



The Baltic Sea Our Common Treasure– Economics of Saving the Sea

Cost-benefit analysis undertaken by the international research network BalticSTERN, show that combating eutrophication in the Baltic Sea would provide large welfare gains to the people living in the Baltic region.

Benefits of reaching the nutrient reduction targets of the HELCOM (Helsinki Commission) Baltic Sea Action Plan (BSAP) exceed costs by 1 000 – 1 500 million Euros annually. People in the nine littoral Baltic Sea countries are in total willing to pay approximately 3 800 million Euros per year for a less eutrophied Baltic Sea. The cost of reaching the BSAP country quotas is estimated to 2 800 million Euros annually. Under a more cost-effective allocation of measures the cost would amount to 2 300 million Euros annually.

This is the first large-scale international cost-benefit analysis for an environmental policy target in which both benefits and costs have been estimated for all nine Baltic Sea countries. The results are published in the report *The Baltic Sea – Our Common Treasure. Economics of Saving the Sea* and is available at www.stockholmresilience.org/balticstern.

A majority of the people in Baltic Sea countries is willing to pay for a healthier marine ecosystem, thereby attaching a great value to the ecosystem services of the sea, such as fish, recreation and inspiration. This is not surprising as more than 80 per cent of the people have visited the sea for leisure activities such as walking along the seashore, swimming or boating. Furthermore, many people are worried about the state of the Baltic Sea and every second person in the region has experienced the effects of eutrophication.

The welfare gains of fulfilling the BSAP nutrient reduction targets could possibly be higher than estimated. Costs are likely to be overestimated, as there are more low cost measures available than what could be included in the study. Benefits are further most likely underestimated, as measures would generate additional benefits, for example in upstream lakes and waters.

To reach the cost effective solution and obtain the highest welfare gains for the Baltic Sea countries, international collaboration, information and cost sharing solutions are important. The use of financial instruments such as EU cohesion and structural funds, as well as other policy instruments, for example trading systems, would facilitate such a development.

The BalticSTERN research network, with partners in all nine Baltic Sea countries, has combined ecological and economic models in a three-year research project to estimate benefits and costs for reaching the nutrient reduction targets of the BSAP. The research includes two large-scale surveys in all Baltic Sea countries regarding use of the sea, attitudes and the value of an improved environmental state.

The Baltic Sea Action Plan is an agreement within HELCOM where all Baltic Sea countries have committed to reduce their emissions of nutrients in order to achieve a good status of the sea by 2021. The BSAP targets can be reached through measures reducing the nutrient loads from agriculture and wastewater, such as reduced fertilization and increased abatement at wastewater treatment plants.

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