



PBL Netherlands Environmental Assessment Agency

# Monitoring & evaluation system for climate change adaptation

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## Climate change adaptation: multi- multi- multi-



**Multi-scale**  
**Multi-sectoral**  
**Multi-institutional**

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## Adaptation challenges

- Clear policy interest
- Planning under conditions of deep uncertainty
- Insufficient information about
  - *progress* of policies & measures
  - *Effectiveness of policies & measures*
- Where, who & when to be involved?

→ **Monitoring  
&  
Evaluation**



## Steps towards NL M&E system

1. *General design of the system*
2. *Apply for some sectors at national scale*
3. *Broader sectors*
4. *Broaden institutional setting*
5. *Output & outcome indicators*





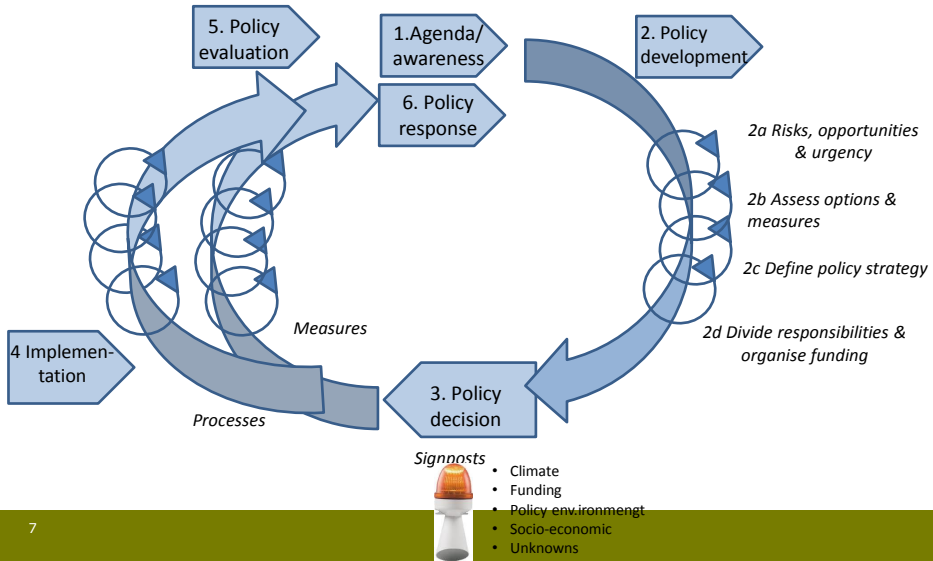
## Step I Design: dimensions Dutch M&E puzzle

- “Doing together”/Multi-governance & sectors
- Flexible (“uncertainties”)
- Two dimensions: (i) progress; (ii) Learning
- Connecting short-term measures (“things right”) with long-term strategies (“right things”)
- Process, output & outcome



## Design: 13 sectors

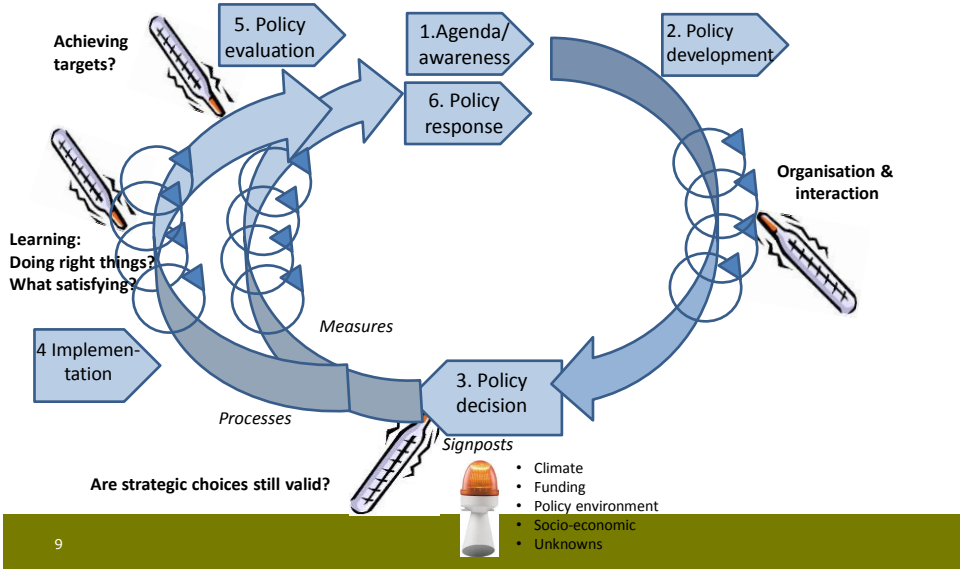
- T1 Water safety
- T2 Fresh water availability
- T3 Urban planning
- T4 Water quality
- T5 Energy
- T6 Transport & infrastructure
- T7 ICT & networks
- T8 Health
- T9 Agriculture
- T10 Fisheries
- T11 Nature
- T12 International trade
- T13 International policies



## Signposts

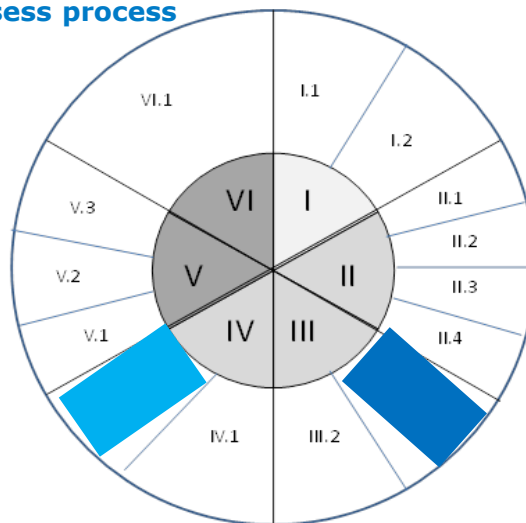
- Not indicators
- Information/basic assumptions that should be tracked to determine the validity of choices made  
=> Needed to bridge short-term decisions and long-term strategy/vision
- E.g.
  - Environmental conditions (climate)
  - New knowledge (e.g. on measures)
  - Policy environment
  - Financial basis
  - Unknowns
- Signpost triggers are also needed, i.e. values beyond which additional actions should be implemented
- Based on Haasnoot et al, 2013





### Monitoring wheel to assess process

- 14 fields of attention (e.g. risk knowledge, defining options)
- 53 process indicators
- 3 classes
- Criteria/triggers needed
  - Individual indicators
  - aggregation



Domein	Criteria	T1 Water safety	T2 Fresh water availability	T3 Spatial planning	T4 Wat quality	T5 Energy	T6 Transport & Infra.	T7 ICT & Networks	T8 Health	T9 Agri & Horticulture	T10 Fishery	T11 Nature	T12 International trade	T13 Int. Cooperation	EU scoreboard
<b>SIGN posts</b>	Climate														
	Financial														
	Policy														
	Societal														
	New knowledge														
	Unknown unknowns														
Policy context	International	-													
	national	-													A1, B1,B2, B3
Inclusion in policy documents	national (yes/partly/no)														A2
	Provinces (yes/partly/no)														A2
	Municipalities (yes/partly/no)														A2
	Waterboards														A2

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7.1a	Implementation	Adaptive management: Flexibility & incremental													??
7.1b	Mainstreaming	Included in sectoral policy plans and actions plans													8a, 9a, 10a
		Included in spatial plans													9c
		Cross-sectoral dialogue													??
7.1c	Financing	Available for coordination													7a
		Long-term availability (implementation)													7b
		Public-private cooperation													7d
7.1d	Communication	Clear communication plan (how, with whom, etc.)													11a, 11b
		Stakeholder involvement (incl. international organisation) (yes/partly/no)													2b, 10e
7.1e	Pilots	Pilots													n.i.
7.2	Instruments	National legislation (yes/partly/no)													8b, 10a
		Regional/local legislation (yes/partly/no)													10b
		Sectoral agreements (yes/partly/no)													8a
		Guidelines for implementation (yes/partly/no)													8a
7.1	M&E system	Guidelines for monitoring (yes/partly/no)													11b?, 12b

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## Follow-up

- Criteria for classification & aggregation (= *monitoring wheel*)
- Testing & discussion
  - › Sectoral
  - › Cross-sectoral (for NAS)
- Literature research on evaluating strategies
- Develop output & outcome indicators
- Documentation



## Summary

- M&E requires multiple dimensions
- NL step-wise approach
- Some of challenges tackled
  - Bridging long & short term
  - Both for progress & sectoral learning
- Still way to go



Thank you

Comments ??

