Non-scientific summary

According to the OECD report "The Ocean Economy in 2030," the marine economy will contribute 3 trillion USD to the word gross value added in 2030 which means a doubling of its contribution in absolute terms in comparison to 2010 - the year in which marine industry produced 2,5% of the global GDP. This rapid development of the so-called blue economy is caused by an unprecedented demographic boom (increased population should be nourished), the improvement of the level of well being in many developing countries (resulting in a higher demand for sea tourism and recreation) and a change in societal attitudes (i.e. the transformation towards a circular and low-carbon economy). If it continues growing at such a rapid pace, the development of marine economy will increase the pressure on marine space which, in turn, will have to be used more intensively and for new purposes. Thus far, marine space has been associated with sea transport, fishery and coastal tourism. In the future, the sea will be used in many other ways, including the production of windenergy, mariculture, and the extraction of polymetallic nodules. In Poland, we expect a rapid increase in the demand for marine space both for off-shore energy and marine aquaculture. The public administration is poorly prepared to face this challenge and, as a result, cannot properly respond to a policy shift. In particular, the administration is equipped with insufficient knowledge regarding the economic consequences of its decisions on the allocation of marine space. Such knowledge is of particular importance when decisions on trade-offs are concerned. Moreover, public decisions suffer from a short-term perspective and, therefore, in many cases, they possess a short-sighted character. Usually, only the direct effects of allocating marine space are taken into consideration which means that allocation is based on the evidence regarding the direct production or employment in a particular marine industry which was granted the right for the usage of a given sea area. The induced and indirect effects (the ways in which the given industry accelerates or decelerates the development of other industries) are neglected.

For the research sector, this situation represents an opportunity to help policy makers by providing them with information on the causal linkages between the allocation of marine space, the development of the marine industry, the development of other sectors that are affected by the marine industry's performance and, ultimately, the development of regions and places as the final outcome of the multiplier processes originated by the maritime spatial development (allocation and use of marine space). Thus, the project has been designed to explore these causal linkages using the research apparatus of economics and spatial sciences. In short, the project aims at assessing the overall economic impact of marine space allocation and, through that, informing public policies such as the Blue Growth Strategy of EU, the Polish Marine Policy till 2030 and maritime spatial planning.

The project will include the following research:

- 1. An assessment of the productivity of marine space (for selected marine industries, representing both traditional sea users and newcomers)
- 2. An estimation of the economic size of the marine industry in Poland and the verification of previously achieved results (a by-product will be the probable growth rate of the Polish marine industry)
- 3. An estimation of the marine industry linkages with other industries and the impact of the marine industry on the performance of other industries
- 4. An estimation of the overall economic result of the allocation of marine space (for selected marine industries), taking into consideration both direct and indirect effects.
- 5. The identification of the on-land spatial incidence of the decisions regarding the allocation of marine space and an estimation of the economic growth on land in Polish voivodeships (If possible even counties) resulting from the development of the off-shore marine industry.

The research results will serve as an input in the recommendations: (i) on the improvement of the scientific tools and methods employed for examining the total economic result of the allocation of marine space, (ii) as well as on the necessary changes in the public policies regulating the use of the sea in Poland .