



 **CLUSTER**



POLICY REPORT  
**BLUE ECONOMY AS AN OPPORTUNITY  
FOR ENHANCING YOUTH AND WOMEN'S  
EMPLOYMENT IN THE MEDITERRANEAN**



## PARTNERS

---



## POLICY REPORT

### BLUE ECONOMY AS AN OPPORTUNITY FOR ENHANCING YOUTH AND WOMEN'S EMPLOYMENT IN THE MEDITERRANEAN

### CLUSTER POLICY REPORT ON YOUTH EMPLOYMENT IN THE BLUE ECONOMY OF THE MEDITERRANEAN: state and near-future prospects

**Author:**

**Celia Murcia**, Blue Economy Expert

**Editorial team:** Oumaya Amghar, Minerva Martinez

**Proofreading:** Pere Bramon

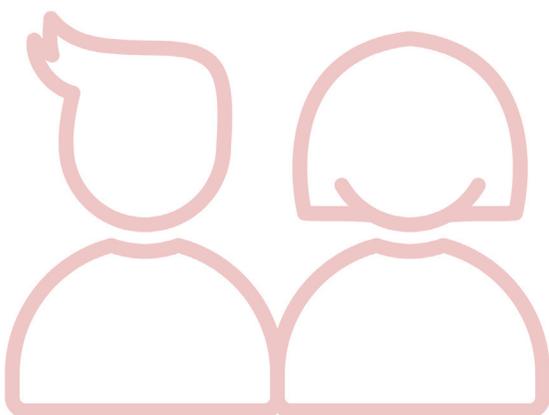
**Layout:** Núria Esparza

November 2023

This document has been produced with the financial assistance of the European Union under the ENI CBC Mediterranean Sea Basin Programme. Its contents are the sole responsibility of the authors and do not necessarily reflect the views of the European Union or the European Institute of the Mediterranean (IEMed).

## CONTENTS

<b>LIST OF ACRONYMS AND ABBREVIATIONS</b> _____	<b>4</b>
<b>EXECUTIVE SUMMARY</b> _____	<b>5</b>
<b>INTRODUCTION</b> _____	<b>7</b>
<b>OVERVIEW OF THE BLUE ECONOMY IN THE MEDITERRANEAN REGION</b> _____	<b>8</b>
<b>MAPPING OF YOUTH EMPLOYMENT POLICY FRAMEWORKS IN THE BLUE ECONOMY SECTOR IN THE MEDITERRANEAN</b> _____	<b>11</b>
<b>EMPLOYMENT PROSPECTS FOR THE BLUE ECONOMY SECTORS IN THE NEAR FUTURE</b> _____	<b>13</b>
<b>ACTION PLAN FOR REGIONAL POLICY-MAKERS TO IMPLEMENT INCLUSIVE YOUTH EMPLOYMENT SCHEMES IN THE BLUE ECONOMY SECTOR</b> _____	<b>16</b>
<b>REFERENCES</b> _____	<b>22</b>



# LIST OF ACRONYMS AND ABBREVIATIONS

<b>ECOPs</b>	Early Career Ocean Professionals
<b>EC</b>	European Commission
<b>EMFAF</b>	European Maritime, Fisheries and Aquaculture Fund
<b>EU</b>	European Union
<b>FTU</b>	Fish Trade Union
<b>ICTs</b>	Information and Communication Technologies
<b>NEETs</b>	Not in Education, Employment or Training
<b>UfM</b>	Union for the Mediterranean
<b>VET</b>	Vocational education and training VET
<b>WestMED</b>	Western Mediterranean Initiative on Sustainable Blue Economy
<b>BE</b>	Blue Economy

# EXECUTIVE SUMMARY

In Mediterranean countries, 22.5 million people were unemployed in 2018. Youth unemployment is a major issue in all of them and, in most cases, it is double or triple the global rate. Moreover, the female unemployment rate was higher than the male unemployment rate in most Mediterranean countries.

The Blue Economy (BE) is an ecosystem-based approach to the sustainable management and utilisation of oceans, seas and coastal resources for economic growth, improved livelihoods, and a healthy environment. The prospects of a successful future for the Mediterranean region lie in its capacity to utilise the BE for job creation, human development, innovation and economic opportunities.

However, there is a need to adapt the training and education requirements for maritime-related professions in view of technological developments and climate-related commitments. Nowadays, there is a mismatch between the skills of the labour force and the evolving needs of the industry, a shortage of attractive jobs in the maritime sectors and the 'brain drain' phenomenon is hitting strongly in the Mediterranean region. Green and digital blue skills as well as inter/multidisciplinary abilities must be promoted to further boost the digitalisation and sustainability of the blue sectors. The creation of jobs and the suitability of the professional profile with the current and future demands of the market is directly related to the quality and availability of the thematic training and availability of these to the younger generations.

Blue biotechnology, marine renewable energy, decarbonisation and digitalisation of the maritime industry, and sustainable coastal tourism are some of the most promising and growing BE sectors that can significantly create job opportunities.

The recommendations for Mediterranean policy-makers to implement inclusive youth employment schemes in BE sectors starts with investing in blue careers and blue skills at the regional and national level, from elementary to high-level education. In addition to investment, there is a need to adapt training and education requirements for maritime-related professions and increase the attractiveness of the sectors. Promoting entrepreneurship is key to transforming feasible business ideas into values with positive financial, social, cultural and environmental impacts. All these skills, training and knowledge should be transferred between countries of the region, in particular, between northern-southern countries. Special focus should be put on young citizens, and actions must be designed to target this specific group, such as youth contests, youth parliaments, blue schools, hackathons, and so on. Youth should be also engaged in policy creation for enhancing employment opportunities. The voice of younger generations should be included in co-created policies to ensure that the interests of future generations are being taken into account. The development of digital platforms and one-stop-shops for young people



provides a valuable tool to access training, mentoring and job opportunities in the BE sectors. Finally, special attention is required to promote gender-responsive policies and address the barriers that women currently face in a still male-dominated maritime industry.

# INTRODUCTION

The economic hardships following the financial crises and the COVID-19 pandemic have heavily affected employment opportunities in the Mediterranean region, raising numbers of citizens at risk of poverty and social exclusion, in particular, young people. In Mediterranean countries, 22.5 million people were unemployed in 2018, more than 11% of the total labour force. Unemployment rates vary from 4% in Malta to 26% in Palestine. The number of unemployed people has reached up to 3 million in Egypt, Turkey and Spain. Youth unemployment is a major issue in all Mediterranean countries. In most cases, the youth unemployment rate is double to triple the global rate. Another trend in unemployment is that advanced education does not seem to provide better protection against unemployment in some countries. Over time, the female unemployment rate has been higher than the male unemployment rate in most Mediterranean countries (UNEP/MAP and Plan Bleu, 2020).

Moreover, demand-supply skills mismatch is a key factor behind high unemployment rates and changing labour market demands. This context highlights the growing importance of reskilling and upskilling youth and women, together with diversifying and investing in sustainable economy sectors to better cope with future economic and climate crises.

This report has been produced under the umbrella of the [CLUSTER project](#), with the financial assistance of the European Union (EU) under the ENI CBC Mediterranean Sea Basin Programme. The CLUSTER project aims to include social economy as part of the solution, and support local, regional and national authorities in their employment practices by providing them with action plans and recommendations based on successful experiences, thus creating a new model of intervention that fosters marketable skills among young people and women who are Not in Education, Employment or Training (NEETs).

This policy-oriented report focuses on the critical challenge of youth employment in the Mediterranean region, concentrating on the potential of the BE sector in generating dignified jobs and ensuring social inclusion. This report aims to identify key policy elements that can be levered to ensure inclusive job creation and reduce socioeconomic disparities in the Mediterranean area.

Special acknowledgement is given to Marta Pascual (Spanish National Hub of the WestMED Initiative), Salem Miladi (Tunisian National Hub of the WestMED Initiative), Ines Boujmil (BlueMed Ambassador in Tunisia and Mediterranean Sub-regional Node Coordinator), Tecla Maggioni and Karina Higa (Italian ECOP Node Coordinators), Benoît Wuatelet (Blue Economy Team Leader, UNIDO) and Adriana Salazar and Alessandra Sensi (Blue Economy Division, Union for the Mediterranean) for providing their valuable contributions to this report.

# OVERVIEW OF THE BLUE ECONOMY IN THE MEDITERRANEAN REGION

The BE is an ecosystem-based approach to the sustainable management and utilisation of oceans, seas and coastal resources for economic growth, improved livelihoods, and healthy environment. It embraces a wide range of economic and social activities, involving the production of goods and services from the sea; including traditional, modern and emerging maritime activities. The prospects of a successful future for the Mediterranean region lie in its capacity to utilise the sea for job creation, human development, innovation and economic opportunities.

In recent years, Blue Growth, Blue Economy and Blue Tech have emerged as a new and promising sector for tackling youth unemployment in the Mediterranean. With potential for job creation and sustainable development, the sector has been heralded as an important opportunity for the social and economic regeneration of the Mediterranean region after the economic crisis and COVID pandemic.

Looking at sector-specific figures, the latest European Commission (EC) Blue Economy report ([EC BE Report, 2023](#)) estimated that over one million jobs in Mediterranean countries were in the BE within the same year, with more than 40% of the employment attributed to aquaculture, fisheries and mariculture. The report noted that younger workers held around 17% of the jobs in the sector, indicating that youth employment was a considerable part of the BE in the Mediterranean.

Another report highlights that tourism remains the main activity in the region, providing jobs to more than 8 million people, of which 2.7 million are youth under the age of 25 (Plan Bleu, 2022). The report concludes that the sector has the capacity to absorb additional labour force, especially youth, given the rapid development and transformation of the sector to a more modern framework by adopting digital platforms, digital marketing and information technologies such as the internet of things (IoT), augmented reality and virtual reality.

The BE sectors are a promising source of job creation, and its potential for employment and career development is undeniable. The main barriers to the sector's growth are related to access to equitable financing and skills development, which are high priority areas in the BE roadmap in the region.

## Professions in the Blue Economy sectors

In terms of career opportunities for young people in the BE sector, the figure below shows the most representative job profiles and opportunities offered from the different blue sectors, including regulatory,

research, and scientific and technical profiles. The outlook for youth employment in the Mediterranean BE sector appears to be encouraging.

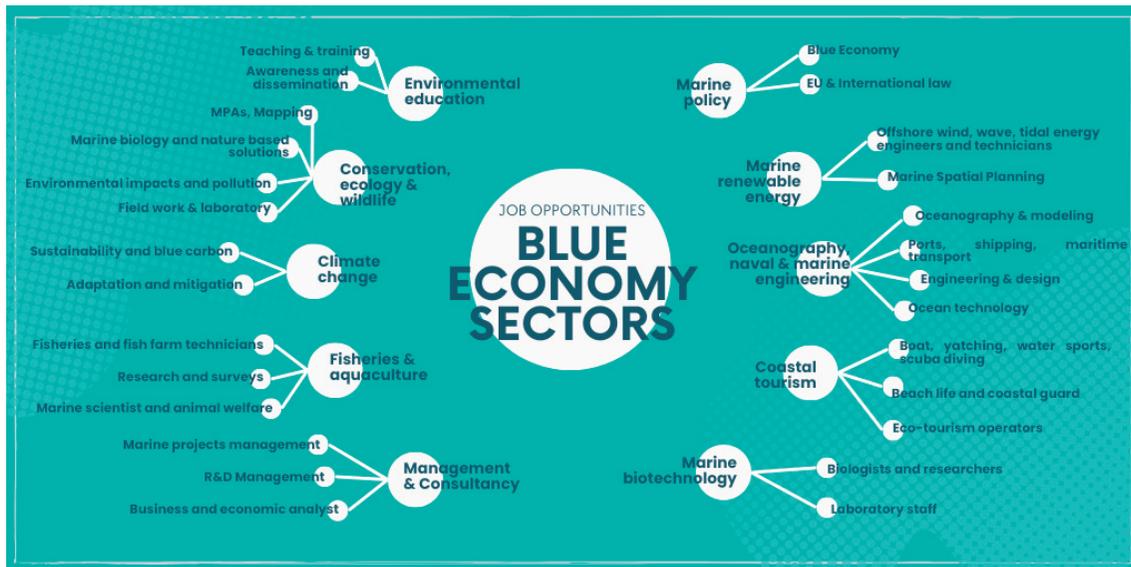


Figure 1 Jobs profiles under the BE sectors (Source: Blue-jobs)

## An overview of the skills needed in the Blue Economy sectors

There is a need to adapt the training and education requirements for maritime-related professions, in view of technological developments and climate-related commitments. Nowadays, there is a mismatch between the skills of the labour force and the evolving needs of the industry, as well as a shortage of attractive jobs in the maritime sectors. Moreover, the phenomenon of 'brain drain' strongly hits the Mediterranean region. Palestine, Morocco, Lebanon, Tunisia and Algeria are examples of countries suffering the migration of a large number of educated and skilled individuals from their own country to work abroad where they can find better salary, work conditions and opportunities (Friedrich Naumann Foundation, 2023).

Therefore, green and digital blue skills as well as inter/multidisciplinary competencies must be promoted to further boost the digitalisation and sustainability of the blue sectors. Additionally, reskilling and upskilling schemes and cooperation between education and industry are key aspects to support the active labour force to acquire the necessary environmental and sustainability skills and become acquainted with modern standards, principles and practices.

A study of the Union for the Mediterranean (UfM, 2021b) analyses the skills needed for each of the BE sectors. For example, in the case of the aquaculture sector, there is a clear need for skills in Circular Economy (CE) approaches to reuse and minimise the waste produced by the industry. In the maritime transport sectors, skills shortages have been observed in foreign trade, environment and sustainability, digitalisation and port logistic operations. In terms of management and business skills, it is important to

improve the know-how of small-scale businesses to improve their access to the market, for example, by engaging with sustainable investors.

In general, a multidisciplinary approach is required, which includes Information and Communication Technologies (ICTs), and management, technical and regulatory skills. In addition, soft skills, such as teamwork, time management, communication and emotional intelligence are key to complement the technical skills.

### **The role of women and youth in the Blue Economy in the Mediterranean**

As highlighted in the UfM Youth Strategy 2030 (UfM, 2022), one third of the European population are under 30 while 48% of the people in the Southern Mediterranean region are under 30. However, 15% of young women and men (between 15 and 34) within the EU were neither part of the labour force nor receiving education or training. Although women play a key role in some blue sectors, such as aquaculture processing industry, small-business fisheries and coastal tourism, there is still a higher rate of unemployment of women in maritime sectors such as marine renewable energy and maritime transport (Union for the Mediterranean, 2021b). Wealth loss due to the gender gap is estimated at 10% of the gross domestic product (GDP) in advanced economies and more than 30% in the Mediterranean region (ASCAME, 2023a).

Some of the BE sectors, such as coastal tourism, do not appear high on the list of the most popular jobs, in particular due to a negative perception of job quality, seasonality and limited career prospects. In addition, women continue to face barriers to recruitment, the 'glass ceiling' impeding women from progressing to senior positions, difficulties balancing work/family life, and lack of security at certain offshore works in a still male-dominated maritime industry.

These figures invite reflection on the importance and existing opportunities that strengthening efforts could bring to the role of youth and women for enhancing sustainability in BE sectors in the future.

# MAPPING OF YOUTH EMPLOYMENT POLICY FRAMEWORKS IN THE BLUE ECONOMY SECTOR IN THE MEDITERRANEAN

This chapter focuses on the existing policy framework that tackles the critical challenge of employment, in particular for youth, concentrating on the potential of the BE sector. A review of the key policy framework is offered at the European and, particularly, Mediterranean level.

## Mediterranean context

The new Agenda for the Mediterranean from the Renewed Partnership with the Southern Neighbourhood (2021) highlights that the foundations for decent jobs are good governance, the rule of law and human rights, social dialogue and equal access to justice. Cooperation to anticipate the need for skills in the development of education strategies in a lifelong learning perspective, including green jobs and BE, is key.

The UfM Ministerial Declaration on Sustainable Blue Economy (2021 a) includes blue skills, and decent and sustainable blue careers and employment among the 10 joint priorities agreed by the countries of the UfM. In particular, the UfM Ministerial Declaration recognises the urgent need (i) to address the mismatch between the skills of the labour force and the evolving needs of the market, including by prioritising Vocational Education and Training (VET) and tailoring training and educational curricula to new and emerging requirements; and (ii) to better integrate private sector actors in the school-to-work transition. As a landmark document for the region, the Roadmap for the implementation of the 2021 UfM Ministerial Declaration further points towards the joint needs, gaps and opportunities for future support, funding, and implementation for each Ministerial priority, and sketches out ongoing initiatives, programmes and projects (Union for the Mediterranean, 2023). Potential future avenues of collaboration tackling blue skills, careers, and employment outlined in the Roadmap include: further developing socioeconomic observatories; further collaborating with the private sector; continuing to foster the ongoing regional dialogue on blue skills, careers, and jobs in the framework of the UfM, with a special focus on women and youth; and further supporting Ocean Literacy initiatives and the integration of Ocean Literacy in educational and training curricula.

The recently adopted Western Mediterranean Initiative Ministerial Declaration for the Sustainable Development of Blue Economy (WestMED, 2023) recognises, firstly, the need to support blue skills and the creation of jobs with upskilling and reskilling of the workforce to meet the demands of new jobs and technologies, facilitating the process of mutual recognition of qualifications to increase the cross-border

mobility of workers in BE sectors, as well as ensuring the promotion of maritime professions. Secondly, the need to strengthen the involvement of young people in favour of the Mediterranean through education, knowledge development and awareness-raising actions on the conservation, restoration and sustainable use of resources.

Parallely, the BlueMed Initiative was launched in 2014 including EU and non-EU Mediterranean countries, and a common Strategic Research and Innovation Agenda for the Mediterranean was agreed in 2018. The BlueMed agenda has allowed the main challenges and knowledge gaps to be tackled, enabling activities to be addressed, as well as relevant response measures for capacity creation and skills enhancement.

### **European context**

The European Skills Agenda is a 5-year plan to help individuals and businesses develop more and better skills, and to put them to use in the real work environment. Ambitious targets have been set up, such as achieving 70% of adults aged 16-74 having, at least, the basic digital skills (European Commission, 2020).

In particular on the topic, the EC has launched a diverse range of initiatives to support the research and innovation activities for the BE. In Europe's key funding programme for research and innovation Horizon Europe, we can find the EU Mission Restore our Ocean and Waters Implementation Plan (2021), which aims to protect and restore the health of all seas bordering the EU as well as major river basins by 2030 through research and innovation, citizen engagement and blue investments. The 'BlueInvest' investment platform that aims to foster investment, innovation and sustainable growth in BE, namely for small and medium-sized enterprises (SMEs). The [Sustainable Blue Economy Strategy](#) supports the sustainable growth of the marine and maritime sectors, and the Smart Specialisation Strategy (S3) plays an important role in the investment, growth, innovation and entrepreneurial potential of each country. All of these initiatives have a clear focus on the creation of sustainable job opportunities and target the younger generations as a key element for the green and blue transition.

# EMPLOYMENT PROSPECTS FOR THE BLUE ECONOMY SECTORS IN THE NEAR FUTURE

At European level, the volume of BE jobs slowly increases when comparing the data from the last decade. However, significant differences can be observed by sectors. For instance, the oil and gas sector employed 9,490 people in 2020, less than one fourth of those employed in 2009. This sector has been on a downward trend, in line with the net-zero emission targets and decarbonisation objectives of the EU while other emerging sectors, such as the marine energy industry, have grown by over 25 times in terms of persons employed in the last decade (EC, 2023).

Across the Mediterranean, the BE as a whole is an essential driver for growth and jobs for the region. Ocean-related activities in the Mediterranean Sea generate an annual economic value of US\$450 billion (Randone et al. 2017). Therefore, the region holds promising employment prospects for youth in the BE sector, particularly in the fields of technology, innovation and digitalisation, as young professionals are keener to work in the technological, sustainable and renewable sectors.

“The Mediterranean Blue Economy must reinforce its position by building a greater knowledge base, by training the next generation of practitioners to think across disciplines, and by breaking down traditional barriers across sectors and countries. We need to educate the next generation of marine professionals, youth and women specially, as they play a critical role in progressing towards a sustainable ocean and sea-based economy, which is key to achieving SDG 14” (Marta Pascual, Spanish National Hub of the WestMED Initiative).

## **Growing Blue Economy sectors as an opportunity for job creation**

### *Blue biotechnology*

The blue biotechnology sector considers the non-traditionally commercially exploited groups of marine organisms (such as bacteria, fungi, micro- or macroalgae) and their biomass applications (food supplements, cosmetics, fertilisers and innovative commercial uses such as biomaterials, bioremediation or biofuels). The algae sector is one of the most dynamic sub-sectors in blue biotechnology. In particular, the EU Algae Initiative recognises that marine bioresources play an important role as contributors to healthy environments on land as well as in the oceans; and that carbon neutrality, innovative, healthy and sustainable food systems, and a sustainable and circular bioeconomy are sources of new employment opportunities. The areas of job opportunity within this sector include research, marine environment, biomass production and processing, product innovation and differentiation, technology and infrastructures, and policy and regulatory framework.

### *Decarbonisation and digitalisation of the maritime industry*

The sector represents one of the most prominent BE activities for the Mediterranean, but it is also exposed to market fluctuation and international crisis, as well as being a major source of pollution. The greening of maritime transport (including shipping, ports operations, shipbuilding and ship maintenance) is amongst the top challenges for the region. In the medium term, the primary strategy must progressively but rapidly involve replacing fossil fuels with renewable fuels (biofuels and e-fuels, i.e., methanol and ammonia).

A study shows that 750,000 seafarers would require additional training to handle alternative fuels and technologies by 2050 under the scenario of Decarbonisation by 2050 (DNV, 2022).

Maritime operations will become more digitalised and automated, suggesting that the industry will need to map the skills and competencies required to implement decarbonisation-related technology.

The job profiles that will be generated within this sector include seafarers and experts on new fuels, emergency procedures technicians, environmental officers, energy efficient managers, chemists and physicists, data and digital managers, experts in ocean sensing and observation, underwater robot pilots, and so on. In terms of digitalisation, the competencies required are to be able to control operations remotely, logging and analysing data, and having a basic digital technology knowledge (IoT, sensors, networks, cyber security, connectivity, machine learning, and so on).

### *Marine renewable energy*

Offshore wind is expected to play a significant role in reaching Europe's climate neutrality targets. The offshore wind sector generated more than €2.15 billion in gross added value (GAV) in 2020 in Europe, an 11% increase compared to 2019. The sector directly employed almost 12.3 thousand persons, up from less than 400 persons in 2009. Other emerging marine renewables such as tidal, wave and floating solar photovoltaic energies are rapidly growing, as well as providing new job opportunities. According to a recent study, marine renewable energy is one of the key sectors where private investors are more willing to invest (Responsible Investor, Credit Suisse, UNEPFI, 2020). The areas of jobs opportunity within this sector include mechanical work, marine engineering, supply industry, project development, operations and maintenance, boating and transport, research and science, construction, marine permitting, and environmental regulations, among others.

### *Desalination*

The global population increase and the rise in demand for consumable water have driven the growth of the desalination sector in the past two decades, with over 2,300 seawater desalination units in the EU, out of over 18,000 worldwide. The Mediterranean is home to the majority of them. As a result, the EU generates around 9.2 million cubic metres of desalinated water every day (10% of global capacity). Desalination technology is currently being used to alleviate water shortages in regions with limited freshwater resources, such as large coastal cities, islands, and offshore industrial sites where seawater

cannot be used due to its high salinity. With desalination plants having a lifespan of 20 to 25 years, it is projected that further expenditures and professionals would be required in the coming years to modernise or replace obsolete facilities (EU Blue Economy Observatory, n.d.)

### *Sustainable coastal eco-tourism*

Eco-tourism is presented as a sustainable alternative of the traditional tourism model, in which the main motivation of tourists is the observation and appreciation of nature as well as the traditional cultures prevailing in natural areas. Examples of eco-tourism include pesca-tourism, culinary tourism, sport and adventure tourism, accessible tourism, nature and culture hiking itineraries, and underwater reality-augmented experiences, among other activities.

In order to move forward to a more sustainable tourism sector, new hard skills are needed for newly developed occupations (e.g., destination management, climate change adaptation management, carbon neutral efforts, CE knowledge, new business models in tourism, e-marketing, e-commerce, and business management skills), and tourism professionals are expected to deliver innovative, customised and value added services for a wider range of target groups, including seniors or travellers with special needs (disabilities, etc.).

# ACTION PLAN FOR REGIONAL POLICY-MAKERS TO IMPLEMENT INCLUSIVE YOUTH EMPLOYMENT SCHEMES IN THE BLUE ECONOMY SECTORS

## Investing in blue careers and blue skills at regional and national level

Investment is key in order to overcome the challenge of unemployment rates and promotion in the BE sectors. Funds must be available at all levels, from schools, education, academic institutions and vocational training centres to research centres, the private sector and local administrative bodies.

At European level, several funding schemes are available to strengthen sustainable competitiveness, ensure social fairness and access to education, training and lifelong learning, as part of the European Skills Agenda. Erasmus+ is the EU's programme to support education, training, youth and sport in Europe. The 2021-2027 programme places a strong focus on social inclusion, the green/blue and digital transitions, and promoting young people's participation in democratic life. Opening up and facilitating access to EU programmes for the southern countries, as well as to relevant European networks, is crucial to ensure equal opportunities for developing BE and blue skills on both shores of the Mediterranean Basin. In this context, the Southern Mediterranean remains a priority region under the Erasmus+ programme.

Similarly, the European Social Fund Plus 2021-2027 is the EU's main instrument for investing in people and supporting the implementation of the European Pillar of Social Rights. It provides an important contribution to the EU's employment, social inclusion and education and skills policies. Other funding programmes for skills development are InvestEU, European Globalisation Adjustment Fund, European Solidarity Corps and Digital Europe.

At the Mediterranean level, ENI CBC MED (2014-2020) and its successor, Interreg Next MED (2021-2027), are cross-border cooperation programmes which aim to contribute to smart, sustainable, and fair development for all across the Mediterranean Basin by supporting balanced, long-lasting, far-reaching cooperation and multilevel governance. Development of business and small and medium-sized enterprises (SMEs) and startups, and professionalisation of young people and women can be found among its priorities.

In addition, the EU provides specific funding calls for the BE. For instance, the Blue careers for a sustainable BE call under the European Maritime, Fisheries and Aquaculture Fund (EMFAF). The call aims to contribute to the development of the next generation of blue skills and to provide opportunities for attractive and sustainable maritime careers. In particular, the call focuses on improving their appeal to students and young professionals, in an attempt to attract and retain new talent and counter human capital depletion because of an aging labour force.

Another important programme to be highlighted is the EU Sustainable Blue Economy Partnership, under Horizon Europe, which supports the green and digital transitions in the field of the BE, while integrating youth engagement and ocean literacy as key goals.

### **Adapting the learning schemes to the current needs**

Apart from investment, there is a need to adapt training and education requirements for maritime-related professions in view of the latest technological developments and climate-related commitments. Academic curricula and non-academic training should be modernised, attending to the changing industry and the advancements in digitalisation and automation. By adapting the learning methods, the attractiveness of maritime careers and jobs will increase among the younger generations. New training tools include the use of gamification, training simulators, virtual reality and augmented reality, digital tools, e-learning and hybrid solutions, and so on.

### **Supporting entrepreneurship in the Blue Economy sector**

The support from local, national and regional governments can be done by providing financial support, investments, coaching services and technical support for NEETs with feasible business ideas. Entrepreneurial capacity-building reinforces entrepreneurial attitudes by offering skills, knowledge and experience, helping to increase the number of startups and the creation of jobs.

For example, the [B-Blue Programme](#) is an innovative entrepreneurship programme promoted by Barcelona Activa – funded by the local government in Barcelona (Spain), that supports the creation and growth of SMEs and startups in the BE sectors by providing access to training, mentoring, networking and financial schemes.

Another successful case of promoting blue entrepreneurship is the [#EYESONGREEN](#) regional competition for the Southern Mediterranean, funded by the EC and the SwitchMed programme. Within the competition, the best three blue entrepreneurs of the Southern Mediterranean are awarded with a business and entrepreneurial training package.

The BlueMed Initiative also launched a [hackathon](#) team challenge to develop ideas and solutions for a Healthy Plastic Free Mediterranean Sea, where the young winners had the unique opportunity to be trained by a pool of experts in developing a business plan and present it to investors at the ECOMONDO Exhibition in October 2021.

## Promoting and facilitating skills circulation among the countries

In order to promote and popularise the concept of blue skills and enhance countries' skills and expertise in this field, it is necessary to promote and facilitate skills circulation between the countries of the region through training, exchanges, raising awareness, and research activities. Harmonisation of curriculum at regional level is essential to facilitate skills circulation, enabling transposition and recognition of acquired skills from one country to another. Additionally, vocational training should be reinforced particularly in southern countries, through the knowledge and technology transfer between north-south shores, a 'win-win' situation across the Mediterranean.

The Ministerial Declaration of the WestMED Initiative (WestMED, 2023) proposes support for actions to enhance ocean knowledge and the creation of a network of blue schools and awareness campaigns to develop youth entrepreneurship and initiatives at sea, including through the organisation of hackathons based on company needs and programmes. WestMED countries also support the programming of training cycles for young civil servants in the BE field, the establishment of a business incubator in the BE field, and the promotion and encouragement of e-learning between countries in the region, among other measures.

This collaborative approach would allow, for instance, opening up and facilitating access of the EU funding programmes to the southern countries.

As an example, [The Science We Need for the Mediterranean Sea We Want](#) (SciNMeet) programme aims to be the Mediterranean region's contribution to the UN Decade of Ocean Science for Sustainable Development. One of the SciNMeet Programme's goals is to narrow the gaps between northern and southern areas, reinforcing partnerships and transboundary cooperation.

## Improving coordination and synergies across policy fields and stakeholders

In addition to the needed coordination among countries, there should be effective coordination and partnerships across policy fields, including youth organisations. As highlighted in the New Agenda for the Mediterranean (EC, 2021), a successful cooperation area should be created among policy fields, administrations, organisations and countries in the Mediterranean. The design of the skills strategies in a lifelong learning perspective should be decided collectively, with the support of the VET centres and based on an integrated approach of the relevant ministries (education, employment, health, culture and social protection).

It is also important to recognise the role of the different stakeholders in the development of policies for youth employment. The regional authorities can plan a very practical role implementing direct actions for the benefit of the unemployed population. For instance, in Catalonia (Spain) there is a self-employment allowance for young people to help them build up their own companies and develop their business ideas.

Similarly, the private sector must be involved in the design of the national youth employment policies. Firstly, to provide firsthand knowledge on the current and future needs of the maritime sectors to adapt the training

programmes. Secondly, because of the private sector's worldwide contribution to 90% of jobs (ASCAME, 2020), it is a key sector to generate job opportunities.

Banks and financial institutions can also be part of the strategies to promote youth employment. For example, the [Tunisian Solidarity Bank](#) was created in 1997 to finance youth higher education and vocational training graduates, in particular, microfinancing the promotion of small business and independent professionals.

### **Bringing young citizens into the focus**

The study of the analysis of more than 800 projects related to BE in the last 10 years resulted in the conclusion that funded projects do not target enough young citizens (European Commission, 2023). In this context, further support should be provided from elementary schools to graduate levels, promoting initiatives such as youth contests, youth parliaments, Blue Schools, Blue Hackathon's, and so on.

In Europe, several initiatives – such as the [EU Blue Schools Network](#) developed by the EU4Ocean coalition – have been working to increase knowledge of marine ecosystems and raise awareness of the importance of preserving the ocean. Ocean Literacy has slowly progressed to reach its various sea basins; schools have joined the movement; and educators have been more and more involved, using the ocean as a teaching tool. The [BlueS\\_Med project](#), funded by the Erasmus+ programme, serves as an example of a co-designed action for the protection of the Mediterranean Sea among the project partners, schools and local stakeholders, but, most importantly, the pupils.

### **Engaging youth in policy creation for enhancing employment opportunities**

The scale and complexity of the labour market, on the one hand, and the BE sectors, on the other, make it essential that the process of creating policies should engage all the relevant stakeholders. The approach of co-creating refers to processes of joint knowledge production between governments, industry, research and other stakeholders, such as civil society. The [Future Lives with Oceans and Waters – FLOW](#) project is an example of co-creating insights to support future policies for ocean and waters with young people. It enables co-ownership, co-responsibility and co-implementation of the young generation to co-create effective, target group-oriented and actionable blueprints for stewardship assemblages featuring social interaction and engagement with the sea and waters.

Another example of engaging youth in the policy processes in the [BlueMed Ambassadors](#) Programme whose objective was to engage and coach a group of highly motivated young people from non-EU Mediterranean countries to share the BlueMed vision in their contexts and lay the ground for the development of a pan-Mediterranean network of 'BlueMed Ambassadors'. The BlueMed ambassador in Tunisia, Inés Boujmil, pointed out that "Blue Economy governance mechanisms should be based on an ecosystem approach to maintain their long-term sustainability and to ensure the continuity of the political agenda, which requires transdisciplinary efforts to guide the incentives of governments, corporations, and civil societies toward ocean stewardship. Governance mechanisms should connect the aspirations of the

Blue Economy to norms of equity, conservation, and developing capacities for regional and local ECOP groups in order to foster more responsible citizenry, sound corporate practices, and local conservation initiatives.”

### **Scaling up inspiring initiatives such as the Youth Guarantee scheme**

The Youth Guarantee is a European initiative aimed at facilitating access of young people (under the age of 30) to the labour market. The objective is that all NEETs can receive an offer of employment, education or training, including an apprenticeship or a traineeship, after completing formal education or unemployment (and no later than four months). This initiative has been shown to have a major transformative effect in the rates of NEETs. In about seven years' time, over 24 million young people who were once registered in Youth Guarantee schemes received an offer of employment, continued education, apprenticeships and traineeships.

Translating the objectives of such initiatives at national/local level as well as replicating them in the Southern Mediterranean countries could have a significant impact on the reduction of the NEETs rates.

### **One-stop-shop for young people**

The development of a one-stop-shop for unemployed young people can be the solution to find multiple available services, such as training, mentoring, guidance, counselling, and support for active search of jobs.

The [Mediterranean Blue Economy Stakeholder Platform \(MedBESP\)](#) managed by the UfM Secretariat is a valuable gateway and tool for all stakeholders, including youth and women. As a regional online networking platform and one-stop-shop for technical and sectoral knowledge and information on the blue sectors and activities, MedBESP enables users to keep track of the latest news and events in the region, access training and educational resources, share their work and initiatives in order to disseminate and widen the reach of their activities, extend their network, and build new partnerships.

### **Encouraging women's employment and entrepreneurship in the Blue Economy**

Promoting women's employment and empowerment in the BE sector is a crucial priority in the Mediterranean, as stated in the UfM's Roadmap (Union for the Mediterranean, 2023). To leverage these opportunities, gender-responsive policies are required to address barriers and promote equal access to employment and leadership positions. Efforts should be made to enhance capacity-building programmes, networking opportunities, and access to financing for women entrepreneurs (e.g., loans and micro-credits) in the BE sectors. The European Maritime, Fisheries and Aquaculture Fund (EMFAF) call on ['Women in the Blue Economy'](#) (2022) was the first call dedicated to address the participation of women in the different sectors of the BE, contributing to a more gender equal society. Two projects ([WIN-BIG](#) and [WINBLUE](#)) were awarded. In terms of supporting women entrepreneurship, [the Break EU project](#) is an example of an initiative supporting women entrepreneurs through training and mentoring, and providing network opportunities in different sectors, including BE and, in particular, coastal tourism in



Spain. Additionally, awareness campaigns and outreach programmes can help challenge gender stereotypes and encourage more women to pursue careers in the BE sector. These actions can be organised at regional but also national and local level, where the impact of creating awareness is usually higher. As an example, the UfM organised an event called ‘[Women and Blue Skills/Careers/Jobs in Lebanon](#)’, which focused on the challenges, opportunities and recommendations for supporting and encouraging women in the BE sectors.

## REFERENCES

**ASCAME** (2020). *Accelerating the green economy in the greater Mediterranean*. <https://www.ascame.org/new/accelerating-the-green-economy-in-the-greater-mediterranean/>

**ASCAME** (2023). *Women entrepreneurs transforming the Mediterranean scene*. <https://www.ascame.org/new/women-entrepreneurs-transforming-the-mediterranean-scene/>

**BlueMed Initiative** (2019). *Mediterranean Sea top priorities for research and innovation*. <http://www.bluedmed-initiative.eu/wp-content/uploads/2019/11/BM-roll-up-priorita%CC%80.png>

**CLUSTER** (2022). *National reports on youth employment policy frameworks in 7 Mediterranean countries*. <https://www.enicbcmed.eu/cluster-produces-reports-explore-youth-employment-policy-frameworks-its-project-countries>

**CPMR Intermediterranean Commission and MedWaves, the UNEP/MAP Regional Activity Centre for SCP** (2022). *A Circular Blue Economy for the Mediterranean: Current practices and opportunities*. [https://medblueconomyplatform.org/wp-content/uploads/2022/07/2022\\_a-circular-blue-economy-for-the-mediterranean-switchmed.pdf](https://medblueconomyplatform.org/wp-content/uploads/2022/07/2022_a-circular-blue-economy-for-the-mediterranean-switchmed.pdf)

**DNV** (2022). *Insights into seafarer training and skills needed to support a decarbonized shipping industry*. <https://www.dnv.com/Publications/seafarer-training-and-skills-for-decarbonized-shipping-235124>

**ENICBCMED** (2020). *YEP MED – Youth Employment in port of the Mediterranean*. <https://www.enicbcmed.eu/projects/yep-med>

**EU Blue Economy Observatory** (n.d.). *Desalination*. [https://blue-economy-observatory.ec.europa.eu/eu-blue-economy-sectors/desalination\\_en](https://blue-economy-observatory.ec.europa.eu/eu-blue-economy-sectors/desalination_en)

**European Commission** (2020). *European Skills Agenda*. [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_20\\_1196](https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1196)

**European Commission** (2021). *Renewed Partnership with the Southern Neighbourhood – A new Agenda for the Mediterranean*, [https://www.eeas.europa.eu/sites/default/files/joint\\_communication\\_renewed\\_partnership\\_southern\\_neighbourhood.pdf](https://www.eeas.europa.eu/sites/default/files/joint_communication_renewed_partnership_southern_neighbourhood.pdf)

**European Commission, Directorate-General for Research and Innovation, Chimini, G., Failler, P., Galgani, L. (2023).** *Portfolio analysis, EU mission "Restore our Ocean and Waters by 2030"*. <https://data.europa.eu/doi/10.2777/683>

**European Commission, Directorate-General for Maritime Affairs and Fisheries, Joint Research Centre, Borriello, A., Calvo Santos, A., Ghiani, M. (2023).** *The EU blue economy report 2023*, Publications Office of the European Union. <https://op.europa.eu/en/publication-detail/-/publication/9a345396-f9e9-11ed-a05c-01aa75ed71a1>

**Friedrich Naumann Foundation (2023).** *The migration of young Mediterranean talent and the challenge of employability*. <https://www.freiheit.org/spain-italy-portugal-and-mediterranean-dialogue/migration-young-mediterranean-talent-and-challenge#:~:text=The%20%22brain%20drain%22%20is%20intimately,implications%20for%20the%20Northern%20shore.>

**Plan Bleu - Regional Activity Centre of UNEP/MAP (2022).** *State of play of tourism in the Mediterranean*. [https://medblueeconomyplatform.org/wp-content/uploads/2022/11/20222\\_stateoftourism\\_planbleu.pdf](https://medblueeconomyplatform.org/wp-content/uploads/2022/11/20222_stateoftourism_planbleu.pdf)

**Randone. et al. (2017).** *Reviving the Economy of the Mediterranean Sea: Actions for a Sustainable Future*. WWF Mediterranean Marine Initiative, Rome, Italy. 64 pp. [https://wwfint.awsassets.panda.org/downloads/reviving\\_mediterranean\\_sea\\_economy\\_full\\_rep\\_lowres.pdf](https://wwfint.awsassets.panda.org/downloads/reviving_mediterranean_sea_economy_full_rep_lowres.pdf)

**Responsible Investor, Credit Suisse, UNEPFI (2020).** *Ocean risk or opportunity? Is the sustainable Blue Economy investible?* <https://www.esg-data.com/blue-economy>

**Union for the Mediterranean (2021)** *Ministerial Declaration on Sustainable Blue Economy*. <https://ufmsecretariat.org/wp-content/uploads/2021/02/Declaration-UfM-Blue-Economy-EN-1.pdf>

**Union for the Mediterranean (2021).** *Towards a Sustainable Blue Economy in the Mediterranean region – 2021 Edition*. <https://ufmsecretariat.org/publication-speech/blue-economy-mediterranean-2021/>

**Union for the Mediterranean (2022).** *UfM Youth Strategy 2030 Euro-Mediterranean youth towards a common goal*. [https://ufmsecretariat.org/wp-content/uploads/2022/02/UfMYouthStrategy2030\\_dec2021\\_DEF.pdf](https://ufmsecretariat.org/wp-content/uploads/2022/02/UfMYouthStrategy2030_dec2021_DEF.pdf)

**Union for the Mediterranean. (2023).** *Roadmap to set the path towards the implementation of the 2021 UfM Ministerial Declaration on Sustainable Blue Economy*. <https://medblueeconomyplatform.org/wp-content/uploads/2023/04/ufm-advanced-draft-roadmap-sustainable-blue-economy-april-2023.pdf>



**WestMED Initiative** (2023). *WestMED Ministerial Declaration 2023*. <https://westmed-initiative.ec.europa.eu/wp-content/uploads/2023/06/WestMED-2023-Revised-Ministerial-Declaration-Final-Draft.pdf>

**United Nations Environment Programme/Mediterranean Action Plan and Plan Bleu** (2020). *State of the Environment and Development in the Mediterranean*. Nairobi. [https://planbleu.org/wp-content/uploads/2021/04/SoED\\_full-report.pdf](https://planbleu.org/wp-content/uploads/2021/04/SoED_full-report.pdf)



# CLUSTER

Implemented by

