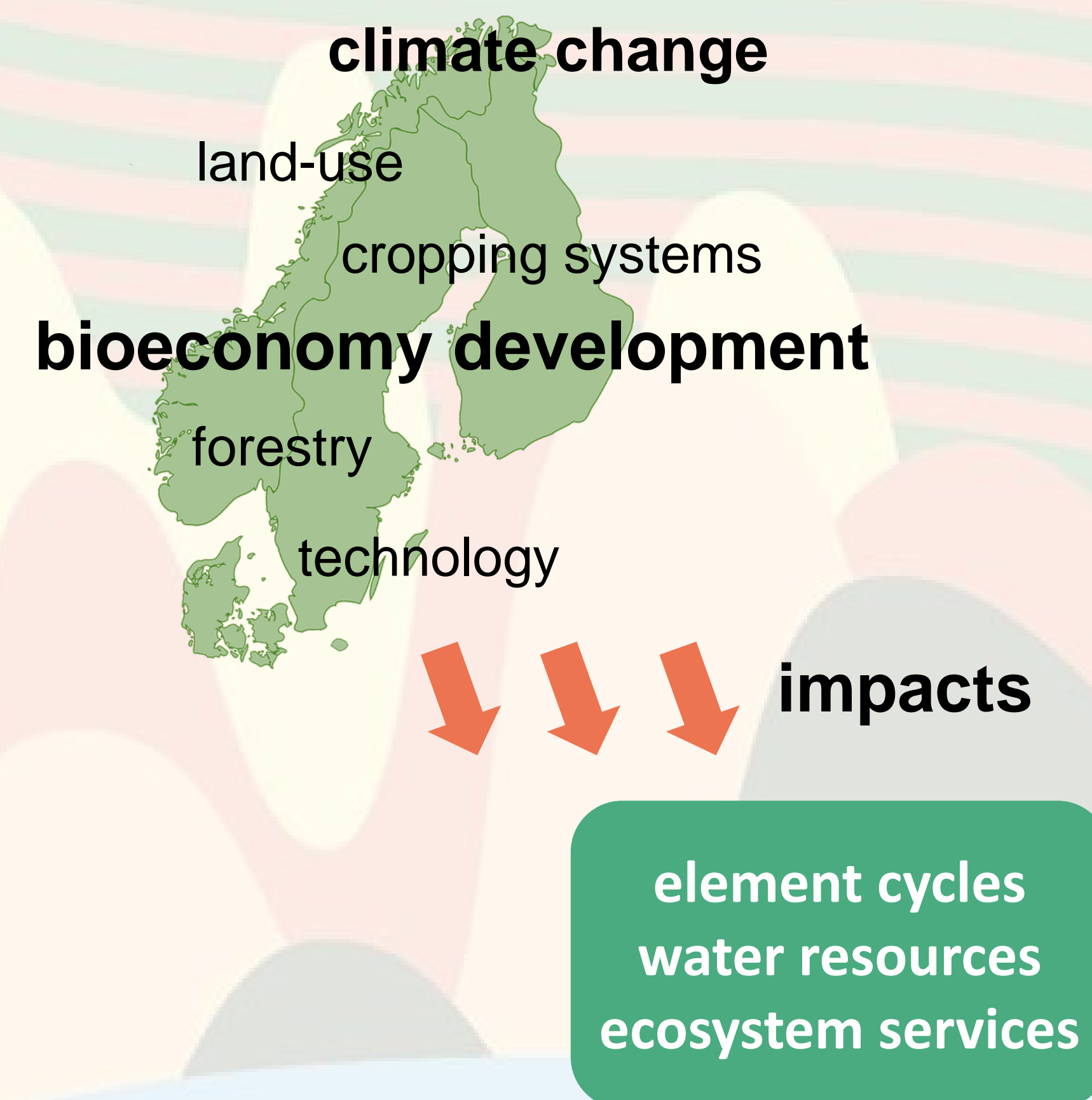
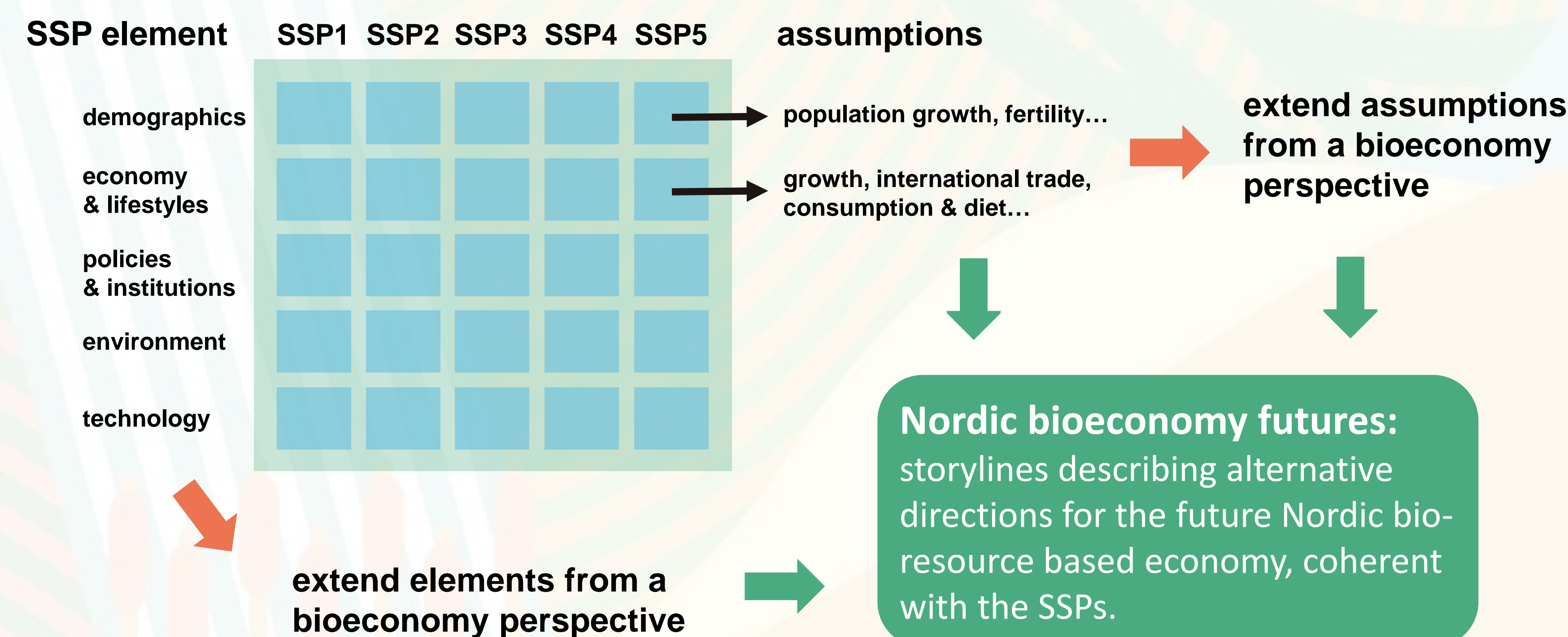


Objectives of BIOWATER



Key challenge I: downscaling and extending the SSPs



Workflow

Downscale and extend the SSP storylines (O'Neill et al., 2017) to develop a set of scenarios – Nordic bioeconomy futures.

Use our **Nordic bioeconomy futures** as a tool in stakeholder workshops to develop nationally adapted storylines, coherent with the SSPs.

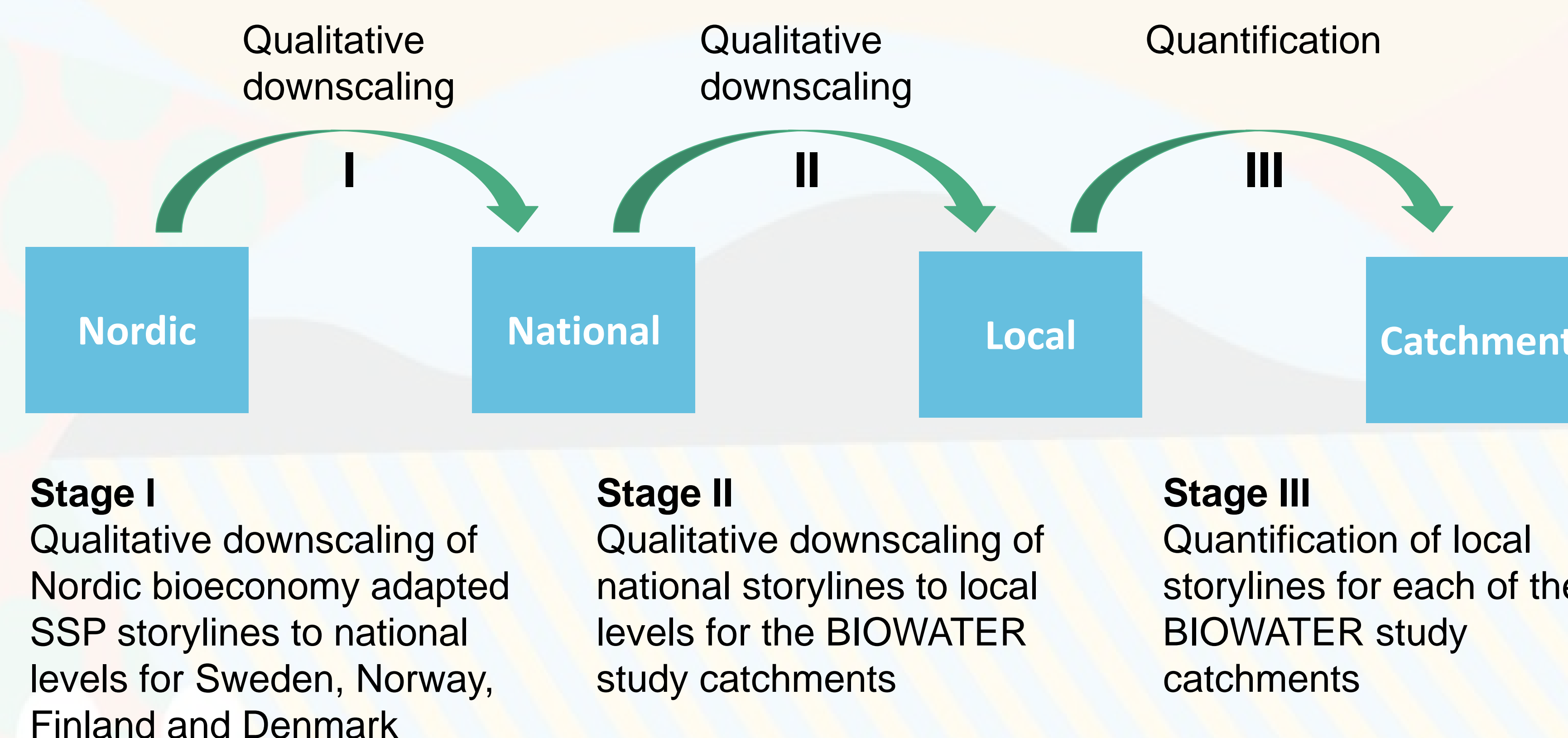
Quantify storylines to assess **catchment level impacts** on water resources and major ecosystem services.

Produce guidance to support implementation of a sustainable land based bioeconomy that promotes delivery of soil and water ecosystem services.

Future scenarios

In order to assess the integrated and interacting future effects of climate change and bioeconomy development on water resources and delivery of major ecosystem services – future scenarios of bioeconomy development in the Nordic countries are being developed. We decided to downscale the shared socioeconomic pathways (SSPs) and extend the SSP storylines from a bioeconomy perspective (O'Neill et al., 2017).

Key challenge II: quantifying Nordic bioeconomy futures



Background

The SSPs are based on five storylines describing alternative global developments (above left). They are part of the new scenario framework developed by the climate change research community (Riahi et al., 2017). The scenario framework includes socioeconomic (SSPs), climate (RCPs) and policy dimensions (shared policy assumptions, SPAs) which can be combined across to create alternative scenarios (van Vuuren et al., 2013).



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