

Towards a comprehensive and ambitious post-2012 climate change agreement

WG III – Adaptation to climate change




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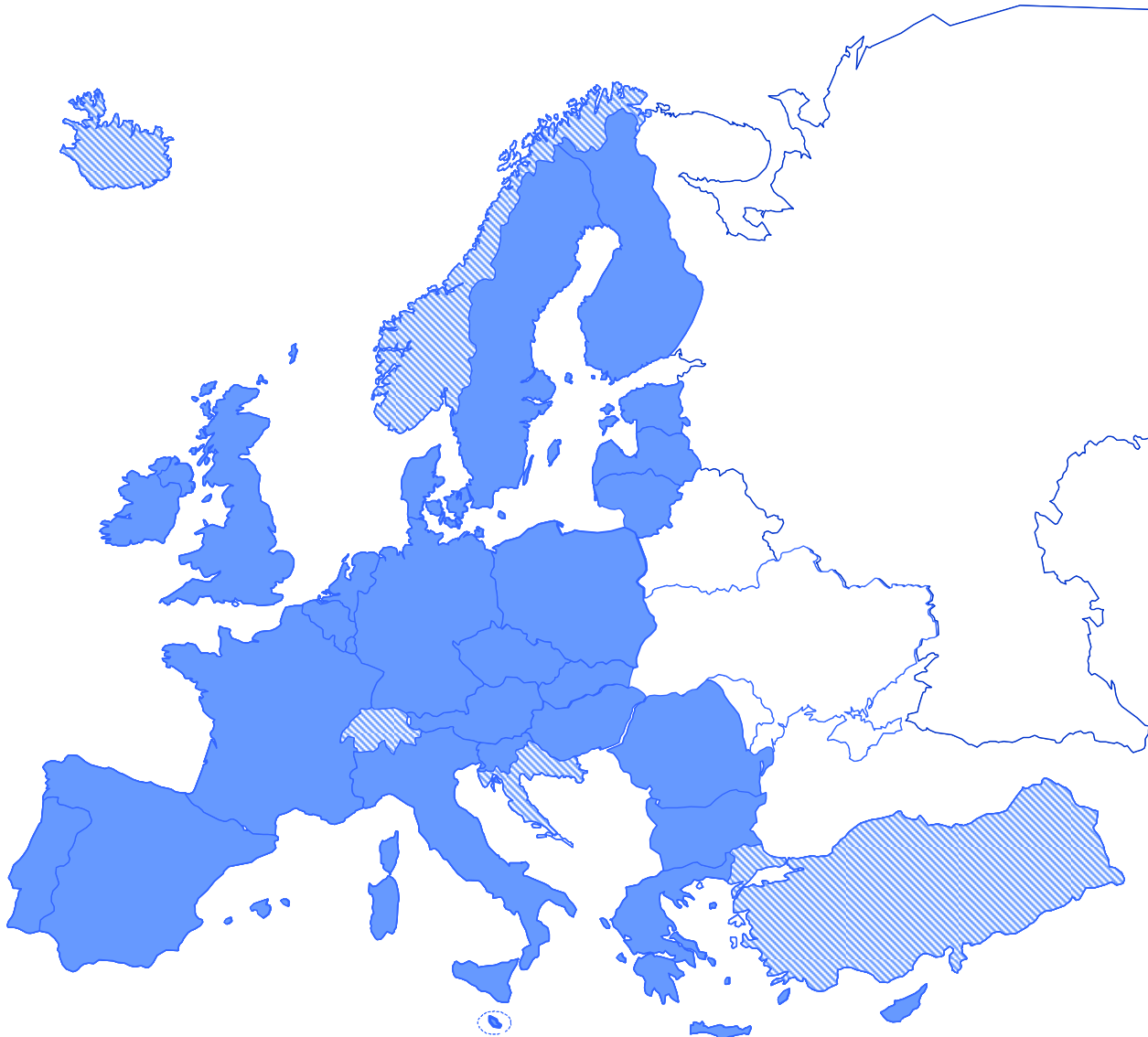
About the CEA

33 National Member Associations:

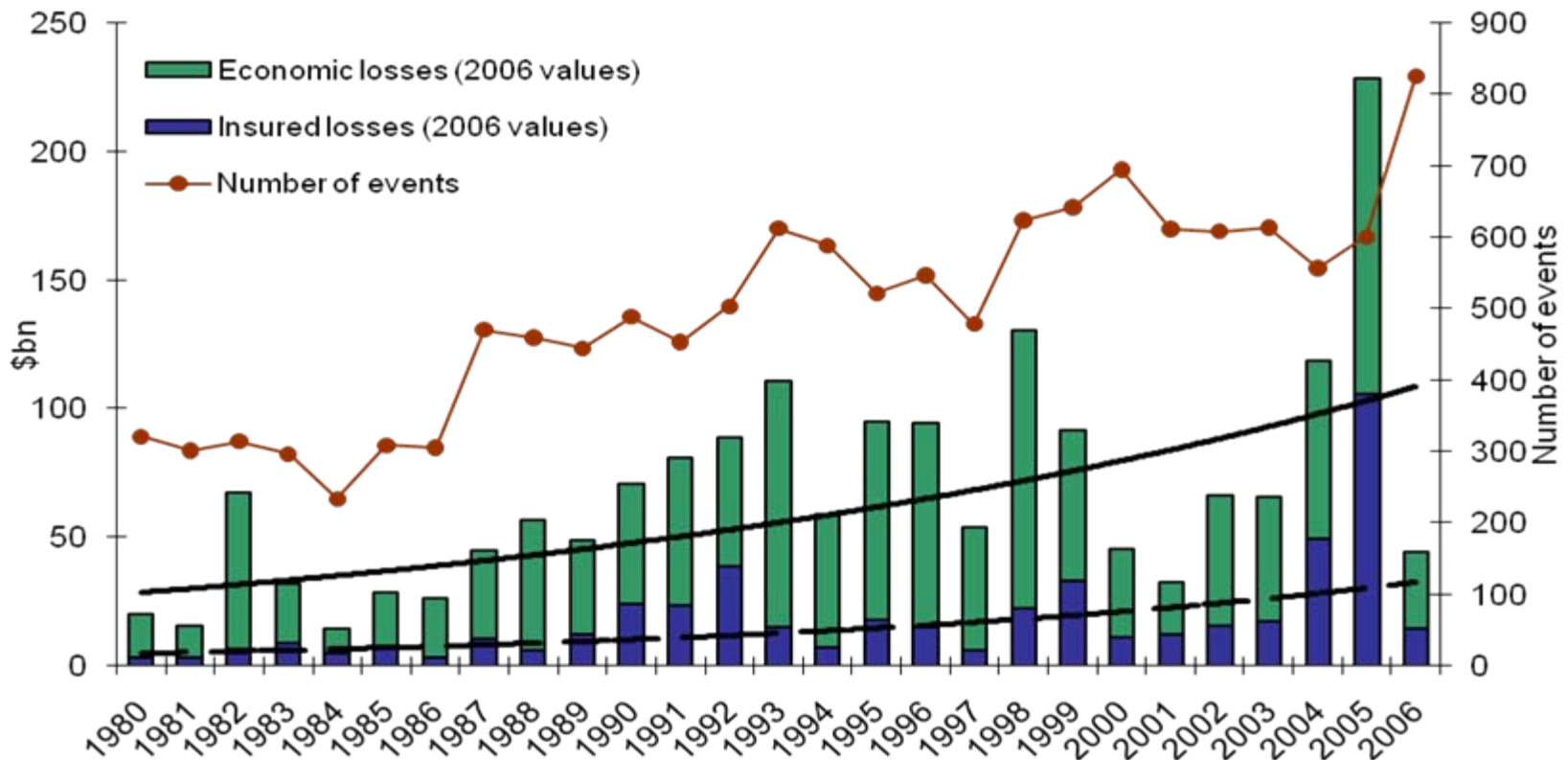
 **27 EU Member States**

 **+ 6 Non-EU Markets**
Switzerland, Iceland, Norway, Turkey, Liechtenstein, Croatia

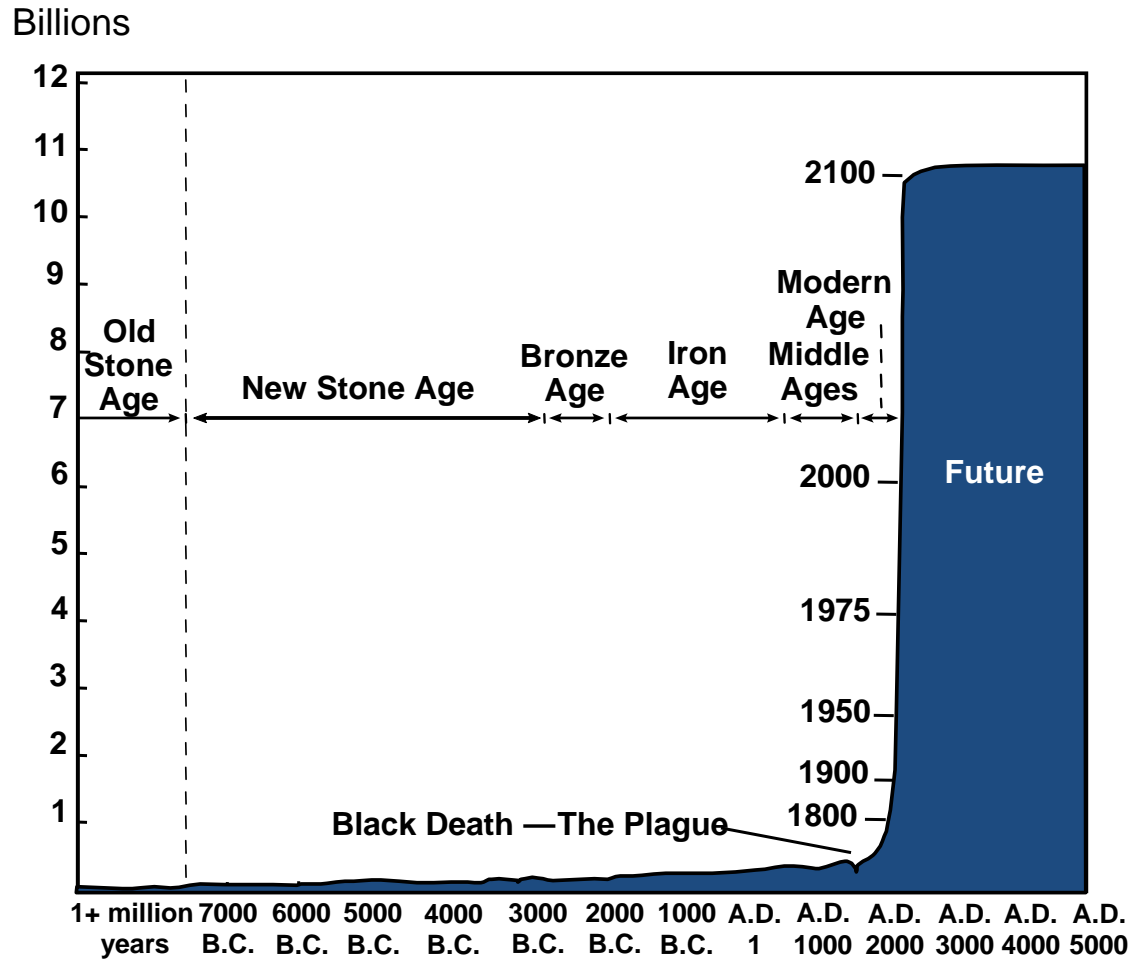
 **2 Observers**
Russia Ukraine



- Number of global weather related disasters and the losses caused

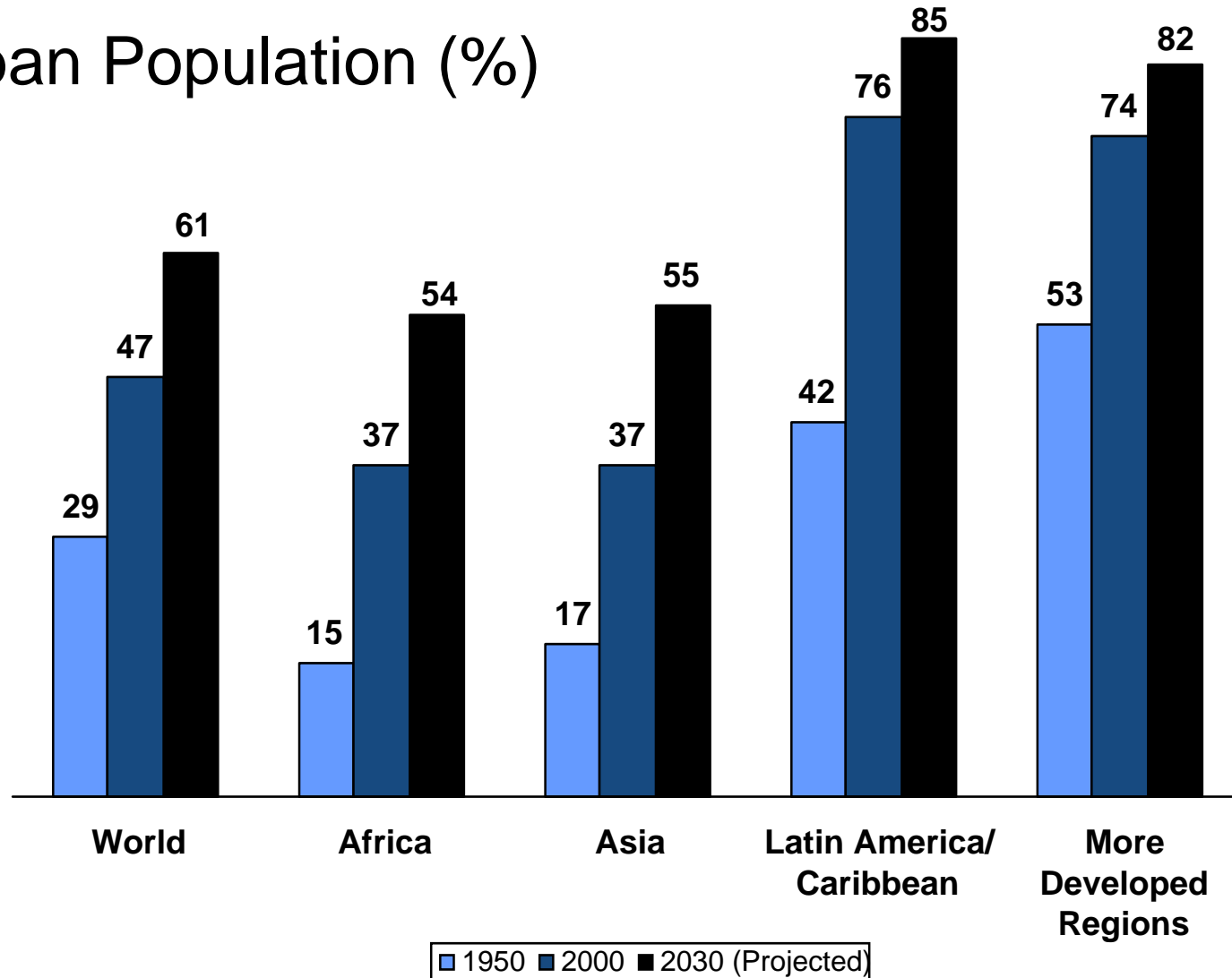


World Population Growth



Source: Population Reference Bureau; and United Nations, *World Population Projections to 2100* (1998).

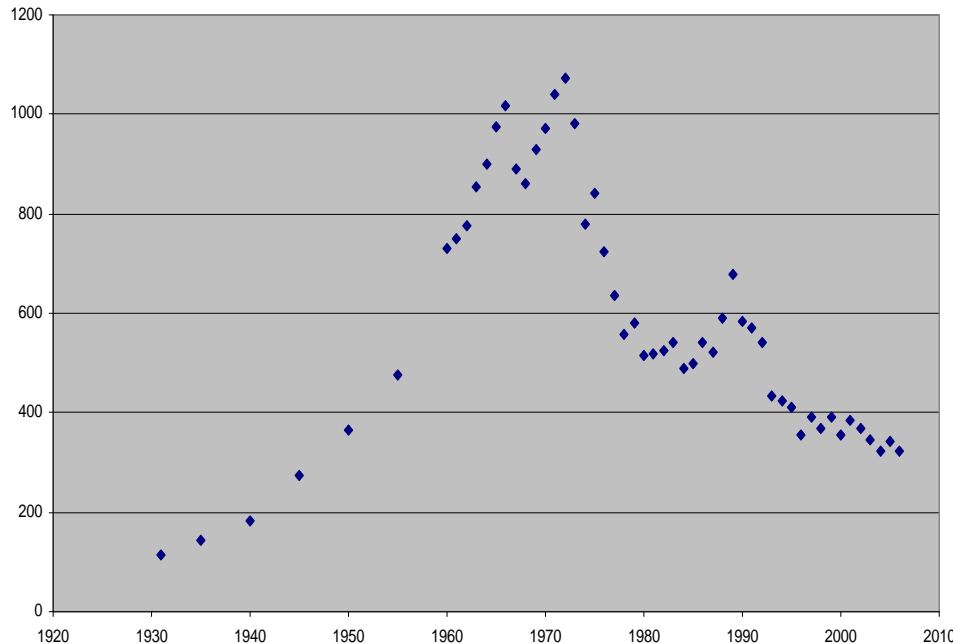
Urban Population (%)



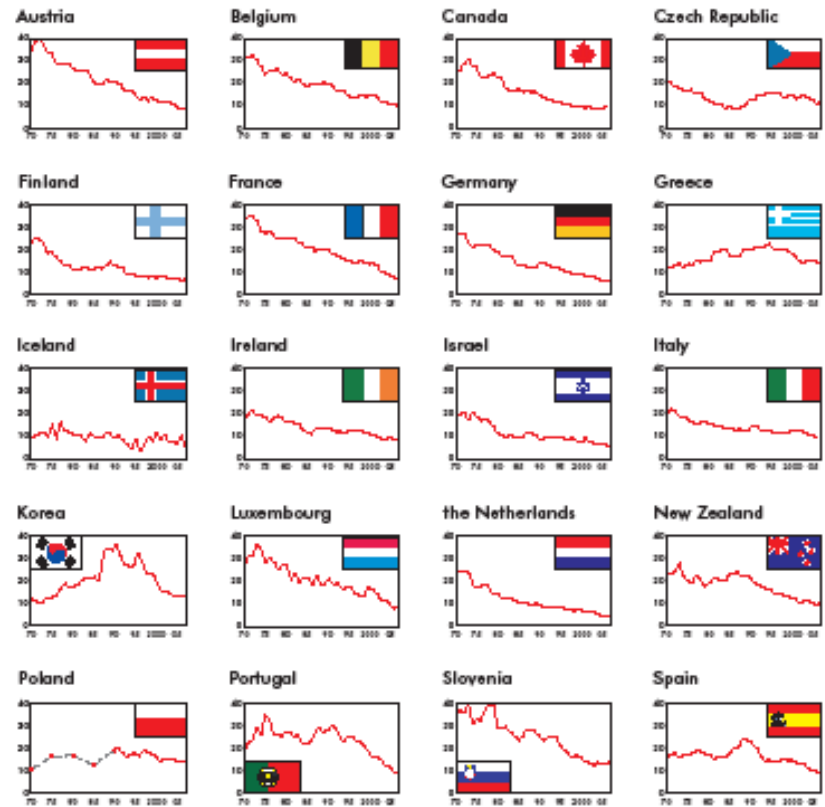
- No need to be fatalistic

- see traffic deaths

Fatalities in road accidents in Finland



Traffic deaths / 100 000 population since 1970



- insurers have much experience in loss protection

- At each stage of the process
 - Risk assessment: FW-looking & multi-dimensional models
 - Risk awareness: communication, mapping/zoning, pricing,...
 - Risk reduction: prevention, underwriting policy
 - Risk mitigation
 - Re/insurance policies (eg micro-insurance)
 - Financial markets (eg ART)

- In public/private partnership (PPP)

■ All lines of business to be impacted

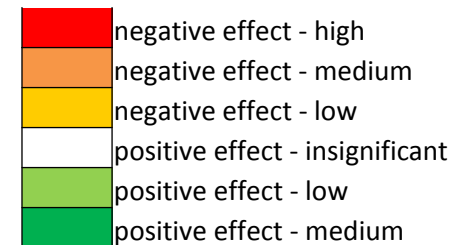
	Flood, storm surge		Severe weather, flash flood		Heat, drought		Cold weather, frost	
	ST	LT	ST	LT	ST	LT	ST	LT
Property	Yellow	Orange	Orange	Red	Yellow	Orange	Light Green	Green
Engineering CAR ¹	Orange	Red	Orange	Red	Yellow	Orange	Light Green	Green
Engineering EAR ²	Yellow	Orange	Orange	Red	Yellow	Orange	Light Green	Green
Marine	Yellow	Orange	Orange	Red	Yellow	Orange	Light Green	Green
Agricultural ³	Yellow	Orange	Orange	Red	Orange	Red	Light Green	Green
Motor own damage	Yellow	Orange	Orange	Red	Yellow	Yellow	Light Green	Green
Aviation, space	Yellow	Yellow	Yellow	Orange	Yellow	Orange	White	Green
Contingency risk (eg events' cancellation)	Orange	Red	Orange	Red	Yellow	Orange	Orange	Red
Health	Yellow	Yellow	Yellow	Yellow	Yellow	Orange	Light Green	Green
Life	Yellow	Yellow	Yellow	Yellow	Yellow	Orange	Light Green	Green

¹ Contractors' All Risks

² Erection All Risks

³ given the current coverage concept, multi-perils severely affected (corresponding to property)

Source: Munich Re, Geo Risks Research, 2004



■ **Several initiatives such as:**

■ **Munich Climate Insurance Initiative**

- Launched by Munich Re in 2005
- Aim: finding solutions to the risks posed by climate change (loss reduction, insurance,...)

■ **Climate Adaptation Development Program**

- Launched by Swiss Re in 2007
- Aim: developing financial risk transfer market for the effects of adverse weather in emerging countries

■ **Climate Wise**

- Launched by the Association of British Insurers (ABI) in 2007
- Aim: encouraging customers to change their habits and influencing policy

■ Challenges

- Statistics
- Insurance capacity
 - do transfers to capital markets via securitisation help?
- Correlation
- Anti-selection
- Moral hazard

- New technology such as renewable energy production needs
 - financing and
 - insuranceto become commercially viable.
- Lack of experience (no statistics) in this area means higher risk margins both in financing and in insurance
- research, not only by industry, is needed

- **Knowledge building and sharing**
 - gathering and sharing of data, models and analyses
 - forward-looking impact assessment
 - Impact on both adaptation and mitigation

- **Platform for the exchange of best practices on**
 - Research
 - Education
 - Tools such as risk zoning/hazard mapping

■ Ex-ante financed schemes

- more efficient
- more effective
 - Increased awareness and
 - stronger involvement of stakeholders

■ Conditionality / penalty clause

■ Liquid and stable financial markets

- Alternative Risk Transfer instruments

- **long-term, strong and effective framework**
 - stable legal and political environment
 - For businesses to adapt their strategies (business plan)
 - Strong involvement of the authorities
 - national adaptation plans, policy measures such as land use planning, public-private partnerships
 - high standard of risk management rules (building codes, land use planning, etc)
 - Flexibility
 - Principle-based
 - Adaptable to the local conditions
 - Market-led initiatives

- According to the IPPC (Intergovernmental Panel of Climate Change) the cost of **mitigation is 0.13 %** of the global GDP until 2030
- The Federation of Finnish Financial Services has used Capgemini forecasts saying that in payment systems (**SEPA**) the potential savings for the economy as a whole are **0,12-0,22** of the GDP (EU-16) – and this is just the SEPA part of e-services

For more information
www.cea.eu



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