



Adaptation to climate change at national to local levels: examples from EU countries

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The EUR-ADAPT project: Aim of research

- The development of adaptation policy and actions in a multi-level governance context in Europe
 - Nested cases: national, regional and local level
 - Most different case studies



EUR-ADAPT

Organising Adaptation to Climate Change in Europe





EUR-ADAPT:

Organising adaptation to climate change in Europe



EUR-ADAPT is a five-year (2008-2012) project that aims to analyse the **development of adaptation policy and adaptive capacity with regard to climate change** among stakeholders and governance in seven European countries, from national to local level: *the United Kingdom, the Netherlands, Norway, Sweden, Finland, Italy and Russia.*

EUR-ADAPT asks:

- What do stakeholders see as their possibilities of adapting to climate change?
- How do the structures and perceived requirements for adaptation in the different countries compare?
- Can models and requirements for successful adaptive capacity development be identified?



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Case study areas: National and regional differences

Country	Region	Sub-region	Local
UK	SouthEast England	Hampshire County, Surrey County	Winchester, Portsmouth, Woking Borough
Finland	Uusimaa	Helsinki Metropolitan Area, Kuuma Municipality Cooperation	City of Espoo, Tuusula, Kerava, Mäntsälä and Pornainen
Sweden	Västra Götaland	n/a	Göteborg, Mölndal, Trollhättan, Munkedal
Italy	Emilia-Romagna	Province of Ferrara	Municipality of Ferrara



Methodology

- Policy documents
- Semi-structured interviews with main policy actors
 - In total some 95 interviews



Local level: systematic differences in the Gothenburg area

- Gothenburg
 - Mölndal
 - Trollhättan
 - Munkedal
- Similar differences observed in the other case study areas and regions.



FORMAS Adaptive capacity in multi-use forests

Increased climatic vulnerability in forestry, reindeer husbandry, winter tourism:

- Shorter winter season, longer autumn and spring (impacts on winter tourism and forest winter roads)
- Rain in winter (impact on reindeer grazing)
- Limited predictability (impacts on reindeer migration, forest harvesting, tourism booking)

Potential increased conflict over area resources, also with environmental protection. Benefits for forestry: increased forest growth. Limited municipal awareness.



Conclusion

- Observations, impacts and adaptation to climate change also in areas that do not have developed adaptation policy
- Need for area- and stakeholder-specific vulnerability assessment and adaptation measures
- Large differentiation between areas depending on a number of factors



Selected publications on adaptation

- Keskkitalo, E. C. H. (2008) *Climate Change and Globalization in the Arctic: An Integrated Approach to Vulnerability Assessment*. Earthscan Publications, London. 257 p.
- Keskkitalo, E. C. H. (2009) "Governance in Vulnerability Assessment: the role of decision-making networks in determining local vulnerability and adaptive capacity". *Mitigation and Adaptation Strategies for Global Change*. Vol.14, No. 2 (February, 2009), pp. 185-201
- Keskkitalo, E. C. H. (2008) "Vulnerability and adaptive capacity in forestry in northern Europe: a Swedish case study". *Climatic Change* 87:219–234
- Keskkitalo, E. C. H. and A. A. Kulyasova (2009) "The role of governance in community adaptation to climate change". *Polar Research*, Vol. 28, No. 1 (April 2009), pp. 60-70.
- Koivurova, T., E. C. H. Keskkitalo, and N. Bankes (2009, eds) *Climate Governance in the Arctic*. Springer Verlag, Hanover. 450 p.
- Keskkitalo, E. C. H., L. Westerhoff and S. Juhola (submitted) "Agenda-setting on the Environment: the development of climate change adaptation as an issue in European States". 25p.
- **(three further articles submitted on the development of adaptation policy)**