



THE CHALLENGE OF CLIMATE CHANGE

EU APPROACH TO ADAPTATION





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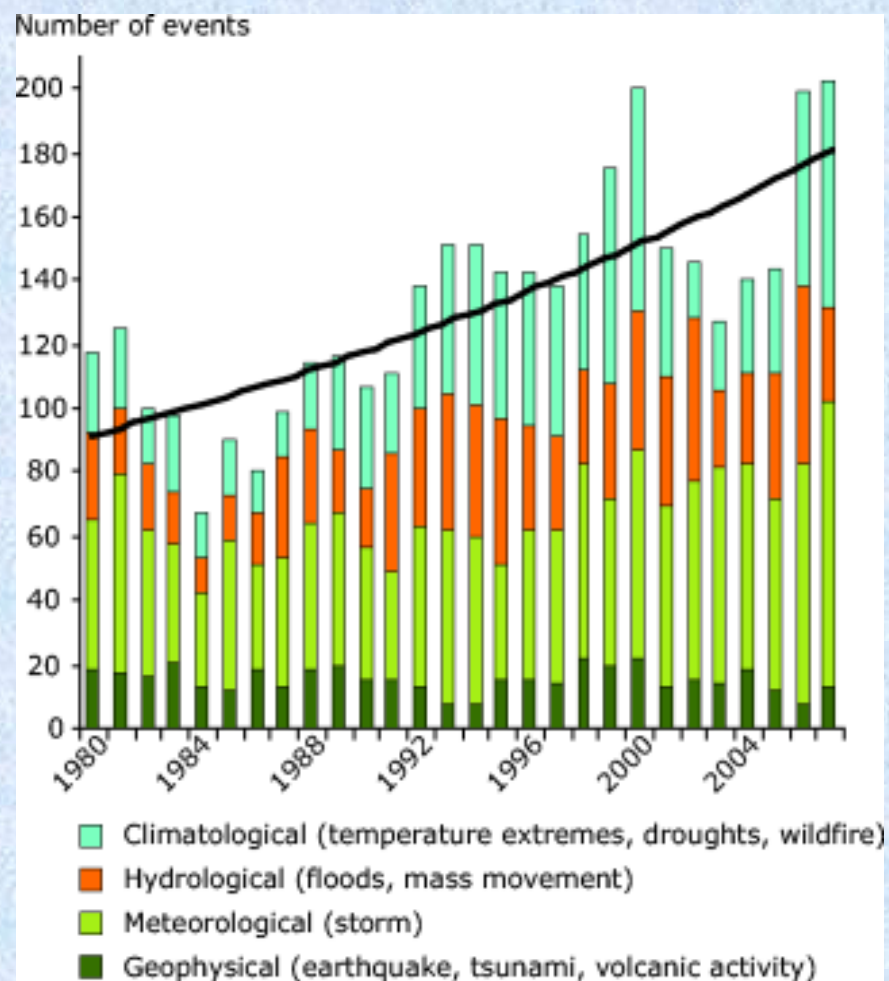


IMPACTS OF CLIMATE CHANGE

- **Higher temperature increases (Global Warming)**
- **Water and precipitation patterns (Droughts, Floods)**
- **Ice melting**
- **Sea levels (Coastal erosion, loss of land)**
- **Species move to the North (Health and Biodiversity implications)**
- **Energy and transport**
- **Agriculture and land planning**
- **Migrations**



NATURAL DISASTERS IN EUROPE, 1980-2007



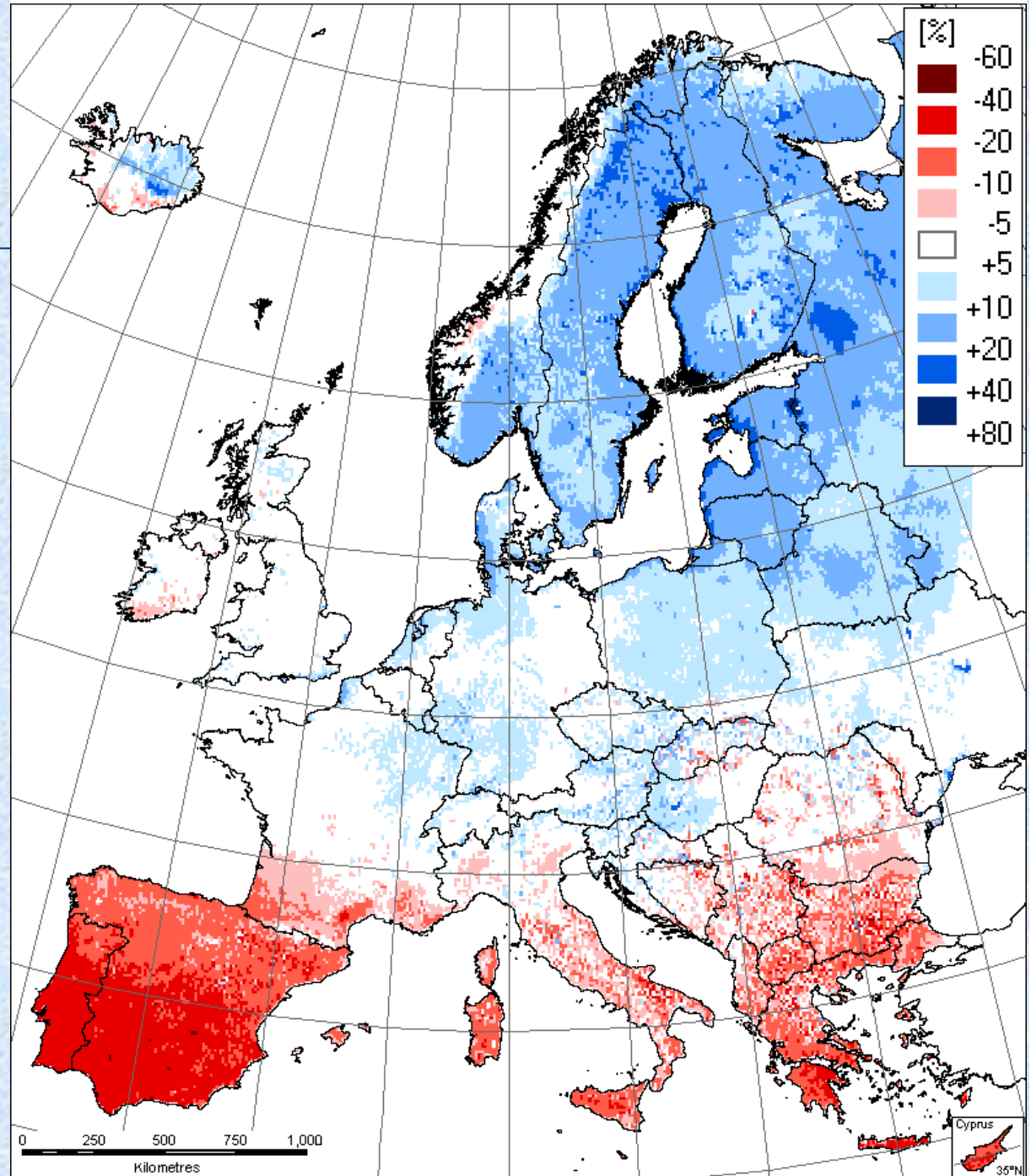


**Northern Europe:
increased rainfall
and snowfall**

**Southern Europe:
more frequent
droughts**

European Commission, DG Environment

Precipitation: change in annual amount [%]





IMPACTS OF CLIMATE CHANGE

Since 1998 Europe has suffered more than 100 major floods causing more than 700 deaths, displacing more than a million people and bringing more than 25 billion EUR damage



Flooding in Northern Europe during 2007



European Commission, DG Environment

Slide 7



IMPACTS OF CLIMATE CHANGE (EEA Report 2008)

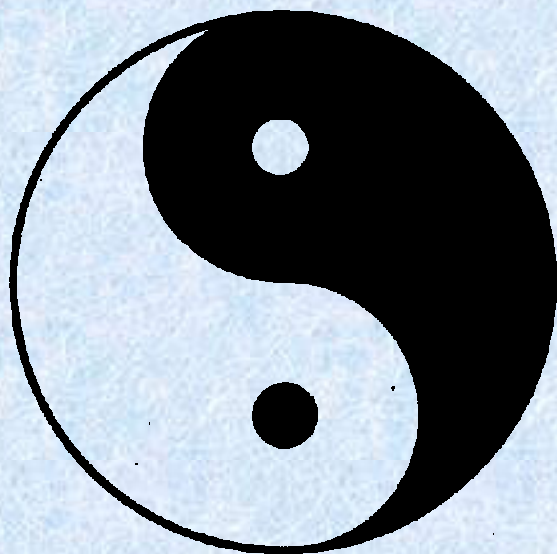
EEA REPORT “Impacts of Europe’s Changing Climate”
(2008) based on 40 Key Indicators highlights that:

- Vulnerability to Climate Change varies widely across regions and sectors in Europe
- Main Vulnerable Areas are Mountainous regions, Coastal Zones, the Mediterranean and the Arctic
- Improved Monitoring - necessary



MITIGATION AND ADAPTATION COMPLEMENTARY EFFORTS

MITIGATION



ADAPTATION

- EU Goal: to maintain global warming at + 2°C (pre-industrial times)
- This Goal will limit the risks and magnitude of climate change but will not avoid all impacts
- Adaptation will be a necessary and complementary effort to mitigation
- The more Mitigation the less Adaptation will be required and vice versa



ADAPTATION ROLE IN REDUCING COSTS

- Adaptation has an extremely important role in reducing economic costs across Europe and in many cases has benefits that dramatically outweigh costs.
- **Cost of inaction:**
 - in 2020 \$ 6 billion a year
 - rising to 57 billion by 2060
 - and 382 billion by 2100.
- **The costs of adaptation**
 - by 2060 are estimated at 42 billion/year,
 - and achieve benefits of 30 to 34 billion/year in 2060,
 - rising to 131 to 196 billion/year in 2100.

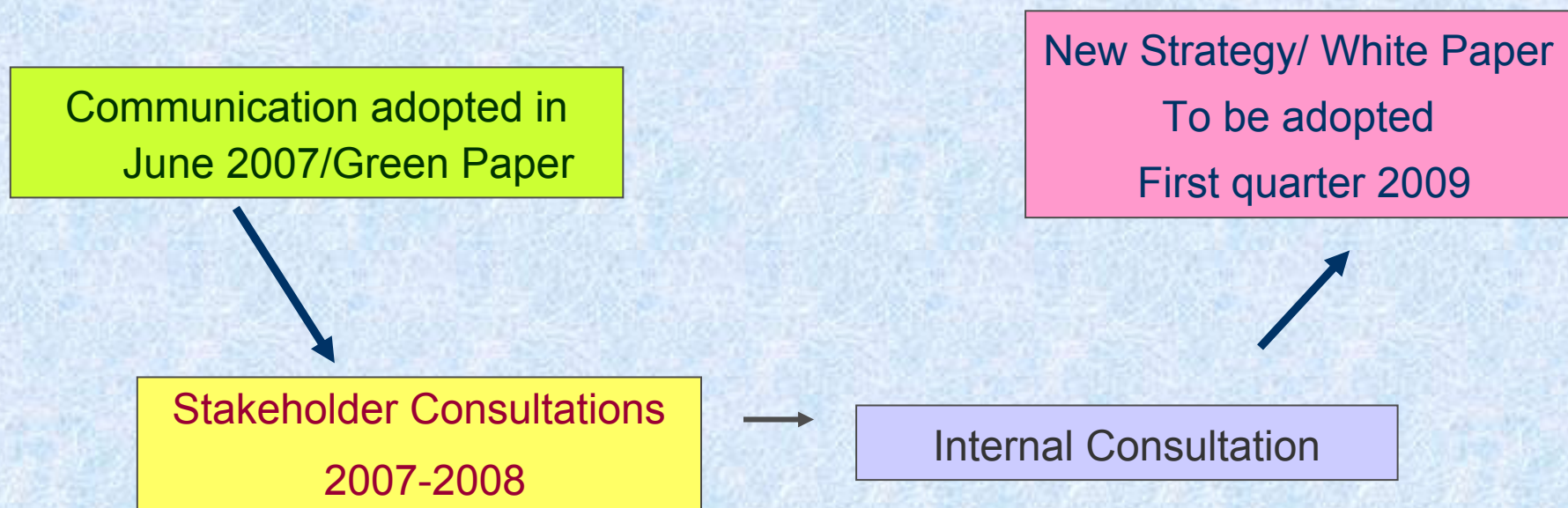


TOWARDS AN EU ADAPTATION FRAMEWORK

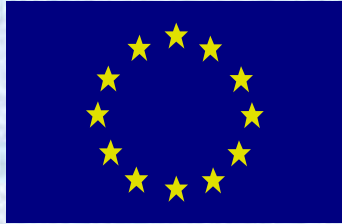




POLICY MAKING PROCESS AT EU LEVEL



Development of an EU Adaptation Framework



EU ADAPTATION FRAMEWORK

The EU Adaptation Framework building on the Green Paper will:

- 1) Strengthen the Knowledge/Evidence Base
- 2) Mainstream climate Adaptation into key policy areas
- 3) Advance work internationally on Adaptation
- 4) Work in Partnership



STRENGTHENING THE KNOWLEDGE BASE – AN ESSENTIAL STEP FORWARD

- Sound **scientific results** are paramount
- Current **reporting mechanisms** are fragmented.
- EU Strategy will focus on strengthening the knowledge base.
- Important starting point –

European Clearing House Mechanism (CHM)



MAINSTREAM ADAPTATION INTO KEY POLICY AREAS

Building Resilience – core theme

- Step by step approach
- Review risks, Consider options
- Short-term and long-term actions



ADVANCE WORK INTERNATIONALLY ON ADAPTATION

The EU is committed to working with third countries to improve their resilience and capacity to adapt to the adverse effects of climate change through for example:

- The Global Climate Change Alliance
- The UNFCCC - EU Proposal for a Comprehensive Framework for Action on Adaptation (FAA)
- Bilateral and Regional Agreements



WORKING IN PARTNERSHIP

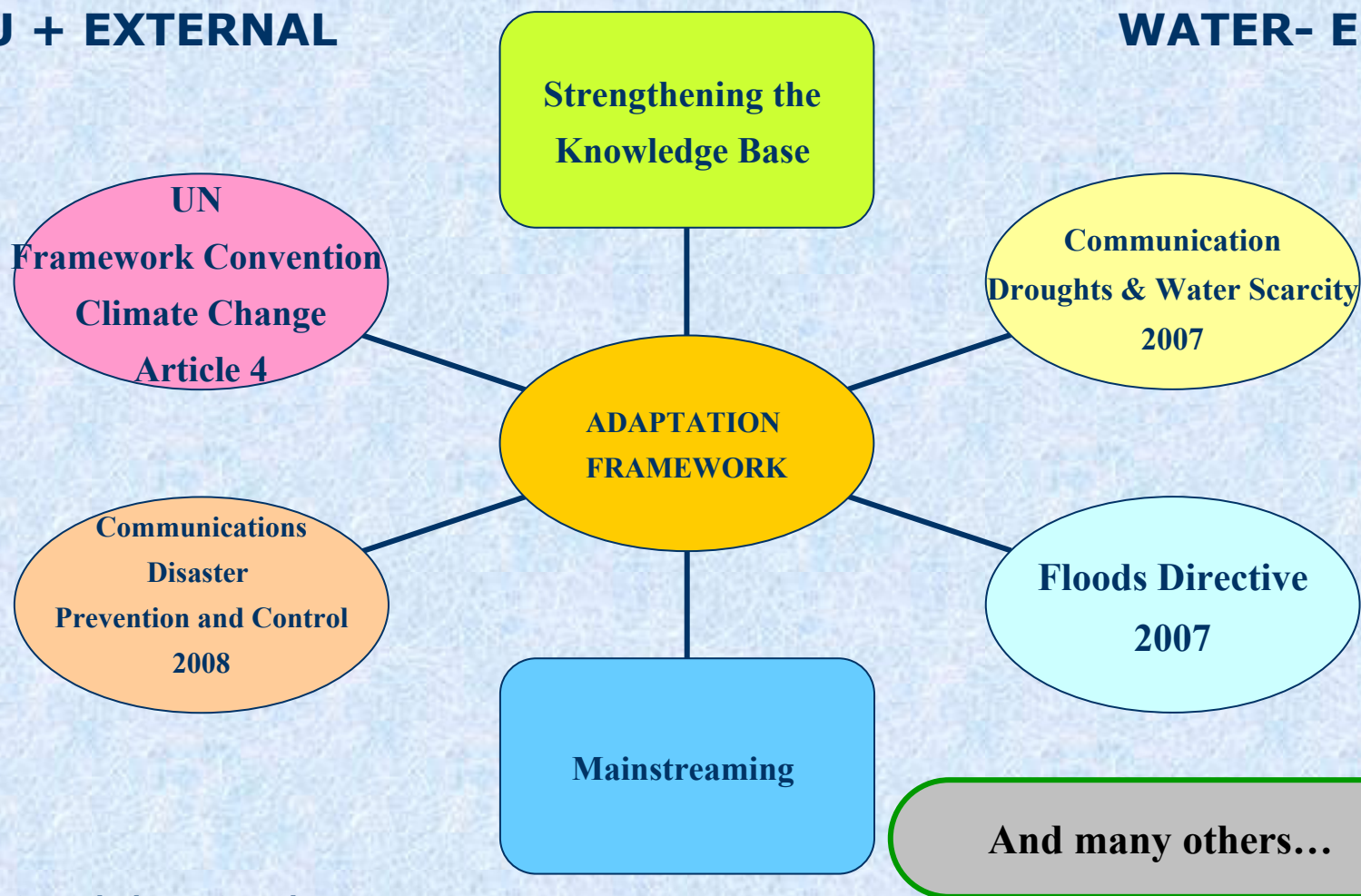
- Adaptation involves co-operation at all levels
- Close co-ordination with EU Member States is essential in preparing effectively to address the impacts of Climate Change



INITIATIVES LINKED TO ADAPTATION

EU + EXTERNAL

WATER- EU



YOU CONTROL CLIMATE CHANGE.



TURN DOWN. SWITCH OFF. RECYCLE. WALK. **CHANGE**

- http://ec.europa.eu/environment/climate/climate_action.htm
- http://ec.europa.eu/environment/climate/adaptation/index_en.htm