



**KLIMZUG-NORD**

Strategische Anpassungsansätze  
zum Klimawandel in der Metropolregion Hamburg

# Cooperative Planning for Climate Change Adaptation in Municipalities

Two Case Studies from the Metropolitan Region of Hamburg

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**HCU**

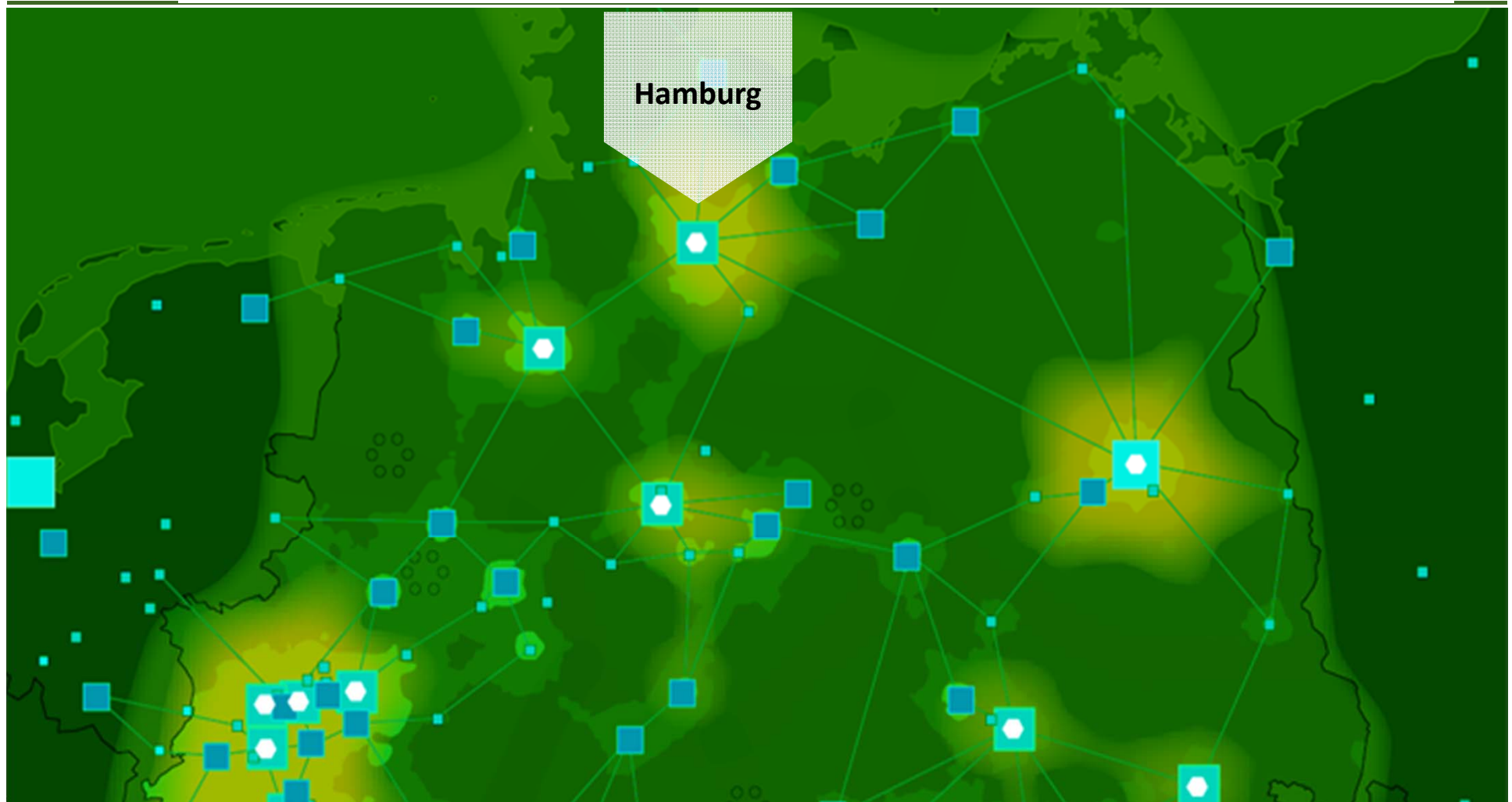


# Structure

- \_Climate change in the Metropolitan Region of Hamburg
- \_The applied research project KLIMZUG-NORD
- \_Cooperative planning as part of climate adaptation governance
- \_Case study "Greater Community of Gartow"
- \_Case study "Catchment Area of Wandse River"
- \_Conclusions



# Metropolitan Region of Hamburg (MRH)







# Metropolitan Region of Hamburg

\_ Hamburg and 14 districts of  
the federal states Lower Saxony  
and Schleswig-Holstein

\_ 20,000 km<sup>2</sup> area

\_ 4.3 Mi. inhabitants

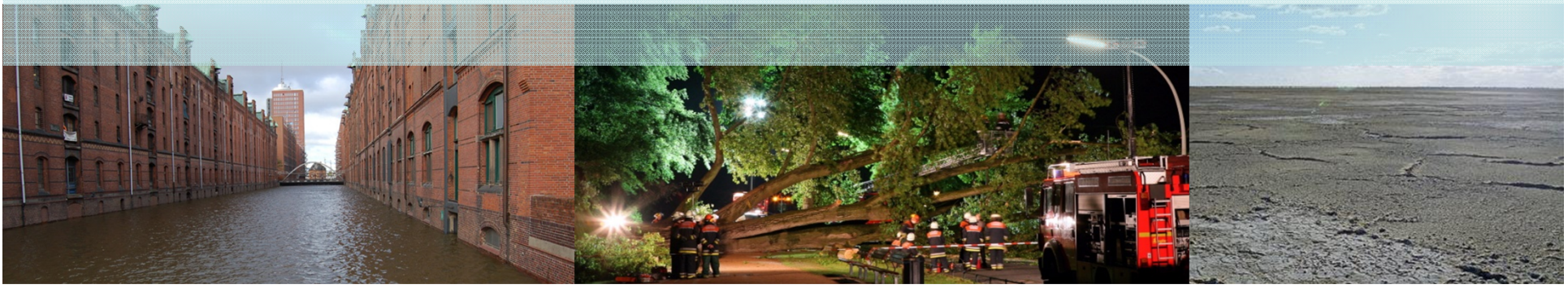
\_ Directly connected to  
the North Sea and  
closely to the Baltic Sea





# Climate change in the MRH

- \_ Rising sea level / Increasing storm surge water levels
- \_ Rising temperatures (2.0 – 3.5 °C until 2100)
- \_ Increasing extreme weather events
- \_ Drier summers, increasingly humid falls and winters
- \_ Increasing wind velocity







# KLIMZUG-NORD - Objectives

- \_ Quantification of changes within the MRH
- \_ Development and testing of techniques, methods and processes for adaptation
- \_ The master plan of the climate change impacts management
- \_ Dialogue between state, economy, and civil society





# Climate Adaptation Governance

\_forms of governance that support coordination of public and private action for climate change adaptation

**regulatory/formal  
instruments**

**economic  
instruments**

**cooperative planning/  
informal instruments**

**organizational  
structures**





# Stakeholder involvement in adaptation planning – a cooperative instrument

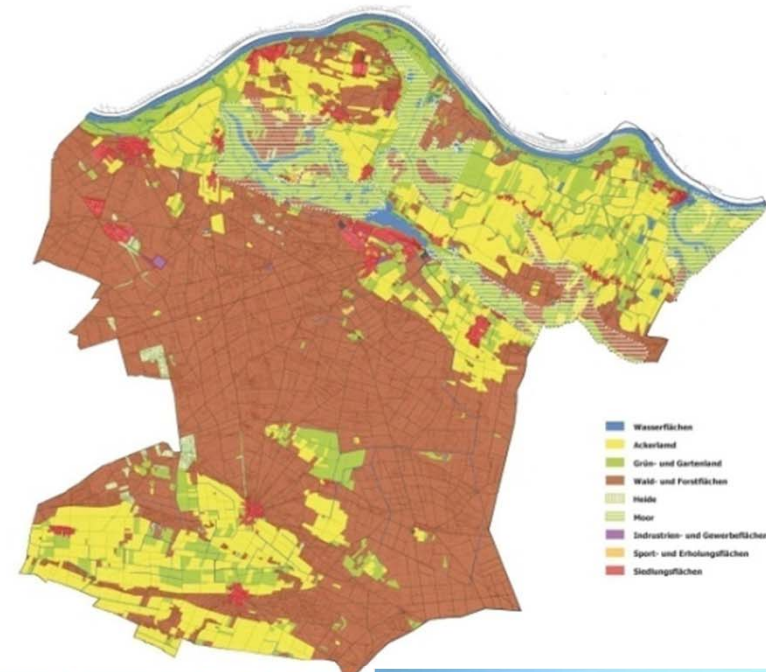
- \_Contributes to transparency and acceptance
- \_Supports learning between stakeholders and decision makers
- \_Avoids conflicts and can improve the reputation of local authorities among the citizens
- \_Includes knowledge of local experts about their community







# Case study Greater Community of Gartow





## Mission statement process

### **Information event**

To inform about climate change and its impacts

### **Cooperative vulnerability assessment**

To identify chances and risks of climate change for Greater Community of Gartow and raise awareness

### **Scenario workshop**

To develop and assess adaptation strategies

### **Mission statement workshop**

To present and discuss mission statement

### **Gartow council**

Decision on the mission statement





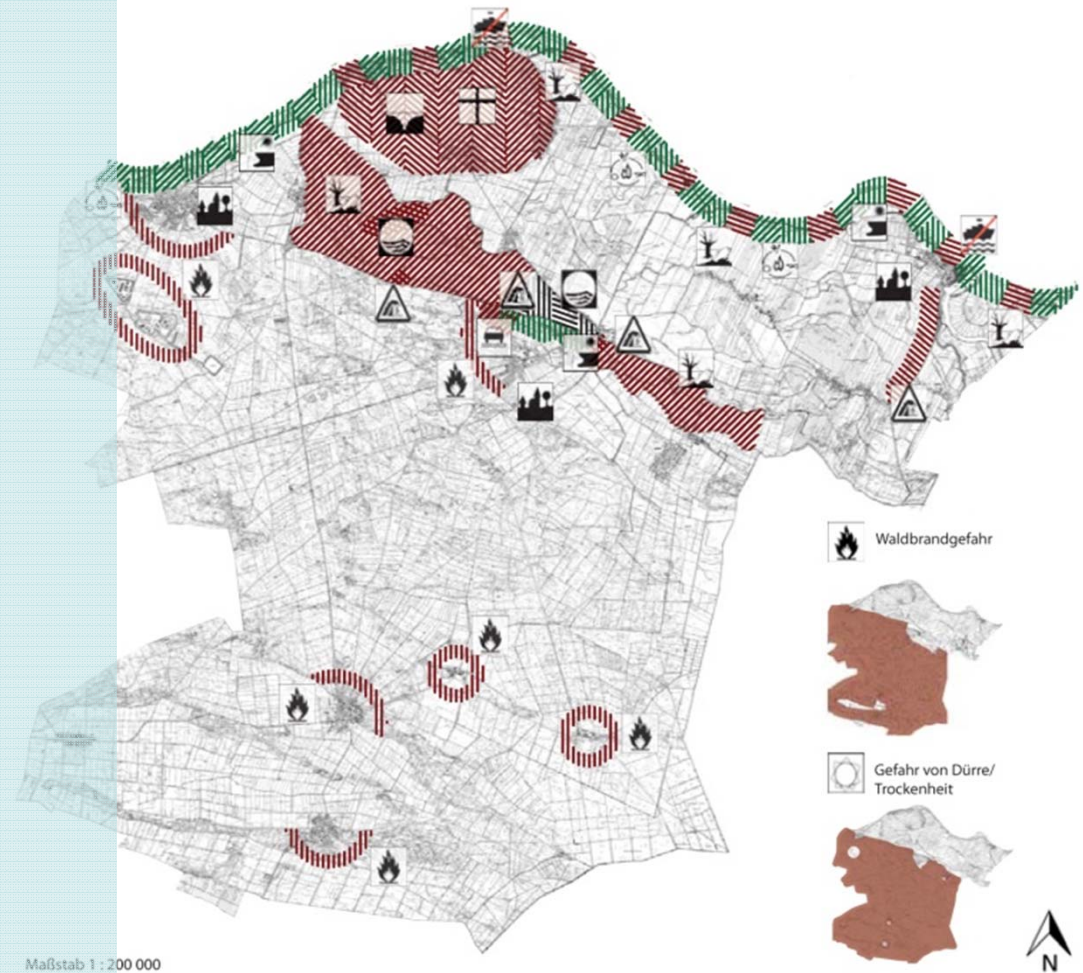
# Participatory vulnerability assessment

## Risks of climate change:

- \_ Forest fire
- \_ Impacts on water quality
- \_ Impacts of dryness

It is also important  
to communicate  
the positive aspects:

- \_ tourism



# Scenario workshop

## 3 adaptation strategies:

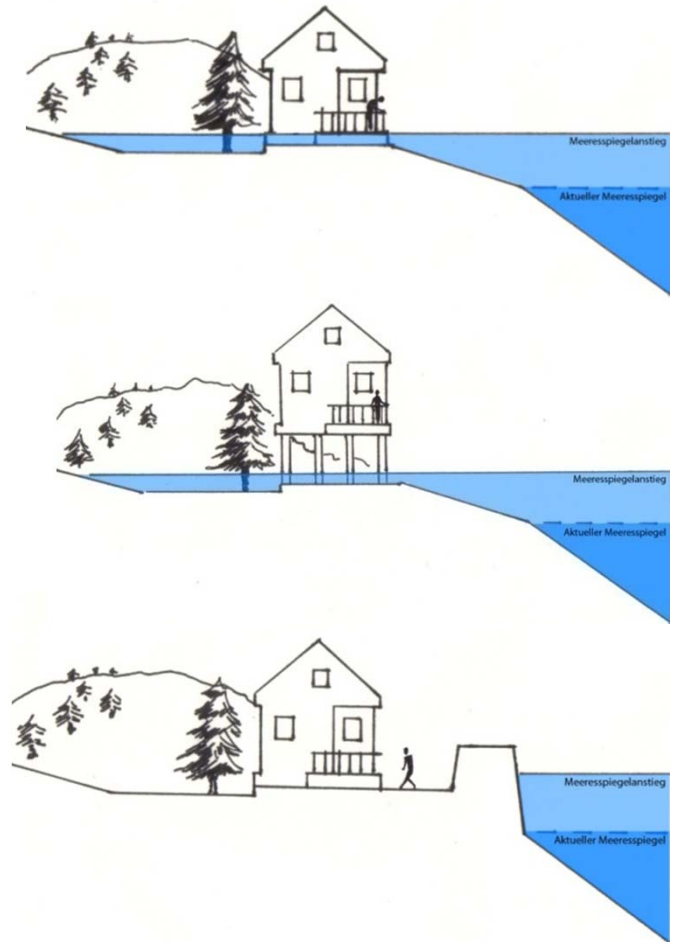
\_ Wait and see / Adapt / Protect

## Working groups for each strategy:

\_ description of locations in 2050 /  
measures / consequences

## Plenary discussion:

\_ Adaptation as preferred strategy, but  
settlements need to be protected



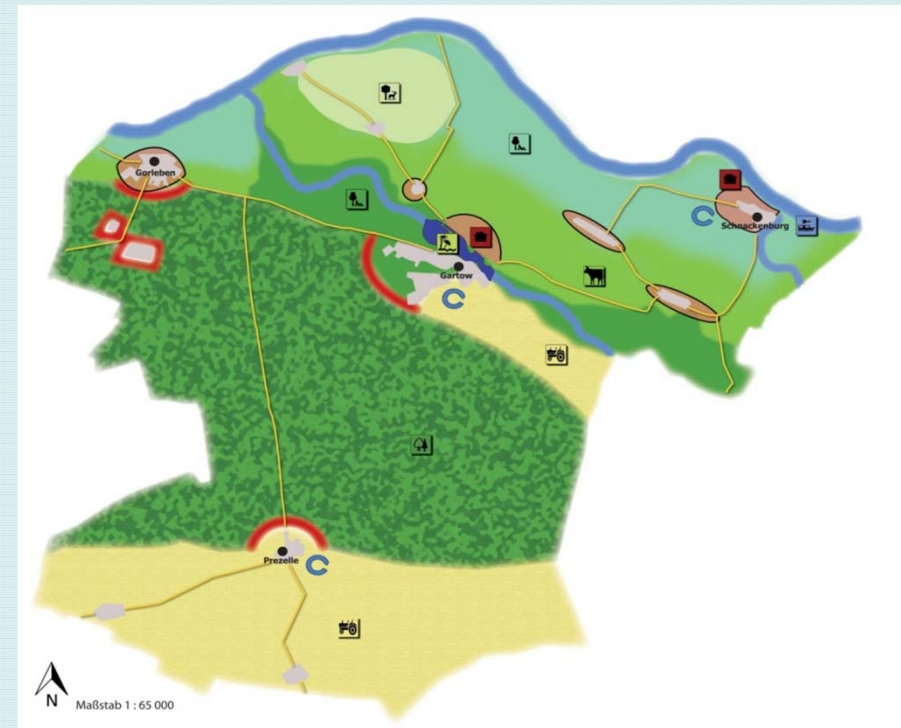




# Mission statement: Development in harmony with nature

## Example: Protected settlements

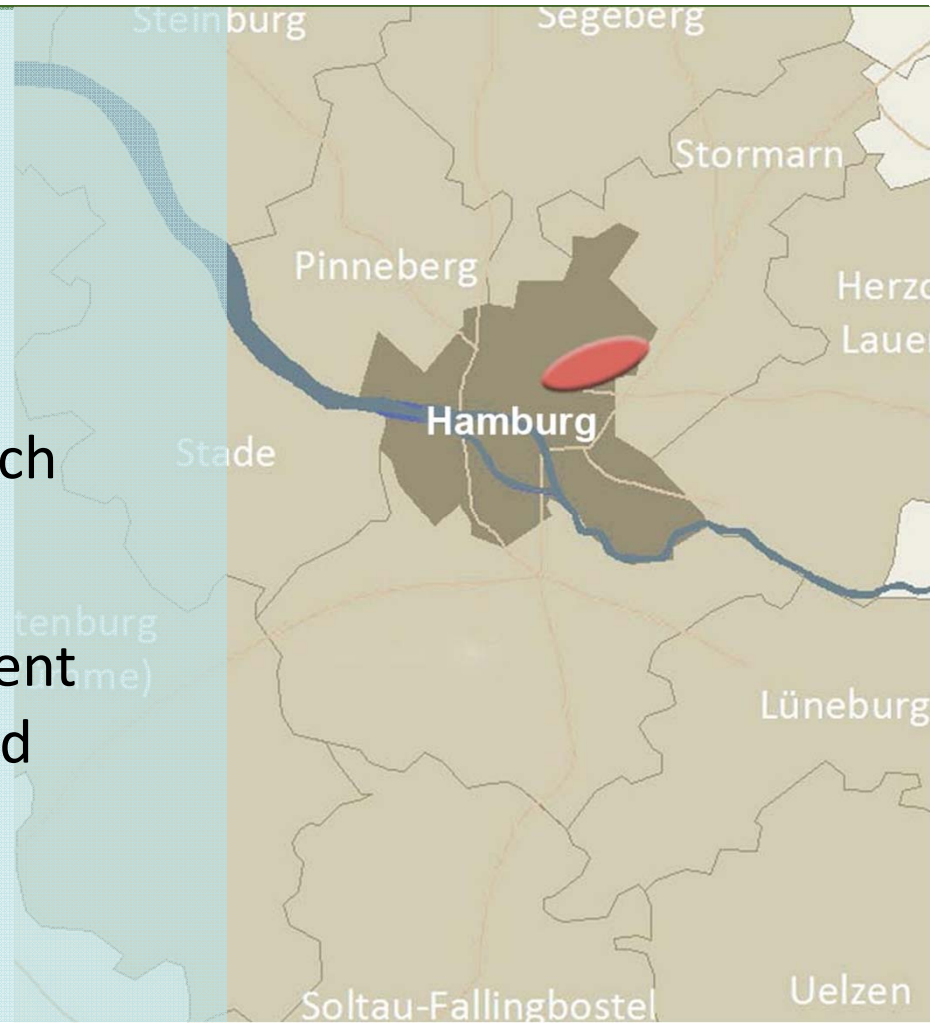
- \_ Compact settlements
- \_ Clearances of danger zones
- \_ Raising awareness for risks of climate change
- \_ Cover up the free spaces
- \_ Climate proofing for planned nuclear storage facility





## Case Study: Catchment Area of Wandse River

- \_ Concepts for climate change adapted development
- \_ Focus urban development
- \_ Inter- and transdisciplinary approach in KLIMZUG-NORD
- \_ Participative vulnerability assessment and scenario workshops in May and June 2011





# Conclusions



- \_ Cooperative planning is an important part of climate adaptation governance
- \_ Inclusion of different stakeholder groups is important for cooperative planning
- \_ Normative Scenarios, based on predefined strategies, are useful tool for raising awareness about new adaptation strategies
- \_ Spatial concepts for climate change adaptation should include all 3 strategies, they should be assessed at the end of the workshop



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# Thank you for your attention!

**for more information: [www.klimzug-nord.de](http://www.klimzug-nord.de)**

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