

# Climate Services in Germany

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Deutscher Wetterdienst



Umwelt  
Bundes  
Amt   
Für Mensch und Umwelt

# Overview

**1** German Adaptation Strategy

**2** Basic Challenges

**3** German Climate Research and Information Network



# Overview

**1** German Adaptation Strategy

**2** Basic Challenges

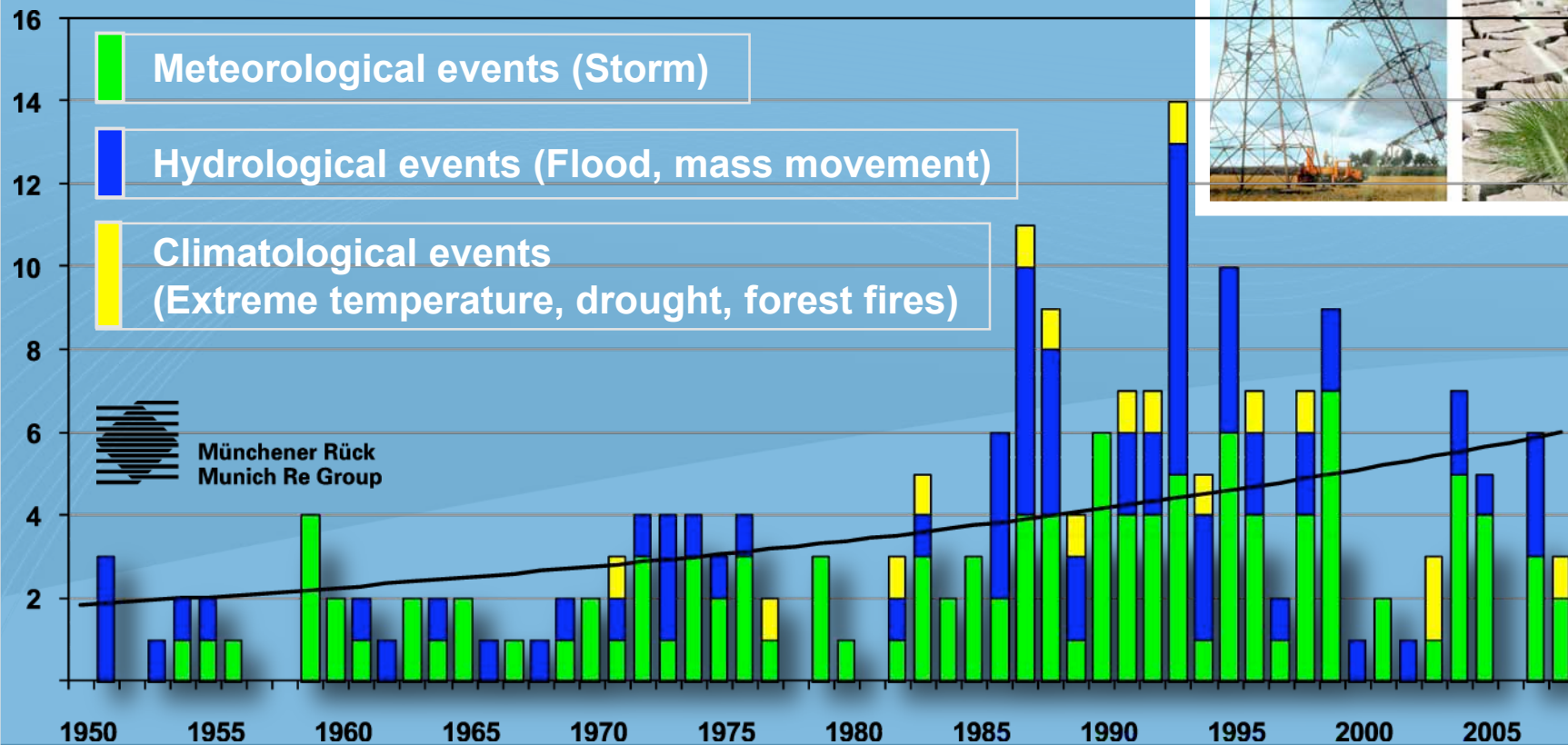
**3** German Climate Research and Information Network





# German Adaptation Strategy Deutsche Anpassungsstrategie (DAS)

Damages during the last two decades in Germany due to major floods approx. 13 bn € hot spells and droughts approx. 1 bn € storms 4.5 bn € 7000 deaths





# German Adaptation Strategy

## Deutsche Anpassungsstrategie (DAS)



### DAS aimed at

- reducing vulnerability to climate change impacts
- maintaining or enhancing adaptability of natural, societal, and economic systems

### Sustainable planning and acting requires to

- widen the knowledge base
- create transparency and participation
- support stakeholders by providing the basis for decision-making
- raise public awareness
- develop strategies to deal with uncertainties

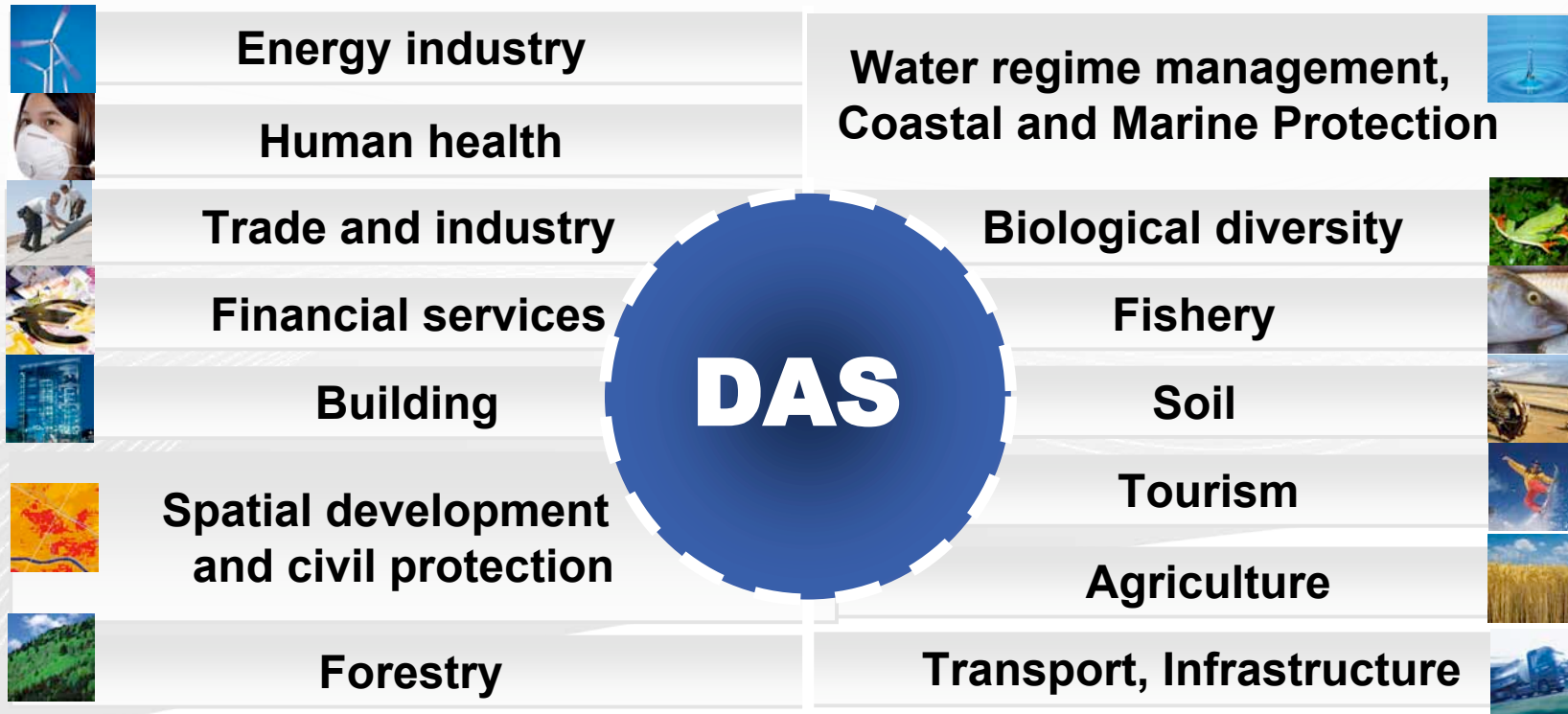
**Major next step: Development of an Adaptation Action Plan until 2011**





# German Adaptation Strategy

## Deutsche Anpassungsstrategie (DAS)



Options and first proposals for 14 sectors






# **KLIWAS – Impacts of climate change on waterways and navigation – options to adapt**

Part of the German Adaptation Strategy



## **Prepare waterborne transportation for the impacts of climate change:**

-  Acquisition and regionalization of global and regional climate projections (ensemble approach)
-  Assessing the vulnerability of navigation (incl. an estimation of the future costs of this particular transport mode)
-  Identification of options for action and development of sector-specific adaptation strategies (waterways, coasts, and estuaries)



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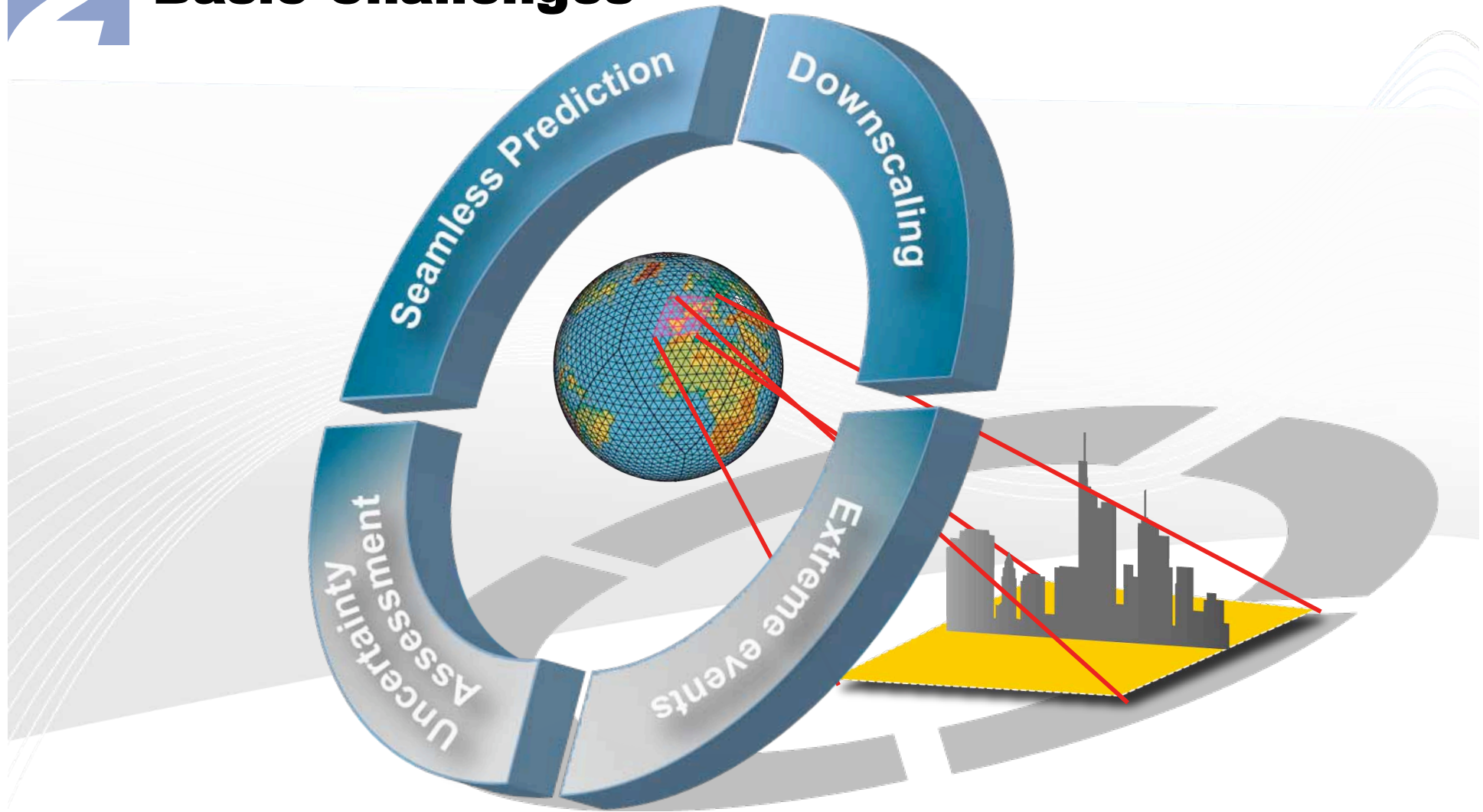
**2** Basic Challenges

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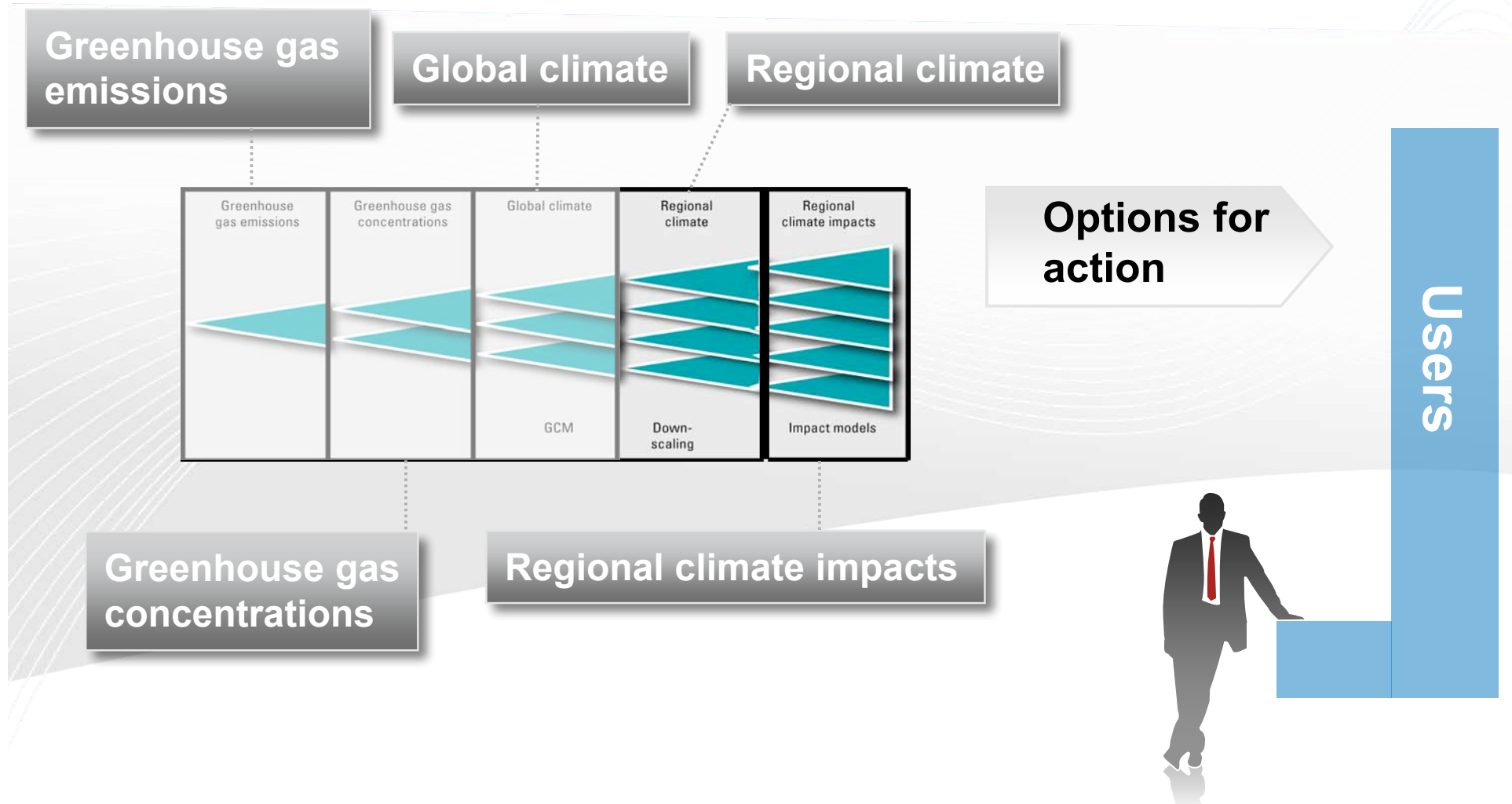


# 2

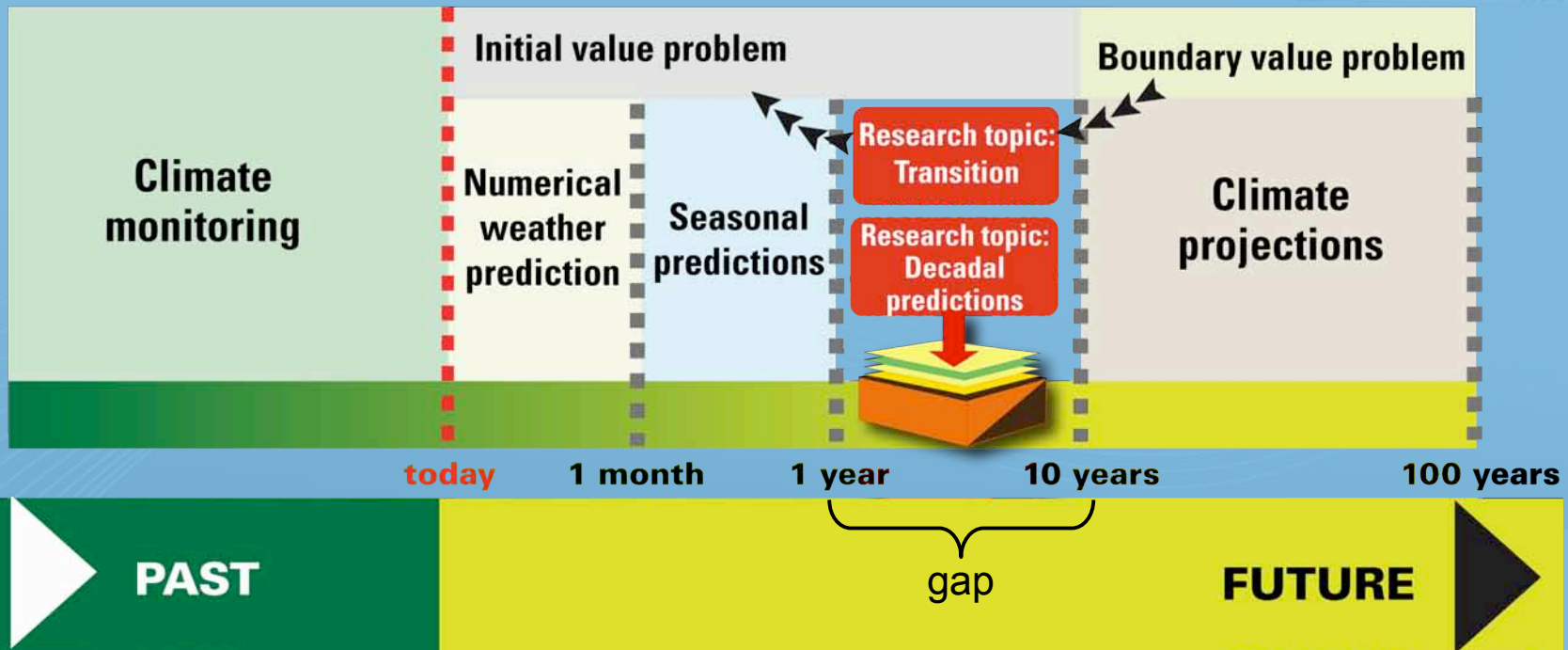
## Basic Challenges



# 2 Uncertainty assessment



## 2 „Seamless Prediction“



Development of a uniform ensemble modeling framework for time-scales from weather prediction to climate projections and closure of gaps in the temporal coverage of predictions

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# 3 German Climate Research and Information Network

## Climate service requirements

### Customer's view

Where do I get the data?

What is going to happen in the next few months, what in the next 10 years?



What consequences does this scenario have for my region or my task?

Will there be new scenarios soon?

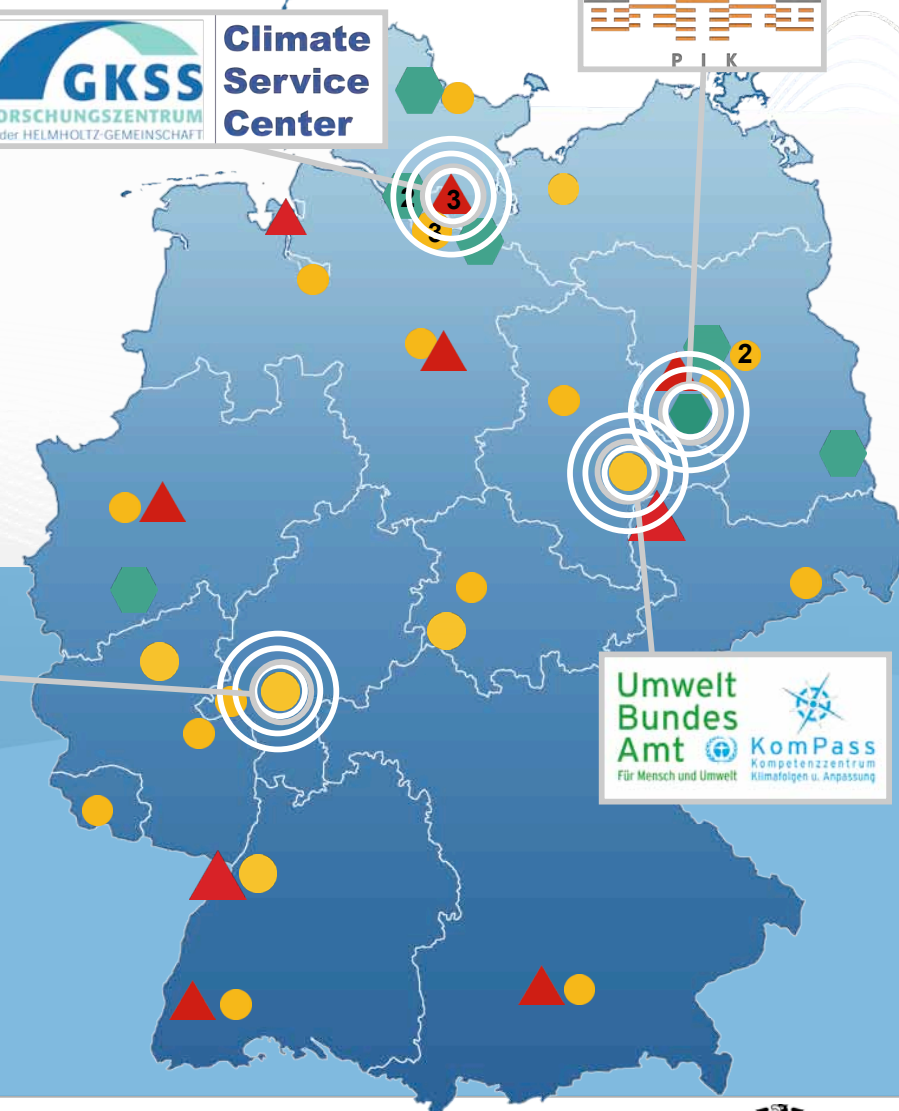
Who to contact?

Which scenario is to be trusted?



# 3 German Climate Research and Information Network

- ▲ Regional climate services and climate consulting
- National and federal government agencies concerned with climate change
- ⬡ Climate and/or climate impact research institutions



Advantage of decentralized structure:

local communication between scientists and decision makers





**Thank you very much, for your attention.**

