Key Messages for Decision-Makers

Baltic–Black Sea Region: Strengthening the Climate-Ocean-Nature-Nexus

Background

The region between the Baltic and Black Seas encompasses nine EU Member States and Ukraine, a candidate country for EU membership. This intermarium area includes major river basins such as the Vistula, Oder, Danube and Dnipro, together with numerous smaller catchments that transport nutrients, CO_2 and other pollutants into marine ecosystems.

The region is among the most climate-sensitive areas in Europe. Rising temperatures, ocean acidification, eutrophication, deoxygenation and biodiversity loss are increasingly interacting and reinforcing one another. At the same time, governance remains fragmented across climate, water, marine, biodiversity and agricultural policies, limiting the effectiveness of responses. Because many environmental pressures originate upstream and affect entire marine basins, stronger coordination is required across sectors, countries and governance levels.

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Key Messages

Global level: Recognise ocean acidification as a climate issue

Decision-makers should formally **recognise ocean acidification as a direct consequence of rising atmospheric CO_2 concentrations and an integral component of climate change.** Greater coherence is needed between SDG 13 (Climate Action) and SDG 14 (Life Below Water), reflecting the close links between climate stability, ocean health and biodiversity.

Parties to the **UNFCCC should strengthen the climate–ocean–nature nexus** by addressing ocean acidification alongside warming, deoxygenation and sea-level rise. This should include improved scientific cooperation, enhanced monitoring and reporting systems, identification of knowledge and capacity gaps, and stronger coordination between climate, marine and nature restoration policies.

EU level: Integrate climate, marine and nature restoration policies

EU institutions and Member States should **strengthen the integration of climate, biodiversity, water and marine policies** by systematically addressing ocean acidification, ecosystem restoration and land–sea interactions within climate adaptation and marine governance frameworks. Marine acidification should be incorporated into National Energy and Climate Plans (NECPs), adaptation strategies and monitoring systems as a key indicator linking climate change with the condition of marine and coastal ecosystems.

Nature-based solutions and ecosystem restoration should become central pillars of EU adaptation and marine protection policies. Priority should be given to the restoration and protection of coastal wetlands, floodplains, estuaries, river deltas, seagrass meadows, shellfish habitats and other blue-carbon ecosystems. These measures can simultaneously improve biodiversity, enhance carbon sequestration, reduce nutrient pollution, strengthen climate resilience and support implementation of the Water Framework Directive (WFD), Marine Strategy Framework Directive (MSFD), Nature Restoration Regulation (NRR) and the EU Biodiversity Strategy for 2030. This should be incorporated into National Restoration Plans.

The EU should also **promote a source-to-sea approach integrating river basin management, coastal zone management, marine spatial planning and climate adaptation policies.** Greater investment in catchment-scale restoration and nutrient reduction measures would improve water quality before pollutants reach marine environments and contribute to achieving Good Environmental Status under the MSFD. Marine Spatial Planning (MSP) should be further developed as a strategic tool for integrating climate adaptation, ecosystem restoration, biodiversity conservation and the sustainable blue economy.

Baltic–Black Sea region level: Establish a regional Climate & Ocean Initiative

Countries of the Baltic–Black Sea region should **establish a Baltic–Black Sea Climate & Ocean Initiative** to strengthen cooperation on climate change, ocean acidification, eutrophication, biodiversity loss and marine ecosystem degradation. The initiative should provide a common platform for policy coordination, scientific cooperation, data sharing and joint action among EU Member States, candidate countries and neighboring states. It should build synergies between existing regional frameworks, including HELCOM, the Danube Commission and the Commission on the Protection of the Black Sea Against Pollution, while strengthening the region's voice in EU policymaking and international climate and ocean negotiations.

A key objective should be the **creation of a harmonised regional monitoring and assessment system for marine and coastal ecosystems.** Common methodologies and reporting standards for pH, pCO_2 and total alkalinity should be combined with Copernicus satellite observantions and in-situ monitoring networks. Such a system would improve data comparability, strengthen modelling and forecasting capacities, and support evidence-based decision-making.

The initiative should also facilitate the **mobilisation of financial resources** through blue finance instruments, climate adaptation funds and ecosystem restoration investments. Stronger links with EU funding mechanisms, including Cohesion Policy, the LIFE Programme, Horizon Europe and the EU Emissions Trading System (ETS), are needed to ensure adequate long-term financing.

Finally, governments should **promote broad stakeholder participation**. Scientific institutions, NGOs, fisheries, tourism operators, maritime transport stakeholders, local authorities and coastal communities should be actively involved in monitoring, planning and policy development. Such inclusive governance would improve the legitimacy and effectiveness of policy measures while strengthening the resilience of the Baltic and Black Sea ecosystems.