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# RECREATE Final Conference

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EBNs (2): Climate information  
services for urban resilience

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Joint Institute for Innovation Policy



ArcelorMittal



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Wuppertal Institute  
for Climate, Environment  
and Energy

# DG RTD: Roadmap for Climate Services (2015)



DG R&I March 2015

## A strategic approach to Climate Services in Horizon 2020



- Horizon 2020 "Societal Challenges": solution-oriented research and innovation, policy development through R&I targeted funding
- Focus in Horizon 2020 SC5 on very few policy priorities addressing solutions to climate change challenges:
  - The development of a market for **Climate Services**
  - The development of a medium-to-long-term **deep decarbonisation** initiative
  - The attention to climate change hot spots: the **Arctic**

### Climate Services

*The transformation of climate-related data – together with other relevant information – into customised products such as projections, forecasts, information, trends, economic analyses, assessments (including technology assessments), counselling on best practices, development and evaluation of solutions and any other service in relation to climate that may be of use for the society at large.*

A European research and innovation  
**Roadmap**  
For Climate Services

# DG RTD Objectives

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- Enable EU leadership on climate services
- Enable market growth
- Develop the market framework
- Enhance the quality and relevance of climate services

# EBNs help DT RTD

## Because they tell the story

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- a. Provide sound data and analyses and evidence
- b. Contact stakeholders and understand their view
- c. Preliminary view on economic performance and environmental benefits
- d. Understand factors of success and obstacles (TIS)
- e. So that micro cases are useful for macro analysis
- f. Challenges can be translated into policy recommendations





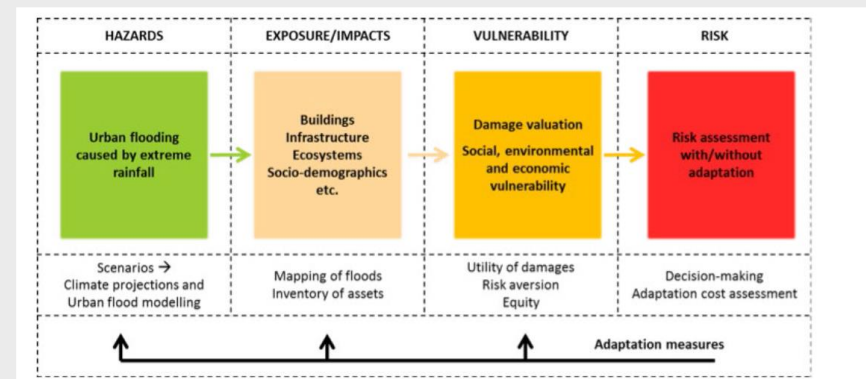
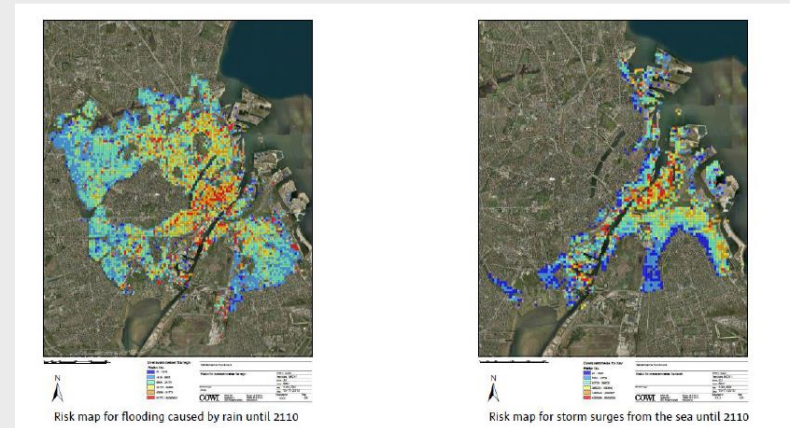
# The Copenhagen case

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- Economic losses incurred in Copenhagen as a result of the flooding in 2010 and 2011 exceed 1 billion EUR (insurance + public infrastructure)
- Cloudburst management plan .... meets nature-based solutions

# The innovation

- Using climate services to improve urban resilience and quality of life (holistic perspective)
- Facilitating the integration of multiple sets of complex trans-disciplinary information
- Support user's decision-making with focus on
  - Citizens, cost-efficiency and the environment
  - Climate resilience
  - Nature-based solutions (green urban infrastructure)
  - Green innovation and green growth/jobs
  - Facilitate specific financing scheme



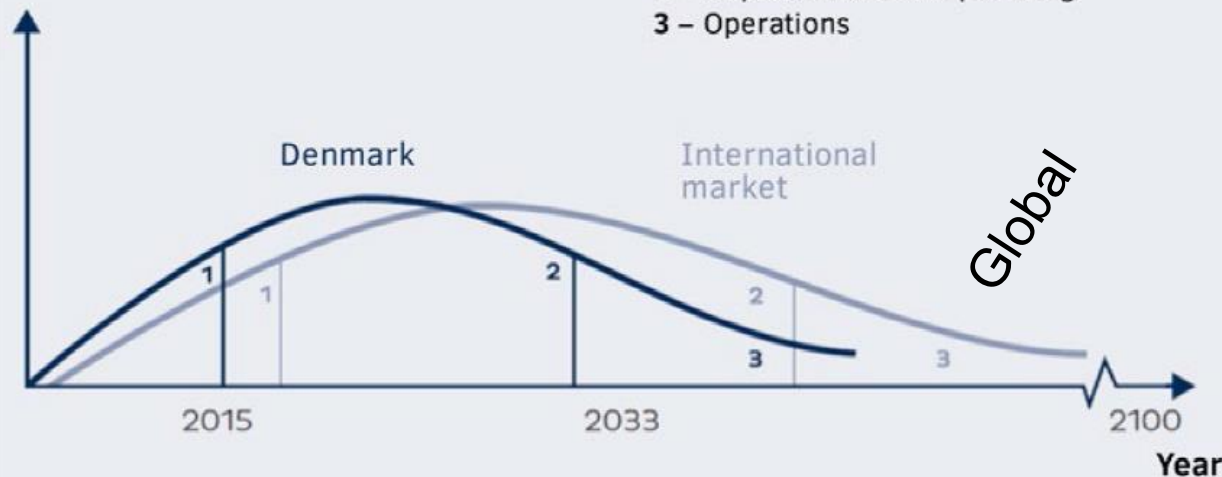


# The investment case

Rainwater	Traditional urban drainage solutions*	Combined solution*	Combined solution (Ministry of Finance method)**
Damage costs without adaptation	2.2	2.2	2.4
Costs of adaptation	2.7	1.5	1.4
Reduction of damage costs	2.2	2.2	2.3
Profits	-0.5	0.7	0.9

Copenhagen

## Realisation of market potentials



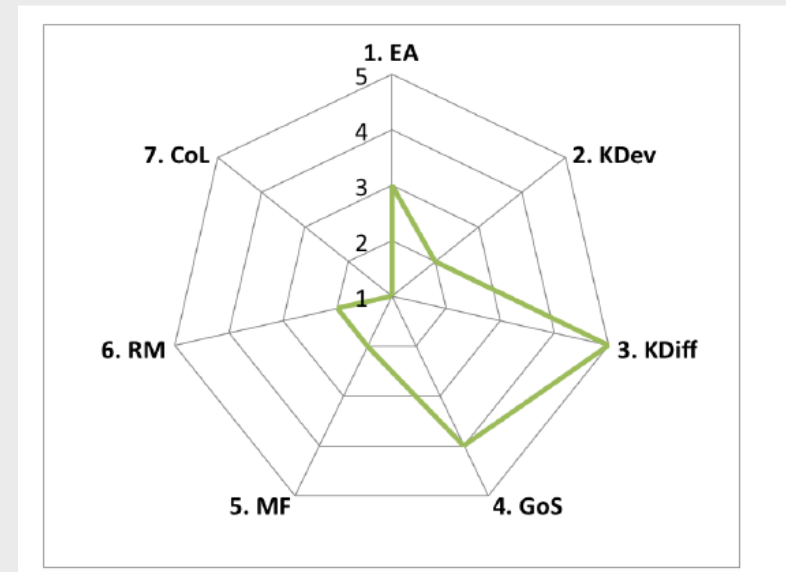
## Great urgency for cities to adapt:

- Climate risks increase
- Population growth
- Demand for higher quality of life, healthy living, etc.
- 70% of EU cities are only early stages of planning



# Status of the innovation

- **Urban climate services: Great market potential meets low actual demand!**
- **Barriers:**
  - Access to and quality of data (2)
  - Methodological legitimacy (7)
  - Funding for co-development (6)
  - Market is under development (5)



# Policy recommendations

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- Promote international standards for climate information services
- Foster sustained long-term investments in both applied and basic research within a number of different areas related to urban issues, including climate modelling and socio-economics
- Enhance requirements for and assigning higher evaluation scores to proposals that credibly outline mechanisms for matching co-funding in order to support the use of different financing models to stimulate adaptation action in European cities including the uptake of dedicated CIS.
- Launch or invite analyses of how existing barriers for collaboration between research institutions and commercial entities might impact the implementation of Horizon 2020