

The Finnish National Adaptation Strategy - FI

1. Policy Objective & Theme

- ADAPTATION TO RISK: Managing impacts of climate change and safeguarding resilience of coasts/coastal systems
- ADAPTATION TO RISK: Integrating coherent strategies covering the risk-dimension (prevention to response) into planning and investment

2. Key Approaches

- Integration
- Participation

3. Experiences that can be exchanged

Thirty two EEA member countries are at different stages of preparing, developing and implementing national adaptation strategies. So far only ten have been produced. This case highlights the Finnish strategy which was the first to be completed, in 2005.

4. Overview of the case

The Adaptation Strategy gives a detailed account of the impacts of climate change in different sectors and presents measures to be taken until 2080. The main elements of the strategy are also included in the National Energy and Climate Strategy where the focus is on measures to be launched in the next 5 to 10 years.

5. Context and Objectives

a) Context

Increase in greenhouse gas concentrations in the atmosphere is leading to global warming and changes in the climate systems. The Finnish Meteorological Institute compiled climate change scenarios based on the existing international and national data. According to these estimates, in Finland by 2080, the average temperature could rise by 4-6°C and the average precipitation would grow by 15-25%. Extreme weather events, such as storms, droughts and heavy rains, are likely to increase. The Government Institute for Economic Research drew up a background study on the long-term scenarios for the economy and the Finnish Environment Institute examined the future development trends in natural conditions.

The preparation of the Adaptation Strategy began in the latter half of 2003. Seminars were held in different sectors with a two-fold goal: to outline the projected impacts of climate change and adaptation, and to outline the involvement in, and views of, different stakeholders on the preparation work of the Adaptation Strategy. The work relied on existing research data, expert assessments and views. One of the research projects involved was the FINADAPT which is part of the Finnish Environmental Cluster Research Programme of the Ministry of the Environment and which is coordinated by the Finnish Environment Institute. The project assessed Finland's adaptive capacity to climate change. The proposal for Finland's National Strategy was presented at an open seminar in October 2004. The draft was sent to a number of stakeholders for comment and the general public was able to comment through the Internet. It was finalised in 2005.

b) Objectives

The objective of the National Strategy for Adaptation to Climate Change is to strengthen and increase Finland's adaptive

capacity. This is to be achieved by: describing climate change and its impacts, as well as assessing the sensitivity of sectors; assessing current adaptive capacity, vulnerability and opportunities associated with climate change; and presenting actions that should be taken immediately and policies for future actions.

6. Implementation of the ICZM Approach (i.e. management, tools, resources)

a) Management

The work was coordinated by the Ministry of Agriculture and Forestry and representatives from the Ministries of Traffic & Communications, Trade & Industry, Social Affairs & Health, Environment, and Foreign Affairs as well as the Finnish Meteorological Institute and Finnish Environment Institute. Each Ministry was responsible for assessing the impacts and identifying adaptation measures in its own sector. The implementation of the Adaptation Strategy has been followed and promoted by a Coordination Group for Adaptation to Climate Change

b) ICZM tools

The strategy describes the impacts of climate change in the following sectors: agriculture & food production, forestry, fisheries, reindeer husbandry, game management, water resources, biodiversity, industry, energy, traffic, land use and communities, building, health, tourism & recreational use of nature, and insurance. It describes the present sensitivity to climate change and outlines actions and measures to improve the capacity and to adapt to future climate change. The strategy aims at reducing the negative consequences and taking advantage of the opportunities associated with climate change and includes a proposal on starting a research programme. The Strategy for Adaptation to Climate Change was drawn up as a self-standing and comprehensive work.

The Adaptation Strategy presents measures to be taken until 2080. The main elements of the strategy have been included in the National Energy and Climate Strategy where the focus is on measures to be launched in the next 5 to 10 years. Priorities identified for increasing adaptation capacities include: (i) mainstreaming climate change impacts and adaptation into sectoral policies, (ii) addressing long-term investments, (iii) coping with extreme weather events, (iv) improving observation systems, (v) strengthening the research and development base, and (vi) international cooperation. It was recommended that work on adaptation should be started immediately because in most cases this would also benefit the different sectors under present climatic conditions. In the Adaptation Strategy specific measures have been outlined for the 15 different sectors considered. In addition to these, some actions shared by different administrative sectors were also proposed. A preliminary, five level adaptation progress indicator was developed alongside the strategy and it is considered that Finland is currently at level 2. This means that among the decision-makers there is understanding of the impacts of climate change and the need for adaptation measures has been recognised. Some practical adaptation measures have already been identified and plans have been made, or even launched, for their implementation.

A Coordination Group for Adaptation to Climate Change was appointed to follow and promote the implementation of the strategy, with representatives of ministries, research institutes, research funding agencies and regional actors. The Coordination Group steered an evaluation of the implementation of the Adaptation Strategy conducted in 2008–2009. The Strategy will be reviewed in 2011–2013.

7. Cost and resources

The Climate Change Adaptation Research Programme is implementing the Adaptation Strategy by providing funding for research aimed to produce information in support of the planning of the practical adaptation measures. In 2006–08 the Ministries of Agriculture & Forestry, Transport & Communications and Environment funded 18 projects under the programme by ca. €500,000/year.

8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)

The Adaptation Strategy does not contain an assessment of the effect of possible future mitigation measures on climate change. Instead, it focuses on some of the challenges that lie ahead up to 2080, assuming a range of plausible long-term

scenarios of the climate and economic development and a description of the likely resulting effects on natural systems and processes. The most advanced sector in the implementation of the Adaptation Strategy has been the water resources management where adaptation to climate change is already well integrated into the decision-making. In the transport sector, community planning and agriculture and forestry the implementation of the Adaptation Strategy has also proceeded quite well although in most sectors the work is only in its early stages.

9. Success and Fail factors

The Climate Change Adaptation Research Programme has produced a lot of useful information in support of the adaptation measures but the resources available are smaller than were originally envisaged and this has not allowed comprehensive studies on all relevant sectors.

10. Unforeseen outcomes

A challenge faced in the implementation of adaptation measures in practice is how to coordinate and distribute the responsibilities between the different administrative levels and the cooperation needed between the sectors.

11. Prepared by

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12. Verified by

It has not been possible to verify this case.

13. Sources

- Assessing the adaptive capacity of the Finnish environment and society under a changing climate: FINADAPT (2007) T. R. Carter. Finnish Environment Institute (SYKE)
- Evaluation of the Implementation of Finland's National Strategy for Adaptation to Climate Change 2009 (2009) Ministry of Agriculture and Forestry, Finland
- Finland's National Adaptation Strategy An integral part of the National Energy and Climate Strategy (undated) Ministry of Agriculture and Forestry, Finland
- Finland's National Strategy for Adaptation to Climate Change (2005) Ministry of Agriculture and Forestry, Finland
- www.mmm.fi/sopeutumisstrategia



Assessing the adaptive capacity (1.41 MB) 



Evaluation of the implementation of Finlands National Strategy (733.04 KB) 



Finlands national adaptation strategy (1.94 MB) 



Finlands national strategy for adaptation (8.19 MB) 