

Development of Latvia`s monitoring system for adaptation

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What does monitoring, reporting and evaluation (MRE) mean?

- “The goal for an Monitoring & Evaluating system for adaptation is to identify the aspects that are working, those that are not working, and the reasons why, as well as providing mechanisms and feedback to adjust the adaptation process accordingly.” (van den Berg, 2009)
- MRE – framework to take for assessing a more quantitative approach to assessing progress in country's preparedness for climate change (UK)
- Objective – improving adaptive capacity and / or reducing vulnerability of society and natural and economic systems on which they depend (UNDP)

Political requirements for adaptation monitoring, reporting and evaluation

1. EU Regulation 525/2013 on reporting asks all EU member States (MS):

- Improved information is needed to monitor progress and action in adapting to climate change
- «By 15 March 2015, and every four years thereafter, aligned with the timings for reporting to the UNFCCC, Member States shall report to the Commission information on their national adaptation planning and strategies, outlining their implemented or planned actions to facilitate adaptation to climate change. That information shall include the main objectives and the climate-change impact category addressed, such as flooding, sea level rise, extreme temperatures, droughts, and other extreme weather events.»

2. European Environmental Agency (EEA) – «should assist the Commission with monitoring and reporting work»

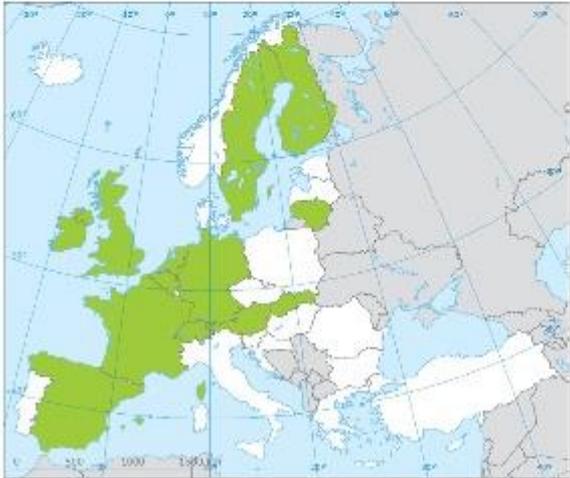
3. European Climate Adaptation Platform - Climate-ADAPT: gathers EU member States information (profiles) relating to CC impacts, vulnerabilities and adaptation policies

MRE systems in EU countries

National monitoring, reporting and evaluation climate change adaptation in Europe (EEA Report, Dec 2015)

Key findings:

- **14 countries have systems** for monitoring, reporting and/or evaluation of adaptation **in place or under development**.
- As implementation progress, there is a growing recognition that MRE can **inform policy making** and **facilitate shared learning** on national level approaches across member countries.
- Most countries **focused on monitoring and reporting** activities. The **evaluation** of adaptation policies is **at an early stage often** because the implementation of adaptation has only just begun.



14 European countries have or are currently developing a system for MRE of adaptation at national level

- Countries in place or currently developing a system for MRE of adaptation at national level
- Countries without a national MRE system for MRE of adaptation at national level
- Outside EEA13 coverage **

** The 28 EU member states include the 26 European Union member states together with Iceland, Liechtenstein, Norway, Switzerland and Turkey.

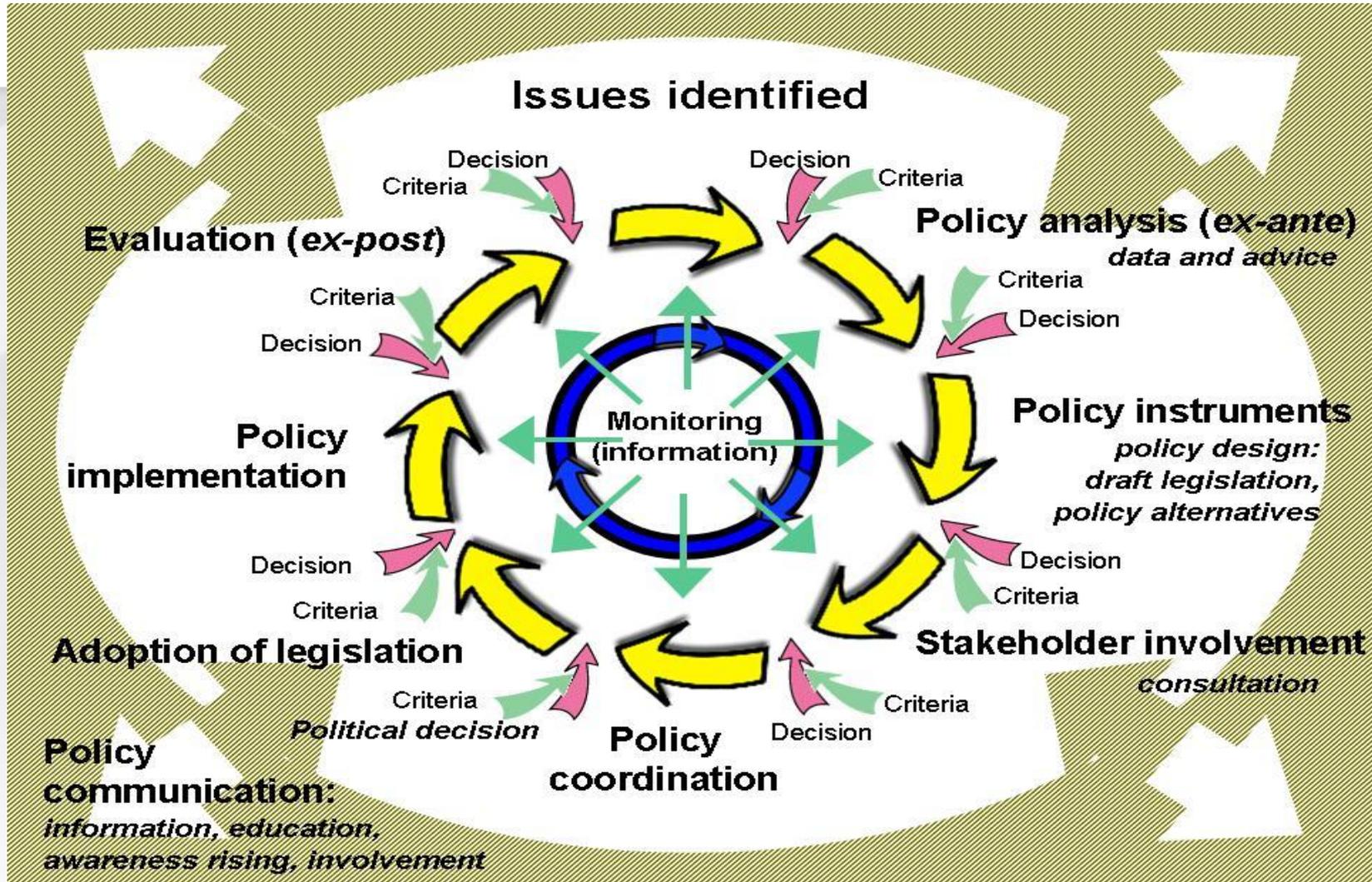
1. UNDP`s Monitoring Framework for Climate Change Adaptation

2. European Environmental Agency`s reports (EEA):

- Adaptation in Europe - Addressing risks and opportunities from climate change in the context of socio-economic developments (published 2/05/2013)
- Climate change adaptation in Europe: tracking progress and sharing know-how (published 2/12/2015)
- Technical report No 20/2015 - National monitoring, reporting and evaluation of climate change adaptation in Europe (published 2/12/2015)

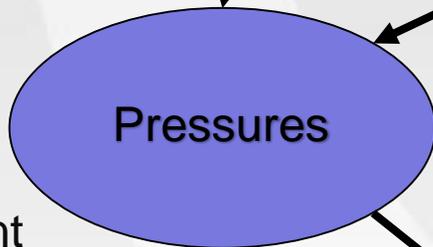
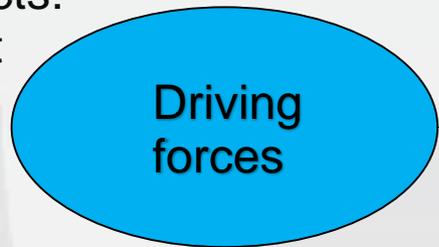
3. OECD Environmental working paper No74: Monitoring and Evaluation of Climate Change Adaptation (published 2/12/2014)

Policy cycle for adaptation to climate change

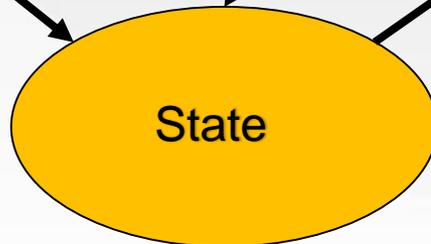


DPSIR model for CC adaptation

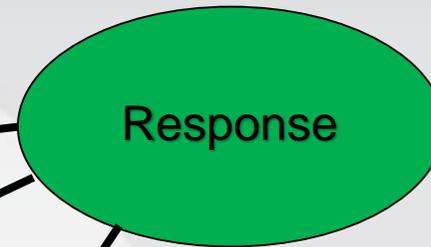
CC effects:
frequent
storms



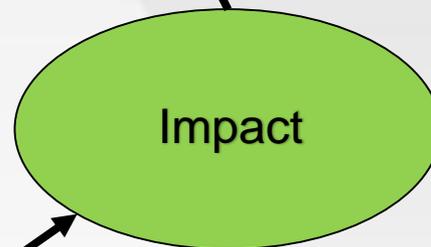
Frequent
damages to
electricity
transfer
networks



CC mitigation



Adaptation
measures:
local generation;
underground
cables



Economic
consequences
(losses)

Decreased quality of
electricity supply
(interruptions)

Indicators for adaptation to CC monitoring system

GDP/adaptation - high indicator's value measures the value of endangered physical infrastructure and the extent of possible damage to the economy; Insurance company point of view

GDP/adaptation - low indicator's value measures the capacity of people or city to cope with a catastrophe

Population density / vulnerable territories - measures the amount of people in danger

Significant natural areas (ha, % of the whole territory) - areas with special natural values (e.g. parks or other significant natural areas) can be considered vulnerable because they are unique and possibly home to rare species of flora of fauna

Fragmented natural areas (ha, % of the whole territory) - natural areas that are small and fragmented are vulnerable, since they are likely to be totally destroyed if a hazard strikes;

Green areas as natural adaptation measures (ha, % of the whole urban territory)

Risk perception - indicates how people perceive a risk and what their efforts have been to prevent – the effects of a hazard

Institutional capacity - indicates the level (of knowledge, technological, etc.) of adaptation

Preparedness – under national security and civil protection system, based on knowledge and technical parameters

Medical capacity- indicates how a city is able to respond to a hazard

Technical capacity - indicates how a city is able to respond to a hazard (e.g. number of fire brigades, infrastructure fire men, helicopters etc.)

Alarm systems - civil protection system

Share of budget spent on civil defense (natural hazards)

R&D budget - spent on climate change and adaptation research and development

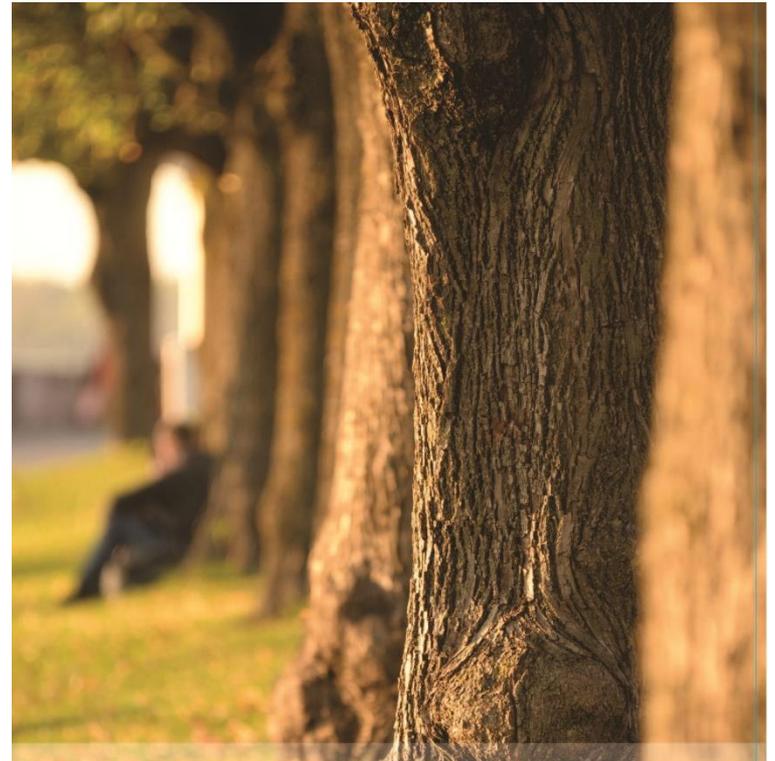
CC risk communication budget - spent on climate change risk communication

Methodology sheets for adaptation indicators

| Short name / abbreviation | e.g. Finances for adaptation |
|---------------------------|---|
| Definition | Amount of money from all types of financing resources spent on adaptation measures, which include ... |
| Time coverage | Annually, since 2010 |
| Spatial coverage | All country, at level of municipalities |
| Calculation (formula) | - |
| Unit of measurement | Euro |
| Data source | Municipal governments |

THANK YOU!

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Programmas
„Nacionālā klimata politika” projekti