

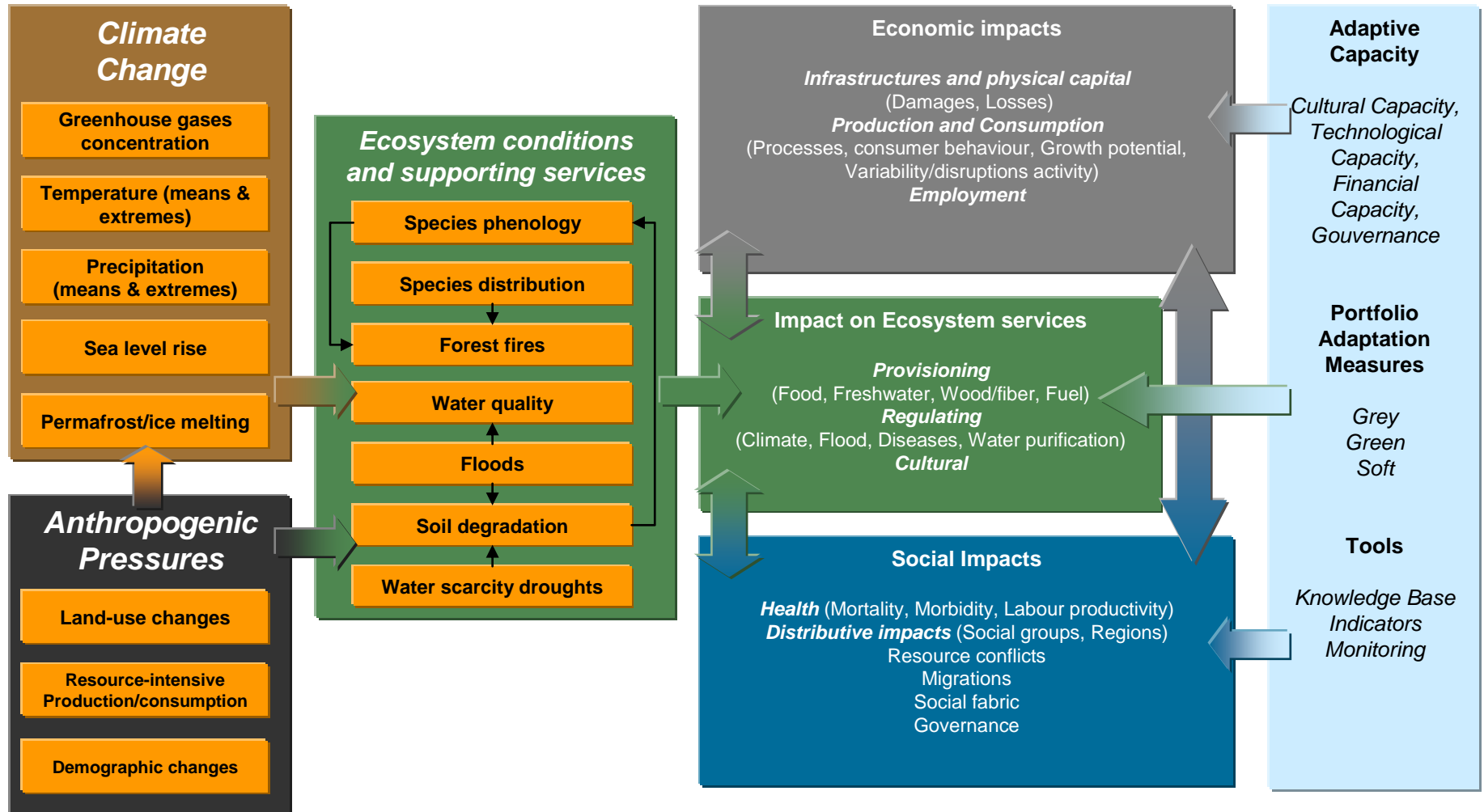
Adaptation activities in the Carpathian region and EU projects

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Environmental pathway of vulnerability and adaptation

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Preparatory action

- Three projects:
 - Climate of the Carpathian region
 - Integrated assessment of vulnerability of environmental resources and ecosystem-based adaptation measures (Service contract CARPIVIA)
 - In-depth assessment of vulnerability of environmental resources and ecosystem-based adaptation measures (Framework contract CarpathCC)

Preparatory action

- 2010 allocation: as a follow-up of the Adaptation White Paper, the European Commission proposed to focus work on:
 - Analysis of the vulnerability of water and ecosystems of the region to climate change impacts and other man-made pressures
 - Identifying potential adaptation measures, focusing on adaptive water management and ecosystem-based approaches.
- Benefits
 - National or Regional adaptation strategies in the Carpathian Region
 - Danube Climate Adaptation Strategy
 - Contribution to the forthcoming EU Information System (Clearinghouse) on Climate Change Vulnerability and Adaptation

CARPIVIA project

Werner, 2012

CARPIVIA Tasks and Outcomes:

- Integrated assessment & discussion of key of vulnerabilities & adaptation measures, including cost-benefit analysis and policy recommendations
- Data inventory & knowledge gap analysis (->framework proj)
- Web-supported information system
- Stakeholder consultation and cooperation with Carpathian Convention

CARPIVIA runs until 2013. Partners: Alterra Wageningen UR with ECNC, ECORYS, Grontmij and WWF-DCP

CarpathCC framework project

In-depth study on the key climate change threats and impacts on water resources

- Produce maps for projected floods, droughts and changes snow cover
- Assess projected seasonal shift in water balance and impacts on soils
- Assess the potential impacts of climate change on the implementation of the water framework directive and flood directive
- Assess the risk of landslides in relation to changing precipitation patterns and flash floods
- Impact of changes in ecosystems and adaptation measures on water resources

In-depth study on the impacts of climate change threats on ecosystems

- Assessing the effect of pests and pathogens on the Carpathian forests; climate change-induced increase in virulence; change in distributional and outbreak ranges, and change in populations dynamics of both resident and newly-emerging forest pests and pathogens will be addressed;
- Assessing the effect of climate change on protective function of montane and subalpine forests in the Carpathians;
- Evaluating the effect of management practices on forest vulnerability to climate change, including expected adaptation potential of forest management;
- Evaluating the anticipated changes in species composition of forests, wetlands and grasslands, including climate change effect on grasslands productivity

In-depth study on the impact of climate change on ecosystem based production systems

- Positive and negative climate impacts on ecosystem services with specific reference to multifunctional landscapes and grasslands
- Assessment of the vulnerability of the tourism sector

In-depth study on adaptation measures

- Ex post evaluation of adaptation measures
- Supporting costs and benefits studies
- Ecological networks and ecosystem fragmentation
- Assessing and tailoring adaptation measures for the Carpathian region
- Agri-environmental schemes and other farmer support

Supporting stakeholder interaction

- series of stakeholder workshops will be organised and managed using knowledge-based facilitation techniques in order to generate: a) a number of action scenarios in relation to the impacts of climate change, based on key impacts and assessments of vulnerability; b) generate a number of adaptation options in relation to these scenarios; c) evaluate the costs and benefits of the options along with their feasibility; and d) identify preferred options and adaptation pathways

Integral vulnerability assessments in focal areas

- Tatra mountain, including Zakopane
- Rodnei and Maramures
- Tarnava Mare area
- Irongate national park and foothills
- Bükk mountains

Climate Change adaptation WG at Carpathian Convention

- Decision COP3/15 on Climate change of the COP 3 of the Carpathian Convention: a Working Group on Adaptation to Climate Change under the Carpathian Convention has been established

Workplan

- Preparation of strategic agenda on adaptation to climate change in the Carpathians
- Comments and feedbacks to the list of adaptation measures developed within the CARPIVIA and CarpathCC projects
- Develop communication strategy
- Contribution to the establishment of a web based information system on adaptation to climate change for the Carpathians

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Thank you for your attention!