



Priority	Project name and summary	Total budget <small>(to be confirmed)</small>
	<p>BWN Building with Nature</p> <p>The most serious threat facing the North Sea Region is climate change, increasing flood and coastal erosion risk from storm surges in coastal and estuarine areas and heavy rain causing flooding of rivers and lakes inland.</p> <p>The Building with Nature (BwN) project demonstrates BwN solutions that utilize natural processes to deliver flood risk and coastal erosion management whilst enhancing ecosystem services. However, the performance of BwN solutions is uncertain and hampers wider uptake across the North Sea Region. A common transnational evidence base is needed to justify investments and optimise the effectiveness of BwN solutions (EC, 2015).</p> <p>The overall objective of the BwN project is to make coasts, estuaries and catchments of the North Sea Region more adaptable and resilient to the effects of climate change. BwN will demonstrate BwN-based climate change adaptation solutions at 7 coastal target sites in NL, D, DK, SE (sand nourishment at North Sea Coasts and Wadden Sea barrier islands) and at 6 catchment scale sites in B, NL, SE, SCO (e.g. river restoration).</p> <p>BwN creates joint transnational monitoring programmes, uses state-of-the-art analysis methods, develops improved designs and business cases. The laboratories generate the evidence-base to incorporate BwN in national policy and investment programmes of each of the North Sea Region countries (worth >€200M/y). BwN gathers (national) governments that manage most of the North Sea coast, Wadden Sea and river basins and thus provide critical mass for major uptake.</p>	<p>3,420,000 €</p>



	<p>FAIR Flood infrastructure Asset management and Investment in Renovation, adaptation and maintenance</p> <p>Flooding is a major risk for loss of life and economic damage in the North Sea Region. Flood protection is the cornerstone of our strategy to reduce these risks with benefit-cost ratio of 6:1. The >100Bn Euro worth infrastructure assets that protect us from flooding in the North Sea Region, such as dykes, sluices and dams are ageing (many are 70-100y old) and often its performance is no longer at the desired level. The flood protection infrastructure needs renovation, adaptation, and maintenance all across the North Sea Region.</p> <p>The overall objective of the FAIR project is to reduce flood risk across the North Sea Region by demonstrating climate change adaptation solutions to improve the performance of flood protection infrastructure. FAIR demonstrates improved approaches for cost-effective upgrading and maintenance, optimising investments across national-system-asset levels, as well as applying adaptive, innovative technical designs.</p> <p>FAIR builds upon IVB results (ia MARE, SAWA) and state-of-the-art EU research from its partners (Deltares, TUHH, Sayers). FAIR guides the full-scale implementation of reinforcement, upgrade and maintenance programmes of dykes, sluices, dams, flood gates and pumping stations at target sites in UK, B, NL, D, DK, SE worth >1Bn/y until 2020. A transnational approach is vital to accelerate learning, as there is no budget or time for 'trial and error'. FAIR gathers the major asset owners in the North Sea Region (eg RWS, LSBG, MOW), the first international collaboration of its kind.</p>	<p>2,296,875 €</p>
---	---	--------------------



	<p>TOPSOIL Top soil and water - The climate challenge in the near subsurface</p> <p>The values of society are tied to the uppermost subsurface and climate change has a rapid impact here. In the WaterCAP projects (Interreg IVB) the TOPSOIL partnership has performed an extensive consultation with the EU commission, waterworks, farmers, city planners and public bodies across the North Sea Region. Five shared climate adaptation challenges related to the top soil and groundwater were revealed:</p> <ol style="list-style-type: none"> 1. Groundwater flooding in towns and agricultural areas 2. Saltwater intrusion into freshwater reserves 3. The need for a groundwater buffer to store excess rain water for later use 4. Better management of soil conditions, to strengthen the resilience to extreme rain events and improve water quality 5. An unused capacity to break down nutrients and hazardous pollutants in the uppermost layers <p>These challenges will be addressed in 16 pilot areas to develop and test solutions for managing uppermost 20-30 m of the sub-surface. This will lead to a strong improvement of climate resilience in and across pilot areas, The project will improve e.g.:</p> <ul style="list-style-type: none"> • protection against groundwater flooding • groundwater storage for irrigation and drinking water inland and in coastal areas • less leaching of nutrients and pollutants along with improved yields <p>New investigation and management methods will be developed through transnational joint approach techniques and management will be transferred between the countries. The partnership is strongly committed to bridging science, practice and countries.</p>	<p>3,671,110 €</p>
---	--	--------------------



	<p>NorthSEE A North Sea Perspective on Shipping, Energy and Environment Aspects in MSP</p> <p>The North Sea is both an environmental asset and a source for value generation for different maritime sectors. Maritime Spatial Planning (MSP) is a tool to help balance the often competing user interests as well as environmental protection aims. However, MSP can only be effective, if national Maritime Spatial Plans are coordinated and not contradictory. A lack of MSP coordination leads to spatial inefficiencies, higher costs for maritime industries and compromised environmental objects.</p> <p>NorthSEE launches a sea-basin wide coordination process among MSP authorities in the North Sea Region. In this context, NorthSEE aims at achieving greater coherence in MSP across the North Sea Region for three transnational topics: Environmental aspects, shipping routes and energy infrastructure. Planners compare existing national MSP plans and approaches. In addition, future scenarios are jointly developed by planners and stakeholders in the framework of the “MSP Challenge 2050” simulation. This improved informational basis allows planners to identify current and future synergies and mismatches of national planning solutions and approaches as well as to come to planning solutions for selected sites with incompatibilities.</p> <p>Findings are synthesised in reports and maps. These will inform national MSP processes, whereby increased MSP coherence will be reached. Recommendations on an MSP coordination process in the North Sea Region set the basis for an ongoing transnational MSP dialogue beyond the project’s lifetime.</p>	<p>2,024,789 €</p>
---	--	--------------------



	<p>WaterCoG Water Co-Governance for sustainable ecosystems</p> <p>The natural environment is dependent on water to provide society with many essential benefits or “ecosystem services” (e.g. drinking water, biodiversity, food production, recreation, carbon sequestration). A number of EU directives aim to protect and improve the delivery of these services. However, successful implementation and integration of the different directives at a local level is a major shared challenge in the North Sea Region. Understanding how this can be achieved is fundamental to delivering long-term sustainable ecosystem-based management strategies for the North Sea Region and the focus for the WaterCoG project.</p> <p>The project will demonstrate through the adoption of new participatory, ecosystem service based approaches that implementation and integration of different water management frameworks can be achieved at the same time as providing additional social, economic and environmental benefits not currently being realised.</p> <p>A strong transnational component will identify and incorporate common, transferable elements of different approaches into an up-scaling toolbox that will extend the impact of the project and build capacity for delivering improved sustainable management strategies for North Sea Region ecosystems.</p> <p>The projects’ output aims for a change in working practice that will improve the integration between top-down implementation of European and national directives and bottom-up, participatory developed solutions for improving the quality and sustainable management strategies of North Sea Region ecosystems.</p>	<p>1,690,275 €</p>
---	--	--------------------