



# Climate change and the European water dimension – Enhancing resilience

4-5 November 2020 | online

### **Conference Report**







## The conference

We are already witnessing the outlines of how climate change is reshaping the waterscape in Europe, sometimes in shockingly rapid ways. Adaptation to water-related climate impacts is thus a core challenge for society and all sectors that depend on water resources. The failure to adopt climate-resilient water

management will result in billions of euros in damages.

Climate change impacts primarily

While the EU and its Member States have made great initial strides in pushing forward adaptation efforts, much remains to be done. In the context of the

Climate change impacts primarily manifest in changes to the water cycle

European Green Deal, the European Commission had announced a new, more ambitious EU strategy on adaptation to climate change to be published in the beginning of 2021. During the German EU Council Presidency in 2020, it was therefore timely to explore ways in which EU policy and EU initiatives could contribute to enhancing water-related climate resilience in EU Member States and beyond.

The online conference "Climate change and the European water dimension – Enhancing resilience" on 4-5 November 2020 provided a platform to highlight the role of water and discuss the state of resilience, solutions and policy recommendations with key actors from science, policy-making and practice. It was co-hosted by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, the Portuguese Ministry of Environment and Climate Action, and the Slovenian Ministry for Environment and Spatial Planning, as a joint initiative of the three subsequent EU Council Presidencies. More than 600 people registered for the virtual conference which was broadcasted via live stream.

#### Main objectives

- Discuss appropriate measures and policy instruments to achieve resilience towards climate change.
- Explore policy recommendations for EU activities to enhance adaptation efforts at EU, Member States' and transboundary level.
- Provide input to and support the ongoing development of the new EU adaptation strategy and other relevant EU policy processes and instruments.

#### Programme

- Day one: High-level opening by the hosting ministries and the European Commission, key-note speeches with a focus on the local/regional and the European level, stakeholder perspectives, and latest insights from research and practice.
- Day two: Presentation and discussion of draft policy recommendations in parallel virtual break-out sessions and final reflections by representatives of the hosting ministries and the European Commission.

#### Main documents



<u>Policy Paper</u>: As the main outcome of the conference, it provides recommendations for the European Commission and EU Member States on how to increase water-related climate resilience and initiate the transformational change required to ensure enhanced resilience in the future.

<u>Background Paper</u>: It summarises the state of the art on observed and expected climate change impacts, analyses adaptation measures adopted to date, and identifies required action and possible entry points for EU activities.

All documents are available on the conference website <a href="https://www.bmu.de/en/climate-change-and-the-european-water-dimension/">https://www.bmu.de/en/climate-change-and-the-european-water-dimension/</a>

## Key messages from the opening sessions



Minister Svenja Schulze, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Germany - Making social, economic and environmental systems more resilient will require fundamental changes in economic practices and lifestyle. The new EU Adaptation Strategy should reflect the fact that adaptation is often most effective if it is decided and implemented at the local and regional levels and should therefore complement and support these efforts.



Minister João Pedro Matos Fernandes, Ministry of Environment and Climate Action, Portugal - The impacts of climate change need to be duly considered in all decision making. The new EU Adaptation Strategy should therefore support mainstreaming of climate adaptation into sectoral strategies. Portugal will continue to promote the important role of water in climate adaptation during its Council Presidency, also by placing it on the agenda of the informal meeting of European Environment Ministers in early 2021.



State Secretary Metka Gorišek, Ministry of the Environment and Spatial Planning, Slovenia - Climate adaptation requires strong cross-border cooperation, especially in transboundary basins. Climate resilience is also a prerequisite for stability and peace and therefore calls for global cooperation. During its Council Presidency, Slovenia will continue to work on the water and climate change nexus with a special focus on its importance in EU External Action.



**Virginijus Sinkevičius, EU Commissioner for the Environment, Oceans and Fisheries.**Preventing and reducing risks now will likely be less expensive than the costs of inaction.

The new EU Adaptation Strategy will be key in providing a framework for enhancing prevention, preparedness and climate proofing. The required transition will depend on buy-in from all citizens. The EU should lead by example, e.g. through the European Green Deal.

Key-note by Markku Markkula, President of the Helsinki Region, Finland and former President of the European

Committee of the Regions. Cities play an important role as main actors for transformation. In the face of the climate change emergency, administration, private sector organisations, universities and other actors in cities need to work in partnership to achieve innovation and develop evidence-based policies to bring about change.

Policy needs to dance with practice

Markku Markkula

Key-note by Veronica Manfredi, Director of the Quality of Life Directorate in the European Commission.

The EU water policy framework already largely caters for climate change adaptation. However, there is a need to step up implementation. In the Water Framework Directive, implementation gaps stem, among other, from lack of funding and insufficient mainstreaming of environmental objectives into sectoral policies. Reinforced efforts are needed especially with regards to water scarcity issues. Deficits in implementation of the Floods Directive mainly result from a lack of knowledge and data, for example with regards to modelling climate change impacts on all types of floods.

The Green Deal is our strategy to tackle environmental challenges and climate change jointly

Veronica Manfredi

## Stakeholder perspectives

- Patrick Ten Brink, European Environmental Bureau: Nature-based solutions (NBS) are very effective, for example
  in flood risk mitigation, while bringing multiple benefits including for biodiversity and recreation. The restoration law promised under the EU Biodiversity Strategy and reconsidering the current proposal for the Common
  Agricultural Policy (CAP) could make a significant difference in this regard.
- Oliver Loebel, EurEau: Drinking water has to get priority over other uses, but also households have to use water
  wisely. While the EU needs to define appropriate targets to guide water-related climate adaptation, implementation needs to take place at the local level, which requires regional level data and projections.
- Ivan Zavadsky, International Commission for the Protection of the Danube River: The European Commission
  needs to further strengthen transboundary water cooperation by supporting non-EU countries in implementing
  adaptation measures, through technical capacity development and knowledge sharing but also investments.
- Blaz Kurnik, European Environment Agency: There is urgent need to move on from adaptation strategies and planning to actual implementation at various levels and sectors. This includes investing in harmonised data across Europe and closing gaps in knowledge on how to measure successful adaptation.
- Vasileios Latinos, ICLEI/Covenant of Mayors: Cities are very interested in increasing resilience, for example through blue and green infrastructure but there is a need for local level data to enable evidence-based local decision making and integrated planning that combines climate resilience with green recovery and emergency response.
- Thomas Haselberger, IFOAM- Organics International: Organic agriculture can be part of the solution for increasing water-related climate resilience. In order to further promote organic agriculture, the European Commission needs to live up to its own goals and ensure an ambitious implementation of the CAP together with the Member States.

## Insights from policy-making and research

#### The upcoming new EU adaptation strategy and water - Preliminary insights.

Elena Višnar Malinovská, European Commission – Directorate-General for Climate Action.

The new strategy will work towards the goal of a climate resilient continent by 2050 through climate proofing of policies, resilience building, and fostering prevention and preparedness. It will aim to channel public and private funding into resilience measures and improve access to relevant climate data for all actors.

The new strategy clearly needs to be more ambitious

Elena Višnar

#### Water-related climate change impacts in Europe - Main results of the PESETA IV study

Ad de Roo, Joint Research Centre, European Commission

According to the <u>PESETA IV Study</u>, increasing efforts in climate mitigation to keep global warming at 1.5°C compared to 3°C can generate benefits amounting to 172 billion €/year in reduced damages that would result from droughts, river and coastal floods by 2100. In addition, climate adaptation measures could reduce such damages by estimated 122 billion €/year. Measures currently planned under the Water Framework Direction will likely not be sufficient to adapt to climate change impacts on water availability in the near future.

Increasing efforts in climate action can generate enormous economic benefits Ad de Roo

## Thought starters on cross cutting topics

Health, water and climate change, Francesca Racioppi, WHO European Centre for Environment and Health. Climate change effects on water have significant impacts on human health, including faecal-oral and helminth infections, vector-borne diseases, malnutrition and stunting, poisoning with chemicals, death and physical injury, and mental well-being. A number of WHO initiatives and tools have been developed to address these interlinkages.

<u>Transformational adaptation</u>, Lykke Leonardsen, City of Copenhagen, Denmark.

The city of Copenhagen approached transformation towards sustainability and adaptation by taking climate change adaptation as the backbone for urban development, dividing the city into catchment areas for master planning and adopting multifunctional solutions, such as water parks with recreational value.

<u>Climate action as an innovation driver</u>, *Prof. Dr Georg Teutsch*, *Helmholtz Centre for Environmental Research*, *Germany*. Recent advancements in monitoring, remote sensing and modelling allow to draw 'pictures of the future' describing future climate conditions and sectoral impacts. Such systemic projections help identifying cross-sectoral co-benefits and synergies and can therefore instigate technology-pull and innovation in multi-functional solutions.

Water and climate change mitigation, John Matthews, Alliance for Global Water Adaptation.

There are two main paths of water-related climate mitigation: a) reducing greenhouse gas (GHG) emission, and b) storing and sequestration of GHG. Wetlands and especially peatlands have a high GHG storage potential, which has not yet sufficiently been taken into account, e.g. in carbon accounting and mitigation policies.

#### Case studies and lessons learned from EU Member States

In addition to the main conference programme, the afternoon of day one provided opportunity to exchange experiences from good practice examples. Three parallel sessions featured case studies of:

Addressing too much water through houselifting in the <u>German Elbe basin</u>, flood risk assessment for evaluating water management measures in <u>Helsingborg</u>, <u>Sweden</u>, and through robust projections of climate change impacts in the <u>Danube basin</u>

**Adressing too little water** through better drought preparedness in the <u>Danube region</u>, and through working on water efficiency in <u>Zaragoza, Spain</u>

**Climate proofing** through adaptive/dynamic pathways in the <u>Dutch Delta Program</u>, and through weather-wise urban planning in <u>Rotterdam</u>





## Discussing the policy recommendations

As one of its main highlights, the conference featured discussions of policy recommendations for the European Commission and EU Member States on how to increase water-related climate resilience and initiate the transformational change required to ensure enhanced resilience in the future. Representatives of the three ministries hosting the conference presented draft recommendations which were then discussed among conference participants in a number of parallel breakout groups.



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The resulting <u>Policy Paper</u> includes recommendations for three different levels of policy and decision-making, covering the overall topics of:

- Mainstreaming water-related climate resilience into EU policy and international frameworks through
  increasing coherence and ambition across relevant EU policies, strategies, and initiatives and by leveraging
  synergies across international frameworks for climate action, disaster risk reduction and sustainable
  development.
- Highlighting water-relevant issues in the new EU Adaptation Strategy, especially in cross-cutting topics
  such as appropriate adaptation financing for water-related climate resilience, improved availability of
  water-relevant data and climate services, cross-border and international cooperation
- Supporting sustainable water management as a key building block for climate resilience in EU Member
  States by promoting a fundamental change in how water is used and valued, and supporting transformational change through cross-sectoral coordination, stakeholder participation and awareness-raising.
  Climate-resilient water management needs to be steered by financial and regulatory instruments, and
  further strengthened through research and innovation, data and knowledge generation, guidance and
  capacity development.

## Key outcomes emanating from the group discussions:

- The Common Agricultural Policy and its implementation (national strategic plans) are a priority measure for enhancing climate resilient adaptive water management
- There is a need to integrate adaptation and mitigation, exploiting synergies and avoiding trade-offs (maladaptation or negative effects of mitigation measures), e.g. through multi-functional measures such as nature based solutions
- Sustainable and integrated urban planning has an important role to play in enhancing climate-resilience, e.g. to deal with heavy rainfall events
- The EU should provide more guidance and knowledge exchange on good practice examples of mainstreaming water-related climate resilience into policies at different levels
- There is a need for increased knowledge, improved access to tailor-made data, information and climate services in order to provide reliable assessments and projections of climate change impacts
- Indicators need to be established for assessing climate risks as well as adaptation benefits and co-benefits as well as for evaluating and communicating results of adaptation measures
- The role of regional coordination and cooperation mechanisms need to be further strengthened within member states, across borders, and in EU neighbouring countries
- The importance of local initiatives and the role of sub-national /regional authorities in coordinating local activities need to be highlighted
- With regard to adaptation financing, climate-proofing of investments needs to be ensured along with mainstreaming water-related climate resilience into EU financial instruments, and highlighting the importance of engaging the private sector
- There is a need to raise awareness and enable participation of the public as well as other stakeholders, e.g. through tailor-made information
- · Climate-resilience needs to be addressed more prominently in external and trade relations

Based on the conference deliberations, the draft policy paper that had served as a basis for discussion was revised. In the follow-up, the final policy paper and its recommendations were fed into relevant policy processes and meetings at EU-level. On 24 February 2021, the European Commission published the new EU Adaptation Strategy. The Strategy includes a dedicated section on freshwater sustainability which had not been foreseen in the blue-print for the Strategy dating from spring 2020.

## Final reflections

State Secretary Jochen Flasbarth, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Germany – The European Commission's announcement to accord water a prominent place in the new EU Adaptation Strategy is highly welcome. Transformational approaches are needed to overcome existing path-dependencies, and create opportunities to cope with climate impacts while building more resilient and sustainable societies. Germany, Portugal and Slovenia have agreed to continue cooperation on the topic during the Trio Presidency.

State Secretary Inês dos Santos Costa, Ministry of Environment and Climate Action, Portugal – Besides the existing sound water policy framework, there is a need for more coherence across sectoral policies in order to manage natural resources in a systemic manner. This will require ending business as usual and making concessions to sustainability. During its Council Presidency, Portugal will continue to emphasize the important role of water for climate-resilience.

Deputy Director-General Clara de la Torre, European Commission Directorate-General for Climate Action – The recommendations put forward by the conference will enter into the thinking at the European Commission when finalising the new EU Adaptation Strategy. The new strategy will support mainstreaming water-related climate adaptation into international frameworks including those on disaster risk reduction and climate mitigation. Water-related climate resilience is also important for macroeconomic stability, and will therefore have to be considered in international trade policies.

We need resilience and sustainability to go hand-in-hand Jochen Flasbarth

While the European Green Deal provides a good framework, it now requires taking ambitious action
Inês dos Santos Costa

The role of innovation is very important in adaptation and needs to be fostered
Clara de la Torre





#### **Imprint**

#### **Published by**

German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety Working Group WR I 1, 53175 Bonn Email: <a href="mailto:wri1-w@bmu.bund.de">wri1-w@bmu.bund.de</a>

#### **Edited by**

German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

#### Text

adelphi, Berlin

#### **Photo credits**

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#### Date

March 2021

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