisheries and aquaculture, and tourism in cleaner beaches and coastal waters. There is an increasing awareness of the potential of the Blue Economy and the challenges it may face in Albania. These challenges, however, present an opportunity to steer positive change and accelerate necessary reforms. With this, blue investments, policy development and support for communities would become even more important.

As we look ahead, the effects of the COVID-19 crisis on the maritime sectors in Albania are yet to be fully assessed and are likely to remain an ongoing concern. In the pursuit of restoring its economy, Albania's commitment to environmental sustainability, that is intrinsically linked to socio-economic development, will inspire action. This vector will place Albania on a steady path towards a bluer, more resilient economy and will serve as a logical follow-up to the European Union's decision to open accession talks with the country.

The work on this publication took place between September 2019 and September 2020. It is a result of a dialogue between the Government of Albania and the World Bank. This publication attempts to take Albania's Blue Economy agenda one step further by answering three basic questions: What is the significance of Albania's blue assets and how have past unsustainable patterns affected them? What are the opportunities provided by the Blue Economy development alternatives? What policies and sector approaches should be pursued in a transition to Blue Economy? This publication tries to answer these questions within the specific context of the country.

We hope, these insights will help Albania become a regional leader in the Blue Economy development and inspire its neighbors to follow the suit. We believe that the analysis presented in this publication will stimulate investments in building resilience of marine ecosystem by re-emphasizing the crucial role of Albania's natural capital as a source of employment, income and sustainable growth.

**Maryam Salim** 

Country Manager for Albania
Europe and Central Asia Region

Mym Alim

Kseniya Lvovsky

Practice Manager
Environment, Natural Resources
and Blue Economy

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# Acknowledgements

The team would like to express their sincere gratitude to all government officials and private sector organizations in Albania for their insights and generous cooperation during the inception, preparation, and consultations of the report. The team would especially like to thank the Deputy Minister of Tourism and Environment Ornela Çuçi, the Deputy Minister of Agriculture and Rural Development Mr. Roland Kristo, and Ms. Florensa Haxhi, Unit Director, Department for Development and Good Governance of the Prime Minister's Office, the Government of Albania, for frequent interactions, advice and guidance.

This report was prepared by a World Bank team led by Berengere Prince, Stavros Papageorgiou and Drita Dade that included Adriana Damianova, Narin Panariti, Jo Sciortino, Cai Junning, Ana Gokutaj, Elona Qana and Linh Van Nguyen. Additional contributors are Stefan Pall Thorarinsson and Ögmundur Haukur Knútsson. The team benefitted from the insights of Raha Shahidsaless, Qing Wang, Silpa Kaza, Randall Brummett, Miguel Angel Jorge, Gayane Minasyan and Paola Agostini. Overall management support and guidance was provided by Kseniya Lvovsky and Maryam Salim. The team is grateful for strategic directions provided by Linda van Gelder, Country Director, Steven Schonberger, Regional Director for Sustainable Development and Karin Kemper, Global Director for Environment, Natural Resource and Blue Economy.

The team thanks Ekaterina Sleta and Conor Purcell for producing and editing of the report.

### **Executive Summary**

The Adriatic-Ionian coast is a vital part of Albania's national economy that contributes hugely to the country's economic growth and employment. The Government recognizes the importance of Albania's unique coastal and marine resources and seeks to develop an integrated and sustainable plan to grow their economic contribution and to harness the potential of the Blue Economy. The Blue economy is the sustainable use of maritime resources for economic growth, improved livelihoods and jobs, and maritime ecosystem health. While a relatively new concept in Albania, it has become a public policy goal, in part due to the anticipated negotiations around Albania's entry into the EU. The Government of Albania (GoA) has already undertaken an important step to prepare a national Blue Economy Program.

The objective of this study is to fill the knowledge gaps to help advance Albania's vision of the Blue Economy, in the context of the country's aim of joining the EU. The two most important sectors with this regard are fisheries and tourism. Both industries are well established and offer the highest potential return on investment when it comes to the Blue Economy and have socio-economic and cultural significance for the coastal communities. The study further extends to cover the challenges of marine plastic pollution and examine possible solutions. For the purpose of cross-sectoral planning and investment coordination, the Blue Economy Development Framework (BEDF) is introduced as a distinct theme. The analysis concludes with a menu of options to develop the marine based economic activities and ultimately accelerate the country's transition towards the Blue Economy. The study reflects Albania's specific circumstances and the opportunities arising from integrated economic development of maritime sectors, including branding a 'Blue Albania' vision that could serve as a blueprint for future innovations in these sectors. Policy and decision makers from multiple institutions representing the GoA, as well as development partners and organizations such as the European Commission, have been consulted in the course of the study preparation.

The COVID-19 pandemic has exposed how profoundly both the overall economy and individual livelihoods are reliant on access to natural resources. The COVID-19 crisis posed significant challenges to both public and private sectors. It also offers an opportunity to shift from the "business as usual" approaches in the fisheries and tourism sectors in Albania towards smarter and more viable development avenues. While the GoA has taken action to fight the pandemic, this report highlights additional considerations that could be taken to strengthen the recovery effort. These measures focus on three areas: fisheries, 'blue tourism' and marine plastic pollution, and involve public institutions on national and local levels and private enterprise.

#### Policy and Institutions Underpinning Albania's Blue Economic Development

Albania has made impressive progress with promoting growth, jobs, investment and poverty reduction, but is yet to realize the full economic potential of its coastal and marine assets. A sizable body of policies and laws aligned with EU acquis could support Albania's aspirations for unlocking the blue growth opportunities. The Fisheries Strategy¹ highlights a series of priorities for every key aspect of the sector. The Law on Fisheries establishes institutional arrangements for sector governance. The term 'maritime economy' was first articulated in 'The Integrated Cross-Sectorial Plan for the Coastal Belt'² which highlighted the need for integration of maritime activities with the rest of the national economy.

Albania's General National Spatial Plan 2015–2030 singles out the coast as the most important zone of the national territory because of its position, natural values, biodiversity significance, and cultural and historical heritage. Albania's Tourism Development Strategy (2019–2023) acknowledges that for many years sun-sand-sea tourism has been the main product accounting for the largest share of tourism and needs to diversify

<sup>&</sup>lt;sup>1</sup> Adopted by the Council of Ministers' Decision No. 701 on October 12, 2016.

<sup>&</sup>lt;sup>2</sup> National Territorial Planning Agency and the Ministry of Urban Development 2016. Approved by the CoM Decision 881 14/12/2016.

product offerings and look for new opportunities to brand Albania's tourism. Albania has an established track record in implementing the Integrated Coastal Zone Management principles. and will benefit from improved governance and coordination among all institutions which plan and manage marine resources as well as a coordination of investments. Good progress has been made in improving protection policies for Marine Protected Areas (MPA). The country, which has been recently invited to negotiate its accession into the European Union (EU), is in the process of aligning its waste management policies with EU laws.

Albania has ratified several international agreements which provide a common policy platform relevant to the Blue Economy. The country has taken actions to create conditions for a safe, secure, and protected marine environment consistent with the best international standards of marine space governance and protection. In 2009, the GoA established an Inter-Institutional Maritime Operational Center [IMOC]) to respond to the recommendations of the International Maritime Organization in line with the provisions of UNCLOS.

There is an emerging opportunity to further the Blue Economy vision in a way that it is aligned with the spirit of Albania's national development goals<sup>3</sup>. Albania is yet to pass the EU Marine Strategy Framework Directive (MSFD) in national legislation. The MSFD (2008/56/EC) aims to effectively protect the marine environment. Its objective is to achieve good environmental status (GES) of the EU's marine waters by 2020 and to protect the resource base upon which marine-related economic and social activities depend. The MSFD provides the legal basis for application of an ecosystem-based approach to the management of human activities affecting the marine environment and ecological systems. It is possible to consider early policy harmonization with the MSFD keeping in mind Albania's candidacy status for EU membership.

The COVID19 pandemic calls for a strategic review of resource allocation in order to anticipate future trends and to prepare for a more resilient future. Compliance with regulatory norms and sanitary standards will become more important. The tourism industry may have to adapt to smaller groups rather than mass tourism. Industries relying on import may have had to diversify their supply chains and may have to continue to do so as a risk mitigation measure. The increase in electronic transactions that has resulted from the pandemic may be confirmed as a global trend after the crisis has passed. These changes should be part of any Blue Economy solutions focused on a post COVID-19 world.

#### Blue Economy Sectors, Challenges, and Emerging Priorities

Albania aspires to deliver EU-level living standards to its citizens. The Blue Economy can become a driver of this ambition. Well-established marine-based economic sectors such as fisheries and tourism can help Albania achieve its national development goals. Reforming fisheries and aquaculture management, promoting unique tourism products, and reducing marine litter all offer good starting points for defining the priority actions. When faced with resource allocation decisions the Government should prioritize sector development investments based on a Blue economy ecosystem approach, taking account of the knowledge and uncertainties and considering multiple uses that are mutually supportive and can increase resource productivity. Priorities in coastal and nautical tourism and fisheries and aquaculture could be designed in such a way to meet ecologically and operationally meaningful objectives, and address societal needs, without jeopardizing the options for future generations to benefit from the full range of coastal and marine goods and services.

#### (i) Fisheries, aquaculture and seafood

Fish and seafood industry is a relatively small part of the national economy with important growing potential. The fisheries and aquaculture industries provide full-time employment for 4,215 people. The overall economic contribution of fish and seafood is more than double the value of its primary production. According to the study's conservative estimates, its overall contribution was US\$111 million in 2017 representing 0.9 percent

<sup>&</sup>lt;sup>3</sup> National Strategy for Development and Integration 2015–2020.

of Albania's GDP. The contribution is projected to grow by more than 40% by 2030 reaching US\$158 million. This estimate includes only part of the economy-wide contribution, as is based on an incomplete group of commodities (shrimps/prawns, anchovies, cephalopods, seabass/seabream, trout, and mussels<sup>4</sup>. The contribution of fish and seafood to Albania's total commodity trade value has been increasing in absolute terms but remains stable as a share of total trade.

Average seafood consumption is expected to grow as standards of living and GDP per capita are projected to rise. Currently, the official average seafood consumption is 5.3 kg per capita, which is far lower than Albania's Mediterranean neighbors. However, real fish consumption is likely to be higher due to informal and unreported seafood sales. Driven by per capita income growth the fish food market growth potential is much greater in the domestic market (rising from US\$96 million to US\$158 million in 2030) than in the export market (rising from US\$61 million to US\$70 million in 2030).

Albania's impressive seafood export performance is a result of the country's dynamic fish processing and trading industry, which uses the country's competitive advantage. This includes proximity to EU markets, labor costs, commercial/cultural links to neighboring markets, access to imported raw materials. to overcome the constraint of inadequate fisheries resources. Its major fish and seafood export commodities include shrimps/prawns, anchovies, cephalopods, seabass/seabream, and rainbow trout. In 2018, its products accounted for 35% of Estonia's shrimps/prawns imports, 22% of Italy's anchovies imports, 21% of North Macedonia's trout imports, and 6.5% of Croatia's seabass/seabream imports.

Yet, the sector is not operating at its full potential due to the overexploitation of its fish stock and low productivity of its production asset. There is a general concern about weaknesses in the management of the fisheries sector. Albania – like most countries in the Mediterranean – lacks adequate resources to reverse negative stock trends and adopt more sustainable practices. Although the catch has stabilized over the past few years, according to FAO estimates, up to 80% of the fish stock within the EEZ of Albania is overexploited. The overall situation with the regional fisheries is complex and Albania is part of the puzzle, facing issues such as illegal, unreported and unregulated (IUU) fishing, fleet overcapacity, and stock overexploitation, which have not been adequately addressed. Strengthening the national capacity for enforcement, management and research, reducing the rate of illegal, unreported and unregulated fishing are the path to rebuild marine fish resources.

Current high rates of overfishing in the Mediterranean basin will affect the capacity of small pelagic species to cope with climate change impacts. Warming and the expected increase of oceanic water entering the Mediterranean will likely affect the migration and spawning behavior of large pelagic fish. Countries in the Mediterranean basin, including Albania, may need to develop climate adaptation strategies to new fisheries situations and better understanding of the natural and ecological mechanisms of climate change impacts (e.g. drivers of impact, mapping changes and ecosystems and populations indicators, vulnerability assessments).

Overexploited fishing stock puts pressure on the sector to find other ways of improving profitability and creating value. Innovation and research can bring better utilization of the catch and find new, more valuable uses for the product. Introducing a limitation on fishing days could result in the industry putting more emphasis on higher-value products, and extracting more value from byproducts that have, until now, been used for things such as fish meal. Albania is one of the few countries in the Mediterranean that lacks modern wholesale fish markets. To increase the marketing power of the small-scale sector produce, the Government may opt to establish electronic auction fishing markets. The government could also strengthen the role of Fish Marketing

<sup>4</sup> Not accounting for the economic value generated further downstream in the catering and food service industry.

Organizations (FMOs), so they can play more of a role in marketing their members' produce and help run the electronic auction fishing markets.

Looking into the future opportunities for growth, Albania is well positioned to pursue a 'blue' aquaculture development strategy, which has become increasingly popular worldwide. At the same time, it has a less competitive edge in capture fisheries since many countries harvest the same species in the Adriatic. Albania's proximity to European and Asian markets and the growing number of ethical consumers concerned about sustainability provide opportunities for promoting 'Eco', 'bio', or 'organic' labelling and expanding private sector's marketing schemes. These factors create a conducive socioeconomic environment for pursuing the Blue Economy strategy. Additionally, establishing a value-added capacity for fish processing could increase the employment opportunities in the sector and enhance the economic effect of business clusters. Therefore, public policies on aquaculture and fisheries development would have to adequately account for the contribution of the entire fish and seafood value chain that includes processing, marketing, and catering services. Building a national brand name for 'blue' aquaculture in Albania is also crucial for green aquaculture products produced in Albania to compete in foreign markets.

Pursuing the concept of marine clusters is promising. Marine clusters can facilitate an array of benefits based on horizontal and vertical links between and within sectors, businesses, technology, academia, and public bodies. There are interesting opportunities in recreational fishing and fishing tourism. A strategy to make recreational fishing a centerpiece of a larger effort to restructure the fishing business in a sustainable manner can be a powerful tool for both sustainable management of resources and for local economic development. If developed, these opportunities could yield more income than artisanal fisheries at present. To realize the opportunities which inland fishery and aquaculture represent, Albania will need research-backed management regimes. Albania could follow examples from developed countries to establish a Fisheries and Aquaculture Research Fund (FARF) which would promote innovation and address sector challenges.

The fisheries sector is subject to the indirect impacts of the COVID-19 pandemic, changing consumer demand and market access and causing logistical problems related to transportation and border restrictions. This could in turn affect fishers and their livelihoods as well as the food security and nutrition of the population that relies on fish produce. In some countries, inaccurate perceptions about food safety have resulted in price falls and economic losses. A full range of public measures could seek to protect job losses, support delivery of fish products from production to consumers and protect supply chains. Reduced demand from hotels and catering businesses could result in partial business closures and higher unemployment.

#### (ii) Coastal and Nautical Tourism

Albania's pristine nature and rich cultural traditions will continue to contribute enormously to the value of coastal and marine tourism. They present a distinct opportunity to brand the Albanian coast as an authentic, diverse, and clean destination. Currently, the coastal tourism industry in Albania depends largely on beach tourism. While beach tourism and other coastal activities have seen positive developments in recent years, areas such marine tourism, boating, yachting industry, diving, recreational fisheries and other watersports still have good potential to grow. In 2015, 1,177 small and large yachts visited Albanian coastal waters. In 2019, Saranda, one of the main destinations, recorded 1,650 boat visits.

One issue hampering the development of a nautical tourism industry in the short term is the lack of diversified offerings for sailors, yachters and other marine tourists. So, even if yachting and boating infrastructure is in place, without enough compelling itineraries and activities, the marine tourism sector will miss out on this type of visitor. While developing infrastructure is an issue for the short term, Albania also needs to grow through the improvement of marine-based tourism segments and linking those offerings to inland tourism. This would help generate demand so that before a growth ceiling is reached the infrastructure is ready to accommodate further growth.

Albania's current marine infrastructure has limited capacity and does not support the country's potential for nautical tourism. There are 354 berths in the country, not including day berths. This is only 0.5% of the total number of berths in the Adriatic Sea basin (76,467). It is estimated that there should be between 700 and 1,050 berths or at least a twofold increase from 350 to 700. If Albania is to follow the example of its neighbor Montenegro, the number of berths should expand by 1,000. These numbers are estimates since the available statistical data from the ports of Shengjin, Durres, Vlora, and Saranda is limited and doesn't support a full market analysis. A careful evaluation of development alternatives using Environmental Impacts Assessment and cost-benefit analysis of marina developments would reduce the risk of building overcapacity and strengthen the investment return potential of both public and private projects.

The yachting industry presents a unique economic opportunity for the country. Albania's coastline is positioned along well-travelled sailing routes and so it has the potential for a much larger nautical tourism market over and above the current two-day visits to a single port. To tap into the widespread economic benefits of nautical tourism, the overall objective should be to establish a one-week or a two-week 'Sailing in Albania' strategy in addition to the current 'Sailing to Albania' strategy, and eventually entice stopovers by larger boats. In addition to the revenue generated by direct servicing, nautical tourism would generate a large number of indirect benefits in terms of employment and income. In order to be successful in the nautical tourism market, there needs to be effective regulation and sophisticated ancillary services such as boat repair, transport connections and entertainment options. The development of a cluster of downstream services that support the sector in information and communication technology (ICT), training, and professional services would be a necessary enabler for competitiveness in this market. The Government should have two roles in the process of developing and administering the new infrastructure. It will need to identify the sites for potential marinas and/or other yachting infrastructure and facilitate their development. It will also need to regulate the activities generated by this development. The physical development and management of the marinas, seasonal moorings, pontoons, and repair facilities can be left to the private sector.

A unifying Blue Economy approach would ensure that nautical tourism both drives economic growth and ensures ecological and social sustainability. While nature and rich cultural traditions will continue to contribute enormously to the value of marine tourism there is a distinct opportunity to brand the Albanian coast as an authentic, diverse and clean destination that offers a variety of water-based tourism and recreational sector activities including fisheries tourism. The provision of yachting infrastructure is a challenge which needs addressing in both the short and long term to fulfil the government's objectives, which can best be addressed with the multiple Blue Economy opportunities in mind.

The impact of the current global pandemic on maritime transport and port connectivity in the Mediterranean region is still being evaluated<sup>5</sup>. While most ports are fully operational for cargo business, they have closed or restricted operations for passenger vessels, especially cruise ships. In many cases governments and port authorities have introduced safety regulations and restrictions related to the movement of ship's crews, truck drivers and others needing access to port facilities. The UN World Tourism Organization (UNWTO) warns that in 2020, international tourist arrivals could fall by between 60% and 80%. This puts 100-120 million jobs at risk and could lead to €805 billion to €1.06 trillion lost in exports<sup>6</sup>. Countries are looking for guidance on how to manage concerns over humanitarian, safety and employment issues related to the shipping community. Different countries have put in place a variety of safety procedures to reduce the risk of infection among crew members and shore-based workers. Developing "back to work plans" will need new COVID-19 government procedures, including safe return to work conditions (hygiene and social distancing measures), a move from paper-based to digital processes, and clear guidance on how port protocols will change in a post-pandemic world.

<sup>&</sup>lt;sup>5</sup> International Association of Ports and Harbors (IAPH) World Ports Sustainability Program.

<sup>&</sup>lt;sup>6</sup> UNWTO. 2020. World Tourism Barometer May 2020 – Special focus on the impact of COVID-19.

In the post recovery period Albania needs to support the private sector so it has knowledge of how to operate in a post-COVID-19 environment. This could include ensuring tourism establishments have access to plastic recycling facilities to comply with World Health Organization (WHO) sanitary and safety requirements. The government could also help tourism businesses identify new, diverse sources of income. Access to technologies that can facilitate both traditional and non-traditional market outreach would help the tourism industry in the short to medium term. Access to finance to prepare and respond to the needs of the post-COVID tourism market is also important.

#### (iii) Marine Pollution and Plastics

Environmental concerns are a key part of the country's Blue Tourism Strategy. Support is needed to ensure the tourism sector produces less plastic waste. Incentives can be introduced to ensure resources are used efficiently and public policy and private sector innovations reduce the current levels of plastic waste.

While Albania is not the biggest contributor to the plastic pollution problem in the Adriatic-Ionian basin, it is in the higher range of the total plastic leakage into the natural environment at 20 kg per person. A 2018 regional survey of marine litter (Vlachogianni et. al., 2018) where seven other countries participated: Albania, Bosnia and Herzegovina, Croatia, Greece, Italy, Montenegro, and Slovenia showed that litter from land-based activities (48.9 percent) was far more prevalent than litter from sea-based activities (7.8 percent). According to this survey, Albania was ranked second out of seven countries based on the cleanliness of the beaches (0.22 items per m²), after Bosnia and Herzegovina (0.17 items per m²). A separate assessment conducted in 2019 by the World Wildlife Fund based on the percentage of untreated plastic waste as a share of the total waste streams ranked Albania third among the Mediterranean countries that have mismanaged solid waste (73 percent of all waste mismanaged), preceded by Montenegro (95 percent), and Egypt (93 per cent).

Albania, like other Mediterranean countries, still lacks effective waste management systems in place, not just plastic management. Waste management services are not offered for slightly over 30% of the population of the country. Waste infrastructure is insufficient to cover the entire country. In addition to these gaps, there is no waste segregation at source, and implementation of extended producer responsibility or deposit refund schemes stipulated by law is delayed. The bulk of municipal solid waste, including plastic packaging/waste is disposed in the landfills or old dumpsites, and often fly tipped in river gorges or lakes.

Albania has a low recycling rate of plastic waste at nearly 5 percent of the total amount of generated waste (166,000kg in 2016). All of this points to the need for more effective marine litter management. With 60% of the Albanian population living in coastal areas, the effects of intensive construction, growing coastal tourism, and inadequate waste stream management could cause deterioration of the quality of the coastal and marine environment. As the Albanian coastal economy continues to grow, it's vital to find ways of reducing plastic pollution.

Marine litter could affect the performance of marine based sectors such as tourism, fisheries, and shipping and can cause a loss of valuable resources. A quick assessment based on extrapolation of data from existing studies (e.g. Vlachogianni, T., 2017) on the Mediterranean and using Organization for Economic Co-operation and Development and the World Bank Group methodologies shows that the estimated economic loss in Albania due to marine litter in 2017 could be €0.34 million to fisheries, €1.74 million to the fishing fleet, and in the range of €1.73 to €5.62 million for beach cleaning. Potential impacts of marine litter on coastal municipalities include loss of amenity value and direct economic costs from public health risks, reduced recreational opportunities, negative publicity and reputation, beach cleaning costs, waste collection, and disposal costs. There are also hidden costs related to litigation action and reduced revenue. Polluted beaches can discourage tourists which lead to a loss of revenues for local businesses. Marine plastic debris can restrict catch, and clog boat engines and fishing nets, leading to disruption of fishing operations. The public sector is

affected by the high cost and administrative burden associated with littering, including clean-ups, enforcement of prevention measures, and treatment costs.

Recently, Albania has adopted measures to address an increasing problem with Single Use Plastics (SUPs). The country's National Action Plan: 'Plastic Free Albania-the First European Plastic Free Country' 2019–2021), introduces a staged ban on lightweight plastic bags and on certain SUPs. The plan refers to the use of economic instruments and measures to discourage SUP use and to promote alternative products (e.g. biodegradable plastics from seaweed) that are more environment friendly. Albania currently does not have policy on microplastics. Plastic waste is more complex than a simple waste management issue and therefore it needs an integrated approach based on a 'value chain analysis' to address waste accumulation and reduce usage. The potential economic and social effects of the planned transition to a 'plastic-free' country need to be assessed, especially with regards to retailers who are part of the value chain of plastic waste. There are multiple untapped opportunities in the plastic supply chain which can reduce plastic waste streams and promote a circular economy.

The key actors in the plastics value chain in Albania include polymer producers/importers, plastic convertors, waste suppliers, waste management administration/companies, and plastic recyclers. More than 500 workers are engaged in the conversion of domestically recycled plastics, 1,500 workers are involved in the conversion of imported raw material, and about 500 workers are employed by other recycling companies. It is estimated that 12,000–16,000 individuals,<sup>7</sup> mainly from the Roma community, are informally involved in collecting and selling recyclable plastic waste from public containers and businesses. The contribution to the state budget of the plastic industry working with domestically recycled material was €2,927,900 (including social and health insurance, income tax, value added tax, profit tax, and dividend tax), that is 20 percent of the total contribution of the plastic industry to the state budget. Albanian recycling companies have invested about USD\$66 million in mechanical recycling.

Albania needs to develop effective and efficient instruments in order to use less, reuse more, and recycle the rest. This can be addressed in many ways: through market-based measures for changing consumer and manufacturers behaviors and the materials they use, and for making recycling more economically attractive. To make recycling economically attractive, the key is to focus on the whole value chain to enable high quality recycling and preserve the value of plastics upon recycling. Improving plastics recycling will require transformation across the entire value chain from raw materials production, product design, collection, end of life treatment, recycling, to secondary materials market. Some of the measures promoting circularity could include bringing landfilling and incineration costs in line with recycling costs; introducing product taxes and charges to discourage consumption of certain products; deposit-refund schemes; making producers responsible both financially and logistically for dealing with packaging waste; enforcing higher fees and fines for littering. All of these measures would help to discourage behaviors that result in plastic leakage into the environment.

Areas that can be further improved include stronger regulations such as the Law on 'marine environmental protection from pollution and damage'. <sup>8</sup> The Law has provisions for protecting the marine environment from pollution caused by human activities at sea and in coastal areas. Specifically, it aims to prevent activities that affect water quality, alter marine and coastal resources, and damage fauna and flora and human health. The institutional arrangements for adopting these measures are in place, although implementation outcomes vary and remain overall challenging. The key institutional and financing constraints include insufficient resources and a lack of human resource capacity, and effective financial planning. However, the law is not aligned with the EU Marine Strategy Directive and currently doesn't support the goal of achieving Good Environmental Status (GES) for Albania's marine waters. The law has no provisions for marine spatial planning (MSP)

<sup>&</sup>lt;sup>7</sup> Albanian Plastic Convertors Association (APKA).

<sup>&</sup>lt;sup>8</sup> RA Law no. 8905, dated 6.6.2002.

referred to in Directive 2014/89/EU, which is yet to be adopted in Albanian legislation. The Decree on 'the sanitary regulation on the bathing water management' (2010), has been included in the Bathing Water Directive, 2006/7/EC. At the national level, monitoring of bathing water quality is being implemented, however it is still at the initial stage when it comes to profiling bathing water, monitoring cyanobacterial risks, and ensuring public participation. Despite continuous progress in the improvement of bathing water quality, Albania still ranked second-to-last in bathing waters with excellent quality in Europe in 2019 according to the latest report of the European Environment Agency.

As Albania aspires to become a 'clean and green' destination, transitioning to a circular economy will unlock multiple benefits for both public and private sectors. Albania's biggest investment in waste management infrastructure is in the lower part of the waste hierarchy pyramid focusing on disposal facilities, such as landfills and incinerators. A circular economy has the potential to improve industry performance and reduce costs. Waste management costs could be optimized by investment in innovation and technology to reduce, replace, reuse, recycle, and re-manufacture. Albania should transition to policies with a stronger emphasis on the use of economic incentives for prevention as a first step, in order to be able to comply with its own 2035 targets. It should increase the coverage of waste management services from about 69% (2016) to 100% of the population and the recycling of plastic packaging to 22.5% by weight. Further efforts will be needed to close non-compliant landfills and dumpsites and increase the separate collection of different waste streams and reduce bio-waste.

While the removal of plastic litter is essential, the problem cannot be addressed without prevention of such pollution in the first place. Preventive measures need to engage producers of waste as part of the solution. The tourism sector, for instance, should be encouraged to produce less plastic waste and become part of the solution. Measures can involve regulations, and soft approaches to incentivize the private sector to produce less plastic waste. It is also important the government supports private sector innovation that adopts approaches and technology that reduces plastic waste. For example, special certificate programs can recognize tourism establishments that comply with certain requirements and standards, which are effective marketing tools. In some countries, firms that comply with certain 'green' standards get special benefits when they participate in trade fairs. Whatever the measures, including the private sector in these solutions is vital.

The deterioration of the marine environment remains of concern, as maritime traffic increases and the underlying causes of marine waste are not addressed. Reducing the impact of marine plastic pollution is not yet part of Albania's National Environmental Monitoring Program. To reach its goal of reducing marine pollution, Albania needs to understand the current scale of its plastic litter problem. This will allow it to determine targets to aim for and understand the best approaches to tackle the problem. The issues around plastic pollution are only going to worsen given increased human activity and development in the coastal areas. Putting in place clear policy measures to mitigate the economic, social, health, and environmental risks caused by plastic pollution will increase Albania's prospects of creating a successful marine-based tourism industry.

The impact of COVID-19 and the subsequent measures taken by governments worldwide raise some tough questions around plastic pollution. The pandemic has seen a dramatic rise in the use of SUPs, such as gloves, masks and other personal protective equipment. For example, single-use carrier bags might currently be a safer option than potentially virus-laden reusable bags that could contribute to the spread of coronavirus. However, hospital plastic waste from PPE contaminated with coronavirus is not recyclable and could cause an exponential increase in generation of plastic waste for incineration. Therefore, measures to collect and safely decontaminate used plastic equipment is a concern. Albania may need to undertake a targeted effort to develop medical and hazardous waste management practices, given that the volume of such waste will increase. Strengthening the medical and hazardous waste management policy framework should become a priority. Workers in the informal economy – specifically waste pickers – are particularly vulnerable to the

pandemic. Businesses must explicitly and thoughtfully build support for waste pickers into their COVID-19 responses, by supplying PPE, connecting them with food and community resources, and ensuring they have access to formal health care systems.

#### Priority Recommendations to Realize the Blue Economy Potential of Albania

Based on the analysis above, key recommendations for priority reforms and investments have been formulated to inform Alania's future plans. These recommendations are further detailed in the report.

#### (i) Blue Economy Development Framework

- Expand the knowledge base and reinforce cross-sectoral coordination on planning and monitoring of marine-based sectors -with Marine Spatial Planning.
- Improve the management of existing MPAs and extend marine areas under conservation.
- Foster investment opportunities in Blue Economy sectors with a Blue Economy Innovation Center including the private sector and with a Blue Economy Investment Plan.

#### (ii) Fisheries, aquaculture, and seafood

- Expand market share and develop a 'Blue Albania' brand to compete with neighboring countries.
- Unleash the growth potential of Albania's aquaculture -by stimulating innovation and investment in alignment with the European Green Deal.
- Address the ineffective management of fisheries and reform it in line with the priorities of the Fisheries Strategy and recommendations for the EU accession.
- Close the marine resource science gaps and increase the research and scientific support to the sector.
- Improve fishers' marketing power through stronger fishermen's organizations and an electronic auction platform.
- Take advantage of the local market in order to increase domestic fish consumption.

#### (iii) Blue tourism

- Address regulatory and enforcement aspects in a holistic manner and create an enabling framework for private sector investment.
- Foster the development of marine (or 'blue') clusters to boost Albania's nautical tourism.
- Tap into growth opportunities of the nautical sector by improving critical infrastructure and enablers for private sector participation.

#### (iv) Protection of marine environment from plastic pollution

- Close existing policy and regulatory gaps related to marine plastic pollution.
- Strengthen implementation of integrated waste management systems to prevent plastic leakage.
- Lay the foundations for the transition to a circular economy to prevent plastic pollution.

Advancing the Blue Economy will require investment in infrastructure, conservation, research and development, and institutional and human capacity, as well as information sharing and knowledge building. There are various sources to finance Albania's investment needs in order to set the course towards the Blue Economy and address the pressure points discussed in this report. Due to the significance of the coastal economy, the Government may consider allocating a larger share of its budget to Blue Economy initiatives that aim to strengthen the marine-based sector performance and to ensure that Albania remains attractive as a 'clean and green' destination in the Mediterranean. Given the heightened risks of natural disasters and climate change, there might be a chance to reassess the opportunity cost of enhancing the resilience of the coastline. Developing a Blue Economy Program and action plan could potentially enable Albania to leverage

more financing for Blue Economy development. Capacity building for planning sectoral investments and for developing high-quality project proposals, backed by sound research, would create new opportunities to bridge the financing gaps for high-priority "blue" projects.



### Introduction

Albania is a unique place, blessed with pristine beaches, stunning scenery and a rich cultural heritage. The country's coast is a vital part of its national economy, with its coastal districts contributing 37% of its GDP in 2017 (AKPT 2016). The Government of Albania (GoA) aspires to develop an integrated and sustainable plan to grow the economic contribution of its coastal and marine resources. While the Blue Economy is a relatively new concept in Albania, it has become a public policy goal, in part due to the anticipated negotiations around Albania's entry into the EU. The Albanian government therefore fully recognizes the role it needs to play in harnessing the potential of the Blue Economy.

The objective of this report is to fill in the knowledge gaps and to focus on Albania's vision of a Blue Economy, in the context of the country's aim of joining the EU. The two most important sectors with regard to this are the fisheries and tourism. Both industries are well established and offer the highest potential return on investment when it comes to the Blue Economy.

This report focuses mainly on marine-based sectors, and the extent to which indirect upstream and downstream effects of these sectors can be identified and measured. The findings and recommendations in this report are based on the analysis of information mostly available from public resources and published materials. It also uses three papers on nautical tourism, fisheries and marine litter, which were prepared as contributions to the policy discussion on the Blue Economy. Nonetheless, there are certain limitations concerning the breadth and depth of the analysis, due to the use of secondary data. This includes technical information on specific investments and priorities that Albania could focus on to achieve its Blue Economy goals.<sup>9</sup>

The target audience of this report are policy and decision makers from multiple institutions representing the GoA, such as the Prime Minister's Office on Development and Governance, the Ministry of Finance and Economy, the Ministry of Tourism and Environment, and the Ministry of Agriculture and Fisheries as well as bilateral development partners and partners from the European Commission. Focused on Albania's specific circumstances, the report proposes a menu of options to develop the marine industries and ultimately accelerate the country's transition towards Blue Economy.

The COVID-19 pandemic has exposed how profoundly both the general economy and individual livelihoods are reliant on access to natural resources. While the GoA has reacted to the pandemic quickly, this report highlights additional measures that could be taken to strengthen the recovery effort. These measures focus on three areas: fisheries, 'blue tourism' and marine plastic pollution, and involve the public, private enterprises and municipalities.

The content of the report is organized into six chapters. Chapter 1 introduces and defines the Blue Economy and the holistic thinking that underpins it. Chapter 2 to Chapter 4 focus on the respective sectors of the Blue Economy and focuses on the policy issues that need to be tackled in order for Albania to realize its full potential. Chapter 2 covers the Blue Economy development framework, Chapter 3 fisheries, aquaculture and seafood, and Chapter 4 nautical tourism. Chapter 5 examines the link between the quality of the coastal and the marine environment in Albania, particularly with regard to marine plastic pollution. Finally, Chapter 6 focuses on the reforms needed for Albania to build a strong economic model that benefits from the sustainable use of the country's blue capital.

<sup>9</sup> Certain aspects related to the role of the private sector are based on the ongoing Country Private Sector Diagnostic (CPSD) undertaken by the World Bank and the International Finance Corporation (IFC). The CPSD will take a deeper dive into the potential of both blue tourism and inland tourism in Albania for growth and job creation.

# Chapter 1. What is Blue Economy?

Coastal assets are key engines of development. Yet, many countries around the world have seen massive coastal development which has negatively affected the quality of the local environment (both land and sea), impacted on the livelihoods of local communities and exacerbated the impact of climate change. Among the main problems that need effective solutions are:

- Inadequate enforcement of regulations is undermining sustainable fisheries and resulting in overexploitation of wild fish stocks and an unsustainable aquaculture industry.
- The effects of a growing marine and coastal tourism industry have resulted in a range of negative impacts such as increased greenhouse gas emissions, increased demand for water, rising amounts of untreated sewage and waste, the degradation and loss of coastal habitats, and a loss of biodiversity.
- Marine pollution from growing urbanization of coastal areas has increased the number of land and seabased pollution sources, including from shipping and from the exploitation of marine resources.
- Coastal areas are increasingly vulnerable to the impact of climate change, with communities less able to
  offset carbon emissions. The privatization of marine ecology has also resulted in long-term damage to
  habitats such as seagrass meadows and sea marshes.

These issues have increased awareness among the scientific community, politicians and the general public about the problems we face in trying to manage our marine environment. It has also led to a rethinking of how we should tackle the damage to these ecosystems and the subsequent effect on the livelihoods of those effected by unsustainable economic policies.

# Box 1: Definition of Blue Economy concept

"A sustainable ocean economy emerges when economic activity is in balance with the long-term capacity of ocean ecosystems to support this activity and remain resilient and healthy." Essentially, the Blue Economy concept is a lens by which to view and develop policy agendas that simultaneously enhance ocean health and economic growth, in a manner consistent with principles of social equity and inclusion."

Source: The Economist. Intelligence Unit. 2015.

The concept of a Blue Economy is based on an integrated, participatory approach, which includes the sustainable use and management of marine resources for society as a whole. The origin of the concept can be traced back to the UN's Agency 2030 guidelines and its Sustainable Development Goals (SDGs), which are focused on marine management.

The origin of the concept can be traced back to the UN's Agency 2030 guidelines and its Sustainable Development Goals (SDGs), which are focused on marine management.

The SDGs, recognizing that the fisheries industry can drive sustainable development, set several targets designed to meet a number of conservation and sustainability goals. For example, SDG 14<sup>10</sup> encourages the responsible use of ocean resources and includes specific targets that countries should collectively or individually pursue to protect and sustainably use ocean resources.

Many other SDGs are also relevant to the Blue Economy concept, depending on the country-specific context. The GoA has affirmed its full commitment to UN Agenda 2030, yet it needs to align sector-specific policies to meet SDG 14.

According to Albania's 2018 National Voluntary Review report, less than 25 percent of the policies are aligned to meet its national commitment.

The Blue Economy concept places an emphasis on jobs and the increased economic opportunities that emerge once the marine space is managed sustainably. The central theme in the Blue Economy concept is interconnectivity. Concerned stakeholders, both public and private, should work with marine-based sectors.

<sup>&</sup>lt;sup>10</sup> SDG 14: "Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

This is reflected in the importance of the link between coastal communities and the marine industries. The Blue Economy is inherently related to Integrated Coastal Zone Management (ICZM), as well as ecosystem management, the fairness of social policy and ensuring all stakeholders are engaged with from the start.

#### Box 2: Goals for the Blue Economy

The World Bank has defined **seven** goals for the Blue Economy.

- Identify clear policies and objectives that combine consideration of economic, social, cultural, and environmental needs in the ocean area.
- 2. Provide better guidance and clarity to decision-makers and greater certainty to the private sector.
- 3. Understand how the marine environment is currently being used, the needs of different activities, how new technologies are emerging, and how the nature of activities is changing.
- Protect valuable ecosystem services and natural resources and better understand and manage the cumulative effects of different marine activities, both on the ecosystem and each other.
- Make more efficient use of available marine space, striking a considered balance between competing pressures, and consider how diverse activities can be better integrated in a shared space for mutual benefit.
- 6. Anticipate the predicted impacts of climate change on the marine environment and address how marine activities contribute to it and how they are likely to be affected.
- Ensure that the views of all those with an interest in the marine environment (including women) are considered in deciding how ocean resources are to be used.

Source: World Bank, 2018

The physical context of the marine environment dictates the realities of a sustainable marine economy. As well as established sectors such as marine transport, fisheries and tourism, there's a host of emerging industries that will play a role in the new marine economy. These include: offshore wind, tidal and wave energy; oil and gas exploration; offshore aquaculture and seabed mining, and marine biotechnology. All of these areas have their own opportunities and challenges and its vital that these diverse sectors coordinate with each other.

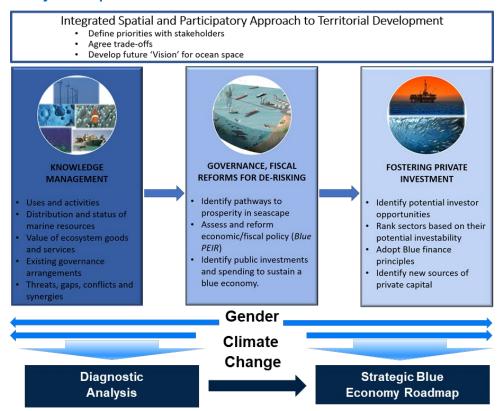
#### According to the World Bank,

"the Blue Economy concept seeks to promote economic growth, social inclusion, and the preservation or improvement of livelihoods while at the same time ensuring environmental sustainability of the oceans and coastal areas"

(World Bank and United Nations Department of Economic and Social Affairs 2017).

The Blue Economy Development Framework (BEDF) adopted by the World Bank promotes economic growth which is based on holistic consideration of the ocean economy and ecological systems. The entry point of the framework is the economic development attuned to the changes in the flow of blue natural capital as inputs to the economy over time and aiming to reduce outputs, such as pollution and marine litter, that undermine the quality of ocean's natural capital. The BEDF promotes a multisectoral, integrated, and participatory approach to coastal and marine development, at multiple levels. Central to the framework are (a) knowledge management; (b) governance, fiscal reforms, and public investments that help create an enabling environment for sustainable private sector growth (de-risking growth); and (c) fostering of private investment, all underpinned by a number of key cross-cutting considerations (Figure 1). These elements are complementary but could be undertaken independently or concurrently depending on each country's development stage and objective. The BEDF factors in environmental degradation and the impacts of climate change in the marine resource governance strategies.

Figure 1. Blue Economy Development Framework



Source: World Bank 2019.

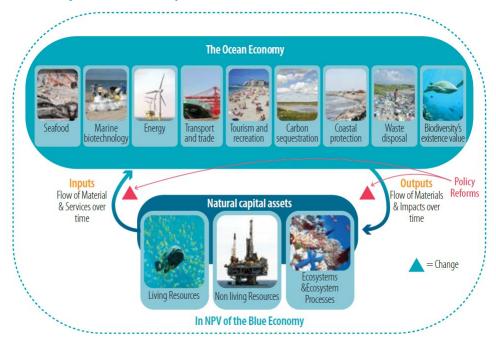
The Blue Economy aims to move the sustainable development agenda beyond a 'business as usual' mindset. To do that, it should apply core principles based around the commitment to decouple socioeconomic development from environmental degradation. This can be achieved by incorporating the real value of natural capital (ocean values and services) into all aspects of sea-based economic activity.

The Blue Economy could potentially drive transformative change by addressing the issue of the underestimated value of natural capital. Many goods and services provided by the marine ecosystem (not supplied by private firms through markets) contribute significantly to the economy. Economic benefits derived from carbon sequestration, coastal protection, waste prevention, and biodiversity conservation are often neglected by economic policies and investment decisions, which tend to rely solely on goods and services with market prices. The traditional method of using GDP to measure outputs in the ocean economy does not account for changes to natural stocks and future benefit streams that they provide (World Bank 2017). Conversely, economic valuation methods that measure the value of 'blue assets' overcome this limitation by measuring the contributions of nonmarket goods and services, provided by the natural systems (Figure 2).

<sup>11</sup> Nonfinancial nonproducing assets comprise natural capital. It is the extension of the economic notion of (produced) capital to the natural environment, that is, the 'stock' of natural (eco-)systems that yields a flow of valuable (ecosystem) goods or services into the future.

Within a wider economics context in the absence of market prices, businesses, governments, and individuals have a tendency to overuse and undersupply environmental public goods, for example, air quality may be poor if people do not pay when they pollute it, or outdoor recreation may be undersupplied because it is difficult for landowners to earn a return from its provision. Sometimes even those goods that are provided by publicly regulated private firms may face prices that only poorly reflect the full value of the goods concerned. For example, the regulated price of water supply and treatment services may be only weakly related to the value of those services. Valuation methods may be needed to provide information to allow policy makers to make decisions or regulate prices in situations such as this.

Figure 2. The Blue Economy and natural capital



Source: Patil PG. et al. World Bank 2016

Ensuring that natural capital is valued by the market is central to the Blue Economy concept. This ecosystem approach ensures a greater understanding of the importance of the marine ecosystem, protects the environment, and promotes market-based instruments such as taxes, fees and subsidies that help do this. These could complement public policies and regulations, help improve marine resource governance, and enhance the effectiveness of public investments in the marine space. Natural capital valuation can also inform policy decisions toward sustainable growth of marine-based industries by considering all costs and benefits, both internal and external.

The Blue Economy creates economic opportunities by changing the development paradigm. In the face of increasing competition for valuable coastal and marine resources, the Blue Economy aims to overcome the challenge of thinking of this environment as having no inherent market value, or simply as a low-cost storage space. This means (a) moving away from current economic planning trends that harm the quality of coastal and marine resources and livelihoods, (b) investing in the human capital required to harness employment and development benefits, (c) investing in innovative Blue Economy sectors, and (d) valuing our marine resources in a centralized, efficient manner.

The Blue Economy promotes sustainable business models which are adapted to a variety of coastal and marine resources. Instead of focusing on the idea of 'doing no harm,' the Blue Economy promotes a shift towards a business mindset, albeit one that brings positive long-term effects to the natural environment, and the livelihoods of those who live in these areas. To ensure such a shift can take place, multiple issues need attention, from marine pollution and land development pressures to the depreciation of ecosystem services. This requires capacity, resources and enforcement as well as development planning and investment coordination.

In addition to the preexisting challenges such as increasing levels of plastic and marine pollution and growing pressure on natural resources, policy makers have to address the repercussions of the COVID-19 pandemic. The government needs to support speedy recovery through sustainable alternatives for Blue Economy sectors. In order to develop a Blue Economy vision, it is essential to take a holistic view and fully understand the drivers of and potential solutions to all these problems.

The Blue Economy sectors that depend on the marine environment have been heavily affected by the COVID-19 pandemic. Areas such as tourism, maritime transport, fisheries, and seafood production have been affected due to the disruption of supply-side capacity, restricted access, falling demand, and the increased number of sanitary and regulatory measures which have undermined the operations of these sectors. Some areas of the Blue Economy were closed down fully, while others have been operating at much lower capacity in order to supply only essential goods and services. Many coastal economies in the Mediterranean have been struggling, due to restriction on free movement of goods, services and people.

Yet, the pandemic's impact on the Blue Economy varies from country to country, depending on the level and duration of lockdown imposed by respective governments. The severity of the long-term impact of the pandemic on the Blue Economy is unknown and depends on the capacity of governments to manage the spread of the disease within the population, the strength of the respective health services, and on management of the economic recovery process.

Countries follow different pathways in order to realize their blue economic potential. These pathways depend on national and local priorities regarding established industries such as fisheries, tourism, and maritime transport and 'new emerging' activities such as offshore renewable energy, aquaculture, seabed extractive industries, and marine biotechnology and bioprospecting (World Bank 2016). For example, experience from the United States shows that the overall economic and population growth in coastal regions outpaces that of the national economy (NOEP 2016). More than 80% of US employment and GDP are generated in coastal states and 49% in the coastal districts (NOEP 2016). This indicates that under a 'business-as-usual' scenario, coastal resources will bear more of the pressure from economic expansion including the stress of climate change and sea-level rise – hence the motivation of countries to choose the benefits of the Blue Economy as a more sustainable development alternative.

The EU Blue Growth Strategy for Sustainable Development of Marine and Maritime Sectors estimates these sectors contribute US\$555 billion annually to the EU's economy as well as nearly 5.4 million jobs. The coastal and maritime tourism sector is identified as an area with the potential to foster a smart, sustainable, and inclusive path for Europe's future. It is estimated that more than 2.2 million people are employed in tourism – by far the biggest employer in the EU Blue Economy (accounting for 54% of jobs in the established Blue Economy sectors). The European Commission's Directorate-General for Maritime Affairs and Fisheries' (DG MARE) initiative used data reported by member states to measure the size of their Blue Economy. Mediterranean countries ranked far above the average with Albania's close neighbors among the leaders (Figure 3).



Figure 3. EU Mediterranean countries share of Blue Economy to GDP

Source: Eurostat (SBS), DCF, own calculations.

Ireland's Blue Economy has performed better than its general economy (SEMRU 2014). Specifically, from 2012 to 2014 its Blue Economy outperformed the national economy with growth rates of 8 percent, with employment numbers increasing from 17,425 to 18,480 full-time equivalents. Ireland's integrated management plan (IMP) 'Harnessing Our Ocean Wealth,' provided a momentum for growth in the marine area and stimulated government departments to work together more efficiently and effectively on a diverse set of issues related to the marine space. IMP targets include doubling the value of national ocean wealth to 2.4% of GDP by 2030 and increasing turnover from the ocean economy to more than US\$7 billion by 2020.

South Africa developed the 2050 Africa's Integrated Maritime Strategy, which provides a comprehensive plan that aims to "foster more wealth creation from Africa's oceans, seas and inland waterways by developing a thriving maritime economy and realizing the full potential of sea-based activities in an environmentally sustainable manner." South Africa's government operation Phakisa ('hurry up' in Sesotho)<sup>13</sup> presents development targets for the marine-based economy. Phakisa predicts that South Africa's ocean economy could potentially contribute up to US\$10 billion to its GDP by 2033 (compared to US\$3 billion in 2010) and create approximately 1 million jobs (compared to 316,000 in 2010). These targets are based on (a) skills and capacity building and (b) research, technology, and innovation that supports marine transport and manufacturing.

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https://www.environment.gov.za/projectsprogrammes/operationphakisa/oceanseconomy; https://www.environment.gov.za/sites/default/files/docs/publications/operationphakisa businessreportadvert.pdf.

<sup>&</sup>lt;sup>14</sup> South African rand (R) equals US\$0.060.

# Chapter 2. Albania's Road Towards the Blue Economy Development Framework

Albania's General National Spatial Plan 2015–2030 singles out the coast as the most important zone of the national territory because of its position, natural values, biodiversity significance, and cultural and historical heritage. The coast supports unique ecosystems and provides vital resources and connectivity routes for the country. The Albanian coast is 450 km long and is known for many important ecosystems in the Mediterranean region like lagoons, wetlands, sandy dune, rover deltas and forests. The Albania coast starts in the North at Buna river mouth and ends in the South at Cape Stillo. The lakes and rivers are also important for the biodiversity and landscape values. The western riviera stretches along the Adriatic coastline for about 200 km from North to South and is penetrated by the rivers of Shkumbin, Seman dhe Mat. There are many wetlands and sandy areas which form excellent beaches like in Shengjin, Velipoje, Durres, Karavasta, Godullat, Vain, Kenalle, Divjake, etc. While the Sothern coast in the Ionian Sea is covered by hilly capes, torrent rivers and wide stream deltas, the most important being Dukat, Kudhës and Borsh in the north and Bistrica, Kalasa and Pavllo int he south. Along the Ionian coast, there are four small islands, the largest being Sazani island.

Coastal lagoons are important part of coastal ecosystems and cover an area of 10,600 ha. Most large lagoons support commercial fishery. The lagoons and coastal wetlands are significant sites for nature-based tourism and shelter a wide range of aquatic life, fish, and wild birds. Both the wetlands and lagoons have experienced multiple environmental challenges including overfishing and pollution which need to be addressed to protect their potential for costal nature-based tourism as an alternative to sea-sun-sand tourism. Butrint and Karavasta Lagoons are significant Ramsar sites. The Otrano channel as 'the door' to the Adriatic Sea has a special place in the biogeographic map of the Mediterranean region as the only corridor for global migratory species of the Adriatic, including cetaceans and sea turtles.

Albania's exclusive economic zone (EEZ)<sup>17</sup> is small. Nonetheless, it fosters a variety of pelagic and demersal species of fish and crustaceans. Most fishing activity takes place on the continental shelf. Further out, the continental shelf drops off sharply to a depth of about 1,200 m. The pelagic fish and part of demersal fish stocks are shared with neighboring countries, particularly Italy in the west, Montenegro in the north, and Greece in the south. The dynamics of Mediterranean seawater that flows through the Straits of Otranto into the Adriatic Sea creates fertile fisheries grounds.

Nature already contributes in many ways to the value of the coastal tourism industry. Albania's undeveloped coastal areas feature untouched beaches and natural sites close to highly developed tourist areas (for example, Croatia, Montenegro, Italy, and Greece) offer opportunities for authentic and diverse visitor experiences. Currently, coastal tourism comprises mainly beach recreational tourism. Natural attractions and cultural heritage could well place Albania on the map of emerging destinations for maritime recreational boating (yachting, sailing, and cruising) and high-value tourism.

Albania's Tourism Development Strategy (2019–2023) acknowledges that for many years 'beach, sea, and sun' tourism has been the main form of tourism in the country. It also emphasizes the concerns related to the

<sup>&</sup>lt;sup>15</sup> Albania 2030. General National Spatial Plan 2015–2030. AKPT.

<sup>&</sup>lt;sup>16</sup> With the impact of COVID-19, tourism in smaller groups (usually possible with nature-based tourism) is likely to witness an increased demand compared to mass tourism offers.

OECD Glossary of Statistical Terms: The Exclusive Economic Zone (EEZ) comprises an area which extends either from the coast, or in federal systems from the seaward boundaries of the constituent states (3 to 12 nautical miles, in most cases) to 200 nautical miles (370 kilometers) off the coast. Within this area, nations claim and exercise sovereign rights and exclusive fishery management authority over all fish and all Continental Shelf fishery resources. (Review of Fisheries in OECD Countries: Glossary, February 1998).

seasonal character of Albania's tourism and the lack of infrastructure for yachting, sailing, cruising tourism. Nautical tourism presents a unique economic opportunity in terms of value added, which the national policies have to translate into action, along with the sustainability principles, <sup>18</sup> to address the risks from development pressure and rising vulnerability to environmental risks, climate change impacts, biodiversity losses, and quality of ecosystems. Failure to integrate sustainability principles can put at risk the coastal natural assets and the local economy in the medium and long run.

The value of marine ecosystem could open opportunities for expanding ecotourism through better planning. The Sazan-Karaburun Peninsula is the first marine protected area (MPA) in Albania. It was established in 2010 as a marine national park (International Union for Conservation of Nature [IUCN] category II), with a surface area of 12.570 ha. The MPA represents 2% of the territorial waters which places Albania below the EU average (10.8%) and below the Western Mediterranean Sea average (19.6%). The National Strategy and Action Plan on Biodiversity (NSAPB)<sup>20</sup> and the Strategic Plan on Marine and Coastal Protected Areas<sup>21</sup> identify other potential MPAs including Porto Palermo, the Vjosa river mouth to Sazan and Karaburun (the entire Vlora Bay), the area from the Cape of Rodon to Patoku Lagoon, and the Buna river mouth to Viluni Lagoon (RAC/SPA and IUCN 2014). MPAs, in addition to nature conservation benefits, can generate direct socioeconomic benefits through the ecosystem services for food provision, climate regulation, and storm protection.

The EU Maritime Spatial Planning (MSP) Directive<sup>22</sup> establishes a framework that aims to reduce conflicts between sectors and create synergies between different activities. It encourages investment by creating predictability, transparency, and clearer rules. It increases cross-border cooperation so energy grids, shipping lanes, pipelines, submarine cables can be developed. The MSP directive also aims to support coherent networks of protected areas and protect the environment, through early identification of negative impacts and opportunities for multiple uses of space. In the future, Albania could benefit from the recently launched EU Assistance Mechanism for MSP.

Albania has made best use of its economic policies promoting growth, job investment, and poverty reduction, but is yet to realize the full economic potential of its coastal and marine assets. There is an emerging opportunity for Albania to develop a Blue Economy vision in a way that it is aligned with its aspirations to become an EU member and with the spirit of its national development goals.<sup>23</sup> The term 'maritime economy' was first articulated in 'The Integrated Cross-Sectorial Plan for the Coastal Belt'<sup>24</sup> which highlighted the need for integration of maritime activities with the rest of the national economy. It also advocated for enhanced polices to protect coastal and marine ecosystems. Realizing these sustainable development opportunities requires good planning and coordinated investment. For Blue Economy principles to be factored into the country's economic development plans, Albania should also address the risks of ecosystem degradation and climate change and factor them in its marine spatial planning.

<sup>&</sup>lt;sup>18</sup> In 2005, the UN's World Tourism Organization (UNWTO) and UNEP published 'Making Tourism More Sustainable Report' identifying 12 principles for sustainable tourism.

<sup>19</sup> European Environment Agency, https://www.eea.europa.eu/themes/water/europes-seas-and-coasts/assessments/marine-protected-areas

<sup>&</sup>lt;sup>20</sup> Albania made significant progress in expanding its protected area network from 5.2 percent of the country's territory in 2005 to 16 percent of the territory in 2014 and in 2018 has surpassed the 18 percent of the territory (UNEP 2019).

<sup>21</sup> Shqipëria dhe zonat e mbrojtura detare: Vlerësimi i kuadrit ligjor dhe institucional për ruajtjen e biodiversitetit bregdetar dhe detar dhe krijimin e ZMD-ve. RAC/SPA and IUCN-Med. Ed. RAC/SPA - MedMPAnet Project, Tunis. 48pp

<sup>&</sup>lt;sup>22</sup> The Directive 2014/89/EU was approved by European Parliament and EU Council of July 23, 2014.

<sup>&</sup>lt;sup>23</sup> National Strategy for Development and Integration 2015–2020. The National Strategy for Development and Integration 2015–2020 was approved by the Government in May 2016.

<sup>&</sup>lt;sup>24</sup> National Territorial Planning Agency and the Ministry of Urban Development 2016. Approved by the CoM Decision 881 14/12/2016.

#### 2.1. Institutional and policy context of the Blue Economy in Albania

Since early 2020, the GoA has been developing a National Program for its Blue Economy that aims to transform the Albanian marine space and coastal regions into regional economic development engines. Two working groups have been set up by Prime Minister's Orders to analyze the current regulatory and incentive framework for nautical tourism and the Blue Economy. The working group on a Blue Economy Program is led by the Prime Minister's Office on Development and Governance, and its working on the development of an integrated marine sector program. The first draft of the Program has been prepared and will be discussed with subsector stakeholders and supporting partners. A new Law for the Activities of Maritime Tourism is also under preparation. There are other initiatives potentially contributing to the Blue Economy agenda mostly through donor-supported technical assistance projects.

Albania has already developed a sizable body of policies and legislation aligned with EU legislation. Albania's spatial planning is aligned with best international practices. More effort is needed in order to strengthen its implementation capacity and ensure it can shift to a multisectoral, holistic economic planning approach. This will help overcome remaining challenges such as the institutional fragmentation of responsibilities among the agencies operating in the coastal and marine space. These weaknesses could be addressed by a better coordination of sector policies that are based on sound scientific research. Consistency among the established and new marine-based sectors and development plans need to be a cornerstone of Albania's Blue Economy initiatives. Albania is one of the countries covered by the EU Strategy for the Adriatic and Ionian Region (EUSAIR). It is a macro-regional strategy adopted by the European Commission and endorsed by the European Council in 2014. The Strategy aims at creating synergies and fostering coordination among all territories in the Adriatic-Ionian Region.

Currently, national policies have provisions for meaningful public engagement in development decisions. Nonetheless, expanding public involvement across all sectors might bring sector practices closer to Blue Economy principles of inclusive and equitable treatment of all stakeholders and users of blue assets and wealth sharing generated by the marine space.

Albania has an established track record in implementing the ICZM principles. Albania's experience<sup>25</sup> gained under projects financed by development banks and bilateral donors will facilitate the plans to expand MSP – a planning instrument central to overcoming the sector-by-sector approach typical in tourism, fisheries, coastal infrastructure development and environmental protection.

MSP will facilitate coherent planning actions among the main bodies responsible for coordination, spatial plans, programming, budget resources, financing, and monitoring of coastal developments (fisheries, tourism, environmental protection, water, infrastructure, transport, and mining). MSP will also ensure the involvement of stakeholders across the entire institutional and public sector (ministries, health authorities, municipalities, and municipal utilities), as well as the population living in the coastal areas and the private sector and civil society. MSP and integrated coastal management are cooperative tools for analyzing and allocating the distribution of human activities in the coastal-marine areas. The positive impacts of using MSP are (a) lower coordination costs, (b) lower transaction costs, and (c) enhanced investment climate.

The Fisheries Strategy<sup>26</sup> highlights a series of priorities for every key aspect of the sector. Implementation has been slow mainly due to limited budgets and capacity to adopt the best management approaches. Within the framework of the General Fisheries Commission for the Mediterranean (GFCM), Albania, through the sectoral Ministry of Agriculture and Rural Development (MoARD), collaborated with its neighbors on actions to reduce

<sup>&</sup>lt;sup>25</sup> The General National Spatial Plan 2015–2030 sets the stage for corrective spatial planning policies based on ICZM principles and better management of biological resources and MPAs.

<sup>&</sup>lt;sup>26</sup> Adopted by the Council of Ministers' Decision No. 701 on October 12, 2016.

the pressure on fish resources in the Adriatic and Ionian Seas. At the national level, Albania is preparing a fisheries management plan for small pelagic fish with support from the EU Instrument for Pre-Accession Assistance (IPA).

The Law on Fisheries establishes institutional arrangements for sector governance. The law has provisions for a Central Consultative Commission for Fisheries and Aquaculture (CCCFA) at national level and for Fishery Management Organization (FMO) at local level. Inspections for enforcement of the Law on Fisheries and relevant regulatory provisions are undertaken by the Fishery Inspectorate. A precautionary approach applies in fishing in protected areas, specific estuarine areas and natural or artificial lagoons. This management decision covers about 1 percent of the territorial waters.

# Box 3: Albania's legal framework for waste management

The Law on Integrated Waste Management (2011), amended, sets the following provisions:

- Fly tipping or fly dumping or burial of all types of waste in public places is prohibited.
- Ban on dumping or burial of all types of waste in agricultural parcels, regardless planted or not, along drainage and irrigation canals as well as in any other place where land, plants, and animals could be damaged.
- Burning of all types of waste is prohibited.
- Uncontrolled abandonment, dumping, or disposal of waste is prohibited.
- Import of waste (both hazardous and nonhazardous) and the cross-border transit of hazardous waste in Albania are prohibited in all cases.
- Export of waste from Albania is allowed only with the authorization of the minister.

The law sets requirements on the reuse/recycling/recovery of used tires, with most of them being forbidden to be landfilled as a whole since January 2013, while those already treated since January 1, 2016.

As per the requirement of Directive 2008/98/EC, the law sets sanctions and penalties for contraventions of the provisions of the law. The level of penalties is in the range of ALL 300,000–2,000,000 (equivalent to €2,460–16,393). The lowest fine is for transgression of the provisions on the transfer of nonhazardous waste and the highest fine is related to transgression of the import, export, and transition of waste. The law promotes public-private partnership for waste management. Every three years, Ministry of Tourism and Environment should prepare a report on the implementation of this law.

Good progress has been made in improving its MPA protection policies. The Wetlands Strategy and Action Plan (2006) complements the legal framework for biodiversity conservation following the spirit and principles of three UN conventions - the Rio Conventions (Biodiversity, Climate Change, and Desertification). The Decision of the Council of Ministers No. 84, 27. 1. 2009, "On determining the criteria for establishment of a biodiversity inventory and monitoring network," provides the necessary elements for a functional biodiversity monitoring network. Under an agreement with the United Nations Educational, Scientific and Cultural Organization (UNESCO), Albania started the development of a pollution monitoring system in the coastal areas. The National Biodiversity Strategy and Action Plan proposes a network of 25 coastal and marine protected areas, with relevance for the development of ecotourism along the coast that could support certain Blue Economy elements within marine clusters.

Albania is aligning much of its waste management policies with the EU law as part of its goal to become an EU member<sup>27</sup>. Currently, Directive 2008/98/EC on Waste, amended, is partially (around 34%) accepted in Albanian legislation, and implementation is in its initial stage. This Decision of Council of Ministers on waste segregation at source (2014) provides further details on implementation and sets reporting requirements for the collected waste. Nonetheless, Albania lacks a coherent policy and implementation framework supported by comprehensive data on marine litter. December 31, 2018 was the deadline for enacting waste segregation at source for the four waste streams: plastic, paper, metal, and glass; December 31, 2020, is the deadline for local government units to achieve a minimum target of 50 percent for

<sup>&</sup>lt;sup>27</sup> In June 2006, the GoA signed a Strategic Accession Agreement with the EU, the first step in the EU accession process. It took three years to ratify by all member states and consequently came into force in April 2009 when the GoA submitted its formal application for EU membership.

preparation, reuse, and recycling of solid waste, including plastics, glass, paper, and metal. Current reporting requirements for collected waste streams to be aligned with the provisions of Regulation (EC) 2150/2002 on waste statistics, are yet to be implemented.

Albania has ratified several international agreements which provide a common policy platform relevant to the Blue Economy. For instance, the provisions of UNCLOS make the Adriatic Sea particularly suitable to meet the provisions in Part IX (Article 23) of UNCLOS on cooperation of coastal states in enclosed or semi-enclosed seas (Sersic 1993). Several other provisions further emphasize the necessity for cooperation on shared stocks, including for fisheries research and management (Mannini et al. 2003), such as the Code of Conduct for Responsible Fisheries (as formulated by Food and Agriculture Organization [FAO] in 1995) in coherence with UNCLOS and accounting for the Declaration of Cancun (1992), the Rio Declaration (1992), the provisions of the Agenda 21 of United Nations Conference on Environment and Development (UNCED), the 1992 FAO Technical Consultation on High Sea Fishing, the 1984 FAO World Conference on Fisheries Management and Development, and other relevant international fisheries instruments<sup>29</sup>.

# Box 4: Statutory foundation for marine and coastal protection

Selected list of laws and conventions

- The Barcelona Convention for the Protection of Mediterranean Sea against Pollution (ratified in 1990)
- The Ramsar Convention and ratified on March 29, 1996
- Six protocols to the Barcelona Convention ratified in 2001
- International Convention for the Prevention of Pollution from Ships (MARPOL73-78)
- Law for the Protection of the Marine Environment of the Republic of Albania from pollution and damage (2002)
- The Law on Environmental Impact Assessment in Albania (#10 440/07.07.2011)
- The Law on Ship and Port Security in Albania (2004)
- The Law on Environmental Protection in Albania (Nr. 10 431/09.06.2011)
- The Law on Protected Areas (8906 of 06.06.2002) amended by the Law 'On some supplements and changes in Law 8906 of 06.06.2002' (#9868/04.02.2008)

Albania has taken actions to create conditions for a safe. secure, and protected marine environment consistent with the best international standards of marine space governance and protection. In 2009, the GoA established an Inter-Institutional Maritime Operational Center [IMOC]) to respond to the recommendations of the International Maritime Organization in line with the provisions of UNCLOS.30 IMOC is set up to (a) ensure the surveillance of Albanian maritime space, including organization, planning, coordination, and direction of operations at sea, in compliance with national and international maritime legislation, and (b) guarantee the management and control of the Albanian maritime borders. safety at sea, and coordination of all government institutions with responsibilities and interests within the maritime space. The ministries involved in IMOC are the Ministries of the Interior, Defense, Finance and Economy, Tourism and Environment, Agriculture and Rural Development, Infrastructure and Energy, and Culture.

IMOC's role will be critical in ensuring Albania has effective and efficient security and surveillance arrangements and quality maritime regulatory regimes. These institutional arrangements are necessary to support economic growth, investment, and job creation. They are relevant in the Blue Economy context and compatible with Blue Economy principles for provision of maritime security as a precondition for sustained economic opportunities. IMOC could become a

Albania acceded to the 1982 UN Convention on the Law of the Sea (UNCLOS) in June 2003. It is also a party to the 1976 UNEP Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention). Albania is a party to a number of IMO instruments such as SOLAS, MARPOL, STCW Convention, Load Lines Convention, TONNAGE Convention 69, COLREG Convention 72, SAR Convention, FAL Convention 65, CLC Convention 69 and protocols, FUND Convention 71 and Protocols, Pal Convention 74 and Protocols, LLMC Convention 76 and Protocol, SUA Convention 74 and Protocol, OPRC Convention 90 and OPRC-HNS 2000, BUNKERS Convention 01, and BWM Convention (UNDP 2019).

<sup>&</sup>lt;sup>29</sup> FAO UN. 1998. Responsible Fish Utilization.

<sup>&</sup>lt;sup>30</sup> United Nations Convention on the Law of the Sea.

task force to drive Blue Economy policy actions that require a high degree of cross-sectoral consensus and integrated action for Albania's Blue Economy road map.

Albania has not yet passed the EU Marine Strategy Framework Directive (MSFD) in national legislation. The MSFD (2008/56/EC) aims to effectively protect the marine environment. Its objective is to achieve good environmental status (GES) of the EU's marine waters by 2020 and to protect the resource base upon which marine-related economic and social activities depend. The MSFD provides the legal basis for application of an ecosystem-based approach to the management of human activities affecting the marine environment and ecological systems, all with a view to ensuring that they are not irreversibly damaged by the cumulative effects of natural and anthropogenic pressures (Berg T. et al 2015). It is possible to consider early policy harmonization with the MSFD keeping in mind Albania's candidacy status for EU membership.

#### 2.2. Blue Economy sectors and emerging priorities

Albania's established marine-based economic sectors are shipping, fisheries, and tourism. These sectors are key contributors to Albania's socioeconomic development. Albania's coastal economy is centered around coastal cities,<sup>31</sup> of which Fier stands out with a 12.4% contribution to the national GDP, followed by Durres with 9.9% and Vlora with 5.9%<sup>32</sup>.

The current COVID-19 crisis will pose significant challenges to both public and private sectors. With falling commodity prices, rising unemployment and income uncertainties, attention is shifting to the Blue Economy and its potential to drive economic recovery.

The pandemic calls for a strategic review of resource allocation in order to anticipate future trends and to prepare for a more resilient future. Compliance with regulatory norms and sanitary standards will become more important. The tourism industry may have to adapt to smaller groups rather than mass tourism. Industries relying on import may have had to diversify their supply chains and may continue to do so as a risk mitigation measure. The increase in electronic transactions that has resulted from the pandemic may be confirmed as a global trend after the crisis has passed. These changes should be part of any Blue Economy solutions focused on a post COVID-19 world.

Reforming fisheries management, promoting unique tourism products, and reducing marine pollution all offer good starting points for Albania to achieve its national development goals. By 2020, the country aims to have achieved an annual increase of GDP per capita relative to the EU-27 average – around 35 percent of EU average. Although this target may seem challenging considering the current circumstances, the Blue Economy can become a driver of this ambition. The sectors discussed in the following sections have been identified as key drivers of Albania's Blue Economy path. While there are multiple other opportunities beyond these well-established sectors, the discussion here focuses on opportunities to develop sustainable fisheries, aquaculture and seafood, marine-and based tourism. It also focuses on ways to protect the marine environment from plastic pollution. All of these opportunities can help drive Albania's future economic growth.

<sup>&</sup>lt;sup>31</sup> The coastal belt includes several local government units—Shkoder, Lezhe, Durres, Kavaje, Rrogozhine, Divjake, Fier, Vlore, Himare, Sarande, and Konispol—which have significant economic potential. They cover 36.7 percent of the surface area of the country and 39.3 percent of the country population.) The Integrated Cross-Sectorial Plan for the Costal Belt 2015–2030).

<sup>32</sup> Albania INSTAT 2016.

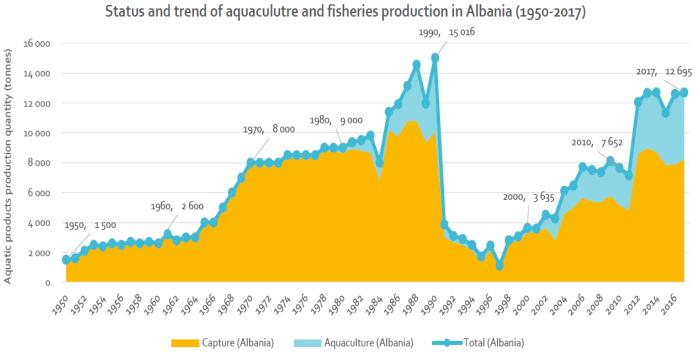
# Chapter 3. Fisheries, Aquaculture and Seafood

#### 3.1. Sector overview

Albania's coastal waters are known for the diversity of fish of high economic value. Among the fish species with the highest economic value are the small pelagic – anchovy and sardines – and large pelagic – tuna and bottom dwelling species, European hake, red mullet, striped mullet, sole, and cuttlefish. Shrimp is also found within Albania's EEZ. There is intensive cultivation of gilthead seabream and European seabass in Vlora and north and south of Saranda, as well as farming of Mediterranean mussels in the Butrint Lagoon.

While the fish and seafood industry is a relatively small part of the national economy, there are untapped opportunities for it to grow. The value of fish and seafood production in Albania in 2017 was US\$53 million, which included US\$29 million from marine fisheries production (55%), US\$20 million from aguaculture production (38%), and US\$3.6 million from inland fisheries production (7 percent). Total fishery production increased from 1,500 tons in 1950 to 15,016 tons in 1990, collapsed to 3,635 tons in 2000, then rebounded back to 12,483 tons in 2017 (Figure 4). Although the catch has stabilized over the last few years, the FAO estimates that up to 80% of the fish stock within the EEZ of Albania is overexploited.<sup>33</sup> There is also a small amount of recreational and sports fishing in the south.

Figure 4. Historical trend capture fisheries and aquaculture from 1950-2017



Source: FAO FISHSTAT 2019.34

Aquaculture production has been growing. In 2017, more than 4,000 tons of fish species were produced, mainly comprising of seabream and seabass from sea farming and carp and trout from freshwater farming.35

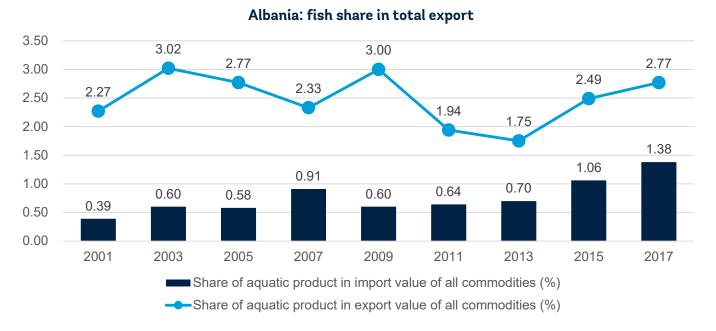
<sup>&</sup>lt;sup>33</sup> FAO. The State of Mediterranean and Black Sea Fisheries. FCM Rome, 101–113.

<sup>34</sup> FAO Global Fishery and Aquaculture Production Statistics v2019.1.0, published through FishStat (March 2019).

<sup>35</sup> FAO 2017.

The overall economic contribution of fish and seafood is more than double the value of its primary production. According to our conservative estimates,<sup>36</sup> its overall contribution was US\$111 million in 2017 which represents 0.9% of Albania's GDP. This estimate includes only part of the economy-wide contribution<sup>37</sup> and is based on an incomplete group of commodities (shrimps/prawns, anchovies, cephalopods, seabass/seabream, trout, and mussels). The usual estimate of the economic contribution of the sector tends to focus on the primary production of aquaculture and fisheries and rarely accounts for the contribution of the entire fish and seafood value chain which includes processing, marketing, and catering services. The contribution of fish and seafood to Albania's total commodity trade value has been increasing in absolute terms but remains stable as a share of total trade (Figure 5).

Figure 5. Contribution of fish and seafood to international commodity trade



Source: FAO statistics

The fisheries sector is comparatively small, but it is a significant source of jobs. Marine fisheries employ about 2,250 people<sup>38</sup>. In addition, 2,100 fishers are directly engaged in inland fisheries<sup>39</sup>. Accurate data on indirect employment of women is not available. Besides household or farm work women in fishermen households are mostly engaged in the ancillary services like fishing net repair and maintenance and inland aquaculture and fish processing. The fish processing industry employs majority women.

Average seafood consumption is low but domestic demand is expected to grow as standards of living rise due to EU accession and the projected increase in GDP per capita. Average seafood consumption is 5.3 kg per capita, which is far lower than its Mediterranean neighbors: 12.2 kg in Montenegro, 19.1 kg in Croatia, 20 kg in Greece, 25.9 kg in Italy, and 32.8 kg in Malta.<sup>40</sup> However, real fish consumption is likely higher due to informal and unreported seafood sales. It was not the objective of this study to assess fish consumption level, but the authors believe it is likely higher and consistent with a country under the influence of Mediterranean

<sup>&</sup>lt;sup>36</sup> Background Paper on the Fisheries and Seafood Sector.

<sup>&</sup>lt;sup>37</sup> Not accounting for the economic value generated further downstream in the catering and food service industry.

<sup>38</sup> Eurofish & INSTAT, Albania 2019.

<sup>&</sup>lt;sup>39</sup> Eurofish & INSTAT, Albania 2019.

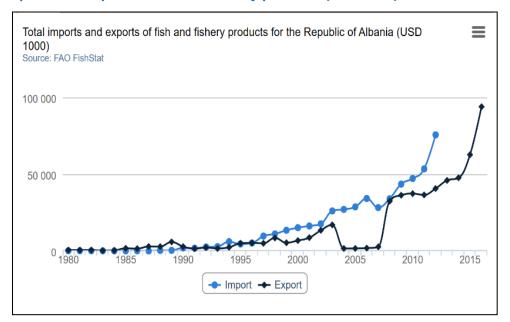
<sup>&</sup>lt;sup>40</sup> FAO 2020.

cuisine culture. According to our estimates,<sup>41</sup> the sector could grow from US\$111 million to US\$160 million in 2030 (Table 1). The market growth potential (driven both by population and income growth) is much greater in the domestic market (rising from US\$96 million to US\$158 million in 2030) than in the export market (rising from US\$61 million to US\$70 million in 2030).

Table 1. Estimation and projection of the economic value of fish and seafood in Albania

Economic value (USD 000)	Shrimps /prawns	Anchovies	Cephalopods	Seabass /seabream	Trout	Mussel	Sub-total of the six fish or seafood items	Others	Overall fish & seafood				
Baseline													
Total consumption	25 628	20 811	18 083	28 060	1 703	1 465	95 750						
+ Export	23 563	20 982	5 165	5 190	5 663	2	60 564						
- Import	23 627	16 284	7 929	2 790	48	66	50 744						
- non fish/seafood import contents				12 563	3 469		16 031						
Economic contribution	25 565	25 508	15 319	17 898	3 848	1 401	89 539	21 476	111 015				
Projection to 2030													
Total consumption	46 776	27 940	40 395	37 686	2 117	2 723	157 638						
+ Export	30 703	21 672	5 949	5 354	6 357	3	70 037						
- Import	37 213	19 331	15 806	3 747	60	123	76 279						
- non fish/seafood import contents				15 694	3 975		19 669						
Economic contribution	40 266	30 281	30 538	23 600	4 440	2 603	131 727	28 836	160 562				
Increase in economic contribution (2030 vs. baseline)	14 701	4 773	15 219	5 702	591	1 202	42 188	7 360	49 548				

Figure 6. Total imports and exports of fish and fishery products ('000 USD)



<sup>&</sup>lt;sup>41</sup> Background Paper on the Fisheries and Seafood Sector by Cai J.

# Box 5: Albania's export of capture fisheries at a glance - 2018

Capture fisheries items (shrimps/prawns, anchovies, and cephalopods) accounted for nearly 80 percent of Albania's fish/seafood export and nearly 60 percent of its fish and seafood production.

Albania was the fifth largest supplier exporting 2,015 tons (US\$23.373 million) anchovies' products in 2018.

Shrimps/prawns products were exported to eight EU countries: Sweden (62.71 percent of Albania's total shrimps/prawns export) and Estonia (26.7 percent) being the biggest markets. Shrimps/prawns products from Albania accounted for 35.33 percent of Estonia's total shrimps/prawns import. Albania's US\$2.276 million (280 tons) of shrimps/prawns' export to Italy accounted for less than 0.5 percent of the Italian market.

Italy is the major market for anchovies from Albania, accounting for 90 percent of the country's anchovies export value in 2018, followed by Spain (4.08 percent) and Japan (3.64 percent). Albania's anchovies export accounted for 22.59 percent of the Italian import market in 2018.

The Republic of Korea and Croatia were the other two anchovies' markets where Albania had a relatively large market share (7.03 percent and 6 percent, respectively). The price of Albania's anchovies export varied from US\$7.68 per kg in Austria to US\$37.14 per kg in the United States with the average world market price being US\$11.6 per kg.

Albania is among the few countries in the Mediterranean that lacks modern wholesale fish markets. Its catch is dominated by valuable demersal species which have been mainly exported (largely to EU countries) as fresh fish. To increase the marketing power of the small-scale sector produce, the Government may opt to establish electronic auction fishing markets. This would help combat the problems that face traditional floor markets, such as their dispersed locations near fishing grounds. Auction markets are regarded as an effective way for fishermen to get a fair price for their catch. The government could also strengthen the role of Fish Marketing Organizations (FMOs), so they can play more of a role in marketing their members' produce and help run the electronic auction fishing markets.

Albania has been active in the fish trade, facilitated by its proximity to the largest seafood markets in Europe. Its major fish and seafood export commodities include shrimps/prawns, anchovies, cephalopods, seabass/seabream, and rainbow trout. In 2018, its products accounted for 35% of Estonia's shrimps/prawns imports, 22% of Italy's anchovies imports, 21% of North Macedonia's trout imports, and 6.58% of Croatia's seabass/seabream imports. Albania's impressive seafood export performance is a result of the country's dynamic fish processing/trading industry, which uses the advantage country's competitive (low labor commercial/cultural links to neighboring markets and access to imported raw materials) to overcome the constraint of inadequate fisheries resources.

The fisheries and aquaculture industries provide full-time employment for 4,215 people<sup>43</sup> (Fisheries Sector Assessment Report, January 2015) with a significant number of women employed by the processing industry. Yet, there is no accurate data on the indirect employment of women other than that women are engaged in household or farm work and ancillary services such as fishing net repair and equipment maintenance. There is clearly potential for growth in the aquaculture sector.

Albania's fishing fleet represents 0.33 percent of the Mediterranean fishing fleet. Trawlers are the dominant part of the fleet and the small and large pelagic fisheries vessels are underdeveloped. According to the National Fleet Register data, there were 592 registered fishing vessels in 2015. 182 of these were trawl fishing vessels, 9 were pelagic purse seiners fishing vessels, were 375 small-scale fisheries, and 26 were combined small fishing vessels (both bottom trawl and pelagic fishing) (IPA 2016). Currently most of Albania's operating fishing fleet are based in four ports: Durres harbors 111 vessels, Vlora harbors 85, Shengjin harbors 50 and Saranda harbors 34. One of the factors that affects the economic performance of the industry is the cost of fuel which makes up 58–72% of costs for landed value trawlers, 49% for purse seiners, and 56% for small

<sup>&</sup>lt;sup>42</sup> AKPT Shqipëria 2030. 2018. Integrated, Competitive Destination, Ministry of Urban Development. Integrated Cross-sectorial Plan for the Coastal Belt p. 88.

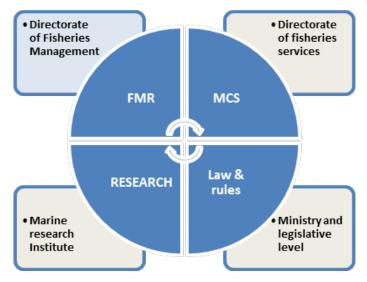
<sup>&</sup>lt;sup>43</sup> The sector provides approximately 4,000 jobs including 1,000 fishers, 300 fish farmers, and up to 3,000 (mainly women) fish-processers.

gillnetter vessels. Since 2015, the GoA has removed several taxes on fuel used by fishing vessels. The productivity of the fisheries sector can be further improved by modernizing and upgrading Albania's ageing fleet and facilities while retaining the incentives for fishermen to take responsibility of sustainable fisheries management.

#### 3.2. Challenges and opportunities

The fisheries sector In Albania is not operating at its full potential due to the overexploitation of fish stock and low productivity of its production assets<sup>44</sup>. Overexploited fishing stock puts pressure on the sector to find other ways of improving profitability and creating value. Innovation and research can bring better utilization of the catch and find new, more valuable uses for the product. Introducing a limitation on fishing days could result in the industry putting more emphasis on higher-value products, and extracting more value from byproducts that have, until now, been used for things like fish meal. An experience of Iceland demonstrates, for example, that government support for research and innovation in the form of grants can boost collaboration between the industry and research institutions and universities.

Figure 7: Fisheries sector management organizational structure



Climate change impacts on the Mediterranean Sea include increased surface warming, salinity anomalies and frequent heatwaves thus adding a new set of challenges to fisheries. Mediterranean Sea level has been increasing with rates of 2 to 10 mm/ year during the last decades. A decrease in pH (i.e., acidification) is considered likely given the high potential of large water masses to sequestrate anthropogenic CO<sub>2</sub> (FAO 2018). The potential effects on the aquatic resources include changes in abundance, survival, growth, fertility/reproduction, migration and phenology (Marbà et al., 2015). Small and medium pelagic fish which are among the main fisheries resources in the region are extremely sensitive to climate change

because of their dependence on surface hydroclimatic conditions (Tzanatos et al., 2014). To address the new challenge the sector needs coping adaptation strategies to new fisheries situations which may include changing consumer preferences, governance mechanisms, protection of vulnerable habitats and better understanding of natural and ecological mechanisms of the impact of climate change (FAO 2018).

There is scope for strengthening the management of the fisheries sector. Albania – like most countries in the Mediterranean – lacks adequate resources to reverse negative stock trends and adopt more sustainable practices. The overall situation with the regional fisheries is complex and Albania is part of a regional network, facing issues such as illegal, unreported and unregulated (IUU) fishing, fleet overcapacity, and stock overexploitation, which have not been adequately addressed.

Transparent and efficient administrative structures will generate more trust among fishermen and the general public. A functional reorganization in order to separate policy, management, and research (Figure 7) would be in line with the National Fisheries Strategy regarding the strengthening of its administration capacity.<sup>45</sup>

<sup>44</sup> http://www.fao.org/fishery/facp/ALB/en.

<sup>&</sup>lt;sup>45</sup> The EU IPA II defines institutional strengthening and implementing capacity of the fisheries administration is seen as first priority. Ref. IPA II 2014–2020.

Improved institutional capacity and organizational effectiveness is also key for the effective enforcement of fisheries regulations, which is limited due to a lack of resources. This is the reason why illegal fishing is widespread in some areas and that a significant share of small-scale vessels fish without license.

Albania has a less competitive edge in capture fisheries since many countries harvest the same species in the Adriatic. Marine fishery is limited and unlikely to yield much more than it does now. 46 Therefore, sustainable aquaculture development could be an appealing value proposition given Albania's proximity to European and Asian markets and the growing number of ethical consumers concerned about sustainability. Seafood consumers in the EU (Albania's major seafood exporting market) have relatively high willingness to pay for environmental and social amenities. 'Eco', 'bio', or 'organic' labelling has become increasingly popular in the public sector's development strategy and the private sector's marketing schemes.

A 'Blue Albania' approach is also compatible with the country's ongoing effort in addressing marine pollution and other environmental issues and the development of travel and tourism as one of the key sectors. These factors create a conducive socioeconomic environment for pursuing the Blue Economy strategy. Additionally, establishing a value-added capacity for fish processing could increase the employment opportunities in the sector and enhance the economic effect of business clusters. Therefore, public policies on aquaculture and fisheries development would have to adequately account for the contribution of the entire fish and seafood value chain that includes processing, marketing, and catering services.

Albania is well positioned to pursue a 'blue' aquaculture, something which has become increasingly popular worldwide. This will consist of adopting responsible farming practices and securing price premiums through certification and other marketing mechanisms in the private sector. The public sector could facilitate private sector investment through proper planning and governance, financial supports, and other mechanisms. In the planning of aquafarm siting, the Government may consider allocating a specific zone exclusive for 'blue' seabass/seabream farming and other aquaculture activities subject to higher environmental and farming standards (such as the use of aquafeed produced with sustainable ingredients, no antibiotics and a low stocking density). Building a national brand name for 'blue' aquaculture in Albania is also crucial for green aquaculture products produced in Albania to compete in foreign markets.

There are interesting opportunities in recreational fishing and fishing tourism. If developed, these opportunities could yield more income in than artisanal fisheries at present. Sports fishing, for example, is a huge global industry. Slovenia's 47 fisheries tourism is built around marble trout. In Iceland, sport fishing yields more than US\$90 million annually. 48

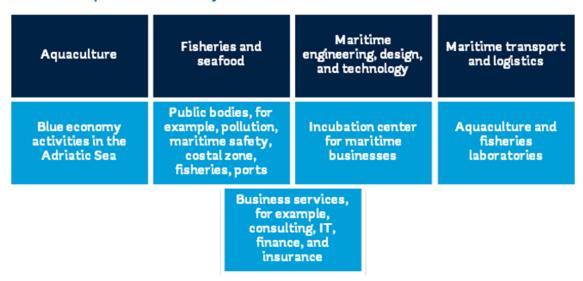
The concept of marine clusters is promising. Marine clusters can facilitate an array of industry benefits based on horizontal and vertical links between and within sectors, businesses, technology, academia, and public bodies. Clusters provide a platform for collaborative engagement between different levels of government, state-owned enterprises, and the maritime community to implement programs of common interest that support growth and improve the competitiveness of the maritime industry. Clusters in Iceland and the US serve more as an "incubator" housing small companies for cross-fertilization and cost-savings. The concept of maritime clusters has proven to be successful in a number of countries. For example, in Iceland, the Ocean Cluster in Reykjavik, the New England Ocean Cluster, in Seattle in the United States, in Portland Maine in the United States, and the Ethekwini Maritime Cluster in Durban in South Africa.

<sup>&</sup>lt;sup>46</sup> Estimated at 6,000 to 8,000 metric tons a year46 based on an interview with Dr. R. Kapitani.

<sup>47</sup> www.alpflyfishing.com and www.fishingbookers.com.

<sup>&</sup>lt;sup>48</sup> Economic Research Institute University of Iceland.

Figure 8: Cluster concept of Blue Economy Innovation Center



The cluster concept could be piloted through the establishment of a Blue Economy Innovation Center in Durres. The Center would be jointly owned with other entities such as the Agricultural University in Tirana and other private partners (Figure 8). The Center could operate as a company that rents out spaces to businesses, logistical companies, public bodies, and other organizations and promotes value chain integration. Fisheries clusters function based on an array of institutions for collaboration, functioning independently but often subsidized by the government. With the support from the public sector cluster organizations promote research and innovation partnerships, sector organizing bodies, and ecological certification initiatives.

Fisheries are a remarkably technical field. To realize the opportunities which inland fishery and aquaculture represent, they will need research-backed management regimes, based on sound scientific advice. Albania has untapped opportunities in aquaculture, both inland, in the marine environment, and in the recreational fishing tourism sector, all of which will not be realized without strong and able aquatic research and fish stock monitoring. Realizing the full potential of research and innovation will support healthy marine and inland water resources. While most research activities would be funded by the government, there are other activities that could be driven by the industry; public-private collaborations that address common challenges. Albania could follow examples from developed countries to establish a Fisheries and Aquaculture Research Fund (FARF) which would promote innovation and address sector challenges.

Compliance with government regulations in addressing coastal development has been a significant issue. Albania could develop, as part of the ICZM planning, zoning guidelines for its coastal areas to determine which areas could be suitable for fish farms, which areas should be left fallow, and what zones would be free for marine traffic or capture fishing. Fish farmers and producers have to operate in compliance with environmental and food safety standards and to meet risk management standards. A lack of compliance would undermine the whole industry's image and competitiveness. Environmental protection, resource management, and food safety regulations should address the industry's regulatory aspects.

The fisheries sector is also subject to the indirect impacts of the COVID-19 pandemic, changing consumer demand and market access and causing logistical problems related to lockdown, transportation, and border restrictions. This could in turn affect fishers and their livelihoods as well as food security and nutrition of the population that relies on fish produce. In some countries, wrong perceptions about food safety have resulted in price fall and economic loss. A full range of public measures could seek to protect job loss in the workforce, support for delivery of fish products from production to consumers and protect the supply chains. Reduced demand from hotels and catering businesses could result in partial business closures and higher

unemployment. Mitigation can be through credit and microfinance programs, home delivery arrangement, and redirection of production to long conservation processing (oil/salt prepared/preserved, canned, and frozen products could enhance the recovery of the sector). Concerns about unsafe conditions in the fisheries processing enterprises could be mitigated by adaptive working arrangements, strengthening of health insurance program for essential workers, stricter sanitary guidance and disinfection, and enforcement of personal protective equipment (PPE) use protocols. The OECD<sup>49</sup> further recommends that governments response to COVID19 do not undermine long-term Blue Economy strategies such as fishery recovery plans.

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<sup>&</sup>lt;sup>49</sup> OECD, 2020, Fisheries, Aquaculture and COVID-19: Issues and Policy Responses. TAD/FI(2020)2.

## Chapter 4. Coastal and Nautical Tourism

### 4.1. Overview

The Adriatic-Ionian coast is an area of national importance recognized for its tourism potential. Tourism is and will remain a key driver of Albania's national economy. According to the 2018 Economic Impact Report of the World Travel and Tourism Council<sup>50</sup> (WTTC), Albania's tourism sector recorded a direct contribution of US\$1.12 billion, accounting for about 8.5% of GDP. The economic contribution of the sector through indirect multiplier effects is estimated at US\$3.47 billion, which is 26.2% of the GDP (Ministry of Tourism and Environment 2019a). The WTTC forecasts that in 2028, the tourism industry in Albania will generate US\$2 billion.<sup>51</sup> Tourism will remain a key driver of economic growth and jobs in Albania. Within this context, the water-based tourism and recreation sector offers a genuine opportunity to foster economic development and job creation. Albania can offer competitive marine tourism destinations that are well distributed and environmentally friendly if the risks associated with the stresses of growth are properly addressed.

Albania's pristine nature and rich cultural traditions will continue to contribute enormously to the value of marine tourism. They present a distinct opportunity to brand the Albanian coast as an authentic, diverse, and clean destination. Albania is strategically located between highly developed marina locations such as Croatia, Montenegro, Italy, and Greece. According to the National Statistics Institute and the Ministry of Tourism and Environment, the most visited tourist sites in the country are the Butrint and Porto-Palermo castles (first and fifth, respectively, in the summer season). Albania also has many cultural attractions, numerous archaeological sites, and great cuisine. Most importantly, Albania has huge potential to develop its berthing capacity, offer lower prices, and increase its share in the regional market. Today Albania represents only 0.5% of the Adriatic's total berthing capacity, despite having similar nautical conditions to its neighbors.

The tourism industry in Albania depends largely on the sea. One of the policy goals of the Tourism Development Strategy (2019–2023) is the 'Development of a Seaside and Maritime Tourism Program and creation of new products' (Goal 3.1.). While beach tourism and other coastal activities have seen positive developments in recent years, areas such marine tourism still have potential to grow. The growth in the yachting industry in Europe, especially boat charter holidays, offers an opportunity to maximize Albania's central position in the Adriatic Sea. The provision of yachting infrastructure is a challenge which needs addressing in both the short and long term to fulfil the government's objectives in this sector.

Albania's tourism sector is aiming to connect the various separate areas of the coastal economy through economic clusters. The Tourism Development Strategy (2019–2023) aims to compete with its neighbors more developed tourist markets. The Blue Economy can support this by developing opportunities to address interlinked sectoral challenges and stimulate investments in infrastructure, cleaner beaches and coastal waters, and healthier marine ecosystems.

Environmental concerns are a key part of the country's Blue Tourism strategy given Albania's outstanding natural, biodiverse features. A unifying Blue Economy could ensure that nautical tourism both drives economic growth and ensures ecological and social sustainability. Supports are needed to ensure the tourism sector produces less plastic waste. Incentives can be introduced to ensure resources are used efficiently and public policy and private sector innovations reduce the current levels of plastic waste.

<sup>&</sup>lt;sup>50</sup> www.wttc.org/-/media/files/reports/economic-impact-research/countries-2018/albania2018.pdf.

<sup>&</sup>lt;sup>51</sup> €220.4 billion at exchange rate €1 = ALL 121.19.

One issue hampering the development of a nautical tourism industry in the short term is the fact the country doesn't have enough to offer sailors, yachters and other marine tourists. Thus, even if yachting and boating infrastructure is in place, without enough compelling itineraries and activities, the marine tourism sector will miss out on this type of visitor. While developing infrastructure is an issue for the short term, Albania also needs to grow through improvement of marine-based tourism segments and linking those offerings to inland tourism. This would help generate demand so that before a growth ceiling is reached the infrastructure is ready to accommodate further growth.

Albania needs to support the private sector with knowledge of how to operate in a post-COVID-19 environment. The UNWTO warns that in 2020, international tourist arrivals could fall by between 60% and 80%. This puts 100-120 million jobs at risk and could lead to €805 billion to €1.06 trillion lost in exports<sup>52</sup>. The government could help tourism businesses identify new, diverse sources of income. Access to technologies that can facilitate both traditional and non-traditional market outreach would help the tourism industry in the short to medium term. Access to finance to prepare and respond to the needs of the post-COVID tourism market is also important. The increasing sanitary and safety requirements of the new tourism market will require funding, and this will help contribute to the sector's post-COVID-19 recovery. Ensuring that tourism establishments have access to plastic recycling facilities to comply with World Health Organization (WHO) sanitary and safety requirements would contribute to a safer and greener recovery.

#### 4.2. Coastal-marine infrastructure

The cities of Durres, Saranda, Orikum, Himarë, Dhërmi, and Ksamil are the main tourist centers at the coast. Durres and Vlora have relatively well-developed infrastructure to accommodate tourist influx during the summer. Vlora is well connected to other tourist destinations in the south – Himara and Saranda – and has a commercial port, a fishing port, and a hydrocarbons terminal. A touristic marina is located nearby in the Orikum area. In the south, the city of Saranda has a commercial/passenger port and a small fishing port. Himara, a small tourist town in the south, has a small port for yachts and small-scale fishing vessels. According to the 2014 data, Vlora District has 5,937 registered commercial enterprises.

Improved transport connectivity of the coast with the rest of the country and the region is a priority. According to the prospects outlined in the 'Scenarios and Vision for European Territory 2050'<sup>53</sup> of the ESPON Program<sup>54</sup>, Albania needs to strengthen its connectivity within the Balkans and EU's main transport corridors. The Integrated Cross-Sectorial Plan for the Shore 2015–2030 emphasizes the need to create conditions for development of maritime infrastructure and transport which will be an essential part of the economic development and integration with global value chains. Investments in transport infrastructure have increased. In 2017, Albania spent 2.4% of GDP on transport but still ranks 115/140 in road connectivity according to the 2018 Global Competitiveness Index and 100/140 in overall infrastructure.

Albania's sea transport infrastructure has limited capacity especially during the summer months to support the growth of nautical tourism. This includes the following: 354 berths available suitable only for short, oneday stops; 14 piers and similar infrastructure available for yachting boats used during high season (such as the T-form concrete pier at the small bay near the castle of Porto Palermo); and 5 commercial ports/ports of entry. There are six partially used naval/police ports and six fishing ports two in each key district (including Durres (Vlore and Saranda) and Shengjin, also available to tourist boaters. The two privately operated

<sup>&</sup>lt;sup>52</sup> UNWTO. 2020. World Tourism Barometer May 2020 – Special focus on the impact of COVID-19.

<sup>53</sup> www.et2050.eu.

<sup>&</sup>lt;sup>54</sup> ESPON 2020 Cooperation Program was adopted on the 26 May 2016 by the European Commission with an objective to support the reinforcement of the effectiveness of EU Cohesion Policy and other sectoral policies and programs under European Structural Investment (ESI) funds as well as national and regional territorial development policies.

hydrocarbon terminals at Porto Romano in Durres and Petrolifera in Vlore can be used by yachts in emergencies and adverse weather conditions. The Orikum Marina is currently the only marina with developed infrastructure required for yachters with 145 berths representing about 41% of the berth capacity in Albania.

### 4.3. Nautical industry

The yachting industry presents a unique economic opportunity<sup>55</sup>. Albania's coastline is positioned along well-travelled sailing routes and so it has the potential for a much larger nautical tourism market over and above the current two-day visits to a single port. To tap into the widespread economic benefits of nautical tourism, the overall objective should be to establish a one-week or a two-week 'Sailing in Albania' strategy in addition to the current 'Sailing to Albania' strategy, and eventually entice stopovers by larger boats. In addition to the revenue generated by direct servicing, nautical tourism would generate a large number of indirect benefits in terms of employment and income.

In 2015, 1,177 small and large yachts visited Albanian coastal waters. The Vlora and Saranda districts recorded 72% of the total number of yachts in Albania. More than 90% of the traffic arrived between May and September. According to the Saranda's Port Authority, Saranda recorded 1,650 boat visits 2019. The highest number of yachts per day (16) was registered in Saranda's commercial harbor. The mooring area near to the city center, locally referred to as 'The Aquarium', has a maximum capacity of only 10 berths and so sometimes vessels have been sent to anchor overnight outside of the harbor. During the summer months, visitors regularly have to move their boats if cruise ships or ferries require the space at the pier. As a result, yachters cannot leave their boats for more than a couple of hours to go ashore. The average duration of a yachter's stay is between one and two days, indicating a clear potential economic loss. It is therefore essential to optimize the marine infrastructure and encourage longer stays to capture the economic potential of visiting yachters.

### 4.4. Prospects for growth

#### Box 6. Opportunities for diving tourism in Albania

A World Bank project (2006) studied the opportunities for reducing the inshore fishing effort while mitigating the economic and social impact of such a strategy on the livelihoods of the fishermen.

A total of 47 dive sites were assessed using the method used in the report to the World Tourist Association on the Anderman islands in the Indian Ocean. A total of 20 dive sites were considered as having foreign diver attraction potential, meaning recreational divers would travel to Albania to dive these sites. An underwater survey of the Albanian coast for potential wreck-site database of naval decommissioned vessels dating back from the early 1950s concludes that the coastal area has significant potential for diving tourism. database of naval decommissioned vessels dating back from the early 1950s concludes that the coastal area has significant potential for diving tourism.

The nautical tourism industry is experiencing a worldwide slowdown worse than the one of the 2008 financial crisis. Before the COVID-19 crisis, the average age of European boaters had risen from 45 to 55 over the past decade. This is due to an aging European population as well as a decline in boating among younger age groups due to increased competition for leisure time. However, Albania can adapt to these new challenges. Businesses could offer short-term access to boating facilities and offer multiple activities and locations to tourists, in order to take advantage of the younger demographic.

The impact of the current global pandemic on maritime transport and port connectivity in the Mediterranean region is still being evaluated.<sup>56</sup> While

<sup>&</sup>lt;sup>55</sup> While the present study mainly covers yachting and sailing, other segments of the blue tourism may also have potential to generate income and provide a good return on investment for the economy overall. These other sectors will be covered under the Country Private Sector Diagnostic for Albania by the World Bank Group.

<sup>&</sup>lt;sup>56</sup> International Association of Ports and Harbors (IAPH) World Ports Sustainability Program <a href="https://sustainableworldports.org/wp-content/uploads/2020-05-18-WPSP-COVID19-Guidance-FIN.pdf">https://sustainableworldports.org/wp-content/uploads/2020-05-18-WPSP-COVID19-Guidance-FIN.pdf</a>.

most ports are fully operational for cargo business, they have closed or restricted operations for passenger vessels, especially cruise ships.

In many cases governments and port authorities have introduced safety regulations and restrictions related to the movement of ship's crews, truck drivers and others needing access to port facilities. Countries are looking for guidance on how to manage concerns over humanitarian, safety and employment issues related to the shipping community. Different countries have put in place a variety of safety procedures to reduce the risk of infection among crew members and shore-based workers. Developing "back to work plans" will need new COVID-19 government procedures, including safe return to work conditions (hygiene and social distancing measures), a move from paper-based to digital processes, and clear guidance on how port protocols will change in a post-pandemic world.

Currently, Albania's maritime infrastructure does not support the country's potential for nautical tourism. The current number of Albanian berths (354), not including day berths, is only 0.5% of the total number of berths in the Adriatic (76,467). The two private sector all-weather residential marinas currently in the pipeline (one is under construction at Kalaja e Turres and one is now past the planning stage at Hamallaj near Durres) will be able to accommodate around 650 vessels each, although some of these berths may be linked to real estate purchases. However, if we consider coastline length as an indicator of required berth capacity, the number of berths (relative to the successful marine destinations of Croatia and Montenegro) could be two to three times higher than it is currently. Ideally, there should be between 700 and 1,050 berths or at least a twofold increase from 350 to 700. If Albania is to follow the example of its neighbor Montenegro, the number of berths should expand by 1,000. These numbers are estimates since the available statistical data from the ports of Shengjin, Durres, Vlora, and Saranda is limited and doesn't support a full market analysis. A careful evaluation of development alternatives using Environmental Impacts Assessment and cost-benefit analysis of marina developments would reduce the risk of building overcapacity and strengthen the investment return potential of both public and private projects.

Table 2. Total number of berths per km in the Adriatic Sea basin

	Italy	Croatia	Montenegro	Albania
Number of berths	172,000	17,949	2,220	354 (431 including day berths)
Length of coastline in km	9,534	8,032	294	476
Berths per km of coastline	18.04	2.23	7.58	0.90

Source: ICOMIA, https://el.wikipedia.org.

Figure 9. Marina development investments: reengineered ports: Shengjin, Vlora and Saranda

PORT OF ENTRY	PUBLIC	PRIVATE
(NORTH TO SOUTH)	INVESTMENT	INVESTMENT
Shengjin port	Rehabilitation Realignment of quay New quay &reclam	PPP marina Packing density 250 Large-Medium/2.5ha 300 Medium-small/2.5ha Average 412 Vessels Pontoon length 800m
Vlora City Centre port	Rehabilitation Realignment of inner breakwater	PPP marina Packing density 250 Large-Medium/2.5ha 300 Medium-small/2.5ha Average 660 Vessels Pontoon length 1,300m
Saranda City Centre	Constructio of new TEE Jetty  **Complete Water Barbin 1997	PPP marina Packing density 250 Large-Medium/2.5ha 300 Medium-small/2.5ha 300 Med-Small Vessels 100 Large-Med vessels 150 Small Vessels Pontoon length 600m

Demand for berthing in Albania exceeds the existing capacity during the summer months. The fact that boat arrivals in the south have been steadily rising is a good indicator that both Vlora and Saranda will require all-weather city-center marinas. These marinas could be accommodated inside the refurbished ports. Given that a marina needs at least 500 small-tomedium size vessels to operate costeffectively, a further 1,000 berths would be adequate between these two ports. Temporary or seasonal berths could be operated during the summer months and perhaps in spring and fall, assuming favorable weather conditions. In the short term, a total of 7 to 8 sites suitable for seasonal mooring have been identified in the southern Albania, and around 300 to 400 seasonal moorings could be provided to complement all-weather berths. So, if we add the two private sector marinas, as well as the city-center marinas (plus seasonal moorings), 2,600 berths could be added in total.

In order to be successful in the nautical tourism market, there needs to be effective regulation and sophisticated ancillary services such as boat repair, transport connections and entertainment options. The development of a cluster of downstream services that support the sector in information and communication technology (ICT), training, and professional services would be a necessary enabler for competitiveness in this market.

The Government should have two roles in the process of developing and administering the new infrastructure. It will need to identify the sites for potential marinas and/or other yachting infrastructure and facilitate their development. It will also need to regulate the activities generated by this development. The physical development and management of the marinas, seasonal moorings, pontoons, and repair facilities can be left to the private sector.

The capital investment for refurbishments of the three existing ports in Shengjin, Vlora, and Saranda is estimated at US\$19 million. Further expansion of berthing capacity to 4,247 berths within 10 years could be undertaken by improving the investment conditions for privately funded residential marinas (Turres and Hamallaj) which would result in 1,240 additional all-weather berths.

## Chapter 5. Marine Plastic Pollution

Marine plastic litter<sup>57</sup> travels across borders, equally affecting multiple aspects of the Blue Economy. It is transported by rivers, wind, sewage systems, and ocean currents over long distances. It is found in all marine environments: beaches, seabed, floating on (deep and shallow) waters, in pristine environments of MPAs, and even in remote and uninhabited islands in the open oceans. Marine litter, (both on beaches or floating on the sea), is considered a public health issue (Galloway 2015; Sheavly and Register 2007). Because of the toxicity of some plastic components to humans, (especially plasticizers and additives) and possible leaching of harmful chemicals, plastics are a potential hazard (Rayan P.G. 2015). While the toxicity in the marine environment is low, the risk to human health may be more harmful when we consider accidental inputs of debris with high presence of toxic compounds or harmful debris.

### 5.1. Regional context

The Mediterranean Sea is among the most polluted bodies of water in the world. It holds only 1% of the world's water but contains 7% of all of the world's microplastic waste. 58 An estimated 82% of the manmade litter floating on its surface is plastic, and plastic the most common debris on its seafloor. 59 A large fraction of the top 20 items found in the Adriatic and Ionian Seas are single-use plastic (SUP) items related to tourism and recreational activities, such as plastic cups/lids from drinks, crisp packets, food wrappers and fast food containers, straws and stirrers, cups and cup lids, shopping bags, and drink bottles. 60 The World Wide Fund for Nature (WWF) report (2019) has revealed that tourists cause 40 percent of the waste entering the Mediterranean Sea, 95% of which is plastic. A survey 61 of marine litter on 22 beaches located in 16 coastal and marine protected areas of Albania, 62 France, Greece, Italy, Slovenia, Spain, and Turkey showed that the marine litter accumulated in autumn, following a cleanup in summertime, was half of the amount found in summertime. The survey also revealed that even in protected areas of the Mediterranean, marine litter is threatening habitats and species. Impacts vary from entanglement and ingestion to bioaccumulation and biomagnification of toxins released from litter items to the facilitation of introduction of invasive species and damage to seabed habitats.

While Albania is not the biggest contributor to the plastic pollution problem in the Adriatic-Ionian basin, there is a clear need for more effective marine litter management. With 60% of the Albanian population living in coastal areas, the effects of intensive construction, growing coastal tourism, and inadequate waste stream management could cause deterioration of the quality of the coastal and marine environment. As the Albanian coastal economy continues to grow, it is vital to find ways of reducing plastic pollution.

<sup>&</sup>lt;sup>57</sup> Marine litter is any persistent, manufactured, or processed solid material discarded, disposed of, or abandoned in the marine and coastal environment. It consists of items that have been made or used by people and deliberately discarded into the sea or rivers or on beaches; brought indirectly to the sea with rivers, sewage, storm water, or winds; accidentally lost, including material lost at sea in bad weather (fishing gear and cargo); or deliberately left by people on beaches and shores (UNEP 2005).

<sup>&</sup>lt;sup>58</sup> https://invest-in-albania.org/wwf-rings-alarm-bells-on-albanias-plastic-pollution/.

<sup>&</sup>lt;sup>59</sup> The EU IPA II defines institutional strengthening and implementing capacity of the fisheries administration is seen as first priority. Ref. IPA II 2014–2020.

<sup>60</sup> Understanding the socioeconomic implications of marine litter in the Adriatic-Ionian macroregion.

<sup>&</sup>lt;sup>61</sup> Carried in the frame of Interreg Med ACT4LITTER project from February 2017 to October 2018.

<sup>62</sup> The Albanian team was the Association for the Protection of Aquatic Wildlife of Albania (Albania).

### 5.2. Country baseline

Marine plastic litter surveys have been carried out in several of Albania's beaches and coastal areas. Results indicated that beaches are generally clean. One survey of eight beaches<sup>63</sup> found that only one was ranked 'moderately clean' (Plepa Beach, Durres Bay) while seven others were ranked 'clean' (Zvernec beach, and the beaches in Durres Bay and Lalzi Bay, Buna Delta, Cape of Rodon, Shengjin, and Velipoja). Same studies determine that there are no marine litter 'hot spots' in Albania. The area of the western border between Albania and Greece was categorized as a secondary 'plastic hot spot'. A more recent survey of five Albanian beaches found a total of 3,321 marine litter items at Durres Bay and Lalzi Bay (Gjyli et al. 2020). About 65% of the marine litter was artificial polymer materials and 58.5% originated from shoreline sources, as a result of poor waste management practices, tourism, and recreational activities. SUPs accounted for 48% of all items recorded, ranging from 16.8% to 69.1% depending on the beach.

Albania was also part of a regional survey of marine litter.<sup>64</sup> Seven countries sharing the Adriatic and Ionian Seas: Albania, Bosnia and Herzegovina, Croatia, Greece, Italy, Montenegro, and Slovenia participated in the study. About 180 beaches were surveyed in 31 locations, covering 32,200 m² and extending over 18 km of coastline. The three beaches surveyed in Albania were Plepa Beach (Durres), Shengjin Beach (Lezha), and Velipoja Beach. Albania was ranked second out of seven countries based on the cleanliness of the beaches (0.22 items per m²), after Bosnia and Herzegovina (0.17 items per m²). The study showed that litter from land-based activities (48.9%) was far more prevalent than litter from sea-based activities (7.8%). The study found that Albania is not a major contributor to the pollution of the Adriatic and Ionian Seas. One-third of the average total annual river discharge into the whole Mediterranean basin is from the south Adriatic Sea. The basins of Bojana, Drini, Mati, Ishëm-Erzen-Shkumbini, Seman, Vjosa and Bistrice drain the Adriatic Sea and Ionian Sea and so could potentially bring plastic litter into the Adriatic.

Albania, like other Mediterranean countries, still lacks effective waste management systems in place, not just plastic management. The WWF assessment is based on the percentage of untreated plastic waste as a share of the total waste streams. Albania is ranked third among the Mediterranean countries that have mismanaged solid waste (73 percent of all waste mismanaged), preceded by Montenegro (95%), and Egypt (93%) and followed by Libya (64%). Albania has a low recycling rate of plastic waste at nearly 5% of the total amount of generated waste (166,000 kg in 2016). Ranked according to the total plastic leakage into nature, Albania is in the higher range of 20 kg per person.

Waste management services are not offered for 31.7% of the population of the country. Waste infrastructure is insufficient to cover the entire country. In addition to these gaps, there is no waste segregation at source, and implementation of extended producer responsibility or deposit refund schemes stipulated by law is delayed. The bulk of municipal solid waste, including plastic packaging/waste is disposed in the landfills or old dumpsites, and often fly tipped in river gorges or lakes.

Regular beach cleaning could reduce the litter to zero, if waste management follows cleanup standards. A survey of two areas in Buna/Bojana Delta and in Cape of Rodon Beach<sup>65</sup> indicated that the waste collected in Buna Delta (Velipoja Beach) and Cape of Rodon Beach (near Ishmi river) <sup>66</sup> contained artificial polymers, mostly deposited from rivers and not from the beach tourist activity. The Buna Delta and Cape of Rodon

<sup>&</sup>lt;sup>63</sup> Covering the period 2015–2019 and conducted under regional projects with the financial support of UNEP/MAP Medpol, Interreg IPA program, and so on The Albanian partners in these projects have been universities, local government, nongovernmental organizations, national agencies, and so on

<sup>&</sup>lt;sup>64</sup> IPA Adriatic DeFishGear project, with the Agricultural University of Tirana (AUT), Tirana, Albania. The study took place from October 2014 to April 2016.

<sup>65</sup> Adopt-a-Beach (2017–2018).

<sup>&</sup>lt;sup>66</sup> In the framework of the Cooperation Agreement between the Italian Ministry for the Environment, Land and Sea (IMELS) and the UNEP/MAP Coordinating Unit to support the implementation of the mandate of the Barcelona Convention and the work of the UNEP/MAP addressing key priorities towards ensuring a fully integrated marine and coastal management in the Mediterranean region.

surveys showed that the marine litter accumulated during the fall following a cleanup in summer was reduced to nearly half of the amount accumulated during the summer season. This implies that a periodic cleanup of the coastal area, also beyond the high season, would significantly reduce plastic marine litter.

Marine litter could affect the performance of marine based sectors such as tourism, fisheries, and shipping. While the specific impacts in Albania have not been studied, in economic terms plastic pollution can cause a loss of valuable resources. Ironically, the consumers, tourists, and communities alike are often the cause and the victim of the marine plastic litter. Potential impacts of marine litter on coastal municipalities (Mouat et al. 2010) include loss of amenity value and direct economic costs from public health risks, reduced recreational opportunities, negative publicity and reputation, beach cleaning costs, waste collection, and disposal costs. There are also hidden costs related to litigation action and reduced revenue.

Polluted beaches can discourage tourists which lead to a loss of revenues for local businesses. Beach waste collection infrastructure is inadequate and there are overflowing bins in many places along the coast. The cost for additional waste collection and prevention measures in the Adriatic is estimated at €2,505 per action per tourist facility. Tourist businesses do put pressure on the local authorities in charge of the beaches and coastline to keep them litter free. However, there are no signs at beaches promoting environmentally responsible behavior. <sup>67</sup>

### Box 7: Impacts on beach tourism

In 2013, a study of 31 beaches in Orange County (California, USA) considered how marine debris influences their decision to go to the beach, and at what expense (Leggett et al. 2014). It applied the travel cost model, which estimates the value people derive from recreation at a site based on the utility they expect to experience in relation to alternative sites. They showed that marine debris had a significant impact on residents' beach choices, and that a 75 % reduction in marine litter at six popular beaches generated over €40 million in additional benefits to Orange County residents over just 3 months.

Source: 2015. The Economics of Marine Litter

Marine plastic debris can restrict catch, and clog boat engines and fishing nets, leading to disruption of fishing operations. The largest cost to the fisheries sector in general is related to vehicle damage and maintenance caused by collision with plastic debris, and delays caused by fishing nets filling up with plastic rather than fish. This also includes the cost of coastguard rescue, statutory duty, negative publicity, additional dredging in harbors and marinas, removal of litter from harbors and marinas, awards such as ISO 14001 and Golden Anchors, and vessel damage incidents (Mouat et al. 2010). In the Mediterranean, the loss to fisheries caused by marine plastic litter is estimated at US\$153 million annually (WWF 2019).

Marine industry losses due to plastic debris across the Mediterranean is estimated at US\$261 million a year (WWF 2019).

Maritime transport is particularly vulnerable to collisions with plastic objects, entanglement of floating objects with propeller blades, and clogging of water intakes for engine cooling systems.

Costs are also incurred by vessel downtime, delays, and additional maintenance costs. Port facilities are also at risk of damage from plastic pollution, including the clogging of waterways, which creates delays and incurs cleanup costs (WWF 2019). Current regulations for environmental protection from stock and flow may not sufficiently protect the marine environment. This includes regulations on fishing vessels to comply with the rules of navigation and meet the standards required for protection of the marine environment and avoid economic loss.

The public sector is affected by the high cost and administrative burden associated with littering, including clean-ups, enforcement of prevention measures, and treatment costs. During the summer months, tourist activities in the Mediterranean increase monthly waste generation by one-third, costing an average of US\$1,444 per ton (WWF 2019) when cleaning beaches. Local municipalities, having limited capacity and can

<sup>&</sup>lt;sup>67</sup> Understanding the socioeconomic implications of marine litter In the Adriatic-Ionian microregion.

be overwhelmed by the additional waste influx, leading to uncollected waste or unsafe management practices (AKPT 2016).

The estimated economic loss in Albania due to marine litter in 2017 could be €0.34 million to fisheries, €1.74 million to the fishing fleet, and in the range of €1.73 to €5.62 million for beach cleaning. This quick assessment was based on extrapolation of data from the EU study on the Mediterranean and using Organization for Economic Co-operation and Development and the World Bank Group methodologies, with estimates summarized in Table 3.

Table 3. Estimated costs of marine litter damage on economic sectors

Impacts on sectors and cleanup activities	Estimated cost for Adriatic-lonian microregion, including Albania	Estimated cost of marine litter damage in Albania	Estimated costs of litter damage in the EU and member states
Beach cleaning/ tourism sector	€5,685/ tourism business unit/year	€1.73–5.62 million all the coastline	EU: €194–630 million for 50,000 km coastline
Beach litter removal by municipalities	€216,920/ municipality	Durres region: €146,755/year Lezha region: €25,682/year Shkoder region: €72,553/year Vlora region: 161,945/year  Total of coastal municipalities: €1.94 million/year	UK: €139,043 (Mouat et al. 2010) Netherlands: €176,000
Fishing fleet	€5,378/ vessel	€1.74 million	EU: €3,542
Fisheries		€0.34 million	
Aquaculture sector	€3,228/ per aquaculture farm/year	€2,146/ aquaculture farm/year	Montenegro: €500/year Greece: €1,888/year Croatia: €2,352/year Italy: €15,000/year Scotland: €580/year (Mouat et al. 2010)
Harbor and marinas	€8,518/ harbor		Spain: €2,960/ harbor

Plastic litter could potentially affect the plastics industry in terms of reputational damage and economic losses. Public opinion about plastics in general is negative, which could affect, or at least dampen, the demand for SUP and plastic products in general, exemplified by 'no-plastic' campaigns, which are mobilizing a growing number of citizens. Marine litter also represents a loss of valuable resources. Specific plastic items can be reused as secondary raw materials. In the absence of effective regulatory solutions and incentives, measures such as radical bans on SUPs could affect producers along the plastic value chain and recyclers who will then resort to a non-resource-efficient approach for specific plastic items.

Solid waste is the main contributors to CO<sub>2</sub> eq. emissions for the whole waste sector where methane emissions are the highest from waste disposal on land. These methane emissions will decrease as waste treatment options improve over time and prevention takes apriority<sup>68</sup>.

While improvement of waste management and cleanup are immediate priorities, the promotion of the circular economy is a pathway to addressing this problem in the longer term. This would require a sector/value chain approach combined with investments, policy reforms, capacity building, and technical assistance with access to innovative financing. Recycling can also be encouraged the design of plastic products is changed, so they can be recycled easier. Alternatives to SUPs should also be promoted.

### 5.3. Plastic value chain and the recycling industry

The total waste generated in Albania in 2016 was 1,300,373 tons, of which the municipal solid waste (MSW) was 1,079,373 tons. With a generation rate of 373 kg per capita per year, Albania ranks higher than Romania and lower than Malta, Croatia, and Montenegro (INSTAT 2016). In 2016, the plastic waste was 30.03 kg per capita per year with the plastic packaging only 11.41 kg per capita per year. This plastic packaging generation rate place Albania between Latvia (2.55) and Croatia (13.12), respectively, the lowest and the second lowest rate for plastic packaging waste generation in the EU (2016).

The planned transition to a 'plastic-free' country needs to be informed by the potential economic and social effects, especially with regard to retailers who are part of the value chain of plastic waste. These have not yet been studied in Albania. This section looks at Albania's potential to explore multiple opportunities in the plastic supply chain. These opportunities can reduce plastic waste streams and promote a circular economy.

The best way to reduce marine plastic litter is to apply an integrated approach across the entire waste management system. This goes beyond regulating plastic production or use. Integrated solutions to reduce plastic leakages include policies, regulations, institutional capacity, incentives and technologies and the right choice by businesses to use plastics as an alternate to other materials, when it is the best economic and environmental option, but not to use plastics excessively and unnecessarily. The suggested waste hierarchy (Fig. 10) can serve as a guide for sustainable plastic use and marine litter management — prevention sitting at the top as the most preferred option, and disposal sitting at the bottom as the least favored option.

A value chain analysis method is used to evaluate detailed procedures involved in each step of any business aiming to increase production efficiency and deliver maximum value for the least possible cost. Plastic waste is more complex than a simple waste management issue and therefore it needs an integrated approach (Figure 9) based on a 'value chain analysis' to address waste accumulation and reduce usage. The estimated plastic waste generation in 2025 as a share of the total MSW (at around 12%<sup>69</sup> for upper-middle-income countries) is 100,730 tons. <sup>70</sup> The total amount of plastic material imported in Albania as raw material or as finished goods is 70,588 tons or 24.34 kg per capita per year plastic material.

<sup>&</sup>lt;sup>68</sup> Ministry of Environment. Third National Communication of the Republic of Albania under the United Nations Framework Convention on Climate Change. Tirana, June 2016.

<sup>&</sup>lt;sup>69</sup> Urban Development Series - Knowledge Papers. <a href="https://siteresources.worldbank.org/INTURBANDEVELOPMENT/Resources/336387-1334852610766/Chap5.pdf">https://siteresources.worldbank.org/INTURBANDEVELOPMENT/Resources/336387-1334852610766/Chap5.pdf</a>.

<sup>&</sup>lt;sup>70</sup> If the total MSW generated will be 839,418 tons and using the methodology of the "Technical Assistance for integrated solid waste management system (SWM) for Two Selected Municipalities in Albania. T1.2.1 Identification of the MSW Sources, Streams and Quantities Final Report – June 2017."

Figure 9. An integrated approach to reduce marine litter and plastic consumption



The key actors in the plastics value chain in Albania include polymer producers/importers, plastic convertors, waste suppliers, waste management administration/companies, and plastic recyclers. There are no producers of raw material or monomers in Albania. There are currently about 53 plastic converters, 27 producers of plastic packaging and plastic carrier bags, and 20 recycling companies in Albania, all of which provide multiple jobs. More than 500 workers are engaged in the conversion of domestically recycled plastics, 1,500 workers are involved in the conversion of imported raw material, and about 500 workers are employed by other recycling companies. It is estimated that 12,000–16,000 individuals,<sup>71</sup> mainly from the Roma community, are informally involved in collecting and selling recyclable plastic waste from public containers and businesses. Plastic convertors are organized under the APKA<sup>72</sup>.

Producers of plastic packaging and plastic carrier bags use recycled plastic materials converted into products by the plastic conversion industry. About 10,000 tons were converted in 2019 while the imported plastic raw material used was 30,000 tons. The average price of the domestically recycled plastic is €750 per ton versus €1,050 per ton of the imported raw material. The turnover from products made of domestic recycling industry was €9,565,165, that is, almost 20% of the overall turnover of the plastic industry (about €46,097,903). The contribution to the state budget of the plastic industry working with domestically recycled material was €2,927,900 (including social and health insurance, income tax, value added tax, profit tax, and dividend tax), that is, 20% of the total contribution of the plastic industry to the state budget<sup>73</sup>.

Albanian recycling companies have invested about US\$66 million in mechanical recycling. These companies are based in Tirana (9), Durres (3), Elbasan (5), Korce (1), Fier (1), and Berat (1). Due to the ban on imports of plastic waste for recycling and the small quantities of acceptable domestic plastic waste, these companies are working at 15-60% of their capacity. In 2016, the total capital investment of the recycling industry (including plastics, ferro metals, color metals, electronic/e-waste, batteries and accumulators, wood pellets, and textiles) was USD\$260 million. Due to the ban on the import of waste for recycling, this industry is working at only 26.7% of its installed capacity.

Optimizing recycling and making it economically feasible can be complex and will require targeted policies and measures adapted to the local context. In Europe, plastic recycling operating costs are estimated at

<sup>&</sup>lt;sup>71</sup> Albanian Plastic Convertors Association (APKA).

Testablished in December 2014, APKA is the official representative body of plastic converters in Albania, whose activity encompasses all sectors of the plastics conversion industry, including recycling. APKA is member of the Union of Producers/manufacturers of Albania, European Plastic Convertors (EuPC), and Plastic Europe.

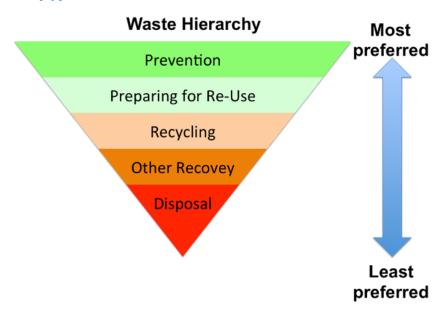
<sup>&</sup>lt;sup>73</sup> Data from 2019 from Albanian Plastic Convertors Association (APKA).

US\$1,000 per ton, which is significantly more than the average selling price of secondary plastic material at US\$600 per ton. With the price of recycling going up and price of plastic declining, recycling is becoming a less profitable business. The relative profitability between recycling and the production of new plastic is strongly determined by oil prices. When oil prices are low, it can be cheaper to make raw plastics than to recycle. This means that recycling is likely to remain unprofitable (WWF 2019). At the same time, recycling in developing countries can be profitable for waste pickers who may earn a higher wage picking recyclable materials than if they were doing something else.

In Albania, recycling creates jobs and increases the overall rate of recycling. The ideal approach is somewhere between preventing low-value recyclable waste from being generated at the consumer level and identifying opportunities where recycling can work and be profitable. The ideal approach is somewhere between preventing low-value recyclable waste from being generated at the consumer level and identifying opportunities where recycling can work and be profitable, supported by a mix of ad-hoc policies and incentive systems that go beyond waste management.

Looking forward, Albania would need to develop effective and efficient instruments in order to use less, reuse more, and recycle the rest. This can be addressed in many ways: through market-based measures for changing consumer and manufacturers behaviors and the materials they use, and for making recycling more economically attractive. To make recycling economically attractive, the key is to focus on the whole value chain to enable high quality recycling and preserve the value of plastics upon recycling. Improving plastics recycling will require transformation across the entire value chain from raw materials production, product design, collection, end of life treatment, recycling, to secondary materials market. Some of the measures promoting circularity could include bringing landfilling and incineration costs in line with recycling costs; introducing product taxes and charges to discourage consumption of certain products; deposit-refund schemes; making producers responsible both financially and logistically for dealing with packaging waste; enforcing higher fees and fines for littering. All of those could help to discourage behaviors that result in plastics leakage into the environment.

Figure 10. Waste hierarchy pyramid



### 5.4. Albania's priorities for cleaner marine environment

Box 8: Action plan on the 'Plastic Free Albania-First European Plastic Free Country'

The law defines the lightweight plastic carrier bags for SUPs, those items with thickness of less than 50 microns on each side and the very lightweight plastic carrier bag, of thickness of less than 15 microns on each side and sets the following restrictions:

- The use, placing on the market, production, import, or entry of SUPs in the territory of Albania is banned.
- Any person who places on the market, produces, imports, or brings SUPs in Albania shall be punishable by a fine of ALL 1,000,000–1,500,000, an equivalent of around €8,200–12,300.
- Any person who uses SUPs shall be punished with a fine of ALL 30,000–100,000, an equivalent of around €246–820.
- Entities producing, importing, or placing SUPs on the market in Albania shall stop their activity by February 1, 2020.
- The entities that introduce or use SUPs in the territory of Albania shall cease activity within June 1, 2020.

The three-stage plan covers the period September 2019–2021. It tries to introduce phased and differentiated ban of economic instruments to discourage SUP use and measures that encourage the use of alternative products that are more environment friendly.

On plastic carrier bags. The lightweight plastic carrier bags (under 35 microns) were banned by law in 2018. In 2019, a fee/product charge of ALL 1.00 (equivalent of €0.008), applicable to specific areas only, was set on plastic carrier bags (more than 35 microns). Use of biodegradable waste bags for organic waste and own shopping bags will be encouraged. In 2020, multipurpose bags will be provided (initially) free of charge.

On SUPs. In 2019, a fee/product charge was set on drinking straws. Plastic food boxes were to be replaced by other materials. In 2020, biodegradable plastics are to be extended to certain SUPs and bottles. In 2021, biodegradable plastics will be extended to medical SUPs and sanitary products. Other SUPs (not specified) shall be banned.

Source: Ministry of Tourism and Environment. Tirana.

Albania has approved the Strategic Policy Document and National Integrated Waste Management Plan (2018–2035). (date of approval 27.05.2020, Council of Ministers' Decision 418.)

Some coastal municipalities have already achieved higher waste collection rates: Durres (99.49%), Fier (86.10%), Lezha (77.9%), and Shkoder (85.47%). Vlora has a lower collection rate (65.99%).<sup>74</sup> There is a target of 22.5% by weight for plastic packaging waste recycling for 2018–2033. The plan foresees phased implementation of extended producer responsibility (EPR) schemes<sup>75</sup> for collection and recycling of packaging waste as follows: first phase (2018–2023) collects not less than 8% of the packaging waste; second phase (2023–2028) collects and recycles not less than 21 percent; and third phase (2028–2035) collects and recycles not less than 39%.

Albania has adopted measures to address the increasing problem with SUPs. The country's National Action Plan: 'Plastic Free Albania-the First European Plastic Free Country' 2019–2021 (see Box 8), introduces a staged ban on lightweight plastic bags and on certain SUPs. The plan refers to the use of economic instruments and measures to discourage SUP use and to promote alternative products that are more environment friendly. Albania currently does not have policy on microplastics.

Many countries have tried different approaches for regulating the use of plastic bags and SUPs. The results differ from country to country. Some countries achieved a drastic drop in the number of plastic bags used (Ireland, Denmark, China, and Israel). Some countries which have attempted to ban SUPs completely have failed, as their bans triggered illegal use; while other countries experienced a big drop in plastic bag use followed by a gradual increase in use

<sup>&</sup>lt;sup>74</sup> Technical Assistance for Integrated SWM System for Two Selected Municipalities in Albania. T1.2.1 Identification of the MSW sources, streams and quantities Final Report - June 2017.

<sup>&</sup>lt;sup>75</sup> The EU has introduced a timeline for EPR schemes covering the costs for collection, transport, and treatment, cleanup litter, and awareness raising measures for products already covered by existing EU legislation: for packaging and wrappers by January 5, 2023; for food containers, cups for beverages, beverage containers with a capacity of up to three litres, lightweight plastic carrier bags, and fishing gear by December 31, 2024; reduction in the consumption of products with currently less widely available alternatives: food containers and cups for beverages by 2026; EPR schemes for the costs of cleanup litter, awareness raising measures, and data gathering and reporting for tobacco products by January 5, 2023; and for balloons and wet wipes by December 31, 2024.

back to pre-existing levels (Box 9). This often-unsuccessful approach led to more effective tactics such a better reporting, plastic deposit schemes, and increased fees and taxes on plastic products.

Extended Producer Responsibility (EPR) schemes are yet to be implemented although they have been part of Albania's waste management policy since 2011. The lag in introducing such schemes explains the low packaging waste collection and recycling rates in Albania. The draft National Waste Strategy (2020–2035) implies introduction of EPR schemes by progressive increase in collection rates of packaging waste: in the first phase (2018–2023), collect not less than 8% of the packaging waste; second phase (2023–2028) not less than 21%; and in the third phase (2030–2035), collect and recycle not less than 39% of the packaging waste.

## Box 9: Experience with regulatory measures on the use of SUPs

Experience with regulatory measures on the use of SUPs

Ireland is one of the leading countries tackling plastic bag consumption. It set (2002) a significant tax on plastic bags, whose consumption dropped by 94 percent. Their use became unacceptable by the end of the first year. Revenues were earmarked for environmental protection.

Denmark (2003) set a tax on retailers giving out plastic bags. Stores charged the plastic bags and pushed for the use of reusable bags. By 2014, Denmark had the lowest plastic bag use in Europe: 4 bags per person per year.

Tunisia is gearing up for a monumental 2020. On December 31, 2019, non-biodegradable plastic bags will be officially outlawed across the board—that means no producing, importing, selling, or distributing whatsoever. The bold move follows a 2017 supermarket-only ban that saw a 94 percent reduction in plastic bags in the first year.

France took its first step toward a plastic-free future in 2015 by banning plastic bags. The following year, it became the first nation to outlaw plastic cups, plates, and cutlery. By 2020, France will outlaw plastic straws, coffee stirrers, and cotton swabs, too. It aimed to reduce 5 billion plastic grocery bags and 12 billion produce bags. The plastic industry has opposed the ban. Source: Ministry of Tourism and Environment. Tirana.

Source:https://www.greatbigstory.com/guides/plast ic-bans-around-the-world

Current regulation on port reception facilities for ship-generated waste and cargo residue is aligned with EU regulations.<sup>76</sup> The rules for preventing the discharge at sea of waste generated by ships are applicable to all kinds of ships entering ports of Albania and include mandatory fees on delivery of ship waste at the port reception facilities. These rules are to be further aligned with the amended/approved Directive (EU) 2019/883 aiming to address negative effects of waste from ships using EU ports by improving port reception facilities for waste from ships.

The delay in modernizing Albania's waste monitoring and reporting systems is a concern. The amount of data collected, and access to that data is limited. There is no official data on the annual flows of plastic/packaging waste, and data quality is inadequate which indicates implementation challenges. Projects that receive technical assistance produces certain limited data, but big-picture data is still lacking. There are discrepancies in the data on Municipal Solid Waste (MSW), on waste composition, and so on. There is no official methodology for MSW data estimation, and so data on MSW is based on questionnaires completed by each municipality focused on its estimated waste airings, based on waste generation rate per capita and population which is not consistent. This inconsistency is then transferred to the data at the national level. There are no checks on the quality of this data. These same issues arise when it comes to plastic waste. To reduce marine litter and to achieve growth towards the Blue Economy, more needs to be done to improve data collection on both waste and plastic/packaging.77

Albania's biggest investment in waste management infrastructure is in the lower part of the waste hierarchy pyramid focusing on disposal facilities, such as landfills and incinerators. These include four operational sanitary landfills (in Sharra, Bushat, Bajkaj, and Maliq); two planned landfills in Vlora and Berat; one waste-to-energy plant (W2E) in Elbasan; and two new W2E plants in Tirana and Fier. If Albania aspires to become a 'clean and green'

<sup>&</sup>lt;sup>76</sup> DCM No. 1104, dated 28.12.2015 fully transposed in The Port Reception Facility Directive 2000/59/EC, amended by Directive 2002/84/EC, Regulation (EC) 2007/71/EC, and Regulation (EC) 1137/2008.

<sup>&</sup>lt;sup>77</sup> DCM no. 687, dated 29.7.2015 'Approving the rules for keeping, updating, and publishing waste statistics.

destination, transitioning to a circular economy will unlock multiple benefits both for public and private sectors. A circular economy has the potential to improve industry performance and reduce costs. Waste management costs could be optimized by investment in innovation and technology to reduce, replace, reuse, recycle, and re-manufacture. Albania should transition to policies with a stronger emphasis on the use of economic incentives on prevention as a first step, in order for it to comply with its own 2035 targets. It should increase the coverage of waste management services from 68.7% (2016) to 100% of the population and the recycling of plastic packaging to 22.5% by weight.

Further efforts will be needed to close the non-compliant landfills and dumpsites and increase the separate collection of different waste streams and reduce bio-waste. There are 89 old dumpsites in Albania currently operating. Plans for Berat, Kucove, and Ura Vajgurore are being prepared and funding is being made available for their improvement under the State Secretariat for Economic Affairs of Switzerland (SECO)-funded project on Integrated Waste Management. The construction of an incinerator in Elbasan (which started operations during this year) and plans for further investments in incinerators pose concerns about potential inconsistency with EU principles which state that disposal and incineration are the least preferred waste management options. Further efforts will be needed to apply economic pressures to promote recycling and prevent waste generation.

The institutional arrangements for adopting these measures are in place, although implementation outcomes vary and remain overall challenging. The key institutional and financing constraints include insufficient resources and a lack of human resource capacity, and effective financial planning. An EU study<sup>78</sup> estimated the capital costs for the implementation of the Waste Directive 2008/98/EC plan to be US\$172 million, with operating costs for full compliance totaling US\$59 million annually. Estimates for the capital cost of meeting the requirements of the Landfill Directive are US\$268 million and for the operating cost for full compliance US\$0.592 million annually<sup>79</sup>. By introducing Extended Producer Responsibility (EPR) schemes, the financial burden of municipalities could go down. Most of the measures related to compliance with EU Waste Directive and related regulations are being implemented for the first time, for which substantial technical and financial assistance will be needed. Additional complications arise from the frequent changes of organizational structures, lack of staff, and a high staff workload.

The deterioration of the marine environment also remains of concern, as maritime traffic increases and the underlying causes of marine waste are not addressed. Reducing the impact of marine plastic pollution is not yet part of Albania's National Environmental Monitoring Program. To reach its goal of reducing marine pollution, Albania needs to understand the current scale of its plastic litter problem. This will allow it to determine targets to aim for and understand the best approaches to tackle the problem. The issues around plastic pollution are only going to worsen given increased human activity and development in the coastal areas. Putting in place clear policy measures to mitigate the economic, social, health, and environmental risks caused by plastic pollution will increase Albania's prospects of creating a successful marine-based tourism industry.

While the cleanup of plastic litter is essential, the problem cannot be addressed without prevention of such pollution in the first place. Preventive measures need to engage producers of waste as part of the solution. The tourism sector, for instance, should be encouraged to produce less plastic waste and become part of the solution. Measures can involve regulations, and soft approaches to incentivize the private sector to produce less plastic waste. It is also important the government supports innovation by the private sector that adopts approaches and technology that reduces plastic waste. For example, special certificate programs can recognize tourism establishments that comply with certain requirements and standards, which are effective

<sup>&</sup>lt;sup>78</sup> Directive Specific Implementation Plan for the Directive on Waste (2008/98/EC). EU funded INPAEL project. 2009.

<sup>79</sup> Directive Specific Implementation Plan for the Landfill Directive 1999/31/EC. EU funded INPAEL project. 2010.

marketing tools. In some countries, firms that comply with certain 'green' standards get special benefits when they participate in trade fairs. Whatever the measures, including the private sector in these solutions is vital.

The devastating impact of COVID-19 and the subsequent measures taken by governments worldwide raise some tough questions around plastic pollution. The pandemic has seen a dramatic rise in the use of SUPs, such as gloves, masks and other personal protective equipment. For example, single-use carrier bags might currently be a safer option than potentially virus-laden reusable bags that could contribute to the spread of coronavirus. However, hospital plastic waste from PPE contaminated with coronavirus is not recyclable and could cause an exponential increase in generation of plastic waste for incineration. Therefore, measures to collect and safely decontaminate used plastic equipment is a concern.

Albania may need to undertake a targeted effort to develop medical and hazardous waste management practices, given that the volume of such waste will increase. Strengthening the medical and hazardous waste management policy framework should become a priority. Workers in the informal economy – specifically waste pickers – are particularly vulnerable to the pandemic. Businesses must explicitly and thoughtfully build support for waste pickers into their COVID-19 responses, by supplying PPE, connecting them with food and community resources, and ensuring they have access to formal health care systems.

Another area that can be further improved by stronger regulations include Law on 'marine environmental protection from pollution and damage'<sup>80</sup> The law has provisions for protecting the marine environment from pollution and damage caused by human activities at sea and in coastal areas. Specifically, it aims to prevent activities that affect water quality, alter marine and coastal resources, and damage fauna and flora and human health. However, the law is not aligned with the EU Marine Strategy Directive and currently doesn't support the goal of achieving Good Environmental Status (GES) for Albania's marine waters. The law has no provisions for marine spatial planning (MSP) referred to in Directive 2014/89/EU, which is yet to be adopted in Albanian legislation. The Decree on 'the sanitary regulation on the bathing water management' (2010), has been included in the Bathing Water Directive, 2006/7/EC. At the national level, monitoring of bathing water quality is being implemented, however it is still at the initial stage when it comes to profiling bathing water, monitoring cyanobacterial risks, and ensuring public participation. Despite continuous progress in the improvement of bathing water quality, Albania still ranked second-to-last in bathing waters with excellent quality in Europe in 2019 according to the latest report of the European Environment Agency.

Albania's aspiration to become a 'clean and green' tourist destination requires more progress in improving surface water quality. The Law on the 'effluent discharge limits of wastewater and sensitivity criteria'81 has been partially (66 percent) covered in the Urban Wastewater Treatment Directive 91/271/EEC, but implementation of the directive is being adopted slowly. Large developments along the coast have sewage systems, but often without proper wastewater treatment. Rural areas lack this service. Violations of permissible effluent limits prescribed by the law are punishable by up to three years of imprisonment. Violations in protected areas results in stricter punishment, but the enforcement of these laws needs improvement.

<sup>80</sup> RA Law no. 8905, dated 6.6.2002.

<sup>81</sup> RA Law No. 177 of March 31, 2005.

## Chapter 6. Priority Reforms

The previous chapters of the report summarize the baseline, challenges, and opportunities and discuss actions that will be central to Albania's transition to a Blue Economy. All of this is based on the conviction that Albania's coastal and marine resources are central to economic growth and jobs. This is contingent upon the capacity of policy and decision-makers to manage trade-offs among various development goals and protect Albania's natural capital. There are multiple challenges in the way forward. The effects of COVID-19 on the economy will have an impact on growth and jobs in many sectors where the workforce is self-employed or informal, and fisheries and tourism will be severely hit. The BEDF provides an opportunity to shape the future growth in light of new global trends and over time address the effects of COVID-19.

The GoA is developing a National Strategy on the Blue Economy that aims to transform the Albanian marine space and coastal regions into regional economic development engines. There are currently no cost estimates for the technical assistance needed to support the institutional capacity for setting the implementation arrangements and coordination of the strategy at national and local levels. Future work on the Blue Economy Action Plan could elaborate and provide such estimates. However, to piece together all elements of the Blue Economy, the process may benefit from the help of the international community. Albania could benefit and proactively become a regional leader in the implementation of the European Union Strategy for the Adriatic and Ionian Region specifically in the areas and actions identified as priorities for reforms.

### 6.1. Blue Economy Development Framework

Albania has a well-developed body of policies and legislation aligned with the EU legislation which could support its blue growth, but enforcement is weak. There is good spatial planning capacity at the national level, which needs to be extended to the marine space to better manage marine protected areas. To address current constraints, Albania will benefit from improved governance and coordination among all institutions which plan and manage marine resources as well as a coordination of investments. While there have been multiple steps taken in this direction, future efforts could be structured along the following lines:

# (i) Expand the knowledge base and reinforce cross-sectoral coordination on planning and monitoring of marine-based sectors

Albania could expand the use of MSP as an effective tool for implementation of marine-based sector strategies. Establishing a wider coalition of government departments with planners, policy and decision-makers, and public participation would put more focus on land-sea economic planning with natural science perspectives. The benefits of the MSP tool include efficient use of maritime space, prevention of conflicts, faster decision-making, reduced costs, and a better investment climate. An EU study on the economic effects attributable to MSP<sup>82</sup> estimated that maritime activities in the EU created US\$116 billion of value in 2010.

<sup>82</sup> http://ec.europa.eu/maritimeaffairs/study msp en.html.

### **Priority actions**

- Establish cross-sectoral protocols for coordination and monitoring based on MSP.
- Expand the use of MSP as a tool to support marine-based sector strategies.
- Improve the collection of coastal and marine data to support monitoring.
- Identify paths for prosperity and pull together a Blue Economy priority investment program, with sector focus on adequate resources to meet the sustainability objectives and targets articulated in multiple government documents.
- Set clear, measurable, and internally consistent goals and targets for a sustainable Blue Economy.
- Establish a coalition of government departments with planners, policy and decision-makers, and public participation focusing on land-sea economic planning with inputs from natural sciences.
- Develop national capacity for science-based decision-making to stimulate a better investment climate including the
  capacity for assessment of natural capital inputs to Blue Economy sectors such as fisheries, tourism, and protection
  of environmental and ecosystems.

### (ii) Improve the management of existing MPAs and extend marine areas under conservation

### **Priority actions**

- Use MSP as a planning tool to increase the number of MPAs and to determine their status and conservation regimes.
- · Strengthen the monitoring and regulation in MPA by providing the necessary financing and technical expertise.
- Increase the sense of ownership of MPAs of coastal communities by using the planning process to reduce potential
  conflicts between users.

### (iii) Foster investment opportunities in Blue Economy sectors

### **Priority actions**

- Establish a Blue Economy Innovation Center including research and development for aquaculture and fisheries
  research
- Strengthen the Blue Economy partnerships along sector value chains as a platform for coordination on the use of marine space and resources applying inclusive methods and the ecosystem approach.
- Develop a Blue Economy Investment Plan as an integral part of the country's overall economic/business development program (for example, the Albanian's effort in transforming the brand 'Blue Albania' into a trusted brand in the international market).
- Encourage the private sector to take part in innovation and scientific research to address the threats to sustainable blue development and the vitality of sectors dependent on marine resources.
- Actively cooperate; share information and knowledge, and apply best practices and lessons learned.
- Apply innovative and proactive approaches to investments and partnerships with the private sector.

## 6.2. Fisheries, aquaculture, and seafood

# (i) Expand market share and develop a 'Blue Albania' brand to compete with neighboring countries

With global seafood demand growing and a well-established processing industry, Albania does have a competitive advantage. Albania could increase revenue from seafood products by taking advantage of export opportunities identified in the background paper on the Fisheries and Seafood Sector.

Export opportunities for Albania were identified for shrimps and prawns, anchovies, seabass and seabream, and mussels. Albania could, for instance, increase export of prepared/preserved shrimps and prawns to Serbia and Montenegro where growth potential is high. Albania could also explore business opportunities in the three largest markets for prepared/preserved shrimp: The United States (30% of the world import), Japan (14%), and United Kingdom (7.5%). Egypt is another potential market that deserves attention because of its high market growth (127%). For seabass and seabream, Croatia, Montenegro, Serbia, Republic of Moldova, North Macedonia, Slovenia, and the Czech Republic have a greater growth potential than the Italian market.

Another strategy would be to explore the seafood market niches which benefit from a price premium. The demand for organic and socially fair products is a growing trend among Western consumers. The development of a 'Blue Albania' label would contribute to a branding of the Albanian seafood production.

In Albania, environmental labelling has become more common both in the national development strategy and in the private sector's marketing schemes.

### **Priority actions**

- Develop and adopt 'Blue Albania' standards with high environmental and social standards to capture growing seafood market trends.
- · Ensure education, awareness, and promotion of 'Blue Albania' nationally and internationally.
- Monitor and strictly enforce the standard to build trust and mold it into a business culture in the long run.
- Facilitate accession to IPARD83 finance to processing industries in partnership with the EU.

### (ii) Unleash the growth potential of Albania's aquaculture

The domestic and export market growth potential for farmed fish will continue to grow. The contribution of seabass/seabream to domestic and export market demand is expected to increase from US\$17.9 million to US\$24.1 million in 2024. Further increased aquaculture production will also create jobs in an 'essential' sector relatively more resilient to the volatility of the global economy.

There is room to increase aquaculture productivity. The relatively high retail price of farmed seabass/seabream in Albania is an indication of relatively high seabass/seabream aquaculture production cost in the country. Small-scale farming is a standard cause of low productivity in aquaculture. Less-conducive farming environment and/or less-efficient farming systems/technology/practices could also contribute to low productivity. The reliance on imported inputs (seeds, feeds, cages, and so on) tends to increase production cost.

A 'Blue Albania' label is expected to give a price premium. In a supermarket in Rome, a 270g seabass with 'no-antibiotics' tag was sold at €16.35, whereas a 350g seabass without such a tag was sold at €12.8 per kg.

<sup>83</sup> EU Instrument for Pre-accession Assistance. The Component V of IPA is for Rural Development Program (IPARD).

### **Priority actions**

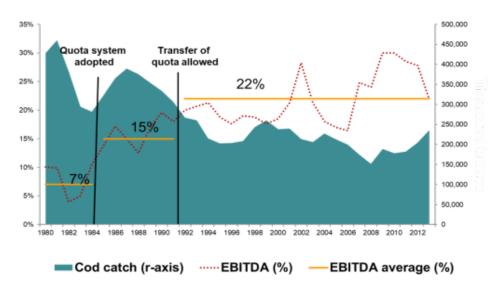
- Allocating Zone for Aquaculture (AZA) needs to be completed for aquaculture license delivery to resume.
- Environmental and social standards for aquaculture connected to the 'Blue Albania' label need to be developed.
   Building a national brand name for aquaculture in Albania is also crucial for higher standard of farmed fishes produced in Albania to compete on foreign markets.
- In the planning of the AZA, the Government may consider allocating specific zones exclusively for 'Blue Albania' aquaculture subject to higher environmental and social standards (that is, use of aquafeed produced with sustainable ingredients, no antibiotics, and low stocking density, among others).
- · Research and development should be targeted at improving technical and economic performance of fish farming.
- Research and development should be targeted at production of aquaculture inputs (seeds, feeds, and)
- Private sector investments should be stimulated through guarantee and financing mechanisms (other than subsidies) in alignment with the European Green Deal principles.

# (iii) Address the ineffective management of fisheries and reform it in line with the priorities of the Fisheries Strategy and EU accession

The economic contribution of the sector could increase if fisheries were managed in line with the Fisheries Strategy. Albania's seafood industry uses imported shrimps, anchovies, and cephalopods to make up for the shortage of domestic supply. Addressing the systematic problem of IUU fishing and overexploitation is a prerequisite for successful investment of the private sector in the fishing sector.

Figure 11: Icelandic fisheries management





Future economic and social benefits of fisheries can be generated with appropriate fisheries management, adequate control over access to fish resources, and fishing efforts in accordance with levels of fish resources. Figure 11<sup>84</sup> shows how effort reductions have transformed the Icelandic cod fishery. Profits have tripled over a 20-year period from 1982 to 2002. In Iceland, the cost of the fisheries management supported by the Government represents approximately 3 percent of landed catch value.<sup>85</sup> The costliest activity in fisheries

<sup>&</sup>lt;sup>84</sup> Refer to Hilmarsson, Haraldsson, and Thorarinsson 2019.

<sup>85</sup> Refer to Arnason, Cost of fisheries management.

management is usually enforcement.<sup>86</sup> Adjusting the level of fishing effort could mean removing fishing boats and fishers out of the fisheries sector. It is important to mitigate this social impact through a dedicated program to support fishers transitioning to another sector. Recreational fishing may offer some opportunities.

### **Priority actions**

- Strengthen enforcement capacity to effectively reduce IUU fishing. Inspectors need their own equipment separate from the FMO and need to be physically present at major marine and inland fishing sites on land and at sea.
- Establish properly staffed and skilled public sector administration with capacity to design policies and legislation in an inclusive and evidence-based manner and to implement, monitor, and enforce appropriate sector policies.
- Increase the awareness of stakeholders and public, including businesses and consumer associations and civil society, regarding the protection of the fishery resources against IUU fishing and of demographic and environmental hazards to the sector.

## (iv) Close the marine resource science gaps and increase the research and scientific support to the sector

Reliable and independent investigation capacities are important for the credibility of a 'Blue Albania' label. By boosting national scientific marine research capacity, Albania could advance the fisheries sector reform and growth. Sound scientific fisheries research provides the foundation for good inland waters and marine fisheries policies leading to long-term fishing benefits.

#### **Priority actions**

- A vision for the future of research in support of the 'Blue Albania' label could be developed and adopted. This includes the ability to verify and guide implementation of environmental and social standards. For the fisheries sector, this could include improved monitoring of fish stocks and marine ecosystems and possibly the development and monitoring of fisheries management plan for strategic species (shrimps, anchovies and cephalopods).
- A participatory organizational review of research capacity could be a first step toward an institutional reform.
- A capacity-building program should be developed and implemented. Attractiveness of research position should be strengthened to appeal to and keep talented researchers.

A possible new setup for research in Albania could include the establishment of a structure within the Ministry of Agriculture connected to a strengthened institution within the Agricultural University of Tirana. A well-organized and administered national research authority, within or under the MoARD, could act as the executive arm of Commission for Co-ordinating Scientific, Technological and Economic Research (CCSTER), capable of organizing, analyzing, accumulating, and preserving a database for all aquaculture and fisheries research in Albania. Part of the institutional set up, but independent, the Albania Aquaculture and Fisheries Laboratory (AFL) could become an institute again, with its own board of directors, executive director, budget, and scientific counsel. It could be placed directly under the Dean of the Agricultural University of Tirana to strengthen the status of the institute and facilitate association with all departments of the university.

### (v) Improve fishers' marketing power through an electronic auction platform

Fishermen's organizations should be able to compete in the market and gain strength, particularly in benefiting from economies of scale of operation. Currently, the marine capture sector is dominated by major buyers/processors and fishers tend to have suboptimal negotiation position. Artisanal fisheries in coastal,

<sup>&</sup>lt;sup>86</sup> Refer to Arnason reports an average fisheries management cost split in three countries: enforcement 59 percent, research 34 percent, and administration 7 percent.

lagoon, and inland water bodies have no collective marketing and limited sales options other than one or two key buyers.

An electronic auction platform would connect fishermen and fish buyers. It brings more transparency to the value chain. Usually, the fishermen pay a fee which is either fixed or based on the fish price or both. An electronic auction platform could be paired with an on-line ordering system, working with logistics companies and emerging value chain models like community-supported fisheries. This might actually add new viable value chains to the traditional export and catering ones and help fishing communities retain more value. In several high-income countries, the rise of electronic transactions was accelerated by COVID-19 and is expected to continue beyond the crisis.

### **Priority actions**

- Improve governance of fishers' organizations
  - Strengthened oversight of fishermen's organizations would be needed to allow the Fisheries Management Organizations (FMO) to take part in the electronic auction.
  - Current FMOs could be reorganized and grouped by homogenous interest groups: association of small boat owners and vertically integrated companies.
  - Readiness criteria and path for converting FMO into Producers Organizations (PO) should be defined, including instruments to ensure legal recognition and functioning of POs.
- Electronic auction
  - Only certified fish sold on the auction market; IUU fish excluded from the market.
  - Software and training of staff and fishers' organization to grade the fish, package it. and secure transport to the buyer.

### (vi) Take advantage of the local market to increase domestic fish consumption

Seafood consumption in Albania is relatively low by international standards. Seafood consumption averages 5.3kg per capita compared with a global average of 16.3kg per capita. Both domestic and export demand can be expected to increase with longer-term increases in consumer expectations and standard of living associated with EU accession. Increased fish consumption is known to bring multiple health benefits: Fish is a low-fat high-quality protein; filled with omega-3 fatty acids and vitamins such as D and B2 (riboflavin); and a great source of minerals such as iron, zinc, iodine, magnesium, and potassium.

#### **Priority actions**

- Promoting fish consumption through public programs (for example, school feeding).
- Fostering seafood cuisine and dietary culture. This is mainly the private sector's domain, yet public support is also crucial to address the lack of private incentives to provide such public goods.

### 6.3. Blue tourism

Albania has invaluable assets to spearhead the development of blue tourism and to attract more tourists to its coastal and marine recreational activities. Yachting and sailing constitute a significant part of marine-based tourism and is an area that Albania has the potential to develop. Sitting between two sailing and yachting hubs (Greece and Croatia), Albania has the potential to serve as an additional stop for those who sail between these two hubs while developing itself as a unique 'blue' destination. There are multiple opportunities to increase revenue from yachting and sailing; cruises; other types of boating activities (for example, kayaking, canoeing, white water rafting, and so on); scuba diving; and recreational fisheries. These can all be developed in a sustainable way, which will strengthen the link with other sectors in the economy such as agriculture and

transport. Yachting and sailing, if developed strategically, also have the potential to develop links with agriculture (through provisioning of food for the yachts and sailboats and culinary tourism) and with inland tourism (as people often enjoy getting off their yachts to experience activities on land).

The purpose of strengthening blue tourism in Albania is to use the country's marine and coastal assets to move the country's tourism beyond 'sun, sea, and sand'. According to the World Economic Forum's 2019 Travel and Tourism Competitiveness report, Albania's tourism industry ranks 86 out of 140 countries reviewed. While the country has moved up 12 positions compared to the previous year, there is clearly room for improvement. Albania could better promote its natural and cultural resources. The development and promotion of a variety of tourism products and outdoors activities based on its natural resources would help raise tourist numbers further.

UNWTO anticipates the heightened vulnerability of the tourism sector in the Mediterranean along with a slow recovery from the COVID19 pandemic. Targeted support to the sector, focused on small and medium size tourism operators, would help to protect multiple jobs given the high number of workers involved in this industry. In Greece, more than one-third of the workforce is employed by the tourism sector, followed by Cyprus with over 20%. In Albania, mass tourism (sea, sun, and sand) could decline in favor of smaller group trips and cultural and nature-based tourism. Therefore, analyzing the medium- and longer-term trends in the face of this global challenge, and planning safer and resilient investment, should be an imminent priority.

# (i) Address regulatory and enforcement aspects in a holistic manner and create an enabling framework for private sector investment

The main issues hampering the growth of the blue tourism sector include weak product development, branding, and marketing. Tourism services and skills in the sector are underdeveloped while the tourism sector lacks robust service standards, and businesses don't pay enough attention to environmental issues. With some exceptions, there is a lack of quality infrastructure as well as a lack of preservation of existing assets due to the weak institutional capacity of both the public and private sectors. In this context, key regulatory barriers, unclear land ownership, and uncertainty in tenure rights could dissuade investors. While the investments in marina infrastructure may be led by the private sector, the public sector's role should be to create a framework for Albania's marina industry that will steer encourage private uptake and avoid potential mistakes. Sector aspirations to offer unique sailing destinations need to be backed by investment promotion and attractive policies and incentives for public-private partnerships. These issues need to be addressed if Albania is to capture more higher-spending tourists and to ensure an environmentally sustainable, culturally acceptable, and economically viable growth.

### **Priority actions**

- Tackle outstanding legislative issues to ensure seamless cruising operations between Albania and neighboring coastal states.
- Develop the legal framework in order to establish a 'boat registry'.
- Streamline navigation immigration procedures so they are similar to those of other EU member states.
- Rigorously apply the Strategic Environmental Assessment for coastal developments, in order to assess the sustainability of future expansion in the tourism and nautical infrastructure.
- Prevent the accelerated rate of coastal and marine environment degradation through strict enforcement of protected
  area's rules and take preventive measures to avoid the risk of diminishing the attractiveness of Albania as a growing
  nature-oriented market segment.
- Address marine litter and poor waste management practice in the coastal areas in order to prevent destruction of valuable landscapes.
- Use a combination of policies and economic instruments to encourage the private sector to take part in addressing
  the issue of marine litter. Attracting private sector investment to the waste management industry, whether as standalone investors or as a part of public-private partnerships, could be an important part of the waste management
  solutions.
- Enforce land use planning regulations in order to prevent illegal construction practices and to improve the operating environment for investment and businesses.

### (ii) Foster the development of marine (or 'blue') clusters to boost Albania's nautical tourism

The maritime cluster model would connect tourism markets, yachtsmen, fishermen, food producers, harbor managers, and local business associations through a commercial network and logistics platform. For example, the coastline between Vlora and Saranda offers at least five different types of economic opportunities that could be tapped by the industry: (a) visits to archaeological sites, (b) eno-gastronomic tours and activities, (c) diving, (d) hiking trails, and (e) educational awareness trips.

### **Priority actions**

- Embark on a midterm program to kick-start sailing holiday packages in the south to build up visitor confidence and gain valuable in-house experience in operational requirements.
- · Promote Albania's unique sailing package by organizing proper marketing, linking it with natural and cultural assets.
- Focus on building marine/nautical tourism offering and product, linking it to inland tourism as well to generate and build demand so that before a growth ceiling is reached, the infrastructure is already in place to accommodate further growth.
- Initiate implementation of agricultural (eno-gastronomic activities) and cultural (museums, archaeological sites, and nature trails) projects along the southern route and market them to nautical visitors through appropriate awareness and targeted advertising campaigns.

# (iii) Tap into growth opportunities of the nautical sector by improving critical infrastructure and enablers for private sector participation

### **Priority actions**

- Prepare a phased nautical sector road map to guide business planning and investment decisions for the next 10
  years based on consolidating projects already in the pipeline to ensure a solid foundation before attempting
  expansion further or accepting more unsolicited offers of investment in marine developments. The following
  considerations would be critical to the nautical tourism value position of Albania and competitive access to tourism
  markets.
- Pursue the completion of all-weather marinas in the pipeline, where necessary, with supporting infrastructure (ports of Saranda and Vlora under rehabilitation/construction to provide a further 1,210 all-weather berths).
- Secure an additional 210 seasonal moorings for use in the peak summer months.
- Monitor the status of the two privately funded residential marinas nearing completion (best case scenario).
- Vet unsolicited development offers more rigorously, either by filtering them through a Strategic Environment
  Assessment or an oversight committee of experts or placing a moratorium of about five years, extendable as
  necessary to a longer period. All investment proposals arising from the public and private sector should be subject to
  robust economic and financial appraisal.

## 6.4. Protection of marine environment from plastic pollution

Albania's ambition is to address the challenges of legacy and flow pollution in the coastal areas. A clean and healthy marine environment will remain a lifeline for Albania's marine-based sectors. Marine litter can be prevented through improved and increased recycling, avoidance of single-use products. Other helpful steps are the use of alternatives to plastic and eco-design (for example, plastic products designed to prevent littering, avoiding intentional use of microplastics in products) and through intensive education and awareness actions and campaigns.

Through harmonization with the EU regulations, the national policy and regulatory framework for waste management has improved. However, the remaining challenges can't be underestimated. These include gaps in SWM services, cost recovery, affordability and coverage, level of recycling, and understudied impacts of marine litter. Shifting current solid waste investment priorities from the lower part of the waste hierarchy pyramid to investments in prevention could help realize Albania's ambition of becoming a 'plastic-free country'.

Marine plastic litter in Albania cannot be resolved by one policy or measure alone. It will take well-coordinated and sequenced actions to curb plastic leakage. A whole-system approach should divert plastic waste from landfills, recognizing its economic value as a material that can be reused. While it is important to acknowledge flaws in the waste management system, the critical issue is to prevent the generation of plastic waste through investments in upstream solutions. Combatting plastic pollution and marine litter require three groups of actionable policies:

- Prevent/reduce marine litter at source (upstream action).
- Reuse. Cooperate with and provide support to the private sector to come up with eco-business solutions to prevent plastic leakage and increase recycling (upstream/downstream action).
- Clean up (downstream actions) marine litter (for example, 'fish for litter' initiatives involving fisherman to collect and deliver plastic waste items to the port reception facilities, when litter is already in the sea.

The current COVID-19 urgency and the measures it needs to take to protect against the pandemic health impacts may reverse Albania's single use reduction effort. The situation needs further studies on the impact and opportunities, enhanced monitoring of generation of nonrecyclable waste, heightened attention to

potential health risks from hazardous medical waste, and government support for cleanup operations to protect the most vulnerable in the recycling value chain.

Protecting and investing in the health and resilience of blue natural assets could yield significant Blue Economy returns. To realize these opportunities, the following actions are recommended.

### (i) Close existing policy and regulatory gaps related to marine plastic pollution

### **Priority actions**

- Make provisions for addressing the plastic waste/marine plastic litter in the National Waste Strategy and regional/local waste plans.
- Further harmonize the Albanian legislation with Directive (EU) 2019/904 on reduction of the impact of certain plastic products on the environment; the MSFD and MSP Directive; and the Decision (EU) 2018/896 of June 19, 2018, on the methodology for the calculation of the annual consumption of lightweight plastic carrier bags.
- Review and adjust current fiscal incentives on lightweight plastic bags for reducing plastic use; earmark the revenue from environmental plastic taxes and the fees for plastic carrier bags to contribute to targeted programs on waste management.
- Amend Law 8905/2002 'On protection of marine environment from damage and pollution' to ban fishing gear being
  discarded into the sea. Consider joining the London Convention 1972 on Prevention of Marine Pollution by Dumping
  of Wastes and Other Matter and Protocol, which will support introducing country measures for protection of the
  marine environment from plastic pollution in a coastal country such as Albania.

# (ii) Strengthen implementation of integrated waste management systems to prevent plastic leakage

#### **Priority actions**

- Address institutional capacity gaps for integrated waste management at the central and municipal level including through adequate financial resources.
- Strengthen waste monitoring and reporting as per legal provisions.
- Establish a system to monitor plastics in riverbanks/beds, beaches, and coastal waters.
- Mobilize financing to properly close old dumps and 199 illegal dumpsites, with priority for those located in/near the coast or upstream of coastal rivers.
- Consider public investment in waste management infrastructure.

### (iii) Lay the foundations for the transition to a circular economy to prevent plastic pollution

### **Priority actions**

- Apply a policy mix of regulations and economic instruments, such as EPRs, tax deductions, and adjusted fee levels to limit excessive use of plastics and divert plastic waste from natural environment and landfills.
- Introduce upstream measures to prevent the generation of plastic waste and to keep valuable materials in the economy, for example, through product design, the substitution or reuse of materials, and via efficiency measures.
- Align capital investment plans with policies to support separation at source and bridge the recycling infrastructure gaps.
- Analyze the plastic value chain (e.g. through a national survey) and work with stakeholders to promote value chain solutions (production, consumption, management, regeneration) to increase recycling, prevent plastic waste generation, and sustain/increase jobs and livelihoods.
- Provide incentives for commercial grocery chains to introduce a deposit refund scheme for plastic packaging (for example, EPR) and the use of plastic alternatives.
- Increase public awareness of Albania's branding as a 'Blue Albania' destination to prevent marine litter; involve communities and the private sector to prevent leakage.
- Implement 'fish for litter' cleanup schemes in major coastal ports.

### 6.5. Conclusion

Advancing the Blue Economy will require investment in infrastructure, conservation, research and development, and institutional and human capacity development, as well as information sharing and knowledge building. There are various sources to finance Albania's investment needs in order to set the course towards a Blue Economy and address the pressure points discussed earlier in this report.

The economic value of the interventions discussed in this report can be analyzed further to measure socioeconomic benefits and costs. Given the current data limitations, it is difficult to quantify in detail the investment needs of each of the sectors discussed.

Investment in the Blue Economy may be constrained by several country-specific challenges, particularly related to public financial resources, restricted fiscal space, and the level of public debt. Given the significance of the coastal economy, the Government may consider allocating a larger share of its budget to Blue Economy initiatives that aim to strengthen the marine-based sector performance and to ensure that Albania remains attractive as a 'clean and green' destination in the Mediterranean. Given the heightened risks of natural disasters and climate change, there might be an opportunity to reassess the opportunity cost of enhancing the resilience of the coastline. Developing a credible Blue Economy Program and Action Plan could potentially enable Albania to leverage more financing for the Blue Economy development and tap in image gains as a regional leader and a dedicated partner for implementation of the Action Plan to the European Union Strategy for the Adriatic and Ionian Region. Capacity building for planning sectoral investments and for developing high-quality project proposals, backed by sound research, could create new opportunities to bridge the financing gaps for high-priority Blue Economy projects. In addition to public and commercial financing, there are multiple financial instruments—blue/green bonds, contingent debt instruments, insurance, and debt-foradaptation swaps—that can help leverage investment to pool public and private sector resources and maximize the financial, social, and environmental returns. Through exploring partnerships for augmenting the leveraging power of public resources via innovative "green" financing and partnerships with private sector, Albania's marine and coastal space could be the engine for inclusive and sustainable growth.

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