

Partnership of European Environmental Research: Climate Projects 2008



TOLERATE conference, 19 May 2008

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What is PEER?

A network of 7 large European environmental research Centers:

- created in 2001
- covering the full spectrum of natural and social environmental sciences
- combining basic, strategic and applied interdisciplinary research

PEER Member Institutes

a part of ERA,..
a part of Europe..

Staff: 4700 persons
Annual budget: 350 million Euros
PhD students: 700
Publications: 5200 / year (1380 peer-reviewed)



PEER: vision and mission

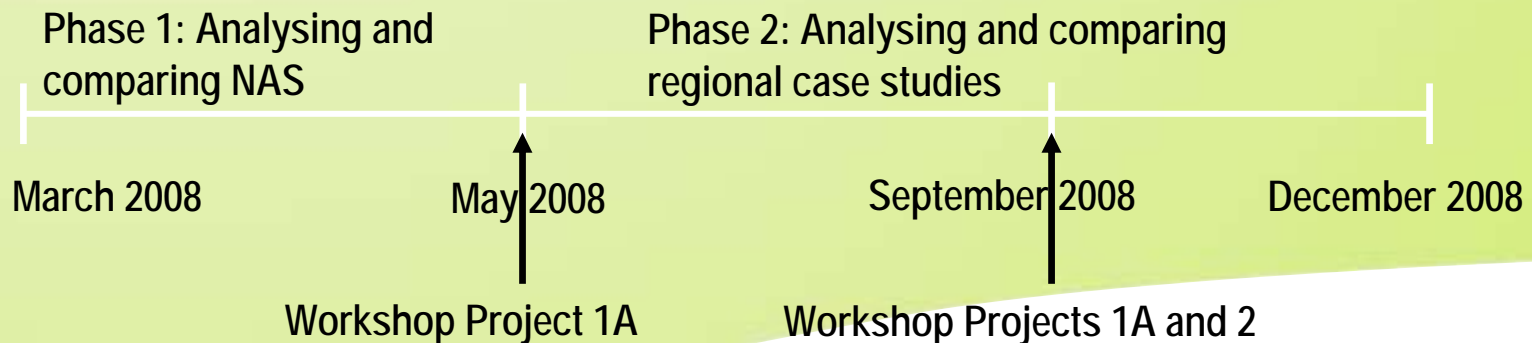
The vision of PEER is to be a world leader in integrating knowledge and expertise for sustainable development.

PEER Mission:

- To build a strategic partnership of major European public environmental research centres;
- To lead a European Research Area that strengthens the knowledge base for the sustainable development of a changing world;
- To foster innovative interdisciplinary research and cross-cutting approaches in support of national and European policy-makers, industry and society.

PEER: Two climate change projects

- Project 1A: comparative analysis of national and regional adaptation strategies
 - project lead: Alterra – Rob Swart
- Project 2: policy integration, coherence and governance
 - project lead: SYKE - Per Mickwitz
- Timeframe PEER project 1A

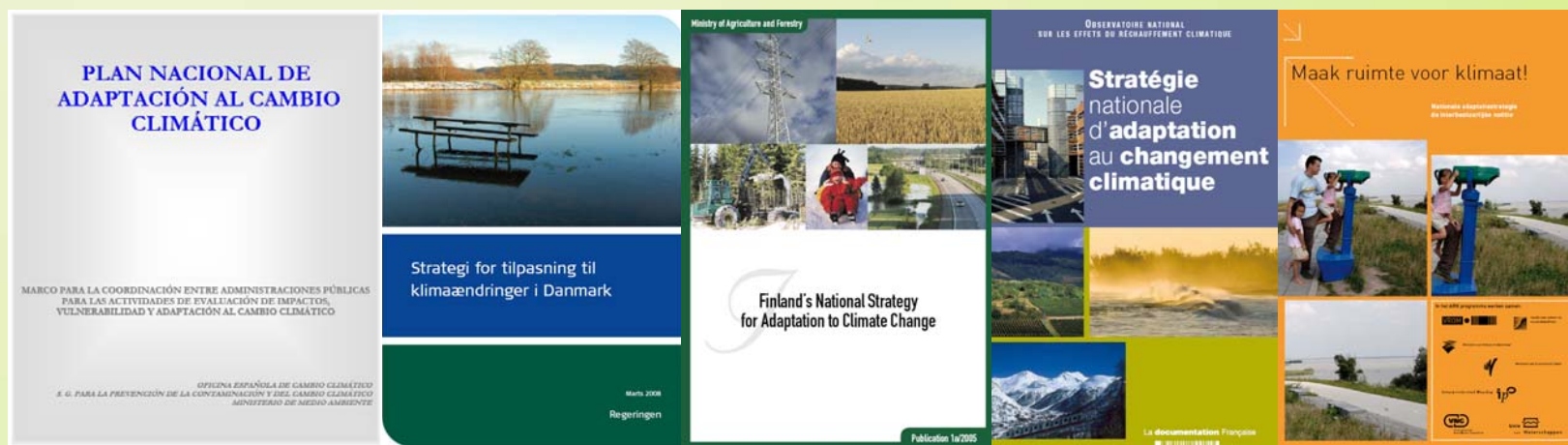


Project 1A: output and objectives

- **Policy support**
 - Position paper “Acclimatizing Europe”
 - PEER as policy-relevant think tank
- **Research agenda**
 - Knowledge gaps: “Advancing the PEER Climate Agenda”
 - Scientific Paper: “How does Europe adapt to Climate Change”
 - PEER as innovating research community

Phase 1: Research strategy

Comparative analysis of National Adaptation Strategies (NAS)



- Analyses NAS characteristics with factsheets for a dozen countries
- Use information from earlier assessments to broaden perspective (EEA, IVM/EPA, CIRCLE, UNFCCC)
- Builds upon an earlier framework to categorize and compare adaptation activities developed by IVM for European EPAs

Phase 1: Research strategy - Factsheet

General information	Adaptation level	Adaptation objective	Adaptation aim
<p><i>Example:</i></p> <ul style="list-style-type: none">•Budget/costs (research programs)•Timeframe•Level of implementation•Science-policy interactions	<p><i>Example:</i></p> <ul style="list-style-type: none">•Adaptation concern•Adaptation (policy) recommendation•Adaptation policy measure	<p><i>Example:</i></p> <ul style="list-style-type: none">•Building adaptive capacity•Reduction of risk and sensitivity•Increase of coping capacity	<p><i>Example:</i></p> <ul style="list-style-type: none">•Coastal zone management•Water management•Health and disease management

After Massey and Bergsma (2008)

Phase 1: Research strategy - NAS

PEER countries

- Denmark (NERI)
- Finland (SYKE)
- France (CEMAGREF)
- Germany (UFZ)
- Netherlands (Alterra)
- United Kingdom (CEH)

Second NAS (other?)

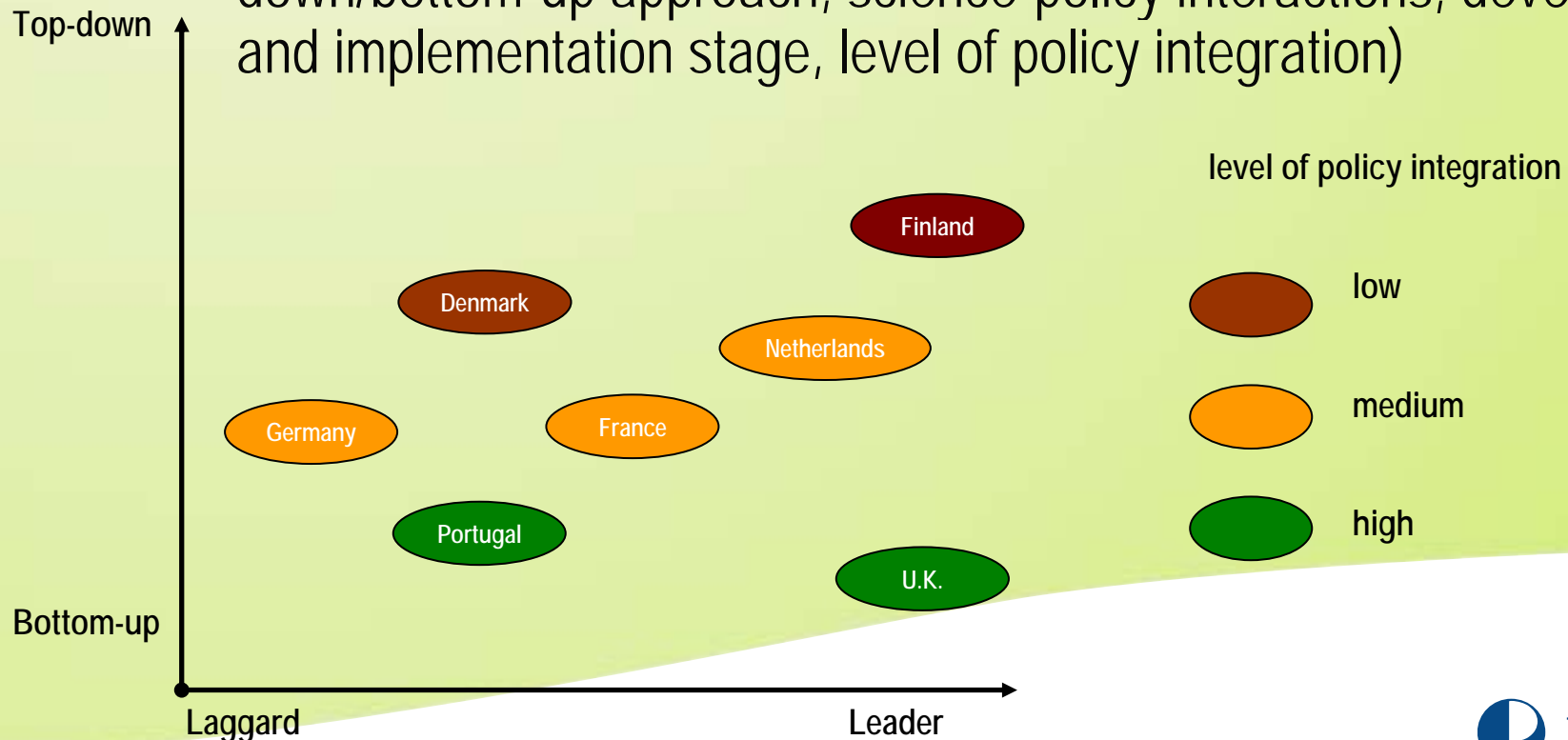
- Norway
- Latvia
- Spain
- Austria
- Portugal
- Ireland

Source of information:

- National policy document(s),
- Interviews
- Sectoral policy strategies

Phase 1: Research strategy - output

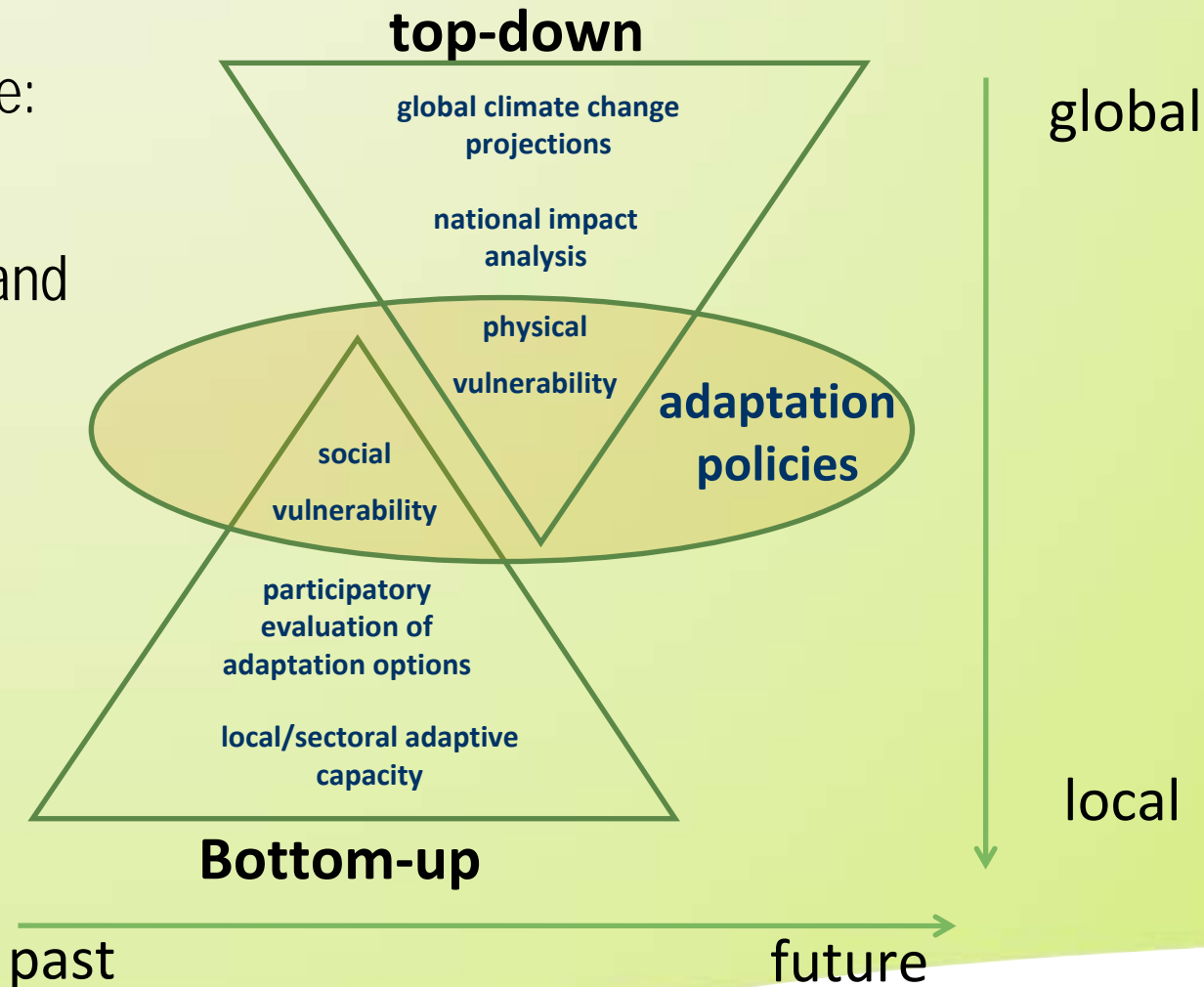
- Comparative analysis of national adaptation strategies from at least 12 countries
- Identification of the 'laggards' and 'leaders'
- Overview of the main similarities and differences (e.g. top-down/bottom-up approach, science-policy interactions, development & implementation stage, level of policy integration)



Phase 1: Research strategy - output

For example:

Integration
bottom-up and
top-down

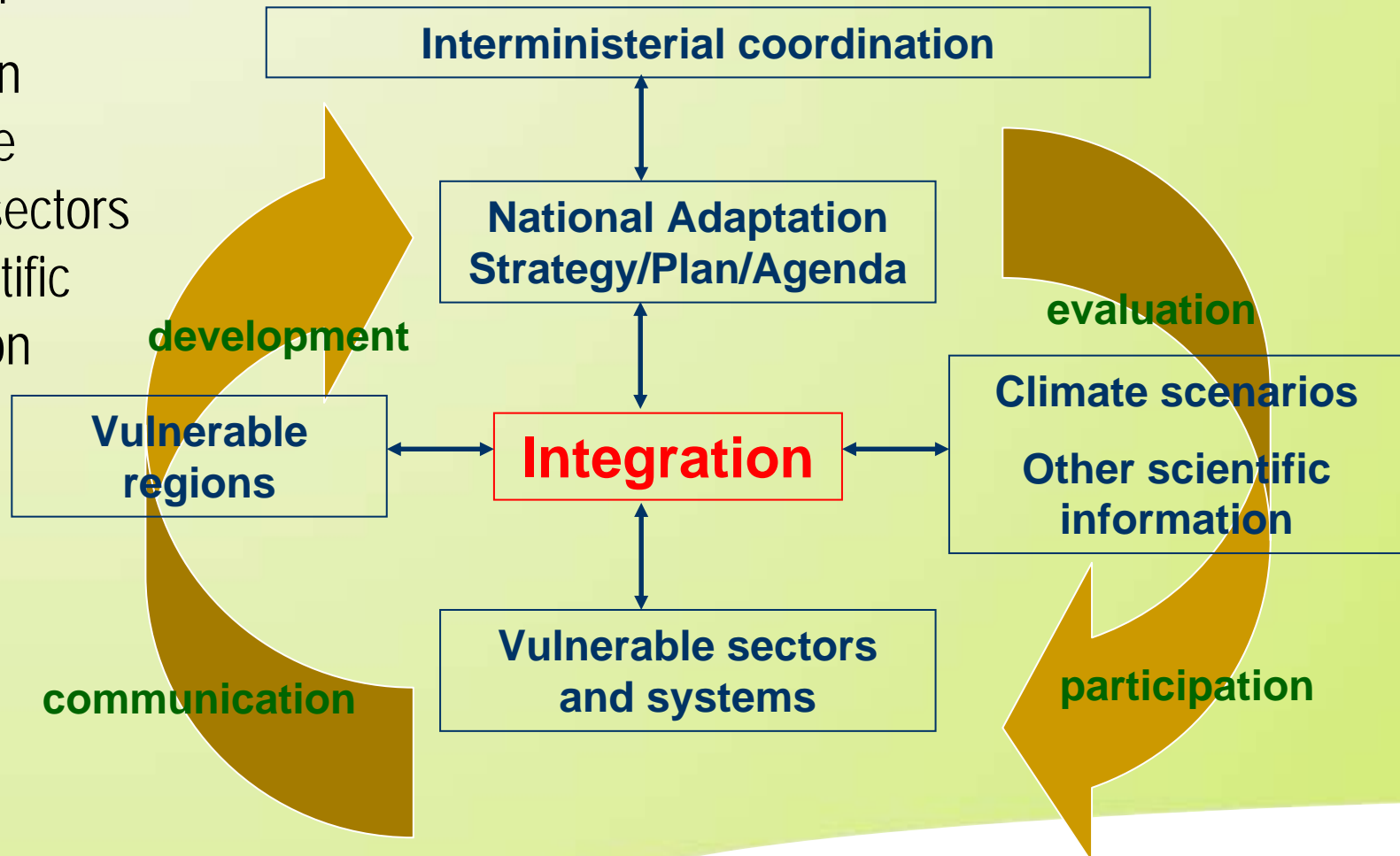


Source: adapted from FINADAPT

Phase 1: Research strategy - output

For example:

Integration
vulnerable
regions, sectors
and scientific
information



Source: adapted from Spanish NAP

Preliminary conclusions (phase 1)

Spain

Portugal

Finland

Netherlands



social
vulnerability
focus

climate change
focus

SNEAK PREVIEW: the Dutch 'NAS'

Policy document 'Make Space for Climate!'

- Description of the main strategy for making the Netherlands 'Climate Proof'
- Accepted by the Dutch parliament as NAS
- Very short document (15 p) to create broad political support

Background document

- Description/analysis of main problems; suggestions for adaptation options
- Not an official, commonly agreed-upon policy document, hence more detail (46 p)
- Follow-up: National Adaptation Agenda for implementation announced

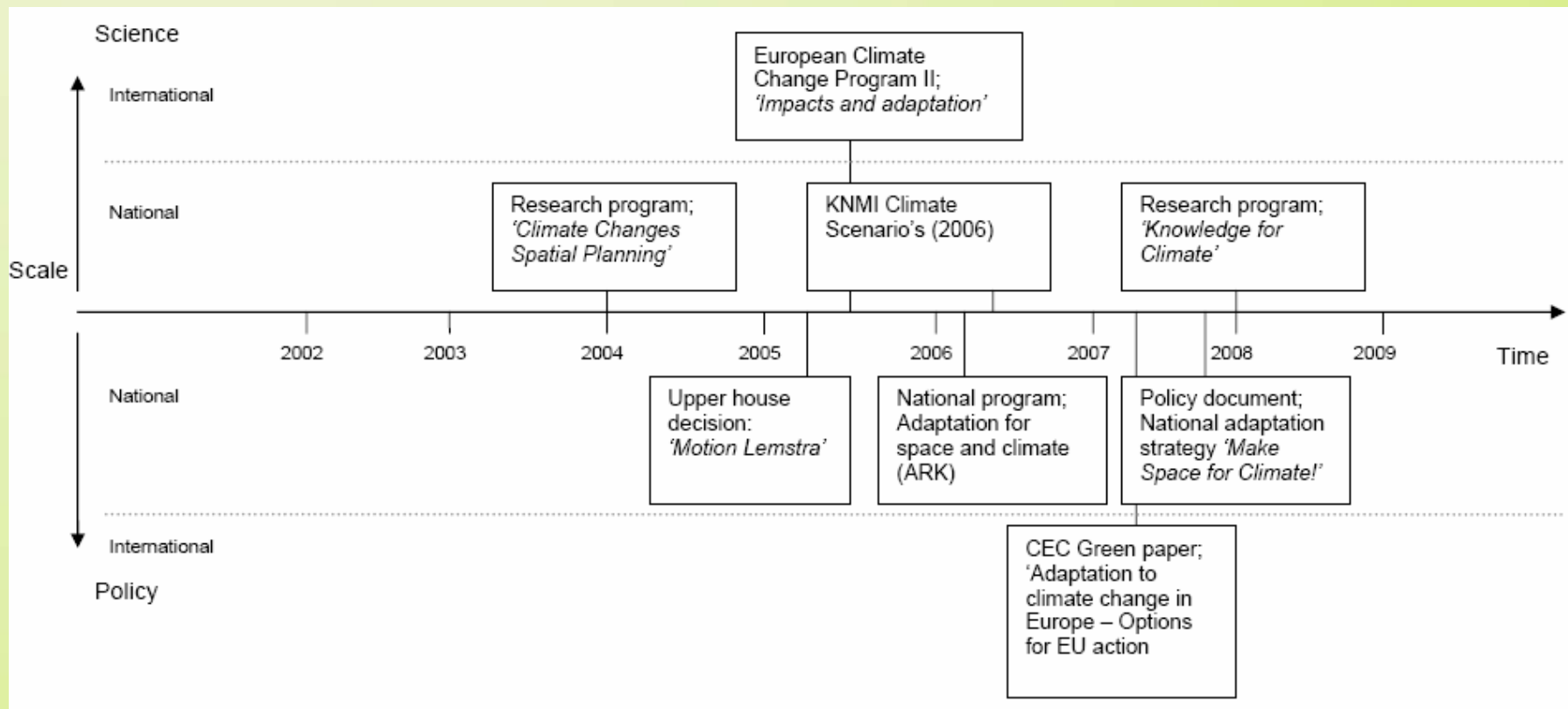


SNEAK PREVIEW: the Dutch 'NAS'

- Supported by a coalition of national, regional & local governments:
 - Ministry of Transport, Public Works and Water Management,
 - Ministry of Agriculture, Nature and Food Quality,
 - Ministry of Economic Affairs,
 - Interprovincial Cooperation,
 - Association of Dutch Municipalities,
 - Union of Water Boards
 - Coordinated by the Ministry of Housing Spatial Planning and the Environment
- Includes long-term vision; short-term actions
- Advocates an integrated approach on a regional level
- Aims for policy coherence and interaction in and between policy domains
- Proposes links & interaction between science, research and policy
 - Research programs: Climate changes Spatial Planning, Knowledge for Climate
 - Interface: Adaptation for Space and Climate (ARK), 'Routeplanner'
 - Policy: National Adaptation Strategy, National Adaptation Agenda (forthcoming)

SNEAK PREVIEW: the Dutch 'NAS'

- The NAS is the result of evolving interactions between governmental organisations (policy) and scientific research programmes (science) through time and governance levels



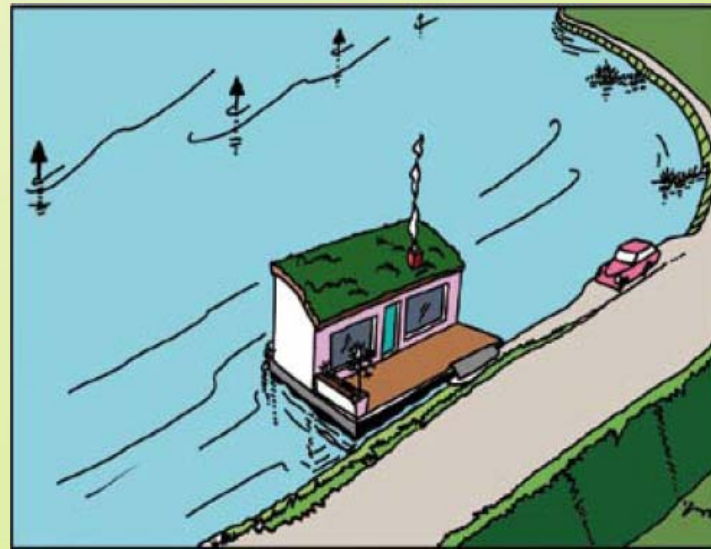
SNEAK PREVIEW: the Dutch 'NAS'

Challenge



Overused) flood risk with high damage potential

Possible solution in NAS



Simple, low-cost, low-impact solution; flexible for tourism (flexible)

SNEAK PREVIEW: the Dutch 'NAS'

Concluding:

- Based on comprehensive analysis of positive and negative effects of climate change in the Netherlands and suggestions for solutions
- Mostly a top-down strategy, but implementation local/sectoral
- Strong science-policy interactions: research programs (CcSP)– interface (ARK) – policy development (Make Space for Climate!)
- Focus only on spatial/water dimension (health, energy etc. not included)
- No 'SMART' criteria for gauging the progress included (indicators)
- June 2008 National Adaptation Strategy will be made operational -> National Adaptation Agenda (NAA)

Phase 2: case studies – aim and objective

- Start: May 2008 – October 2008
- Research focus to be further developed (during Helsinki workshop)
- Search for collaboration with PEER project 2 (policy coherence and integration)
- Objective: comparative analysis of adaptation strategies at the regional/sectoral scale

Phase 2: case studies – output

- Good practice guidance: practical examples of (different) approaches to adapt to climate change in specific contexts (e.g. different countries)
- Insights in the key NAS implementation challenges
- Understanding of the links between (European and) national strategies and the regional/local/sectoral scale
- Options for effective science-policy knowledge transfer
- Pros and cons of different balance of top-down and bottom-up approaches
- Search for links with PEER 2: How can NAS be transferred to sector policies?
- Questions for future research

Possible research questions

- What are the pros and cons of a local/regional approach (bottom-up) in terms of effectiveness, public awareness?
- Which scientific information is required for which kind of adaptation and how can it be generated?
- Is spatial planning an attractive way of successfully developing and implementing NAS in an integrated fashion?
- How relevant are synergies and trade-offs with mitigation?
- What are social, economic, institutional, technological barriers to successful adaptation?
-

If you have any relevant information on adaptation strategies that we can use, please let us know Robbert.Biesbroek@wur.nl

Thank you!



Alterra, The Netherlands | www.alterra.wur.nl



Joint Research Centre - Institute for Environment and Sustainability,
European Commission | <http://ies.jrc.ec.europa.eu>



CEH - Centre for Ecology and Hydrology, United Kingdom | www.ceh.ac.uk/



NERI - National Environmental Research Institute, University of Aarhus, Denmark | www.dmu.dk



Centre for Agricultural and Environmental Engineering Research, France | www.cemagref.fr



SYKE - Finnish Environment Institute, Finland | www.environment.fi/syke



Helmholtz Centre for Environmental Research - UFZ, Germany | www.ufz.de

SNEAK PREVIEW: the Dutch 'NAS'

Other climate related policy recommendations in NAS

- Improve knowledge-action nexus
- Public private partnerships (PPP) to enhance effectiveness of measures
- Stimulate innovation and knowledge development
- Evaluating existing climate sensitive policy strategies
- Re-evaluate policy instruments ('carrots and sticks')
- Aim for a multi-level governance approach in adaptation
- Policy coherence in and between governmental organisations
- Communication strategy (effects of climate change)

SNEAK PREVIEW: the Dutch 'NAS'

Dutch National Adaptation Strategy framed in the IVM framework

	Netherlands
Adaptation stage:	
Policy concern	X
Policy recommendation	X
Policy measure	-
Adaptation objective:	
Building adaptive capacity	X
Reduction of risks and sensitivity	X
Increase coping capacity	X

	Netherlands
Adaptation aim:	
Coastal zone management	X (e.g. spatial reservations,...)
Landscape management	X (e.g. spatial quality,...)
Water management	X (e.g. water storage areas, ...)
Energy / secure power	-
Health and disease management	-

Phase 2: case studies – selection criteria

- Options for research focus second phase:
 - *Drivers*: laggards and leaders
 - *Multilevel governance*: institutional organization
 - *Science-policy nexus*: knowledge transfer arrangements
 - *Policy integration* and coherence
 - *Policy mix*: portfolios of options
 - *Implementation* issues, including socio-economic factors
- Dimensions for comparison:
 - *scale*: local to transnational
 - *theme/sector*: water management, agriculture, forestry, spatial planning,...
- Five criteria for case study selection:
 - *scientific credibility*: expertise PEER
 - *scientific relevance*: innovative research agenda
 - *policy relevance*: focus in NAS
 - *feasibility*: accessibility of information
 - *comparability*: combination of dimensions shared by at least 3 partners

Preliminary conclusions (phase 1)

- **Differences in emphasis between NAS**
 - comprehensive strategy (e.g., Finland, Netherlands, Denmark)
 - sectoral approach (e.g., Portugal, United Kingdom)
- **Differences in timing**
 - 'leaders' (U.K., Finland?) and 'laggards' (Belgium, Norway?)
- **Differences in organization of science-policy interactions**
 - Participatory (Netherlands, Portugal, UK?) or directive (Germany, Spain?)
- **Similarity in science policy interactions**
 - Research program -> knowledge transfer -> policy making
- **Reasons of differences and similarities**
 - Specific vulnerability/opportunities, political/institutional culture, individual initiatives, level of participation in international negotiations?