Adaptation to climate change in the Baltic Sea and Arctic Regions

Results of a study on governance and policy tools

Kati Berninger, Maria Tiusanen and Oras Tynkkynen

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Adaptation governance

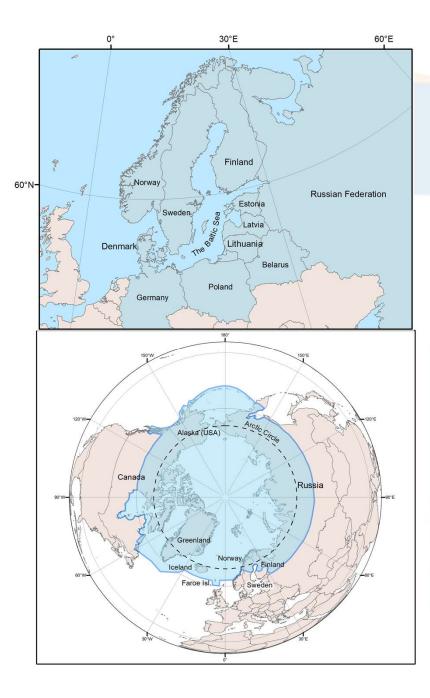
- Adaptation aims at reducing the vulnerability of our natural and social systems to the current and future impacts of climate change
- Adaptation policy and governance is growing in importance beside mitigation
- Adaptation requires effective policy tools and processes to help coordinate different levels of government and across sectors





The study...

- ...compiled information about adaptation policy and governance in the Baltic Sea and Arctic regions
- ...will be used to further develop adaptation policy and processes in Finland
- …covered Sweden, Denmark, Faroe Islands, Greenland, Norway, Iceland, Germany, Poland, Estonia, Latvia, Lithuania, Russia, Belarus, Canada and the USA



Methods

Literature study

- the Climate-ADAPT data base (https://climate-adapt.eea.europa.eu)
- literature search in both Google and Google Scholar using search terms "climate change adaptation" and "governance", "policy" or "strategy" and the name of the country or territory

19 interviews conducted

- to complement the information collected and to get a deeper understanding about each country's adaptation policy and governance
- all 15 countries and territories covered
- some experts answered the interview questions in a written form

The study included issues related to

- national and sectoral adaptation strategies and plans and their review and reporting processes
- regional and local adaptation strategies and plans and their support
- hierarchy of decision-making and coordinating body
- planning process of adaptation policy
- challenges in adaptation and adaptation policy
- priorities in adaptation and how they are set
- coordination and co-operation
- financing tools
- tools to engage stakeholders
- international cooperation
- good practices

National strategies and plans

- 5 countries have both national strategy and plan,
 2 only strategy, 2 only plan
- 5 countries/territories have no national/territorial strategy or plan
- Starting dates of the process vary greatly
- Early starters have also updated strategies/plans

Table 5.1.1. The year of publishing national strategies and action plans in different countries.

S = strategy, ES = existing strategy, P = Plan

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Finland	S	ES	ES	ES	ES	ES	ES	ES	ES	Р	ES	ES	ES	ES	ES	ES
Sweden	122	- 21	8	0	72	223	-23	121	1920	1122	24	22	223	S	ES	ES
Denmark		. =	. =	S	ES	ES	ES	P	ES	ES	ES	ES	ES	ES	ES	ES
Faroe Islands	- 622	2	2	<u> </u>	12	125	125	- 22	3423	1121	22	12	128	323	22	2
Greenland		. =	. =		i n	:=2		-	100	-	=		-		-	. =
Norway	- 22	2	2	2	12	123	125	123	S	ES	ES	ES	ES	ES	ES	ES
Iceland		-		-	5	172		1.71	-	1171			(7)			
Germany	82	- 2	2	S	ES	ES	PI	ES	ES	ES	PII	ES	ES	ES	ES	P III
Poland		. =			- 5	1750	-		S	ES	ES	ES	ES	ES	ES	ES
Estonia	-		×	Ξ.	. 	-	-	() - (-	-	*	S & P	ES	ES	ES
Latvia	197	5			5	574		67.5	2 	873		- - 51		S	Р	ES
Lithuania	-	×	-	Ξ	14		~	S	Р	ES	ES	ES	ES	ES	ES	ES
Russia	124	2	2		- 2	22	- 22	12	1.02	14	2	2	1	124	2	Р
Belarus				-	е,	343). (8.48			- 			-	
Canada	1224	2	2	2	72	<u>92</u> 93	- 25	021	1221	12	2	S	ES	ES	ES	ES
USA			-	-		:73	-	-			. =		174		-	. 5

Sectoral strategies and plans

- In most countries, a few key sectors have prepared adaptation strategies or action plans
- In Sweden the sectoral action plans are mandatory
- No dedicated sectoral adaptation documents were identified in Germany, Lithuania and Poland





Reporting and reviewing cycles

- Finland, Germany and Sweden have regular reporting and reviewing cycles of either the national adaptation strategy or action plan
 - The reviewing cycle is either 5 or 10 years
- Lithuania has a regular reporting cycle
- Other countries studied seem to have more ad hoc reporting and reviewing cycles or the system is just being developed



Regional and local adaptation work

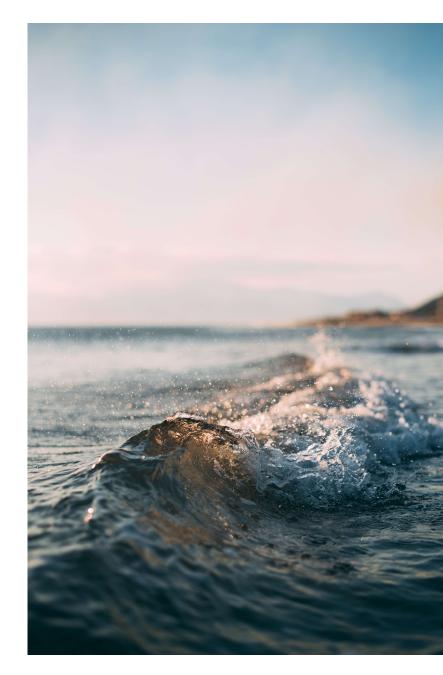
- The countries studied have differing approaches towards regional and local adaptation work
- The most common approach is that subnational adaptation strategies or plans are voluntary, but they are supported by projects (e.g. Germany, Poland, Norway)
- Some countries have obligatory subnational plans
 - In Sweden regional adaptation plans are obligatory, and support is provided for the county administrative boards in the form of guides, trainings and regular meetings
 - In Denmark municipalities must adopt adaptation action plans and the state provides adaptation expert services for the municipalities

Tools and practices for co-operation and stakeholder engagement

- Most countries studied have governmental working groups or committees in place to coordinate the work across sectors
 - In some countries they include representatives of different stakeholders
- Sectoral working groups exist in some countries
 - In Denmark, there is a formal coordination network for municipalities
- Stakeholder engagement varies greatly
 - e.g. in Germany there is a systematic stakeholder involvement process
 - Methods include hearings, stakeholder workshops and seminars, and involvement of representatives of different stakeholders in official working groups

Financial tools

- Several sources of EU funding: structural funds, LIFE programmes and EU research programmes
 - E.g. the LIFE integrated project Coast to Coast Climate Challenge, is creating a climate resilient Central Denmark Region
- It may be challenging to find finance for concrete adaptation measures
 - In general, actors are supposed to finance preventive measures themselves
 - Support is available for municipalities in Norway for concrete measures that protect against landslides and floods



Biggest challenges

- the need to improve awareness and political priority of adaptation
- challenges in coordination across sectors and levels
- lack of funding or human resources dedicated for adaptation
- the need for more knowledge, capacity and tools or technologies





Selected good practices

- Measuring success
 - Adaptation Plan in Lithuania sets clear quantitative targets, for example a target for the share of GDP going to mitigation and adaptation measures and for the share of population aware of adaptation.
- Promoting co-operation
 - The National Network for Adaptation in Sweden consists of 19 national agencies and 21 county administrative boards. It enables co-operation across sectors and scales. Arrange an annual competition on adaptation measures.
- Focus on Indigenous Peoples
 - The federal government of Canada supported the work on National Inuit Climate Change Strategy. Also funding for implementation.

Selected good practices

- Supporting regional and local adaptation work
 - The German state of Rhineland-Palatine provides a nine-month advisory and support programme for both municipalities and counties.
- Strengthening the knowledge base
 - A degree programme on adaptation: Master's programme in the Western Norway University of Applied Sciences on climate change management concentrating on adaptation related to land use planning
- Concrete information and planning tools
 - Denmark has developed an interactive guide for businesses (BusinessWizard). It helps businesses to understand how to adapt to problems related to climate change induced extreme weather events.

Recommendations

1. Foundational work

- Introduce a systematic and iterative process
- Set clear goals and indicators
- Present sectoral strategies
- Focus more on the Arctic





Recommendations

2. Local adaptation action

- Require municipalities to prepare plans
- Allocate funding to local and regional work
- Establish a nation-wide municipal cooperation body

3. Information and visibility

- Set up a master's programme on adaptation
- Establish a competition on adaptation action



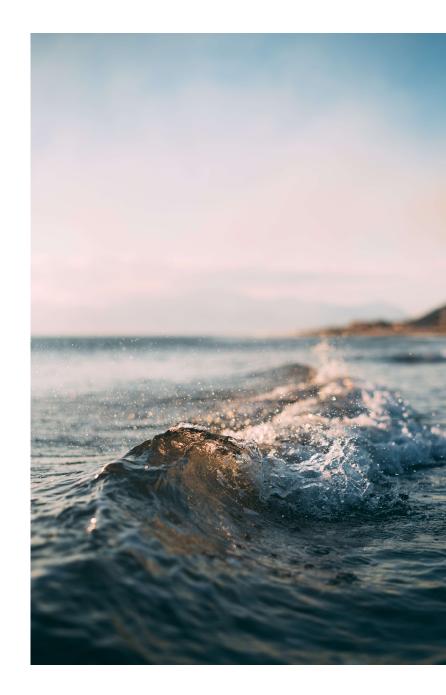
Recommendations

4. Dialogue and coordination

- Set up a Climate Adaptation Leaders Forum
- Establish a co-operation body for health and social adaptation

5. International co-operation

• Take initiative to create joint Nordic adaptation policy





Thank you!

Kati Berninger kati.berninger@tyrskyconsulting.fi

Maria Tiusanen, maria.tiusanen@tyrskyconsulting.fi

Oras Tynkkynen oras.tynkkynen@tyrskyconsulting.fi

www.tyrskyconsulting.fi

