

# Economics of Climate Change Adaptation

## Integration of economic modeling and institutional analysis at different scale levels (econCCadapt)

### econCCadapt

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**The overall aim of the project** is to analyze and quantify the costs and benefits of climate change and adaptation in Germany - differentiated with respect to spatial regions, economic sectors and social groups at different scale levels. The project interlinks an institutional analysis with economic modeling and an extended cost-benefit analysis.

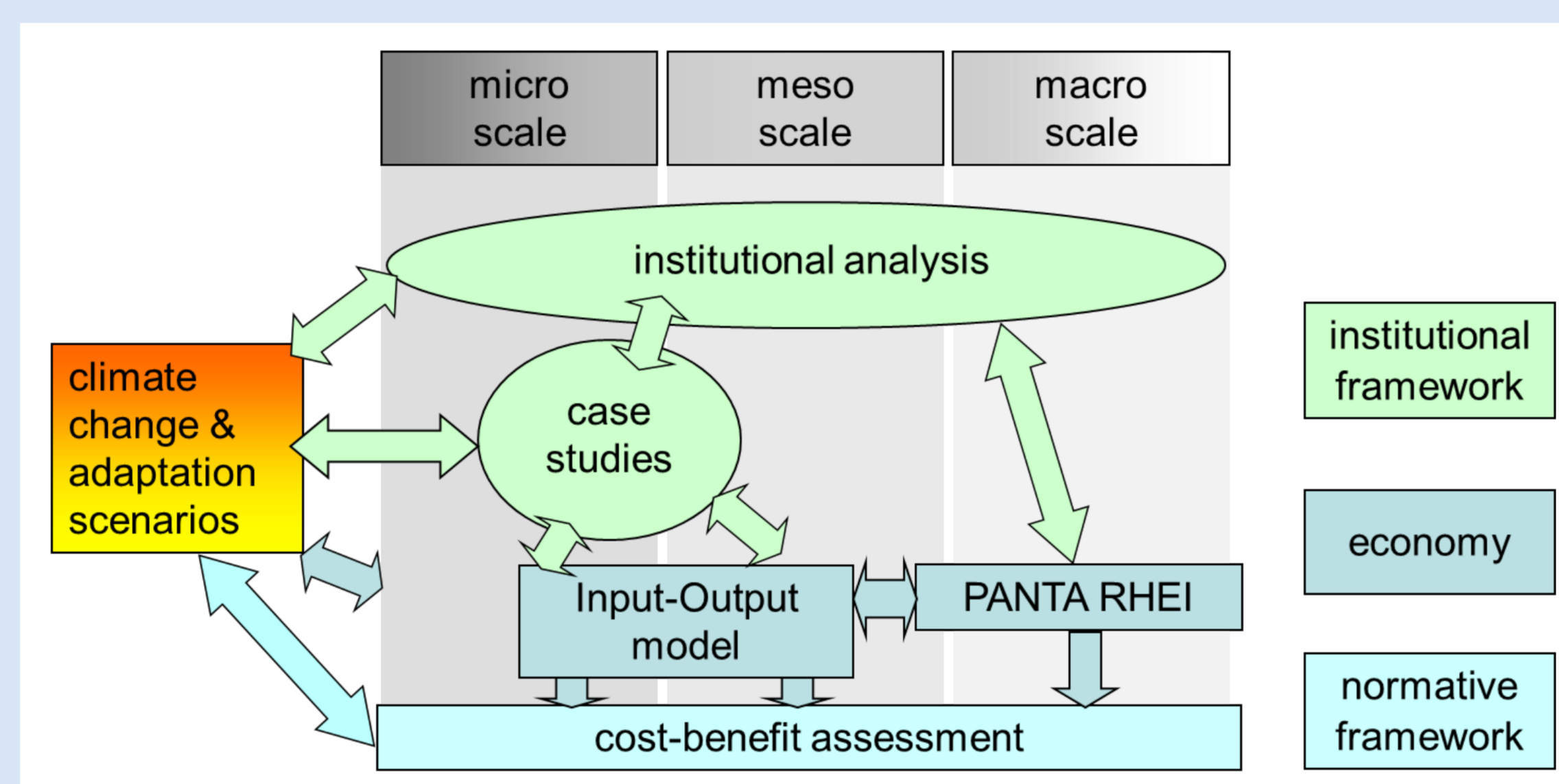
### Institutional Analysis

**Aims:** Understanding the link between existing institutional settings and different approaches to adaptation by local actors

**Methods:** Case study comparison and in-depth social research

**Expected Results:** Isolation of specific combinations of key organizational factors within local governance for a successful implementation of adaptation strategies

### Economic Modeling



### Integrating climate change impacts

**Aim:** Simulation of economic climate change impacts for Germany until 2050

**Methods:** Expansion of the macroeconomic model PANTA RHEI with a climate change impact module and extension of the simulation horizon until 2050

**Expected Results:** Economic effects of climate change in tables and graphs

### Modeling adaptation to climate change

**Aims:** Analysis of macroeconomic effects of selected climate adaptation strategies for Germany;

Development of a regional Input-Output-model for calculation of macroeconomic effects of several adaptation strategies for selected regions

**Methods:** Simulation with the macroeconomic model PANTA RHEI; Application of a regional Input-Output-model

**Expected Results:** Quantification of the effects of alternative adaptation strategies on national and regional GDP, employment and other economic indicators

### Extended Cost-Benefit Analysis

**Aims:** Development of a methodology for integration of alternative normative foundations into an extended cost-benefit analysis of climate change and adaptation strategies

**Methods:** Application of alternative valuation methods (e.g. happiness and capabilities approaches) on climate adaptation measures within a case study

**Expected Results:** Evaluation of selected adaptation measures in different normative currencies

**Project Homepage:** [www.oekonomie-klimawandel.de](http://www.oekonomie-klimawandel.de)



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