



# What is an appropriate policy response for adaptation?

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Adaptation Futures – Rotterdam 2016



## Key questions

- What is a non-proportionate policy response in adaptation?
- How to operationalize proportionality in adaptation policy?
- Which factors need to be taken into account in determining a proportionate policy response?
- What are the implications of proportionality considerations for adaptation policy?



## Non-proportionate policy responses

### Policies can

- **underreact** by failing to respond sufficiently to an emerging challenge,
- **overreact** by spending too much time and resources on a problem that can be objectively shown to be small, or creating rigid rules where actors respond in an appropriate way independently of any policies.

→ Long time perspectives and uncertainties make adaptation policies particularly prone to non-proportionate policy responses

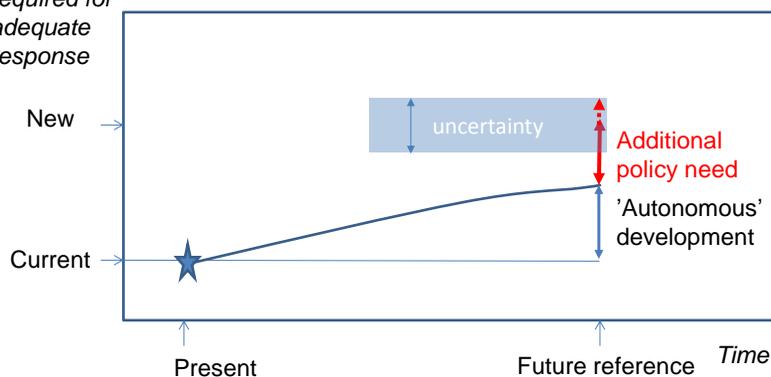


Inspiration from: Moshe Maor 2015 Rhetoric and Doctrines of Policy Over- and Underreactions in Times of Crisis. [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2707511](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2707511) 3



## In climate change adaptation proportionality is about responding adequately to future needs

*Resources required for adequate response*



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## Empirical data

### Monitoring progress in adaptation and planning

- The Finnish Adaptation Strategy 2005
  - A comprehensive review
  - Wish list of possible actions
- Revision of the strategy in 2014
  - Evaluation 2009, 2013
  - Sector based policy analysis and development in the environment administration
- Data on policies in water management, buildings and biodiversity



## Factors affecting proportionality

Factors	Risk of overreacting	Risk of underreacting
<b>Time frame</b>	Singular event demanding a strong political response	'Distant future' postpones action
<b>Advocacy coalitions</b>	'Solutions looking for problems'	Competition for resources
<b>Path dependency</b>	Strengthening existing solutions	Opposition against novelty
<b>Knowledge base</b>	Biased information in favour of specific action	Lack of awareness and appropriate knowledge
<b>Uncertainty</b>	Risk aversity	Risk seeking/accepting

→ The likelihood of autonomous action is affected by a complex set of factors. **Proportionality is context and actor dependent**



## Operationalisation of proportionality in climate change adaptation

Approaches	Advantages	Disadvantages
<b>Economic</b>	Objective cost-benefit analysis	Sensitivity to discount rate and time frame
<b>Technical</b>	Specification of unambiguous thresholds for extreme events	Sensitivity to threshold values; challenges in dealing with gradual changes
<b>Participatory</b>	Reflexive debate on critical needs of adaptation	Prone to influence by advocacy groups
<b>Policy evaluation</b>	Triangulation of different aspects of proportionality	Weighting of partly incompatible data and information



## Case examples

Approach	Flood protection	Buildings	Biodiversity
<b>Economic</b>	Indicative C-B ratio should be favourable	Local consideration mainly	Not used
<b>Technical</b>	Normally 1/100a flooding probability	Building standards on certain aspects of risks (flooding, humidity)	No specifications
<b>Participatory</b>	Nationally significant flood risk areas have been identified	Municipality level, national building sector and regulations	Emerging public debate, some popular action
<b>Policy evaluation</b>	Regular reporting on progress	Emerging topic	Very limited systematic studies



## What does the analysis of proportionality tell us?

- Likelihood of adequate societal response to climate change:
  - Water and buildings likely, not clear for biodiversity conservation
- Opportunities for adjusting proportionality:
  - Ongoing process to gradually increase private responsibility. Focus on responsibility for consequences is key. Challenging for biodiversity conservation.



## Different ways of ensuring proportionality in policy responses

Approach	Water	Buildings	Biodiversity
Economic	Insurance products	Insurance products	Developing compensation mechanisms recognising climate change
Regulatory	Mandatory risk assessments in water related projects	Revisiting building standards	Limited opportunities
Knowledge base	Strengthening links with regional and local planning	Developing interpretations of climate change specifically for a building context	Exploring significance of climate change as driver of biodiversity change
Forecasting	Public access to forecasts of flood risks	Participatory interpretation of forecasts for buildings and renovation	Analysing scenarios for habitats and species
Experimenting	Novel solutions – identifying and testing robust approaches in water regulation	Exploring how repair building can contribute to adaptive capacity; Green infrastructure	Testing compensation mechanisms



**Conclusions: it is worth thinking seriously about proportionality**

- **Proportionality is not a static state:**
  - Foster flexibility and innovation in adaptation
  - Maximise co-benefits across sectors
  - Support exploration of new business models
- **Proportionality considerations help to focus on:**
  - Actors and agency: who does something and why?
  - Available policy instruments and their dynamic effects