WETSCAPES –from understanding to sustainable use of peatlands

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Peatlands and coastal wetlands are characteristic elements of the landscape and, thus, of land use in Mecklenburg-Western Pomerania. Depending on water and land management, their possible contribution to climate and water protection is much higher than that of other ecosystems. The aim of WETSCAPES, an interdisciplinary joint project of the Universities of Greifswald and Rostock, is to develop scientific principles for sustainable and gentle cultivation of former degraded and now rewetted peatlands. WETSCAPES provides the basis for a nationwide, internationally influential research and development structure, spanning the biogeochemical complex of primary production, metabolic processes, matter transport, gas exchange and peat formation at wetlands. It builds on existing structures at the Universities of Greifswald and Rostock and integrates them over other universities and institutes (DLR, LIKAT) with the goal to understand ecosystem interactions (upscaling) and to derive indicators for sustainable management. It integrates joint research at six central investigation sites and one complex central experiment with a unique fen lysimeter. Mecklenburg-Western Pomerania will benefit from the development of scientific based, sustainable and innovative utilization, from value chains in agricultural production and sustainable tourist use of fragile peatlands and coastal sites, which will be optimized or newly developed considering the aims of environmental protection and nature conservation. The project is funded within the excellent research program of Mecklenburg-Western Pomerania with 5 million Euro from 2017 till 2021 with means of the European Social Fund.