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Title: *Resilience in the face of social and environmental change: The Arctic Resilience Report.*

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The physical environment and ecology of the Arctic are already committed to substantial warming-related changes as a result of current levels of atmospheric greenhouse gases. Projections indicate that if society fails to cut global greenhouse gas emissions, the Arctic will experience the world's largest temperature changes, driving further unprecedented changes to the region's landscapes and seascapes. At the same time, the demography and economy of the region are undergoing sharp shifts as local communities and many other actors around the world are transforming their view of the Arctic. Many current social and economic trends in the region are not simple responses to the recent changes, but are profoundly influenced by the anticipated environmental changes and future opportunities in the region. Prediction is thus itself a driver of change, and brings new risks and challenges in its wake.

The Arctic Resilience Report is an ongoing Arctic Council project running from 2011-2015. It explores how the multiple drivers of change interact in ways that affect the ability of ecosystems and human populations to withstand shocks, adapt or transform. Currently at its mid stage, the project's interim report has focused on identifying the potential for large and sudden shifts in ecosystem services that affect human wellbeing in the Arctic. This analysis has demanded an integrative approach that draws on insights about both environmental and social processes. We describe the development of a conceptual framework that allows for future impacts of both biophysical and social change to be addressed in combination. A key challenge is to incorporate biophysical changes, some of which can be predicted with confidence, in the same framework as social changes, where agency, power and choice are fundamentally important features. This framework can help in characterizing better the ability of society and ecosystems to respond to the potential impacts of rapid change in manageable ways.