



# **Domestic Policy Frameworks for Adaptation to Climate Change in the Water Sector**


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# The Art

- Focus count
- Highli frame

- OECD  

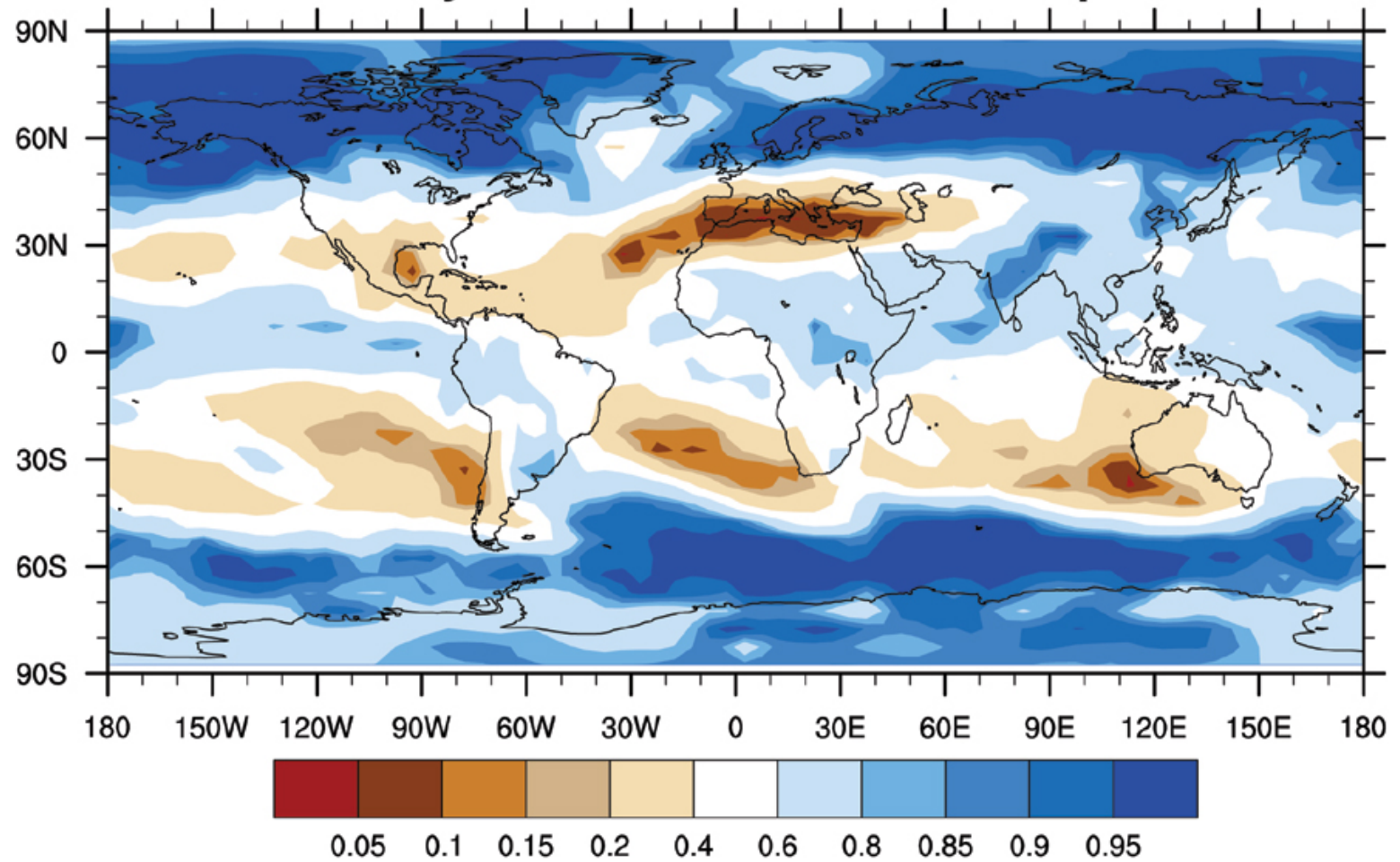
# Key messages

- **Sectoral adaptation is practical and feasible.**
- **Degree of adjustment of using current policy frameworks will vary.**
- **Despite differences countries can learn from each other.**
- **Uncertainty of available information reinforces risk aversion → level of information use is low.**

# Uncertainty in Precipitation

(based on differences between 16 AOGCMs)

## Probability of Increase in Annual Precipitation



# 1. Domestic and International Legal Frameworks

## *Domestic Legislation*

- Defines legal boundaries and responsibilities: adaptation will have to play by the same rules.
- Water rights and abstraction
  - ◆ Riparian and prior appropriation doctrines,
  - ◆ Licensing/permitting systems, Registrations, Apportionment,
- Examples: EU Water Framework Directive; California Water Recycling Act;

## *International water approaches*

- Wide range of bilateral and multilateral agreements.

## 2. Institutional Landscape

- Centralised
  - ◆ Significant role of the central government
  - ◆ Stakeholder participation is essential
- Decentralised
  - ◆ Allows flexibility and encourages innovative solutions
  - ◆ Lack of consistency may become a problem when catchments are shared
- Numerous key players
  - ◆ National, regional and local level policy-makers
  - ◆ Water companies
  - ◆ Irrigation practitioners
  - ◆ Water infrastructure engineers, owners and operators
  - ◆ Land planners
  - ◆ Scientists
  - ◆ Officials in related sectors: agriculture, energy, and fisheries

# 3. Water Management Approaches and Policies

- Key components are similar across countries:
  - ◆ Long term water resources management strategies
  - ◆ Abstraction permits
  - ◆ Water supply infrastructure
  - ◆ Demand-side management policies
  - ◆ Drought plans
  - ◆ Water management plans
  - ◆ Flood management
- There is a role for adaptation in each component

## 4. Knowledge and Information

- Scientific capacity to generate and interpret relevant information is key to informative decision-making
- Monitoring systems provide data for flood and drought predictions and raw information needed for climate models and future demand analysis
- First step in adaptation is to provide relevant and timely information to those who are making everyday decisions 'on the ground'



# Conclusions

- Adaptation to climate variability is constantly occurring in the water sector.
- Adaptation to long term climate change is not yet a significant factor in water resources management but there are several relevant initiatives in individual countries.
- Adaptation needs to be built into all elements of the existing policy frameworks.
- Available information on climate change needs to be put into use.

# Water Resources Management and Adaptation

	AR	MX	IN	ZW	CA	US	FI	UK
<b><u>1. Water rights</u></b>	☹️	☹️	☹️	☹️	☹️😊	☹️😊	😊	😊
<b>Abstraction permits</b>	😊😊	😊	☹️	☹️	😊😊	😊😊	😊	😊😊
<b><u>2. Institutions</u></b>	☹️	😊	☹️	☹️	😊	😊	😊	😊
<b>stakeholder particip.</b>	😊	😊	☹️	☹️	😊	😊	😊	😊
<b>3. Flood management</b>	😊	😊😊	😊😊	☹️	😊	😊	😊	😊
<b>Drought plans</b>	☹️	☹️	😊😊	☹️	😊	😊	😊	😊
<b>Demand side policies</b>	☹️	😊	☹️	😊	😊	😊	😊	😊
<b><u>4. Information use and dissemination</u></b>	☹️	☹️	☹️	☹️	😊😊	😊😊	😊😊	😊😊

# Implications for 5-year programme of work

- **Sharing information at sectoral level should be deep to be of value.**
- **Promoting adaptation is a challenge even at sectoral level.**
- **There is a need to reach out to domestic and international institutions dealing with particular aspects of particular sectors.**



# **Annex I Expert Group papers can be found on**

**[www.oecd.org/env/cc](http://www.oecd.org/env/cc)**

## **Adaptation papers:**

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