

The major goal of BALANCE is to assess the vulnerabilities of the Barents Sea system to climate change based on a common modelling framework for major environmental and societal components and on the quantification of linkages between these components through an integrated assessment model.

Objectives of BALANCE include: specification of environmental and societal vulnerability indicators; estimates of present environmental and societal vulnerabilities, partly based on an assessment of presently observable shifts in terrestrial biodiversity; the refinement/adjustment/development of impact models for specific components of the Barents Sea system; the (re-)assessment of the nature and strength of links between components of this system and their quantification through an integrated assessment model; the implementation of a regional climate model for the study region; the assessment of climate change impacts for 2020 and 2050 (and possibly 2080), i.e., the time slices used by the Arctic Climate Impact Assessment (ACIA); estimates of future environmental and societal vulnerabilities to climate change of the Barents Sea system; the implementation of a stakeholder-scientists collaborative and an assessment of perceptions and views of local residents on climate change.