



The Black Sea

Cross-border research
for a healthy and productive region



Spanning two continents, bounded by six riparian countries and connected to countless others via rivers and tributaries, the Black Sea is a truly international body of water. As such, it often takes a front row seat to international challenges, including climate change, pollution and the harmful effects of heavy industry.

The sea's unique position also makes it a case study on the benefits of cross-border cooperation – among Black Sea countries and with the EU. In fact, successful partnership between the countries bordering the sea is what set into motion the development of a shared vision for a healthy, resilient and productive Black Sea – a vision that resulted in the Black Sea Strategic Research and Innovation Agenda (SRIA), the scientific pillar for the Black Sea Common Maritime Agenda.

By funding research and innovation through partnerships and missions, the EU continues to advance this vision. In the following pages, we share how this work is helping ensure a bright future for the Black Sea.

Black Sea CONNECT

Black Sea CONNECT aims to develop an implementation plan for the Black Sea Strategic Research and Innovation Agenda. It also looks to support the design and implementation of joint actions and establish an operational network for a healthy, resilient and sustainable Black Sea. To achieve this, the project has leveraged the collective expertise of stakeholders from academia, funding agencies, industry, policy and society, whose work is guided by the principles and pillars defined in the Burgas Vision Paper.

→ connect2blacksea.org



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DOORS

With the combined expertise of 35 institutions, the DOORS project aims to develop and test a System of Systems platform for evidence-based knowledge development. By integrating and sharing in situ and Earth observation data with numerical modelling, the platform will help us better understand how the Black Sea ecosystem responds to global biogeochemical cycles and the impact of climate change. The platform will be used to support blue business development and to train a new generation of blue professionals.

→ doorsblacksea.eu



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BRIDGE-BS

BRIDGE-BS aims to develop the tools and capabilities needed to understand and predict the impact climate-driven and anthropogenic multi-stressors have on Black Sea ecosystem services. Using ecosystem service risk analysis, climate and socio-economic scenarios, co-designed transformative pathways at local living labs, blue economy incubators and citizen engagement, the project is paving the way towards sustainable solutions for a healthy, resilient and productive Black Sea by 2030.

→ bridgeblacksea.org



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EurofleetsPlus

Conducting marine underwater research requires the use of specialised vessels that are beyond the budgets of many scientific organisations. With a fleet of 27 state-of-the-art research vessels, including new autonomous underwater and remotely operated vehicles, the EurofleetsPlus project integrates and opens existing national and regional research infrastructures of European interest. In doing so, the project ensures scientists have ready and cross-border access to the tools they need to conduct in-depth underwater research and develop innovative ideas for protecting our oceans.

→ eurofleets.eu



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B-SEENOVA

With the potential to facilitate growth, drive innovation and create jobs, SMEs play a big role in the economic development of the Black Sea region. That's why the B-SEENOVA project is helping local SMEs leverage their full potential. The project is working with 59 growth-oriented SMEs to improve their innovation management capacity. Each SME receives Key Account Management and coaching services and assistance preparing proposals for Horizon Europe funding opportunities.

→ blacksea-een.org/tr (Website in Turkish)

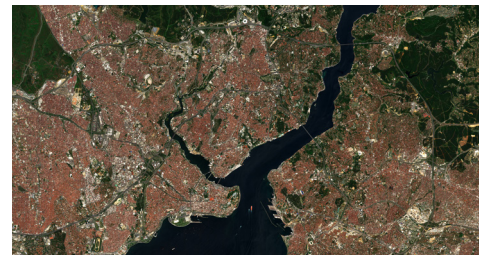


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FORCOAST

Earth observation data, including from Europe's Copernicus programme, could redefine how marine activities are planned and managed. The FORCOAST project is developing a range of practical services and solutions to help wild fishery and oyster ground restorations, along with bivalve mariculture operations, leverage this opportunity. Each solution will provide users with the high-resolution data on water quality and met-ocean variables they need to implement more efficient planning and management decisions.

→ forcoast.eu



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KEAC-BSR

The past 25 years has seen a strengthening of scientific ties between the EU and Black Sea countries. While including these countries in the European Research Area will be an important milestone, according to the KEAC-BSR project, there is still more work to be done. By examining the history of these two regions' exchanges, the project aims to identify even more opportunities for joint research and cross-border cooperation.

→ blacksearegion.eu



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PIONEER

Coupling plasmas with catalysts has the potential to transform captured carbon dioxide into methane and complex synthetic fuels. Before this can happen, researchers first need to fully understand how plasma and catalysts interact. Enter the PIONEER project. This European training network is educating the next generation of experts, who will go on to create new plasma/catalysts solutions for turning polluting CO₂ into beneficial raw materials.

→ co2pioneer.eu



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SeaChanges

Most of the research being done on Europe's marine environments focuses on biological data, not archaeological history. According to the SeaChanges project, ignoring this historical record prevents us from having a complete picture of the human impact on marine vertebrates – not only today, but across millennia. By training a new class of interdisciplinary researchers in archaeology and marine biology, the project aims to add a long-term perspective to marine management.

→ sites.google.com/york.ac.uk/seachanges



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Further research under the Marie Skłodowska-Curie Actions programme includes an innovative method that uses bimetallic catalysts to produce green and blue hydrogen (**BIKE**), and work that provides new insights into the evolutionary origins of the Black Sea's biodiversity (**DarkLife**).

EcoDaLLi DANUBE4all DALIA REST-COAST EmpowerUs



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Climate change, pollution and overuse have left Europe's oceans and waters in a fragile state. The EU [Mission 'Restore Our Ocean and Waters'](#) aims to reverse this trend by working across programmes, instruments and sectors and at the EU, national, regional and local levels.

For example, in the Danube-Black Sea region, EU-funded projects are fostering cross-border collaboration and innovation to help restore the once-vibrant Danube River basin and delta. While the **EcoDaLLi** Coordination and Support Action looks to establish a robust digital platform that stakeholders from across the region can use to share best practices and implement coordinated decision-making, the **DANUBE4all** Innovation Action is focused on restoring the river's free-flowing status, reducing the risk of floods and droughts, and protecting biodiversity.

Creating a healthy Danube-Black Sea region not only involves clean and free-flowing water, but also requires protecting coastal areas. In addition to being extremely biodiverse, coasts have an underappreciated potential to store carbon. That's why the **REST-COAST** project is establishing ecosystem services across the region's marshes, seabed meadows and coastal dunes.

Beyond protecting the Danube river's ecosystems, projects such as **DALIA** are working to support local communities through the creation of sustainable employment opportunities and by enhancing the river's cultural importance. The project is unique in that it brings together trusted experts from eight Danube countries with a shared goal of implementing harmonised actions from source to sea.

EmpowerUs is also focused on building resilient coastal communities. To do this, it is creating a coastal transition lab to empower Danube-Black Sea communities as they make the transition towards sustainable coastal development.

These projects all play an important part in helping the EU Mission Ocean and Waters protect and restore the health of our waters and adjacent regions and economies become more sustainable and resilient.

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Check out the Common Maritime Agenda for the Black Sea

black-sea-maritime-agenda.ec.europa.eu

Consult the 2020 edition of the CORDIS Results Pack on the Black Sea by scanning this QR code:

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