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SOCLIMPACT: Climate change risk assessment and impact chain analysis for European Islands

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The SOCLIMPACT project aims at modelling downscaled Climate Change effects and their economic impacts in European islands and archipelagos in the context of the EU Blue Economy, and to assess corresponding decarbonisation and adaptation pathways, thus complementing current available projections for Europe, and nourishing actual economic models with non-market assessment.
This contribution reports on the results of its work package 3, “Climate Change vulnerability assessment framework and complex impact chains”, which is devoted to the definition of possible impact chains and of the list of needed climate and economic indicators. This WP presents a homogeneous and comparable treatment of Blue Economy activities in all the European islands concerned by the Project. Impact chains are used to synthetize in a diagram the complex relationships between exposure (to climate parameters), sensitivity (related to physical and socio-economic features of the island), and adaptive capacity. Main potential impacts of Climate Change are listed and ranked by degree of importance, relevant climate parameters are identified and weighted. Both these components are successively assembled in conceptual impact chains. A set of indicators along the impact chains allow the quantitative assessment of changes in the climate characteristics (CCI), changes in ecosystem services (ESI), and changes in the Blue Economy activities and in the whole economy of European islands (EVI). Quality control and management of the data flow between Climate Change, impacts and economic models is described. The specific requirements for climate, economic and impact models at regional and local scales are discussed.
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