

Europe adapts to climate change

Status of developing National Adaptation Strategies

Swart, R.J.¹, Biesbroek, G.R.¹; Cowan, C.², Morecroft, M.², Rey, D.²; Loquen, S.³; Binnerup, S. Henrichs, T.⁴; Carter, T.⁵, Mela, H.⁵; Reese, M.⁶

- 1 Wageningen University and Research Centre Alterra
- 2 Centre for Ecology and Hydrology (CEH)/Natural England
- 3 Centre for Agricultural and Environmental Engineering Research (CEMAGREF)
- 4 National Environmental Research Institute (NERI)
- 5 Finnish Environment Institute (SYKE)
- 6 Helmholtz Centre for Environmental Research (UFZ)

The PEER Climate Change Initiative

In order to support the development and implementation of climate policy, PEER started two projects under the PEER Climate Change Initiative with the objective of identifying policy-relevant lessons and major knowledge gaps. This project addresses national adaptation strategies through six themes: drivers of adaptation policies, science-policy interactions, communication and awareness raising for adaptation, multilevel governance, policy integration, and review and implementation of national adaptation strategies.

The number of National Adaptation Strategies in the EU is increasing rapidly

Finland was the first EU country that formally adapted a National Adaptation Strategy (NAS). Since then eight other countries have developed similar strategies and others are expected to follow within the next few years. Different combinations of motivating and facilitating factors work together leading to a varied array of National Adaptation Strategies in EU member states (see figure below).

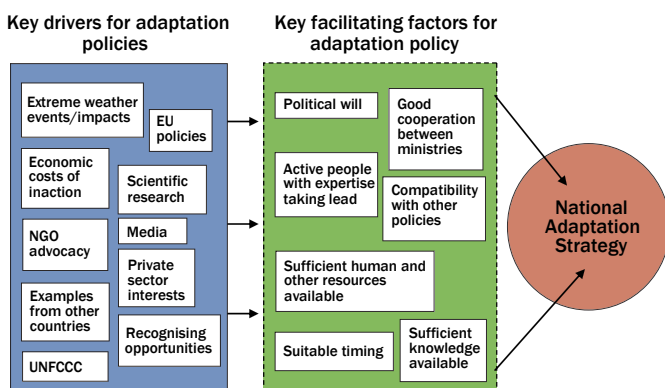


Figure 2. The key drivers and facilitating factors for developing National Adaptation Strategies.

Policy-relevant scientific, technical and economic knowledge about vulnerability and adaptation options is still scarce

Since the 80s Climate change research has focused on the understanding of the climate system and the attribution of change to human causes. Since the 90s, research on potential impacts and mitigation of climate change has been added to the research agenda, followed only after 2005 by research on local and regional vulnerability and adaptation options (see figure below).

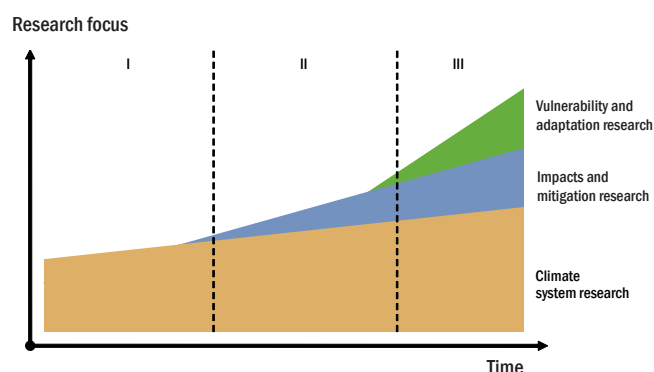


Figure 3. Increase in climate change research over time, from approximately 1980 onwards. Note that this is a stylized diagram.

Communication and awareness raising for adaptation is important for implementing the Adaptation Strategies

Communication and awareness raising for adaptation is important for implementing Adaptation Strategies, and it needs to take into account differences with mitigation. Most EU National Adaptation Strategies include proposals for communication and awareness raising strategies, but few have started to develop these. Communication is important to increase societal support for political decisions on adaptation, and provide information about building adaptive capacity and developing adaptation actions.

Institutional problems such as multilevel governance and policy integration may be a greater challenge than finding appropriate technical solutions

Many adaptation actions have to be implemented at the local level, but action is dependent on plans at the regional or provincial level, on the overarching frameworks and possible funding schemes at the national level, and in some cases on EU climate and sector policies. In most EU Member States, mechanisms to coordinate vertically between these levels are still lacking. The same applies to the horizontal policy integration, or mainstreaming, of climate change adaptation into sectoral policies. There are a few exceptions, such as in specifically vulnerable sectors, where action was taken before the development of National Adaptation Strategies.



Figure 1. The 2008 status of the development of National Adaptation Strategies in European Countries.

Concrete plans and mechanisms for evaluation, revision and implementation of National Adaptation Strategies are still to be developed

Because most current National Adaptation Strategies are political consensus documents rather than concrete policy plans, little attention has yet been paid to the review and revision of the Strategies and the need for a flexible set of objectives and indicators for reporting and monitoring. Additionally, a menu of soft instruments to facilitate and encourage, or hard instruments to enforce adaptation is still to be developed. Enforcement may be needed in cases where actors lack incentives, e.g. when the beneficiaries of the adaptation action are not the same as those who have to pay.

PEER: Partnership for European Environmental Research

PEER is a network of seven European environmental research centers, created in 2001, covering the full spectrum of natural and social environmental sciences and combining basic, strategic and applied interdisciplinary research and society.