

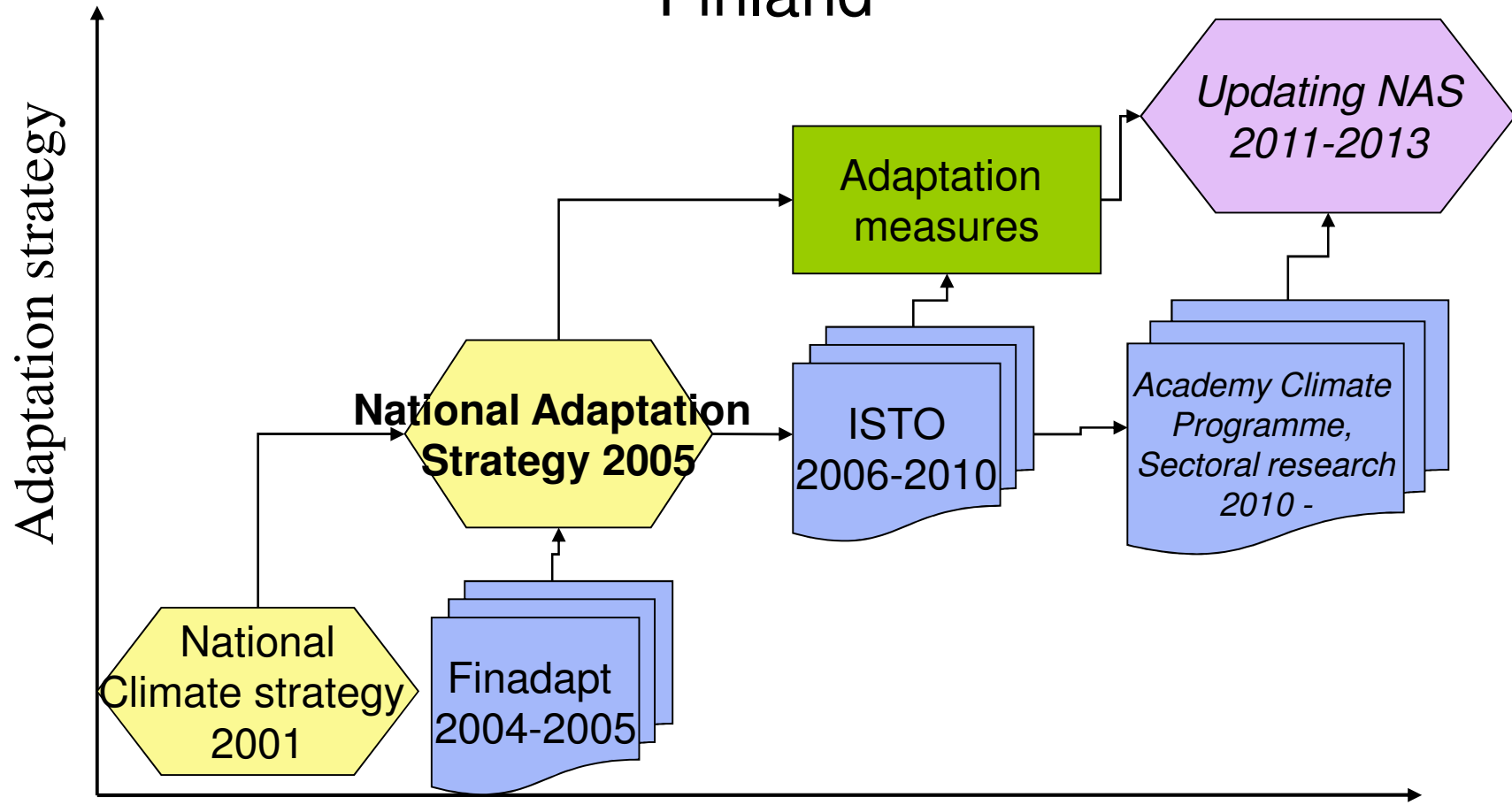
Finnish Adaptation Strategy

Era-NET CIRCLE Workshop
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Veikko Marttila



Science – policy interaction in adaptation in Finland



Process towards the adaptation strategy

- National Climate Strategy (2001) focused only on mitigation - Parliament emphasized the need for adaptation strategy
 - National climate policy needs to focus on both mitigation and adaptation
- Adaptation strategy - process from 11/2003 to 1/2005
 - Climate change data and information: Finnish Meteorological Institute (FMI)
 - Changes in natural conditions (soil, water, air, plants and animals): Finnish Environment Institute (FEI)
 - Socio-economic scenarios: Government Institute for Economic Research
 - Process coordinated by Ministry of Agriculture and Forestry



Several sectors are covered in the strategy

- Natural resources:
 - agriculture and food production, forestry, fisheries, game husbandry, reindeer husbandry, water resources
- Biodiversity
- Industry, energy
- Traffic
- Land use, building
- Health
- Tourism, recreation
- Insurance

Finland's National Strategy for Adaptation to Climate Change (2005) in English:

www.mmm.fi/sopeutumisstrategia



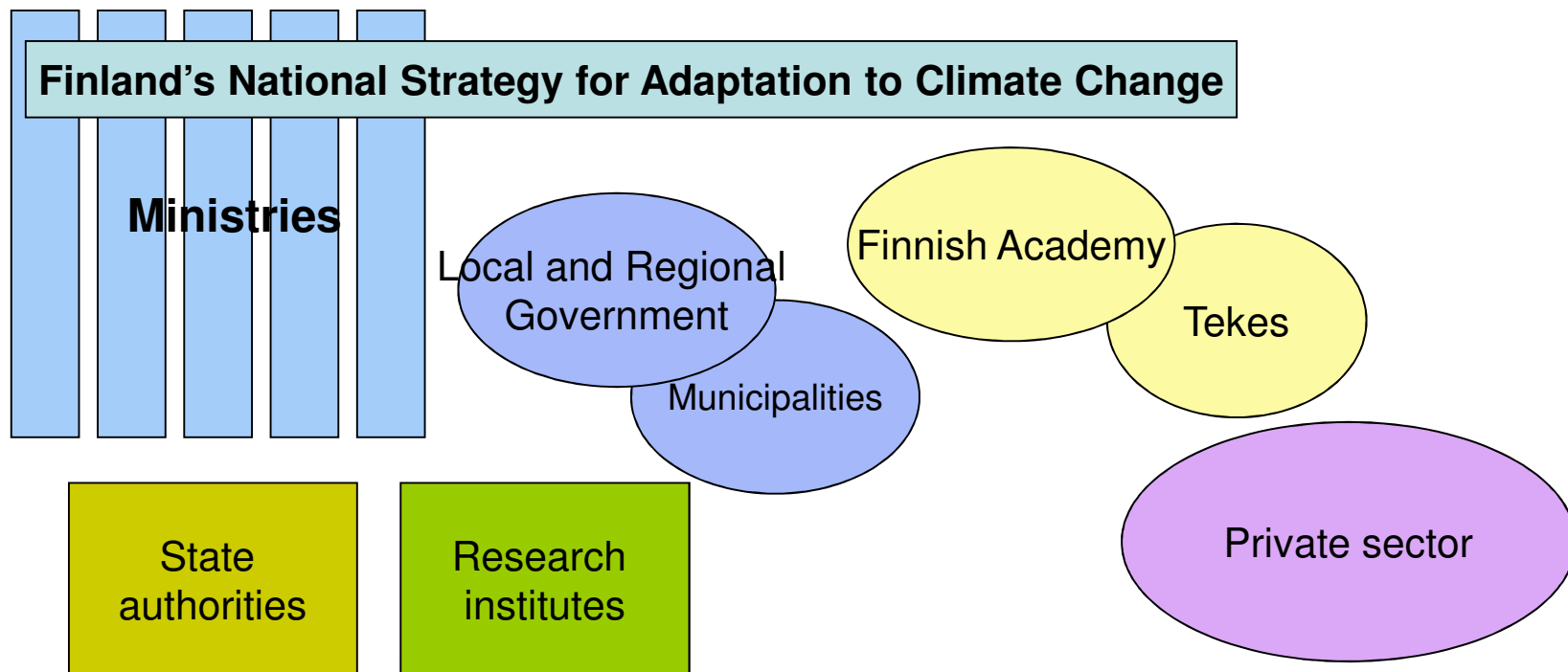
Aims to be achieved by 2015

- Integrate climate change impacts and adaptation into sectoral planning, implementation and evaluation (mainstreaming)
- Include climate aspects into long-term investments
- Improve capacities to address extreme weather events
- Develop further observation and warning systems
- Strengthen and focus research and development; programme started 2006
- Address international linkages and development cooperation



Implementation of the strategy

- Collaboration between sectors, within sectors also "top-down" steering
- Coordinated by Ministry of Agriculture and Forestry
- Mainstreaming followed up and enhanced by coordination group



Some examples of the adaptation work in sectors

- Climate change adaptation research programme, ISTO, 2006-2010
- MIL-programme 2007-2011 – Forests in changing climate
- Finland's national forest programme 2015
- Adaptation action plan in environmental administration
 - About 40 separate measures identified
- Adaptation action plans e.g. in Finnish Road Administration, Rail Administration, Marine Administration
- Provincial and municipal climate strategies
 - Mainly mitigation, but adaptation increasingly important



Where are we in 2009?

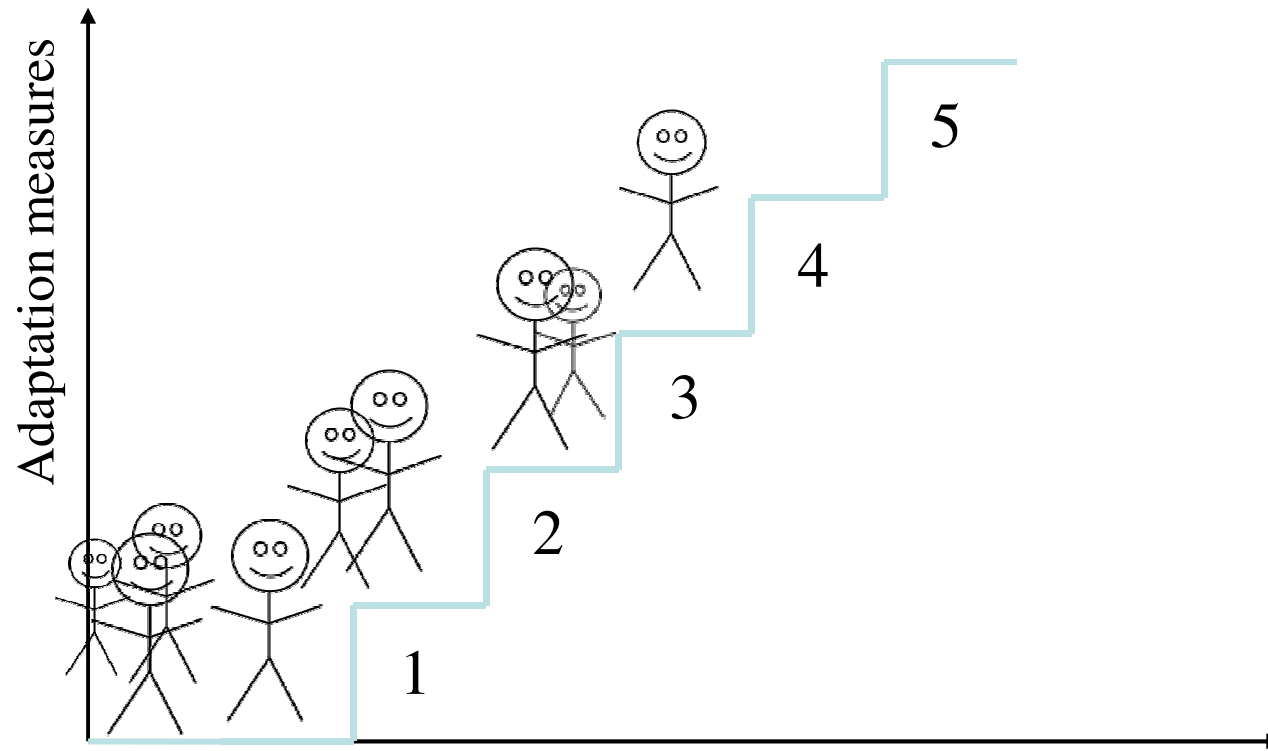
Evaluation of implementation of the strategy during spring 2009

- Completed or started adaptations measures in different sectors
- Adaptation research in Finland
- Identified new needs for adaptation
 - for updating the adaptation strategy in 2011-2013



Steps in adaptation

- adaptation research and awareness among decision-makers are preconditions for taking adaptation measures



Adaptation research



Steps in adaptation to climate change

Step 1

- Need for adaptation recognised among a small group of pioneers in the sector
- Little research on the impacts of or adaptation to climate change
- Some adaptation measures identified but not yet implemented

Step 2

- Need for adaptation measures recognised to some extent in the sector (minority of decision-makers)
- Indicative understanding of the impacts of climate change (qualitative information)
- Some adaptation measures identified and plans made for their implementation, some launched

Step 3

- Need for adaptation measures quite well recognised (majority of decision-makers) in the sector
- Impacts of climate change quite well known (quantitative information)
- Adaptation measures identified and their implementation launched
- Cross-sectoral cooperation on adaptation measures started

Step 4

- Need for adaptation measures widely recognised and accepted in the sector
- Adaptation incorporated into regular decision-making processes
- Impacts of climate change well known, within the limits of the uncertainty in climate change scenarios
- Implementation of adaptation measures widely launched and their benefits assessed at least to some extent
- Cross-sectoral cooperation on adaptation measures an established practice

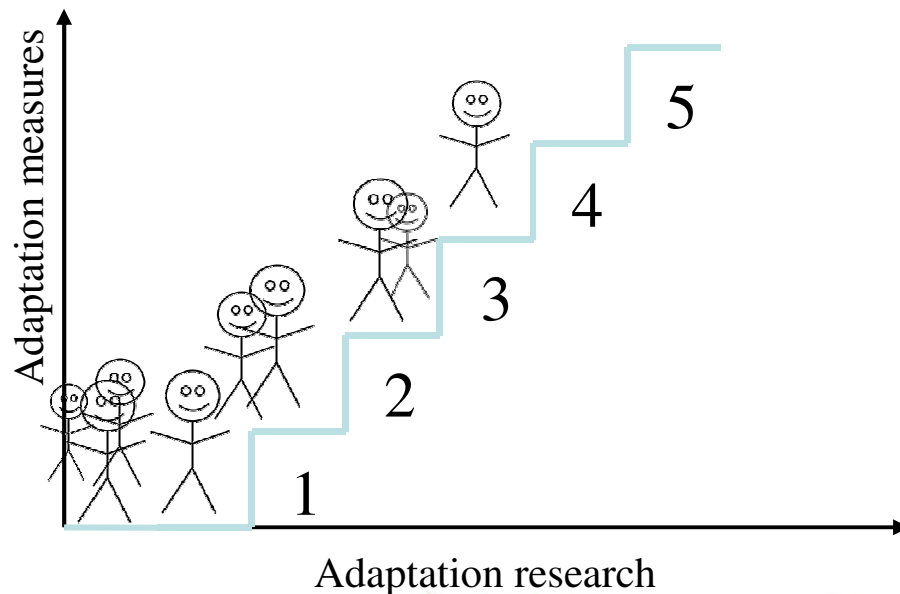
Step 5

- Adaptation measures under the strategy or recognised otherwise implemented in the sector



Adaptation level in Finland in 2009

- All the sectors considered - on average on step 2
- Water resources management the most advanced sector (step 4)
- Agriculture and forestry, traffic, parts of the environmental administration around step 3
- Other sectors on steps 1...2



Climate change adaptation research programme, ISTO, 2006-2010

Midterm evaluation, spring 2008

- Results of the on-going research projects are useful for adaptation
- Yet, only 8 fields out of planned 20 are covered
 - Need to start projects to cover the gaps
 - More applied, multi-disciplinary research to support practical adaptation measures
- Resources for adaptation research are not enough, need for long-term planning
- Communicating the results of adaptation projects to decision makers and public increasingly important



Adaptation research in Finland, spring 2009

ISTO-funding, TEKES, EU (Life+, Northern Periphery), Finnish Academy (Era-NET CIRCLE)

Cross-sectoral research

- Climate research for adaptation, risk assessment, economical and social impacts, adaptation management, environmental impact assessment

Sectoral research

- Agriculture and food production, forestry, fisheries, game and reindeer husbandry, water resources, biodiversity, industry, energy, building, urban planning, traffic, health, tourism, insurance, international dimension



Identified new needs for updating the national adaptation strategy in Finland

- Synergies and contradictions of mitigation and adaptation
- More cross-sectoral collaboration
- Wider understanding for need to adapt to socio-economical impacts of climate change
- Risk assessment and management for pessimistic SRES-scenarios
- Cost-benefit analysis for adaptation measures
- More regional aspects of adaptation
- More user-oriented communication about adaptation

- Recommendations of PEER study
- White Paper on adaptation



Thank you for your interest!

<http://www.mmm.fi/sopeutumisstrategia>

