

4BIZ NEWSLETTER

Boosting the Blue Economy
in the Black Sea Region



4BIZ PROJECT COUNTRY REPORTS



Ukrainian
Maritime Cluster



Co-funded by
the European Union

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WELCOME MESSAGE



Dear Readers,

It is a great pleasure for us to share with you the 2nd Newsletter of the **4BIZ Project** dedicated to the "4 BIZ Country Reports".

Based on the common effort of the experts from the countries of our region, two reference documents for the promotion of Blue Growth Initiative in the Black Sea Region were issued in 2019 as *Strategic Research & Innovation Agenda for Blue Growth in the Black Sea Region* and the *Common Maritime Agenda*. In the two documents, the low performance of the business sector, particularly SMEs and start-ups, is highlighted in the detailed analysis of the poor development of the Blue Economy in the Black Sea Region.

In this respect, the 4BIZ Project Consortium, which includes 9 project partners and 17 associated partners from Romania, Bulgaria, France, Greece, Türkiye, Georgia and Ukraine, together with their stakeholders, plan to develop a unique set of activities to support SMEs and start-ups specialized on Fisheries and Aquaculture, Coastal and

Maritime tourism and Maritime transport that is covering all the signatory states of the CMA.

In the last month, we have reached an important milestone that consisted on the accomplishment of the mapping process of the current status of the Blue Business sectors and the drafting of the Country Reports regarding the Blue Business sectors in Romania, Bulgaria, Türkiye, Georgia and Ukraine.

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According to the workplan of the 4BIZ project, the Country Reports have been developed by the partners from the respective countries following a methodology that consisted on the following steps: overview analysis of the Blue Business in the field of Fisheries and Aquaculture, Coastal and Maritime Tourism and Maritime Transport while focusing on a selected region of each country, establishment of a statistical assessment of target actors from each region, online and in-person interviews, Data processing, synthesis of the results and drafting of the Country Reports.

At present, we are distributing the Country Reports to different authorities at national level and on March 17th, 2023, we are organizing the 4BIZ Workshop for the Analysis of the final Country Reports. This Special Newsletter edition will provide an overview of the current situation in each mentioned country, important positive aspects, success stories and lessons learned.

During your lecture, we hope that you will envisage this newsletter as a springboard for your ideas about how we can creatively join our efforts for boosting innovation, digitalisation and investment in the Black Sea Blue Economy!

Please do not hesitate to send us your comments, suggestions and your remarks on the above mentioned topics.

Warmly,
Prof. Dr. Eden MAMUT
BSUN Secretary General and 4BIZ Project Coordinator

BULGARIA COUNTRY REPORT, WHAT WAS IT ABOUT?

CURRENT SITUATION IN BULGARIA IN THE FIELD OF FISHERIES AND AQUACULTURE, COASTAL AND MARITIME TOURISM AND MARITIME TRANSPORT.

According to the [EU Blue Economy Report 2022](#), Bulgarian Blue Economy (established sectors) employs 93 330 people and generates around €1.03 billion in GVA.

The contribution of the Blue Economy to the national economy in terms of jobs is 3.2 % and in GVA 1.9 %, which is a significant decrease compared to 2009 (9.2 % and 4.7 % respectively).

Coastal tourism is by far the largest contributor to Bulgaria's Blue Economy.

The sector of tourism was among the hardest hit by the COVID19 pandemic due to its dependence on international travel.

Bulgaria expects inbound tourism to achieve 2019 levels by 2025 but the total contribution of tourism to GDP is expected to take longer to recover, returning to pre-pandemic levels by 2025-27. Main trends for the sector are related to digitalisation of the businesses and introducing sustainable alternative forms of tourism.

The development of **Maritime transport** is largely dependent on the construction and condition of the port infrastructure. From the analysis of the water access conditions in the seaports, it was found that the parameters of the port water areas and the depths in front of the quays of most seaports do not always correspond to the trends in the development of the fleet and are a limiting factor for the size of the ships that can visit the ports.

Further challenges are related to the green transition goals to cut emissions from maritime transport. New opportunities exist for the development of short sea shipping and multimodal transport.

Fish and sea food production in Bulgaria stem primarily from capture fisheries in the Black Sea, and fresh water and marine aquaculture.

Limiting factors for the development of **fisheries and aquaculture** along the Bulgarian Black Sea coast include: there are not enough areas, that are well protected from waves, such as estuaries, bays strongly cut into the land, etc.; the temperature regime of the Black Sea waters in an annual aspect is also not favourable. These factors negatively affect the production value of marine organisms.

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IMPORTANT POSITIVE ASPECTS IN OUR RESEARCH

While investigating on the current trends of the Blue economy of Bulgaria, several encouraging facts were noted by the researchers despite the unstable economic situation left after the abatement of COVID-19.

There is a positive trend during the last year in growing the activity in maritime transport, aiming at normalizing the container flow as before the pandemic.

In tourism, the recovery in the sector is rapid, with significant increase of domestic sector, with domestic tourists reached a record 4.1 million in 2019. Despite a significant decline in 2020, domestic tourists recovered in 2021, with domestic nights in all means of accommodation reaching 9.6 million, only 0.5% below 2019 levels.

Fisheries and aquaculture: Black Sea catches have remained stable over the last years, while production from aquaculture farms has grown steadily, boosting the number of production centers up to 750 in 2019, of which 25 are Black sea aquaculture farms.

The sectors of the Blue economy can benefit from well-developed funding mechanisms on EU and national level, dedicated to the promotion of blue business. Marine and maritime-related EU-funded projects can be found across various policy areas and are financed by various EU funds. Especially the European Maritime, Fisheries and Aquaculture Fund, The INTERREG IV B NEXT Black Sea Programme, and the Black Sea Basin ENI CBC provide financial support for actions in the Black Sea region.

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The SME survey performed under this research revealed a positive attitude of most of the companies towards developing their business in the sectors of Blue economy, and not only in their traditional sector, but also showing a high interest in developing new activities, for example, in the field of renewable energy sources.

SUCCESS STORIES WHICH WOULD WE LIKE TO SHARE

The case study represents success story of collaboration between local stakeholders for the development of projects of significant importance to the three sectors – maritime transport, fisheries and aquaculture and tourism.

Municipality of Burgas has implemented several projects for improving the infrastructure of fishery village “Chengene-Skele” and popularizing it as a tourist destination. As a result of the first project, financed under OP “Regions in growth”, a Cultural-Historical Complex “Chengene Skele” is built where trainings, exhibitions and demonstrations of fishing practices will be held in order to develop maritime culture, attract tourists, create jobs for the local fishing community and more.



Solumar is a Bulgarian company, specialised in the production of gas and air filtering solutions. The new technology will make it possible for ship-owners and port operators to keep up to the EU requirements and comply with the Agenda 2050 in an efficient and sustainable way – with low acquisition and operational costs.

[Learn more](#)



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THE LESSONS LEARNED DURING THE IMPLEMENTATION OF THE RESEARCH IN OUR COUNTRY ARE:

1. Was revealed that SMEs in the blue economy sectors need adequate support to facilitate their development and to deploy the unused potential of the marine resources. This support involves a strong cooperation between academia, research institutions and companies to unlock existing innovation capabilities.
2. Another lesson learnt is the need to raise awareness and promote blue career opportunities among young people to fill the gap in qualified workforce and new skills in the Blue economy. Companies need to expand their network of business contacts on regional and international levels in order to exchange best practices and to create fruitful business partnerships.

WHAT WE SEE TO EFFECTIVELY ENSURE THE NEXT STEPS OF THIS PROJECT:

The collaboration framework, built within 4BIZ project, will bring together blue economy stakeholders in the Black Sea region to address local capacity building needs to boost innovation, digitalisation and investment in the Black Sea Blue Economy.

Successful cooperation of project partners on current issues existing in the Black Sea region will be complemented with a deep-dive in other Sea basins regional experiences to identify more good practices and success stories.

[Learn more](#)

GEORGIA COUNTRY REPORT, WHAT WAS IT ABOUT?

CURRENT SITUATION IN GEORGIA IN THE FIELD OF FISHERIES AND AQUACULTURE, COASTAL AND MARITIME TOURISM AND MARITIME TRANSPORT

Field of Fisheries and Aquaculture, Coastal and Maritime Tourism and Maritime Transport in Georgia is in process of reformation and leaves space for further development. The port system in Georgia undergoes significant expansion, namely Poti port expands its off-dock container storage capacity and a new breakwater. There is lack of ship repair facilities means that domestic needs are often served in neighbouring countries, notably Turkey and Bulgaria; and there is a growing recognition from both government and industry of the need to develop adequate shipyards and repair facilities in Georgia through foreign investment. The fishing fleet is small in size and old, and currently under restructuring. The Government has recently introduced legislation for the regulation of aquaculture in the territorial waters of Georgia. However, a development strategy for aquaculture, which will support the growth of this sector in Georgia is not yet adopted. Despite the opportunities, the sea is not actively used for cruise tourism in Batumi and Georgia.



IMPORTANT POSITIVE ASPECTS DURING RESEARCH

- Significant progress was achieved in field of regulatory framework. An important national-international agreement, EU-Georgia Association Agreement, which contains strategic steps for management of marine environment;
- EU funded project in field of Fisheries, Aquaculture and Maritime Transport play significant role for development of industry;
- There are successful companies with good potential for growth.

SUCCESS STORIES

Since December 2019, as a result of the joint work of the Ministry of Economy and Sustainable Development, the Maritime Transport Agency and the "Enterprise Georgia" agency, the fishing direction was added to the "Enterprise Georgia" program. In 2020-2021, within the framework of the industrial program, 19 projects (13 ships) were financed; 13 fishing vessels were purchased, of which 6 are newly built vessels and 7 are second-hand vessels; the amount of the loan is 57,144,992 GEL (nearly 2228290\$), and the total amount of investment is 66,029,898.60 GEL (nearly 25747447\$). The co-financing amount of "Enterprise Georgia" agency is 18,317,952 GEL (nearly 7142832\$). The number of jobs created by the investment is 312. The program simultaneously provides up to 5 million GEL (nearly 1949681\$) with a credit-guarantee mechanism (90% guarantee) and a bank loan refinancing rate plus the possibility of 3% co-financing. Currently fishing companies are operating in Georgia. They are currently the largest license holders of fishing quotas. They have fishing vessels and are also renting other vessels if



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needed. They also process fish processing facilities. Those fishing companies are preparing fish flour and small quantities of fish oil for export and thanks to the DCFTA with EU, they are also exporting it to EU. They mainly employ local staff in the fishing process and they have ensured that at least 30% of fishermen employed are Georgian citizens.

Azimut yachts (Ramses Georgia Yachting Platform), which has sold a record number of recreational yachts during the Covid 19 pandemic, is thriving

LESSONS LEARNED DURING THE IMPLEMENTATION OF THE RESEARCH IN GEORGIA

- Legislation on aquaculture which is just now adopted is the first step to the way of development of this sector in Georgia. Aquaculture has big potential and can lead to successful business projects with variety employment opportunities and impact to country's economic growth.
- The small scale yachting and cruising is very perspective industry for Georgia. Infrastructure, such as berths for yachts in Georgian need to be developed on first stage.
- A considerable lack of human resources and education/training in terms of maritime profession in Georgia. This is especially true for port based professions such as stevedores, dockers and others and also ship and logistics agents, fishermen and etc.

VITAL NEEDS TO EFFECTIVELY ENSURE THE NEXT STEPS OF THIS PROJECT

- Georgia needs to raise awareness on Blue Economy both on industry and Governmental levels. There is need of Government policy in terms of blue economy and maritime field in general.
- In terms environmental improvement, Georgia undertakes, with a limited number of scientific staff and policy officers only, extensive efforts to assess its marine environment. Several institutions, like the National Environmental Agency's (NEA) Environmental Pollution Monitoring and Fisheries and Black Sea Monitoring Departments, are of utmost importance for coastal and marine monitoring programmes and activities. The Ministry of Economy and Sustainable Development assesses parameters of economic activities that depend on the coastal and marine environment. Next to these state departments and institutions, some universities conduct marine and coastal research.

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ROMANIA COUNTRY REPORT, WHAT WAS IT ABOUT?

CURRENT SITUATION IN ROMANIA IN THE FIELD OF FISHERIES AND AQUACULTURE, COASTAL AND MARITIME TOURISM AND MARITIME TRANSPORT.

In Romania **Aquaculture** has been carried out, in recent years, exclusively in fresh waters (waters continental/inland) and is technologically characterized by two directions: extensive and semi-intensive growth of cyprinids in polyculture, in earth basins(lakes, ponds and lakes); intensive growth of salmonids. According to the records of the National Agency for Fisheries and Aquaculture (NAFA), in Romania there is an area of approx. 135,000 ha of landscaping freshwater fish that correspond to a number of approx. 1,000 fish farms, located in ownership/administration of NAFA, local/county councils and the National Administration of the Romanian Waters.



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Located at the crossroads of Central, Eastern, and Southeastern Europe, Romania has an area of 238,397 km². Romania benefits from all types of aquatic units: rivers, lakes, underground waters, marine waters.

Maritime accessibility, from an international **tourism** perspective, is possible mainly by Constanța Port. Constanța Port is the main seaport of Romania, strategically located to supply goods to Central and Eastern Europe, being also the largest port of containers from the Black Sea, also provided with unloading berths for goods, but also with a modern passenger terminal.



The ports are also used from a tourist perspective interiors such as Brăila, Tulcea etc. During the cruise season (April-November), 129 ships pass through Tulcea cruise ships, via Sulina 21 cruise ships, via Hârșova 7 cruise ships, via Cernavodă 10 cruise ships, through Fetești 26 cruise ships, through the commune of Sfântu Gheorghe 11 cruise ships and through Brăila 6 cruise ships.

SUCCESS STORIES WHICH WOULD WE LIKE TO SHARE

Anghila Impex SRL is a commercial company that, in addition to the main activity, also carries out, according to the acts of operation, activities with NACE 0322 - Freshwater aquaculture and NACE 1020 - Processing and preserving of fish, crustaceans and molluscs. The benefits of this technology are high fish growth densities and producing products at optimal marketing sizes, which leads to high yields per small area units, and also the provision of healthy and safe products.

Due to this project, Anghila Impex SRL **created 6 new jobs** (1 electromechanical technician and 5 fish farmers). At the same time, the company also owns a fish farm in the same area for the intensive breeding of trout and sturgeon in a recirculating system, which provides a considerable production of trout and sturgeon.

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Marfishing SRL, starting with 2014, capitalized on the ponds resulting from the exploitation of ballast from the perimeter of the former riverbed and terrace of the Siret River and set up, with the help of European funds, a mixed farm for cyprinids and acipenseridae.

Based on the success of the business started in 2014, Marfishing SRL continued the investments from own funds but also from European funds accessed within the Operational Programme for Fisheries and Maritime Affairs 2014-2020 and diversified the activities of the fish farm, setting up accommodation units (41 bungalows, 10 houseboats and 26 yurt tents), public catering units (1 fishery restaurant with a capacity of 78 people) and leisure spaces (adventure park, swimming pool, etc.), thus developing the complex [Zaga Zaga Land](#). Also, for tourists' rides and for recreational fishing, 20 boats (10 electrically-powered boats and 10 boats with oars) were purchased.



The Research - Development Institute for Aquatic Ecology, Fisheries and Aquaculture Galați (ICDEAPA) carries out research, development and technology transfer activities in the fields of aquaculture, freshwater fishing, etc. The institution purchased, within the consulting center set up with European funds allocated through the Operational Programme for Fisheries and Maritime Affairs 2014-2020, a diagnostic system for aquaculture, unique in Romania, which provides online data from aquatic environments, wherever there is telephone coverage.

The diagnostic system allows the collection of data from aquatic environments with the help of sensors, their transmission to the consulting center and the processing of information through software, so that



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the institute's specialists to be able to issue solutions for rapid corrections on fish production or vegetation, corrections that can be made in real time.

ARE THERE ANY LESSONS LEARNED DURING THE IMPLEMENTATION OF THE RESEARCH IN YOUR COUNTRY?

Our lessons which we learned during the implementation of the research in Romania, namely urgency:

- ensuring scientifically based management of living aquatic resources,
 - reducing the pressure on resources exerted by fishing,
 - practicing sustainable aquaculture and preserving biodiversity,
 - development and diversification of environmentally friendly and innovative technologies for aquaculture to increase production and obtain products with high biological value,
 - diversification of aquaculture production by introducing new,
 - economically valuable species,
 - developing traditional aquaculture,
 - encouraging producers to apply environmentally friendly methods,
 - ensuring traceability throughout the value chain, including the introduction of environmental, health, and hygiene standards.
-

WHAT VITAL NEEDS DO YOU SEE TO EFFECTIVELY ENSURE THE NEXT STEPS OF THIS PROJECT?

The vital needs to ensure the next steps of this project it would be:

- good visibility of the project by promoting in all ways, and the awareness of the importance of Blue Economy, among the population, the stakeholders and not the least, the potential investors;
- identifying and providing the necessary advisory in order to access the financial support from non-reimbursable funds, to accelerate business, such as aquaculture development, to improve navigability on the Danube and to modernize the infrastructures ports, for the competitiveness, and for the sustainability of the Blue Economy sector;
- bringing to the attention of those interested examples of good practice and success stories, as a model to follow.

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TÜRKIYE COUNTRY REPORT, WHAT WAS IT ABOUT?

THE CURRENT SITUATION IN TÜRKIYE IN THE FIELD OF FISHERIES AND AQUACULTURE, COASTAL AND MARITIME TOURISM AND MARITIME TRANSPORT

Fisheries and Aquaculture: In the last 30 years, the aquaculture sector has grown by 10-15% and ranked 3rd in the world after China and India. The sector has been included in the support program since 2003. There are 2,127 aquaculture facilities in country and 69% of aquaculture production takes place in the sea. The highest production is made in Muğla province.



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Coastal and Maritime Tourism: Türkiye has 8,333 km of coastline and coastal tourism constitutes 20% of tourism income. The proximity of natural, historical and cultural resources to the coasts, the existence of world-famous diving areas and natural coves, many blue flag beaches and the mild climate make the country strong. However, the pressure of construction in coastal areas, global warming and environmental problems threaten the future of coastal tourism.

Maritime Transport: There are 197 shore facilities in Türkiye and 45 percent of these facilities are located in the Marmara Region. According to the amount of cargo handled, the ports of the Marmara Region come first, followed by the Mediterranean Region. The Turkish ports handled a total of 496 million metric tons of cargo in 2020.

IMPORTANT POSITIVE ASPECTS IN OUR RESEARCH

The research process has acted as an important catalyst to update the data on the strengths and weaknesses, explore potential threats, opportunities, gaps and needs in the sectors and provide more specific suggestions for the sectors' development. It was again understood that discussing the needs and problem areas with the stakeholders in the sector face to face is an important research method, and such interviews helped to establish a closer relationship with the stakeholders. For example, it has been noticed that the Black Sea Salmon, which is an endemic species specific to the Black Sea, has a high economic potential due to the high demand by consumers and therefore it is an area that should be given extra attention. Additionally, it has also been revealed that there are significant success stories in the shipbuilding sectors, which have a high development potential for the region.

SUCCESS STORIES WHICH WOULD WE LIKE TO SHARE

Türkiye has a major development in aquaculture production made from inland and marine waters between the years 2017-2021. The production showing a significant performance, increased from approx. 277,000 tons to approx. 472,000 tons as the increase rate has been 71%. In aquaculture sector mainly trout, sea bass and sea bream fish species are farmed. For the last 5 years the fastest and the largest growing sector in Eastern Black Sea Region is aquaculture. The main farmed fish in our region is Black Sea Salmon named as Turkish Salmon. According to the data of Eastern Black Sea Exporters Association, Turkish Salmon export of Eastern Black Sea Region went up to approx. 129 million USD from 15 million USD between the years 2018-2022. Turkish Salmon export increased more than 8 times within this period. The export value of Turkish Salmon in 2022 comprises almost 91% of the total fisheries export of Eastern Black Sea Region which implies Turkish Salmon is the most substantial export item of the Region in fisheries sector.

OMEGA 61 (61 Su Ürünleri Tic. Ltd. Şti) company has been established in 2010 and started its operation with the aquaculture of Black Sea Salmon and sea bass. The company's salmon and sea bass aquaculture production was approx. 1,000 ton in 2018 and within 5 years the production has enhanced to approx. 5,000 ton (in 2022) by its capacity increasement investments. The company has started export in 2021 with the value of 156,000 USD and it boomed its export to approx. 5 million USD in 2022. The turnover of the company was approx. 5.6 million USD in 2018 and it rised to 21.5 million USD by the end of 2022.



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Mimarine Gemi İnş. Mimarlık ve Mühendislik Hiz. Ltd. Şti. (Mimarine Shipyard Architecture and Engineering Services LLC) has been the best developed company in Trabzon and Black Sea Region between the years 2019-2022 in the shipbuilding industry in terms of production capacity, export and product diversification. The company which has produced a wide variety of boats and ships since its establishment (October 2018). The company has constructed 35 ships since 2018. 11 of them were exported to Mauritania, Morocco, Georgia, Norway and 25 of them were built for domestic market.



In 2021 and 2022 it started to build passenger ships, tug boats and motoryachts. In 2018, the company only produced one fishing vessel and employed 11 people. The total turnover was just 189,000 USD in 2018. Within 2021-2022 years the employment rised to 170 people. The total production increased to 35 ships; 31 of them fishing vessels, 2 of them tug boats and 2 of them were passenger boats. Out of 35 ships, 11 of them were exported.

The total export of the company enhanced to 14 million USD and the turnover increased to 16,5 million USD in 2021-2022. One of the company partners were awarded as the best woman exporter in the sector of ship construction in Eastern Black Sea Region by Eastern Black Sea Exporters Union in 2022. The company is currently the largest exporter of fishing vessels in the entire Black Sea Region of Türkiye.

THE LESSONS LEARNED DURING THE IMPLEMENTATION OF THE RESEARCH IN OUR COUNTRY ARE:

One of the subjects learned during the implementation of the research is that many enterprises in the sector are very willing to share information, aware of the concept and principles of the Blue Economy and want to grow in this area. However, few businesses have long-term goals and strategies. It has been revealed that businesses have difficulties in transportation infrastructure, marketing and cooperation with other companies. In this respect, the survey is a good data collection tool in terms of revealing the trends, business profile and needs of enterprises on blue growth context.

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WHAT WE SEE TO EFFECTIVELY ENSURE THE NEXT STEPS OF THIS PROJECT:

Businesses in the region are small and medium sized enterprises operating in the blue economy sector in the basin need to be supported to enable them to achieve green and digital transformation. In this direction, training and consultancy services should be provided on resource efficiency, green transformation, digitalization, R&D and innovation. Their access to finance should be facilitated.

[Learn more](#)



UKRAINE COUNTRY REPORT, WHAT WAS IT ABOUT?

THE CURRENT SITUATION IN UKRAINE IN THE FIELD OF FISHERIES AND AQUACULTURE, COASTAL AND MARITIME TOURISM AND MARITIME TRANSPORT

Ukraine has favorable conditions for the development of Blue Economy and maritime activities in all the fields including Fisheries and Aquaculture, Coastal and Maritime Tourism and Maritime Transport.

Aquaculture opens wide prospects for the development of fishery complex in the Odesa and Mykolaiv oblasts. Their coastal sea waters are favourable ecosystems for the industrial cultivation of a lot of species of marine fish that is confirmed by the growing number of business entities over the past 5 years.

The Black Sea coast of Ukraine has also a powerful recreational potential based on the long coastline, unique ecosystem and natural healing resources. Despite these the maritime tourism is characterized by a limited number of tourist products, a small number of service providers, and their rather high cost. There is a lack of creative solutions regarding the types and methods of recreation. Moreover, a wide range of land and marine-based military activities are placing Ukraine's marine ecosystems at risk, while fragile and ecologically sensitive coastal habitats have been directly affected by the fighting. So, it makes it more important to develop the solution for support and development of the Maritime Tourism.

As for **the Maritime Transport**, the peculiarity of pre-war Ukraine is the dynamic development of ship repair and ship conversion much more than shipbuilding presented basically by engineering field. The economy of Ukraine depends on the efficient functioning of ports. In recent years, the volume of cargo processing in seaports has a tendency to increase. Despite this ports located in Odesa and Mykolaiv regions are losing competitive positions in the controlled market segment in the Black Sea basin. The production potential of some is used up to 50 percent due to prolonged hostilities provoked by Russian military aggression against Ukraine.

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IMPORTANT POSITIVE ASPECTS IN OUR RESEARCH

- The reality of modern shipbuilding is the flourishing of engineering. More than 12 design bureaus work in Mykolaiv and Odesa. Only one is part of the Ukroboronprom concern. The rest is privately owned and steadily increases the volume of services provided to foreign and domestic customers. The lion's share of operating enterprises represents a new generation of investors, management and engineers, which has a unique way of thinking and a corresponding way of acting.
- The Black Sea coast has a powerful recreational potential. The therapeutic profile of resorts is characterized by the presence of natural healing resources. And the most promising directions of tourism development are ecological, rural (green), historical and cultural, industrial, youth, active types of tourism (rafting, kiting, jumping, hiking tourism, sports orientation).
- Aquafarming is one of the promising and economically profitable areas of agribusiness development for SMEs. The coastal sea waters are favourable ecosystems for the industrial cultivation of a lot of species of marine fish that is confirmed by the growing number of business entities over the past 5 years. Moreover, the number of new innovative projects is increasing in the field of Fisheries and Aquaculture.

SUCCESS STORIES WHICH WOULD WE LIKE TO SHARE

"Maritime Competence Center Mykolaiv" is an initiative of Ukrainian Maritime Cluster (UMC) to develop innovative platform for support a sustainable development of maritime economy in South of Ukraine. Preceding phases such as the training center "Novel Ship Engineering" and virtual digital training center "Shipbuilding CAD/PDM platforms" have been successfully implemented by UMC partners, and the initiative is further evolving with the purpose to sustain digital transformation of shipbuilding industry.

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Recent sitting of the shipbuilding expert council of business development in Mykolaiv has decided to integrate the idea of MCCM into the strategy of national shipbuilding industry development.

AQUABATOR project creating an ecosystem for the development of aquaculture in the South of Ukraine. A pilot aqua farm and its digital twin (demonstrator) AQUABATOR.online. The portal also provides innovative developments in the field of aquafarming, an open database of technological solutions for aqua farms, a training program on starting a business in the field of aquaculture, information on available programs and support tools for micro, small and medium businesses. Financial instruments, inquiries for aqua farming products of Ukrainian producers, offers of seed source materials from suppliers, information, and analytical materials, as well as registration for thematic events and events on the development of aqua farming in the South of Ukraine.



The All-Ukrainian Innovation Ecosystem "**Sikorsky Challenge Ukraine**" (SCU) is an open innovation ecosystem that unites the country's institutions interested in the development of the Ukrainian innovation economy: universities, scientific institutions, state and local self-government bodies, business companies, foundations and public organizations. The centres of innovation in various branches of the economy are universities with their scientific schools and expert environments, with a constant flow of students, postgraduates, scientists, engineers and inventors.



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THE LESSONS LEARNED DURING THE IMPLEMENTATION OF THE RESEARCH IN OUR COUNTRY ARE:

- The survey methodology should be modified for each country to allow gathering insights related to a current challenges and particular area of interest.
- The importance of wide promotional campaign during the research to inform more target audience. Also, cooperation with associated project partners plays an important role in reaching SMEs of Fisheries and Aquaculture, Coastal and Maritime Tourism and Maritime Transport fields willing to take the survey.
- The importance of diving business into the Sustainable Blue Economy. As the research has shown a lot of SMEs especially of the Fisheries and Aquaculture field are not aware of the Blue Economy concepts and principles. The importance of developing the support instruments for the SMEs of the target fields are also is vital for supporting the maritime sector and boosting the Blue Economy in the region.

WHAT WE SEE TO EFFECTIVELY ENSURE THE NEXT STEPS OF THIS PROJECT:

- Increasing the awareness of SMEs of the Blue Economy concepts and principles. The possible solution can be forming the open knowledge database on the Blue economy. Collection of information about the concept and policies of the blue economy, European experience, best practices, available tools, programs and opportunities, as well as European clusters, specialized scientific institutions, innovation centers that are active in the blue economy by involving specialized experts and specialists.
- Further facilitating cooperation within the maritime sector in the Black Sea Region between industry players: R&D institutions, Educational establishments, Clusters, Innovation Centres, and of course businesses. Supporting their first contacts and further joint activities.



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- Implementation of Support Projects. Developing the support instruments and mechanisms based on conducted within the 4BIZ project needs assessment and identified gaps that will contribute to sustainable maritime development in Black Sea region.

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FINAL WORD

17 March was held the 4BIZ Workshop for the Analysis of the final Country Reports.

European Climate, Infrastructure and Environment Executive Agency Project Manager Sonia Karasavvidou, Acting EU Black Sea Mechanism Project Manager Matteo Bocci, Secretary General of the Union of Balkan and Black Sea Coastal Regions Stavros Kalognomos and Black Sea Economic Cooperation Organization International Permanent Secretariat Administrative Manager Rositsa Stoeva gave the opening speeches of the workshop. The Secretary General of the Black Sea Universities Network Prof. Dr. The final state of the project in practice by Eden Mamut, Prof. from the Department of Economics Studies at the University of Bucharest. Dr. Gabriela TIGU gave detailed information about the methodology of the structuring of country reports and the mapping of blue economy studies of countries. The moderation of the session, in which country reports of Turkey, Georgia, Bulgaria, Ukraine and Romania were presented, was made by Mehmet Bozdoğan, Head of Tourism and Entrepreneurship Unit. In the workshop, a presentation titled "A Comparative Analysis of Good Practice Examples in Strengthening the Blue Economy in Other Sea Basins of EU Countries" was given by Georgia Chantzi, Research and Policy Development Manager of the International Black Sea Studies Center.

You have read an abridged version of the project partner country reports in this newsletter. Thank you for your time and see you in the next newsletter!

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Project Coordinator – BLACK SEA UNIVERSITIES NETWORK



Prof. dr. Eden MAMUT

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EVENTS



WHAT? Annual SMN Athens Conference.

WHEN? 10 May 2023, 09:00 - 10 May 2023, 18:00

WHERE? Athens, Greece

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WHAT? BlueInvest @ Sustainable Investor Summit

WHEN? 16 May 2023 9:30 | End: 16 May 2023 5:30 pm

WHERE? Frankfurt, Germany

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WHAT? TUGTECHNOLOGY '23

WHEN? May 22-23, 2023

WHERE? Rotterdam, Netherlands

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WHAT? Showcase your project or innovative solutions in the [#BlueEconomy](#) at EMD

WHERE? Brest, France

WHEN? 24-25 May 2023

[Learn more](#)



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