

# Local adaptation in Rovaniemi

## Presentation of the Clim-Atic-project

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Dr., lecturer Leena Suopajarvi  
University of Lapland  
[leena.suopajarvi@ulapland.fi](mailto:leena.suopajarvi@ulapland.fi)



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# Clim-ATIC –project 2008-2011 presentation

- Ⓒ Support rural peripheral communities to adapt to the impacts of climate change:
  - vulnerability scenarios,
  - adaptation strategies,
  - climate change impact visualisations and communication tools.
- Ⓒ Coordinated by UHI Millennium Institute in Scotland. Partners in Greenland, Norway, Sweden and Finland.
- Ⓒ In Finland national coordinator Lapland Regional Environment Center, partners Finnish Environmental Center, Finnish Forest Research Institute, University of Oulu and University of Lapland and Arctic Center and municipalities Rovaniemi, Kolari and Kittilä.
- Ⓒ Funded partly by Northern Periphery Programme, tot.2,35 M€.



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# Adaptation strategy for Rovaniemi, research frame

- ② University of Lapland: to produce back-ground research for the adaptation strategy for Rovaniemi in the fields of 1) tourism, 2) city planning and traffic, 3) energy and waste management.
- ② Data: survey to the candidads for the municipal council election autumn 2008 (102/314), focus group meetings with experts (3), personal or group interwievs among residents' association (16 persons/ 9groups).
- ② Hermeneutical approach: local climate change scenarios produced in Finnish Environmental Center and Arctic Center as a base of the work -> local interpretations what these changes mean.



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# Vulnerability in Clim-Atic and specific features in Rovaniemi

- Ⓜ Vulnerability is “the exposure to multiple stresses, to shocks and to risk over a longer period”.
- Ⓜ General features: northern city at the polar circle, geographically large municipality, service-based occupational structure, reasonable high unemployment ra.
- Ⓜ Specific features:
  - situated in the confluence of Rivers Ounasjoki and Kemijoki upper course,
  - general plan created by Alvar Aalto limiting height of the houses to five floors,
  - rural municipality Rovaniemi and city of Rovaniemi had consolidation of the municipalities in 1.1.2006,
  - dependency on Christmas tourism.



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# Risk of floods and floodprotection



Photo: Kemijoki Oy



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# General plan by Alvar Aalto and new demands



Photo: YIT

# City of villages?



Photo: Tiehallinto



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# International Christmas tourism, Rovaniemi as "Santa´s hometown"



Photo: Rovaniemi city.



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# Suggestions for the adaptation strategy

- ④ Adaptation as a process of social learning: understand climate changes, evaluate consequences, cope with consequences and take advantage of opportunities.
- ④ Adaptation strategy for Rovaniemi city: back ground information + concrete suggestions in different fields (23): developing the alternatives for Christmas tourism, possibilities for energy saving and renewable energy, recycling, better public transportation, green areas to the center of the city and more concern on environment in urban planning.



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# Logic of the project – and problems

- ② Information -> interest -> action -> change.
- ② Information: fragmented science, knowing and understanding.
- ② Interest: several competing interests, culturally and socially made, changing, complicated to analyze.
- ② Action: resources for action or possibilities for action missing.
- ② Change: something unexpected coming or created.



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