

# Adaptation strategies to climate change impacts in urban regions of the Baltic Sea coast - The science-practice interactions within plan B:altic

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**Adapting to Climate Change - Case Studies from the Baltic Sea  
Region**

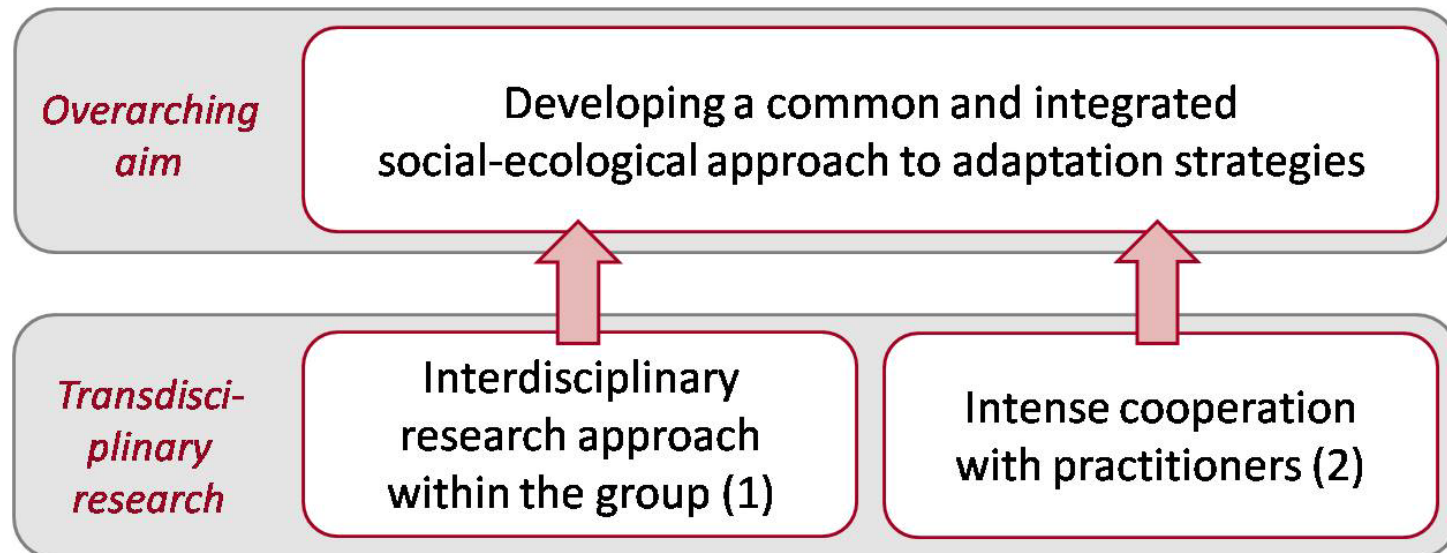
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## Introduction: The research project plan B:altic

Social-ecological research, funded by a specific German research fund from 2009-2013

Overarching research topic: “Climate Change and Spatial Development: Adaptation strategies of urban and regional planning in urban regions of the Baltic Sea Coast“





## Main research questions tackled

1. Which challenges for spatial planning result from the specific characteristics of climate change and the related uncertainties (Climate change scenarios – storyboards, difficult to predict and very specific local impacts for urban regions of Baltic Sea coast)

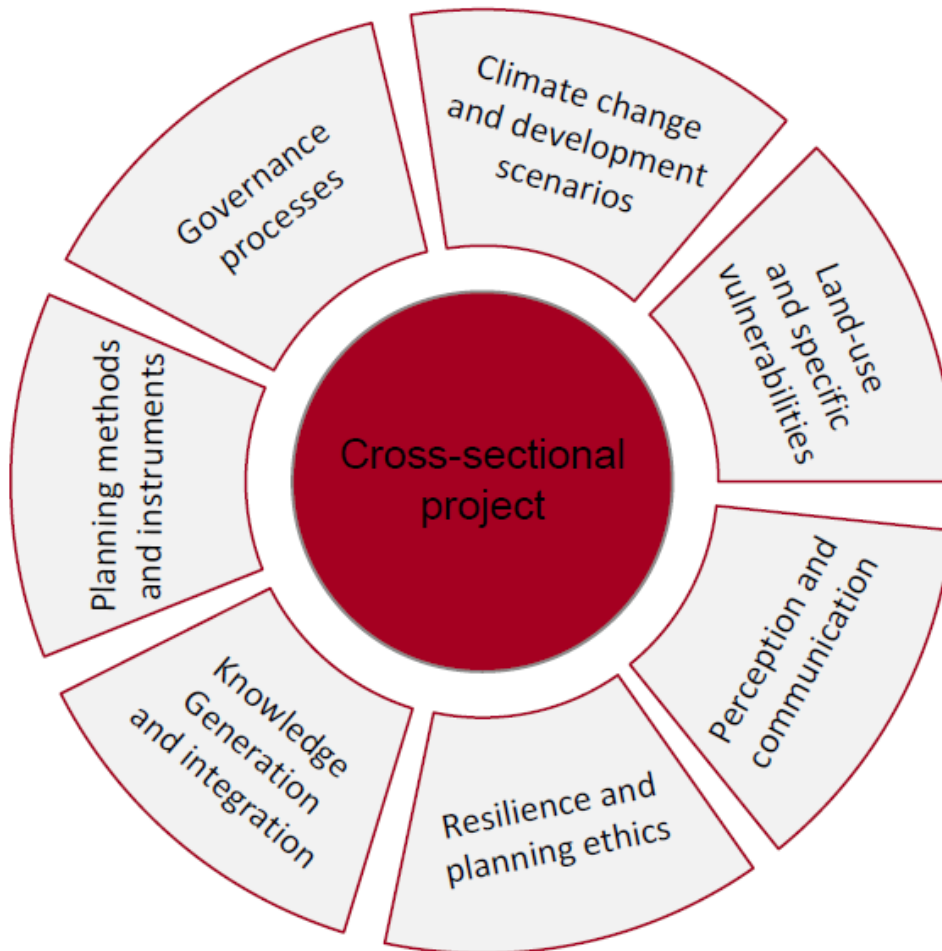
2. Which specific challenges arise from this in urban regions - as they are potentially highly vulnerable due to concentration of humans and infrastructure, diverse and interdependent functions and experience high pressures for use of land

3. How can urban and regional planning deal with these challenges and develop strategies towards a resilient spatial development?



p: M. Schaerffer

## → Interdisciplinary cooperation on climate change adaptation (1)



- Strong interdisciplinary research – with very different single research topics
- sub-projects cover different aspects within the overall topic of social-ecological adaptation to climate change to avoid partial worldviews of single disciplines and to achieve useful results for practice
- all intending to contribute the main questions asked
- case studies Rostock and Stockholm, also Copenhagen and Riga – according to these research topics



## Specific transdisciplinary research (2)

Transdisciplinary research – what does this mean?

➔ production of knowledge to solve problems of the practical world. In order to avoid potential borders of knowledge, it transcends disciplinary boundaries and goes beyond scientifically generated knowledge through integrating non-scientific societal knowledge

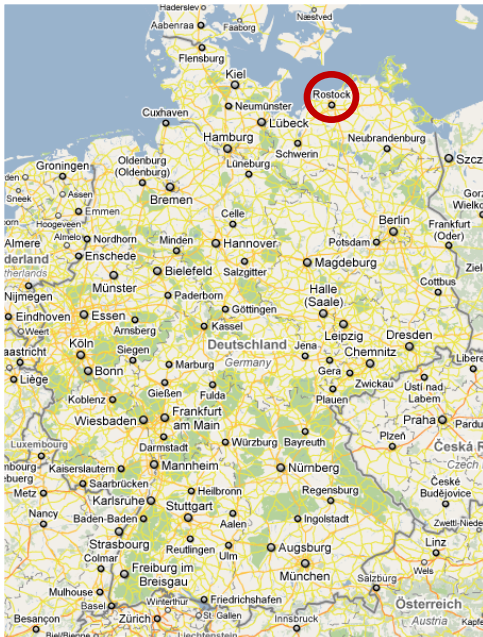
What are we doing?

➔ Intense transdisciplinary cooperation with the city of Rostock and the suburban region and

➔ Loose exchange within a transnational working group BSSSC – plan B:altic (still open to join)



# → Transdisciplinary research with peri-urban region of Rostock



Source: <http://maps.google.de>\_18.11.2010; modified



# → Future land development in the peri-urban region of Rostock

**Aim:** common and integrated adaptation strategies to climate change impacts of the urban region of Rostock with reference to land – use development

**Overarching method: strategic scenario planning** (2010 – 2012; 3 main events), involving politicians, key administration departments, associations and stakeholder relevant for land-use

**Process so far:** First contacts, planning region and city of Rostock official project supporters => kick-off research project with active participation of practitioners => **common workshop on challenges through climate change** => established **core-working-group** consisting of researchers and of practitioners (urban and regional planners, environmental administration, coastal and flood protection) – task: intensive preparation of the inputs for the scenario-planning workshops => **first scenario-Workshop (on climate change and land development in Rostock and the suburban-region)** with a wider participation



## → Science-practice cooperation within the BSSSC-plan B:altic working group

*Different partaking actors* from e.g. Stockholm Region, Riga Region, Westmecklenburg, Klaipeda

*Overarching goal:* project group “BSSSC – plan B:altic” is the exchange of knowledge between the different group members with their specific backgrounds and experiences.

*Further Actions:* workshops, focused work sessions and fieldtrips. All the discussions and results of the group should be as concrete as possible, always integrating specific problems and perspectives of the regions.

*Inputs of the group members:* actual and future research results and analysis of the different institutions, production of tools for implementing adaptation strategies and - inputs from the regions

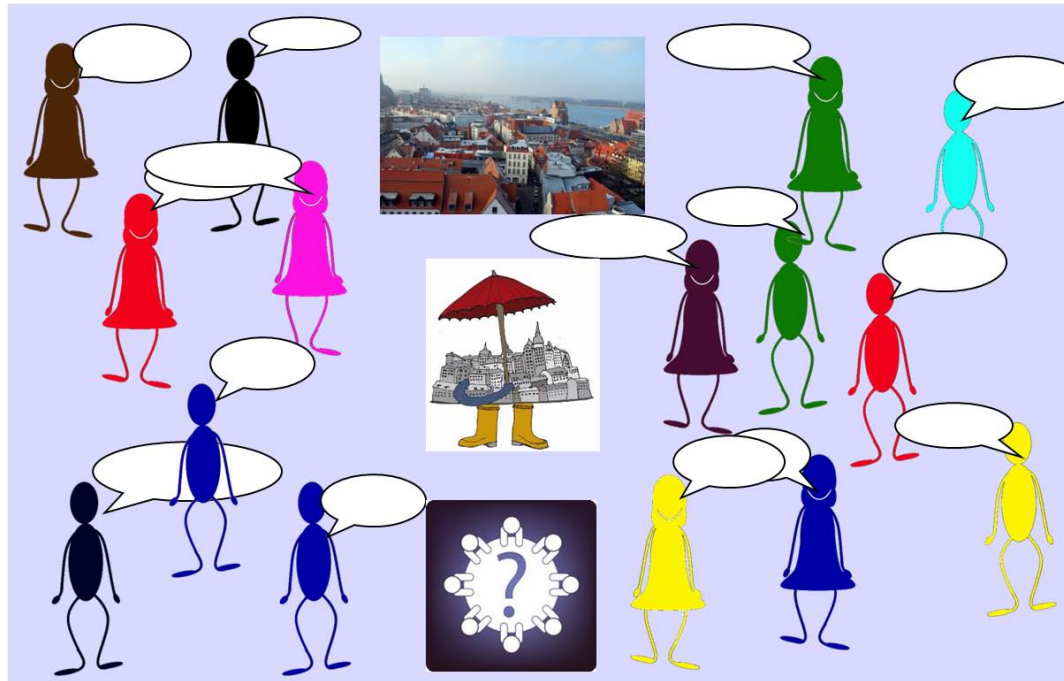
*Possible outputs:* policy measures (e.g. political lobby paper, actions to rise the political and public awareness), - a framework for adaptation strategies (e.g. guidelines for all stakeholders and for regional work), - support instruments for urban planning (e.g. decision support systems, improved planning instruments).





## → Further Science-practice interactions with cities and urban regions in the Baltic Sea Region

exchange through interviews in case studies: Stockholm (planning region and city), Riga (region and city), Copenhagen (mainly city )



events like this of today: very pleased that all practitioners I contacted also were willing to present in session 3

analysis of the adaptation processes so far

science-practice network and visits from practitioners at Hafencity University for mutual learning on adaptation processes, strategies and measures

## ➔ Preliminary science-practice experiences and open questions

Climate change adaptation within urban region as **highly relevant topic for mutual science – practice learning**: e.g. how to deal with uncertainty, potential specific local climate change impacts and specific aims (and norms) of how to deal with them, specific local adaptation strategies; practicability and implementation

**Where should the further research on adaptation go?** What might be needed to solve the practical problems? But also: what kind of at the first glance “glass bed games” could turn out to be helpful for practical purposes?

Baltic Sea Region (macro-regional EU BSR strategy; Action Plan also on adaptation): to what extend are **transnational exchanges and cooperation or even common adaptation strategies of added value?** – given the specific local impacts, vulnerabilities and adaptation measures?



# Thank you for your kind attention!

**Sources photographs:** M. Schaerffer; S. Deppisch, C. Janssen, [www.flickr.com](http://www.flickr.com)

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