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**Title:** *Scenario-based Transboundary Approach to Shape Arctic Futures*

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Technological advances, climate change and increased strategic interest in the Arctic are causing rapid and long lasting transformations that challenge established governance and collaboration practices, and increase information demands to support regional decision making. In the rapidly transforming Arctic, however, scenarios of environmental change risk being insufficiently accounted for in adaptation planning, as monitoring of key environmental parameters has declined or is poorly optimized. Furthermore, application of support instruments for environmental planning, such as strategic environmental assessment, has been limited. This poster presents recent advancements in efforts to combine quantitative analysis of environmental monitoring in the Arctic with strategic governance research to develop instruments, such as scenarios, projections and assessment processes, which can facilitate relevant planning and decision making for change adaptation. The research explores and aims to improve the preconditions for and links between environmental management, policy-relevant monitoring, and climate change adaptation strategies in the Arctic. Results include environmental monitoring assessment for the Arctic, and design of a transboundary strategic environmental assessment approach that includes scenarios as a main component for enabling strategic dialogues, information exchange and decision support. In this proposed approach, focus is placed on identifying conflicts of interest, gaps of knowledge and uncertainties, and on developing inclusive scenarios and future projections that could be used by different actors to facilitate improved understanding of climate change impacts on sensitive and unique Arctic ecosystems. The approach can be used to discuss and arrive at shared projections, visions and objectives for the Arctic, and its application and testing in research may aid in enabling Arctic actors to establish networks, interact, share information and develop their capacities to improve decisions on Arctic futures.