



# Climate Change Adaptation activities in Norway

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# Content



- «The Norwegian history»
- Organization, roles and responsibilities
- On-going work
- Success factors

# The road towards the white paper on climate change adaptation

2007: Norwegian Climate Adaptation Programme

2008-2010: Norwegian report on Climate Change Adaptation

2013: White paper on National Adaptation Strategy

- Headed by the Ministry of the Environment
- 10 ministries
- Programme secretariat



The Cities of the Future – pilot project in 13 cities  
Continuous research, i.a. NORKLIMA and NORADAPT

# Major statements from the white paper

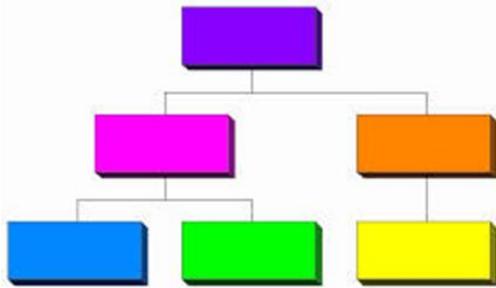


- Extreme weather events - severe test
- Higher risk of landslides and flooding
  - different risks and new areas
- Infrastructure in urban areas - vulnerable to intense precipitation and sea level rise
- Impact on species
- Direct impacts on the primary industries
- Pressure on the electricity infrastructure
- Major consequences in the Arctic region



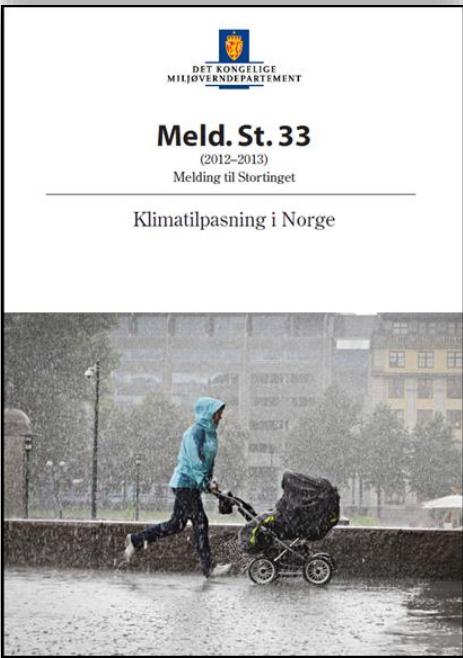
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# Organization, roles and responsibility



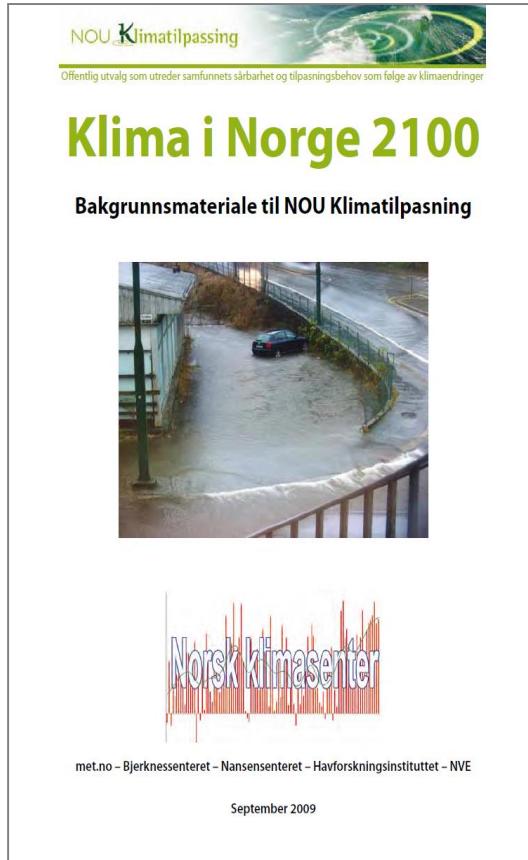
- Ministry of Climate and Environment - overarching responsible ministry
- Sectorial responsibility
- Local implementation:
  - County governors
  - Municipalities
- Norwegian Environment Agency supports the Ministry of Climate and Environment

# Where do we go with adaptation in Norway?



1. Strengthening the knowledge base
2. Urban - runoff water
3. Central Planning Guidelines
4. Indicators

# 1. Strengthen the knowledge base



- Norwegian Center for Climate Services
  - make climate data for CCA in Norway available
  - new projections in 2100 for sea level rise, hydrology and climate - based on IPCC AR5
  - review team - directorates and scientists

## 2. Urban runoff water



Source: yr.no (Hå, 7 August 2014)



Source: rb.no (Lillestrøm, 4 August 2014)



Source: rb.no (Lillestrøm, 4 August 2014)

- A committee is appointed by the Government to evaluate the current legislation on urban runoff water and as appropriate make proposals for amendments to provide a better framework for the municipalities
- Official Norwegian report - December 2015
- Developed an overview of current relevant regulations - [www.miljokommune.no](http://www.miljokommune.no)

### 3. Central planning guidelines



## GUIDELINES

- The Government also intends to prepare guidelines describing how the municipalities and counties can incorporate climate change adaptation work into their planning activities.

# 4. Indicators on climate change adaptation

**Goal: Norwegian society will prepare for and adapt to climate change**

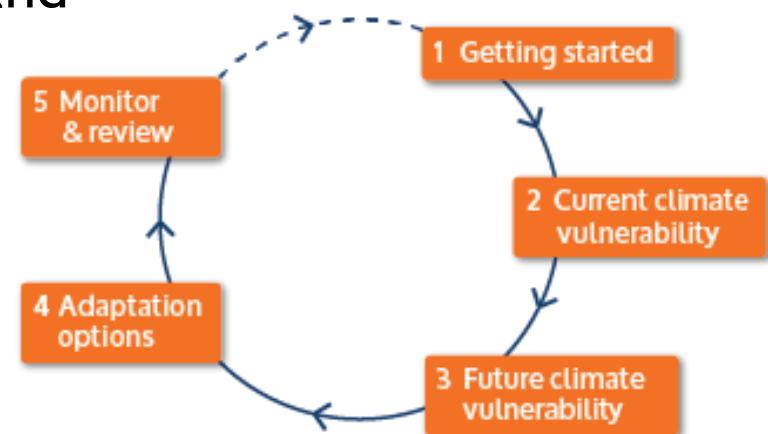
- Norway has no indicators on CCA
- Norwegian Environment Agency asked by the ministry to look into how to develop indicators in CCA
- Look closely into what has been done in EU and European countries



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# Success factors

- Cooperation between governmental actors - across sectors and levels
- Getting all actors involved: governments, businesses, science and the public
- Increase and share knowledge and competence
- Gain and share lesson learned from adaptation actions and results
- Increase and maintain capacity building at various level
- Integrate adaptation actions now



- Question:

What kind of metrics/indicators are most suitable to monitor and evaluate progress in societal processes that are impacted from climate change?

- Challenge:

How to fulfill the very high and growing expectations from practitioners when spatial and temporal resolution are increased? No matter how fine the spatial grid will be decisions by policymakers and practitioners will still need to be taken on the basis of uncertainty and natural variability within the climate system itself.

# Thank you!

