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# A framework for Nordic actor-oriented climate adaptation research

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*on behalf of*

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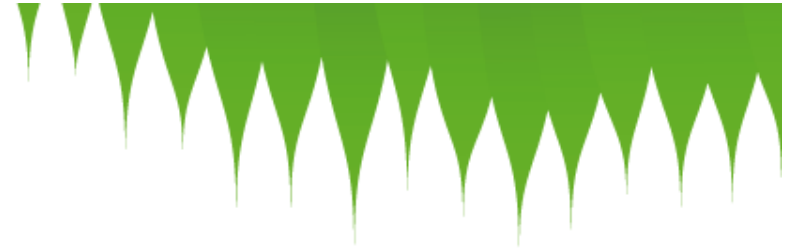
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## Nordic adaptation research and action

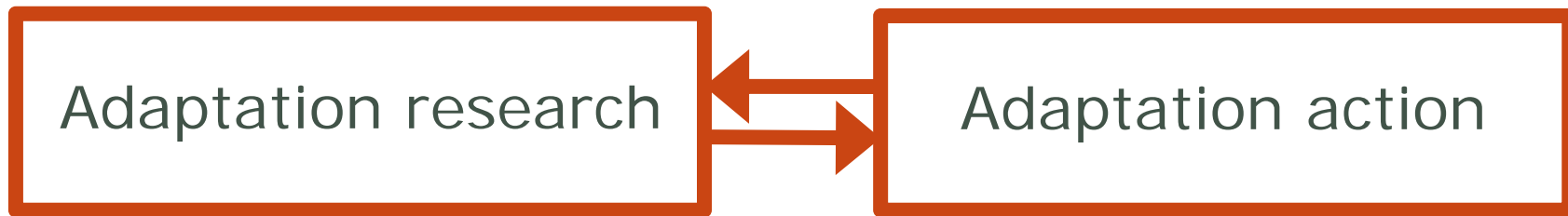
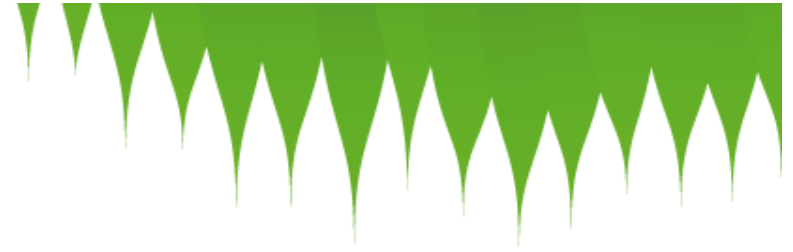
- \* Climate adaptation research has a long tradition in the five Nordic countries, and has tended to be interdisciplinary in nature.
- \* All Nordic countries are engaged in adaptation policy and practice, but they take quite different approaches.
- \* Adaptation research has had little impact on adaptation policy and practice.

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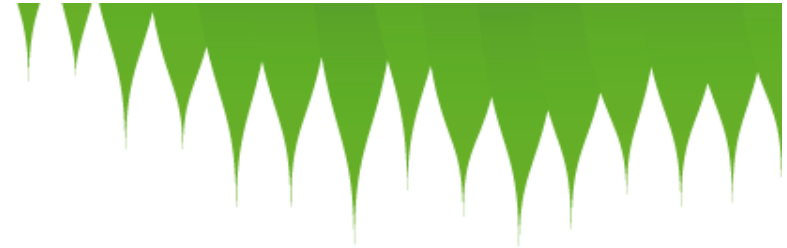


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## Five bottlenecks

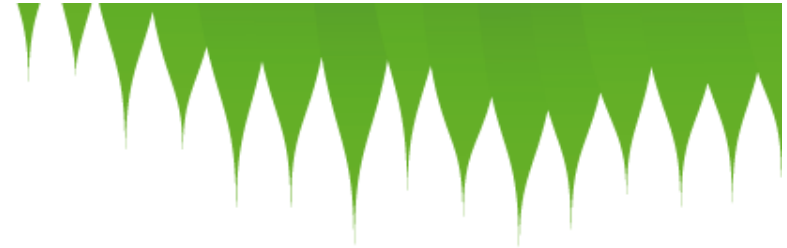
- \* Theoretical concepts and constructs developed and applied in adaptation research do not relate to the decision 'reality' of stakeholders.
- \* Uncertainty surrounding the potential impacts of climate change makes stakeholders inclined to wait and see rather than act.
- \* There is a mismatch between the local scale on which many stakeholders operate and the smaller-scale climate information provided by models.

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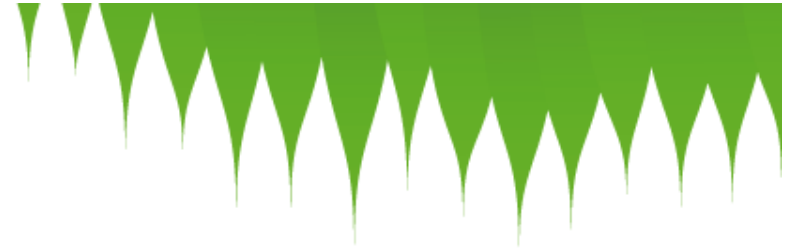
## Five bottlenecks (continued)

- \* There is a mismatch between stakeholders' primary concern to manage current climate variability and the medium to long-term perspective of much adaptation research.
- \* Adaptation research often ignores the fact that adaptation is not the only priority for many stakeholders.



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## Innovations in nord-star\*

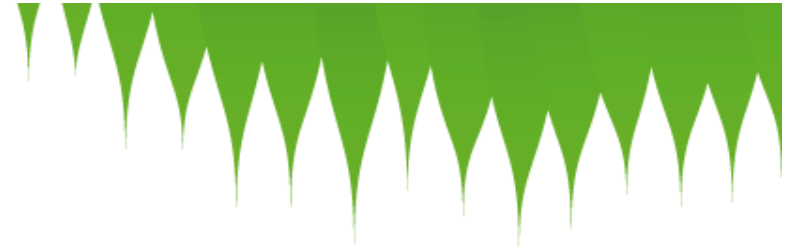
- \* Theoretical innovation by seeking to reflect better the reality of adaptation action.
- \* Methodological innovation on communication of research to inform decisions under uncertainty and across scales.
- \* Methodological innovation related to stakeholders' use of information to address the mismatch in time scales and consider adaptation as a possible priority.

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## Framing climate adaptation

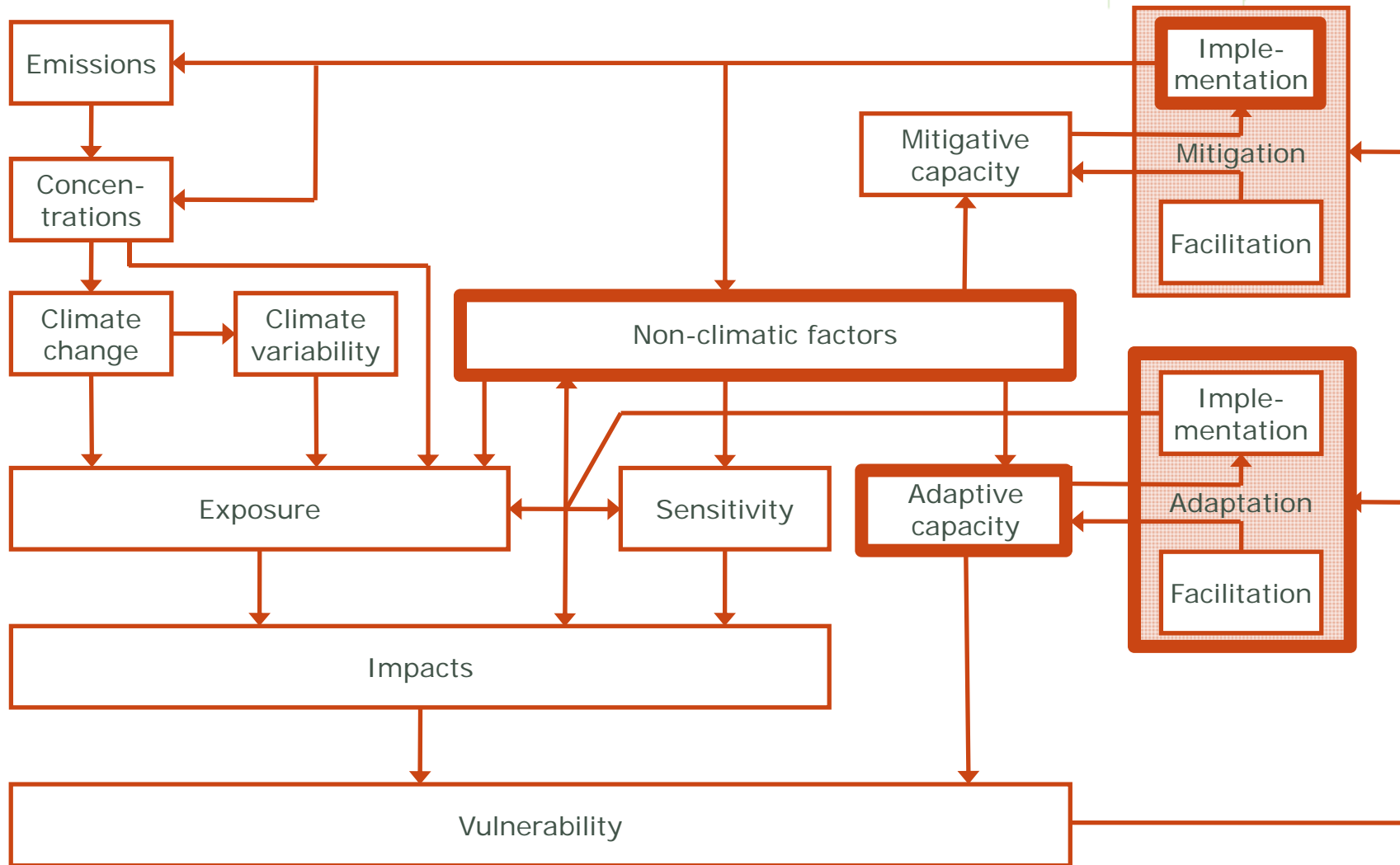
- \* **nord-star\*** frames adaptation as a response both to the impacts of climate change and to the consequences of climate policy, including mitigation.
- \* This framing responds to the reality practitioners are faced with in day-to-day decision-making.

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Modified from Füssel and Klein (2006)

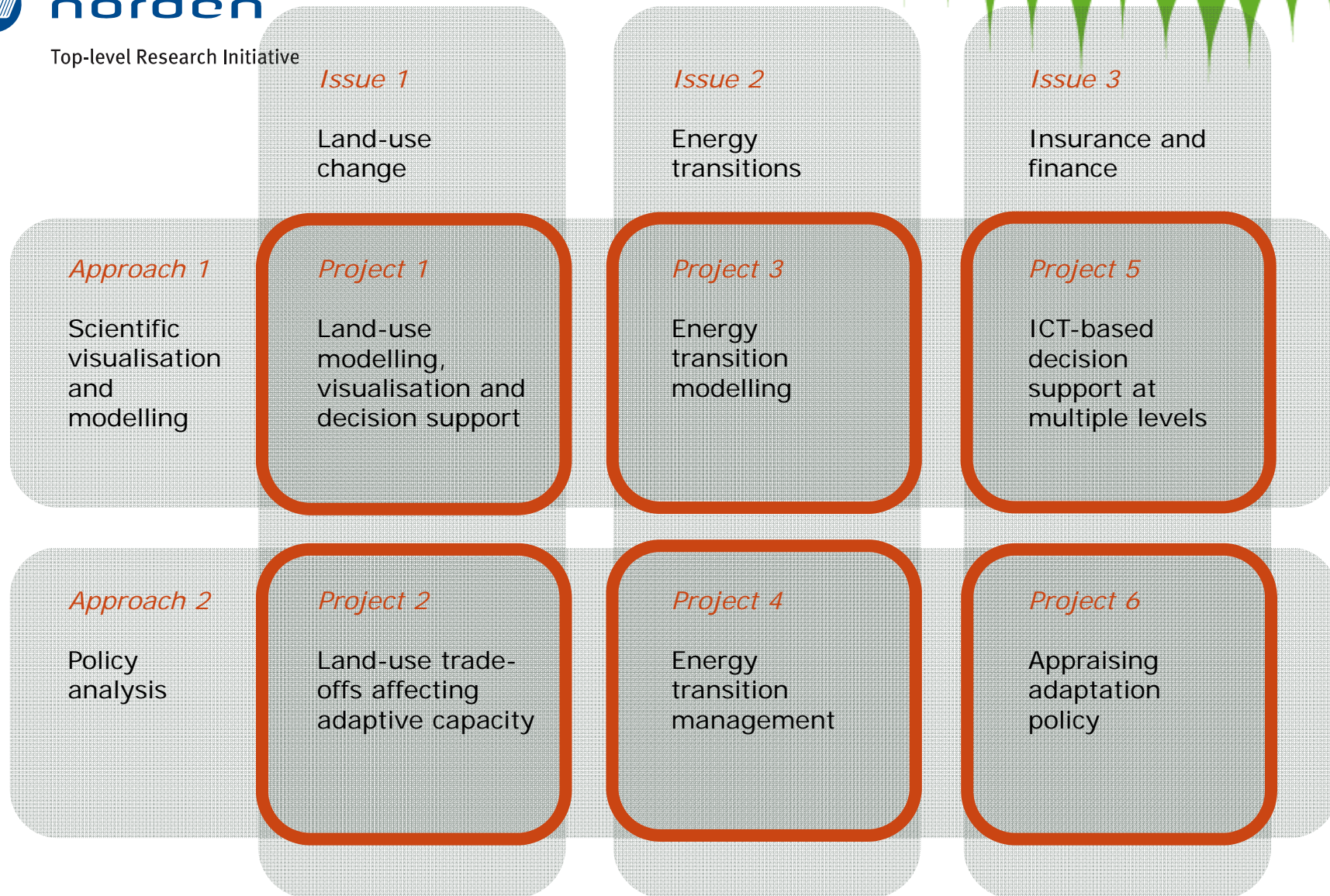
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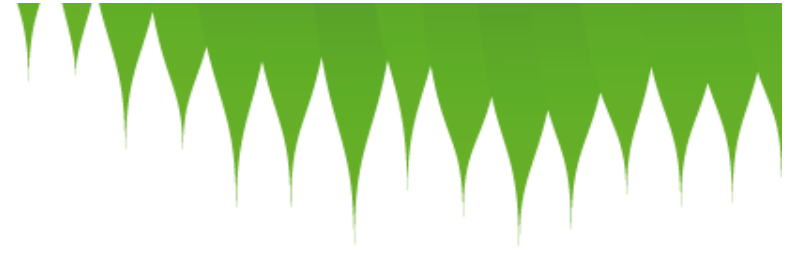
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## Overarching nord-star\* questions

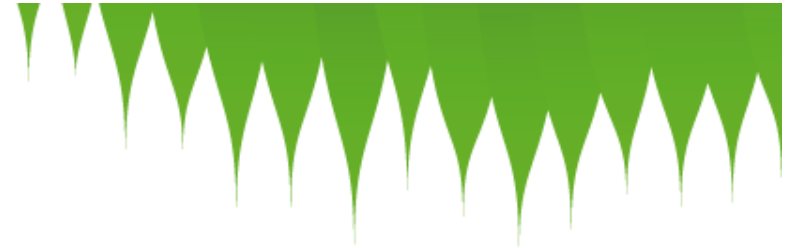
- \* What new challenges and opportunities emerge when developing a strategy to adapt to both the impacts of climate change and the consequences of climate policy?
- \* How can dialogue and innovation help to advance strategic adaptation action in the Nordic region?

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## nord-star\* research approach

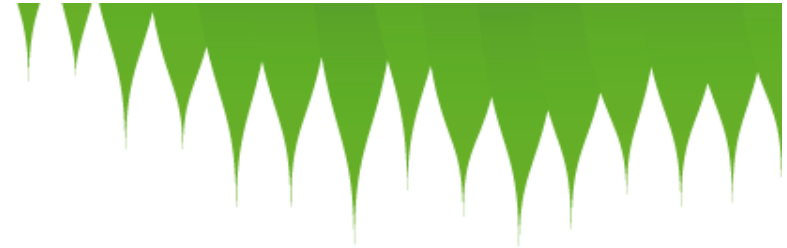
- \* The Füssel & Klein framework does not include agency: it does not consider who could act to facilitate or implement adaptation.
- \* An actor-oriented approach to adaptation research is explicit about agency when analysing adaptive capacity, how it is influenced by facilitative efforts, and how it underpins the implementation of adaptation action.

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## New research questions

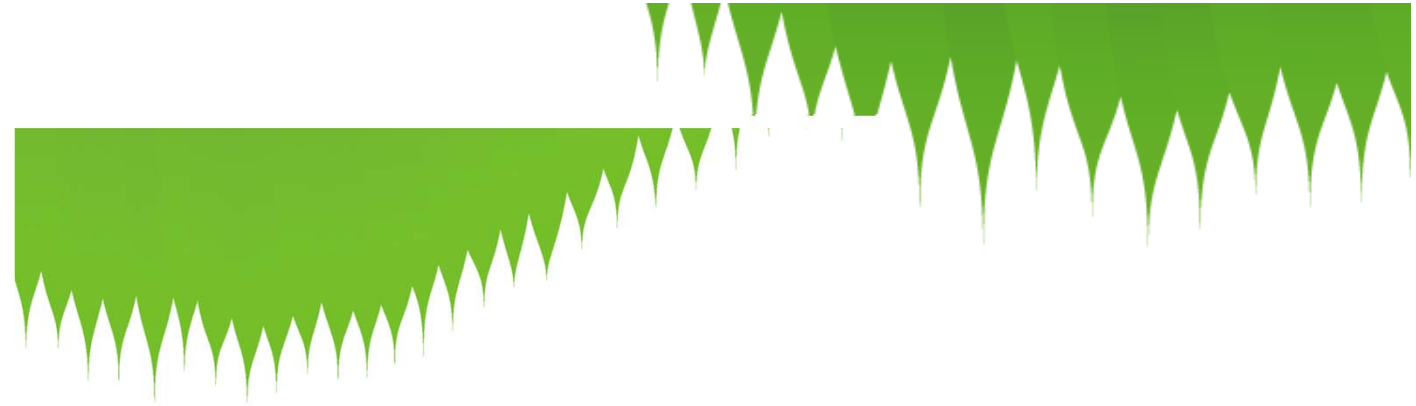
- \* Applying an actor-oriented approach to the new framing of adaptation leads to new research questions, such as:
  - How does climate policy influence actors' decisions, and how does it affect their capacity to adapt to impacts of climate change?
  - What trade-offs may arise between adaptation and mitigation in land management and land-use planning?
  - How could energy transitions include measures to enhance adaptive capacity and reduce vulnerability to climate impacts?

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## A Framework for Nordic Actor-Oriented Climate Adaptation Research

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NORD-STAR WORKING PAPER SERIES      JANUARY 2013 \* NORD-STAR WP 2013-01

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