

# Adaptation to Climate Change Strategy for Latvia

Mrs. Ieva Bruņeniece, Mr. Valdis Bisters  
Ministry of the Environment of Latvia,  
Climate and Renewable Energy Department

Conference "Climate change and  
waters", Riga, 9-11 May 2007

# About what the story will be?

1. What adaptation to climate change (CC) policy does mean?
2. Challenges we met for adaptation integration into sectoral policies
3. Strength and weakness of existing policies
4. Step by step to successful policy creation
5. Lessons learned and barriers: examples
6. Instead of the end - conclusions

# What adaptation policy does mean?

Adaptation to climate change means a system of policies and measures (PAMs), coordinated by state government, which allow to manage in a cost-effective way society, natural resources and technologies in all governance levels (state, regional, municipalities, enterprise, individual) in order to prevent natural disasters and threats. In a case it occurs, the appropriate assistance to population, particular species or ecosystems should be given, thereby promoting system's (society's, community's, dwelling) preservation or unacceptable consequences entering with a likely less damages.

# Challenges for adaptation integration into other policies and measures

*The main would be the following:*

- Addressing scientific uncertainties
- Stakeholder engagement and funding resources;
- Carrying out cost and benefit analyses, allocating costs and assessing the costs of inaction
- Co-ordination between sectors, organisations and institutional structures.

# Need for decision support methods

Prioritization of adaptation options is a complex decision problem involving multiple:

- objectives
- solutions
- Actors

Decision support methods - cost-benefit analysis - CBA, multi-criteria analysis - MCA, CEA - have different information requirements.

Step by step to successful policy.

What does it need for? I

First of all we have to get answers to these general questions:

- What do existing policy documents say?
- What methods are available?
- *Pros and contra* of methods?
- What methods to use?

# Step by step to successful policy. What does it need for? II

... but with these methods we shouldn't do without:

- Assessment and analysis of existing policies and measures
- Elaboration of overall risk management structure
- Impact assessment to human health taking into account
- Overall spatial planning and development
- Insurance system creation based on public-private partnership

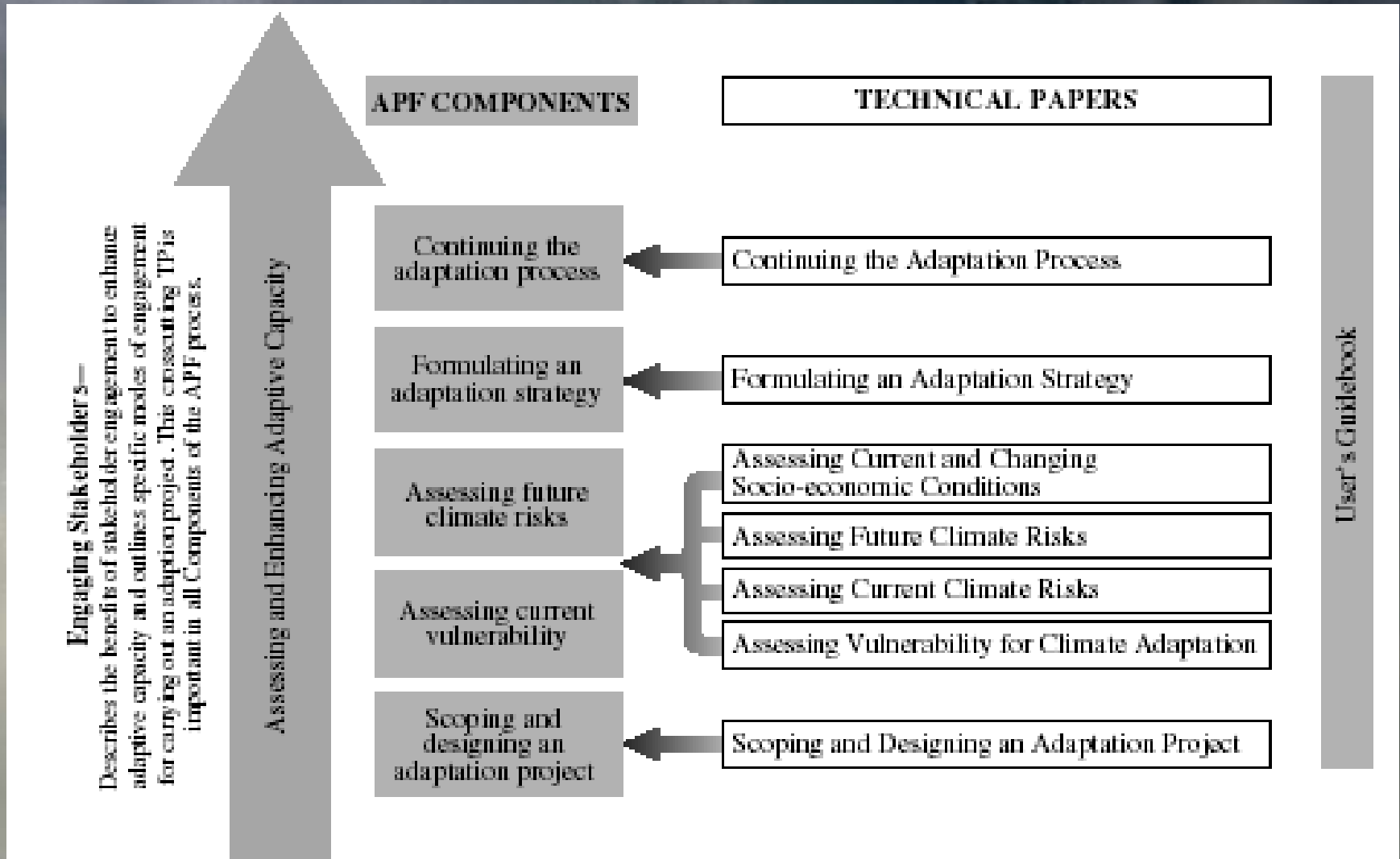
# Assessment and analysis of existing policies and measures

It's an absolute necessary to reassess national policy planning documents (strategies, concepts, programmes) and legislative acts concerning adaptation policy based on sectoral principle, including environmental, agricultural, forestry, energetic, transport, health care, financing, social, internal affairs (civil protection), regional and spatial planning.



# Adaptation Policy Framework

(by Mozaharul et al.)



# Elaboration of risk management structure

Necessity to develop risk\* management structure, making assessment to current situation, identifying all risks and their mutual effects related with climate change, making quantitative and qualitative for risk assessment, their levels and consequences, elaborating risk prevention alternatives as well as economic, financial, administrative legal, and informative instruments (tools) for risk management

\*Such components are involved in the term risk : potential undesirable accident trigger off hazard; likelihood, determined if undesirable accident will happen; consequence of undesirable accident; and uncertainty – perception of the components mentioned before

# Concern and barriers up to now

All natural disasters have been managed by civil protection system, and the nature of them concerns consequences - post factum, not as much prevention policies and measures

# Lessons learned and barriers: agriculture

(an example)

- Agricultural and Rural Development Law and its subordinated Regulations On State Support for Agriculture every year estimate compensation extent for damage made in agriculture
- Large land area suitable to agriculture; considerable investment in agricultural production facilities, buildings, machinery and equipment by making use of national and EU support allocated for that purpose;
- Relatively low labour cost;
- Relatively unpolluted environment as a resource available for production of agricultural products;
- Gross added value in agriculture is growing rapidly;
- An advisory and education extension system in place to support farmers
- Outdated agricultural machinery, buildings and equipment, including that related to environment protection; fragmented production structure competing on the local market
- Low productivity as the consequences of the fragmented structure Small proportion of long-term investments (in comparison with short-term).
- Low level of assurance to minimise risks of losses
- State intervention by irregular compensatory mechanisms
- Private insurance system does not function in the field of agriculture yet

# Lessons learned and barriers: forestry

## (an example)

- Rural Support Service: Annual state subsidies, inter alia, for compensation damage made in agriculture, and for forest and agricultural land (soil) amelioration
- State Forest Service (SFS) in the long term aimed at ensuring sustainable forest management
- SFS also keep a watch on forest fire safety
- Latvian State Forestry research Institute "Silava" researches on interaction of wind and forest (trees) results in windthrow and storm breakage
- State Forest Service has no hardware to help bring large scale fires under control

# Needs in order to successfully implement the adaptation action (instead of the end)

- Development of mixed (based on public - private partnership) insurance system
- Effective land-use management
- Improvement of general rural infrastructure
- Use of the most seasonable cereal varieties
- Cost-effective investments in modernisation of agricultural machinery, equipment and construction of buildings
- Afforestation of agricultural land
- Development and diversification of economic activities providing for alternative income



# Thank you!

[leva.Bruneniece@vidm.gov.lv](mailto:leva.Bruneniece@vidm.gov.lv)

[Valdis.Bisters@vidm.gov.lv](mailto:Valdis.Bisters@vidm.gov.lv)

Conference "Climate change and  
waters", Riga, 9-11 May 2007