



**Priority 2 description** 

# Efficient management of natural resources

**Extract of the Cooperation Programme** 





Priority 2 description 'Efficient management of natural resources' of Interreg Baltic Sea Region, a transnational European Territorial Cooperation Programme, for the period 2014 to 2020, part-financed by the European Regional Development Fund (ERDF), version 1.0.



This document is an extract from section two of the Interreg Baltic Sea Region Cooperation Programme, version 1, as adopted by the European Commission on 18 December 2014. Priority descriptions for the three thematic priorities have been extracted from the programme document as service to potential applicants under the respective thematic fields. The text presented in this document should be identical with the priority descriptions in section 2 of the Cooperation Programme. However, only the official Cooperation Programme is legally binding. Furthermore, the Cooperation Programme provides additional information relevant for applicants, e.g. about the programme strategy, indicators and horizontal principles. Therefore we strongly advice applicants who are preparing an application to the programme to read the full version of Cooperation Programme:

interreg-baltic.eu/about-the-programme/main-documents.html

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## Specific objective 2.1 'Clear waters'



To increase efficiency of water management for reduced nutrient inflows and decreased discharges of hazardous substances to the Baltic Sea and the regional waters based on enhanced capacity of public and private actors dealing with water quality issues.

Water management in the Baltic Sea Region has improved during the last ten years, resulting in a considerable decrease of phosphorus loads and some hazardous substances<sup>1</sup>. Despite this progress, the nutrient reduction targets set in the HELCOM Baltic Sea action plan have not been fully reached. For the whole Baltic Sea there remains a reduction need of both nitrogen and phosphorus, which implies that there is a need for even higher reductions at inland and coastal sources due to the retention in the catchment. In addition, most parts of the Baltic Sea were classified as "disturbed by hazardous substances". Concentrations of some hazardous substances (e.g. pharmaceuticals) have increased. Pollution by nutrient inflows from e.g. household and industrial waste water treatment facilities, agricultural lands and forests as well as hazardous substances from e.g. waste disposal sites, industries and chemical munitions at the sea bottom has a negative impact on

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<sup>&</sup>lt;sup>1</sup> Hazardous substances are substances that are toxic, persistent and bioaccumulative (i.e. accumulating pesticides or other organism chemicals in an organism), or having an equivalent level of concern such as substances with effects on hormone and immune systems (as defined by HELCOM).



the regional economic performance (e.g. fishing, coastal tourism, recreational boating). Furthermore, these pollution sources affect the biodiversity of the BSR in both land and marine areas, while having a particular negative effect on protected areas that are essential for biodiversity conservation and strengthening.

In addition, climate change has also an impact on the environmental state of the Baltic Sea and the regional biodiversity. For instance, eutrophication might be aggravated even more as the measures of the HELCOM BSAP applied today will be less efficient. More extreme weather conditions in a changing climate might cause technological accidents at e.g. onshore and offshore constructions (oil platforms and refineries), resulting in spills of hazardous substances into the sea waters. The acidity of river waters might also increase.

Therefore, the programme aims at enhancing institutional capacity of public and private actors to jointly develop and implement water management strategies and measures for the improved state of the Baltic Sea as well as the regional inland and ground waters. In particular, the programme strives to support a transnational policy-oriented dialogue among the BSR authorities from different sectors that deal with water quality issues as they expressed the need and wish for this process. Such a dialogue should improve cross-sectoral management and facilitate realisation of the existing strategies and action plans in order to ensure implementation of the environmental targets agreed at the pan-Baltic level (e.g. in HELCOM BSAP). Further, to combat aggravating eutrophication and to meet both environmental and economic needs, human and technical resources should be more efficiently used. This could include piloting new water management solutions and anchoring them in daily practice, e.g. recycling and removal of nutrients and hazardous substances (e.g. from household and industrial sources) and water management models in different sectors (e.g. efficient handling, processing of nutrients and preventing accumulation of manure based nutrients in agriculture). Actions could focus on developing solutions for valuation of ecosystem services and establishing effective compensation schemes to encourage the circular economy, optimize value-chain consideration and reduce waste of nutrients. Further, regional strategies on climate change adaption could be seen as a measure to decreasing eutrophication. To prevent or decrease release of hazardous substances at sea or in inland waters, capacity of authorities and practitioners should also be improved. This could include solutions in e.g. handling waste materials and marine litter as well as waste disposal sites, integrating coastal spatial planning with contingency planning allowing for



swift responses in case of e.g. oil spills, dealing with chemical munitions and other warfare agents in the Baltic Sea.

The topic of water management has been well covered by the projects implemented within the predecessor Baltic Sea Region Programme 2007-2013. The projects produced new information and demonstrated solutions to combat water pollution: e.g. phosphorus removal at pilot waste water treatment plants and sludge handling (PURE and PRESTO), regional water protection action plans for river basins (WATERPRAXIS), assessment of selected hazardous substances and recommendations on control measures (COHIBA), development and dissemination of good practices and technologies in agricultural nutrient management (Baltic COMPASS, Baltic Deal, Baltic MANURE), water management in forested landscapes (Baltic Landscape). Proposals should build on these achievements and capitalise on the knowledge and experience already gained in order to make further progress. Furthermore, achievements of projects implemented within HELCOM, BONUS, Northern Dimension Partnership on Environment, Council of the Baltic Sea States, etc. should feed into the preparation of new applications. This should enhance institutionalisation of knowledge and competences to advance the implementation of the common environmental priorities from the piloting level to the BSR-wide implementation.

The actions should also take into consideration their potential to strengthen regional development and open up new jobs in the BSR. The proposals shall consider how they can improve regional performance in the important economic sectors for the Baltic Sea region (e.g. wastewater management and its links to the energy sector through analysing the sludge potential, sustainable agriculture to increase food production, etc.).



### **Examples of actions:**

- Developing and implementing integrated action plans to protect the Baltic Sea and regional inland waters, taking into account stricter targets set in intergovernmental commitments (e.g. HELCOM Baltic Sea action plan);
- Piloting a cross-sectoral policy-oriented dialogue among actors that deal with water quality issues (e.g. public administrations, water management, agriculture, aquaculture, forestry, biodiversity, technology producers);
- Developing regional strategies for integrated monitoring, management and coordination of nutrient fluxes as well as hazardous substances, including the Baltic Sea Region wide nutrient and hazardous substances management strategies covering open, coastal and inland waters;
- Developing and testing sector-based management models (e.g. in agriculture, forestry, etc.), also addressing the biodiversity protection;
- Developing and implementing regional strategies on climate change adaption;
- Developing and introducing strategies and measures to address the threats posed by underwater chemical munitions and other warfare agents;
- Introducing advanced/innovative measures for economically feasible and environmentally sustainable recycling, recovery and reduction of nutrients and hazardous substances, including pilot investments, and institutionalising the measure in daily practice of relevant institutions dealing with the water quality issues (including green technologies, upsteam solutions and nutrient uptake at sea, nutrient trade schemes);
- Improving existing water management monitoring and reporting systems, used for decision-making with a focus on consistency and comparability of data among countries in the BSR;
- Integrating coastal spatial planning with contingency planning;
- Planning and implementing training throughout the Baltic Sea Region based on good practices on decreasing nutrient and hazardous substances release, recycling and removal of nutrients and hazardous substances from point sources (e.g. in waste water treatment plants, sewage facilities or industries) and diffuse sources (e.g. from agricultural lands, fisheries or forestry) as well as decreasing hazardous substances;
- Developing innovative ecosystem service compensation schemes for nutrient reduction and uptake;
- Developing and testing a methodology for valuation of ecosystem services and establishing effective compensation schemes.



- Public authorities/institutions responsible for water management at national, regional and local level as well as associations of these authorities;
- Intergovernmental organisations (e.g. HELCOM, VASAB);
- Environmental protection agencies and environmental associations;
- Waste water treatment facilities;
- Authorities from specific sectors having an impact on the water quality (e.g. agriculture, forestry, fisheries, responsible for coastal spatial planning and contingency planning and response, etc.);
- Non-governmental organisations (environmental, water protection, farming, pharmaceuticals, etc.);
- Enterprises;
- Academic and research institutions.

### Geographical coverage:

The whole area of the Baltic Sea, coastal waters, as well as the whole drainage area in the Baltic Sea Region. The programme provides space for cooperation with actors located outside the formal borders of the BSR to strengthen already established networks.

### Specific objective 2.2 'Renewable energy'



To increase production of sustainable renewable energy based on enhanced capacity of public and private actors involved in energy planning and supply.

Currently the Baltic Sea Region countries depend on fossil fuels. The majority of the countries in the BSR drew up renewable energy action plans, establishing targets for the share of renewables in line with the goal to increase renewable energy consumption to 20% of the final energy consumption by 2020. Shares range from a high of 49% in Sweden to 15% in Poland. A higher share of renewables in the energy mix will decrease the dependence of the region on the import of fossil fuels and resultant high greenhouse gas emissions attributed to their use. Increased production of renewable energy will have a positive impact on the economy and employment in the BSR as new green jobs will be open.

The BSR countries have potential for increasing renewable energy use, based on the resources available in the region. Some of the research-oriented projects (e.g. within BASREC) confirmed this potential. A place-based approach allows tapping into hidden economic potential of the region and boosting its development. However, to reach the set targets, capacity of both public and private actors involved in the energy sectors to facilitate production and use of renewable energy should be enhanced. Further, solutions for storage and distribution of renewable energy should be developed or improved in order to better utilise its potential in the region.

Thus, to unlock green growth opportunities, the programme is looking for proposals that would enhance the capacity of public and private actors to produce renewable energy from natural resources (e.g. offshore and onshore wind, water, solar/geothermal sources, biomass from agriculture and forest, manure and aquatic resources) available in the region as well as waste. Waste-to-energy solutions will not only contribute to higher energy performance, but also help improve waste management policies. To use the resources in a sustainable way (e.g. biomass), an integrated approach to producing renewable energy should be followed. These tested innovative green solutions to produce renewable energy should be better integrated in regional strategies. Further, proposals could improve the regional capacity for renewable energy planning through development and introduction of proactive regional policy instruments.

In addition, the programme is looking for proposals enhancing the capacity of energy sector actors to jointly develop or improve the energy storage capacity and distribution patterns (development and reorganisation of smart grids, integration of storage) and to coordinate energy networks (electricity, gas, heating). This would improve storage and integration of renewable energy into the power system in the BSR.

The results of the projects Bioenergy Promotion, on sustainable bio-energy production, Baltic MANURE and REMOWE, on energy production from waste, should be taken into account when preparing actions.

### **Examples of actions:**

- Developing incentive policies for increasing renewable energy production based on recourses available in the region;
- Testing innovative green solutions on producing energy from renewable sources, including pilot investments;
- Evaluating and testing alternative technologies for energy recovery from waste (e.g. anaerobic digestion, incineration);
- Improving sustainable energy networks (e.g. development and reorganisation of smart and sea grids, virtual power plants, integration of storage);
- Demonstrating and implementing innovative renewable energy storage technologies and distribution patterns.



- Public authorities/institutions responsible for natural resources and energy planning and supply at national, regional and local level;
- National and regional energy agencies;
- Waste management agencies;
- Forestry and agricultural advisories;
- Energy enterprises;
- NGOs;
- Academic and research institutions.

### **Geographical coverage:**

The whole area of the Baltic Sea Region. The programme provides space for cooperation with actors located outside the formal borders of the BSR to strengthen already established networks.



### Specific objective 2.3 'Energy efficiency'



# To increase energy efficiency based on enhanced capacity of public and private actors involved in energy planning.

Energy efficiency differs significantly around the BSR and needs further improvement, especially in the eastern part of the region. The situation is aggravated by the imminent consequences of climate change as costs for heating and cooling might increase in a changing climate. Further, a clear plan for a transition towards low energy cities and regions is often missing, with a few exceptions within the BSR. Energy efficiency aspects (e.g. in housing, heating, waste collection or public spaces) are not yet well integrated into regional planning. There is often a lack of political commitment, capacity of regional planners and other relevant professional bodies, as well as dedicated structures supporting cooperation between various governance levels and administration.

There is significant potential to increase energy saving and to become a more climate neutral region through improving urban and rural development strategies. Therefore, the specific objective is dedicated to developing and testing policy, institutional and financial measures as well as developing training schemes for professionals and anchoring them in the daily practice of public authorities and energy institutions, responsible for energy planning. The transport sector also shows a greater potential for energy saving. Actions on this topic (e.g. optimising urban logistics, short-sea or inland shipping) are covered by priority 3 'Sustainable transport'. Thus, these actions will contribute to achieving the goal to increase energy efficiency by 20% by 2020.

New jobs would be opened up and social pressure would be reduced. More energy efficient domestic heating would improve air quality conditions by reducing pollution emissions.

Under this specific objective the programme strives to support proposals that will enhance the capacity of public and private actors to improve energy efficiency when developing new quarters or retrofitting building blocks, primarily in cities and towns as they are major energy consumers which offer the largest cost-effective opportunity for savings.

Furthermore, project proposals could focus on developing scenarios, including specific measures for climate neutral regions, working with energy service companies and innovative financing models on energy efficiency.

Energy saving in production of goods and services should be also encouraged through policy incentives to facilitate a shift to green entrepreneurship.

The results of the projects Urb.Energy on energy efficiency in urban planning and PEA on public energy management should be considered when developing actions. In addition, cooperation possibilities with other regional initiatives should be explored to ensure a leverage effect in the field of energy efficiency. For instance, the Baltic Sea Region Energy Cooperation — BASREC provides a platform for dialogue on energy policy and global climate change issues.

### **Examples of actions:**

- Improving and implementing sustainable urban and rural energy strategies comprising an integrated package of policy, institutional, financial and technical measures;
- Developing better coordination of regional energy planning among the BSR countries;
- Developing and testing incentive policies to implement retrofitting of public and commercial properties;
- Developing new financing models (e.g. energy performance contracting) for energy efficiency in e.g. buildings or production companies;
- Developing multi-level transnational strategies for optimisation of resources, creation of emission neutral regions, including transfer of models for cooperation with energy service companies on comprehensive energy solutions;
- Developing training schemes for professionals
- Developing incentives for energy efficient products and services in enterprises;
- Developing initiatives for promoting green entrepreneurship for energy efficiency.



- Public authorities/institutions responsible for energy planning at national, regional and local level;
- Local and regional public authorities/institutions (e.g. cities, municipalities) responsible for urban space development, acting as real estate owners and property developers;
- National and regional energy agencies;
- Energy enterprises;
- Entrepreneurs;
- NGOs;
- Academic and research institutions.

### **Geographical coverage:**

The whole area of the Baltic Sea Region. The programme provides space for cooperation with actors located outside the formal borders of the BSR to strengthen already established networks.



### Specific objective 2.4 'Resource-efficient blue growth'



To advance sustainable and resource-efficient blue growth based on increased capacity of public authorities and practitioners within the blue economy sectors.

The human activities in BSR are causing widespread pressures to marine ecosystems. The financial capacity of the regional economies is limited. Thus, there is a need to approach the Europe 2020 growth and resource-efficiency goals from unconventional, integrated and innovative perspectives. The blue growth understood as a smart, sustainable and inclusive economic and employment growth from the sea and coasts provides opportunities for the BSR as it holds growing potential for the economic use of the Baltic Sea resources and protection of its environment.

Therefore, the programme addresses sectors that rely on sea resources in order to develop sustainable business opportunities. The sectors in question include, but are not limited to, traditional sectors of maritime economy (e.g. fisheries or coastal tourism) and novel sectors (e.g. wind and wave energy, aquaculture, blue biotechnology, or mussel farming). Shipping, another traditional sector that is of utmost importance for the blue growth in the BSR, is covered in specific objectives 3.3 and 3.4. In addition in this objective 2.4, there is a further opportunity in transnational cluster building around the Baltic Sea (pan-Baltic), or in its specific parts (sub-basin) in order to bundle expertise and increase the success of blue growth projects.

To prevent negative impacts of exacerbating pressure on vulnerable sea resources, including the natural and cultural heritage and the ecosystem, which are already affected by the climate change, the approach of proposals must be sustainable and resource-efficient. This will also provide an opportunity for the region to become a leader in the sustainable use of marine resources, for instance, using its potential to develop as an exemplary macroregion of integrated heritage resource management.

Consequently, the programme aims at building favourable framework conditions and increasing capacity of public authorities and practitioners for developing blue growth solutions and providing a test ground for such solutions on a transnational level.

In addition, projects should build up capacity of stakeholders to mediate between contradictory interests in uses of marine resources and to achieve synergies between sectors implementing the Integrated Maritime Policy approach. Implementing the new EU regulatory framework for maritime spatial planning (Directive 2014/89/EU) can play an important role in developing blue growth sectors.

When preparing new projects, the results of the projects SUBMARINER, AQUABEST, and AQUAFIMA, which focused on new marine technologies for a better economy and environment, should be taken into account. In particular, the project SUBMARINER is to be looked at as it has provided a comprehensive overview and assessment of the BSR specific potential in fostering to the blue growth. Whereas projects BaltSeaPlan and PartiSEApate focused on maritime spatial planning, and their results should be considered when dealing with maritime policy tools.

### **Examples of actions:**

- Piloting application of advanced marine technologies for sustainable use of marine resources, with potential for multiple uses of these resources;
- Testing models for cross-sectoral cooperation among actors promoting innovative uses of marine resources;
- Clustering innovative, sustainable applications of marine resource uses;
- Developing policy proposals for supporting blue growth business opportunities;
- Implementing pilot investments, preparing the ground for future resourceefficient blue economy projects on a larger scale;
- Conducting market surveys on potential of products from marine resources,;

- Developing transnational strategies to use the cultural and natural heritage of the sea and coastal areas for sustainable business development, e.g. pilot actions improving the resource efficiency of maritime tourism;
- Developing integrated management plans on marine environment and biodiversity in sea sub-basins;
- Developing framework conditions for integrating new uses of marine resources into maritime spatial planning;
- Improving linkages between water management monitoring and reporting systems and site selection/maritime spatial planning;
- Testing models and establishing common standards concerning ecosystem services and harmonisation of maritime spatial plans across the borders.

- Public authorities/institutions responsible for promotion of industry and economy within blue economy sectors at national, regional and local level;
- Public authorities/institutions responsible for planning, management and protection of marine resources at national, regional and local level;
- Authorities from specific sectors using marine resources (e.g. energy, agriculture, fisheries, marine tourism, etc.);
- Intergovernmental organisations (e.g. HELCOM, VASAB);
- Environmental protection agencies;
- Enterprises in blue growth sectors;
- NGOs:
- Academic and research institutions.

### **Geographical coverage:**

The whole area of the Baltic Sea Region with a particular focus on coastal areas. The programme provides space for cooperation with actors located outside the formal borders of the BSR to strengthen already established networks.