

MODULE 7: BLUE ECONOMY SOLUTIONS

1. OBJECTIVES

- Providing a definition and a state of play of the Blue Economy in the Black
- Recall how innovation can play a pivotal role in its development of existing sectors and new ones
- Illustrate how the importance of the supporting mechanisms, such as accelerators (Black Sea Accelerator) and the High Tech Summit.

2. INTRODUCTION

This lecture is to raise awareness on the potential of the Blue Economy in the Black Sea and, in particular, on the sectors with a significantly high potential impact related to job and value creation at the national and regional level. It highlights the areas where innovation could be fostered in the established and emerging sectors of the Blue Economy. Based on the research conducted under BRIDGE-BS, it recalls significant opportunities in sectors such as shipping, port operations, aquaculture, marine renewable energy, coastal tourism, marine pollution and blue biotechnology. However, these opportunities are often hindered by fragmented policies, geopolitical risks, and limited access to coordinated financing, as current funding mechanisms—public and private—are available but insufficiently coordinated, limiting their impact.

To fulfil the potentials identified, innovation plays a critical role, especially in promising areas including digitalisation, green technologies, and sustainable aquaculture practices. Yet, the region lags in adopting cutting-edge solutions compared to global leaders. To address these gaps, the lecture proposes how to further finance the support as it was initiated with the Blue Economy Accelerator for the Black Sea, jointly implemented under the BRIDGE-BS and DOORS (sister project funder under the same call) projects, so as to further accompany innovative blue economy projects, coordinate funding, foster innovation adoption, and attract private investment.

3. READING SUGGESTIONS

- EU and International Policy Framework

EU policy

*Sustainable Blue Economy Communication*¹ - The European Commission new approach for a sustainable blue economy, for EU industries and sectors related to oceans, seas and coasts.

*EU Parliament Overview*² - The EU policy framework and the various initiatives and actions linked to the blue economy, the cross-cutting 'key enablers' and a sector-by-sector analysis.

*Black Sea Common Maritime Agenda*³ - The framework of regional cooperation in the Black Sea, aiming at supporting regional cooperation for a more sustainable Blue Economy.

¹ https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2341

² [https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/646152/EPRS_IDA\(2020\)646152_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2020/646152/EPRS_IDA(2020)646152_EN.pdf)

³ <http://www.bsec-bsvkc.org/Forms/commonMaritimeAgenda>

*Black Sea Strategic Research and Innovation Agenda*⁴ A bottom-up strategy for academia, industry, policymakers and society to address the fundamental Black Sea challenges.

*COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT: BLACK SEA SYNERGY - A NEW REGIONAL COOPERATION INITIATIVE*⁵: Black Sea Synergy is a cooperation initiative that proposes a new dynamic for the region, its countries and their citizens. Regional cooperation could provide additional value to initiatives in areas of common interest and serve as a bridge to help strengthen relations with neighbouring countries and regions (Caspian Sea, Central Asia, South-eastern Europe)

International policy

*UN SDG 14*⁶ - The Specific Sustainable Development Goal aiming to conserve and sustainably use the oceans, seas and marine resources for sustainable development.

*G20 declaration on Sustainable Ocean*⁷ - Economy G20 initiative on the ocean economy.

*Law of the sea*⁸ - A body of customs, treaties, and international agreements by which governments maintain order, productivity, and peaceful relations on the sea.

*International Ocean Governance*⁹ - Managing the world's oceans and their resources, so that they are healthy and productive, for the benefit of current and future generations.

- Blue Economy Activities

Overview

*EU Blue Economy Report*¹⁰ - In its fifth edition, the EU Blue Economy Report continues to analyse the scope and size of the Blue Economy in the European Union.

*Blue Growth in the Black Sea*¹¹ - ICBSS (2018). The scientific outcome of the 9th International Black Sea Symposium on *Blue Growth as a Driver for Regional Development*.

*Towards a Sustainable Blue Economy in the Mediterranean*¹² - An overview of the sea basin.

Marine Living Resources: Fisheries and Aquaculture

*The State of Mediterranean and Black Sea Fisheries*¹³ - A comprehensive and up-to-date review of the status and trends of fisheries in the region.

⁴ <http://connect2blacksea.org/the-sria/>

⁵ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52007DC0160>

⁶ <https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf>

⁷ https://www.g20-insights.org/wp-content/uploads/2017/05/06a_Agenda-2030_Sustainable-Ocean-Economy-Innovation-and-Growth.pdf

⁸ https://www.un.org/depts/los/doalos_publications/LOSBulletins/bulletinpdf/LOS_91_WEB.pdf

⁹ https://oceans-and-fisheries.ec.europa.eu/ocean/international-ocean-governance_en

¹⁰ <https://op.europa.eu/en/publication-detail/-/publication/0a4a79d8-353f-11f0-8a44-01aa75ed71a1/language-en>

¹¹ <https://icbss.org/books/xenophon-paper-no-16-2/>

¹² <https://ufmsecretariat.org/wp-content/uploads/2021/07/21.7.19-2021UfM.studydefEN-web.pdf>

¹³ <https://www.fao.org/gfcm/publications/en/>

*Aquaculture market in the Black Sea*¹⁴ - An overview of the state of aquaculture markets in 2020 for the six countries surrounding the Black Sea.

*CMA Factsheet Aquaculture*¹⁵ - Key facts on Black Sea aquaculture.

*CMA Factsheet Fisheries*¹⁶ - Key facts on Black Sea fisheries.

Renewable Energy

*EU strategy on offshore renewable energy*¹⁷ - The EU strives to become the first climate-neutral continent by 2050 and offshore renewable energy is a sector of key importance.

*Offshore renewables (key technologies)*¹⁸ - Technologies supported by the Offshore Renewable Energy Strategy.

Blue Biotechnology

*Blue bioeconomy report*¹⁹ - Situation in the sector development and perspectives ahead.

Coastal and Maritime Tourism

*CMA Factsheet Tourism*²⁰ - Key facts on Black Sea coastal and maritime tourism.

*UN World Tourism Organisation (WTO)*²¹ - Trends and statistics on tourism in the Black Sea.

*Innovation And Nautical Tourism*²² - Given the substantial contribution of this sector on the European economy and the volatility of tourism, we need to look at the challenges we face.

Maritime Transport

*CMA Factsheet Maritime Transport*²³ - Key facts on Black Sea fisheries.

*Greening maritime transport in the Black Sea*²⁴ - Regional webinar organised by the 2021 Turkish coordination of the Common Maritime Agenda for the Black Sea.

*European Maritime Transport Environmental Report*²⁵ - An analysis of the environmental pressures exerted by the maritime transport sector.

¹⁴ <https://www.fao.org/documents/card/en/c/cb8551en>

¹⁵ https://blackseablueeconomy.eu/sites/default/files/cma_factsheet_aquaculture.pdf

¹⁶ https://blackseablueeconomy.eu/sites/default/files/bsam_factsheet_fisheries_draft_v3.pdf

¹⁷ https://energy.ec.europa.eu/topics/renewable-energy/eu-strategy-offshore-renewable-energy_en

¹⁸ https://ec.europa.eu/commission/presscorner/detail/en/fs_20_2098

¹⁹ <https://www.eumofa.eu/documents/20178/84590/blue+bioeconomy.pdf/f5a87949-c541-416b-16e7-52115cdff06?t=1608051570785>

²⁰ https://blackseablueeconomy.eu/sites/default/files/bsam_factsheet_3_tourism.pdf

²¹ <http://core.bsec-organization.org/UploadedFiles/OtherFiles/20191217-bsec-unwto-brochure-november-2019-1e23yd5m.pdf>

²² <https://mediterranean.observer/blue-growth-innovation-and-nautical-tourism/>

²³ https://blackseablueeconomy.eu/sites/default/files/cma_factsheet_maritime_transport.pdf

²⁴ <https://blackseablueeconomy.eu/420/greening-maritime-transport-preparedness-marine-pollution-prevention-black-sea-region>

²⁵ https://www.euneighbours.eu/sites/default/files/publications/2021-09/EMTER_Report_TH-AL-21-004-EN-N.pdf



BRIDGE-BS



LINKING SCIENCE, TECHNOLOGY AND POLICY FOR THE BLUE ECONOMY WITH THE BRIDGE-BS MOOC



*A Green Deal for the European shipping industry*²⁶ - The shipping industry commitment to eradicating its GHG emissions completely.

- Black Sea Environmental Challenges

*Commission on Protection of Black Sea Against Pollution*²⁷ - An overview of main issues.

*European Environmental Agency*²⁸ - An overview of main issues – check the references on the environment but also on the impacts of the sectors

²⁶ <https://www.ecsa.eu/sites/default/files/publications/2020%20ECSA%20Position%20Paper%20-%20A%20Green%20Deal%20for%20the%20European%20shipping%20industry.pdf>

²⁷ <https://www.unep.org/explore-topics/oceans-seas/what-we-do/working-regional-seas/regional-seas-programmes/black-sea>

²⁸ <https://www.eea.europa.eu/soer/2015/countries/black-sea>