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Greening the Black Sea:
Overcoming Inefficiency and
Fragmentation through
Environmental Governance

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Abstract

Black Sea countries are endowed with an invaluable natural heritage, but fragile enough to be threatened by numerous environmental challenges. The divergent, yet developing, economies of the region, the fragmented sectoral policies that are not compatible with environmental sustainability, and the systems of hierarchical government that lack of transparency and participation have accelerated the environmental degradation of the area. The case is not lost as long as new cooperative initiatives emerge, new administrative reforms are attempted, and funds are allocated. In order to overcome inefficiency and fragmentation there is a need for "greening" the Black Sea through environmental governance. This strategic policy implies the incorporation of the horizontal environmental perspective into all sectoral policies, with a view to achieving legal compliance, efficiency, legitimacy, and networking.

Keywords

Black Sea area, environmental threats, conventions, institutions and actors, "greening" sectoral policies, environmental governance, environmental integration, networking, legitimacy, efficiency.

ICBSS POLICY BRIEF no. 21

Table of Contents

Black Sea environment: the state of the art	3
General features of natural environment	3
Pressures and threats	4
Water resources and management	4
Coastal areas, forests, and inland ecosystems	5
Natural and technical risks	6
International and regional conventions	7
Institutions and actors	9
Sectoral policies: challenges for the environment	11
Transport	
Energy and climate change	
Security and environment	
Regional policy and cooperation	
Policy recommendations: environmental governance aiming at "green	
the Black Sea	17
Dimensions of environmental governance	17
Integration and cohesion of actions towards "greening" Black	
sectoral policies	
Environmental networking: enhancing legitimacy and efficiency	25
Financing environmental governance	
Conclusions	

Greening the Black Sea: Overcoming Inefficiency and Fragmentation through Environmental Governance

Zefi Dimadama and Alexia Timotheou*

Black Sea environment: the state of the art

General features of natural environment

The Black Sea area includes ten countries connecting two different continents: Europe and Asia. Only six of them have physical boundaries and direct access to the coast of the Black Sea (Russia, Ukraine, Romania, Bulgaria, Turkey, and Georgia), while the rest (Greece, Armenia, Azerbaijan, and Moldova) are connected to it by historical, economic, environmental, and social ties.

The Black and the Azov Seas cover in total an area of 460,860 km², constituting the ending point of some of the largest rivers of Europe (the Danube, the Dnieper, the Southern Bug, the Dniester, and the Don).¹

The area is a crossroad of political, economic and societal cultures. Nowadays, on the one hand it constitutes an economic, geopolitical and trade hub, and it serves as a crucial energy trade corridor connecting Asia with Europe. On the other hand, it is characterised by intense regional discrepancies and a number of challenges such as migration, unresolved conflicts, environmental degradation, and illegal trafficking.

Nevertheless, the Black Sea area constitutes a valuable natural asset of global importance. Its natural habitats, ecosystems and diversity of fauna and flora are particularly rich, yet vulnerable to human intervention. Its natural ecosystems include affluent forests (mainly in the West, South and East), steppes (in the North), high mountains (in the East, South and the Carpathians) and several wetlands, which provide shelter for numerous

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¹ Nicolas Tavitian et al., *Greening the Black Sea Synergy* (Brussels: WWF-World Wide Fund for Nature and Heinrich Böll Foundation EU Regional Office in Brussels, June 2008).

species of animals and plants. Apart from the maintenance of biodiversity, the area's natural environment is vital for the provision of goods for humans and their economic viability. Local populations are dependent on rivers for the supply of freshwater for consumption, industrial and agricultural uses. Forests provide a wide range of food, fuel and timber products, while fishery constitutes an inextricable part of the area's economy and nutrition. Furthermore, the natural beauty of the Black Sea is a pole of attraction for tourists and therefore, for new investments in the specific sector.

However, the environmental equilibrium in the Black Sea region is threatened by a series of challenges that have already started degrading the area's features. The following section analyses the pressures on the natural environment and the direct or indirect human impact on the area.

Pressures and threats

The Black Sea area has been at the centre of environmental concerns, due to its unique natural and economic value. Although it did not follow the urbanisation and industrialisation patterns of other parts of Europe which led to rapid environmental degradation, the region still encounters severe environmental threats and future risks. These can be categorised into three basic types:

Water resources and management

The inflow of untreated sewage into the Black Sea constitutes a serious threat for the local population and economies. More than 170 million people live in the Black Sea basin, and the sewage of 17 countries flows directly into the sea coastal waters without any prior rectification.² This causes public health problems and substantial damage to ecosystems and the tourist industry.

The intensive agriculture of the past decades and the overuse of fertilizers and pesticides led to the over-fertilisation of the sea with nitrogen and phosphorus compounds,³ mainly through rivers. This over-fertilisation,

² Natia Bejanidze and Mariam Kekenadze, "The Black Sea Coast Sewage: Both an Ecological Problem and a Profit," http://www.inepo.com/english/uplFiles_resim/Compositetechnologyproject.doc (accessed 4 October 2010).

³ Laurence D. Mee, "How to save the Black Sea: Your guide to the Black Sea Strategic Action Plan," http://www.undp.org/gef/new/blacksea.htm (accessed 4 October 2010).

along with waste discharges from agricultural, domestic, and industrial sources, is responsible for the phenomenon of "eutrophication," which has turned the Black Sea into an oxygen-free and asphyxiated zone. It is estimated that the six littoral countries are accountable for the 70% of these substances flowing into the water, while the remaining 30% comes from the upper Danube.⁴ Eutrophication is to be blamed for the vast alterations in the Black Sea ecosystems and the area's balance disorder.

Another problem is the introduction of alien species, transported via ships that empty their ballast water into the Black Sea.⁵ These species adapt quickly in their new environment, since they have no natural predators, and they manage to displace or decrease the numbers of native populations.

Furthermore, over-fishing leads to the exhaustion of certain species and the drastic decline of catches, creating serious economic damage in the fishing industry. It is mainly driven from poverty (and the potential of quick profit) and the international increased demand for black caviar.⁶ This drop in fish catches is also equally connected to the phenomenon of eutrophication and the sea pollution from untreated sewage and waste waters.

The last pollutant comes from the inadequate management of solid waste. This form of pollution originates either from the coastal cities or from the ships sailing the sea. Either way, garbage ends up on the shores creating sources of pollution and degrading the coastal zone, the rural landscape, as well as the touristically developed areas.

Coastal areas, forests, and inland ecosystems

The Black Sea region is not only threatened by the degradation of the marine environment, but the failure of forests preservation as well. The rich forest ecosystems are deteriorated by illegal logging and fires, with adverse impact on the valuable natural habitats.

The large number of towns around the Black Sea (with 155 of them having more than 50,000 inhabitants)⁷ is indicative of the high pressure on the coastlines generated by human settlements. Uncontrolled urban and

⁵ Ibid., 5.

⁴ Ibid., 4.

⁶ Tavitian et al., *Greening the Black Sea Synergy*, 8.

⁷ Black Sea Basin ENPI CBC Programme, "Black Sea Basin Joint Operational Programme 2007-2013," November 2007, http://ec.europa.eu/europeaid/where/neighbourhood/regional-cooperation/enpi-cross-border/documents/black_sea_adopted_programme_en.pdf (accessed 31 September 2010).

industrial planning is to a large extent responsible for the deterioration of the coastal areas. Additionally, transportation, infrastructure, and tourism have contributed to the erosion and damage of the ecosystems. The uncontrolled regional economic growth as well as the population increase in urban and rural coastal areas will obviously continue to pose a threat to the natural environment.

Natural and technical risks

Oil pollution threatens the Black Sea's coastal and marine ecosystems. This kind of pollution can be a result either of accidental oil discharges from tankers or wasteful use or disposal on land. Almost half of the inputs of oil from land-based activities are brought to the Black Sea via the Danube River.⁸

The former Soviet Union countries of the Black Sea region are characterised by the ongoing production and use of nuclear energy. Even after the Chernobyl nuclear accident and its catastrophic environmental, economic, societal, and human health impact on the surrounding areas, the operating power plants in Armenia and Russia, still do not meet the high safety standards set by the European Union (EU).

Relative weakness of democratic institutions, ethnic and minority claims, and divergent cultural identities are the main sources of conflict among certain regions in the Black Sea area. Due to the ongoing hostilities, organised crime, corruption and poverty, environmental protection is certainly not the primary target of the governments. The economic survival of these populations usually lies in unsustainable developing practices, such as illegal over-logging and uncontrolled urban sprawl⁹ that further aggravate environmental degradation. It is also worth mentioning that areas involved in conflicts are obviously unsuitable for agriculture.

However, the countries of the Black Sea region are aware of the environmental problems and challenges that are posed by man-induced interventions in global climate. The problem is that they still have not adopted tools of environmental risks assessment and early warning prediction models and scenarios about potential environmental hazards and crisis management. Attached to the legacy of using oil, gas or nuclear energy, the Black Sea countries do not rely on renewable energy resources

⁸ Commission on the Protection of the Black Sea against Pollution (BSC), "Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea (2002-2007)" (Istanbul: Publications of the Commission on the Protection of the Black Sea against Pollution, 2009).

⁹ Tavitian et al., Greening the Black Sea Synergy, 40.

and they do not promote ecological security, in order to ensure long-term safety for the Black sea environment and its populations.

The challenge, which the region now faces, is to secure a healthy Black Sea environment at a time when economic recovery and further development are also being pursued. Consequently, there is a serious risk of losing valuable habitats and landscape and ultimately, the biological diversity and productivity of the Black Sea ecosystem. ¹⁰ In this regard, the adaptation to relevant international conventions becomes imperative ¹¹ for all the countries of the region.

International and regional conventions

The number of international and regional conventions regarding environmental protection proves the major concern over adverse environmental impacts. Indeed, nowadays numerous international initiatives aiming at the conservation of biodiversity (Convention on Biological Diversity), the protection of wetlands (Ramsar Convention), the conservation of wildlife and natural habitats (Emerald Network)¹² and others exist.

Additionally, there are also conventions at trans-national, regional or even smaller scale level that are relevant to the Black Sea area. Some of the most important ones are the Convention on Cooperation for the Protection and Sustainable Use of the Danube River,¹³ the Framework Convention on the Protection and Sustainable Development of the Carpathians (2003), and the Black Sea Convention (1992)¹⁴ for the conservation and integrated management of the area.

The Convention on the Protection of the Black Sea Against Pollution (1992), known as the Bucharest Convention, is the main legal document that defines the priorities and directions in the sphere of international

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 $^{^{\}rm 10}$ BSC, "Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea (2002-2007)," 4.

¹¹ Black Sea Basin ENPI CBC Programme, "Black Sea Basin Joint Operational Programme 2007-2013," 26.

¹² Tavitian et al., Greening the Black Sea Synergy, 14.

¹³ The Danube River Protection Convention (short name) is valid since 22 October 1998

¹⁴ Tavitian et al., *Greening the Black Sea Synergy*, 9.

environmental protection in the Black Sea basin. ¹⁵ The Convention was signed by six Black Sea countries (Bulgaria, Georgia, Romania, Russia, Turkey, and Ukraine) and includes a basic framework agreement for cooperation, and four specific protocols: i) the Protocol on the Protection of the Black Sea Marine Environment against Pollution from Land-Based Sources and Activities; ii) the Protocol on Cooperation in Combating Pollution of the Black Sea Marine Environment by Oil and Other Harmful Substances in Emergency Situations; iii) the Protocol on the Protection of the Black Sea Marine Environment against Pollution by Dumping; and iv) the Protocol on the Conservation of the Biological Diversity and the Black Sea Landscapes. ¹⁶

In the same logic, cooperation on environmental conservation can lead to the development of ecological networks, in order to coordinate the management of trans-boundary areas. Such networks are needed to restore ecological continuity in specific areas, and to develop a framework that will facilitate synergy between protection of biodiversity and sustainable social and economic development, applicable at different geographic scales (local, regional, cross-border, national, and international.)¹⁷ One of these networks is the Pan-European Ecological Network established in 1995 at the "Environment for Europe Ministerial Conference" in Sofia.

The variety of the aforementioned conventions (and many more) and networks proves that many environmental issues can be dealt more effectively in an international rather than national or regional level. Opportunities are given to national governments to cooperate and coordinate their actions in fundamental issues, such as water and waste management, prevention of pollution, conservation of natural habitats etc. Nevertheless, a prerequisite for achieving these goals is for the signatories to agree on taking all the appropriate legal, technical, and administrative measures.¹⁸

However, these conventions are today only partly implemented, indicating the low level of legal compliance in the countries of the Black Sea.

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¹⁵ "Saving the Black Sea Together, EU Funded ECBSea Project," October 2009, http://ecbsea.org/files//content/ECBSea_eng!!!.pdf.

¹⁶ Ibid

¹⁷ Marie Bonnin et al., *The Pan-European Ecological Network: Taking Stock*, Nature and Environment, no 146 (Strasbourg: Council of Europe Publishing, July 2007), 29.

¹⁸ Ioannis Stribis, "Pooling Forces in Protecting the Black Sea Marine Environment: Actors and Actions," *ICBSS Policy Brief*, no. 17 (Athens: ICBSS, October 2009), 13.

Moreover, low rates of ratification ¹⁹ demonstrate numerous weaknesses. The most fundamental ones are the inadequate administrative and technical support and the insufficient financial capacity. It also seems that there is lack of coordination among relevant national and regional authorities, governmental departments and agencies, along with inadequate collection, analysis and assessment of environmental data. Consequently, this leads to poor national reports and disoperation of compliance mechanisms. Nonetheless, a number of countries tend to ratify conventions and protocols without prior application of certain requirements, such as compliance of their national legislation with the convention's main provisions. Generally, fund allocation for the implementation of conventions is very limited and it depends almost exclusively on external assistance.²⁰

The proper ratification of conventions needs to be accompanied by horizontal and vertical cooperation ²¹ among different governmental departments and agencies. The involvement of appropriate actors and the enhancement of capacity building are also essential in order to improve institutional arrangements (in cross-sectoral policy development and policy implementation), and achieve the desirable compliance and implementation of conventions.

Institutions and actors

Numerous organisations, institutions and networks are today active in the Black Sea region, aiming at the cooperation among countries and the coordination of their actions. These initiatives differ concerning the space and scale of reference, the institutional membership (international, regional, European) and the power relations between the different actors involved. Thus, there are international organisations and forums (e.g. the Black Sea Commission on the Protection of the Black Sea against Pollution – 1992), regional organisations (such as the Black Sea Economic Cooperation – 1992) and platforms, and EU driven policies and programmes [e.g. the Black Sea Synergy (BSS) – 2007].

¹⁹ OECD, *Policies for a Better Environment: Progress in Eastern Europe, Caucasus and Central Asia* (Paris: OECD Publishing, 2007), http://www.oecd.org/dataoecd/33/12/39274836.pdf.

²⁰ Ibid

²¹ Vertical cooperation entails collaboration among central governments, regional institutions, municipalities, and horizontal networks, in which public institutions, private actors and representatives of NGOs participate.

Despite the plethora of various institutions and structures in the Black Sea area, it seems that there is a lack of political commitment, which negatively influences policy making procedures and national or regional cooperation. For example, one of the most important intergovernmental organisations in the area is the Black Sea Commission established in implementation of the Bucharest Convention in 1992 which constitutes the only official initiative for the environmental protection of the Black Sea. The Commission's protocol on biodiversity and landscape conservation is not yet implemented, since only two countries (Turkey and Ukraine) have ratified it.²²

This case shows the lack of political will from national governments to proceed to effective communication and coordination. Simultaneously, in the absence of clear goals, the multiplicity of organisations, bilateral agreements, and institutions lead to a highly fragmented system²³ with misplaced priorities and misused funds. Consequently, the numerous institutions and actors have not yet led to cohesion and synergy of actions, rather than overlapping and lack of clarity and coordination.

At a first glance the increased number of multilateral agreements, institutions, and actors in the environmental field shows the intention and need of the Black Sea countries to showcase their problems and seek for solutions not internally, but internationally. After all, the complexity of environmental issues and the growing demand for their incorporation into several other sectoral policies require more than a single institution or organisation. However, despite the good will, this multiplicity has led to a maze of legislation, jurisdictional overlaps and severe gaps. National and local governments and administrations are unable to implement the results of conventions, protocols and policies. The outcomes are inefficiencies and inconsistencies in implementation procedures.

In this framework, scientific and political debates agree on the need for a strengthened, more effective, and more coherent institutional and legislative framework for international and regional cooperation and environmental governance.²⁴ To this end, the participation of the EU in

²² Tavitian et al., *Greening the Black Sea Synergy*, 45.

²³ James Gustave 'Gus' Speth, "Analyzing the Present," in "Global Environmental Governance in the 21st Century: Way Ahead Way Open" (report from the Global Environmental Governance Forum: Reflecting on the Past, Moving into the Future, 28 June – 2 July 2009, Glion, Switzerland), http://www.unep.org/civil_society/GCSF11/pdfs/GEG-Forum-Report_Final.pdf.
²⁴ Maria Ivanova and Jennifer Roy, "The Architecture of Global Environmental

²⁴Maria Ivanova and Jennifer Roy, "The Architecture of Global Environmental Governance: Pros and Cons of Multiplicity" (chapter from the Centre for UN

certain organisations and conventions would act as a driving force in improving the legislative framework, promoting its operationalisation and enhancing cooperation among the Black Sea states. In fact, Greece, Bulgaria, and Romania, already EU member states, can promote the EU agenda to the other countries and play a crucial role in cooperation structures.

Sectoral policies: challenges for the environment

Lack of coherence and synergy is a crucial problem, referring not only to the multiplicity of actions of the institutions of the Black Sea, but also a major concern of sectoral policies exercised at all levels (European, national, regional/local). However, there is not only the issue of fragmentation and lack of coordination of sectoral policies in the Black Sea area, but even more importantly the compatibility of fragmented policy objectives with environmental concerns. Sectoral policies (transport, energy and climate change, security, regional policy, etc.) have severe impacts on the environment. How far multilevel sectoral policies have integrated "environmental acquis" and whether they are compatible with environmental concerns, is an open issue.

Transport

The Black Sea plays a key role as a transit area. It is considered as a valuable transport corridor connecting Europe and Asia, and therefore the EU actively supports regional transport cooperation in the area, in order to improve the efficiency, safety and security of relevant operations. ²⁵ However, as transport activities support increasing mobility demands for passengers and freight, they have become notably linked to environmental problems.

Transport activities release millions of tons of gases into the atmosphere, aggravating air pollution and contributing to greenhouse gas emissions, which affect the global climate. Air pollution is provoked by different types of transport: road, railways and sea transfer. The extensive dependence on private cars and road freight transport are responsible for

Reform Education's upcoming reader on Global Environmental Governance, January 2007), www.centerforunreform.org/system/files/Ivanova+and+Roy+G EG.pdf (accessed 12 October 2010).

²⁵ Tavitian et al., *Greening the Black Sea Synergy*, 30 (see fn. 1)

major air quality problems, mainly of local nature. Furthermore, marine transport is also accountable for emission of air pollutants and CO2, along with railway wagons that release exhaust gases and a number of pollutants. Apart from the serious damage to the climate, air pollutants are linked to serious health problems. Toxic air pollutants are associated with cancer and respiratory diseases, while particulate matters cause respiratory problems, skin irritations and various types of allergies.²⁶

Transport activities are also responsible for environmental impacts on water ecosystems (sea, rivers, wetlands, etc.), while contamination risks from water transport are particularly high in the Black Sea area, where a large part of cargo is transferred by ships across the sea or the inland waters. Dredging activities disrupt the marine environment and threaten to spread the contamination of bottom soils to the surrounding areas. Different kinds of waste from passing ships are also common in the Black Sea.

Likewise, soil quality is affected by means of transportation. Soil erosion is a common side-effect during the construction of ports, resulting in transformed river banks and coastal areas. Moreover, the construction of highways and airports shrink the percentage of fertile land. Soil contamination is also possible due to the use of toxic materials²⁷ used in the transport industry.

Transportation activities have an impact on the man-made environment as well, since such facilities constitute an essential part of the urban landscape. Often, economic and social segregation in cities is caused by the construction of avenues, subways and train terminals. Major transport infrastructures create physical barriers mainly for pedestrians, increase noise levels and degrade the built cultural heritage and cities' aesthetic.

The conservation of biodiversity becomes a challenge when transportation activities are involved. The need for construction materials and appropriate land threatens natural habitats and flora and fauna species' survival.

The EU member states follow a common framework regarding the incorporation of environmental concerns into their national transport policies. Unfortunately, this is not a common practice for the Black Sea countries. Strategic Environmental Assessment (SEA) is an essential tool for the support of strategic decision-making and the integration of

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²⁶ Jean-Paul Rodrigue and Claude Comtois, "The Environmental Impacts of Transportation," http://people.hofstra.edu/geotrans/eng/ch8en/conc8en/ch8c1 en.html (accessed 4 October 2010).

²⁷ Ibid.

environmental values into transport policy. However, the European directive concerning the harmonisation of SEA with the national policies is not applicable for non EU member states of the Black Sea area. Similarly, the EU Water Framework Directive, which aims at a new holistic approach in order to improve and manage the water environment and the Environmental Impact Assessment (EIA), which ensures that decision-makers take into consideration the environmental impacts induced by projects of transport infrastructure are not fully applied by the Black Sea countries.

Energy and climate change

Energy production and consumption are the main contributors to the generation of greenhouse gas emissions and other air pollutants, oil and nuclear waste. The energy sector constitutes the backbone of the economy for the countries of the Black Sea, concerning either production or transit, and therefore environmental impacts in the area are more evident than anywhere else.

Oil industry installations are major sources of solid, liquid and gaseous waste to air, soil and water.²⁸ The extraction of oil is responsible for the destruction of natural habitats for animals and plants. Simultaneously, waste products can cause soil contamination, if they are not properly treated and disposed.²⁹ On the other hand, oil spills from accidents during the transportation phase can cause serious environmental damage. Oil tankers are bound to pass through the Turkish Straits, which are considered a major shipping hazard due to their narrowness and the windy weather in the area. The potential of such an accident can be increased if the ships are old, not fully equipped and do not follow the safety standards. Such an accident occurred in March 1994, when the tanker Nassia exploded in the Bosporus strait killing most of its crew and releasing over 1.000 tons of oil into the sea, causing extensive environmental damage.³⁰ This kind of accidents is extremely perilous for the environment of the Black Sea, especially due to the rich biodiversity of the area and its value for humans.

²⁸ Tavitian et al., *Greening the Black Sea Synergy*, 18.

²⁹ European Environment Agency, *Europe's Environment: The Fourth Assessment* (Copenhagen: European Environment Agency, 2007), http://www.eea.europa.eu/publications/state_of_environment_report_2007_1.

³⁰ Mee, *How to save the Black Sea*, 23 (see fn. 3).

Given the hazards of transporting oil by ships, oil and gas pipelines seem to be a more reliable and environmentally friendlier solution. Nevertheless, it should be noted that they also leave their footprint in the area. Pipelines occupy land, destroy natural habitats and ruin the area's landscape and aesthetic. Moreover, even in the case of pipelines, the potential of leakage cannot be eliminated and there is always the peril of an environmental damage.

The countries of the Black Sea have a tradition in nuclear energy production. However, this tradition is not always accompanied with the necessary safety standards for nuclear power plants, constituting a constant threat.³¹ Even after Chernobyl's nuclear accident that cost lives and caused irreparable damages in the area's environment and economy, there are still outdated facilities (e.g. in Armenia), supporting the countries' energy sector. Moreover, the storage and transport of radioactive waste from nuclear power production and uranium mining is also accountable for environmental pressures.³²

On the other hand, it is already evident that climate change, and particularly rising temperatures, is having significant impacts on physical, biological and human systems. Warmer temperatures are causing changes in the hydrological cycle affecting the incidence and severity of drought and floods and the availability of water, threatening in many aspects human society and industry (e.g. agriculture, rural economies, water security and food security). Sea level rise is another consequence of climate change that will have an increasing impact on human settlements and infrastructure.

The Black Sea area is particularly susceptible to this kind of changes, and it may well experience floods, droughts, sea level rise, shortage of freshwater and degradation of agricultural products. Furthermore, local populations are likely to migrate due to severe economic and environmental impacts provoked by climate change. Species migration is also a probability, since climate change influences severely biophysical systems.

In addition, major impacts can be induced on economic sectors in the Black Sea region. Climate change can negatively affect the tourist industry in coastal areas, especially in the Black Sea countries that lack adequate national or regional contingency plans. Agriculture is also a vulnerable sector that can easily be afflicted by global warming, prolonged droughts, intense floods and shrinkage of fertile land.

³¹ Tavitian et al., *Greening the Black Sea Synergy*.

³² European Environment Agency, *Europe's Environment: The Fourth Assessment*, 335.

Security and environment

The ongoing conflicts among different ethnicities in the Black Sea region are a serious threat to the natural environment. Obviously, during political tensions or violent outbursts, the preservation of biodiversity and environmental resources is not a primary goal, since survival (physical and economic) is usually the key issue. Conflicts among different regions or nations endanger natural ecosystems and species of flora and fauna, causing either the death of native populations or their migration. Furthermore, ongoing conflicts lead to extensive migration of humans searching for a peaceful living environment. Their land is abandoned and sectors such as agriculture and forestry are noticeably decreasing. In addition, people staying behind are obliged to find new sources of income and they usually turn to unsustainable methods of taking advantage of the natural resources, such as illegal over-logging.³³

Unfortunately, environmental degradation induced by hostilities and violent conflicts is not usually considered as an issue of national security. National governments do not seem to be interested, willing or even able to conduct serious studies or assessments regarding the relation of security and environment. The reasons for this include lack of funding and proper assessment methods in order to carry out such projects. As a result, ongoing environmental degradation due to conflicts hampers economic development, leading to more severe problems for national and regional governments.

Regional policy and cooperation

On the one hand, the Black Sea area is characterised by divergent economies, which hampers the prospect of economic integration, but on the other hand, it becomes more and more evident that cooperation among them is essential. These countries have left behind the economic decline after the Cold War and until the end of the 1990s having passed to a new era after 2000. Per capita incomes have begun to grow resulting in an increased degree of prosperity, even though it seems to be unequally distributed among the countries of the Black Sea. Their economic systems are today market-driven, while intra-regional dynamics are also improved. This is due to the development of a number of organisations, processes, and policies aimed at promoting cooperation and economic integration with increased flows of people, capital, goods and services across the region, as

³³ Tavitian et al., *Greening the Black Sea Synergy*.

well as greater convergence with the EU. ³⁴ However, all Black Sea countries experienced an economic recession in 2009 and it is rather unlikely to reach the growth rates prior to the crisis by the end of this year.

It should be mentioned that these countries are extremely different in terms of size, demographic numbers, development structure and political systems. Nevertheless, there are a number of issues that need to be addressed collectively by all countries, aiming at cooperation and coordination at different levels. These include the critical relation with the spatial development priorities of the EU and the linkage of regional policy with other relevant key policy sectors that seem today more crucial than ever: trade, energy, transport, telecommunications and environmental protection.

The contemporary need to deal with environmental challenges and the consequences of climate change are a perfect incentive for joint and complementary actions. These should be met in the framework of achieving sustainable economic development, despite the different priorities of each state in the Black Sea area.

The Black Sea is the object of numerous regional institutional structures and programmes. From economic and political organisations (the Black Sea Economic Cooperation – BSEC) to EU-led or initiated programmes (the Danube Black Sea Task Force – DABLAS) and to wider EU policies such as the European Neighbourhood Policy (ENP) and the BSS, ³⁵ there is abundance of programmes dealing with the region's economic, political, social and environmental aspects. Nevertheless, it should be noted that national governments do not always have the institutional capacity to undertake such major programmes. Several constraints emerge that include slow decision-making processes, poor financing, a lack of qualified expert staff, weak horizontal and vertical institutional coordination and the limited participation of private sector and civil society actors.³⁶

Similarly, regarding the incorporation of environmental aspects in national and regional policies, the Black Sea countries' authorities experience major institutional and organisational weaknesses, often related to public

³⁴ Mustafa Aydın and Dimitrios Triantaphyllou, rapporteurs, *A 2020 Vision for the Black Sea Region: A Report by the Commission on the Black Sea* (Gütersloh: Bertelsmann Stiftung, May 2010), 35.

³⁵ Ibid., 36.

³⁶ Commission of the European Communities, *Black Sea Synergy – A new regional cooperation initiative*, COM (2007) 160 final, Brussels, 11 April 2007.

administration practices inherited from the Soviet era.³⁷ Other limitations stem from the low environmental awareness of the public and economic agents, the absence of environmental governance, the lack of participation in policy-making, and mainly from the common dominant perception of policy makers of these countries that environmental protection will act as an impediment to economic growth and not as an essential component for social and economic prosperity.³⁸

In general terms, regional policies in the countries of the Black Sea are mainly driven by the goals of economic growth, neglecting severe environmental issues. It is almost as if economic development and environmental protection go in opposite directions. Moreover, the implementation of innovative tools is missing from national policy-making procedures, and therefore the possibility of a holistic aspect of strategic planning is diminished.

Policy recommendations: environmental governance aiming at "greening" the Black Sea

Dimensions of environmental governance

The most crucial environmental problems and challenges of the Black Sea that were previously highlighted (see Box 1), should be re-examined on the basis of the multilevel and multi-actor environmental governance, leading to more effective and integrative outcomes, aiming at "greening" the Black Sea development.

Environmental governance either based on the "neo-institutionalist" ³⁹ approach, or on the "environmental economics" ⁴⁰ or on the "radical

³⁷ OECD, Policies for a Better Environment: Progress in Eastern Europe, Caucasus and Central Asia, 12 (see fn. 19).

³⁸ Ibid., 13.

³⁹ For further information, see Philippe C. Schmitter, "Examining the Present Euro-Polity with the Help of Past Theories," in *Governance in the European Union*, ed. Gary Marks, Fritz W. Scharpf, Philippe C. Schmitter and Wolfgang Streeck (London: Sage, 1996),1-14.

⁴⁰ For further information on environmental economics, see Elinor Ostrom et al., ed. *The Drama of the Commons* (Washington, D.C.: National Academy Press, 2002).

geography" ⁴¹ theoretical approach, includes the following crucial dimensions:

i) The search for "strategic" environmental governance and integrated cross-sectoral policies.

The integration of the "environmental acquis" in the main core of sectoral policies (from the initial stage of policy formation, up to decision-making process and implementation) is an important step towards integration, based sustainable development principles. Thus, environmental governance can function as a "loose-coupling mechanism," coordinating and integrating processes, institutions and actors in different policy fields. Of outmost importance is the synergy and cohesion among environmental policy, spatial planning, regional policy, transportation and energy policy. Compatibility of different policy objectives can lead to "territorial cohesion"⁴² and better cross-sectoral regulation and cooperation of institutions, enabling actors to take initiatives enhancing efficiency. The main challenge for the Black Sea, an area with highly fragmented sectoral policy outcomes, is the strategic steering of individual policy sector's objectives and interests towards more interwoven paths of environmental integration.

Box 1.: Summarising the most acute problems and challenges of the Black Sea

- The intensive pressures, threats and future risks of the rich natural environment of the Black Sea need urgent environmental policy responses.
- Formally signed international and regional conventions are only partly implemented (legal compliance), while policy formation in most countries lacks operational and effective measures and tools (evaluation, performance).

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⁴¹ See, for example, Erik Swyngedouw, "'Globalisation' or 'Glocalisation'? Networks, Territories and Rescaling," *Cambridge Review of International Affairs* 17, no. 1 (2004): 25-48.

⁴² See, for example, Committee on Spatial Development, *ESDP European Spatial Development Perspective: Towards Balanced and Sustainable Development of the Territory of the EU* (Luxembourg: Office for Official Publications of the European Communities, 1999); Georgia Giannakourou, "Transforming Spatial Planning Policy in Mediterranean Countries: Europeanization and Domestic Change," *European Planning Studies* 13, no. 2 (2005): 319-331.

- The multiplicity of institutions and actors at and across a range of levels, has not yet led to cohesion and synergies of actions, while overlapping and lack of coordination emerge.
- Fragmented sectoral policies (especially transport, regional policy and big infrastructure projects) do not integrate environmental concerns, while new asymmetries and discrepancies occur.
- ii) The shift from "government" to "governance:" market, hierarchies, network, "meta-governance," multilevel, multi-actor.

The shift from "government" to "governance" corresponds to the emergence of new "horizontal" networking ("heterarchies"), based on arguing and bargaining.⁴³ However, this shift has not overwritten the pre-existing "vertical" top-down relations, based on command and control paternalistic policy style. In fact they co-exist in "mixture forms" of political arrangements, in "meta-governance" structures. ⁴⁴ National governments, international institutions and state bureaucracies cannot be the only stakeholders imposing top-down environmental policies, which anyway have proved to be ineffective. There is a need to open up the decision-making processes, enabling new environmental networks to express their voice and interests across all policy levels and especially at the regional, local and cross-border level.⁴⁵

⁴³ Hubert Heinelt, "Multilevel governance in the European Union and the Structural Funds," in *Policy Networks and European Structural Funds: A Comparison between European Union Member States (Perspectives on Europe)*, ed. Hubert Heinelt and Randall Smith (Aldershot: Avebury, 1996); Hubert Heinelt, et al., ed. *Participatory Governance in a Multi-Level Context: Concepts and Experience* (Opladen: Leske and Budrich, 2002); Panagiotis Getimis and Grigoris Kafkalas, "Comparative Analysis of Policy-Making and Empirical Evidence on the Pursuit of Innovation and Sustainability," in *Participatory Governance in a Multi-Level Context: Concepts and Experience*, 155-171.

⁴⁴ Bob Jessop, "The Crisis of the National Spatio-temporal Fix and the Ecological Dominance of Globalizing Capitalism," *International Journal of Urban and Regional Studies* 24 (2000): 273-310.; Bob Jessop, "Governance and Metagovernance: On Reflexivity, Requisite Variety, and Requisite Irony," in *Participatory Governance in a Multi-Level Context: Concepts and Experience*, 33-58; Bob Jessop et al., "Theorizing Sociospatial Relations," *Environment and Planning D: Society and Space* 26 (2008): 389-401.

⁴⁵ Panagiotis Getimis et al., "Eco-Management and Audit Scheme (EMAS) in Greece," in *Sustainability Innovation and Participatory Governance*, ed. Hubert Heinelt and Randall Smith (Adershot: Ashgate, 2003), 151-164.

iii) The politics of "scale:" rescaling, "jumping scales."

Vertical and horizontal scalar reordering and "jumping scales" ⁴⁶ lead to new actor constellations and policy interventions. In parallel, there is a rise of various transnational "regionalisms," (e.g. Black Sea Macro-Region), focusing on territorial policy objectives (e.g. regional economic cooperation). Various EU-inspired trans-frontier regionalisms seek to foster greater integration by supporting actors and regions which cross the boundaries of EU member states (e.g. the Interreg transnational and cross-border programme, the Black Sea Basin Joint Operational Programme 2007-20013, and the European Spatial Development Perspective). Concerning environmental governance in the Black Sea, it is important to focus in the nested relations between local, regional, national, European and global actors and institutions and enhance their cooperation in effective and operational practices, across scales.

iv) The opportunities and the limits of "strategic choices" of actors and institutions in the framework of "environmental governance."

Actors and institutions in the framework of environmental governance have both opportunities and limits, while developing their "strategic choices." Dominant norms, values and beliefs are often very rigid, opposing institutional reforms. Environmental choices can have effective outcomes, if they are based on participation, accountability, transparency and legitimacy.⁴⁷ Given the multiplicity of actors and institutions in the Black Sea region, there is a need not only for better cooperation among them, but also for "opening" the "action arenas" to new stakeholders (civil society and private sector), implementing realistically "greening" practices, as good examples for knowledge and policy transfer.

Integration and cohesion of actions towards "greening" Black Sea sectoral policies

Effective environmental protection requires the consideration of environmental impacts of all sectoral policies at the national level. The

Territories and Rescaling."

⁴⁶ Neil Smith, "Remaking scale: Competition and cooperation in pre-national and post-national Europe," in *State/Space: A Reader*, ed. Neil Brenner et al. (Oxford: Blackwell, 2003); Swyngedouw, ""Globalisation' or 'Glocalisation'? Networks,

⁴⁷ Zefi Dimadama and Dimitrios Zikos, "Social Networks as Trojan Horses to Challenge the Dominance of Existing Hierarchies: Knowledge and Learning in the Water Governance of Volos, Greece," *Water Resources Management* 24, no. 14 (2010): 3853-3870.

need for a more holistic approach leads to a cross-sectoral policy integration, as a means to "green" all economic activities already at the planning stage.

The real challenge lies in the determination of environmental externalities deriving from development activities.⁴⁸ This goal can only be achieved by the obligatory conduction of SEAs and EIAs, before the construction of large and medium sized projects, or as "ex ante" prerequisite for the implementation of policies and programmes. Only the full evaluation of possible environmental impacts will allow national governments to achieve long-term economic prosperity, as well as social and territorial cohesion.

In addition, it should be noted that until today there is no formal environmental cooperation between the countries of the Black Sea. Despite the area's unquestionable value in resources and biodiversity and the common challenges to be addressed, there are still no official commitments. During the meeting of the Working Group on Environmental Protection on May 2010, in the framework of the BSEC Action Plan for Cooperation in the field of environmental protection, only a slight progress in the implementation of the Action Plan has been recorded. The truth is that the BSEC presents important steps towards the incorporation of environmental approaches in the economic and social development of its member states. However, despite the notable progress so far, the environmental problems are mainly tackled at the national level, even though they have transboundary impacts. Collective multilevel action can be triggered by the BSEC; its institutional and diplomatic role is essential for the enhancement of horizontal actions for the environment, the allocation of financial resources and the management of projects that need sufficient political and technical support, if they are to succeed.

The countries of the Black Sea region need to implement multilateral environmental agreements and establish a more strategic environmental cooperation in the area. In this framework, multilevel cooperation could be implemented in issues such as waste management, pollution or biodiversity preservation. For example, fisheries in the Black Sea constitute a cross-border issue. The assessment of and the data collection on this activity are crucial in order to explore new sustainable ways of using these resources and ensure their viability. Another activity that should be promoted at the regional level is the involvement of Black Sea countries in

⁴⁸ American Institute for Contemporary German Studies, "Environmental Diplomacy" (conference report, Washington, D.C., 18 November 1998), http://www.aicgs.org/documents/environmentaldiplomacy.pdf.

international discussions on future action ⁴⁹ regarding environmental matters.

In the framework of ecological security, the Black Sea countries should adopt shared initiatives, concerning the implementation of tools of environmental risks assessment, especially early warning prediction models and scenarios about potential environmental hazards as well as improvement of disaster and crisis management. The notions of ecological security, monitoring, risk analysis, management and long-term safety for the Black Sea environment and populations should be embraced, in order to attain a gradual reliance on renewable energy resources.

Likewise, transport policies should also adopt the principles of sustainable development, taking into account the environmental, economic and social consequences of any transport infrastructure projects. As a step towards this direction, the countries of the Black Sea should harmonise their laws with the European legislation and achieve the EU's technical and environmental standards. The implementation of SEA and EIA for the new transport works and plans is also a way of avoiding or reducing the relative environmental impacts.

New interventions are further needed in regional policy implementation. Incentives should be given for green, innovative development and new investments. This includes the "greening" of enterprises by the implementation of environmental management systems, such as the EU Eco-Management Audit Scheme (EMAS) or ISO 14001, which help companies and organisations to improve their environmental performance. The same pattern can be followed in the public sector, in organisations of local government or in universities. "Green municipalities" or "green universities" clusters could further act as examples of "good" environmental governance. Additionally, the notion of environmental management along with sound waste management, energy saving, recycling and water saving should also be embraced ("smart greening").

Integrated coastal zone management is another crucial issue. It needs to be embodied in enforced legislation, in the attempt to achieve sustainability of coastal zones. This means that this process needs to integrate all policy areas, sectors and administrative levels.

The implementation of bilateral agreements among the Black Sea countries is the only way to coordinate actions towards a better balance of oil, gas and other, alternative energy resources. Of course, this is a very difficult task to fulfill, given the high dependence of the Black Sea on fossil fuels. It

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⁴⁹ Commission of the European Communities, Black Sea Synergy, 6 (see fn. 37).

is moreover imperative to take into account the complexity of international and changing interests among the EU, the Black Sea countries and the multi-national corporations, in order to have realistic policy recommendations in the energy sector. Another critical issue is the conformity to high safety standards regarding the nuclear energy power plants, due to the high risks that nuclear energy entails, not only for the sector of environment, but for the safety of people as well.

The Black Sea countries should take full advantage of the opportunities offered by international and European agreements, protocols and legal frameworks. Especially Bulgaria and Romania as new member states of the EU could play a crucial role in improving the institutional setting of the Black Sea countries and enforcing cooperation structures and initiatives. Also Greece, an EU member state since 1981, can share valuable knowledge and expertise in this area. The EU already offers valuable guidance towards this goal through several policies, such as the ENP. Nevertheless, this guidance does not constitute a clear integrated policy for the Black Sea countries, rather than scattered dimensions. Therefore, the EU should not address isolated thematic issues, but integrate environmental concerns into these cooperation fields. It should support cooperation actions around issues (e.g. climate change) that offer joint incentives and result in benefits to all parties, based on a thorough analysis of the regional political economy and the evolving global agenda. 51

Additionally, even though the Black Sea countries are not compelled to incorporate the European legislation into their national laws, the harmonised environmental legislation among these countries based on the best practices and experiences from the European region, would count as one more step towards their cooperation. More actions should include the coordination with other regional institutions and organisations having as a common goal the environmental protection, the promotion of clean, environmentally friendly and resource saving technologies, and the establishment of a monitoring mechanism ratified by all countries for the data collection and ongoing evaluation of the Black Sea environment.

⁵⁰ Tavitian et al., *Greening the Black Sea Synergy*, 50 (see fn. 1).

⁵¹ Panagiota Manoli, *Reinvigorating Black Sea Cooperation: A Policy Discussion,* Policy Report III, Commission on the Black Sea (Gutersloh: Bertelsmann Stiftung, 2010).

Box 2.: Policy recommendations for integration of actions for "greening" sectoral policies

- Obligatory conduction of SEA and EIA.
- Reinforcement of the BSEC's role in the enhancement of horizontal actions for the environment, the allocation of financial resources and the management of projects that need sufficient political and technical support.
- Multilateral environmental agreements among Black Sea states for waste management, pollution, biodiversity preservation, fisheries, better balance of fossil fuels and alternative energy resources.
- Implementation of environmental risks assessments, early warning prediction models, scenarios of potential environmental hazards, and improvement of disaster and crisis management.
- Integration of EU's technical and environmental standards in transport and nuclear energy policies.
- "Smart greening" of enterprises, public institutions, universities and municipalities through the implementation of environmental management systems (EMAS, ISO 14001) and environmentally friendly "clean" technologies.
- Integrated coastal zone management through strict legislation.
- Knowledge transfer and promotion of institutional setting by the EU member states (Greece, Bulgaria, and Romania).
- Taking full advantage of opportunities originated from EU policies and institutions (e.g. ENP).
- Harmonisation of environmental legislation in the Black Sea countries.
- Ratification of monitoring mechanisms for data collection and ongoing evaluation of the Black Sea environment.

Environmental networking: enhancing legitimacy and efficiency

The Black Sea area is characterised by unitary states with long tradition in hierarchical governmental systems and most importantly with different trajectories – mainly based on whether they are EU member states (Bulgaria, Greece, and Romania) or non-EU members or whether they are negotiating their accession to the EU (Turkey) – and influenced by the dominant driving forces of Europeanisation, globalisation and neo-liberal policies. Different historical dependencies and governmental cultures lead to different orientations that create numerous discrepancies among the states. The transition "from government to governance" and the public administrative reforms ⁵² are relatively new notions for the majority of these countries and certainly a major challenge for the region.

This shift is prominent in the context of the environment, where governments remain the key actors due to their constitutional responsibilities. Nonetheless, it is now widely accepted that governments on their own lack the necessary resources, skills, knowledge, and legitimacy needed to address contemporary environmental challenges. Environmental governance should include innovative approaches, multiple groups of stakeholders with diverse views, as well as networks and partnerships among the public and the private sector.⁵³

The implementation of a green agenda for economic development should be a priority for national governments. They should promote more sustainable employment opportunities⁵⁴ in order to restrict environmental impacts. The tourist industry is a good example of a sector that could be developed in a sustainable way. Eco-tourism should be stimulated in the Black Sea area, with a view to incorporating concerns related to water saving, waste treatment and management, integrated coastal management, and new environmentally friendly tourist infrastructures. Towards this direction, economic incentives should be given to investors so as to participate in environmental protection programmes and modern training

⁵² Stella Ladi, *Good Governance and Public Administration Reform in the Black Sea Economic Cooperation (BSEC) Member States*, Xenophon Paper, no. 6 (Athens: ICBSS, December 2008), 37.

From Government to Governance: A State-of-the-Art Review of Environmental Governance," Final Report, Prepared for Alberta Environment, Environmental Stewardship, Environmental Relations (Guelph, ON: Rob de Loë Consulting Services, 2009), http://environment.gov.ab.ca/info/library/8187.pdf.

⁵⁴ Mee, "How to save the Black Sea," 14 (see fn. 3).

schemes for staff. Generally, a new approach to the environment as the basis for economic growth is required, in order to develop a sustainable economy. Certainly, the effective enforcement of a green agenda entails incentives, disincentives, and penalties for non-compliance.⁵⁵

Transparency is widely assumed to be a key issue in the attainment of desired ends, such as accountability and legitimacy of environmental governance. Especially in the Black Sea area, where agreements among national governments and multinational corporations for the exploitation of the countries' rich resources in oil and gas are of great importance for their economies, transparency in procedures is salient for the achievement of legal compliance. In general terms, the transparency of the environmental status and its openness to civil society participation can unquestionably spread awareness and better understanding of the environmental problems. After all, national governments should be held accountable (nationally and internationally) through stringent independent evaluations and strict law enforcement.

Environmental governance requires effective monitoring of the environmental regime by the national governments. However, many states in the Black Sea area fail in this respect. Systematic data quality control and cross-country comparability are necessary to identify environmental problems in the region and set proper indicators for their analysis. For the achievement of this goal, these countries need to have the necessary policy capacity. This includes adequate and qualified manpower, sufficient technical support and financial structure, in order to carry out complex processes. Best practices in global environmental governance have demonstrated that national governments need consensus on procedural norms, adequate incentive mechanisms, and sufficient capacity, if they are to minimise the gap between an increasing number of policies and bilateral agreements on the one hand, and their implementation on the other.⁵⁶

The involvement of non-governmental organisations (NGOs) and the civil society is essential in building strong environmental governance. However, their active engagement is not always granted. For example articles 8 and 9 of the BSEC Charter promote relationships (observer status and sectoral dialogue partnership)⁵⁷ with third parties (institutions, organisations, etc.)

⁵⁵ Franz Perrez, "Vision for Moving Forward," in "Global Environmental Governance in the 21st Century: Way Ahead Way Open" (see fn. 23).

⁵⁶ 'Gus' Speth, "Analyzing the Present," 10 (see fn. 23).

⁵⁷ See articles 8 and 9 of the *Charter of the Organization of the Black Sea Economic Cooperation*,

only if these parties have international status. Therefore, regional and national NGOs and organisations are excluded from cooperation schemes⁵⁸ with the BSEC. In this sense, the BSEC should revise its Charter in order to permit access and cooperation with national NGOs, with a view to their valuable contribution in preparing and adopting policies. After all, the participation of environmental NGOs relevant to the case of the Black Sea area would assist the BSEC and its Working Group on Environmental Protection to better understand and address the environmental challenges⁵⁹ faced. Apart from NGOs, the engagement of other interested actors, such as civil society representatives, would provide valuable input on the deliberations of the aforementioned Working Group.⁶⁰

The implementation of sustainable policies requires the development of educational projects, transparent and participatory decision-making procedures, and rules on open access to administrative and judicial procedures. 61 The engagement of multiple actors, including business associations and the private sector, is already increasing; yet further participation needs to be initiated by the highest political levels, in order to enhance legal compliance. Public participation could be achieved through the wide dissemination of information on the work undertaken to rehabilitate and protect the Black Sea, and through the recognition and exercise of the public's right to participate in the decision-making process and the implementation of policies and plans.⁶² At the same time, a better organisation at local level, in particular, and a more active role of local authorities and universities in guiding and supporting local NGOs, would also enhance their involvement. 63 After all, stakeholders' active participation could serve as a useful counterweights to national monitoring reports to ensure accountability.64 To this end, it is essential to support, politically and financially, the development and execution of training programmes designed to train officials and raise public awareness. Furthermore, the maintenance of regular policy dialogues between

http://www.pabsec.org/resimler/dosyalar/31bseccharter_PN_r_HRMIP.doc (accessed 13 October 2010).

⁵⁸ Stribis, *Pooling Forces in Protecting the Black Sea Marine Environment: Actors and Actions*, 28 (see fn. 18).

⁵⁹ Ibid.

⁶⁰ Ibid., 14.

⁶¹ Mee, "How to save the Black Sea," 16.

 $^{^{62}}$ BSC, "Implementation of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea (2002-207)" (see fn. 8).

⁶³ Tavitian et al., *Greening the Black Sea Synergy* (see fn. 1).

⁶⁴ Peter M. Haas, "Science Policy for Multilateral Environmental Governance," February 2002, http://www.unu.edu/inter-linkages/docs/IEG/Haas.pdf.

governments, the private sector, and the civil society on the one hand, and financing agencies and international organisations on the other, is equally vital.

Box 3.: Policy recommendations for enhancing legitimacy and efficiency

- Implementation of a green agenda for economic development (sustainable employment opportunities, economic incentives, disincentives and penalties for non-compliance on the environmental acquis, environmental protection programmes and modern training schemes for staff).
- Enhancement of transparency and accountability of national, regional and local governments through strict independent evaluations and law enforcement.
- Enhancement of transparency and accountability of national, regional and local governments through strict independent evaluations and law enforcement.
- Adequate and qualified manpower, sufficient technical and financial support in order to carry out systematic data quality control and cross-country comparability.
- Revision of the BSEC's Charter for the permission of access and cooperation with national and regional NGOs.
- Engagement of multiple actors in the BSEC's Working Group on Environmental Protection.
- Dissemination of information on the work undertaken to protect the Black Sea and recognition of the public's right of participation of the public, to participate in the decision-making process and implementation of policies and plans.

Financing environmental governance

Developing environmental governance requires a series of transitions in the countries of the Black Sea region. They need to reform their public administration; tackle their weaknesses in qualified staff and technical support; open up to public participation by including NGOs, networks, scientific communities, business associations, chambers of commerce and local authorities; and enhance their legitimacy, effectiveness and efficiency.

However, achieving the aforementioned goals entails the presence of another crucial ingredient: financing.

So far, financing of the implementation of policies or projects in the Black Sea area comes mainly from external sources, such as the EU and the UN instruments (e.g. the European Neighbourhood and Partnership Instrument – ENPI). Unfortunately, this tactics undermines the involvement of local actors and the capacity of regional cooperation. 65 Moreover, existing programmes that promote regional cooperation with parallel concerns in environmental protection, such as the Black Sea Cross-Border Cooperation Programme, are too complex and costly for small NGOs. 66 New methods should be investigated, in order to simplify the procedures of grant applications and access to alternative sources of funding. This would greatly facilitate the participation of NGOs and civil society in such programmes.

Currently, most of the Black Sea countries are facing severe economic difficulties. The issue of allocating national funds to environmental protection is simply depends on the degree of priority that is given to the environmental sector and whether or not this is seen as a means to contribute to the future prosperity of a country.⁶⁷ Moreover, International Financial Institutions, such as the European Bank for Reconstruction and Development, are often sceptical about the allocation of funds in big projects, concerned about their effectiveness.

Generally, the funds for environmental protection and related activities are quite limited, especially compared to funds for economic development. Financial mechanisms are fragmented and even duplicative ⁶⁸ and mobilisation of resources is insufficient.

Box 4: Policy recommendations for environmental financing

- Take full advantage of EU and UN instruments and financing mechanisms.
- Simplify procedures for grant programme applications and access to alternative funding sources.
- Allocate national funds for environmental protection.

⁶⁵ Manoli, *Reinvigorating Black Sea Cooperation: A Policy Discussion*, 25 (see fn. 52).

⁶⁶ Tavitian et al., *Greening the Black Sea Synergy*, 51.

⁶⁷ Mee, "How to save the Black Sea" (see fn. 3).

⁶⁸ Franz Perrez, "Vision for Moving Forward," 16.

 Facilitate regular policy dialogues between governments, private sector, civil society, financing agencies, and international organizations.

Conclusions

The environmental problems that were highlighted in this policy brief attest to the imperative need for "greening" the Black Sea area. Experience and best practices from the Mediterranean and the Baltic Sea demonstrate that this can be achieved. The EU is a strong ally in this effort, since it could work with Black Sea countries in order to develop strategies to be adopted. The EU could also develop policies and legal frameworks for environmental protection. International funds and respective international funding mechanisms (for instance the Kyoto mechanism) should be mobilised for this purpose.⁶⁹

Apart from the European aid, the Black Sea area can rely on existing institutions, such as the BSEC. The Organisation needs to be strengthened and in some cases adapted, with a view to enhancing cooperation among counties and better address the challenges of environmental governance and sustainability in the Black Sea area.

Black Sea countries are diverse economically and environmentally, they have different aspirations, and are not able or willing to move at the same pace. To However, they still share positive or negative legacies and they can converge to some key priorities. Firstly, they need to set clear objectives for internal governance reforms, participatory processes, and coordination among different sectoral ministries and departments. These reforms need to be implemented in accordance with environmental requirements. Legal compliance is essential, along with administrative and technical support of the relative departments and agencies, and building of needed capacities. Implementation processes should be accompanied with the appropriate planning, financing, and monitoring mechanisms in order to achieve the environmental objectives. The empowerment of environmental authorities, such as NGOs, civil society, and other stakeholders, would also support environmental reforms.

On the one hand, corporate and industrial interests should be taken into serious consideration in finding common ground with environmental

⁶⁹ Tavitian et al., *Greening the Black Sea Synergy*, 52 (see fn. 1).

⁷⁰ OECD, *Policies for a Better Environment*, 96 (see fn. 19).

ICBSS POLICY BRIEF no. 21

needs. On the other hand, polluters should be given incentives to improve their environmental performance, to train their staff, and use cleaner and "greener" technologies. Environmental financing should be integrated into public expenditure frameworks, while any new possible sources of financing should be exploited (for example the Clean Development Mechanism defined in the Kyoto Protocol).⁷¹

Environmental governance can be a vehicle for tackling inefficiency and fragmentation and, eventually, for "greening" the Black Sea.

⁷¹ Ibid., 96.	
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Abbreviations

BSEC O	Organization 1	of the	Black Sea	Economic	Cooperation
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BSS Black Sea Synergy

EIA Environmental Impact Assessment ENP European Neighbourhood Policy

EU European Union

NGOs Non-Governmental Organisations SEA Strategic Environmental Assessment

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