

4TH INTERNATIONAL CLIMATE CHANGE ADAPTATION CONFERENCE  
ROTTERDAM THE NETHERLANDS 10 – 13 MAY 2016



# ADAPTATION FUTURES 2016

practices and solutions



## PROGRAMME





# ADAPTATION FUTURES 2016

practices and solutions

## HOSTS AND MAIN SPONSORS



## Connect, learn, inspire

# Welcome to Adaptation Futures 2016!

If we want a healthy planet with healthy people, urgent solutions for climate change mitigation and adaptation are needed. Following the success of the Paris Agreement, the Adaptation Futures 2016 Conference is an important opportunity to renew focus on our collective responsibility to act and put adaptation into practice.

We all have a role to play. To make major progress in climate change adaptation, we need research and innovation fit for sustainable and inclusive green economies. We need to invest more in research to improve our scientific knowledge of the climate system and we need to develop and implement innovative climate services and technologies.

It is our duty to inspire future generations of students, researchers, innovators and decision-makers in both the public and private sectors. Together we can work towards new adaptation partnerships between nations, communities and businesses. Together we can create a new global market for climate services.

Adaptation Futures 2016 is the perfect place for people of all ages and backgrounds, from all corners of the world, to share new scientific findings, products and services, so we can promote the business case for adaptation. The time to act together on climate adaptation is now, so we welcome you to Rotterdam!

We welcome your ideas and your solutions. We invite you to connect, learn and be inspired by three plenary sessions, more than 155 sessions, seven high-level round tables, 13 field trips, and the Adaptation Expo.

Together, we can make a difference.  
Welcome to Adaptation Futures 2016!

Melanie Schultz van Haegen, Minister for Infrastructure and the Environment, the Netherlands  
Carlos Moedas, Commissioner for Research, Science and Innovation, European Commission  
Achim Steiner, Executive Director, United Nations Environment Programme



Melanie Schultz van Haegen



Carlos Moedas



Achim Steiner

-  PL plenaries
-  RT round tables
-  SC science session
-  PR practice session
-  SP science-practice session

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## THEMES

-  1. Cities and infrastructure
-  2. Food, forestry and rural livelihoods
-  3. Fresh water availability and access
-  4. Public health
-  5. Ecosystems and ecosystem based adaptation
-  6. Disaster risk reduction
-  7. The Arctic

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## CROSS-CUTTING ISSUES

-  8. Risk assessment, adaptation planning and evaluation
-  9. Institutions and governance
-  10. Finance, investment and business

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MONDAY 9 MAY	TUESDAY 10 MAY	WEDNESDAY 11 MAY	THURSDAY 12 MAY	FRIDAY 13 MAY
START REGISTRATION	PLENARY OPENING AND SESSIONS	PLENARY AND SESSIONS	SESSIONS AND PLENARY CLOSURE	FIELD TRIPS
BUSINESS FAIR: STANDS, MATCHMAKING AND SIGNING CEREMONIES				
EXHIBITION, PROJECTS AND POSTERS				
CONFERENCE DINNER				

**ADAPTATION  
FUTURES 2016**  
practices and solutions

**Adaptation Futures 2016** is a four day event. Its programme offers a variety of plenary and parallel sessions, round tables, field trips, a project exhibition and business expo, and an 'adaptation tool shed'.  
You can attend:

- a plenary session each day
- seven high level round tables
- more than 155 parallel sessions: practice sessions, science sessions and science practice sessions

On Friday 13 May we offer 13 field trips.

Every day you can enjoy the project exhibition and business fair in the main hall, where coffee, tea, lunches and drinks will be served. You can study the science posters or drop by in the adaptation tool shed and learn about the many techniques emerging to support adaptation.

## Plenary sessions

On Tuesday 10 May you will be welcomed by high-level representatives of the three hosts of the conference: the Government of the Netherlands, the European Commission, and the Global Programme of Research on Climate Change Vulnerability, Impacts and Adaptation (PROVIA). Their brief statements will introduce the overarching theme of this conference: adaptation practices and solutions.

Two prominent speakers will then set the scene. The Executive Secretary of the United Nations Framework Convention on Climate Change, Christiana Figueres, will speak about the implementation of the Paris Agreement and its relevance to climate adaptation. Top scientist Roger Pulwarty will discuss ways in which adaptation research could contribute to adaptation planning and implementation. The opening plenary will conclude with remarks from a panel of leading figures from the adaptation field, moderated by UK science journalist Vivienne Parry.

On Wednesday 11 May the plenary session will open with a keynote from Her Majesty Queen Maxima of the Netherlands, acting in her capacity as the United Nations Secretary-General's Special Advocate for Inclusive Finance for Development.

Following the Queen's address there will be a panel of speakers: Naoko Ishii, CEO of the Global Environment Facility; Feike Sijbesma, CEO & Chairman of the Managing Board DSM; Robert Glasser, newly appointed Secretary-General of the United Nations Office for Disaster Risk Reduction (UNISDR); high-level representatives of the European Commission and of the finance community.

The plenary session of Thursday 12 May will reflect on the results of the conference. Conclusions presented by members of the conference Science and Practice Advisory Committees will be discussed with high-level representatives of the host organisations and with people from the business community, and indigenous communities. In addition, awards for the best presentation and the best poster will be presented, and the venue of Adaptation Futures 2018 will be announced.



Plenary	Tuesday 10 May	09.30-12.15	Rotterdam Hall
Plenary	Wednesday 11 May	11.00-12.15	Rotterdam Hall
Plenary	Thursday 12 May	16.00-17.30	Rotterdam Hall

The plenary sessions will be simultaneous translated into French and Spanish. Headsets are available at the back of the Rotterdam Hall.

## Round Tables

Seven high level Round Table discussions will be organised on issues of crucial importance for adaptation to climate change. Seasoned practitioners, politicians and scientists will facilitate the debates, and will actively involve audiences. Round Tables are intended to advance international debates and put urgent new matters on the agenda.

- RT RT 1** The science of adaptation practices and solutions:  
new challenges for assessment and communication  
Thursday, 11.00-12.45, Town Hall
- RT RT 2** Nature based-solutions in cities  
Tuesday, 15.45-17.30, Town Hall
- RT RT 3** Business for Adaptation: challenges & opportunities  
Wednesday 09.00-10.30, Town Hall
- RT RT 4** Joining forces: tackling adaptation, alleviate poverty and inequalities  
Wednesday 13.30-15.15, Town Hall
- RT RT 5** Adaptation finance  
Wednesday, 15.45-17.30, Town Hall
- RT RT 6** National Adaptation Planning  
Thursday, 08.45-10.30, Town Hall
- RT RT 7** Adaptation Forum: adaptation under the UNFCCC after the Paris Agreement  
Thursday, 13.45-15.30, Town Hall

## Sessions themes and issues

Approximately 155 parallel sessions are organised around the seven themes and three cross-cutting issues. There are several types of sessions:

-  **Science sessions:** composed on the basis of approved abstracts
-  **Practice sessions:** sharing best practices and lessons learned, working methods, tools, evaluation findings, etc. that are of particular interest to other practitioners, but also to scientists
-  **Science-practice sessions:** sharing experiences among scientists and practitioners; co-creation, boundary work to link science and practice, joint evaluations, etc. that are interesting to practitioners and scientists

All sessions are based upon the call for abstracts and sessions, and are carefully selected by the conveners, and the Practice and Scientific Advisory Committee.



## 1. Cities and infrastructure

Cities and infrastructure are under stress from population growth, urbanisation, austerity measures, inadequate water management and environmental degradation. Changes in rainfall patterns and temperatures as well as sea-level rise add to this stress. Adaptation of the existing and newly developed urban fabric, public space, infrastructure (grey and green), energy networks, water and wastewater systems, biodiversity and buildings is essential to protect cities and their inhabitants. Adaptation requires diverse approaches that integrate and reconcile various economic, social and environmental objectives across institutional, spatial and temporal scales. This theme focuses on recent research and emerging practical experience regarding adaptation measures, policies, strategies and institutional and governance structures that anticipate climate change impacts on urban areas and infrastructure.

- 
**SC 1.1** Critical infrastructure  
 Tuesday, 13.30-15.15, Goudriaan Room II
- 
**SC 1.2** Decision support  
 Wednesday, 13.30-15.45, Goudriaan Room I
- 
**SC 1.3** Regional perspectives on vulnerability and adaptation  
 Thursday, 11.00-12.45, Leeuwen Room II
- 
**SC 1.4** Heat in the city  
 Thursday, 13.45-15.30, Goudriaan Room I
- 
**SC 1.5** Adaptation processes  
 Wednesday, 08.45-10.30, Goudriaan Room I
- 
**SC 1.6** Designing a climate resilient future  
 Thursday, 08.45-10.30, Goudriaan Room I
- 
**SC 1.7** Devising solutions to adaptation challenges in cities  
 Thursday, 11.00-12.45, Goudriaan Room I
- 
**PR 1.1** Integral adaptive concepts applied in urban deltas  
 Wednesday, 08.45-10.30, Penn Room II
- 
**PR 1.2** Climate change as an innovation driver  
 Wednesday, 13.30-15.15, Goudriaan Room II
- 
**PR 1.3** City resilience strategies - to support safe, inclusive and smart development  
 Wednesday, 13.30-15.15, Diamond Room I
- 
**PR 1.4** Managing flood risk 2.0 - the green revolution  
 Wednesday, 15.45-17.30, Goudriaan Room II
- 
**PR 1.5** Unlocking opportunities from leadership for Resilient Cities: how to make changes happen  
 Thursday, 08.45-10.30, Goudriaan Room II
- 
**PR 1.6** Urban design and flood management in resilient cities Nijmegen and Mumbai  
 Thursday, 13.45-15.30, Penn Room I
- 
**SP 1.1** Mainstreaming adaptation  
 Tuesday, 13.30-15.15, Van Oldenbarnevelt Room
- 
**SP 1.2** Resilient cities connect: helping local implementation of the Sendai framework for disaster risk reduction  
 Wednesday, 15.45-17.30, Mees Auditorium
- 
**SP 1.3** Adaptation of highway infrastructure to climate change in four Northern European countries – connected with spatial planning and other modalities  
 Tuesday, 15.45-17.30, Goudriaan Room II
- 
**SP 1.4** Climate risk management and adaptation in ports  
 Wednesday, 15.45-17.30, Van Walsum Room

## 2. Food, forestry and rural livelihoods

Food, agriculture and rural development are already affected by climate change. Agricultural systems have to transform to take account of changes in rainfall, floods and droughts, higher temperatures, salt water intrusion, loss of coastal habitats and new pests and diseases. Food security and livelihoods, often of the poorest and most vulnerable populations, are at stake. Adaptation options that can address all these stresses require integrated land and water management strategies and systems, and a major change in mind-set and decision-making processes. Forests are also increasingly threatened by fires and pests. All these issues affect the livelihoods of people living in rural areas or depending on agriculture or forest production. This theme covers recent research and emerging practical experience on how these multiple stresses can be addressed and food and forest production be improved.

-  **SC 2.1** New methods in modelling climate change impacts and adaptation  
Thursday, 11.00-12.45, Goudriaan Room II
-  **SC 2.2** Rural livelihoods and small holder farming systems  
Wednesday, 08.45-10.30, New York Room
-  **SC 2.3** Food production systems  
Thursday, 13.45-15.30, New York Room
-  **SC 2.4** Climate change adaptation with mitigation co-benefits in forests and woodlands  
Tuesday, 15.45-17.30, New Orleans Room
-  **SC 2.5** Governance, barriers and conflict in climate change adaptation  
Thursday, 11.00-12.45, New York Room
-  **SC 2.6** Risk, vulnerability and resilience in climate change adaptation  
Wednesday, 15.45-17.30, Goudriaan Room I
-  **SC 2.7** Societal responses to climate change in agriculture  
Wednesday, 13.30-15.15, New York Room
-  **SC 2.8** Adapting cropping systems to a CO<sub>2</sub> rich atmosphere: opportunities and challenges for food and water security  
Wednesday, 08.45-10.30, New Orleans Room
-  **SC 2.9** New climate change and food system assessments: coordinating global and regional scales  
Thursday, 08.45-10.30, New York Room
-  **SC 2.10** Adapting farming systems to climate variability and change in Europe: the Macsur experience  
Wednesday, 15.45-17.30, New York Room
-  **SP 2.1** Sowing diversity = harvesting security. Talented small scale farmers and committed researchers working together to develop climate change resilient crops  
Tuesday, 15.45-17.30, New York Room
-  **SP 2.2** From islands of innovation to a sea of change: how can we sustainably build resilient livelihoods and food security in the Sahel at scale  
Tuesday, 13.30-15.15, Goudriaan Room I
-  **SP 2.3** Adapting forest management for climate change: improving research-policy-practice partnerships  
Thursday, 13.45-15.30, New Orleans Room

### 3. Fresh water availability and access

Climate change, socio-economic development, ineffective water policies and governance, and basin-wide developmental interventions are causing increasing threats to the availability and access to fresh water for drinking, agriculture, ecosystems and industrial activities. Sea level rise, salinisation and long periods of drought are posing challenges to optimisation of freshwater supply and demand. This theme will cover recent research and emerging practical experience on how areas can enhance their adaptive capacity to these stresses and meet the increasing demand for water. The theme will highlight technical, economic, governance, policy and spatial planning solutions for fresh water management from local to global level.

-  **SC 3.1** Fresh water availability under drought conditions as a potential driver for water conflicts  
Tuesday, 13.30-15.15, Leeuwen Room II
-  **SC 3.2** Fresh water availability and access: guidelines and methodologies  
Tuesday, 15.45-17.30 Leeuwen Room II
-  **SC 3.3** Improving fresh water availability: measures under climate change  
Wednesday, 08.45-10.30, Leeuwen Room II
-  **PR 3.1** Green water utilities  
Wednesday, 13.30-15.15, Leeuwen Room II
-  **PR 3.2** Implementing climate resilient water management projects to increase adaptive capacities, food security & avoid conflict over resources: examples from Thailand, India, the Netherlands and Spain  
Wednesday, 15.45-17.30, Leeuwen Room II
-  **SP 3.1** Experiences with practical tools and interactive methods to enhance community resilience to droughts  
Thursday, 08.45-10.30, Leeuwen Room II
-  **SP 3.2** Moving towards tailored climate services in the Water Sector  
Thursday, 13.45-15.30, Leeuwen Room II

### 4. Public health

Public health depends to a large extent on safe drinking water, sufficient food, secure shelter and good social conditions. Climate change affects all of these conditions. The health effects of a rapidly changing climate are likely to be negative, particularly in the poorest communities, often living on marginal land and in water-scarce areas. Some of the health effects include increasing heat stress due to more frequent and intense heatwaves, increasing risks of water- and vector-borne diseases, changes in ecosystem and biodiversity, decreasing availability of staple foods, increasing allergic reactions and invading plant and animal species. This theme covers recent research and practical experience on the impact of climate change on health and on national or local health programmes and interventions that take into account measures to reduce vulnerability to future climate change.

-  **SC 4.1** Limits to human health system adaptation  
Thursday, 13.45-15.30, Leeuwen Room I
-  **SC 4.2** Adapting to heat in OECD countries  
Tuesday, 15.45-17.30, Leeuwen I
-  **SC 4.3** Adapting to heat in South Asia  
Wednesday, 15.45-17.30, Leeuwen Room I

-  **SC 4.4** Climate risks for infectious diseases  
Thursday, 08.45-10.30, New Orleans Room
-  **SC 4.5** Impacts on health in a changing environment  
Thursday, 11.00-12.45, Leeuwen Room I
-  **SP 4.1** Early warning systems in public health  
Wednesday, 08.45-10.30, Leeuwen Room I
-  **SP 4.2** Vulnerability and adaptation analysis as a tool for climate change adaptation planning in the health sector at national and local level  
Wednesday, 13.30-15.15, Leeuwen Room I
-  **SP 4.3** More heat, more disease, and less water: financing solutions to reduce the health risks of climate change  
Tuesday, 15.45-17.30, Rotterdam Hall

## 5. Ecosystems and ecosystem based adaptation

Natural ecosystems are threatened by human population growth causing growing demands on the planet's limited supplies, affecting water and habitat quality and changes in climatic patterns. Climate change deteriorates habitat quality and puts plants and animal populations under direct pressure, while also enhancing land and water use impacts. All these pressures combine to accelerate the rapid decline of biodiversity. This theme covers analyses of the problems ecosystems are facing in times of global change, and pathways to induce self-adaptability of ecosystems and biodiversity. Opportunities ecosystems can offer in terms of climate change adaptation, reconciling nature protection, nature-based solutions and social adaptation will be discussed. Opportunities for improving the governance of ecosystem services will also be covered.

-  **SC 5.1** Ecosystem services for climate adaptation  
Wednesday, 13.30-15.15, Tokyo Room
-  **SC 5.2** Ecosystem management for nature protection and climate adaptation  
Thursday, 11.00-12.45, Zaal Staal
-  **SC 5.3** Implementing ecosystem-based approaches for adaptation  
Thursday, 13.45-15.30, Zaal Staal
-  **SC 5.4** Building the knowledge base for ecosystem based adaptation  
Thursday, 08.45-10.30, Zaal Staal
-  **SC 5.5** Economic assessment of climate adaptation  
Thursday, 13.45-15.30, Mees Auditorium
-  **SP 5.1** Scaling up the role of wetlands in climate change adaptation  
Wednesday, 08.45-10.30, Goudriaan Room II
-  **SP 5.2** Exploring the potential of ecosystem based approaches – Ecosystem based Adaptation (EbA) and Ecosystem based Disaster Risk Reduction (Eco-DRR)  
Tuesday, 15.45-17.30, Penn Room I
-  **SP 5.3** Assessing ecosystem-based adaptation  
Wednesday, 08.45-10.30, Penn Room I

## 6. Disaster risk reduction

In spite of the fact that the risk of floods, droughts and other weather-related disasters is influenced by a combination of climate change and socio-economic factors, disaster risk reduction and climate change adaptation are often quite separate fields of research, practice and policy. Yet the two fields have much in common. This theme discusses how climate change affects disasters; it explores links, synergies and differences between disaster risk reduction and climate change adaptation. Lessons are presented from disaster risk reduction research, practice and policy that are relevant to climate change adaptation, and challenges and opportunities for novel adaptation and risk management partnerships are discussed. The session focuses especially, but not exclusively, on floods and droughts.

- 
**SC 6.1** Measuring and enhancing resilience  
 Tuesday, 13.30-15.15, Diamond Room II
- 
**SC 6.2** Floods: recent experience and long-term planning  
 Tuesday, 15.45-17.30, Diamond Room II
- 
**SC 6.3** Tools and approaches to assess disaster reduction strategies  
 Wednesday, 08.45-10.30, Diamond Room II
- 
**SC 6.4** Planning for climate change  
 Thursday, 13.45-15.30, Diamond Room I
- 
**SC 6.5** Disaster risk preparedness  
 Wednesday, 13.30-15.15, Rotterdam Hall
- 
**SC 6.6** Linking climate change adaptation, disaster risk reduction, and loss & damage: lessons toward resilient Asia-Pacific region  
 Thursday, 13.45-15.30, Tokyo Room
- 
**SC 6.7** Megacity transitions: towards justice with resilience  
 Wednesday, 15.45-17.30, Antwerp Room
- 
**SP 6.1** Enhancing adaptation to changing extremes: showcasing standard operating procedures for forecast-based action from three continents  
 Tuesday, 13.30-15.15, Penn Room I
- 
**SP 6.2** Climate risk management: adapting to climate change and reducing disaster risks through integrated risk transfer solutions  
 Thursday, 11.00-12.45, Penn Room II
- 
**SP 6.3** How to promote adaptation towards resilient flood risk governance in Europe? Key recommendations from STAR-FLOOD in a practitioners' perspective  
 Tuesday, 13.30-15.15, Penn Room II
- 
**SP 6.4** How to integrate Climate Change Adaptation and Disaster Risk Reduction policy and practice at different governance scales  
 Wednesday, 08.45-10.30, Tokyo Room
- 
**SP 6.5** Increasing resilience through Building with Nature along tropical coasts  
 Thursday, 13.45-15.30, Antwerp Room

## 7. The Arctic

In the Arctic, the effects of climate change have been among the most striking to appear to date. People living in the Arctic are adapting to rapidly changing conditions, yet may still see their livelihoods and cultures disappear. This is not only due to the direct effects of climate change: commercial interests from extractive industries, shipping and tourism are benefiting from improved access to the Arctic, which adds to the direct climate stress but also creates economic opportunities. This theme presents the latest research on adaptation needs, options and constraints in the Arctic, from the community level to the supranational scale. It also highlights the analytical approaches and methods developed by a range of scientific disciplines to conducting adaptation research in the Arctic.

-  **SC 7.1** Scenarios, governance and adaptation in the Arctic  
Tuesday, 13.30-15.15, Van Walsum Room
-  **SC 7.2** Understanding adaptation in the Arctic  
Tuesday, 15.45-17.30, Van Walsum Room
-  **SC 7.3** The role of narratives and discourses in shaping adaptation, adaptive capacity and mitigation to climate change: cases from the Arctic  
Wednesday, 08.45-10.30, Van Walsum Room
-  **SP 7.1** Connecting Arctic researchers and industry: a dialogue for societal benefit  
Wednesday, 13.30-15.15, Van Walsum Room

## 8. Risk assessment, adaptation planning and evaluation

Planning for climate change calls for risk assessment methods that take a longer-term perspective. Uncertainty about climate change increases the complexity of assessing and evaluating risk. Various methods have been applied to develop adaptation plans and strategies from local to national and regional scales. Adaptation plans and strategies are often most effective when integrated with other policy fields and inclusive of all relevant stakeholders. Better methods and tools for simulating and communicating climate risk to those who take decisions and influence outcomes, might help bridge the gap between science and decision-making. Visualisation techniques are helpful when interacting with stakeholders, elicit their knowledge and increase their commitment. In addition, climate services can play an important part in assessing risk and in planning for adaptation. In this cross-cutting issue, risk assessment methods and techniques are discussed, and the effectiveness of adaptation plans and strategies is assessed. Special attention is given to the evaluation of adaptation projects: how can progress and success in adaptation be measured? What are lessons learned?

-  **SC 8.1** Risk management and risk perception  
Thursday, 08.45-10.30, Van Oldenbarnevelt Room
-  **SC 8.2** Vulnerability assessment  
Thursday, 11.00-12.45, Van Oldenbarnevelt Room
-  **SC 8.3** Multi-sector integrated assessments of impacts and adaptation  
Thursday, 13.45-15.30, Van Oldenbarnevelt Room
-  **SC 8.4** Indicators and modelling of impacts and adaptation  
Tuesday, 13.30-15.15, Antwerp Room
-  **SC 8.5** Stakeholder needs and adaptation  
Tuesday, 15.45-17.30, Beurs Lounge
-  **SC 8.6** Participatory processes and co-production of adaptation knowledge  
Tuesday, 15.45-17.30, Van Oldenbarnevelt Room

-  **SC 8.7** Adaptation support tools  
Thursday, 11.00-12.45, Diamond Room I
-  **SC 8.8** Adaptation pathways and maladaptation  
Thursday, 08.45-10.30, Mees Auditorium
-  **SC 8.9** Use and usability of climate information in adaptation planning  
Thursday, 08.45-10.30, Beurs Lounge
-  **SC 8.10** Adaptation in coastal systems  
Tuesday, 15.45-17.30, Mees Auditorium
-  **SC 8.11** Gender and adaptation  
Wednesday 08.45-10.30, Antwerp Room
-  **SC 8.12** Adaptation guidance  
Tuesday, 13.30-15.15, Mees Auditorium
-  **SC 8.13** Economics, investment and business  
Wednesday, 13.30-15.15, Zaal Staal
-  **SC 8.14** The role of PROVIA: identifying key future challenges across scales  
Wednesday, 13.30-15.15, New Orleans Room
-  **SC 8.15** Tracking adaptation to climate change for MRE  
Thursday, 11.00-12.45, Tokyo Room
-  **SC 8.16** Planning the next generation of adaptation research: how to coordinate, broker and amplifying large research consortia to achieve development impact  
Thursday, 13.45-15.30, Beurs Lounge
-  **PR 8.1** Adaptation to climate change in the IJsselmeer region: creating the future by addressing the past  
Tuesday, 13.30-15.15, Tokyo Room
-  **PR 8.2** Integrated risk management: community evidence as a catalyst for adaptation policies and investments  
Wednesday, 15.45-17.30, Tokyo Room
-  **PR 8.3** Drawing on experts and implementors beyond city government: better climate adaptation inputs and outputs  
Wednesday, 08.45-10.30, Van Oldenbarnevelt Room
-  **PR 8.4** Reducing risks and seizing opportunities: lessons from the development and implementation of business adaptation strategies  
Tuesday, 15.45-17.30, Tokyo Room
-  **PR 8.5** Advancing city adaptation monitoring, evaluation and reporting  
Wednesday, 13.30-15.15, Beurs Lounge
-  **PR 8.6** Climate adaptation platforms in action and networks: the practical challenges and lessons learned from designing and operationalising web-based platforms  
Thursday, 13.45-15.30, Goudriaan Room II
-  **PR 8.7** Country experiences in mainstreaming climate resilience into development planning: lessons learned from the Pilot Program for Climate Resilience (PPCR)  
Tuesday, 13.30-15.15, Beurs Lounge
-  **PR 8.8** Monitoring, reporting and evaluating adaptation: current practice and looking ahead  
Wednesday, 08.45-10.30, Beurs Lounge
-  **PR 8.9** Managing climate change risks amidst uncertainty: designing development co-operation to support national and sub-national adaptation  
Wednesday, 08.45-10.30, Diamond Room I

-  **SP 8.1** Community based adaptation: lessons, challenges and pathways  
Tuesday, 13.30-15.15, Zaal Staal
-  **SP 8.2** Goals, targets and metrics: new ideas for tracking adaptation success in cities, forests, water, finance, and national planning  
Wednesday, 15.45-17.30, Beurs Lounge
-  **SP 8.3** Applying adaptation pathways practice for resilient and sustainable development  
Wednesday, 08.45-10.30, Mees Auditorium
-  **SP 8.4** Droughts from a social, economic and technical perspective  
Tuesday, 13.30-15.15, New York Room
-  **SP 8.5** Developing action plans and assessing costs and benefits for prioritising, programming and financing adaptation in developing countries  
Tuesday, 15.45-17.30, Zaal Staal
-  **SP 8.6** Monitoring, evaluating, and scaling up adaptation: evidence-based learning  
Thursday, 11.00-12.45, Mees Auditorium
-  **SP 8.7** Resilient risk management strategies for critical infrastructure within cities  
Wednesday, 15.45-17.30, Oscar Auditorium
-  **SP 8.8** User-oriented climate services: how can national meteorological and climatological data providers better meet practitioner needs?  
Wednesday, 13.30-15.15, Van Oldenbarnevelt Room
-  **SP 8.9** Exploring the adaptation potential of technologies  
Thursday, 13.45-15.30, New Orleans Room
-  **SP 8.10** Delta approaches: adaptive delta management and other support tools for improving resilience of the world's deltas  
Thursday, 11.00-12.45, Beurs Lounge
-  **SP 8.11** Measuring resilience of adaptation interventions and beyond  
Thursday, 08.45-10.30, Diamond Room I
-  **SP 8.12** Climate risk information for development, disaster risk reduction, and conservation  
Wednesday, 15.45-17.30, Van Oldenbarnevelt Room
-  **SP 8.13** Adaptive policy pathways planning: sharing techniques, tools and experiences across domains, jurisdictions and institutional settings  
Tuesday, 13.30-15.15, Rotterdam Hall

## 9. Institutions and governance

Adaptation to climate change is not only a technological and financial challenge, but also a social, political and normative one. Adaptation governance is multi-level, cutting across different sectors and policy domains, and involving a wide range of actors and stakeholders. These and other factors increase the complexity of decision-making. Institutions need to be able to handle the challenges of climate change adaptation and capacity building needs. This may require changes in societal preferences and priorities, and their interactions with knowledge development. This cross-cutting issue discusses the potential for new governance arrangements from local to the global level for effective adaptation, the conditions of their emergence and adoption, capacity building, new decision-making tools, the social justice implications of adaptation policies, framing of adaptation and forms of science-policy interactions.

-  **SC 9.1** Water and climate adaptation governance  
Thursday, 11.00-12.45, Rotterdam Hall
-  **SC 9.2** Power and agency issues in climate adaptation  
Wednesday, 13.30-15.15, Oscar Auditorium
-  **SC 9.3** Science and policy interfaces for adaptation  
Wednesday, 15.45-17.30, Zaal Staal
-  **SC 9.4** Governance challenges of climate adaptation  
Wednesday, 08.45-10.30, Oscar Auditorium
-  **SC 9.5** Implementation challenges of climate adaptation  
Tuesday, 13.30-15.15, Oscar Auditorium
-  **SC 9.6** Climate adaptation goes global  
Thursday, 08.45-10.30, Tokyo Room
-  **SC 9.7** The policy-economic aspects of adaptation responses  
Tuesday, 15.45-17.30, Oscar Auditorium
-  **SC 9.8** New governance challenges for climate adaptation: comparative perspectives on inclusive policy tools for multi-scalar risk management  
Wednesday, 15.45-17.30, Oscar Auditorium
-  **SC 9.9** Exploring spatial planning as a means to deal with flood risks: comparing experiences in the face of institutional differences between the US and the Netherlands  
Thursday, 08.45-10.30, Oscar Auditorium
-  **SC 9.10** Incorporating uncertain scientific evidence into real-world adaptation decision making: what are the missing links?  
Thursday, 11.00-12.45, Oscar Auditorium
-  **SC 9.11** Institutional economics of adaptation  
Thursday, 13.45-15.30, Oscar Auditorium
-  **SC 9.12** Local governance of adaptation in urbanising cities  
Thursday, 08.45-10.30, Diamond Room II
-  **SC 9.13** Adapting scientific methodologies - how to compare and evaluate case studies as well as integrate and upscale data and information?  
Thursday, 13.45-15.30, Diamond Room II
-  **PR 9.1** Water governance in peri-urban South Asia: impact of urbanisation and climate change  
Thursday, 08.45-10.30, Leeuwen Room I
-  **PR 9.2** Direct access to adaptation funding: five years of experience by pioneering organisations  
Tuesday, 13.30-15.15, Diamond Room I
-  **PR 9.3** The best of both worlds: debating technical and participatory approaches for urban resilience  
Wednesday, 15.45-17.30, Diamond Room I

-  **PR 9.4** The NAP process: opportunities and challenges for climate resilient development  
Thursday, 11.00-12.45, Diamond Room II
-  **PR 9.5** Pathways to resiliency: a co-creation workshop with experts from Rotterdam and New York City  
Wednesday, 15.45-17.30, Penn Room II
-  **PR 9.6** Standards for adaptation of infrastructures to climate change  
Thursday, 08.45-10.30, Van Walsum Room
-  **PR 9.7** Synergies between adaptation and mitigation: integration of resilience in LEDS in Latin America  
Thursday, 13.45-15.30, Penn Room II
-  **PR 9.8** Territorial development and adaptation to climate change  
Tuesday, 15.45-17.30, Goudriaan Room I
-  **PR 9.9** What does a day of a student look like in Rotterdam in 2030  
Thursday, 13.45-15.30, Rotterdam Hall
-  **SP 9.1** Resilient risk governance systems: enhancing integration and adaptive capacity across scales  
Thursday, 11.00-12.45, Penn Room I
-  **SP 9.2** Building flood resilience: an innovative partnership integrating science and practice  
Wednesday, 08.45-10.30, Zaal Staal
-  **SP 9.3** Towards more informed climate adaptation: considerations of ethics in stakeholder participation and decision-making  
Tuesday, 15.45-17.30, Penn Room II
-  **SP 9.4** Connections and disconnections between national and local agendas and aspirations for climate adaptation and development  
Thursday, 08.45-10.30, Penn Room I
-  **SP 9.5** Implementing OECD Principles on Water Governance: building trust and engagement for climate adaptation and disaster risk reduction  
Thursday, 08.45-10.30, Penn Room II
-  **SP 9.6** Local climate change adaptation: barriers and enablers for mainstreaming and implementation  
Tuesday, 15.45-17.30, Diamond Room I
-  **SP 9.7** Indigenous climate change adaptation and transformations: adapting to future challenges by learning from the past  
Thursday, 11.00-12.45, New Orleans Room

## 10. Finance, investment and business

Some of the most challenging questions relate to the financing and economics of adaptation: What are the financing and investment needs for adaptation? What are the costs and benefits of adaptation? Are domestic and international resources adequate and easy to access? How do they affect when and how best to adapt? What do we need to do now and what can be postponed? What are effective, equitable and legitimate strategies to finance adaptation measures? When are investments in adaptation profitable? Whether large or small, businesses often are affected by climate change through disruptions in supply chains. Challenges are many when links in the chain not under their direct control are affected. How can supply chains be made more resilient? This cross-cutting theme discusses issues such as methods to be used to develop and appraise adaptation options under conditions of climate uncertainty, the most cost-effective measures to gain the most socially desired benefits, innovative financing models for adaptation, possible partners for financing alliances and resilience of businesses for climate change.

-  **SC 10.1** Finance for adaptation  
Thursday, 08.45-10.30, Antwerp Room
-  **SC 10.2** Sectoral perspectives on climate finance, investment and business  
Thursday, 11.00-12.45, Antwerp Room
-  **SC 10.3** Options and opportunities for the loss and damage mechanism: understanding the roles of risk management, finance and climate justice  
Tuesday, 13.30-15.15, Leeuwen Room I
-  **PR 10.1** Climate change adaptation and SMEs - case studies from several parts of the world and different sectors  
Wednesday, 15.45-17.30, Penn Room I
-  **PR 10.2** The emerging role of accountants in enabling organisational adaptation and resilience to a changing climate  
Wednesday, 15.45-17.30, New Orleans Room
-  **PR 10.3** Insights from inclusive insurance and applications for climate change adaptation: examples from public private partnerships and participatory index insurance design  
Wednesday, 13.30-15.15, Antwerp Room
-  **PR 10.4** Making climate finance accessible to women  
Wednesday, 13.30-15.15, Penn Room II
-  **PR 10.5** Bridging the gap: initiatives for better access to climate finance in Latin America  
Thursday, 11.00-12.45, Van Walsum Room
-  **PR 10.6** Adaptation finance for private sector  
Wednesday, 13.30-15.15, Diamond Room II
-  **PR 10.7** Bankable investment in climate adaptation  
Wednesday, 13.30-15.15, Mees Auditorium
-  **SP 10.1** Unlocking the potential of pastoralism: opportunities for adaptation and development in Africa's drylands  
Thursday, 13.45-15.30, Van Walsum Room
-  **SP 10.2** Liquid assets and adaptation futures  
Tuesday, 15.45-17.30, Antwerp Room
-  **SP 10.3** Adaptive value chains: addressing the challenges of cross-sectoral adaptation  
Wednesday, 13.30-15.15, Penn Room I
-  **SP 10.4** Adaptation as an innovation and market opportunity  
Wednesday, 15.45-17.30, Diamond Room II

## Socials: receptions and conference dinner

During the conference every evening receptions will be offered on the Adaptation Expo floor, all included in the registration fee. The reception on Thursday 12 May will be held in the exhibition hall of the IABR-2016 (International Architecture Biennale Rotterdam), access to the exhibition is included.

A conference dinner will be organised on Wednesday 11 May. Participation is optional and not included in the registration fee.

### Monday 9 May

17.00 – 19.00 Welcome reception and start registration

### Tuesday 10 May

17.30 – 19.00 Poster session and reception at the Adaptation Expo

### Wednesday 11 May

17.30 – 19.00

Poster session and reception at the Adaptation Expo

19.00 – 22.00

**Conference dinner and boat trip: Rotterdam by night**

The conference dinner will be held on the historic paddle steamer De Majesteit. Once aboard you will experience the bygone days, when steamboating was only affordable by the upper class.

**The evening includes:** transportation to/from the conference venue - boatdinner, buffetstyle and drinks

**Costs** € 65 per person



### Thursday 12 May

18.30 – 21.00

**IABR architecture biennale reception**

The IABR is an architecture biennale that conducts ongoing research into the future of the city. IABR-2016 is not just an exhibition, but also a workshop. For ten weeks, in the heart of the exhibition, the WHAT'S NEXT? programme will unfold: discussions and debates, lectures, workshops, and conferences. An open space, offering room for reflection, exploration, and imagination.

Adaptation Futures and IABR are working together in organising a reception for participants of AF2016.

Drinks and small bites will be served and you will have access to the exhibition floor.

Please register for the IABR reception at the registration desk during the breaks.

## Business day

Wednesday 11 May is Business Day. This day will build closer ties between business, academia and policy by exploring their common opportunities and challenges. In the morning you can visit the round table Business for Adaptation: challenges & opportunities (RT 3). This round table will engage you in an in-depth moderated discussion on topics such as adaptation in supply chains, business access to climate finance and climate risk management tools and linkages between private and public sector actors.

In the afternoon you can join the following climate adaptation sessions tailored to business:

-  **PR 10.1** Climate adaptation & SMEs
-  **PR 10.2** Accountants & Adaptation
-  **PR 10.3** Climate insurance & PPPs
-  **PR 10.6** Private adaptation finance
-  **PR 10.7** Bankable Adaptation Investments
-  **SP 10.3** Adaptive value chains
-  **SP 10.4** Adaptation: innovation & opportunity

The day includes various networking- and matchmaking opportunities, lunch among business exhibitions at the Adaptation Expo. Organisations and companies will showcase ground-breaking climate adaptation tools in the tool shed sessions.

Get social [@confAF2016](#) [#adaptationpays](#)

## Earth Journalism Network

Internews' Earth Journalism Network (EJN) will be carrying out a Training of Trainers course at the Adaptation Futures 2016 conference. A global community of over 8,000 journalists from more than 120 countries, EJN is committed to improving the quantity and quality of environmental and climate coverage, and has trained over 4,500 reporters around the world. To continue capacity-building, they will bring up to 20 trainers to Rotterdam to learn more about climate resilience and how to report on it in an engaging fashion. Along with EJN staff, the trainers – who mostly come from developing countries – will arrive several days before the conference to take part in capacity-building sessions on how to train journalists to improve their coverage of climate change, to combine data with journalism, to raise funds, report on their activities and other management and networking skills. Once the Adaptation Futures conference starts, they will take part in the sessions to learn the latest techniques and activities to build resilience among the most vulnerable communities – particularly those seeking to aid women, children and indigenous people. Many of the trainers will also produce stories that will be aired or published in their home country media. This programme is also being supported by a grant from the Oak Foundation. In the closing plenary one of the trainee-journalists will reflect on the conference.

## Awards

During the plenary closure on Thursday 12 May the 'Young scientist best presentation and best poster award' will be announced. The Conference's Scientific Advisory Committee will act as the jury of these awards, conferred according to the following terms:

- for presenters whose science abstract is approved through the AF2016 submission system
- for Young scientists up to and including 30 years of age
- Award prize: € 1.000

## Flying reporters

Around 16 students from Wolfert Bilingual Secondary School will act as Flying Reporters during the whole conference. The Wolfert is an internationally oriented school in the city centre of Rotterdam. Its students regularly take part in international exchanges and every year a Model UN is organised. The reporters will talk to participants and speakers. Some interviews will be (live) streamed on the internet e.g. using Periscope.



**PR 9.9** What does a day of a student look like in Rotterdam in 2030  
Thursday, 13.45-15.30, Rotterdam Hall

## Living Planet Symposium 2016 (live streaming during AF2016)

The 2016 European Space Agency Living Planet Symposium in Prague follows the previous successful symposia held in Edinburgh (2013), Bergen (2010), Montreux (2007) and Salzburg (2004).

### Location

Van der Werff Studio (second floor)

### Sessions live streamed for Prague

#### Tuesday 10 May

13.10 – 14.50 [Permafrost and freshwater ice](#)  
15.20 – 17.00 [Snow 1:land](#)

#### Wednesday 11 May

08.00 – 09.40 [Agriculture - Farming](#)  
13.10 – 14.50 [Biodiversity / Terrestrial Ecosystems](#)  
15.20 – 17.00 [Biodiversity / Aquatic ecosystems](#)

#### Thursday 12 May

08.00 – 09.40 [Water cycle](#)  
10.10 – 11.50 [Water Bodies](#)  
13.10 – 14.50 [Wetlands](#)

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# ADAPTING CITIES

WE PLAN AND DESIGN  
THE COMMUNITIES  
AND CITIES OF THE FUTURE.



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SESSION OVERVIEW](#)

# MONDAY 9 MAY 2016

17.00 – 19.00

Welcome reception  
and start registration

# TUESDAY 10 MAY 2016

08.00 – 19.00	Registration
09.00 – 19.00	Adaptation Expo
09.30 – 10.45	Plenary
10.45 – 11.15	Break
11.15 – 12.15	Plenary
12.15 – 13.30	Lunch
13.30 – 15.15	Sessions
15.15 – 15.45	Break
15.45 – 17.30	Sessions
17.30 – 19.00	Reception and poster session



Vivienne Parry



Melanie Schultz van Haegen



Robert-Jan Smits



Ibrahim Thiaw



Christiana Figueres



Roger Pulwarty



Debra Roberts



John Firth



Mark Watts



## Plenary

09.30 – 10.45

### Rotterdam Hall

#### Moderator

Vivienne Parry, United Kingdom

#### Welcome by the hosts

- Melanie Schultz van Haegen, Minister of Infrastructure and the Environment, the Netherlands
- Robert-Jan Smits, Director-General for Research and Innovation, European Commission
- Ibrahim Thiaw, Deputy Executive Director, United Nations Environment Programme

#### Setting the scene for practices and solutions

- Christiana Figueres, Executive Secretary of the United Nations Framework Convention on Climate Change
- Roger Pulwarty, Senior Advisor for Climate Research, and, Director of the National Integrated Drought Information System, National Oceanic and Atmospheric Administration (NOAA), USA

#### Opening of the Adaptation Expo

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**10.45 – 11.15**

**Break**

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## Plenary

11.15 – 12.15

### Rotterdam Hall

Where will we go, a short film of Kadir van Lohuizen, the Netherlands

#### Panel

- Debra Roberts, eThekweni Municipality, Durban, South Africa, and IPCC Working Group II
- John Firth, Acclimatise, United Kingdom
- Christiana Figueres, United Nations Framework Convention on Climate Change
- Roger Pulwarty, Senior Advisor for Climate Research, and, Director of the National Integrated Drought Information System, National Oceanic and Atmospheric Administration (NOAA), USA
- Mark Watts, C40 Cities Climate Leadership Group, USA

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**12.15 – 13.30**

**Lunch**

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## Theme 1 • Cities and infrastructure

13.30 – 15.15

Goudriaan Room II

### SC 1.1

## Critical infrastructure

Chair  
Rapporteur

Chris Zevenbergen, UNESCO-IHE/Delft University of Technology, the Netherlands  
Tim Busker, Utrecht University, the Netherlands

#### Presentations

The relevance of cascading effects for adapting critical infrastructures to climate change

Markus Groth, Climate Service Center Germany (GERICS), Germany

Adapting long-lived infrastructure to uncertain climate change

Klaus Eisenack, Carl von Ossietzky University Oldenburg, Germany

The impacts of global and regional change on the resilience of critical infrastructures

Joern Birkmann, University of Stuttgart, Germany

Simulated adaptation in storm water systems: evaluating the efficiency of adaptation pathways

Adam McCurdy, University of Colorado, USA

A Pan-European framework for strengthening critical infrastructure resilience to climate change

Thanasis Sfetsos, National Center for Scientific Research Demokritos, Greece



## Theme 3. Fresh water availability and access

13.30 – 15.15

Leeuwen Room II

### SC 3.1

## Fresh water availability under drought conditions as a potential driver for water conflicts

Chairs  
Rapporteur

Roland Schulze, University of KwaZulu-Natal, South Africa  
Carolien Caspers, Radboud University, the Netherlands

#### Presentations

Water security and climate change: an evolving research agenda

Declan Conway, London School of Economics, United Kingdom

Regional headwater governance in Himalaya for water security in South Asia under climate change

Prakash Chandra, Tiwari Kumaun University, India

Hotspots of climate change-enhanced conflict risks

Karen Meijer, Deltares, the Netherlands

Using a novel climate – water conflict vulnerability index to capture double exposures in Lake Chad

Uche Okpara, University of Leeds, United Kingdom



## Theme 6. Disaster risk reduction

13.30 – 15.15

Diamond Room II

### SC 6.1

## Measuring and enhancing resilience

Chair  
Rapporteur

Daniela Jacob, Climate Service Center Germany (GERICS), Germany

Joris Baars, Wageningen UR, the Netherlands

Presentations

Measuring resilience – Strengths, gaps and future directions

Aditya Bahadur, Overseas Development Institute (ODI), United Kingdom

Capacity building for disaster risk management

Zoe Scott, University of East Anglia, United Kingdom

The influence of livelihood assets to resilience household in flooding condition at rural Indonesia

Fatimah Azzahra, Bogor Agricultural University, Indonesia

Understanding adaptation and resilience in the national disaster resilience competition in the USA

Jesse Keenan, Columbia University, USA

Improving the business case for resilience

Emily Wilkinson, Climate and Environment Programme, Overseas Development Institute (ODI), United Kingdom



## Theme 7. The Arctic

13.30 – 15.15

Van Walsum Room

### SC 7.1

## Scenarios, governance and adaptation in the Arctic

Chair  
Rapporteur

James Ford, McGill University, Canada

Helena de Boer, Ministry of Foreign Affairs, the Netherlands

Presentations

Barents region futures under different global socio-economic scenarios

Bob van Oort, Center for Climate and Environmental Research Oslo (CICERO), Norway

The construction of socioeconomic scenarios to guide adaptation in the Eurasian Arctic

Karoliina Pilli-Sihvola, Finnish Meteorological Institute, Finland

Offshore is onshore

Rasmus Dahlberg, Copenhagen Center for Disaster Research, Denmark



## Issue 8. Risk assessment, adaptation planning and evaluation

13.30 – 15.15

Antwerp Room

### SC 8.4

## Indicators and modelling of impacts and adaptation

Chair

Paula Harrison, University of Oxford, United Kingdom

Rapporteur

Frederik Wardenier, The Hague University of Applied Sciences, the Netherlands

Presentations

Key findings from the fourth generation of European-wide climate change impact assessments

Hans-Martin Füssel, European Environment Agency (EEA), Denmark

How do models treat climate change adaptation?

Ian Holman, Cranfield University, United Kingdom

Behavioural models for climate change adaptation in land-based sectors

Calum Brown, University of Edinburgh, United Kingdom

Role-playing games in validating agricultural land-use adaptation decisions in an agent-based model

Amadou Mahamadou Laouali, Regional Centre AGRHYMET, Niger

Protected areas resilient to climate change

Elise Belle, United Nations Environment Programme, World Conservation Monitoring Centre (UNEP-WCMC), United Kingdom



## Issue 8. Risk assessment, adaptation planning and evaluation

13.30 – 15.15

Mees Auditorium

### SC 8.12

## Adaptation guidance

Chair

Rob Swart, Wageningen UR, the Netherlands

Rapporteur

Jos Baars, the Netherlands

Presentations

Advances in guidance standards for adaptation planning

Mark Stafford Smith, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia

Demand vs. supply of adaptation support in Nepal: what factors drive to the sustainability?

Dipak Bishwokarma, Multi-Stakeholder Forestry Programme, Nepal

Base: adaptation in Europe from a bottom-up and top-down perspective

Hans Sanderson, Aarhus University, Denmark

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Redundancy, an urban design tool to measure passive survivability:

Caribbean experience

Tapan Kumar Dhar, University of Waterloo, Canada

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Tef production in Ethiopia: when what we like is more important than what works

Tesfaye Shiferaw Sida, International Maize and Wheat Improvement Center-CIMMYT, Ethiopia

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## Issue 9. Institutions and governance

13.30 – 15.15

Oscar Auditorium

### SC 9.5

## Implementation challenges of climate adaptation

Chair

Rapporteur

Tiago Capela Lourenço, Lisbon University, Portugal

Olaf Meynecke, Griffith University, Australia

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Presentations

Climate change adaptation: Implementation barriers and enablers across Europe

Olivia Rendon, University of Leeds, United Kingdom

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Benchmarking government adaptation progress: identifying barriers and enablers

Christopher Lee, NSW Office of Environment and Heritage, Australia

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Implementing climate change adaptation policies: problems of fit and response strategies

Marco Pütz, Swiss Federal Research Institute WSL, Switzerland

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Governance of social dilemma in adaptation

Jochen Hinkel, Global Climate Forum, Germany

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Protecting coastal agriculture in regional Australia by uncovering limits to adaptive capacity

Shyamalee Gunaseakra, Central Queensland University, Australia (and Ministry of Public Administration and Management, Sri Lanka)



## Issue 10. Finance, investment and business

13.30 – 15.15

Leeuwen Room I

# SC 10.3 Options and opportunities for the loss and damage mechanism: understanding the roles of risk management, finance and climate justice

COP 21 in Paris gave formal recognition to the Warsaw Loss and Damage Mechanism (WIM) and established the WIM as a separate field of negotiation in addition, not under adaptation. There is currently very little understanding of the role and potential of the WIM. This session aims to advance debate in science and policy by presenting state-of-the-art research on extreme events attribution and loss projections; the framing of loss and damage; the potential of climate risk management; and innovative options in negotiations.

<b>Organised by</b>	Reinhard Mechler, Thomas Schinko, International Institute for Applied Systems Analysis (IIASA) / Vienna University of Economics and Business/ University of Graz, Austria Laurens Bouwer, Deltares, the Netherlands Swenja Surminski, London School of Economics (LSE), United Kingdom Rachel James, University of Oxford, United Kingdom
<b>Chair</b>	Reinhard Mechler, International Institute for Applied Systems Analysis (IIASA), Austria
<b>Rapporteur</b>	Thomas Schinko, Austria International Institute for Applied Systems Analysis (IIASA), Austria

<b>Presentations</b>	Trends and projections of weather impacts: attribution relevant to the Loss & Damage Mechanism Laurens Bouwer, Deltares, the Netherlands
	Perceptions of loss and damage from a range of stakeholders: implications for science and policy Rachel James, University of Oxford, United Kingdom
	A (physical) science perspective of the risk of Loss and Damage: implications for decision making Swenja Surminski, Ana Lopez, London School of Economics (LSE), United Kingdom
	A climate risk management approach for the Warsaw Loss & Damage Mechanism Reinhard Mechler, Thomas Schinko, International Institute for Applied Systems Analysis (IIASA) / Vienna University of Economics and Business/ University of Graz, Austria
	Discussion: Innovative perspectives on Loss and Damage



## Issue 8. Risk assessment, adaptation planning and evaluation

13.30 – 15.15

Tokyo Room

### PR 8.1 Adaptation to climate change in the IJsselmeer region: creating the future by addressing the past

After the large flooding of the Zuiderzee region in 1916, the Afsluitdijk was constructed in 1932 as a safety measure. In the following decades, fertile land could be reclaimed, offering many economic opportunities. The now called IJsselmeer region is of great value to the Netherlands in terms of its natural environment and cultural history. However, new challenges related to water management issues and the need to balance social, economic and ecological interests require an adaptive and integrative response. This will be the focus of the session. Facilitated by reflections on international cases, the audience will be challenged to join the discussion.

**Organised by** Flos Fleischer, Foundation 'Het Blauwe Hart', the Netherlands  
Pieter den Besten, Ministry of Infrastructure and the Environment, the Netherlands

**Partners** Rebuild by Design, USA

Dutch Society for Nature Conservation, the Netherlands

**Chair** Henk Ovink, Special Envoy for International Water Affairs for the Kingdom of the Netherlands

**Rapporteur** Flos Fleischer, Foundation 'Het Blauwe Hart', the Netherlands

**Presentations** Film presentation and short introductions on the challenges in the IJsselmeer region:

Peter Heij, Ministry of Infrastructure and the Environment, the Netherlands

Marc van den Tweel, Dutch Society for Nature Conservation, the Netherlands

Leen Verbeek, Metropolitan Delta Association, the Netherlands

Ingwer de Boer, special advisor of Ministry of Infrastructure and the Environment, the Netherlands

Reflection based on experiences of the Rebuild by Design programme (New York, USA)  
Amy Chester, Managing Director Rebuild by Design, USA

Lake Taihu (China): balancing ecology and economy

Zhu Wei, Deputy Director General of Taihu Basin Authorities, China



## Issue 8. Risk assessment, adaptation planning and evaluation

13.30 – 15.15

Beurs Lounge

PR 8.7

# Country experiences in mainstreaming climate resilience into development planning: lessons learned from the Pilot Program for Climate Resilience (PPCR)

Because project-based activities alone have limited potential to affect national or sector-wide transformations, many countries are now adopting a programmatic approach that links strategic planning with investment to advance their adaptation agendas. In this session, three countries will share lessons on what has worked and what has not – and what would they do differently – as they work to mainstream resilience into development planning and investment. The presenters will clearly articulate how a programmatic approach has helped them shape investment plans and priorities across key economic sectors and with the participation of diverse stakeholder groups. Participants will interact through Q&A.

### Organised by Partners

Rachel Allen, Shaanti Kapila, Focal Point, Saint Lucia  
Climate Investment Funds Administrative Unit (World Bank Group), USA  
Governments of St. Lucia, Zambia and Tajikistan

### Chair

Rachel Allen, Pilot Program for Climate Resilience (PPCR), Climate Investment Funds, USA

### Rapporteur

Shaanti Kapila, Climate Investment Funds (CIF), USA

### Presentations

Lessons in mainstreaming climate resilience from:

Tajikistan Jamshed Hasanov, PPCR Secretariat

Zambia Jean Mukumwa, Interim Climate Change Secretariat, Ministry of Finance

St. Lucia Crispin D'Auvergne, Chief Sustainable Development & Environment Officer, Government of St. Lucia

Lessons learned from the PPCR portfolio

Kanta Kumari Rigaud, The World Bank



## Issue 9. Institutions and governance

13.30 – 15.15

Diamond Room I

### PR 9.2 Direct access to adaptation funding: five years of experience by pioneering organisations

Being first of three international funds to allow 'direct access' to its resources, the Adaptation Fund enables countries to have their agencies directly manage funds for adaptation projects, which helps them break free from reliance on international organisations. Twenty countries have successfully done so. In this panel session, the Fund and four national implementing entities will share their experiences in direct access, discuss the challenges they encountered in pioneering this ground-breaking modality, and chart out possibilities for the future. The speakers will also discuss what this experience can offer to the new scaled up adaptation resources expected to become available.

#### Organised by Partners

Mikko Ollikainen, Adaptation Fund Board Secretariat, USA  
Centre de Suivi Ecologique, Senegal  
Micronesia Conservation Trust, Federated States of Micronesia  
South African National Biodiversity Institute, South Africa

#### Chair Rapporteur

Mikko Ollikainen, Adaptation Fund Board Secretariat, Finland / USA  
Hugo Remaury, Adaptation Fund Board Secretariat, Senegal / USA

#### Presentations

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The Adaptation Fund experience: what we have learned

Daouda Ndiaye, Adaptation Fund Board Secretariat, Senegal / USA

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Getting ready for direct access: how experiences from the first National Implementing Entity (NIE) and the first direct access project can help other developing countries

Dethie Soumare Ndiaye, Centre de Suivi Ecologique, Senegal

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Direct access as a learning exercise: developing pilot initiatives in different states and sectors

B. Suri Babu, National Bank for Agriculture and Rural Development, India

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Experiences from a small island developing state: how to use small country organisations to access funds directly

Lisa Andon, Micronesia Conservation Trust, Federated States of Micronesia

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Experiences from the first 'enhanced direct access' programme, small grants facility for climate change adaptation completely managed at the country level

Mandy Barnett, South African National Biodiversity Institute, South Africa



## Theme 1. Cities and infrastructure

13.30 – 15.15

Van Oldenbarnevelt Room

### SP 1.1 Mainstreaming adaptation

The ultimate goal of mainstreaming is to make sure that adaptation becomes fully incorporated in urban development. This requires sufficient knowledge and tools, and incorporation of adaptation objectives into masterplans, building codes etc., but also in (municipal) budgets. This session will offer a wide variety of approaches to mainstreaming climate change adaptation into people, plans, procedures and projects. Five cities will present their methods, achievements, struggles and lessons learned. The governance scientists will reflect and advise on the cases. The audience is invited to jump in with their experiences, recommendations and questions. Based on these recommendations, the five cities and the audience will be able to take mainstreaming to the next level.

<b>Organised by</b>	Chantal Oudkerk Pool, City of Rotterdam, the Netherlands Mzukisi ka-Gwata, City of Johannesburg, South Africa
<b>Partners</b>	New York City, USA C40 Climate Leadership Group, USA
<b>Moderator</b>	Mandy Ikert, C40 Climate Leadership Group, USA
<b>Rapporteur</b>	Valerie Brown, City of Rotterdam, the Netherlands

<b>Presentations</b>	Mainstreaming the Rotterdam Adaptation Strategy: maximising piggybacking Chantal Oudkerk Pool, City of Rotterdam, the Netherlands
	Mainstreaming CCA in Johannesburg's Integrated Development plan: ensuring funding Mzukisi ka-Gwata, City of Johannesburg, South Africa
	Washington DC Silver Jackets Phetmano Phannavong, Washington DC, USA
	Ho Chi Minh City: mainstreaming into district planning Ha Minh Chau, Ho Chi Minh City, Vietnam
	New York City Climate Change Adaptation Task Force Katherine Greig, New York City Mayor's Office of Recovery and Resilience, USA

<b>Reflections</b>	Katrien Termeer, Wageningen UR, the Netherlands Arwin van Buuren, Erasmus University Rotterdam, the Netherlands
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## Theme 2. Food, forestry and rural livelihoods

13.30 – 15.15

Goudriaan Room I

### SP 2.2 From islands of innovation to a sea of change: how can we sustainably build resilient livelihoods and food security in the Sahel at scale

Community livelihoods and food security in the Sahel are heavily reliant on natural resources and especially wetlands. Climate change and large scale development investments in hydropower and irrigation mean that water insecurity looks set to increase, negatively impacting water reliant ecosystems and consequently community resilience. Rural communities will need to adapt and fast. There is a lot of innovation in this field but bringing this to scale and achieving real impact remain difficult. This session will explore the challenges and the roles and actions that government and the wider development community can undertake to help overcome them.

#### Organised by Partners

Chris Baker, Wetlands International  
Research Programme on Climate Change, Agricultural and Food Security  
(CGIAR), France  
Partners for Resilience (Wetlands International; Netherlands Red Cross; Red Cross Red  
Crescent Climate Centre; Cordaid), the Netherlands

#### Chair

Alain Vidal, Research Programme on Climate Change, Agricultural and Food Security  
(CGIAR), France

#### Rapporteur

Frank van Weert, Wetlands International

#### Presentations

Climatic and environmental change scenarios across the Sahel  
Chris Baker, Wetlands International

#### Case studies

Community-based innovations for food security in the Sahel  
John van der Walle, CARE, the Netherlands  
Decision support for rural communities in the Inner Niger Delta: the OPIDIN tool  
Eddy Wymenga, Altenburg and Wymenga, the Netherlands  
BioRights: an innovative financial tool for increasing community resilience  
Ibrahima Sadio Fofana, Wetlands International  
Farming for the future, communication efforts to advance family farming in Mali  
Francois Laureys, ICT4D information and communication technologies for development,  
the Netherlands

#### Panel Discussion 1

Innovations for Sahelian rural community resilience and food security based on  
successful innovation case studies  
John van der Walle, CARE, the Netherlands  
Eddy Wymenga, Altenburg and Wymenga, the Netherlands

Ibrahima Sadio Fofana, Wetlands International  
Francois Laureys, IICD, the Netherlands

**Panel Discussion 2** Bringing innovation to scale overcoming challenges and capitalising on opportunities  
Sasha Alexander, advisor to UNCCD, Germany  
Pieter Terpstra, Ministry of Foreign Affairs, the Netherlands  
Caroline Figueres, Netherlands Water Partnership, the Netherlands



## Theme 6. Disaster risk reduction

13.30 – 15.15

**Penn Room I**

### SP 6.1 Enhancing adaptation to changing extremes: showcasing standard operating procedures for forecast-based action from three continents

Given increasing extremes with climate change, this session will convene a dialogue between scientists and practitioners on adaptation to reduce the impact of extreme events. Four pilot projects in Africa, Latin America, and Asia have successfully established triggers for risk-reducing actions using weather forecasts in advance of an actual disaster. In an interactive 'marketplace' format, project teams from the pilots will showcase learnings and instigate debate between participants on the concept of a 'forecast-based financing system'. Offering the experiences from these pilots, we invite participants, both scientists and practitioners, to discuss the challenges of receiving, translating and taking action from forecasts.

**Organised by** Erin Coughlan De Perez, Red Cross/Red Crescent Climate Centre, the Netherlands  
Elisabeth Stephens, Department of Geography and Environmental Science, University of Reading, United Kingdom

**Partners** Andrew Kruczkiewicz, International Research Institute for Climate and Society, USA  
Red Cross (Peru, Mozambique, Uganda, Germany)  
Bangladesh Red Crescent

**Chair** Institute for Environmental Studies, VU University Amsterdam, the Netherlands  
**Rapporteur** Erin Coughlan De Perez, Red Cross Red Crescent Climate Centre, the Netherlands  
Catalina Jaime, Red Cross Red Crescent Climate Centre, the Netherlands

**Presentations** Hydrological advances: the application of global models in data-scarce regions of Uganda

Elisabeth Stephens, University of Reading, United Kingdom

El Nino: triggering forecast-based action at several months' lead time in Peru

Juan Bazo, Red Cross Red Crescent Climate Centre, Peru

Storm Watch: innovative actions for extensive cyclone preparedness In Mozambique

Flavio Monjane, Mozambique Red Cross, Mozambique

Risk modelling: tying forecasted flood levels with actual impact

Ahmadul Hassan, Red Cross Red Crescent Climate Centre, Bangladesh

**Theme 6. Disaster risk reduction****13.30 – 15.15****Penn Room II**

## SP 6.3 How to promote adaptation towards resilient flood risk governance in Europe? Key recommendations from STAR-FLOOD in a practitioners' perspective

The need for good governance to deal with increasing flood risks is becoming ever more apparent. In this session we will present conclusions and recommendations, as well as good practices drawn from the rich empirical data generated in STAR-FLOOD ([www.starflood.eu](http://www.starflood.eu)). Examples are the Belgian Water test and River contracts (promoting collaboration between sectors and across boundaries), Polish crisis management (enabling dealing with floods), English insurance system (stimulating awareness and enabling recovery) and Dutch Delta programme (promoting learning and change). Then, all participants will engage in an interactive world café discussion, in which they are invited to bring in their own good practices.

<b>Organised by</b>	Tom Raadgever, Transport & Mobility, Sweco, the Netherlands Dries Hegger, Peter Driessen, Utrecht University, the Netherlands Mark Wiering, Radboud University, the Netherlands Ann Crabbé, University of Antwerp, Belgium
<b>Partners</b>	Organisation for Economic Cooperation and Development (OECD), Public Governance and Territorial Development Directorate, France Water Governance Centre, the Netherlands
<b>Chair</b>	Enrico Moens, Sweco, the Netherlands
<b>Rapporteur</b>	Dries Hegger, Utrecht University, the Netherlands
<b>Presentations</b>	Key findings from the STAR-FLOOD project about flood risk governance in Europe Marleen van Rijswijk, Utrecht University, the Netherlands The STAR-FLOOD Practitioner's Guidebook: a strategic guide towards more resilient and appropriate flood risk management and governance Tom Raadgever, Sweco, the Netherlands



## Issue 8. Risk assessment, adaptation planning and evaluation

13.30 – 15.15

Zaal Staal

### SP 8.1 Community based adaptation: lessons, challenges and pathways

The main objective of the session is to share information on emerging lessons from the growing community of practice on Community Based Adaptation (CBA) to climate change from Asia and Africa. The lessons are mostly based on the outcomes of the 9th international conference on CBA held in Kenya in April 2015 where over four hundred practitioners of CBA from ninety countries met to share their experiential knowledge on practicing CBA. Three presentations from Bangladesh, Kenya and Mali are expected to highlight the current progresses, challenges and pathways of CBA. The interactive discussions will also emphasize how CBA can meaningfully interact with Sustainable Development Goals (SDGs) and Paris CoP outcomes.

**Organised by** Nazmul Huq, International Centre for Climate Change Adaptation and Development (ICCCAD), Bangladesh

**Partner** International Institute for Environment and Development (IIED), United Kingdom

**Chair** Saleemul Huq, International Centre for Climate Change Development, Bangladesh / International Institute for Environment and Development (IIED), United Kingdom

**Rapporteur** Nazmul Huq, International Centre for Climate Change Adaptation and Development (ICCCAD), Bangladesh

**Presentations**

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Community based adaptation: learning from Bangladesh  
Atiq Rahman, Bangladesh Centre for Advanced Studies, Bangladesh

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Community based adaptation: experiences from Kenya  
Victor Orindi, Climate change advisor to the Arid and Semi-Arid Lands Secretariat, Kenya

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Challenges of community based adaptation: lessons from Mali  
Birama Diarra, National Directorate of Meteorology, Mali

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Pathways of community based adaptation: learning from Tanzania  
Euster Kibona, Environmental Protection and Management Service, Tanzania



## Issue 8. Risk assessment, adaptation planning and evaluation

13.30 – 15.15

New York Room

### SP 8.4 Droughts from a social, economic and technical perspective

Water management in arid and semi-arid areas is usually characterized by conflicting uses. The impact of droughts is expected to be exacerbated by climate and global change. In this cabaret session we will discuss the challenges of drought management in different parts of the world taking into account the different water needs from an economic, environmental and social perspective. We aim at providing inputs coming from science-practitioner experiences combining them with science based services and inviting the public to actively participate with their knowledge. We will take advantage of transdisciplinary knowledge creation on droughts and come up with a policy brief and a scientific publication.

#### Organised by

Maria Manez, Climate Service Center Germany (GERICS) - Helmholtz Zentrum Geesthacht, Germany  
Joaquin Andreu, Hydraulic Engineering, Polytechnical University of Valencia, Spain  
Javier Macian, Aguas de Valencia, Spain

#### Partners

Institute for Environmental and Water Research Engineering (IIAMA), Spain

#### Chair

Maria Manez, Climate Service Center Germany (GERICS) - Helmholtz Zentrum Geesthacht, Germany

#### Rapporteur

Roger Cremades, Climate Service Center Germany (GERICS) - Helmholtz Zentrum Geesthacht, Germany

#### Presentations

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The arising of bottom-up governance approaches for drought management  
Joaquín Andreu, GERICS and IIAMA, Germany and Spain

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Lessons from droughts: what worked and what did not work in California?  
Richard Howitt, UC DAVIS, USA

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Integrating conflict analysis and consensus reaching in a decision support system for water resource management  
Raffaele Giordano, Water Research Institute (IRSA), Italy

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The impacts of droughts in water quality, quantity and microbiological contamination for urban demand  
Javier Macian, Aguas de Valencia, Spain

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Drought approaches and management in Brasil  
Erwin Denis, The World Bank



## Issue 8. Risk assessment, adaptation planning and evaluation

Tuesday, 13.30-15.15

New Orleans Room

### SP 8.9 Exploring the adaptation potential of technologies

It has proven a challenge to promote the transfer and diffusion of technologies for climate change adaptation. This session addresses that challenge. It is structured around the question: "Can the discourse on technology transfer for adaptation be reframed to emphasise action and opportunity, rather than support and barriers?" It combines experience and perspectives from policy, practice, the private sector and research, and includes discussion of improved measurement of technology effectiveness, enabling environments of technology implementation, and technology investment opportunities.

**Organised by** Sara Traerup, United Nations Environment Programme (UNEP) DTU Partnership, Denmark

**Partners** Stockholm Environment Institute (SEI), Sweden  
Climate Technology Centre and Network (CTCN), Denmark

**Chair** Jason Spensley, Climate Technology Centre and Network (CTCN), Denmark

**Rapporteurs** Skylar Bee, Caroline Schaer, United Nations Environment Programme (UNEP) DTU Partnership, Denmark

**Presentations**

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Assessing technologies for adaptation, existing and proposed metrics  
Sara Traerup, United Nations Environment Programme (UNEP) DTU Partnership, Denmark

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Technologies for adaptation: part of the solution or part of the problem?  
Examples from the coastal sector  
Richard Klein, Stockholm Environment Institute (SEI), Germany

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Case Study: coastal infrastructure protection using a combination of hard and soft engineering technologies in Mauritius  
Sanju Deenapanray, Ecological Living In Action Ltd, Mauritius

**Panel discussion** Facilitated by Richard Klein, Stockholm Environment Institute (SEI), Germany  
Anne Olhoff, United Nations Environment Programme DTU Partnership  
Youssef Nassef, United Nations Framework Convention on Climate Change (tbc)  
Rasoul D. Mikkelsen, Lifelink, Grundfos (tbc)  
Patrick Pringle, United Kingdom Climate Impacts Programme (tbc)  
Vladimir Stenek, International Finance Corporation (IFC) (tbc)

**Issue 8. Risk assessment, adaptation planning and evaluation****13.30 – 15.15****Rotterdam Hall**

## SP 8.13 Adaptive policy pathways planning: sharing techniques, tools and experiences across domains, jurisdictions and institutional settings

This session aims to share a range of experiences in using a pathways approach to adaptation planning to advance the quality and understanding of the concept, possible tools and methods, and practicalities of using the approach in policy-making and planning. The session exists of pitches on experiences and challenges, for example, on tools for exploring and evaluation pathways, institutional settings, scales, and multi-actor situations. Contributions from case studies in New Zealand, Australia, Maldives, Netherlands, Peru, Bangladesh and Indonesia.

**Organised by** Marjolijn Haasnoot, Deltares / Delft University of Technology, the Netherlands  
Judy Lawrence, Victoria University, New Zealand  
Karyn Bosomworth, RMIT University, Australia

**Chair** Bert Enserink, Delft University of Technology, the Netherlands

**Rapporteurs** Sadie McEvoy, Delft University of Technology, the Netherlands  
Andrew Warren, Deltares, the Netherlands

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**Presentations** Jon Barnett, University of Melbourne, Australia  
Sally Brown, University of Southampton, United Kingdom  
Judy Lawrence, Victoria University, New Zealand  
Rob Lempert/Nidhi Kalra, RAND Corporation, USA  
Umme Kulsum, Buet, Bangladesh

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**15.15 – 15.45 Break**

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**Round Table**  
**15.45 – 17.30**  
**Town Hall**

## RT 2 Nature based-solutions in cities

More and more cities are using nature based solutions as part of a systemic urban planning. This session explores good examples and lessons learned. Key questions include: what are the mid/long term benefits which motivate cities to promote and implement nature based solutions? Are there concrete examples coming from cities of effective ways to quantify the costs and benefits of nature based solutions and green infrastructure in relation to standard solutions (i.e. grey infrastructure)? And how can research and innovation stimulate practice and decision making in cooperation with cities to foster the sustainability transformation? What are the key priorities to be addressed in this regard?

Organised by	Julia Peleikis and Holger Robrecht, ICLEI Denis Peter and Marco Fritz, European Commission Christiaan Wallet, Government of The Netherlands
Partner	Edyta Wisniewska, Netherlands Water Partnership
Moderators	Birgit Georgi, European Environment Agency Holger Robrecht, ICLEI
Rapporteur	Edyta Wisniewska, Netherlands Water Partnership
Panel	Pex Langenberg, Deputy Mayor and Alderman for Sustainability, Mobility, Culture at City of Rotterdam, the Netherlands Kwadwo Yeboah, Metropolitan Director of Town Planning, Accra Metropolitan Assembly, Ghana Cedric Grant, Deputy Mayor of New Orleans, USA Teng Chye Khoo, Executive Director of the Centre for Liveable Cities, Singapore (tbc) Kristina Ina Novak, City of Ljubljana, Slovenia
Board of critical friends	Henk Ovink, Special Envoy for International Water Affairs for the Kingdom of the Netherlands Cynthia Rosenzweig, Co-Director of the Urban Climate Change Research, USA



## Theme 2. Food, forestry and rural livelihoods

15.45 – 17.30

New Orleans Room

### SC 2.4

## Climate change adaptation with mitigation co-benefits in forests and woodlands

#### Chair

Cheikh Mbow, World Agroforestry Centre (ICRAF), Kenya

#### Rapporteur

Carolien Caspers, Radboud University, the Netherlands

#### Presentations

Links between adaptation and climate change mitigation in forests

Rebecca Mant, United Nations Environment Programme, World Conservation Monitoring Centre (UNEP-WCMC), United Kingdom

Development of a prioritization tool of climate change adaptation measures in the forestry sector

Tania Guillen, Climate Service Center, Germany / Nicaragua

Linkages between forests and climate change vulnerability in the complex Himalayan landscape

Anusheema Chakraborty, TERI University, India

Faidherbia albida trees buffer impacts of climate change on wheat in semiarid farming systems

Tesfaye Shiferaw Sida, International Maize and Wheat Improvement Center-CIMMYT, Ethiopia



## Theme 3. Fresh water availability and access

15.45 – 17.30

Leeuwen Room II

### SC 3.2

## Fresh water availability and access: guidelines and methodologies

#### Chairs

Tong Jiang, National Climate Centre, China

Ainun Nishat, Asian Region IUCN, Bangladesh

#### Rapporteur

Helena de Boer, Ministry of Foreign Affairs, the Netherlands

#### Presentations

Water sector adaptations for hydraulic fracturing in Texas

Syeda Mariya Absar, University of Tennessee Knoxville, USA

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Guidelines to assess sustainable production limits for irrigated agriculture: Letaba basin (SA)

Jeroen Veraart, Wageningen UR, the Netherlands

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Establishing a water sharing mechanism at local level in Vietnam

Chuong Huynh Van, Hué University of Agriculture and Forestry, Vietnam

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Critical periods for adaptation in Asia; irrigation demand by crop linked to water supply by source

Qurat-ul-Ain Ahmad, Global Change Impacts Study Center, Pakistan / VU University, Amsterdam

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BeWater: science and society creating river basin adaptation plans to face climate change

Anabel Sanchez, CREAM, Spain



## Theme 4. Public health

15.45 – 17.30

Leeuwen Room I

### SC 4.2

## Adapting to heat in OECD countries

#### Chairs

Leendert van Bree, PBL Environmental Assessment Agency / Utrecht University, the Netherlands

Tanja Wolf, World Health Organization

#### Rapporteur

Tim Busker, Utrecht University, the Netherlands

#### Presentations

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Evaluation of information systems relevant to climate change and health

Hans-Guido Mücke, Federal Environment Agency, Germany

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Experiences from a communication campaign to foster adaptation to increasing heat extremes

Torsten Grothmann, University of Oldenburg / e-fect, Germany

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Changes in the heat-health relationship across the USA, 1975-2010: adaptation and its limits

Scott Sheridan, Kent State Institute, USA

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Assessing costs and benefits of heat warning systems at European level: a methodological framework

Aline Chiabai, Basque Centre for Climate Change, Spain



## Theme 6. Disaster risk reduction

15.45 – 17.30

Diamond Room II

### SC 6.2

## Floods: recent experience and long-term planning

Chair

Rapporteur

Shuaib Lwasa, Makerere University, Uganda

Max Holthuis, VU University Amsterdam, the Netherlands

Presentations

Hurricane Sandy as a tipping point for climate adaptation and resiliency in New York City

William Solecki, City University of New York - Hunter College, USA

THo Chi Minh city adaptation to increasing risk of coastal and fluvial flood

Paolo Scussolini, VU University Amsterdam, the Netherlands

Ensemble flood risk assessment and adaptation strategies in Europe at 4°C global warming

Lorenzo Alfieri, Joint Research Centre, Ispra, Italy

European flood insurance market structures: present and future performance, and possible reforms

Paul Hudson, VU University Amsterdam, the Netherlands



## Theme 7. The Arctic

15.45 – 17.30

Van Walsum Room

### SC 7.2

## Understanding adaptation in the Arctic

Chair

Rapporteur

James Ford, McGill University, Canada

Joris Baars, Wageningen UR, the Netherlands

Presentations

Adaptation to climate change in Nunavut: where are we at and where do we go from here?

Jolène Labbé, McGill University, Canada

Vulnerability and adaptive capacity of Inuit women to climate change: a case study from Nunavut

Anna Bunce, McGill University, Canada

How to evaluate climate change adaptation: a pilot study in Arviat, Canada

Melanie Flynn, McGill University, Canada

How's life on Svalbard?

Judith Klostermann, Wageningen UR, the Netherlands



## Issue 8. Risk assessment, adaptation planning and evaluation

15.45 – 17.30

Beurs Lounge

### SC 8.5

## Stakeholder needs and adaptation

Chair

Saskia Werners, Wageningen UR, the Netherlands

Rapporteur

Jos Baars, the Netherlands

Presentations

Multi-level perspective for adaptation in Cascais

Filipe Alves, CCIAM-FCUL/UL, Portugal

Measuring adaptive capacity among local organisations: a case study in South Africa

Marie-Ange Baudoin, University of Cape Town, South Africa

Learning from stakeholder needs and enabling adaptive capacity: a synthesis from the US West

Lisa Dilling, University of Colorado, USA

Decision maker preferences for adaptation actions and funding: case studies in Brazil, USA and United Kingdom

Catherine Reynolds, University of South Florida, USA

Are we adapting to climate change? The case of Chile, barriers and enablers

Paulina Aldunce, University of Chile, Chile



## Issue 8. Risk assessment, adaptation planning and evaluation

15.45 – 17.30

Van Oldenbarnevelt Room

### SC 8.6

## Participatory processes and co-production of adaptation knowledge

Chair

Sebastian Vicuña, Pontificia Universidad Catolica de Chile, Chile

Rapporteur

Frederik Wardenier, The Hague University of Applied Sciences, the Netherlands

Presentations

Critical reflections on a co-production science-policy process: a case study from Malawi

Katharine Vincent Kulima, Integrated Development Solutions (Pty) Ltd, South Africa

The co-production of climate-change adaptation indicators at a basin scale:

Maipo basin in Chile

Sebastian Vicuna, Pontificia Universidad Catolica de Chile, Chile

Enhancing the use of indigenous knowledge on climate change mitigation and adaptation in Nigeria

Anthony Akpan, Pan African Vision for the Environment (PAVE), Nigeria

Comparing robust decision making approaches for long-term water resources in Southern India

Ajay Bhave, Grantham Research Institute on Climate Change and the Environment, United Kingdom

Adaptation planning combining participation with novel visualisation and decision support tools

Michiel Blind, Deltares, the Netherlands



## Issue 8. Risk assessment, adaptation planning and evaluation

15.45 – 17.30

Mees Auditorium

### SC 8.10 Adaptation in coastal systems

Chair

Rapporteur

Felix Olorunfemi, Institute of Social and Economic Research, Nigeria

Annika Trignol, HZ University of Applied Sciences, the Netherlands

Presentations

Designing adaptation to sea-level rise: where to protect and where to retreat?

Daniel Lincke, Global Climate Forum, Germany

An integrated framework to analyse vulnerability and adaptive capacity to sea level rise in Brazil

Luci Nunes, University of Campinas, Brazil

Storm surge inundation risk analysis for coastal electricity generation facilities

Benjamin Preston, Oak Ridge National Laboratory, USA

Spatially-explicit coastal flood impact scenarios for sea-level rise adaptation

Jackie Z.K. Yip, University of British Columbia, Canada

Timing of adaptation to high end sea level rise: when to start?

Sally Brown, University of Southampton, United Kingdom



## Issue 9. Institutions and governance

15.45 – 17.30

Oscar Auditorium

### SC 9.7 The policy-economic aspects of adaptation responses

Chair

Rapporteur

Peter Driessen, Utrecht University, the Netherlands

Johanna Wandel, University of Waterloo, Canada

Presentations

The political economy of climate change induced resettlement

Colette Mortreux, Exeter University, United Kingdom

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Private sector involvement in urban adaptation planning: exploring the role of property developers

Sofie Storbjörk, Linköping University, Sweden

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Parliamentary actions in South Asia on climate change adaptation: successes and challenges

Mukul Sharma, Climate Parliament, India

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Development implications of assessing loss and damage in the Philippines

Ana Veronica Gabriel, The Oscar M. Lopez Center for Climate Change Adaptation and Disaster Risk Management Foundation Inc., Philippines

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Challenges smallholder farmers face in accessing institutional support in rural Ghana  
Ruth Quaye, University of Ghana, Ghana



## Issue 8. Risk assessment, adaptation planning and evaluation

15.45 – 17.30

Tokyo Room

### PR 8.4 Reducing risks and seizing opportunities: lessons from the development and implementation of business adaptation strategies

Business sector engagement on adaptation to climate change is fundamental as there are risks and opportunities to business; on the other hand, companies can bring relevant contributions to the agenda of adaptation to climate change. In order to support business to elaborate adaptation strategies and action plans, the Business for Climate Platform, Brazil, has developed a framework and tool that have been implemented by seven companies. This session aims to explore the common bottlenecks and solutions in this developing process and to debate the lessons learned that could contribute to the advancement of other companies in climate adaptation. After three presentations, the participants will be invited to contribute their experiences on the main challenges faced by business in this agenda.

Organised by	Natalia Lutti Hummel, Center for Sustainability Studies of the Business Management School at the Getulio Vargas Foundation (EAESP/FGV), Brazil
Partners	UK Climate Impacts Programme (UKCIP), United Kingdom Ministry of the Environment (MMA), Brazil
Chair	Natalia Lutti Hummel, Center for Sustainability Studies of the Business Management School at the Getulio Vargas Foundation (EAESP/FGV), Brazil
Rapporteur	Thais Guimarães, Center for Sustainability Studies of the Business Management School at the Getulio Vargas Foundation (EAESP/FGV), Brazil
Presentations	Adaptation to climate change: engaging private sector Patrick Pringle, UK Climate Impacts Programme (UKCIP), United Kingdom

Lessons learned from business adaptation strategies in Brazil: the examples of CCR Group and Braskem

Mariana Nicolletti, Center for Sustainability Studies, Brazil

Connecting business adaptation strategies with the National Adaptation Plan

Mariana Egler, Ministry of the Environment, Brazil



## Issue 9. Institutions and governance

15.45 – 17.30

Goudriaan Room I

# PR 9.8 Territorial development and adaptation to climate change

Since the Lisbon Treaty and the Europe 2020 strategy, there has been much attention for territorial cohesion within the European Union. Through territorial cohesion the European Union wishes to promote a polycentric territorial integration of places where people live.

Adaptation to climate change is a vital challenge in EU territorial development. During this round table, Directors-General of various EU member states and the European Commission will exchange experiences and best practices in the preparation and implementation of their climate adaptation strategies, and explore whether the inclusion of adaptation strategies in the work on the Territorial Agenda could be of added value.

### Organised by Chair Rapporteur

Milou van Mourik, Ministry of Infrastructure and the Environment, the Netherlands  
Paul McAleavey, European Environment Agency (EEA), Denmark  
Milou van Mourik, Ministry of Infrastructure and the Environment, the Netherlands

### Presentation

Stefan Greiving, Technical University of Dortmund, Germany

### Panel

Jiří Buriánek, Secretary-General of the Committee of the Regions  
Peter Heij, Director General for Spatial Development and Water Affairs, Ministry of Infrastructure and the Environment, the Netherlands  
Tibor Németh, Director General of Construction Section, Ministry of Transport, Construction and Regional Development, Slovakia  
Frank Vansteenkiste, Director General for Territorial Cohesion, Ministry of Sustainable Development and Infrastructure, Luxembourg  
Denise Fiorentino, Director General Strategy & Implementation, Ministry for European Affairs and Implementation of the Electoral Manifesto, Malta  
Birgit Breitfuß-Renner, deputy Director-General for Spatial Development and Territorial Cohesion, Ministry of Transport and Digital Infrastructure, Germany  
Peter Cabus, Flemish Secretary-General for Spatial Planning, Belgium  
Ákos Lukacs, Head of Department for Climate Policy, Ministry of National Development, Hungary  
Katrine Rafn, Head of the Climate Adaptation Department, Ministry of Environment and Food, Denmark  
Beatriz Yordi Aguirre, Head of Unit responsible for Adaptation, DG CLIMA  
DG REGIO



## Theme 1. Cities and infrastructure

15.45 – 17.30

Goudriaan Room II

### SP 1.3 Adaptation of highway infrastructure to climate change in four Northern European countries – connected with spatial planning and other modalities

Climate change has significant potential effects on transport and infrastructure. This sector is a global leader in adaptation. An example is the International Roads Association Guidance on Climate Adaptation. In this session, Denmark, Germany, the Netherlands and Norway will demonstrate climate change adaptation of roads with examples of projects showing: regional, multimodal and specific aspects. The session will also demonstrate how road infrastructure is linked with environment and spatial adaptation. To engage participants, challenges will be presented by the speakers via a panel discussion, whereby participants can bring in their experience and questions interactively.

Organised by	Kees van Muiswinkel, Ministry of Infrastructure and the Environment, Rijkswaterstaat, the Netherlands
Partners	Danish Road Directorate (Vejdirektorat), Denmark Federal Highway Research Institute (BAST), Germany Norwegian Public Roads Administration (Statens Vegvesen), Norway
Chair	Christian Axelsen, Danish Road Directorate (Vejdirektorat), Denmark
Rapporteur	Joke Schalk, Ministry of Infrastructure and the Environment, Rijkswaterstaat Water, Traffic and Environment, the Netherlands
Presentations	Roads as part of complex infrastructure and area use in Norway and the Netherlands
	Kees van Muiswinkel, Ministry of Infrastructure and the Environment, Rijkswaterstaat, the Netherlands
	Joakim Sellevoid, Norwegian Public Roads Administration, Norway
	Adaptation of Road Infrastructure in a multimodal context in Germany
	Martin Klose, Federal Highway Research Institute (BAST), Germany
	Blue spot risk identification on major Danish roads and implementing results with an interdisciplinary approach
	Christian Axelsen, Danish Road Directorate (Vejdirektorat), Denmark



## Theme 2. Food, forestry and rural livelihoods

15.45 – 17.30

New York Room

### SP 2.1 Sowing diversity = harvesting security. Talented small scale farmers and committed researchers working together to develop climate change resilient crops

Sowing Diversity equals Harvesting Security (SD=HS) is a five year programme aiming to forge cooperation between small-scale farmers and research institutes to select and/or breed plant varieties for local climate change adaptation in Africa, Asia and Latin America. The session aims to raise questions on the crucial historic and present role of farmers in improving and adapting crops, and managing crop diversity. The following topics will be discussed: building farmers' crop improvement capacities and strengthening cooperation between public research and farmers towards more resilient local seed systems. We will discuss ways of improving public research relevance for farmers' crop improvement needs and identification of new partners and opportunities for supporting farmers' climate change adaptation strategies through diversity management.

#### Organised by Partners

Jiska van der Heide, Oxfam Novib, the Netherlands  
Southeast Asia Regional Initiatives for Community Empowerment  
(SEARICE), Philippines  
Asociacion para la Naturaleza y el Desarrollo Sostenible (ANDES), Peru  
Community Technology Development Trust (CTDT), Zimbabwe

#### Chair Rapporteur

Bert Visser, Wageningen UR, the Netherlands  
Jiska van der Heide, Oxfam Novib, the Netherlands

#### Presentations

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Overall introduction  
Gigi Manicad, Sowing Diversity equals Harvesting Security, Oxfam Novib,  
the Netherlands

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Examples from Zimbabwe on scaling up farmers' biodiversity management  
Andrew Mushita, Community Technology Development Trust, Zimbabwe

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A video on cooperation between women farmers and Can Tho University in Vietnam in  
rice improvement, from Southeast Asia Regional Initiatives for Community  
Empowerment, Philippines

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A video on indigenous communities' potato park contributing potato varieties to  
Svalbard global seed vault  
Alejandro Argumedo, Asociacion para la Naturaleza y el Desarrollo Sostenible, Peru



## Theme 4. Public health

15.45 – 17.30

Rotterdam Hall

### SP 4.3 More heat, more disease, and less water: financing solutions to reduce the health risks of climate change

Increasing international attention and demand for addressing climate change impacts on health have resulted in new investor interest in the field. Aid agencies and private foundations are searching for new approaches to leverage finance to address the health impacts of climate change. This session will explore these new forms of finance (and partnerships), assess the current set of economic/financial tools, and identify needs for new tools – both at global and country level, using the above case studies for framing. The session is particularly important because little work has been done – or publicly discussed, at the climate health-economic-finance interface. This session aims to raise the level of dialogue around this important component and generate new information that can be used by donor and recipient communities alike.

Organised by	Timothy Bouley, The World Bank
Partners	World Meteorological Organization
Chair	Timothy Bouley, The World Bank
Rapporteur	Nathan Engle, The World Bank

Presentations	A public sector approach to financing climate and health Tegan Blaine, USAID, USA
	Before finance: international approaches to climate and health Joy Guillemot, World Health Organization (WHO) / World Meteorological Organization (WMO)
	A private sector approach to financing climate and health Surabi Menon, Climate Works



## Theme 5. Ecosystems and ecosystem based adaptation

15.45 – 17.30

Penn Room I

### SP 5.2 Exploring the potential of ecosystem based approaches – Ecosystem based Adaptation (EbA) and Ecosystem based Disaster Risk Reduction (Eco-DRR)

Nature based solutions have been gaining increased relevance as ways to adapt to climate change and decrease the risk of natural hazards. Although sharing similar goals, Ecosystem based adaptation (EbA) and Ecosystem based Disaster Risk Reduction (Eco-DRR) have traditionally been developed separately. Nonetheless, there is an urgent need to increase collaboration between both communities. This session will present the most recent knowledge on EbA and Eco-DRR, combined with good practice case studies. Following three presentations on the integration of nature based solutions, participants will be invited to discuss lessons learned and next steps for science, policy and practice.

#### Organised by

Mário Pulquério, Tânia Salvaterra, Faculdade de Ciências da Universidade de Lisboa, Portugal

Karin Allenbach, Mila Lomarda, University of Geneva, Switzerland

#### Partners

United Nations University, Institute for Environment and Human Security (UNU-EHS), Germany

Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC), Italy

Centre for Ecomics and Ecosystem Management, Faculty of Forest and Environment, Eberswalde University for Sustainable Development, Germany

Writtle College, United Kingdom

#### Chair

Horst Korn, Federal Agency for Nature Conservation, Germany

#### Rapporteur

Tania Salvaterra, Faculdade de Ciências da Universidade de Lisboa, Portugal

#### Presentations

Integrating climate change adaptation and disaster risk reduction through ecosystems: opportunities, co-benefits and unintended side effects

Fabrice G. Renaud, UNU-EHS, Germany

Marisol Estrella, UNEP, Switzerland

Can nature help reduce the impacts of climate change?

Jaroslav Mysiak, Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC), Italy

National case studies integrating ecosystem based measures

Pierre Ibisch, Centre for Ecomics and Ecosystem Management, Faculty of Forest and Environment, Eberswalde University for Sustainable Development, Germany

Peter Hobson, Writtle College, United Kingdom



## Issue 8. Risk assessment, adaptation planning and evaluation

15.45 – 17.30

Zaal Staal

### SP 8.5 Developing action plans and assessing costs and benefits for prioritising, programming and financing adaptation in developing countries

While climate finance is increasing, it will fall short of needs. Given this gap, it is important to prioritise adaptation, but this involves several challenges. These can be addressed by using a policy-orientated approach and mainstreaming, considering the timing and phasing of adaptation (iterative approaches), and assessing costs and benefits to help prioritisation and financing. This session presents the latest thinking on action plans and economic assessment. It presents two case studies from less developed countries that have gone from prioritisation to early implementation. An open session is included for other examples, followed by a panel discussion on building networks and capacity.

#### Organised by Partners

Paul Watkiss, Paul Watkiss Associates/ECONADAPT, United Kingdom  
South South North, South Africa

#### Chair

International Development Research Centre (IDRC), Canada

#### Rapporteur

Paul Watkiss, Paul Watkiss Associates/ECONADAPT, United Kingdom  
Jean-Pierre Roux, South South North, South Africa

#### Presentations

Using iterative risk management and economics for action planning, prioritisation, appraisal and climate finance

Paul Watkiss, Paul Watkiss Associates, United Kingdom

Mainstreaming climate adaptation into Rwanda's agriculture sector development plan

Anita Wreford, Scotland's Rural College (SRUC), Scotland/New Zealand

Ritwika Sen, Ministry of Agriculture and Animal Resources (MINAGRI), Rwanda

Simon Martin, Rwanda Agriculture Board (RAB), Rwanda

Developing and financing an adaptation action plan for Zanzibar

Federica Cimato, independent, Italy

Nassir Tahir Ali, Department of Environment, Revolutionary Government of Zanzibar, Tanzania

Alistair Hunt, University of Bath, United Kingdom

Alina Tepes, Basque Centre for Climate Change (BC3), Spain

#### Discussion

Adaptation economics experience

#### Moderator

Sam Fankhauser, London School of Economics (LSE), United Kingdom



## Issue 9. Institutions and governance

15.45 – 17.30

Penn Room II

### SP 9.3 Towards more informed climate adaptation: considerations of ethics in stakeholder participation and decision-making

Given trajectories of significant and irreversible impacts of climate changes, there is increasing focus on decision-makers and their navigation of risk and uncertainty in adapting to these impacts. Instead, we focus on the role of researchers and the ethical challenges that exist at the interface of adaptation research and decision-making which if not addressed have the potential to increase risk exposure of decision-makers. This session will outline the issues via two case-studies, then intensive structured discussions will aim to identify opportunities to improve participatory research approaches and develop a draft set of principles for ethical climate adaptation akin to those already developed for climate services.

<b>Organised by</b>	Justine Lacey, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia Mark Howden, Australian National University, Australia Bruce Hewitson, University of Cape Town, South Africa
<b>Partners</b>	University of Tasmania, Australia James Hutton Institute, United Kingdom University of Arizona, USA University of the Witwatersrand, South Africa
<b>Chair</b>	Mark Howden, Australian National University, Australia
<b>Rapporteurs</b>	Lilly Lim-Camacho, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia Chris Cvitanovic, University of Tasmania, Australia
<b>Presentations</b>	<hr/> <p><b>Case Study 1:</b> Ethical challenges from the climate services domain (based on Climate Services Partnerships Ethics Working Group White Paper) Bruce Hewitson, University of Cape Town, South Africa</p> <hr/> <p><b>Case Study 2:</b> Ethical challenges from international agricultural adaptation (based on the GEC paper, Informed adaptation: Ethical considerations for adaptation researchers and decision-makers) Justine Lacey, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia</p>



## Issue 9. Institutions and governance

15.45 – 17.30

### Diamond Room I

# SP 9.6 Local climate change adaptation: barriers and enablers for mainstreaming and implementation

Knowledge and experience sharing is crucial for a successful local climate change adaptation. This session summarises bottom-up lessons from three years of information analysis based on 23 European cases. The first presentation sets the context and the common methodological frameworks used. The second provides an overview of economic models and tools used in the cases, while the third presents a number of innovative participatory tools and methods applied. The last presentation provides an overview of the policy implementation across cases. All presentations identify a set of recommendations to policy-makers and practitioners to better govern, monitor and implement with success local adaptation.

<b>Organised by</b>	Filipe Duarte Santos, Centre for Ecology, Evolution and Environmental Change (cE3c), Faculty of Sciences, University of Lisbon (FCUL), Portugal
<b>Partners</b>	Helmholtz Centre for Environmental Research (UFZ), Germany Danish Board of Technology (DBT), Denmark University of Exeter, United Kingdom
<b>Chair</b>	Filipe Duarte Santos, cE3c – Faculty of Sciences, University of Lisbon (FCUL), Portugal
<b>Co-chair</b>	Hans Sanderson, University of Aarhus, Denmark
<b>Rapporteur</b>	Filipe Alves, cE3c – Faculty of Sciences, University of Lisbon (FCUL), Portugal
<b>Presentations</b>	<hr/> Twenty-three BASE case studies, a common methodological framework and key results Gil Penha-Lopes, Inês Campos, Kiat Ng, University of Lisbon, Portugal Olivia Rendon, University of Leeds, United Kingdom <hr/> Economic assessments review Oliver Gebhardt, Volker Meyer, Helmholtz Centre for Environmental Research, Germany Filipe Alves, University of Lisbon, Portugal <hr/> Innovative participatory methodologies review Filipe Alves, André Vizinho, Gil Penha-Lopes, University of Lisbon, Portugal Andreas Clemmensen, Danish Board of Technology, Denmark <hr/> Implementing adaptation: barriers and enablers across Europe Olivia Rendon, University of Leeds, United Kingdom Oliver Gebhardt, Helmholtz Centre for Environmental Research, Germany



## Issue 10. Finance, investment and business

15.45 – 17.30

Antwerp Room

### SP 10.2 Liquid assets and adaptation futures

Wetlands help mitigate and adapt to impacts of climate change, yet find limited mention and integration in climate change policies and programmes. Better recognition of wetland values in adaptation planning can help generate significant co-benefits for all key actors and stakeholders. Bridging the science-policy-practice divide will enable translating the evidence base on wetland ecosystem service values into improved adaptation policy and investment practices. Through case studies and moderated discussion, the session will explore pathways for better recognition of wetland values in adaptation planning by government, private sector and investors.

Organised by	Ritesh Kumar, Wetlands International
Partner	Institute for European Environment Policy, United Kingdom
Chair	Ritesh Kumar, Wetlands International
Rapporteur	Julie Mulonga, Wetlands International

Presentations	Wetlands as natural capital
	Patrick ten Brink, Institute for European Environmental Policy (IEEP), United Kingdom

#### Case studies

Economics of Ecosystem Services and Biodiversity in Tana River Basin: implications for climate change adaptation and basin development

Peter Odengho, Government of Kenya, Kenya

Economic values of wetland ecosystem services: the implications and challenges for climate change adaptation planning and implementation

J.R.Bhatt, Ministry of Environment, Forests and Climate Change, India

Bringing the value of ecosystems into corporate decision-making

Joppe Camwinckel, World Business Council for Sustainable Development, Switzerland

Natural capital financing facility

Katarina Malmnäs, European Investment Bank, Luxembourg

Panel	Patrick ten Brink, Institute for European Environmental Policy (IEEP), United Kingdom
	Peter Odengho, Government of Kenya, Kenya
	J.R.Bhatt, Ministry of Environment, Forests and Climate Change, India
	Joppe Camwinckel, World Business Council for Sustainable Development, Switzerland

### 17.30 – 19.00 Reception and poster session

# WEDNESDAY 11 MAY 2016



08.00 – 19.00	Registration
09.00 – 19.00	Adaptation Expo
08.45 – 10.30	Sessions
10.30 – 11.00	Break
11.00 – 12.15	Plenary
12.15 – 13.30	Lunch
13.30 – 15.15	Sessions
15.15 – 15.45	Break
15.45 – 17.30	Sessions
17.30 – 19.00	Reception and poster session
19.00 – 22.00	Conference dinner (optional)





**Round Table**  
**09.00 – 10.30**  
**Town Hall**

## RT 3 **Business for adaptation: challenges & opportunities**

It has been six months since COP21 in Paris. At this historic conference, the private sector was more involved than ever before. Companies are feeling the impacts of climate change, but they can also provide the solutions we need. In this Round Table we will explore how the emphasis on adaptation in the Paris Agreement applies to business, how companies understand the business case for action and what role the public and private sector should play. We will be challenging panellists to show us how the private sector can be mobilised to go beyond a mitigation focus and also embrace the need for adaptation. Join this debate!

<b>Organised by</b>	Rasmus Valanko, World Business Council for Sustainable Development (WBCSD), Switzerland Bart van Gent, Ministry of Foreign Affairs, the Netherlands
<b>Moderator</b>	Peter Bakker, President & CEO, World Business Council for Sustainable Development (WBCSD), Switzerland
<b>Rapporteur</b>	Rasmus Valanko, World Business Council for Sustainable Development (WBCSD), Switzerland
<b>Panel</b>	Feike Sijbesma, CEO & Chairman of the Managing Board DSM, the Netherlands Sandeep Dadlani, Executive Vice President Infosys, India David Walker, Chief Development Officer DNV GL Group, Norway Roger Steens, Director Sustainability Tata Steel Europe, United Kingdom Frank Goossensen, Director Water Arcadis Europe, the Netherlands Christine Tørklep Meisingset, Key Account Manager IBKA (part of the NG group), Norway



## Theme 1. Cities and infrastructure

08.45 – 10.30

Goudriaan Room I

### SC 1.5

## Adaptation processes

Chair	Debra Roberts, eThekweni Municipality, Durban, South Africa, and IPCC Working Group II, South Africa
Rapporteur	Monique Slegers, Radboud University, the Netherlands
Presentations	New spaces of flows? Global urban networks in climate change adaptation Kian Goh, Northeastern University, USA
	Community-based adaptation in the USA: understanding why communities are taking action Heather Hosterman, Abt Associates, USA
	Integrating green and social infrastructure for climate adaptation: case studies across two regions Elisabeth Hamin, University of Massachusetts, USA
	Achieving bottom-up adaptation through local planning policy at the development consent stage Jennifer Pang, Pittwater Council, Australia



## Theme 2. Food, forestry and rural livelihoods

08.45 – 10.30

New York Room

### SC 2.2

## Rural livelihoods and smallholder farming systems

Chair	Laurent Sédogo, West African Science Service Center on Climate Change and Adapted Land Use, Ghana
Rapporteur	Carolien Caspers, Radboud University, the Netherlands
Presentations	How climate compatible are livelihood adaptation strategies & development programmes in rural Indonesia Russell Wise, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia
	Diversification as adaptation: insights from livelihood and crop diversification in semi-arid India Andaleeb Rahman, Indian Institute for Human Settlements, India
	Impact of climate change on farmers' livelihood in a developing country: India Pouchepparadjou Anandan, PAJANCOA&RI, India



## Theme 2. Food, forestry and rural livelihoods

08.45 – 10.30

New Orleans Room

# SC 2.8 Adapting cropping systems to a CO<sub>2</sub> rich atmosphere: opportunities and challenges for food and water security

Rising atmospheric CO<sub>2</sub> concentrations could benefit crops by stimulating biomass production rates whilst improving overall crop water use efficiency. Yet the actual role of CO<sub>2</sub> on crop yield and food security remains controversial and assessments of long-term agricultural adaptation tend to overlook crop-CO<sub>2</sub> interaction. This session aims to discuss challenges and opportunities in adapting cropping systems to a CO<sub>2</sub> rich atmosphere and to identify a list of priorities in future experimental and crop modelling research that are carefully targeted to stakeholders' needs. After three presentations from the Impact-Adaptation-Vulnerability modelling and field experiment communities, practitioners and scientists will be invited to debate in a café style setting.

**Organised by** Delphine Deryng, Joshua Elliott, University of Chicago & NASA Goddard Institute for Space Studies, USA

**Partners** Potsdam Institute for Climate Impact Research (PIK), Germany  
AgMIP, USA

**Chair** Christoph Müller, Potsdam Institute for Climate Impact Research (PIK), Germany

**Rapporteur** Thomas Pugh, Karlsruhe Institute of Technology, Germany

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**Presentations** Regional disparities in the beneficial effects of rising CO<sub>2</sub> emissions on crop water productivity

Delphine Deryng, University of Chicago & NASA Goddard Institute for Space Studies, USA

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New development of FACE experiments and consequence for adaptation futures

Andrew Leakey, University of Illinois, USA

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Narrowing CO<sub>2</sub> uncertainty in projections of adaptation

Julian Ramirez Villegas, University of Leeds, United Kingdom



### Theme 3. Fresh water availability and access

08.45 – 10.30

Leeuwen Room II

## SC 3.3

# Improving fresh water availability: measures under climate change

Chair

Gualbert Oude Essink, Deltares, the Netherlands

Rapporteur

Emilie Buist, Delft University of Technology, the Netherlands

Presentations

Climate adaptation for food security and farming livelihood in Small Island Developing States (SIDS)

Adrian Cashman, University of the West Indies, Barbados

Freshwater supply: the subsurface to the rescue

Koen Zuurbier, KWR Watercycle Research Institute, the Netherlands

Flood water conservation underground – Case Study: Indus Basin to improve water quality & quantity

Amir Haider, Malik Comsats IIT, Pakistan

Water poverty in small islands: natural laboratories for global water management

Josep Osorio, Climate Service Center Germany, Germany

Quantifying present and future water availability in selected Caribbean catchments

Anuradha Maharaj, Centre for Resource Management and Environmental Studies (CERMES), Barbados



### Theme 6. Disaster risk reduction

08.45 – 10.30

Diamond Room II

## SC 6.3

# Tools and approaches to assess disaster reduction strategies

Chair

Sally Brown, University of Southampton, United Kingdom

Rapporteur

Annika Trignol, HZ University of Applied Sciences, the Netherlands

Presentations

Real options analysis in climate change adaptation decisions under uncertainty

Myungjin Kim, University of Southampton, United Kingdom

Flood-risk awareness as a first step to a self-reliant community during evacuation

Teun Terpstra, HKV Consultants, the Netherlands

Climatic change adaption amidst other environmental hazards

Anne Nandawula, Rural-Urban Environmental Agency (RUEA), Uganda

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Adapting social protection systems for disaster risk reduction

Zoe Scott, Oxford Policy Management, United Kingdom

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Tools for loss and damage decision making

Swenja Surminski, London School of Economics, United Kingdom

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## Theme 7. The Arctic

08.45 – 10.30

Van Walsum Room

# SC 7.3 The role of narratives and discourses in shaping adaptation, adaptive capacity and mitigation to climate change: cases from the Arctic

The role of narratives and discourses in shaping adaptation, adaptive capacity and mitigation to climate change is understudied. However, the importance of considering worldviews and values as integral aspects of adaptation is increasingly recognised. We think that the challenges of examining perceptions, cultural values and world views embedded in discourses and narratives will result in the unpacking of the drivers of potential climate change complacency. In this session we will address questions such as how perceptions of resilience to the changing conditions in the Arctic are reflected in different forms of narratives and expressions of world views, values and cultural norms; how such perceptions shape how we approach the challenge of global warming; whether resilience narratives affect the adaptive capacity of individuals and/or communities.

### Organised by

Grete K. Hovelsrud, Faculty of Social Sciences, University of Nordland, Norway

### Partners

University of Oulu, Finland

Kings College London, United Kingdom

### Chair

Helene Amundsen, University of Nordland, Norway

### Rapporteur

Halvor Dannevig, Western Norway Research Institute, Norway

### Presentations

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Adaptation options and actions to change in the Arctic: the Barents Region

Helene Amundsen, Faculty of Social Sciences, University of Nordland, Norway

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Boundary arrangements for adaptation in primary industries

Halvor Dannevig, Western Norway Research Institute, Norway

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Adaptation in Canadian Arctic coastal ecosystems: dissonances and challenges with M&E indicators

Moktar Lamari, Centre de recherche et d'expertise en évaluation (CREXE), Canada

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Avalanche risk in Norwegian communities: risk perceptions and boundaries of local adaptive capacity

Marianne Karlsson, Nordland Research Institute, Norway



## Issue 8. Risk assessment, adaptation planning and evaluation

08.45 – 10.30

Antwerp Room

### SC 8.11

## Gender and adaptation

Chair

Felix Olorunfemi, Institute of Social and Economic Research, Nigeria

Rapporteur

Miriam de Graaff, Wageningen UR, the Netherlands

Presentations

How is adaptation, resilience, and vulnerability research engaging with gender?

Anna Bunce, McGill University, Canada

To study variance in adaptive capacities of women from different social groups in SAR of Maharashtra

Suchita Awasthi, Watershed Organisation Trust, India

Climate change adaptation policies and practices in the delta region of Bangladesh

Mohammad Rahman, Bangladesh University of Engineering and Technology, Bangladesh

Examining the suitability of 'subjective' forms of resilience measurement: insights from Tanzania

Lindsey Jones, Overseas Development Institute (ODI), United Kingdom



## Issue 9. Institutions and governance

08.45 – 10.30

Oscar Auditorium

### SC 9.4

## Governance challenges of climate adaptation

Chair

Diogo de Gusmão-Sørensen, European Commission

Rapporteur

Ryan Bellison, University of Amsterdam, the Netherlands

Presentations

Adapting to climate change across boundaries – lessons from a territorial approach in Senegal

Florence Crick, London School of Economics and Political Science, United Kingdom

Climate change: business as usual or a complex issue? Let's ask practitioners

Paulina Aldunce, University of Chile, Chile

Urban local governance towards mainstreaming disaster risk reduction and climate change adaptation

Zakir Md. Hossain, Krisoker Sor (Farmers' Voice), Dhaka, Bangladesh

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What is an appropriate policy response for adaptation?

Mikael Hildén, Finnish Environment Institute, Finland

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Governance, institutions and practice for adaptation: adequacy and enhancements from New Zealand

Judy Lawrence, New Zealand Climate Change Research Institute, New Zealand

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## Theme 1. Cities and infrastructure

08.45 – 10.30

Penn Room II

### PR 1.1

## Integral adaptive concepts applied in urban deltas

Urban Deltas need to prepare for sea level rise and larger river discharges. This requires an integral adaptive approach to deal with floods and uncertainty in the future. This session aims to explore the strategy of adaptive concepts as developed by the Delta programme 'Coast', including concepts for spatial integration and adaptation pathways for planning and collaboration, illustrated with Dutch examples. This adaptive strategy will be challenged from an international perspective during an interactive session about the short and long term adaptation of the Elbe estuary of Hamburg. The session will be set up as a community of practice. We will challenge the strategy and connect the lessons learned to international urban delta's worldwide.

#### Organised by Partners

Marja Wijnties, Ministry of Infrastructure and the Environment, the Netherlands  
Hamburg University of Applied Sciences, Germany  
Province of Noord-Holland, the Netherlands

#### Chair Rapporteur

Janneke van Bergen, Atelier 1:1, the Netherlands  
Marja Wijnties, Ministry of Infrastructure and the Environment, the Netherlands

#### Presentations

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Introduction to the strategy of adaptive concepts for urban deltas and Dutch best practice so far

Janneke van Bergen, Atelier 1:1, the Netherlands

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Introduction to the case of Hamburg / Elbe estuary

Susanne Heise, Hamburg University of Applied Sciences, Germany

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## Issue 8. Risk assessment, adaptation planning and evaluation

08.45 – 10.30

Van Oldenbarnevelt Room

### PR 8.3 Drawing on experts and implementers beyond city government: better climate adaptation inputs and outputs

Cities are working with a wide array of partners to improve local climate and risk information as well as to motivate and cascade adaptation. To bring the virtues of partnership to light, this session will highlight how cities are working with private actors to assess shared responsibility, and with the scientific community to translate research and climate projections into practice. We will also address challenges with partnerships and potential steps to mitigate them. Audience members will be invited to ask questions of the five panellists from Toronto, Copenhagen, London and NYC concerning partnerships relevant to them. Cities will learn about the pros and cons of trying to create similar partnerships in their home countries.

#### Organised by Partners

Katherine Greig, New York City Mayor's Office of Recovery and Resiliency, USA  
City of Sydney, Australia  
City of Copenhagen, Denmark

#### Chair Rapporteur

Katherine Greig, New York City Mayor's Office of Recovery and Resiliency, USA  
Alfredo Redondo, C40 Cities Climate Leadership Group, USA

#### Presentations

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City of Sydney: benefits and challenges of partnerships driving climate adaptation  
Chris Derksema, City of Sydney, Australia

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Partnering with the national insurance organisation to incent flood risk mitigation  
Jan Rasmussen, Copenhagen Climate Change Adaptation Plan, Denmark

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London climate change partnerships

Nathalie Bellanger, London Climate Change Partnership, United Kingdom

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Multi-sectoral engagement towards interdependent climate adaptation

David MacLeod, senior environmental specialist, Canada

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Public, private, non-profit and academic partnerships essential to adaptation in  
New York city

Katherine Greig, New York City Mayor's Office of Recovery and Resilience, USA



## Issue 8. Risk assessment, adaptation planning and evaluation

08.45 – 10.30

Beurs Lounge

# PR 8.8 Monitoring, reporting and evaluating adaptation: current practice and looking ahead

The session will present monitoring, reporting and evaluation (MRE) systems developed and implemented in both developing and developed countries, including case study examples from Germany, the Lower Mekong Basin, South Africa and the United Kingdom. Discussions will explore the lessons derived from these case studies and their relevance for national level MRE systems. Lessons learned from such experiences are instrumental in helping other countries to develop adaptation MRE systems. The session will consist of two overview presentations and four case study presentations, followed by an interactive panel discussion with national representatives, MRE experts and the audience.

<b>Organised by</b>	Stéphane Isoard, Climate change impacts and adaptation, European Environment Agency, Denmark Timo Leiter, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Germany
<b>Partners</b>	Federal Environment Agency, Germany Mekong River Commission, Cambodia, Laos, Thailand, Vietnam Department of Environmental Affairs, South Africa Adaptation Sub-Committee, United Kingdom Climate Resilience Ltd., United Kingdom
<b>Chair</b>	Patrick Pringle, UK Climate Impacts Programme (UKCIP), United Kingdom
<b>Rapporteur</b>	Andrea Prutsch, Environment Agency Austria, Austria
<b>Presentations</b>	Adaptation monitoring, reporting and evaluation: an overview of experiences from Europe André Jol, European Environment Agency (EEA), Denmark Developing national Adaptation M&E Systems: a guidebook for practitioners Timo Leiter, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Germany
<b>Panel</b>	David Thompson, Adaptation Sub-Committee, United Kingdom Petra van Rùth, Federal Environment Agency, Germany Brian Mantlana / Tsepang Makholela, Department of Environmental Affairs (DEA), South Africa Nguyen Huong Thuy Phan, Mekong River Commission, Laos



## Issue 8. Risk assessment, adaptation planning and evaluation

08.45 – 10.30

Diamond Room I

### PR 8.9 Managing climate change risks amidst uncertainty: designing development co-operation to support national and sub-national adaptation

The objective is to share experience of how developing countries are putting into practice climate (and disaster-related) risk transfer and sharing tools and assessing how these tools can be strengthened at the national and local level. The session will facilitate an exchange of views amongst development cooperation providers and adaptation practitioners on how to successfully integrate adaptation into national and local development policy and planning. After one introductory presentation from the Organisation for Economic Co-operation and Development (OECD) and one presentation by a G7 country on the Climate Risk Initiative, partner countries (Colombia/Bolivia, Philippines - tbc) will showcase their experience.

Organised by	Jan Corfee-Morlot, Michael Mullan, Organisation for Economic Co-operation and Development (OECD), France
Partners	NAP Global Network GIZ
Chair	Jan Corfee-Morlot, Development Assistance Committee (DAC) and Environment Policy Committee (EPOC) Task Team on Climate Change and Development Co-operation, France
Rapporteur	Gisela Campillo and Lola Vallejo, Organisation for Economic Co-operation and Development (OECD), France
Presentations	How are development co-operation providers supporting NAPs processes and entry points for action in countries? Michael Mullan and Gisela Campillo, OECD Secretariat, France Anne Hammil, IISD
	Climate Risk Insurance Initiative for strengthening resilience of poor people in vulnerable countries (progress report) Michael Brossman, GIZ
	Progress In integrating adaptation and climate risk insurance into national and sub-national development planning Rodrigo Suárez Castaño, Climate Change Director at the Ministry of Environment and Sustainable Development of Colombia John Adrian Narag, Ministry of Finance, The Philippines Daniel Bresch (SwissRe): Experience of El Salvador and Bangladesh



## Theme 4. Public health

08.45 – 10.30

Leeuwen Room I

### SP 4.1 Early warning systems in public health

Early warning systems, based on climatic and environmental conditions, can help improve and accelerate alert and public health response capabilities and provide the evidence-base for strategic public health action. Such systems can significantly enhance preparedness to emerging infectious diseases, thereby helping contain human and economic costs, particularly in resource-strapped regions. Monitoring long-term trends in order to build systems adapted to global climate change, and not just meteorological conditions, remains a challenge for public health practitioners. A number of early warning systems from around the world will be presented at this session.

**Organised by** Jan C. Semenza, European Centre for Disease Prevention Control (ECDC), Sweden  
Kristie Ebi, University of Washington, USA

**Chair** Jan C. Semenza, European Centre for Disease Prevention Control (ECDC), Sweden  
**Rapporteur** Kristie Ebi, University of Washington, USA

**Presentations**

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Malaria early warning systems: experience from South Africa  
Swadhin Behera, Application Laboratory, Japan Agency for Marine-Earth Science and Technology, Yokohama, Japan

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Infectious disease early warning systems: experience from ECDC  
Jan C. Semenza, European Centre for Disease Prevention Control (ECDC), Sweden

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Lyme disease early warning systems: experience and lessons from Canada  
Nick H. Ogden, Public Health Agency, Canada

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Dengue early warning systems in Asia  
Joacim Rocklöv, University of Umeå, Sweden

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Climate change: addressing heat-health vulnerability in rapidly urbanising regions of Western India  
Priya Dutta and Abhiyanti Tiwari, Indian Institute of Public Health, India

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Using seasonal forecasts to drive infectious diseases early warning systems, and a bit beyond  
Andy Morse, University of Liverpool, Liverpool, United Kingdom



## Theme 5. Ecosystems and ecosystem based adaptation

08.45 – 10.30

Goudriaan Room II

### SP 5.1 Scaling up the role of wetlands in climate change adaptation

Climate change will have significant impacts on fresh water availability and on natural capital. Wetlands provide major potential to buffer such impacts in river basins, catchments and in coastal areas through their ecosystem services. This session aims to explore how the adaptation potential of wetlands can best be sustained and enhanced through improved practice, policies and investments. Key issues and integrated solutions will be presented from case studies in Malaysia, Mali and Panama. In the session participants from private sector, NGOs, government and knowledge institutes will then explore adaptation priorities based on these and their own experiences.

#### Organised by Partners

Marcel Silvius, Wetlands International  
Stockholm International Water Institute (SIWI) Action for Source to Sea  
Management, Sweden  
Ramsar Convention, Switzerland

#### Chair Rapporteur

Jane Madgwick, Wetlands International  
Marcel Silvius, Wetlands International

#### Presentations

Rajang Delta, Sarawak: addressing challenges of land subsidence caused by  
deforestation and drainage of tropical peatlands  
Hj. Keizrul bin Abdullah, Global Water Partnership South East Asia,  
Wetlands International

Upper Niger Basin, Mali: options and implications of safeguarding and rehabilitating the  
Inner Niger Delta as part of the solution to climate adaptation and resilience to  
increasing climate variability and water scarcity  
Bakary Kone, Wetlands International

Urban and rural wetlands of Panama: challenges and 'Building with nature':  
opportunities for improved coastal resilience in Panama Bay and along an urbanizing  
mangrove coast  
Raisa Banfield, Vice Mayor of Panama City, Panama



## Theme 5. Ecosystems and ecosystem based adaptation

08.45 – 10.30

Penn Room I

### SP 5.3 Assessing ecosystem-based adaptation

Ecosystem-based adaptation (EbA) is said by its proponents to be a cost-effective, flexible and win-win approach to adaptation to climate variability and change that has the potential to deliver multiple development and environmental benefits. This session sets out to explore (i) the relevance and general applicability of EbA in broader adaptation processes in various contexts, and (ii) how scientific uncertainty, data constraints and technical complexity can be managed to successfully bridge the science-practice gap and help optimise the project design. An interactive discussion with practitioners and technical experts, drawing on case studies, will be followed by audience participation on these topics.

<b>Organised by</b>	Barney Dickson, United Nations Environment Programme (UNEP), Kenya Fareeha Y. Iqbal, Global Environment Facility (GEF), USA
<b>Partners</b>	United Nations Environment Programme, World Conservation Monitoring Centre (UNEP-WCMC), United Kingdom Conservation International, USA
<b>Chair</b>	Valerie Kapos, United Nations Environment Programme, World Conservation Monitoring Centre (UNEP-WCMC), United Kingdom
<b>Rapporteur</b>	David Hole, Conservation International, USA
<b>Presentations</b>	The role of long-term research in catalysing large-scale EbA investments Anthony Mills, C4 EcoSolutions, South Africa
	Advances in ecosystem-based adaptation and challenges for scaling up Imen Meliane, United Nations Development Programme (UNDP), Tunisia
	Reassessing Ecosystem-Based Adaptation Barney Dickson, United Nations Environment Programme (UNEP), Kenya



## Theme 6. Disaster risk reduction

08.45 – 10.30

Tokyo Room

### SP 6.4 How to integrate Climate Change Adaptation and Disaster Risk Reduction policy and practice at different governance scales

The Sendai Framework for Disaster Risk Reduction (DRR), the EU Adaptation Strategy and the UNFCCC Paris Agreement recognise the importance of linking Climate Change Adaptation (CCA) to DRR and the need to implement policies in synergy and full coordination in the EU and Member States. This session aims to highlight good practice in CCA and DRR policy; explore how policy frameworks are reflected in real case studies; and stimulate a discussion on the best working methods to strengthen the linkages between CCA and DRR. This practice session will be based on different policy and practice cases that lead to a panel discussion and exchange with the audience.

Organised by	Mário Pulquério, Faculdade de Ciências da Universidade de Lisboa, Portugal Markus Leitner, Environmental Impact Assessment and Climate Change, Environment Agency Austria, Austria
Partners	European Commission Directorate-General for Climate Action, Directorate-General for Humanitarian Aid and Civil Protection, Belgium UNISDR, Europe Office, Belgium European Investment Bank, Luxembourg Global Network of Civil Society Organisations for Disaster Reduction, United Kingdom
Chair	Beatriz Yordi Aquirre, European Commission Directorate-General for Climate Action, Belgium
Rapporteur	Sarah Duff, European Investment Bank, Luxembourg
Presentations	Disaster risk reduction, climate change and resilience: coherence and mutual reinforcement of policy frameworks Luca Rossi, UNISDR, Europe Office, Brussels
	European Investment Bank and national good practice examples towards climate change risks and adaptation in project planning Markus Leitner, Environment Agency Austria, Austria Nancy Saich, European Investment Bank, Luxembourg
	Discussing experiences from a local perspective Marcus Oxley, Global Network of Civil Society Organisations for Disaster Reduction, United Kingdom



## Issue 8. Risk assessment, adaptation planning and evaluation

08.45 – 10.30

Mees Auditorium

### SP 8.3 Applying adaptation pathways practice for resilient and sustainable development

'Adaptation pathways' is an emerging approach to decision-making accounting for future uncertainty, resilience, complex systems and multiple stakeholders' goals. The approach is highly relevant in developing countries, where potential impacts on communities of mal-adaptive decisions are significant, yet decision-maker capacity is low, change is rapid and competing development priorities are many. This workshop will bring together researchers and their policy or donor partners from developing countries to 1) develop lessons for adaptation pathways practice from scientists' and practitioners' experiences, and 2) initiate a community of practice amongst researchers, donors, NGOs and government stakeholders.

<b>Organised by</b>	James R.A. Butler, Russell Wise, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia Alice Ruhweza, Bureau for Policy and Program Support, United Nations Development Program/Global Environment Facility Africa Region, Ethiopia Carina Wyborn, World Wide Fund for Nature, Colombia Celia Harvey, David Hole, Conservation International, USA
<b>Partners</b>	Luc Hoffmann Institute, Switzerland Australian National University, Australia
<b>Chair</b>	James Butler, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia
<b>Rapporteur</b>	Celia Harvey, Conservation International, USA

<b>Presentations</b>	Priming stakeholders for adaptation pathways in rural Indonesia Russell Wise, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia
	The resilience, adaptation pathways and transformation assessment guidelines: experiences from Ethiopian food security Alice Ruhweza, United Nations Development Programme (UNDP), Ethiopia
	Adaptation pathways for protected areas in Colombia: participatory processes to engage with the future Carina Wyborn, World Wildlife Fund, Colombia
	The pursuit of a representative and comprehensive mix of stakeholders for adaptation pathways Barron Orr, Science for Society Solutions, University of Alicante, Spain



## Issue 9. Institutions and governance

08.45 – 10.30

Zaal Staal

### SP 9.2 Building flood resilience: an innovative partnership integrating science and practice

Climate change and associated disasters have transformative impacts on development. While the importance of building adaptive capacity and resilience is increasingly recognized, relevant knowledge is highly fragmented; there is a need for more holistic and cost-effective strategies that truly engage with stakeholders' needs. This session aims to fill this gap by exploring an innovative cross-sector partnership, the Zurich Flood Resilience Alliance. It will demonstrate how diverse organisations work together to operationalize resilience theories and concepts to reduce flood risk in communities and support them to build back better. After three presentations practitioners and scientists will be invited to contribute their experiences and findings in a world café setting.

<b>Organised by</b>	Wei Liu, Reinhard Mechler, International Institute for Applied Systems Analysis (IIASA), Austria Colin McQuistan, Practical Action, United Kingdom Linda Freiner, Zurich Insurance Group, Switzerland
<b>Partner</b>	International Federation of Red Cross and Red Crescent Societies, Switzerland
<b>Chair</b>	Colin Mcquistan, Practical Action, United Kingdom
<b>Rapporteur</b>	Adriana Keating, International Institute for Applied Systems Analysis (IIASA), Austria

<b>Presentations</b>	Measuring the impact of investment in community flood resilience: a systems approach to diagnose and assess community flood resilience in Peru Adriana Keating, International Institute for Applied Systems Analysis (IIASA), Austria Michael Szoenyi, Zurich Insurance Group, Switzerland Meinrad Burer, International Federation of Red Cross and Red Crescent Societies, Switzerland Reinhard Mechler, International Institute for Applied Systems Analysis (IIASA), Austria
	Empowering local communities to participate, innovate and develop new approaches to build flood resilience Colin Mcquistan, Practical Action, United Kingdom
	Harnessing the power of citizen science to enhance climate and disaster resilience Wei Liu, International Institute for Applied Systems Analysis (IIASA), Austria

**10.30 – 11.00 Break**



Vivienne Parry



Her Majesty Queen Máxima  
of the Netherlands



Naoko Ishii



Laurent Sédого



Feike Sijbesma



Paula Caballero



Marjeta Jager



Robert Glasser



Wim Kuijken



## Plenary

11.00 – 12.15

### Rotterdam Hall

Moderator

Vivienne Parry, United Kingdom

Her Majesty Queen Máxima of the Netherlands, United Nations Secretary-General's Special Advocate for Inclusive Finance for Development

Panel

- Naoko Ishii, CEO of the Global Environment Facility, USA
- Laurent Sédого, Executive Director of the West African Science Service Center on Climate Change and Adapted Land Use, Ghana
- Feike Sijbesma, CEO & Chairman of the Managing Board DSM, the Netherlands
- Paula Caballero, Senior Director Natural Resources, The World Bank
- Marjeta Jager, Deputy Director General Directorate-General International Cooperation and Development (DG DEVCO), European Commission
- Robert Glasser, Special Representative of the UN Secretary-General for Disaster Risk Reduction
- Wim Kuijken, Delta Commissioner and Chair of the Supervisory Board of DNB, the central bank of the Netherlands

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**12.15 – 13.30**

**Lunch**

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## Round Table

13.30 – 15.15

### Town Hall

# RT 4 Joining forces: tackling adaptation, alleviate poverty and inequalities

The effects of climate change are increasing and unevenly distributed, hitting poor countries and people disproportionately. Following Paris, billions of dollars will be invested every year in adaptation. From a moral and humanitarian point of view one of the major challenges is investing in adaptation and development while reducing poverty and in-equity. There also proves to be a clear cost of inaction in this respect, urging governmental attention. Which approaches do we need and how can different actors join forces? That is the debate in this roundtable, enriched with reflections from the World Bank, Bhutan, Ethiopia, OECD and the EU.

Organised by	Willem Ligtoet, PBL Netherlands Environmental Assessment Agency, the Netherlands Pieter Terpstra, Ministry of Foreign Affairs, the Netherlands
Partners	The World Bank, Organisation for Economic Co-operation and Development (OECD), EC/DG DEVCO
Chair	Heather McGray, World Resources Institute
Rapporteurs	Willem Ligtoet, PBL Netherlands Environmental Assessment Agency, the Netherlands Pieter Terpstra, Ministry of Foreign Affairs, the Netherlands
Presentations	<hr/> Setting the scene – climate change adaptation, poverty and inequity Stéphane Hallegatte, The World Bank <hr/> <b>Pitch:</b> Adaptation and inequity in Bhutan Pema Tenzin, Programme leader, Gross National Happiness Commission, Bhutan <hr/> <b>Pitch:</b> Adaptation in practice: women farmers in Tanzania Siti Bakar Makame, Agricultural Officer, Community Forests International, Tanzania <hr/> <b>Pitch:</b> Poverty and inequity: the costs of in-action Aziza Akhmouch, Head of the Water Governance Programme, Organisation for Economic Co-operation and Development (OECD) <hr/> <b>Pitch:</b> How the EC supports developing countries to tackle climate change impacts, poverty and inequalities Marjeta Jager, Deputy Director General Directorate-General International Cooperation and Development (DG DEVCO), European Commission
Panel	Stéphane Hallegatte, The World Bank, USA Pema Tenzin, Gross National Happiness Commission, Bhutan Siti Bakar Makame, Community Forsts International, Tanzania Aziza Akhmouch, Head of the Water Governance Programme, Organisation for Economic Co-operation and Development (OECD) Marjeta Jager, Deputy Director General Directorate-General International Cooperation and Development (DG DEVCO), European Commission



## Theme 1. Cities and infrastructure

13.30 – 15.45

Goudriaan Room I

### SC 1.2 Decision support

Chair  
Rapporteur

Darryn McEvoy, RMIT University, Australia  
Emilie Buist, Delft University of Technology, the Netherlands

Presentations

Climate adaptation in spatial planning and the four big questions of what, where, how and who?

Jozefien Hermy, Spatial Development Department Flanders, Belgium

Key design parameters towards urban resilience: insights into the transforming city of Tainan

Chia-Lung Wu, Chinese Culture University, Taiwan

Co-creating climate change adaptation and resilience decision-making support tools with cities

Julia Peleikis, ICLEI, Local Governments for Sustainability, Germany

Lessons learned from touchtable based interactive adaptation support tool sessions around the world

Reinder Brolsma, Deltares, the Netherlands



## Theme 2. Food, forestry and rural livelihoods

13.30 – 15.15

New York Room

### SC 2.7 Societal responses to climate change in agriculture

Chair  
Rapporteur

Olle Olsson, Stockholm Environment Institute (SEI), Sweden  
Marit Heinen, Climate Adaptation Services, the Netherlands

Presentations

How do objective and subjective measures of climate stress influence household migration decisions?

Jacqueline Meijer-Irons, University of Washington, USA

How to encourage farmers to adapt to climate change?

Amarnath Tripathi, Institute of Economic Growth, India

Gender and adoption of soya bean technologies for climate change adaptation in Northern Benin

Gilbert Adjimoti, University of Ghana, Ghana

Climate-smart agriculture: a systematic review protocol for the scientific basis

Aslihan Arslan, Food and Agricultural Organization (FAO), Italy

Climate risks, food insecurity and livelihood responses: why gender matters?

Nitya Rao, University of East Anglia, United Kingdom



## Theme 5. Ecosystems and ecosystem based adaptation

13.30 – 15.15

Tokyo Room

### SC 5.1

## Ecosystem services for climate adaptation

Chair  
Rapporteur

Rebecca Shaw, Stanford University and Environmental Defense Fund, USA  
Carolien Caspers, Radboud University, the Netherlands

Presentations

The contribution of ecosystem services to human resilience: a rapid review  
Elizabeth Carabine, Overseas Development Institute, United Kingdom

Ecosystem based shrimp aquaculture as adaptation option in southwest Bangladesh  
Atikul Islam, Khulna University, Bangladesh

Europe's ecosystem services: integrated assessment of combined climatic and socio-economic futures

Robert Dunford, University of Oxford, United Kingdom

Role of biodiversity and ecosystem services in climate adaptation and mitigation strategies

Sarahi Nunez, Wageningen UR, the Netherlands

Payment for ecosystem services – paying farmers for using farmland for flood control  
Marianne Zandersen, Aarhus University, Denmark



## Theme 6. Disaster risk reduction

13.30 – 15.15

Rotterdam Hall

### SC 6.5

## Disaster risk preparedness

Chair  
Rapporteur

Rina Suryani Oktari, Syiah Kuala University, Indonesia  
Annisa Triyanti, University of Amsterdam, the Netherlands

Presentations

Catalysing synergies between climate change adaptation and disaster risk reduction in agriculture

Stephan Baas, Food and Agricultural Organization (FAO), Italy

Livelihood adaptation to long term exposure to volcanic ash at Volcan Tungurahua, Ecuador

Maria Teresa Armijos, University of East Anglia, United Kingdom

Disaster risk reduction efforts and factors affecting flood disaster management

Jayden Dembe Skyler, Green World Uganda (GWU), Uganda

GO-NGO collaboration for disaster risk reduction in India: a SWOT analysis

Jayashree Parida, National Institute of Technology, India

Preparedness is overrated: community responses in (perceived) low probability contexts

Kim Anema, Red Cross, the Netherlands



## Issue 8. Risk assessment, adaptation planning and evaluation

13.30 – 15.15

Zaal Staal

### SC 8.13 Economics, investment and business

Chair

Rob Swart, Wageningen UR, the Netherlands

Rapporteur

Ryan Bellison, University of Amsterdam, the Netherlands

Presentations

Development of 'profitable' climate adaptation for built assets

Xiaoming Wang, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia

Long term investment scenarios and an opportunity to collaborate

Mike Steel, Environment Agency, United Kingdom

Trade-off analysis – a 21st century complement to cost-benefit analysis?

Julien Harou, University of Manchester, United Kingdom

Understanding and managing climate change risks and adaptation opportunities in a business context

Loannis Chrysostomidis, Sustainable Futures, United Kingdom



## Issue 8. Risk assessment, adaptation planning and evaluation

13.30 – 15.15

New Orleans Room

### SC 8.14 The role of PROVIA: identifying key future challenges across scales

PROVIA, the Global Programme of Research on Climate Change Vulnerability, Impacts and Adaptation, has been instrumental in identifying research gaps in vulnerability, impacts and adaptation (VIA). Tools and materials have been developed that bridge the science-policy gap and help practitioners in taking action. Since PROVIA's inception the prominence of adaptation has increased considerably in the past years. The Paris agreement provides the clearest evidence. This session brings together leading experts, including members of the PROVIA Scientific Steering Committee, to discuss research gaps and PROVIA's readiness in a changed adaptation landscape with increased ambitions. An important part of the session is dedicated to input from the VIA communities on these issues. The outcome of the session will be used to inform the PROVIA future work plan.

Organised by

Philip Drost, PROVIA Secretariat, Kenya

Partners

United Nations Environment Programme (UNEP), Kenya  
Griffith University, Australia

Chair

Jean Palutikof, Griffith University, Australia, PROVIA SSC co-chair

Rapporteur

Janak Pathak, United Nations Environment Programme (UNEP), Kenya

## Presentations

Global research challenges in climate change vulnerability, impacts and adaptation  
Cynthia Rosenzweig, NASA Goddard Institute for Space Studies, USA, PROVIA  
SSC member

Future direction of adaptation research: an exploration

Kristie Ebi, University of Washington, USA, PROVIA SSC member

Evolving messages of the IPCC on adaptation

Yinlong Xu, Chinese Academy of Agricultural Sciences, China, PROVIA SSC member



## Issue 9. Institutions and governance

13.30 – 15.15

Oscar Auditorium

### SC 9.2

## Power and agency issues in climate adaptation

## Chair

Peter Driessen, Utrecht University, the Netherlands

## Rapporteur

Monique Slegers, Radboud University, the Netherlands

## Presentations

A practitioner-based framework of power relations for enabling successful  
adaptation projects

Stephen Woroniecki, Lund University, Sweden

Who, how and why 'must' participate in building resilience to disasters in a  
changing climate

Paulina Aldunce, University of Chile, Chile

Asking the right questions: developing a gender integration guide for local  
adaptation practice

Melanie Boeckmann, University of Bremen, Germany

Orchestrating adaptation, mitigation and transformation

Katharina Hölscher, Drift, the Netherlands

Role of power in climate change adaptation: explaining the shaping and adoption of  
CCA approaches in South Asia

Sumit Vij, Wageningen UR, the Netherlands



## Theme 1. Cities and infrastructure

13.30 – 15.15

Goudriaan Room II

### PR 1.2 Climate change as an innovation driver

Innovation is often seen as the solution to solve everything. But what do we mean by innovation? What can we learn from successful innovations? How can we support innovation? In this session we present 'best practices' that have proven to be successful and innovative. The session is to stimulate a thought-provoking discussion about innovation in making cities and infrastructure more resilient to climate change exploring Working with communities, Working with nature, Using Circular Economy approaches and maximising outcomes by benefitting multiple needs and generating win-wins. We will encourage innovators and give feedback to their ideas in an interactive debate via pitches and Dragon's Den discussion.

#### Organised by Partners

Lisette Heuer, Royal HaskoningDHV, the Netherlands  
International Union for Conservation of Nature (IUCN), Switzerland  
University of Manchester, United Kingdom

#### Chair Rapporteur

Lisette Heuer, Royal HaskoningDHV, the Netherlands  
Fola Ogunyoye, Royal HaskoningDHV, United Kingdom

#### Presentations

Climate change as innovation driver in water resilient cities and infrastructure  
Fola Ogunyoye, Royal HaskoningDHV, United Kingdom

Water infrastructure solutions from Ecosystem Services Underpinning Climate Resilient Policies and Programmes (WISE-UP): developing portfolios of built and natural water infrastructure

James Dalton, International Union for Conservation of Nature (IUCN), Switzerland

Trading-off ecosystem services with engineered and economic benefits to inform investment decisions

Anthony Hurford, University of Manchester, United Kingdom



## Theme 1. Cities and infrastructure

13.30 – 15.15

Diamond Room I

### PR 1.3 City resilience strategies – to support safe, inclusive and smart development

As cities grow and develop at a fast rate, they also increase exposure of their assets to the impacts of disasters snowballing at an alarming rate, thus planning for resilience and disaster risk reduction needs to be a priority for cities. To address these challenges, local governments need to integrate disaster risk reduction and climate change adaptation in their development plans. The practice session aims to discuss and evaluate the process of developing robust resilience plans based on current and potential future risks. Case studies include sharing of plans and experiences in disaster recovery from various cities worldwide.

<b>Organised by</b>	Gubic Milos, United Nations Office for Disaster Risk Reduction (UNISDR), Switzerland
<b>Partners</b>	The United Nations Office for Project Services (UNOPS), Denmark The Ecological Sequestration Trust (TEST), United Kingdom Institute for Water Education (UNESCO-IHE), the Netherlands
<b>Chair</b>	Jerry Velasquez, UNISDR, Switzerland
<b>Rapporteur</b>	Abhilash Panda, UNISDR, Switzerland
<b>Presentations</b>	<hr/> City resilience plan: The framework UNISDR, Switzerland <hr/> Cases from the cities City officials, UNOPS, Denmark <hr/> Financing Disaster Risk Reduction & resilience plans The Ecological Sequestration Trust (TEST), United Kingdom <hr/> City-to-city learning, a catalyst for the implementation of the plans William Veerbeek, UNESCO-IHE, the Netherlands



### Theme 3. Fresh water availability and access

13.30 – 15.15

Leeuwen Room II

## PR 3.1 Green water utilities

The session presents green utility examples: business cases of Water Utilities that illustrate the role utilities can play in society to lower their climate footprint and make drinking water systems climate resilient and adaptive to climate change. Through this session we want to present and promote an approach to transform water utilities into 'green utilities'. A partnership of water utilities, governments, donors and investors – gathered in the green utility network – promote this approach to transform utilities and scale up the green-grey infrastructure investments. A panel composed of utilities, climate experts and financiers will reflect on the opportunities of green utilities and their roles and contribution for scaling up. Desired results/outcomes: more traction, understanding of green utilities and green investments.

<b>Organised by</b>	Marco Schouten, Vitens Evides International (VEI)
<b>Partners</b>	World Resources Institute, USA IUCN National Committee of the Netherlands
<b>Chair</b>	Gerhard Mulder, IUCN, the Netherlands
<b>Rapporteur</b>	Marco Schouten, Vitens Evides International
<b>Presentations</b>	<hr/> Evides Water Utility: an inspiring green utility Annette Ottolini, Evides Waterbedrijf, the Netherlands <hr/> A retention area in the city of Ho Chi Min City, Vietnam Rik Dierx, Vitens Evides International/SAWACO <hr/> The Green City Plan for Harar CEO Harar Water Supply and Daniel Truneh, Vitens Evides International <hr/> Protecting Atewa's Water Resources, Ghana IUCN NL <hr/> Financing mechanism for Green Investments, Norio Saito, Asian Development Bank



## Issue 8. Risk assessment, adaptation planning and evaluation

13.30 – 15.15

Beurs Lounge

### PR 8.5 Advancing city adaptation monitoring, evaluation and reporting

As cities increasingly develop and implement adaptation plans, they face barriers in understanding whether their actions are effective in reducing their risk or vulnerability: adaptation monitoring and evaluation is challenging. This session will explore the efforts of cities and their partners to advance knowledge and practice in city adaptation monitoring and evaluation. Through city case-studies, and a guided discussion we will draw on presenter and participant knowledge to identify the best action that can be taken by practitioners, researchers and city partners to improve monitoring and evaluation of adaptation on a city scale.

#### Organised by Partners

Alfredo Redondo, C40 Cities Climate Leadership Group, Brazil  
ARUP, United Kingdom  
ICLEI Global Secretariat

#### Chair Rapporteur

Alfredo Redondo, C40 Cities Climate Leadership Group, Brazil  
Mandy Ikert, C40 Cities Climate Leadership Group, USA

#### Presentations

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Climate risk assessment framework and taxonomy: development and early results

Alfredo Redondo, C40 Cities Climate Leadership Group, Brazil

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The Rotterdam Adaptation Monitor

Chantal Oudkerk-Pool, Rotterdam City, the Netherlands

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Monitoring health impacts of adaptation

Luciana Nery, City of Rio de Janeiro, Brazil

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Decreasing Heat Impacts by 4 Degrees

Vicki Barmby, Melbourne City Government, Australia

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Climate risk and adaptation framework and taxonomy

Amy Leitch, ARUP, United Kingdom

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Compact of Mayors and reporting

Laura Kavanaugh, ICLEI



## Issue 10. Finance, investment and business

13.30 – 15.15

Antwerp Room

# PR 10.3 Insights from inclusive insurance and applications for climate change adaptation: examples from public private partnerships and participatory index insurance design

Insurance is an important tool to manage climate change risks. This industry is at an early stage in implementing insurance, yet some approaches can be highlighted as examples. This session will present lessons on how insurance can facilitate climate change adaptation among low-income populations, highlighting the importance of public-private partnerships, especially with governments to operationalise insurance programmes. Challenges in the implementation of index insurance as a risk management tool, especially through the use of satellite-derived weather information will be featured: technology, contract design, trust and distribution, and how participatory insurance product design will be combined with climate change adaptation awareness.

Organised by	Pranav Prashad, Miguel Solana, Social Finance Unit - Impact Insurance, International Labour Organization, Switzerland
Partner	Microinsurance Network, Luxembourg
Chair	Pranav Prashad, ILO Impact Insurance Facility, Switzerland
Rapporteur	Jenny Nasr, Microinsurance Network, Luxembourg

Presentations	Public Private Partnerships for catastrophic insurance for low income people: examples from Mexico (CADENA) and Peru (Seguro Agrícola Catatrófico) Miguel Solana, ILO Impact Insurance Facility, Switzerland
	New experiences in data collection, aggregation and analysis in the context of index insurance for climate change adaptation; Global experiences Philippe Guichandut, Grameen Crédit Agricole Microfinance Foundation
	Bundling insurance with other services for building resilience and Impact on insurance value chains Mansi Anand, Oxfam America



## Issue 10. Finance, investment and business

13.30 – 15.15

Penn Room II

### PR 10.4 Making climate finance accessible to women

The Green Climate Fund aims to help countries adopt transformational pathways to low carbon, climate resilient development. The Fund is committed to a gender-sensitive approach to ensure climate finance addresses rather than reinforces gender inequalities, thus potentially setting an inspirational example to other financing mechanisms. This session provides concrete suggestions based on cases from Indonesia, the Philippines and India to put this commitment into practice and assure financing reaches and empowers women to contribute to adaptation efforts. In break-out groups practitioners and policy makers are invited to share their vision on their role in advancing the transformative power of climate finance.

Organised by	Annelieke Douma, Both ENDS, the Netherlands Zohra Moosa, Mama Cash, the Netherlands Claudia Samcam, Fondo Centroamericano de Mujeres (FCAM), Nicaragua
Partner	Samdhana Institute, Indonesia
Chair	Cindy Coltman, Both ENDS, the Netherlands
Rapporteur	Annelieke Douma, Both ENDS, the Netherlands

Presentations	Empowering women to take a lead in adaptation through small grants Neni Rochaeni, Samdhana Institute, Indonesia & Philippines
	A concrete proposal for devolution of climate finance to the local level in India Anju Sharma, Oxford Climate Policy, United Kingdom
	Screening investments in the Green Climate Fund on gender-sensitivity Jacob Waslander, Ministry of Foreign Affairs, the Netherlands



## Issue 10. Finance, investment and business

13.30 – 15.15

Diamond Room II

### PR 10.6 Adaptation finance for private sector

The role of private finance in adaptation at the project level is not yet understood fully. The aim of the session is to provide an overview of the role and opportunities for private sector actors financing adaptation in developing countries and emerging markets. It will also describe which private finance instruments are well suited for financing different adaptation activities, building on real case studies from countries such as Morocco and Bangladesh from the Private Sector Adaptation Climate Change Programme (PSACC). The presentations will aid participant's discussions on opportunities for public sector intervention to support private finance for adaptation.

<b>Organised by</b>	Angelika Frei-Oldenburg, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany
<b>Partners</b>	United Nations Environment Programme (UNEP), Finance Initiative, Switzerland
<b>Chair</b>	Remco Fischer, United Nations Environment Programme (UNEP), Finance Initiative, Switzerland
<b>Rapporteur</b>	Angelika Frei-Oldenburg, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany
<b>Presentations</b>	Demystifying private adaptation finance: towards an actor based perspective Laura Druce, Frankfurt School of Finance & Management, Germany
	Demystifying private adaptation finance: country case study Angelika Frei-Oldenburg, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany and representative from partner country
	Case studies of private adaptation finance Virginie Fayolle, Acclimatise, United Kingdom
	Laura Druce and Christine Gruening, Frankfurt School of Finance & Management, Germany



## Issue 10. Finance, investment and business

13.30 – 15.15

Mees Auditorium

### PR 10.7 Bankable investment in climate adaptation

The Paris Agreement and the new Sustainable Development Goals placed climate resilience at the centre of economic development and poverty alleviation. A key challenge is the profound lack of understanding about opportunities to support climate resilient investments – especially for private actors. There are new tools and approaches that help governments, businesses and individuals to take account of the risks of climate impacts, and opportunities to respond to these. What are the biggest challenges associated with the design and financing of adaptation/climate resilience interventions? What are the roles and responsibilities of the different stakeholders (governments, public and private investors)? Join this session to find the answers with specific examples and solutions!

<b>Organised by</b>	Thymen Kouwenaar, Ministry of Infrastructure and the Environment, the Netherlands Paul van de Logt, Ministry of Foreign Affairs, the Netherlands
<b>Chair</b>	René de Sevaux, Dutch Entrepreneurial Development Bank FMO, the Netherlands
<b>Rapporteur</b>	Michael Mullan, Climate Change and Development Co-operation, (CPI), Organisation for Economic Cooperation and Development (OECD), France Bart van Gent, Ministry of Foreign Affairs, the Netherlands

## Panel

Michael Wilkins, Managing Director, Head of Environmental and Climate Risk Research, Standard & Poor's Rating Services, United Kingdom  
 Roel Messie, Dutch Entrepreneurial Development Bank FMO, the Netherlands  
 Craig Davies, EBRD Senior Manager Climate Change Adaptation  
 Bart van Bolhuis, Director International, Ministry of Infrastructure and the Environment, the Netherlands  
 Lola Vallejo, Senior Adaptation Analyst at OECD

**Theme 4. Public health****13.30 – 15.15****Leeuwen Room I**

## SP 4.2 Vulnerability and adaptation analysis as a tool for climate change adaptation planning in the health sector at national and local level

Climate change has been identified as the defining health issue of this century. Vulnerability and adaptation assessment (V&A) has been promoted as a necessary tool for viable climate change adaptation planning in the health sector at national and local level. This session aims to provide a platform for exploring the lessons learned of V&As in Malawi, Cambodia and Grenada. The benefits of the various methodological approaches and the challenges experienced will be discussed during the panel discussion and other practitioners in the field of climate change adaptation in the health sector will be invited to contribute.

<b>Organised by</b>	Maylin Meincke, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany
<b>Partners</b>	World Health Organization (WHO), Switzerland/Malawi Malteser International, Cambodia
<b>Chair</b>	Elena Villalobos Prats, WHO, Switzerland
<b>Rapporteur</b>	Ute Jugert, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany

<b>Presentations</b>	Increasing resilience to health related impacts of climate change in Siem Reap Province, Cambodia: a vulnerability and adaptation assessment at the local level Richard Hocking, Malteser International, Cambodia
	Vulnerability and adaptation assessment: the Malawian experience Allone Ganizani, Ministry of Health, Malawi
	Vulnerability and adaptation assessment in Grenada: a qualitative approach Maylin Meincke, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, on behalf of the Department of Environmental Health, Ministry of Health and Social Security, Grenada



## Theme 7. The Arctic

13.30 – 15.15

Van Walsum Room

# SP 7.1 Connecting Arctic researchers and industry: a dialogue for societal benefit

How can an open, productive and respectful dialogue between stakeholders from industry and scientists be established for increasing mutual understanding and identifying new ways of working for ensuring economic and societal benefits? After presentations from EU-PolarNet, Shell and Basecamp Oulanka, a small Arctic company, we will have an open discussion focused on the societal and economic impacts of Arctic change and its effects on the sustainable development of the region. Aim is to improve mutually beneficial engagement and interaction between EU-PolarNet participants and stakeholders from industry, the international research community, as well as the wider society, including young people.

### Organised by Partners

Annette Scheepstra, Arctic Centre, University of Groningen, the Netherlands  
Alfred Wegener Institute, Helmholtz-Zentrum für Polar- und Meeresforschung  
Germany

### Chair Rapporteur

European Polar Board, the Netherlands  
Annette Scheepstra, University of Groningen, the Netherlands  
Kirsi Latola, University of Oulu, Finland

### Presentations

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The role of EU-PolarNet in better addressing societal needs in polar research  
Nicole Biebow, Alfred Wegener Institute, Germany

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A social license to operate in the Arctic: studying oil and gas development in Greenland  
Coco Smits, Royal HaskoningDHV, the Netherlands

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The impact of climate change on the economic development in the Arctic  
Dimtry Yumashev, Ice-Arc project, the Netherlands

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An interplay between the climate change and ecotourism  
Keijo Salenius, Basecamp Oulanka, Finland



## Issue 8. Risk assessment, adaptation planning and evaluation

13.30 – 15.15

Van Oldenbarnevelt Room

### SP 8.8 User-oriented climate services: how can national meteorological and climatological data providers better meet practitioner needs?

In the wake of extreme weather events there has been a push for national meteorological and climatological centres to deepen engagement with practitioners building societal resilience to the impacts of climate change. The purpose of this session is to create a dialogue surrounding the question 'how can national meteorological and climatological institutes improve their services to better address practitioner needs?' The National Oceanic and Atmospheric Administration (NOAA), the Royal Netherlands Meteorological Institute (KNMI) and the Swedish Meteorological and Hydrological Institute (SMHI) will share opportunities and challenges to improve their services. After two presentations, practitioners will be invited to share their needs and experiences using climate services.

Organised by	Amanda Rycerz, Acclimatise, USA
Partners	Bart van den Hurk, Royal Netherlands Meteorological Institute (KNMI), the Netherlands National Oceanic and Atmospheric Administration (NOAA), USA Swedish Meteorological and Hydrological Institute (SMHI), Sweden
Chair	Gert-Jan de Maagd, Ministry of Infrastructure and the Environment, the Netherlands
Rapporteur	Amanda Rycerz, Acclimatise, USA
Presentations	Improving end user engagement Amanda Rycerz, Acclimatise, USA Annette Hollingshead, National Oceanic and Atmospheric Administration (NOAA), USA Bart van den Hurk, Royal Netherlands Meteorological Institute (KNMI), the Netherlands Erik Kjellstrom, Swedish Meteorological and Hydrological Institute (SMHI), Sweden
	How have private and public sector actors used climatological data to build societal resilience? Amanda Rycerz, Acclimatise, USA Annette Hollingshead, National Oceanic and Atmospheric Administration (NOAA), USA Bart van den Hurk, Royal Netherlands Meteorological Institute (KNMI), the Netherlands
Discussion	Identifying areas for improvement in climate services
Facilitators	Amanda Rycerz, Acclimatise, USA Bart van den Hurk, Royal Netherlands Meteorological Institute (KNMI), the Netherlands



## Issue 10. Finance, investment and business

13.30 – 15.15

Penn Room I

### SP 10.3 Adaptive value chains: addressing the challenges of cross-sectoral adaptation

Global value chains are facing increasing risks posed by climate change and associated climate variability. The challenge of adapting to overcome these risks is faced not only by local businesses, but by the network of businesses that deliver to global markets. Practitioners and scientists come together in this session to discuss and debate challenges and opportunities for adapting value chains. It will raise challenges of boundary spanning adaptation – across sectors, across borders and across futures. Case studies will be presented and discussed.

<b>Organised by</b>	Lilly Lim-Camacho, Mark Stafford-Smith, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia Anders Levermann, Potsdam Institute for Climate Impact Research (PIK), Germany
<b>Partners</b>	Australian National University, Australia University of Arizona, USA Acclimatise & Kings College, United Kingdom
<b>Chair</b>	Lilly Lim-Camacho, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia
<b>Rapporteur</b>	Nicole Glanemann, Potsdam Institute for Climate Impact Research (PIK), Germany

<b>Presentations</b>	The role of decision tools in adapting value chains Mark Howden, Australian National University, Australia
	Climate disruptions in value chains: a case study Diana Liverman, University of Arizona, USA
	Climate resilience for SME value chains Laura Canevari, Acclimatise & Kings College, United Kingdom
	Zeean: a global perspective on supply chain disruption Anders Levermann, Potsdam Institute for Climate Impact Research (PIK), Germany
	Climate chains: supporting adaptation across food value chains Lilly Lim-Camacho, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia

15.15 – 15.45

Break



**Round Table**  
**15.45 – 17.30**  
**Town Hall**

## RT 5      **The road from Paris: closing the adaptation finance gap in vulnerable developing countries**

One of the key outcomes of the Paris Agreement is the call to make financial flows consistent with pathway toward low carbon and climate resilient development. There is also widespread recognition of the need to increase the finance flows that will be necessary to adapt to the effects of climate change. Despite welcome new finance commitments in Paris from governments and the private sector, there has to be a drastic change to reach the scale of adaptation finance that is required.

This roundtable event will bring together representatives from international financial institutions, developing country governments, and national institutions to discuss the current state of finance for adaptation, and explore some of the possible pathways to increase adaptation finance post-Paris.

During the session, written questions from the audience will be selected and posed to the speakers.

<b>Organised by</b>	Global Environment Facility (GEF)
<b>Partners</b>	World Resources Institute (WRI) Stockholm Environment Institute (SEI) Ministry of Foreign Affairs, the Netherlands
<b>Moderator</b>	Saliha Dobardzic, Global Environment Facility (GEF)
<b>Rapporteur</b>	Fareeha Iqbal, Global Environment Facility (GEF)
<b>Panel</b>	Anne Olhoff from DTU-UNEP, to present the Adaptation Finance Gap Report Mahamat Assayouti, African Development Bank James Close, The World Bank Orsalia Kalantzopoulus, Europa Re Giza Gaspar Martins, former LDC Chair Sumaya Zakieldean, Sudan (LDC lead for adaptation) Diane McFadzien, the Cook Islands (SPREP) (tbc)



## Theme 2. Food, forestry and rural livelihoods

15.45 – 17.30

Goudriaan Room I

### SC 2.6

## Risk, vulnerability and resilience in climate change adaptation

Chair

Rapporteur

Mark Rounsevell, University of Edinburg, United Kingdom

Annisa Triyanti, University of Amsterdam, the Netherlands

Presentations

The adaptation-development spectrum in dryland East Africa: mapping risks and responses

Roger Few, University of East Anglia, United Kingdom

Developing drought resilience in irrigated agriculture in the face of increasing water scarcity

Dolores Rey, Cranfield University / Cranfield Water Science Institute, United Kingdom

Application of a triangular fuzzy AHP approach for flood risk evaluation: a case study

Satya Venkat Prasad, Mulakalapalli Gitam University, India

Comparison of wellbeing and vulnerability approaches for understanding climate change impacts

Irene Kunamwene, University of Cape Town, South Africa

Implications of inherent vulnerability for local adaptation in dryland agro-ecosystems

Darshini Ravindranath, University College London, United Kingdom



## Theme 2. Food, forestry and rural livelihoods

15.45 – 17.30

New York Room

### SC 2.10

## Adapting farming systems to climate variability and change in Europe: the MACSUR experience

The session reports findings from a pilot action by the Joint Programming Initiative 'Agriculture, Food Security and Climate Change' (FACCE JPI) on the topic 'Modelling European Agriculture with Climate Change for Food Security' (MACSUR). MACSUR adopts transdisciplinary approaches and develops tools for integrated assessment of adaptation and mitigation options at regional and European scales. We present three integrated, multi-scale, regional assessments of adapting typical farming systems to climate change. These advanced model-based studies include ex-ante evaluation of a set of common sustainability indicators. In addition, we also present results on specific climate change adaptation options for crop and livestock.

Organised by	Reimund Rötter, Natural Resources Institute Finland (LUKE), Finland Floor Brouwer, Wageningen UR, the Netherlands Martin Köchy, Thünen Institute, Germany
Partners	Georg-August University Göttingen, Germany
Chair	Reimund Rötter, Natural Resources Institute Finland (LUKE), Finland
Rapporteur	Floor Brouwer, Wageningen UR, the Netherlands
Presentations	<hr/> Introduction to MACSUR – methodology for integrated assessment Reimund Rötter, Natural Resources Institute Finland (LUKE), Finland <hr/> Case 1: Integrated assessment of climate change mitigation and adaptation trade-offs in Austria Martin Schönhart, Universität für Bodenkultur Wien, Austria <hr/> Case 2: More strategic farm management needed to adapt to climate change in the North Savo region Heikki Lehtonen, Natural Resources Institute Finland (LUKE), Finland <hr/> Case 3: Winners and losers from climate change in agriculture: a case study in the Mediterranean basin Gabriele Dono, University of Tuscia, Italy <hr/> Case 4: Adaptation of European dairy farms to climate change: a case study approach Kairsty Topp, Scotland's Rural College, United Kingdom <hr/> Case 5: Design future climate-resilient barley cultivars using crop model ensembles Tao Fulu, Natural Resources Institute Finland (LUKE), Finland



## Theme 4. Public health

15.45 – 17.30

Leeuwen Room I

### SC 4.3

## Adapting to heat in South Asia

Chair  
Rapporteur

Sari Kovats, London School of Hygiene and Tropical Medicine, United Kingdom  
Marit Heinen, Climate Adaptation Services, the Netherlands

Presentations

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Heat waves, human health and adaptation: an empirical study in West Bengal, India  
Jyotish Basu, West Bengal State University, India  


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Understanding the heat waves and its effects in Nagpur, India  
Abhiyant Tiwari, Indian Institute of Public Health, Gandhinagar India  


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Development and implementation of heat-health action plan in Ahmedabad: a success story  
Priya Dutta, Indian Institute of Public Health Gandhinagar, India  


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Heat stress and human health: vulnerability of rural communities in dry semi-arid areas of India  
Bhupali Mhaskar, Watershed Organization Trust, India



## Theme 6. Disaster risk reduction

15.45 – 17.30

Antwerp Room

# SC 6.7 Megacity transitions: towards justice with resilience

Large cities are at the forefront in efforts to build resilience in the face of multiple, interlinked threats. This session presents results from TRUC, a Belmont Forum funded analysis of Kolkata, Lagos, London, New York, and Tokyo to determine how far dominant development trajectories constrain vision and practice for disaster risk management. Presentations from each city will be followed by open discussion. Practitioner viewpoints, especially those from other cities are welcome.

Organised by	Mark Pelling, King's College London, United Kingdom William Solecki, City University of New York, USA
Partners	Future Earth: coasts, Ireland London Climate Change Partnership, United Kingdom
Chair	Matthias Garschagen, United Nations University - Environment and Human Security, Germany
Rapporteur	Joern Birkmann, University of Stuttgart, Germany
Presentations	Transformation and resilience in urban coasts Mark Pelling, King's College London, United Kingdom
	Comparative risk assessment Joern Birkmann, University of Stuttgart, Germany
	Development-risk relationships Matthias Garschagen, United Nations University, Germany
	Lagos Julius Agboola, University of Lagos, Nigeria
	Kolkata Priya Narayanan, Anna University, Bangladesh
	New York Bill Solecki, City University of New York, USA
	London Mark Pelling, King's College London, United Kingdom

**Issue 9. Institutions and governance****15.45 – 17.30****Zaal Staal****SC 9.3****Science and policy interfaces for adaptation**

## Chair

Tiago Capela Lourenço, Lisbon University, Portugal

## Rapporteur

Marielise van Raaij, Wageningen UR, the Netherlands

## Presentations

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Bringing together climate, science and policy in Latin America: a study of three cases

Harry Diaz, University of Regina, Canada

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Towards more informed climate adaptation: ethics in stakeholder participation and decision-making

Mark Howden, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia

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A systemic approach to developing responses to climate change

Laurent Bontoux, European Commission DG Joint Research Centre, Belgium

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Assessing the effectiveness of multi-sector partnerships in the Jucar River Basin to manage droughts

Maria Carmona, Climate Service Center Germany (GERICS), Helmholtz Zentrum Geesthacht, Germany



## Theme 1. Cities and infrastructure

15.45 – 17.30

### Goudriaan Room II

# PR 1.4 Managing flood risk 2.0 – the green revolution

Many cities are looking at how soft 'green' infrastructure can complement the hard 'grey' infrastructure they use to manage climate risks. This session will explain through case study presentations how five cities (Copenhagen, New York, Amsterdam, Rotterdam and London) have developed and are implementing city-scale green infrastructure programmes to manage flood risk and improve the quality of life of their residents. The presentations will reflect on the challenges and solutions of moving from pilots to large-scale delivery. After the presentations, the audience will be invited to explore these challenges in more depth through a world café style facilitated discussion.

**Organised by** Alex Nickson, Greater London Authority, United Kingdom

Lykke Leonardsen, City of Copenhagen, Denmark

**Partners** City of New York, USA

De Urbanisten Rotterdam, the Netherlands

City of Amsterdam, the Netherlands

**Chair** Alex Nickson, Greater London Authority, United Kingdom

**Rapporteur** Eveline Bronsdijk, City of Rotterdam, the Netherlands

**Presentations** From plan to implementation, Copenhagen's Cloudburst Management plan

Lykke Leonardsen, City of Copenhagen, Denmark

New York City's green solutions to urban drainage and resilient neighbourhoods

Alan Cohn, City of New York, USA

Mainstreaming resilience: Climate Proof Zoho, Rotterdam and Amsterdam Rainproof programmes

Dirk van Peijpe, De Urbanisten, the Netherlands

Paulien Hartog, Amsterdam Rainproof, the Netherlands

London's sustainable drainage action plan

Alex Nickson, Greater London Authority, United Kingdom



### Theme 3. Fresh water availability and access

15.45 – 17.30

Leeuwen Room II

## PR 3.2 Implementing climate resilient water management projects to increase adaptive capacities, food security & avoid conflict over resources: examples from Thailand, India, the Netherlands and Spain

With climate changing, fresh water of good quality is becoming one of the most critical natural resources. This session will explore the following questions: (1) how do we develop towards a more resilient fresh water supply and more careful use of fresh water; (2) what are feasible measures and water management principles to increase adaptive capacities; (3) what are sustainable agriculture techniques to reduce water needs and (4) what is the role of communities and farmers in managing the water. These four questions will be addressed from four different cultural perspectives: examples from Thailand, India, the Netherlands and Spain.

Organised by	Aurélie Ceinos, Programming – Climate change Adaptation, CARE France, France José Miguel de Paz, Instituto Valenciano Investigaciones Agrarias-IVIA, Spain Steven Visser, Delta Programme, Ministry of Infrastructure and the Environment, the Netherlands
Partners	Raks Thai & CISSD India, Thailand and India
Chairs	Aurélie Ceinos, CARE, France Steven Visser, Delta Programme, Ministry of Infrastructure and the Environment, the Netherlands
Rapporteur	Otto Cox, Delta Programme, Ministry of Infrastructure and the Environment, the Netherlands

Presentations	Climate resilient water management at community level in Thailand and India Sarinthip Promrit, Raks Thai, Thailand or Bharati Joshi, CISSD, India
	Self-supporting freshwater availability along the coastal zones in the Netherlands Vincent Klap, Province of Zeeland, the Netherlands or Jouke Velstra, Acacia Water, the Netherlands
	Fresh water supply and water use in the Mediterranean: the Spanish approach José Miguel de Paz, IVIA, Spain, in cooperation with Joost Delsman, Deltares, the Netherlands



## Issue 8. Risk assessment, adaptation planning and evaluation

15.45 – 17.30

Tokyo Room

### PR 8.2

## Integrated risk management: community evidence as a catalyst for adaptation policies and investments

Jointly analyse Integrated Risk Management (IRM) practice from the field and identify the roles played by civil society, private sector, government and scientists respectively in the various IRM case studies. On the basis of the lessons learned identify outstanding joint challenges and issues for further research regarding the way Integrated Risk Management practices can positively feed the adaptation policy and -investment agenda at local, national, regional and global level.

#### Organised by Partners

Margot Loof, Cordaid, the Netherlands  
Care NL, the Netherlands  
Netherlands Red Cross  
Wetlands International  
Red Cross Climate Center

#### Chair Rapporteur

Lindsey Jones, Overseas Development Institute (ODI), United Kingdom  
Raimond Duijsens, Partners for Resilience International Secretariat, the Netherlands

#### Presentations

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Philippines: addressing urban flood risks through Integrated Risk Management  
Erica Bucug, ACCORD Inc., Philippines

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Indonesia: IRM and rain water harvesting for sustainable agriculture on Timor  
Yohan Rahmal Santosa, KARINA (Caritas Indonesia) national office, Indonesia

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Uganda: IRM – linking the community resilience to district resilience  
Mogus Bekele, Cordaid, Uganda



## Issue 9. Institutions and governance

15.45 – 17.30

Diamond Room I

### PR 9.3 The best of both worlds: debating technical and participatory approaches for urban resilience

City governments often choose for investment in infrastructure to reduce disaster risk and strengthen resilience to climate change. Cordaid observes that while these solutions may be appropriate from a technical perspective their contribution to resilience of urban communities is often limited due to lack of real participation. The objective of this session is to gain more understanding of the benefits of participatory approaches in Urban resilience and integrating technical solutions. After presentations of case studies in both Indonesia and the Philippines participants will be invited to take a stand and join the debate via an interactive Lower House setting.

#### Organised by Partners

Inge Bouwmans and Inge Leuverink, Cordaid, the Netherlands  
City government of Guiuan, Phillipines  
KARINA, Caritas Indonesia, Indonesia  
SWECO Netherlands

#### Chair Rapporteur

Inge Bouwmans, Cordaid, the Netherlands  
Harma Rademaker, Cordaid, the Netherlands

#### Presentations

A resilience framework for empowering communities and integrating technical solutions  
Inge Leuverink, Cordaid, the Netherlands

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Government perspective on cooperation between government, private sector and communities for resilience in Guiuan, Phillipines  
Recti Melquiades, City Government Guiuan, Phillipines

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Challenges in engaging stakeholders in urban resilience in informal settlements in Jakarta  
Yohan Rahmat Santosa, Karina, Caritas Indonesia, Indonesia

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Engineering solutions towards Urban Resilience in Vietnam and Indonesia  
Martijn Steenstra, SWECO, the Netherlands



## Theme 9. Institutions and governance

15.45 – 17.30

Penn Room II

# PR 9.5 Pathways to resiliency: a co-creation workshop with experts from Rotterdam and New York City

Both extreme weather events and gradual climate change urgently require implementation of measures to create resilient cities. The next 15 years provide us with a window of opportunity to adapt since huge investments in city infrastructure will have to be made. Experiences over the past seven years show key success factors for implementation of multi-beneficial solutions. Real cases (Rotterdam, New York) show successes of multilevel governance, integrating bottom up and top down, capacity building, identifying moments of change and creating bankable opportunities. We challenge five cities to identify their biggest 'resilience challenge'. We will present proposals for the next steps in a Carrousel setting and challenge participants to contribute.

### Organised by Partners

Gabrielle Muris, Rotterdam Centre for Resilient Delta Cities, the Netherlands  
Pratt Institute, USA  
City of Rotterdam, the Netherlands  
Arcadis, the Netherlands

### Chair

Arnoud Molenaar, Rotterdam Centre for Resilient Delta Cities & City of Rotterdam, the Netherlands

### Rapporteur

Gabrielle Muris, Rotterdam Centre for Resilient Delta Cities, the Netherlands

### Presentations

Rotterdam and the implementation of water storage to deal with fluvial flooding  
Eric Schellekens, Rotterdam Centre for Resilient Delta Cities & ARCADIS, the Netherlands

Capacity building by community involvement in resiliency planning and adaptation, case from Red Hook, Brooklyn NYC

Jaime Stein and Gita Nandan, Pratt Institute, USA

Setting the scene: introduction to the interactive part of the workshop

Arnoud Molenaar, Rotterdam Centre for Resilient Delta Cities, the Netherlands



## Issue 10. Finance, investment and business

15.45 – 17.30

Penn Room I

# PR 10.1 Climate change adaptation and SMEs – case studies from several parts of the world and different sectors

How can small and medium-sized enterprises in developing countries and emerging economies adapt to climate change while dealing with 'typical SME' challenges, e.g. short-term planning, resource constraints and limited technical expertise. This session will demonstrate a range of tools to build adaptation capacity in the private sector, including on awareness raising and on developing individual adaptation strategies. These tools have been developed and tested in the GIZ programme Strengthening Private Sector capacity to Adapt to Climate Change. The aim of the session is to engage with practitioners and researchers on private sector adaptation and to provide an overview on how small and medium enterprises can be supported in adapting to the impacts of climate change.

Organised by	Angelika Frei-Oldenburg, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany
Partner	INCAE Business School, Costa Rica
Chair	Angelika Frei-Oldenburg, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany
Rapporteur	Catherine Simonet, Overseas Development Institute (ODI), United Kingdom

Presentations	Climate change adaptation and SMEs – Tools and methodologies
	Angelika Frei-Oldenburg, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany
	Cosima Stahr, Adelphi Germany
	SME case studies from developing countries – experiences from practice
	Speakers to be confirmed; contributions from Morocco, Rwanda, Costa Rica, Bangladesh
	Case studies from Central America
	María José Gutierrez, consultant for INCAE Business School and consultant for IntegraRSE, Central America



## Issue 10. Finance, investment and business

15.45 – 17.30

New Orleans Room

# PR 10.2 The emerging role of accountants in enabling organisational adaptation and resilience to a changing climate

Adaptation has significant financial and economic components, and accounting skills can play a vital role. This session addresses the role of an important and newly emerging actor in climate change adaptation: accountants. It identifies the contribution of accountants and other financial professionals to the adaptation agenda, and shows how to realise its full potential. Presenters will detail how accountants help organisations manage climate risks and opportunities and build organisational resilience. Presenters will share insights from (a) a multi-sectoral collaboration to build the capacity of Canadian accountants and (b) ground breaking Australian research.

Organised by	Gordon Beal, Research, Guidance and Support, Chartered Professional Accountants of Canada (CPA Canada), Canada Maya Fischhoff, Network for Business Sustainability, Canada Elizabeth Atkinson, University of Waterloo / Natural Resources Canada, Canada
Partner	University of Queensland, Australia
Chair	Gordon Beal, Chartered Professional Accountants of Canada (CPA Canada), Canada
Rapporteur	Elizabeth Atkinson, University of Waterloo / Natural Resources Canada, Canada

Presentations	How accountants make adaptation happen
	Gordon Beal, Chartered Professional Accountants of Canada (CPA Canada), Canada
	How to build adaptation capacity in professions: a multi-sectoral approach
	Elizabeth Atkinson, University of Waterloo / Natural Resources Canada, Canada
Presentations	Asset impairment: accountants' road to adaptation
	Jac Birt, University of Queensland, Australia



## Theme 1. Cities and infrastructure

15.45 – 17.30

Mees Auditorium

### SP 1.2 Resilient cities connect: helping local implementation of the Sendai framework for disaster risk reduction

Many local governments aim to increase resilience of residents and businesses, but have trouble finding good data, the right partners, technical expertise and enough funding. The Resilient Cities Connect (RCC) platform matches demand and supply for products and services on Disaster Risk Reduction. The session aims to launch and improve the RCC platform to support local governments (>3000 members). Examples of how the platform works will be given in three presentations by: a local government; a non-commercial organisation; and a group of private partners. Subsequently, small groups will discuss goals and needs of local governments and the possibilities, mechanisms and benefits of the platform.

#### Organised by Partners

Sebastiaan van Herk, Bax & Willems, Spain  
UNESCO-IHE, the Netherlands  
UNISDR, Switzerland  
European Commission

#### Chair Rapporteur

Chris Zevenbergen, UNESCO-IHE, the Netherlands  
Azril Apriansyah, Batam, Indonesia

#### Presentations

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The need for Resilient Cities Connect Platform

Henk Ovink, Special Envoy for International Water Affairs for the Kingdom of the Netherlands

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Launch of the Resilient Cities Connect Platform

Robert Glasser, Special Representative of the UN Secretary-General for Disaster Risk Reduction

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About the Platform

Jerry Velasquez, Chief Advocacy and Outreach, UNISDR

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Perspective from a commercial solution providers

Naohiro Nishiguchi, President Japan Bosai Platform, Executive Managing Director Japan Innovation Network, Japan

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Perspective from a non-commercial development partner: city to city learning

Berry Gersonius, UNESCO-IHE, the Netherlands

#### Panel

City: Giacomo Parenti, Director-General Commune of Florence, Italy

Donor: Norio Saito, Principal Urban Development Specialist Asian Development Bank, Philippines

Private: Koen Olthuis, Founder Dutch Docklands, the Netherlands



## Theme 1. Cities and infrastructure

15.45 – 17.30

Van Walsum Room

### SP 1.4 Climate risk management and adaptation in ports

Ports are widely regarded as being highly vulnerable to the impacts of climate change while being critical gateways of international trade. The session explores challenges and opportunities generated by climate change in ports across the globe. It will start with a brief introduction about the broad range of climate risks faced by ports on the different aspects of their value chain. After this introduction, five case studies will be presented, introducing the audience to the different types of climate related risks that ports around the globe are subject to and the challenges of assessing and addressing these risks. The presentations will be followed by a moderated panel discussion.

#### Organised by Partners

Laura Canevari, Acclimatise, United Kingdom  
International Finance Corporation (IFC)  
Inter-American Development Bank (IDB), USA  
University of Rhode Island, USA  
AECOM, USA

#### Chair Rapporteur

The Port of Rotterdam, the Netherlands  
Amanda Rycerz, Acclimatise, United Kingdom  
Virginie Fayoll, Acclimatise, United Kingdom

#### Presentations

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Introduction: climate risks across ports value chains  
Laura Canevari, Acclimatise, United Kingdom

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Climate change risk assessment and management for the Terminal Maritima Muelles el Bosque  
Vladimir Stenek, International Finance Corporation (IFC)

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Climate risks and adaptation plan for the Port of Manzanillo  
Laura Canevari, Acclimatise, United Kingdom

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Port of Providence  
Austin Becker, University of Rhode Island, USA

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Coastal resiliency strategies for the Port of Long Beach  
Claire Bonham-Carter, AECOM, USA

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Taking a port-city approach to resilience: the Port of Rotterdam  
Marc Eisma, Port of Rotterdam, the Netherlands



## Issue 8. Risk assessment, adaptation planning and evaluation

15.45 – 17.30

Beurs Lounge

### SP 8.2 Goals, targets and metrics: new ideas for tracking adaptation success in cities, forests, water, finance, and national planning

In this panel session, participants working in a variety of sectoral and cross-sectoral contexts will share perspectives on defining and tracking adaptation success. We aim to identify practical options to defining success and tracking progress, given climate uncertainty, long time horizons, and growing interest in transformational change. In order to identify tangible solutions for use by practitioners and policy-makers at national level or across scales (national-to-local), the session seeks to avoid focusing on broad conceptual frameworks, aggregate global indices, or narrow project-specific approaches. Instead we will look across sectors and adaptation planning contexts to find shared themes and promising methods for setting adaptation goals and tracking progress toward them.

Organised by	Heather M. Mcgray, World Resources Institute (WRI), USA
Partners	World Resources Institute, Brazil, China, Europe, India, Indonesia, USA Local Climate Adaptive Living Facility, UN Capital Development Fund, multiple least developed countries
Chair	Heather Mcgray, World Resources Institute (WRI), USA
Rapporteur	Ayesha Dinshaw, World Resources Institute (WRI), India
Presentations	Channel adaptation finance on budget to local governments Fakri Karim, Local Climate Adaptive Living Facility, United Nations Capital Development Fund (UNCDF), multiple countries
	Socio-economic indicators for building resilience in Rio de Janeiro Pedro Junqueira, Rio de Janeiro Center of Operations, Brazil
	Adaptation targets in Mexico's national climate plan Intended Nationally Determined Contributions (INDCs) Margarita Caso, National Institute of Ecology and Climate Change, Mexico



## Issue 8. Risk assessment, adaptation planning and evaluation

15.45 – 17.30

Oscar Auditorium

### SP 8.7 Resilient risk management strategies for critical infrastructure within cities

Recent extreme events within Europe and beyond have demonstrated the vulnerability of infrastructure networks and highlighted the challenges there are in the context of improving resiliency of cities and their infrastructure. This interactive session provides an opportunity to explore and discuss experiences, challenges and lessons learned on moving from risk assessment to adaptation planning and implementation that also consider interdependencies and connecting science to practice and policy. After short presentations on experiences of leading cities, EU projects and national approaches, participants will together explore perspectives on crucial factors for managing critical infrastructure in the context of change.

#### Organised by

Annemarieke Grinwis, Deltaprogramme, Ministry of Infrastructure and the Environment, the Netherlands  
Tara Geerdink, TNO, Netherlands Organisation for Applied Scientific Research, the Netherlands  
Roger Street, UK Climate Impacts Programme (UKCIP), University of Oxford, United Kingdom

#### Partners

City of Amsterdam, Waternet, the Netherlands  
City of Rotterdam, the Netherlands  
Arcadis, the Netherlands

#### Chair

Adriaan Slob, TNO, Netherlands Organisation of Applied Scientific research, the Netherlands

#### Rapporteurs

Roger Street, UKCIP, University of Oxford, United Kingdom  
David van Raalten, Arcadis, the Netherlands

#### Presentations

Adaptation approach to critical Infrastructure from a national policy perspective in the Netherlands and a practical/managing approach in the United Kingdom, pitch and reflection

Annemarieke Grinwis, Ministry of Infrastructure and the Environment, the Netherlands  
Reaction: John Dora, John Dora Consulting Limited, United Kingdom

Experiences from the RESIN and INTACT project (network interdependencies) with reaction from the city of Rotterdam

Tara Geerdink, TNO, Netherlands Organisation of Applied Scientific research, the Netherlands

Reaction: Nick van Barneveld, City of Rotterdam the Netherlands

Approach to critical infrastructure from city of Toronto with reaction from the city of Amsterdam

David MacLeod, City of Toronto, Canada

Reaction: Rob Koeze, City of Amsterdam, Waternet, the Netherlands



## Issue 8. Risk assessment, adaptation planning and evaluation

15.45 – 17.30

Van Oldenbarnevelt Room

### SP 8.12 Climate risk information for development, disaster risk reduction, and conservation

New paradigms are emerging for integrating climate information into conservation, disaster risk reduction, and sustainable development strategies. The session will present cutting-edge scientific approaches to developing and using climate risk information for development, conservation and disaster risk reduction practitioners. The Adaptation for Development and Conservation (ADVANCE) partnership between World Wildlife Fund and the Center for Climate Systems Research at Columbia University will provide case studies and approaches based on experience with stakeholders in Myanmar, Colombia and Central Asia. The BRACED programme is helping people become more resilient to climate extremes in the Sahel, East Africa and Asia and will present case studies from these regions. The session will identify opportunities and constraints, and share practices and lessons from the ADVANCE and BRACED countries on the application of climate risk information.

Organised by	Cynthia Rosenzweig, NASA Goddard Institute for Space Studies and Columbia University, USA
Partners	Center for Climate Systems Research, Earth Institute, Columbia University, USA World Wildlife Fund, USA Asian Disaster Preparedness Center, Thailand
Chair	Anita van Breda, World Wildlife Fund, USA
Rapporteur	Ryan Bartlett, World Wildlife Fund, USA

Presentations	Stakeholder-driven climate risk information products for conservation, development and disaster risk reduction Cynthia Rosenzweig, NASA Goddard Institute for Space Studies and Columbia University, USA
	Climate services application experiences in BRACED Asian and African countries Atiq Kainan Ahmed, Asian Disaster Preparedness Center, Thailand
	Local perspectives on integrating climate risk information into village-scale ecosystem based adaptation in Tajikistan Umed Bulbulshoev, Camp Tabiat, Tajikistan
	Adaptation for development and conservation (ADVANCE) partnership: lessons from Myanmar, Colombia and Central Asia Shaun Martin, World Wildlife Fund, USA



## Issue 10. Finance, investment and business

15.45 – 17.30

Diamond Room II

### SP 10.4 Adaptation as an innovation and market opportunity

Climate adaptation services are developed to disseminate and tailor climate information to users in order to help them to adapt to climate change. To develop useful climate adaptation services for public and private sector, strong collaboration between climate scientists, adaptation scientists and climate adaptation service providers (e.g. consultants) is crucial. This facilitated brokerage session aims at exploring what knowledge exchange is needed and how to enhance partnerships between science and consultancies engaged in the climate adaptation service market. The discussion will focus also on business models, intellectual properties and customers acquisition.

#### Organised by Partners

Petra Manderscheid, Joint Programming Initiative – Climate, Belgium  
DNV GL, Norway  
Wageningen UR, the Netherlands

#### Chair Rapporteur

Danmarks Tekniske Universitet (DTU), Denmark  
Asun Lera St. Clair, DNV GL, Norway  
Alexandre Fernandes, JPI Climate, Belgium

#### Presentations

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Partnerships for Climate Solutions  
Bente Pretlove, DNV GL, Norway

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Medium-size consultant focusing on adaptation  
John Firth, Acclimatise, United Kingdom

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Small-size consultant  
Simone Kongsbak, Smith Innovation, Denmark

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**17.30 – 19.00**      **Reception and poster session**

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**19.00 – 22.00**      **Conference dinner (optional)**

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(ADVERTORIAL)



# GACSA: GLOBAL ALLIANCE FOR CLIMATE-SMART AGRICULTURE

THE GLOBAL ALLIANCE FOR CLIMATE-SMART AGRICULTURE IS A VOLUNTARY ALLIANCE OF PARTNERS, DEDICATED TO ADDRESSING THE CHALLENGES FACING FOOD SECURITY AND AGRICULTURE BY TAPPING THE WEALTH AND DIVERSITY OF RESOURCES, KNOWLEDGE, INFORMATION AND EXPERTISE.

## WHO CAN JOIN GACSA?

The Alliance is open to membership from all sectors, including

- governments,
- inter-governmental organizations,
- farmer organizations,
- NGOs,
- civil society groups,
- research institutes,
- private sector,

whose objectives and activities are consistent with the vision and mission of GACSA, and who fulfill the criteria for membership.

Individuals cannot become members of GACSA.

## STRUCTURE

The Global Alliance has a light organizational structure, composed of:

- Annual Forum
- Strategie Committee
- Facilitation Unit.

The operative bodies of the Global Alliance are three Action Groups: Knowledge, Enabling Environment and Investment.

**KNOWLEDGE ACTION GROUP:** Increasing and promoting knowledge, research and development into technologies, practices, and policy approaches for climate-smart agriculture.

**INVESTMENT ACTION GROUP:** Improving the effectiveness of public and private investments that support the three pillars of climate-smart agriculture.

**ENABLING ENVIRONMENT ACTION GROUP:** Integrating climate-smart agriculture into policy, strategies and planning at regional, national, and local levels and across landscapes.



GLOBAL ALLIANCE FOR  
CLIMATE-SMART AGRICULTURE

FOR MORE INFORMATION PLEASE VISIT OUR WEBSITE:

[www.fao.org/gacsa](http://www.fao.org/gacsa)

ENTITIES INTERESTED IN GACSA OR BECOMING A MEMBER.

PLEASE CONTACT THE FACILITATION UNIT:

[ACSA-Facilitation-Unit@fao.org](mailto:ACSA-Facilitation-Unit@fao.org)

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# THURSDAY 12 MAY 2016



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08.00 – 18.00	Registration
09.00 – 18.00	Adaptation Expo
08.45 – 10.30	Sessions
10.30 – 11.00	Break
11.00 – 12.45	Sessions
12.45 – 13.45	Lunch
13.45 – 15.30	Sessions
15.30 – 16.00	Break
16.00 – 17.30	Plenary
18.30 – 21.00	IABR architecture biennale reception





**Round Table**  
**08.45 – 10.30**  
**Town Hall**

## RT 6 National Adaptation Planning: linking across scales

National adaptation planning can strengthen local adaptation responses and local actions can in turn inform national adaptation planning. This round table session will explore in what ways, and feature ongoing initiatives and experiences at the national, sectoral, and local levels that involve mainstreaming climate risk in planning and budgeting. Both good practice and examples of maladaptive practices will be discussed.

Participants and audience members will discuss:

- Entry points in national and local plans and budgets for mainstreaming climate risk
- Prioritisation of adaptation actions
- Institutional challenges in coordinating between national, sectoral and local levels
- Transboundary issues, shift of risks
- Learning from each other and from mistakes

Speakers include policymakers, practitioners and researchers from both developed and developing countries.

Organised by	European Commission, Directorate General DG Climate Action
Partners	United Nations Development Programme
Moderator	Pradeep Kurukulasuriya, United Nations Development Programme (UNDP)
Rapporteur	Max Linsen, European Commission, DG Climate action
Panel	David Bresch, Head, Business Development, Global Partnerships at Swiss Re, Switzerland Sirkku Juhola, Associate professor, Department of Environmental Sciences, University of Helsinki and Department of Built Environment, Aalto University, Helsinki, Finland Ignacio Lorenzo, Executive Secretary, National Climate Change Response System of Uruguay Hermen Borst, Deputy Delta Commissioner, the Netherlands Tbd, Least Developed Countries Experts Group, UN Framework Convention on Climate Change



## Theme 1. Cities and infrastructure

08.45 – 10.30

Goudriaan Room I

### SC 1.6

## Designing a climate resilient future

#### Chair

David Dodman, International Institute for Environment and Development (IIED), United Kingdom

#### Rapporteur

Kathrin Merkelbach, Wageningen UR, the Netherlands

#### Presentations

How can design contribute to climate adaptation? Analysis of an international design workshop

Jeroen de Waegemaeker, Institute for Agricultural and Fisheries Research (ILVO) / University of Antwerp (UA), Belgium

Rebuild by Design: implementation of green infrastructure for flood resiliency in Hoboken

Robert Sakic Trogrlic, UNESCO- IHE, the Netherlands

Design of floating developments based on ecology and living systems principles

Barbara Dal Bo Zanon, Deltasync, the Netherlands

How can green infrastructure serve as adaptation option in low land areas? Case study: Makassar City

Pradiya Adhitama, University of Twente, the Netherlands



## Theme 2. Food, forestry and rural livelihoods

08.45 – 10.30

New York Room

### SC 2.9

## New climate change and food system assessments: coordinating global and regional scales

Food security is one of the most prominent areas of scientific inquiry and popular concern related to climate change's potential to disrupt society. This session focuses on new directions in food system assessments including integration across global and regional scales, linkages to nutrition and health, and sustainable agriculture. Impacts of extreme events will be explored on both biophysical and socioeconomic aspects. Opportunities for participation and collaboration in AgMIP and other projects and programmes will be shared in the discussion.

#### Organised by Partners

Cynthia Rosenzweig, NASA Goddard Institute for Space Studies (NASA GISS), USA  
The Agricultural Model Intercomparison and Improvement Project, USA  
Modelling European Agriculture with Climate Change for Food Security, EU

#### Chair

Jean-Francois Soussana, Institut National de la Recherche Agronomique, France

#### Rapporteur

Delphine Deryng, University of Chicago & Goddard Institute for Space Studies, USA

## Presentations

Towards a new food system assessment: AgMIP coordinated global and regional integrated assessments of climate change and food security

Cynthia Rosenzweig, NASA Goddard Institute for Space Studies (NASA GISS), USA

Global economic models: up- and down-stream linkages

Herman Lotze-Campen, Potsdam Institute for Climate Impact Research (PIK), Germany

Interactions of mean climate change and climate variability increase risk of food security extremes

Alexander Ruane, NASA Goddard Institute for Space Studies, USA



## Theme 4. Public health

08.45 – 10.30

New Orleans Room

### SC 4.4

## Climate risks for infectious diseases

## Chair

## Rapporteur

Kristie Ebi, University of Washington, USA

Valerie Eijrond, Wageningen UR, the Netherlands

## Presentations

Multiple stressors: household vulnerability to schistosomiasis and climate change in rural Gwanda

Alexio Mbereko, University of South Africa, South Africa

Climate change effect on malaria treatment cost among farmers' households in Bole district, Ghana

Komlagan Yao, WASCAL, Togo

A global analysis of the climate sensitive disease: systematic review

Tatiane Sousa, National School of Public Health, Oswaldo Cruz Foundation/FIOCRUZ, Brazil

Understanding health in the face of global change: towards a vulnerability framework

Sarah Dickin, Stockholm Environment Institute (SEI), Sweden



## Theme 5. Ecosystems and ecosystem based adaptation

08.45 – 10.30

Zaal Staal

### SC 5.4

## Building the knowledge base for ecosystem based adaptation

Chair

Pam Berry, Oxford University, United Kingdom

Rapporteur

Emilie Buist, Delft University of Technology, the Netherlands

Presentations

Better Wetter: linking spatial adaptation to regional transitions

Ivan Mettrop, Altenburg & Wymenga ecological consultants, the Netherlands

Selecting climate resilient tree species for forest restoration in the Himalayan region of Nepal

Keshav Prasad Khanal, WWF Nepal Program, Nepal

A theoretical research review of forest law and customs in Bangladesh as local adaptation practices

Shaila Shahid, Gender and Water Programme, Gender and Water Alliance, Bangladesh

Building adaptation among fringe communities along the Atiwa Forest in an era of climate change

Timothy Apeanti, University of Ghana, Ghana

Ecosystem-based adaptation assessment, implementation and policy: lessons from multi-country projects

Camila Donatti, Conservation International, Arlington, USA



## Issue 8. Risk assessment, adaptation planning and evaluation

08.45 – 10.30

Van Oldenbarnevelt Room

### SC 8.1

## Risk management and risk perception

Chair

André Jol, European Environment Agency (EEA), Denmark

Rapporteur

Erik de Groot, The Hague University of Applied Sciences, the Netherlands

Presentations

A regional approach to assess transportation infrastructure vulnerability to extreme weather events

Mark Abkowitz, Vanderbilt University, USA

Knowledge gaps in risk management for critical infrastructure: insights from four case-studies

Trond Husby, TNO, Netherlands Organisation for Applied Scientific Research, the Netherlands

Iterative climate risk management for taking adaptation to the next level? Insights from Austria

Thomas Schinko, International Institute for Applied Systems Analysis (IIASA), Austria

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Risk perception as a driver for risk management policies

Maria Carmona, Climate Service Center Germany (GERICS) Helmholtz Zentrum Geesthacht, Germany



## Issue 8. Risk assessment, adaptation planning and evaluation

08.45 – 10.30

Mees Auditorium

### SC 8.8

## Adaptation pathways and maladaptation

Chair

Rapporteur

Sebastian Vicuña, Pontificia Universidad Católica de Chile, Chile

Annika Trignol, HZ University of Applied Sciences, the Netherlands

Presentations

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Towards a (re)conceptualising of maladaptation in policy and practice

Lindsey Jones, Overseas Development Institute (ODI), United Kingdom

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Evaluating the priming of adaptation pathways governance in Indonesia

James Butler, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia

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Envisioning robust climate change adaptation futures for coastal regions

Tom van der Voorn, Institute of Environmental Systems Research, Germany

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Using sea level rise projections with adaptation pathways in the Torres Strait – a practice case study

Rohan Hamden, Rohan Hamden & Associates, Australia

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Development pathways as a lens to understand adaptation, maladaptation and maldevelopment

Chandni Singh, Indian Institute for Human Settlements, India



## Issue 8. Risk assessment, adaptation planning and evaluation

08.45 – 10.30

Beurs Lounge

### SC 8.9

## Use and usability of climate information in adaptation planning

Chair

Rapporteur

Roger Street, UK Climate Impacts Programme (UKCIP), United Kingdom

Johanna Wandel, University of Waterloo, Canada

Presentations

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Climate projections: the missing link of regional and local adaptation processes?

Sandrine Dhenain, TEC Conseil, France

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Understanding the value of seasonal climate forecasts for agriculture: a Devon, UK case study

Marta Soares, University of Leeds, United Kingdom

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Comparing the decision-relevance of alternative ensembles of climate information  
Robert Lempert, RAND, USA

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The identification of threshold-specific changes in local climate for risk assessment and adaptation

David Stainforth, London School of Economics and Political Science, United Kingdom

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Interactive visualisation of climate impacts, an interactive session

Luuk Masselink, Wageningen UR, the Netherlands

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## Issue 9. Institutions and governance

08.45 – 10.30

Tokyo Room

### SC 9.6

## Climate adaptation goes global

Chair

Rapporteur

Jochen Hinkel, Global Climate Forum, Germany

Miriam de Graaff, Wageningen UR, the Netherlands

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Presentations

Climate adaptation and world markets: governance implications of indirect climate impacts

Åsa Persson, Stockholm Environment Institute (SEI), Sweden

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Does it matter what you call it? Reflections on voluntarily corporate adaptation disclosure

Karoliina Isoaho, University of Helsinki, Finland

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Standards as a form of adaptation governance

Asun Lera St. Clair, DNV GL, Norway

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Intolerable risks of climate change and the debate on loss and damage under the UNFCCC

Gregor Vulturius, Stockholm Environment Institute (SEI), Sweden

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We now have sustainable development goals; should we also have adaptation goals?

Ian Noble, Monash University, USA

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## Issue 9. Institutions and governance

08.45 – 10.30

Rotterdam Hall

# SC 9.8 New governance challenges for climate adaptation: comparative perspectives on inclusive policy tools for multi-scalar risk management

Recent climate change adaptation efforts increasingly recognise the multi-scalar nature of climate risks and responses. Drawing on case studies from North America, Latin America, and Asia, this focused science session examines new knowledge on the inclusiveness, equity, and justice dimensions of these emerging risk management techniques and strategies. This session primarily draws on insights from the water sector – which include floods, droughts, and coastal zone management – and theorises new instruments for inclusive development that address climate risks across multiple levels of governance, integrating urban, rural, as well as national level adaptation options.

### Organised by Partners

Joyeeta Gupta, University of Amsterdam, the Netherlands  
University of Regina, Canada

### Chair

Joyeeta Gupta, University of Amsterdam, the Netherlands

### Rapporteur

Eric Chu, University of Amsterdam, the Netherlands

### Presentations

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Adaptive governance: redesigning policy instruments using the Adaptive Capacity Wheel in Canada, Chile and Argentina  
Margot Hurlbert, University of Regina, Canada

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Governing coastal disaster risk reduction in Indonesia and India: comparative perspectives of engineered infrastructure and nature-based solutions  
Annisa Triyanti, University of Amsterdam, the Netherlands / Gadjah Mada University, Indonesia

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Urban climate adaptation, infrastructure planning, and socio-spatial (in)justice in the global south  
Eric Chu, University of Amsterdam, the Netherlands

**Issue 9. Institutions and governance****08.45 – 10.30****Oscar Auditorium****SC 9.9****Exploring spatial planning as a means to deal with flood risks: comparing experiences in the face of institutional differences between the US and the Netherlands**

Climate change policy arrangements often emphasise large-scale flood protection facilities at the expense of more diffuse, spatially oriented and/or private-actor driven developments such as adaptation-oriented spatial planning and climate change-related risk awareness in policies and plans of corporations and citizens. This session sets out to enable an exchange of experiences in dealing with the (potential) tension between top-down, 'high-tech' solutions and bottom-up, formally less articulate approaches to climate adaptation. Two accounts of local, practical experiences form the basis for a reflective conversation between scholars and practitioners on the relation between institutional setting and policy design in climate adaptation.

**Organised by** Anne Loeber, University of Amsterdam, the Netherlands

Paul Kirshen, University of Massachusetts Boston, USA

**Partners** Municipality of Dordrecht, the Netherlands

ORG-ID, the Netherlands

**Chair** Anne Loeber, University of Amsterdam, the Netherlands

**Rapporteur** Robert de Graaff, ORG-ID, the Netherlands

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**Presentations** Creating a workable climate resiliency planning model for East Boston for low-income communities

Paul Kirshen, School for the Environment, University of Massachusetts, USA

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Managing adaptive responses to changing flood risks in Dordrecht: creating options for spatial adaptation

Ellen Kelder, Municipality of Dordrecht, the Netherlands



## Issue 9. Institutions and governance

08.45 – 10.30

Diamond Room II

### SC 9.12 Local governance of adaptation in urbanising cities

As cities worldwide expand, and climate change intensifies and accelerates, the need to understand opportunities and challenges for adaptation and risk management increases at multiple scales. With contrasting governance and financial regimes, institutional contexts, and organisational landscapes within which decisions are made, the significance of the local tier of government is becoming more pertinent in the face of power differentials, responsibility devolution and resource limitations. With presentations covering North America, The Caribbean, Europe and Africa, the objective of this session is to enable the exploration of practical solutions that not only capture risk but enable reflection and learning in changing environments.

Organised by	Shona Paterson, King's College London, United Kingdom
Partner	University of South Florida, USA
Chair	Mark Pelling, King's College London, United Kingdom
Rapporteur	Shona Paterson, King's College London, United Kingdom

Presentations	Understanding adaptive capacity in contrasting risk management regimes Shona Paterson, King's College London, United Kingdom
	Adapting to risk under austerity: case studies from Europe and the Caribbean Arabella Fraser, King's College London, United Kingdom
	Urban Africa: risk knowledge and governance for risk reduction and adaptation Hayley Leck and Mark Pelling, King's College London, United Kingdom
	Opportunities for and challenges to social learning in community response to flood hazards Åsa Gerger Swartling, Stockholm Environment Institute (SEI), Sweden



## Issue 10. Finance, investment and business

08.45 – 10.30

Antwerp Room

### SC 10.1 Finance for adaptation

Chair	Swenja Surminski, London School of Economics and Political Science, United Kingdom
Rapporteur	Ben Pieterse, HZ University of Applied Sciences, the Netherlands

Presentations	Private finance for adaptation: what does it mean in practice? Mark Redwood, International Development Research Centre, Canada
	International adaptation finance: why the numbers don't add up and what to do about it Romain Weikmans, Brown University, USA

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Financing tools for urban adaptation to climate change impacts

Alexia Leseur, Institute for Climate Economics (I4CE), France

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Private sector investments in a changing climate: resilient rice value chain development in Uganda

Angie Dazé, International Institute for Sustainable Development (IISD), Switzerland

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Mobilising private adaptation finance: developed countries' perspectives and experiences

Pieter Pauw, German Development Institute, Germany



## Theme 1. Cities and infrastructure

08.45 – 10.30

Goudriaan Room II

PR 1.5

# Unlocking opportunities from leadership for Resilient Cities: how to make changes happen

Successful adaptation involves champion leaders to initiate change. The roles of leadership and support from trusted advisors are essential to navigate the changes through political acceptance and on to the delivery of outcomes and impact. The session aims to demonstrate effective leadership practices to initiate and catalyse changes for resilient cities in developed and developing countries. The exchange of leadership practices from ten participating cities will focus on sharing effective ways to 1) drive change for adaptation in cities, 2) foster City-to-City learning (multiply and scale out resilience programmes to other cities), and 3) support leadership development for sustainability and resilience in cities. The session will be prepared in a two-day workshop with ten cities immediately before the Conference.

### Organised by Partners

Chris Zevenbergen, UNESCO-IHE, the Netherlands  
City of Rotterdam, the Netherlands  
TransformationFirst.Asia  
Rockefeller Foundation, USA  
Asian Development Bank (ADB)

### Chair Rapporteur

Chris Zevenbergen, UNESCO-IHE, the Netherlands  
Berry Gersonius, UNESCO-IHE, the Netherlands

### Presentations

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Sustainability & resilience leaders (CRO's) from a selection of cities from Asia and Europe, which have participated in the Workshop on Leadership for Resilient Cities, on 9 May ahead of the Conference.

A panel comprising CRO's of the remainder cities and global city networks and organizations will reflect on the presentations.

## Presentors

Tatiana Gallego-Lizon, Urban Development and Water Division SEUW  
 Eri Honda, Asian Development Bank (ADB)  
 Riyanti Djalante, Kendari, Indonesia  
 Pabdu Zanuvar, Malang, Indonesia  
 Thushari Andra Hennadige, Colombo, Sri Lanka  
 Ellen Kelder, Dordrecht, the Netherlands

**Issue 9. Institutions and governance**

08.45 – 10.30

Leeuwen Room I

## PR 9.1

## Water governance in peri-urban South Asia: impact of urbanization and climate change

Both urbanisation and climate change have exerted pressure on the availability of and access to water. To add to this, the peri-urban areas are often subject to institutional neglect by the state. The objective of the session is to sensitize the participants to the peri-urban dimensions of water governance. Drawing from the case studies from Bangladesh, India and Nepal, the session will expose the participants to different theoretical frameworks for studying peri-urban processes and highlight the important of adaptive governance for the effective management of climate change and urbanization in peri-urban spaces to ensure water security.

## Organised by

Anamika Barua, SaciWATERS, India  
 Dik Roth, Wageningen UR, the Netherlands

## Partners

Bangladesh University of Engineering and Technology (BUET), Bangladesh  
 International Centre for Integrated Mountain Development (ICIMOD), Nepal

## Chair

Dik Roth, Wageningen UR, the Netherlands

## Rapporteur

Sumit Vij, Wageningen UR, the Netherlands

## Presentations

Water (in)security and emerging conflicts: missing links in water management institutions in Periurban Khulna, Bangladesh

Shah Alam Khan, Institute of Water and Flood Management (IWFM), Bangladesh, University of Engineering and Technology (BUET) Dhaka, Bangladesh

Emerging patterns of water insecurity due to climate change and urbanization in peri-urban areas of Kathmandu Valley, Nepal

Otto Hoffmann, MetaMeta, the Netherlands

SaciWATERS, Hyderabad, Water (in) security and institutional conflicts at different levels In peri-urban Hyderabad, India

Anamika Barua, SaciWATERS, Hyderabad, India



## Theme 9. Institutions and governance

08.45 – 10.30

Van Walsum Room

### PR 9.6 Standards for adaptation of infrastructures to climate change

The session covers the role of technical standards in making infrastructures resilient to climate change. As technical standards (ISO (worldwide), EN (European) and national standards) are used in every phase during the lifetime cycle of an infrastructure, these are a key issue in the EC strategy on climate change adaptation. In this interactive session we will show two practical examples of how existing standards can support climate change adaptation. After this, we will highlight which climate effects are likely to be relevant for infrastructures in the building, energy and transport sector, and which corresponding standards appear to be most relevant.

#### Organised by

Netherlands Standardization Institute (NEN), the Netherlands

#### Partners

CEN/ CENELEC (European umbrella-organisation for standardization)

#### Chair

Ab de Buck, NEN, consultants standards and sustainability, the Netherlands

#### Rapporteur

Caroline van Hoek, Netherlands Standardization Institute (NEN), the Netherlands

#### Presentations

Examples of adapting buildings to climate change: the role of standardisation

Annet van der Horn, consultant standards in the building sector, the Netherlands

Adapting infrastructures in the energy, building and transport sector to climate change

Potential gaps between existing standards and future weather effects

Interactive session



## Theme 3. Fresh water availability and access

08.45 – 10.30

Leeuwen Room II

### SP 3.1 Experiences with practical tools and interactive methods to enhance community resilience to droughts

In East Africa population growth and climate change pose challenges to accessing fresh water for domestic and agricultural uses. Experiences in practice and research show that small scale measures in water management are viable ways to improve livelihoods and agricultural production, and make communities more resilient. We will explore how to use available tools, approaches and insights to improve application and effectiveness of small scale measures. Practitioners and researchers share experiences in using global and local information, stakeholder and research approaches. We will foster an interactive discussion with the audience about the agenda on small scale measures for the coming years.

**Organised by** Ralph Lasage, Institute for Environmental Studies (IVM), VU University Amsterdam, the Netherlands

**Partners** Cordaid regional office Horn of Africa, Ethiopia  
Acacia Water, the Netherlands

**Chair** Arjen de Vries, Acacia Water, the Netherlands

**Rapporteur** Paul Hudson, Institute for Environmental Studies (IVM), VU University Amsterdam, the Netherlands

**Presentations** Applying regional models to assess the change in occurrence and impact of drought in East Africa

Ted Veldkamp, Institute for Environmental Studies (IVM), VU University Amsterdam, the Netherlands

Experiences with suitability mapping of small scale and water buffering measures in Kenya, Uganda and Zimbabwe, as input for DRR decision making

Arjen de Vries, Acacia Water, the Netherlands

Evaluation of catchment wide effects of climate change and large scale implementation of water buffering in Ethiopia

Ralph Lasage, Institute for Environmental Studies (IVM), VU University Amsterdam, the Netherlands

Combining stakeholder priorities and inputs from suitability maps to identify and prioritise suitable water management measures: examples from Ethiopia

Moges Bekele, Cordaid regional office Horn of Africa, Ethiopia



## Issue 8. Risk assessment, adaptation planning and evaluation

08.45 – 10.30

Diamond Room I

### SP 8.11 Measuring resilience of adaptation interventions and beyond

The objective is to share, get feedback and stimulate discussion on the latest resilience measurement thinking, the scaling up and how this might shape the programme logic of future adaptation relevant interventions, and related M&E endeavours. In this session we will discuss: the ongoing STAP GEF work on resilience and the Resilience, Adaptation Pathways and Transformation Assessment (RAPTA) framework, the World Bank's approach to the M&E of resilience at the project level, the bottom-up approach of ODI with a focus on subjective household resilience measurement, and lastly UKCIPs focus on transformational adaptation and the capacities needed to support it.

**Organised by** Dennis Bours, Global Environment Facility's Independent Evaluation Office (GEF IEO), USA

**Partners** Scientific and Technical Advisory Panel of the Global Environment Facility (STAP GEF), USA

The World Bank, Climate Change Policy Team, USA

Overseas Development Institute (ODI), United Kingdom

UK Climate Impacts Programme (UKCIP), United Kingdom

**Chair** Anna Viggh, Global Environment Facility's Independent Evaluation Office (GEF IEO), USA

**Rapporteur** Dennis Bours, Global Environment Facility's Independent Evaluation Office (GEF IEO), USA

**Presentations** Approaches and indicators for measuring adaptation and resilience, including process indicators, linking across scale and applications of the Resilience, Adaptation Pathways and Transformation Assessment (RAPTA) Framework

Anand Patwardhan, Scientific and Technical Advisory Panel of the Global Environment Facility (STAP GEF), USA

Monitoring and evaluation of resilience at the project level

Nathan Engle, The World Bank, Climate Change Policy Team, USA

Measuring subjective resilience: outlining a complementary approach to resilience measurement

Lindsey Jones, Overseas Development Institute (ODI), United Kingdom

Transformational adaptation to address systemic, fundamental changes through experimentation, innovation and learning histories

Patrick Pringle, UK Climate Impacts Programme (UKCIP), United Kingdom



## Issue 9. Institutions and governance

08.45 – 10.30

Penn Room I

### SP 9.4 Connections and disconnections between national and local agendas and aspirations for climate adaptation and development

People in rural and peri-urban communities in semi-arid regions face many barriers in adapting to increasing uncertainty. This session intends to provide a platform for researchers, practitioners and decision makers to discuss the opportunities for strengthening the interface between climate-resilient national development strategies and local adaptation pathways to enable more widespread and effective responses to climate change that improve the wellbeing of the most vulnerable. Using case studies from PRISE (Pathways to Resilience in Semi-arid Economies) and ASSAR (Adaptation at Scale in Semi-Arid Regions), the focus will be on ways in which national and local priorities in Africa and Asia interact. Presentations will be followed by a discussion where participants can reflect on a series of questions bringing in their own experiences and knowledge.

<b>Organised by</b>	Mark New, African Climate & Development Initiative, University of Cape Town, South Africa Eva Ludi, Overseas Development Institute (ODI), United Kingdom
<b>Partners</b>	Oxfam GB, United Kingdom ICRISAT, Mali Indian Institute for Human Settlement, India Watershed Organisation Trust, India University of Addis Ababa, Ethiopia University of East Anglia, United Kingdom London School of Economics, United Kingdom
<b>Chair / Facilitator Rapporteurs</b>	Blane Harvey, Overseas Development Institute (ODI) Canada / United Kingdom Sumetee Pahwa Gajjar, Indian Institute for Human Settlement, India Irene Kunamwene, University of Cape Town, South Africa

<b>Presentations</b>	Adaptation opportunities through upgrading and diversifying cotton and beef value chains in Pakistan, Burkina Faso, Senegal, Tanzania and Kenya Elizabeth Carabine, Overseas Development Institute (ODI), United Kingdom
	Maharashtra groundwater development and management act: opportunities and Barriers at local level Suchita Awasthi, Watershed Organization Trust, India
	Fostering an enabling environment for private sector adaptation: insights from Senegal Florence Crick, Grantham Research Institute on Climate Change and the Environment, United Kingdom
	Seed certification and marketing governance in Mali: do farmers actually benefit? Edmond Totin, ICRISAT, Mali

Water for who and what? Implications of national agricultural and water agendas for local communities in Ethiopia

Mohammed Assen, University of Addis Ababa, Ethiopia



## Issue 9. Institutions and governance

08.45 – 10.30

Penn Room II

# SP 9.5 Implementing OECD Principles on Water Governance: building trust and engagement for climate adaptation and disaster risk reduction

Water related challenges of adapting to climate change require contextualized responses rooted in good water governance. The Organisation for Economic Cooperation and Development (OECD), has adopted Principles on Water Governance providing a conceptual framework for policies and programmes that help meeting these challenges. The session will identify promising approaches for adaptive water governance as well as benchmarking indicators that link the implementation of the principles to building climate resilience. After an introduction to the OECD principles on water governance, various country cases will be briefly presented showing the relevance of different principles as building blocks for good policies in different contexts. Participants will be invited to join case inspired thematic round table groups to debate the potential benefits of using the OECD principles as a common framework.

<b>Organised by</b>	Teun Bastemeijer, Water Integrity Network Association (WINEv), Berlin, Germany Miranda Mens, Flood Protection Programme (HWBP), the Netherlands Rob Uijterlinde, Dutch Regional Water Authorities (DWA), the Netherlands
<b>Partners</b>	OECD-Water Governance Initiative Secretariat, France Global Water Partnership, Sweden (International Secretariat), and national Water Partnerships various countries (Congo-Kinshasa, Colombia, Namibia, Pakistan and Philippines) International Water Management Institute (IWMI), Sri Lanka (Headquarters), South Africa (Regional Office), Nepal (Programme office)
<b>Chair</b>	Peter Glas, OECD Water Governance Initiative, the Netherlands
<b>Rapporteur</b>	Teun Bastemeijer, Water Integrity Network Association (WINEv), the Netherlands

<b>Presentations</b>	OECD principles: building blocks for cooperation and learning for climate adaptation and disaster risk reduction Aziza Akhmouch, Organisation for Economic Cooperation and Development (OECD), France
	Applying and monitoring OECD principles in the Netherlands (Dutch Delta Programme, Flood Protection Programme) Richard Jorissen, Flood Protection Programme (HWBP), the Netherlands

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Country case: water basin governance in South Africa

Aril Singh, Ministry of Water and Sanitation, South Africa

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Country case: GOWIN partnership focusing the Awash Basin in Ethiopia

Getachew Gizaw, Awash Basin Authority, Ethiopia

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Thematic cases: comparative synthesis on adaptive integrated water management in urban areas build on cases of Kinshasa (Democratic Republic of Congo), Cali (Colombia), Windhoek (Namibia), Karachi (Pakistan) and Manilla (Philippines)

François Brikké, Global Water Partnership Secretariat, Sweden/International

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10.30 – 11.00

Break

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## Round Table

11.00 – 12.45

Town Hall

RT 1

# The science of adaptation practices and solutions: new challenges for assessment and communication

This roundtable session will engage the Intergovernmental Panel on Climate Change (IPCC) in a lively moderated discussion as it takes its first steps towards preparing its Sixth Assessment Report and a number of Special Reports. Adaptation to climate change is expected to feature prominently in the next IPCC reports, but how could scientific research on adaptation best be assessed and communicated to meet the expectations of a very diverse but solution-oriented audience?

Organised by	The Global Programme of Research on Climate Change Vulnerability, Impacts and Adaptation (PROVIA) and the European Commission, Directorate-General for Research and Innovation
Moderator	Kristie Ebi, University of Washington, USA; former head of the IPCC Working Group II Technical Support Unit
Rapporteur	Diogo de Gusmão-Sørensen, European Commission, Directorate-General for Research and Innovation
Panel	Minpeng Chen, Chinese Academy of Agricultural Sciences; member of the UNFCCC Adaptation Committee Jan Corfee-Morlot, Organisation for Economic Co-operation and Development (tbc) Virginia Murray, Public Health England and UNISDR Debra Roberts, Co-chair of IPCC Working Group II Asun Lera St. Clair, DNV GL, Norway David Thompson, Committee on Climate Change, United Kingdom



## Theme 1. Cities and infrastructure

11.00 – 12.45

Leeuwen Room II

### SC 1.3

## Regional perspectives on vulnerability and adaptation

#### Chair

Shuaib Lwasa, Makerere University, Uganda

#### Rapporteur

Emilie Buist, Delft University of Technology, the Netherlands

#### Presentations

Bridging adaptation to climate change across city scales in Kampala

Shuaib Lwasa, Makerere University, Uganda

A reality check for urban resilience research

Aditya Bahadur, Overseas Development Institute (ODI), United Kingdom

Urban vulnerability assessment to climate change in the Concepción Metropolitan Area, Chile

Dahyann Araya Muñoz, University of Edinburgh, United Kingdom

Working with local actors on ecosystem-based adaptation of vulnerable delta-city Beira, Mozambique

Robbert Snep, Wageningen UR, the Netherlands



## Theme 1. Cities and infrastructure

11.00 – 12.45

Goudriaan Room I

### SC 1.7

## Devising solutions to adaptation challenges in cities

Being home to half of humanity and concentrating most of the global economic activities and assets, cities are particularly vulnerable to climate change impacts. Efforts to adapt to those impacts, however, face a combination of spatial, institutional, economic and social challenges calling for innovative solutions spanning across sectoral and disciplinary boundaries. This session will explore the causes of and the potential solutions for overcoming these challenges from a range of perspectives: from flood risk management, economic modelling, vulnerability mapping, to spatial planning, and stakeholder engagement. Drawing comparisons between cases from across the world, this science-to-practice session will engage the audience in a dialogue on how scientific research can effectively support and inform urban adaptation strategies.

#### Organised by

Marcin Dabrowski, Dominic Stead, Delft University of Technology, the Netherlands

#### Partners

Municipality of Rotterdam, the Netherlands

Chair	Peter van Veelen, Municipality of Rotterdam / Delft University of Technology, the Netherlands
Rapporteur	Marcin Dabrowski, Delft University of Technology, the Netherlands
Presentations	Benchmarking coastal flood risk management practice in two Chinese Delta's megacities, the cases of Hong Kong and Ningbo Faith Chan, University of Nottingham Ningbo, China
	Challenges of adaptation to the increasing flood risk in cities: lessons from the Pearl River Delta Marcin Dabrowski, Delft University of Technology, the Netherlands
	Adaptation strategies to the raising sea level in Los Angeles county Lars de Ruig, Hans de Moel and Jeroen Aerts, Institute for Environmental Studies (IVM), VU University Amsterdam, the Netherlands
	What is participatory planning for climate change adaptation? Do we need it? Do we have time for it? Vanessa Castan Broto, University College London, United Kingdom
	Options for tackling obstacles experienced by construction companies who are willing to innovate and incorporate adaptation in their construction projects Marco Hoogvliet, Deltares, the Netherlands
	Hotterdam: the health and land-use implications of the Rotterdam urban heat island Frank van der Hoeven, Delft University of Technology, the Netherlands



## Theme 2. Food, forestry and rural livelihoods

11.00 – 12.45

Goudriaan Room II

### SC 2.1

## New methods in modelling climate change impacts and adaptation

Chair	Mark Rounsevell, University of Edinburgh, United Kingdom
Rapporteurs	Ben Pieterse, Justin 't Hart, HZ University of Applied Sciences, the Netherlands

Presentations	Livestock system transitions as an adaptation strategy for agriculture Isabelle Weindl, Potsdam Institute for Climate Impact Research (PIK), Germany
	Integrated assessment of high-end climate change on land and water sectors Paula Harrison, University of Oxford, United Kingdom
	Modelling adaptation strategies for Swedish forestry under climate and global change Victor Blanco, University of Edinburgh, United Kingdom
	Lidar and rice agriculture: flood modelling and farmer participation for adaptation John Colin Yokingco, The Oscar M. Lopez Center for Climate Change Adaptation and Disaster Risk Management Foundation Inc., Philippines
	Climate change effects on agriculture. Trends in 2100-production for the Mexican region of Tabasco Melania Michetti, Euro-Mediterranean Centre on Climate Change (CMCC), Italy



## Theme 2. Food, forestry and rural livelihoods

11.00 – 12.45

New York Room

### SC 2.5

## Governance, barriers and conflict in climate change adaptation

#### Chair

Pramod Aggarwal, Research Program on Climate Change, Agriculture and Food Security (CGIAR), International Water Management Institute, India

#### Rapporteur

Miriam de Graaff, Wageningen UR, the Netherlands

#### Presentations

Community based adaptation as a source of conflict: the Adaptation Learning Programme (ALP) in Ghana

Sebastiaan Soeters, Utrecht University, the Netherlands

Climate change perceptions and barriers to adaptation among drought prone farmers in India

Architesh Panda, International Rice Research Institute, Philippines

Climate smart agriculture: identifying barriers to adoption

Anita Wreford, Scotland's Rural College (SRUC), United Kingdom



## Theme 4. Public health

11.00 – 12.45

Leeuwen Room I

### SC 4.5

## Impacts on health in a changing environment

#### Chairs

Sari Kovats, London School of Hygiene and Tropical Medicine, United Kingdom  
Leendert van Bree, PBL Environmental Assessment Agency / Utrecht University, the Netherlands

#### Rapporteur

Jos Baars, the Netherlands

#### Presentations

Updated evidence about the health effects of climate change in the WHO European region

Tanja Wolf, World Health Organization (WHO), Germany

Drinking water salinity associated health crisis in coastal Bangladesh

Mahin Al Nahian, International Centre for Diarrhoeal Disease Research, (ICDDR), Bangladesh

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Climate threats and health impacts in informal urban settlements: enhancing community resilience

Stefano Moncada, University of Malta, Malta

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Climate change: addressing heat-health vulnerability in rapidly urbanizing regions of Western India

Priya Dutta, Indian Institute of Public Health University, India

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The effects of climate change on health: risk assessment for the Dutch National Adaptation Strategy

Susanne Wuijts, National Institute for Public Health and the Environment, the Netherlands

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## Theme 5. Ecosystems and ecosystem based adaptation

11.00 – 12.45

Zaal Staal

### SC 5.2

## Ecosystem management for nature protection and climate adaptation

Chair  
Rapporteur

Mandy Barnett, South African National Biodiversity Institute, South Africa  
Olaf Meynecke, Griffith University, Australia

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Presentations

Effectiveness of local sand nourishment for safety and ecosystem preservation  
Matthijs Boersema, HZ University of Applied Sciences, the Netherlands

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Adaptation in dryland ecosystems: sivopastoral farmer led initiatives in semi-arid region of Pakistan

Sahibzada Irfanullah Khan, Sustainable Land Management Programme to Combat Land Degradation and Desertification in Pakistan, Pakistan

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Adapting communities to climate change vulnerabilities: case of Mweru-Luapula fishery, Zambia

Noah Chongo, Network for Environmental Concerns and Solutions (NECOS), Zambia

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Mobility as an adaptation response in Samburu, Kenya: gendering the debate  
Nitya Rao, University of East Anglia, United Kingdom

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Floating garden: climate smart technology for food security in flooded ecosystem of Bangladesh

Alimur Rahman, Bangladesh Agricultural Research Institute (BARI), Bangladesh

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## Issue 8. Risk assessment, adaptation planning and evaluation

11.00 – 12.45

Van Oldenbarnevelt Room

### SC 8.2

## Vulnerability assessment

Chair

André Jol, European Environment Agency (EEA), Denmark

Rapporteur

Ryan Bellison, University of Amsterdam, the Netherlands

Presentations

A structured climate vulnerability assessment approach – concepts and lessons learned  
Marc Zebisch, EURAC research, Italy

Making climate change vulnerability assessment understandable and useable on a local level

Ellinor Roth, Helmholtz-Zentrum Geesthacht, Germany

An assessment of relative vulnerability to floods by using data envelopment analysis in Bihar, India

Rupak Jha, Indian Institute of Technology Bombay, India

Mapping vulnerability of communities to climate change in the Helsinki Metropolitan Area, Finland

Susanna Kankaanpää, Helsinki Region Environmental Services Authority, Finland



## Issue 8. Risk assessment, adaptation planning and evaluation

11.00 – 12.45

Diamond Room I

### SC 8.7

## Adaptation support tools

Chair

Roger Street, UK Climate Impacts Programme (UKCIP), United Kingdom

Rapporteur

Annika Trignol, HZ University of Applied Sciences, the Netherlands

Presentations

Running an adaptation support tool for five years – looking back and forth  
Clemens HaBe, Federal Environment Agency Germany (UBA), Germany

Stakeholders should come first: delivering effective adaptation tools with comprehensive engagement

David Rissik, National Climate Change Adaptation Research Facility (NCCARF), Australia

An interactive tool translating complex adaptation information to support policy and decision makers

Rob Lokers, Wageningen UR, the Netherlands

C-GEAR core: an integrated web cloud tool for climatic risk assessments and decision support

Byron Quan Luna, DNV GL, Norway

Objectif'Climat: an adaptation planning and monitoring tool developed for French local authorities

Sandrine Dhenain, TEC Conseil, France



## Issue 8. Risk assessment, adaptation planning and evaluation

11.00 – 12.45

Tokyo Room

# SC 8.15 Tracking adaptation to climate change for MRE

This session brings together scholars and practitioners with different backgrounds to discuss in an interactive session the conceptual, methodological and empirical challenges of tracking adaptation actions. We aim to stimulate an active discussion in the panel and with the audience around some pertinent questions, including: what makes adaptation Monitoring, Reporting and Evaluation (MRE) distinctive from the established Monitoring & Evaluation (M&E) practices and theories? Who are the main audiences of adaptation MRE? What can be tracked as key metrics indicative of adaptation success? Do we need different conceptualisations and metricises of adaptation across scales, sectors and regions in the world? We would like to hear your ideas, arguments and lessons learned to address these challenges and advance the debate on adaptation MRE.

Organised by	Robbert Biesbroek, Wageningen UR, the Netherlands James Ford, Department of Geography, McGill University, Canada Joyce Coffee, Notre Dame Global Adaptation Index, USA
Chair	Robbert Biesbroek, Wageningen UR, the Netherlands
Rapporteur	Sumit Vij, Wageningen UR, the Netherlands

Presentations	Tracking adaptation: an overview of key challenges Robbert Biesbroek, Wageningen UR, the Netherlands and/or James Ford, McGill University, Canada
	National-level progress on adaptation among high-income countries Alexandra Lesnikowski, McGill University, Canada
	ND-GAIN country index Ian Noble, Notre Dame Global Adaptation Index (ND-GAIN), USA



## Issue 9. Institutions and governance

11.00 – 12.45

Rotterdam Hall

SC 9.1

# Water and climate adaptation governance

Chair

Saskia Werners, Wageningen UR, the Netherlands

Rapporteur

Marielise van Raaij, Wageningen UR, the Netherlands

Presentations

Normative architecture for groundwater governance: redesign to facilitate adaptation and inclusion

Kirstin Conti, IGRAC and University of Amsterdam, the Netherlands

Flood risk governance in Europe: how eight key issues are being dealt with in six European countries

Dries Hegger, Utrecht University, the Netherlands

Adapting to a variable climate through a private property regime: the case of the Azapa aquifer

Gloria Lillo Ortega, Center for Climate and Resilience Research (CR2), Chile

City blueprint: assessment of the sustainable integrated water resources management in 45 cities

Steven Koop, KWR Watercycle Research Institute, the Netherlands

Concepts and tools for selection of urban water policies for climate adaptation: a comparison

Joost Buurman, National University of Singapore, Singapore



## Issue 9. Institutions and governance

11.00 – 12.45

Oscar Auditorium

SC 9.10

# Incorporating uncertain scientific evidence into real-world adaptation decision making: what are the missing links?

This session seeks to advance the current understanding of the requirements that underpin the use of uncertain science information in developing innovative and effective adaptation decision-making, including under 'high-end' climate scenarios. This session is organised within the framework of the European FP7 IMPRESSIONS project and its case-studies. It brings together researchers working on climate adaptation related decision-making. The aim is to provide empirically-grounded, potentially transformative science that quantifies and explains the consequences

of 'high-end scenarios' for society at large, and particularly for decision-makers with the responsibility of designing climate change adaptation, mitigation and development strategies.

<b>Organised by</b>	Tiago Capela Lourenço and Maria João Cruz, Faculty of Sciences - University of Lisbon (FCUL), Portugal
<b>Partners</b>	Henrik Carlsen and Adis Dzebo, Stockholm Environment Institute (SEI), Sweden University of Edinburgh, United Kingdom Universitat Autònoma de Barcelona, Spain Central European University, Hungary
<b>Chair Rapporteur</b>	Tiago Capela Lourenço, Faculty of Sciences - University of Lisbon (FCUL), Portugal Maria João Cruz, Faculty of Sciences - University of Lisbon (FCUL), Portugal
<b>Presentations</b>	<hr/> Overview of IMPRESSIONS methods and case-studies Henrik Carlsen, Stockholm Environment Institute (SEI), Sweden <hr/> Case 1: EU Adis Dzebo, Stockholm Environment Institute (SEI), Sweden <hr/> Case 2: Scotland Miriam Dunn, University of Edinburgh (UEDIN), United Kingdom <hr/> Case 3a: Iberia/Portugal Maria João Cruz, Faculty of Sciences – University of Lisbon (FCUL), Portugal <hr/> Case 3b: Iberia/Spain David Tàbara, Universitat Autònoma de Barcelona (UAB), Spain <hr/> Case 4: Hungary Laszlo Pinter, Central European University (CEU), Hungary



## Issue 10. Finance, investment and business

11.00 – 12.45

Antwerp Room

# SC 10.2 Sectoral perspectives on climate finance, investment and business

**Chair**  
**Rapporteur**

Paul Watkiss, Paul Watkiss Associates / University of Oxford, United Kingdom  
Erik de Groot, The Hague University of Applied Sciences, the Netherlands

**Presentations**

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Evaluating climate change adaptation for the Maldives' tourism industry  
Heather Hosterman, Abt Associates, USA

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SMEs and climate risk: perception, experiences and responses  
Svenja Surminski, London School of Economics, United Kingdom

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Cost-benefit analysis of adaptation options for communities, regions, and economic sectors of Canada  
Pamela Kertland, Natural Resources Canada, Canada

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The impacts of climate change on food value chains  
Lilly Lim-Camacho, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia

Surface water flood risk and management strategies under future climate change: an ABM approach

Katie Jenkins, University of Oxford, United Kingdom

Business exposure and risk awareness of telecoupled climate effects: examples from Swedish industry

Olle Olssen, Stockholm Environment Institute (SEI), Sweden



## Issue 9. Institutions and governance

11.00 – 12.45

Diamond Room II

# PR 9.4 The NAP process: opportunities and challenges for climate resilient development

The Paris Agreement requires all parties, "as appropriate," to engage in adaptation planning processes and the implementation of actions. The National Adaptation Plan (NAP) process under UNFCCC is meant to help countries reduce vulnerability, build adaptive capacity and mainstream adaptation into development planning. This session will bring together country-level experts and practitioners, development agencies, scientists and others to share their experiences of the NAP process and mainstreaming adaptation. Following case studies of Thailand and Togo and a panel of country-level representatives from various NAP processes, participants will be invited to share experiences and identify solutions and tools to overcome challenges and take advantage of opportunities in achieving climate resilient development.

Organised by	Till Below, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany
Partner	Acclimatise, United Kingdom
Chair	Virginie Fayolle, Acclimatise, United Kingdom
Rapporteur	Jessie Granadillos, Climate Analytics, Germany

Presentations	Introduction to the NAP process Till Below, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany
	NAP case studies Virginie Fayolle, Acclimatise, United Kingdom Till Below, Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany Tabea Lissner, Climate Analytics, Germany Government representative, Togo (tbc) Kollawat Sakhakara, Office of Natural Resources and Environmental Policy and Planning, Thailand

Panel discussion	NAP process, challenges, opportunities
Moderator	Virginie Fayolle, Acclimatise, United Kingdom
Panel	Government representative, Togo (tbc) Government representative, Thailand (tbc)

Government representative, Benin (tbc)  
Mariana Egler, Ministry of the Environment, Brazil

#### Discussion tables

#### Moderators

Nele Bünner, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany  
Mariama Baldé, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany  
Wiriya Puntub, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany  
Virginie Fayolle, Acclimatise, United Kingdom  
Tabea Lissner, Climate Analytics, Germany



## Issue 10. Finance, investment and business

11.00 – 12.45

Van Walsum Room

# PR 10.5 Bridging the gap: initiatives for better access to climate finance in Latin America

There is a significant gap between climate funds available for adaptation and its actual application. International organisations try to reduce the gap by assisting proposal formulation, promoting south-south cooperation, blending public and private investment, supporting regional dialogues, etc. The session discusses innovative ways to bridge this particular climate finance gap, focusing on challenges and opportunities (including how research data and training can drive decision making) to assure faster access to adaptation finance. Presentations include short videos on successful cases of adaptation finance. Representatives from Latin America and the presenters will engage in an exchange of ideas with the audience.

#### Organised by Partners

Johannes Karremans, EUROCLIMA Programme, European Commission, Belgium  
Economic Commission for Latin America and the Caribbean (ECLAC), Chile  
Organisation for Economic Co-operation and Development (OECD), France

#### Chair Rapporteur

Johannes Karremans, EUROCLIMA Programme (European Commission), Belgium  
Guillermo Dascal, EUROCLIMA Programme (European Commission), Belgium

#### Presentations

Overview of national and international climate funding for adaptation in Latin America: challenges and opportunities

Joseluis Samaniego, United Nations Economic Commission for Latin America and the Caribbean (UN-ECLAC), Chile

Fostering effective adaptation finance in Latin America: EU initiatives

Horst Pilger, European Commission, Belgium

Partnership for climate finance and development: tracking climate finance for adaptation and exploring the synergies with the Sustainable Development Goals

Gisela Campillo, Organisation for Economic Co-operation and Development (OECD), France



## Theme 6. Disaster risk reduction

11.00 – 12.45

Penn Room II

### SP 6.2 Climate risk management: adapting to climate change and reducing disaster risks through integrated risk transfer solutions

Risk transfer such as insurance solutions play an important role in adaptation to climate change, as suggested in the UNFCCC Paris Agreement, the Kyoto Protocol and the recent G7 Summit. The session will present first results and strategies from three different country contexts on insurance solutions in the context of integrated climate risk management. Participants will learn about how insurance can complement national / regional strategies and get insights into recent research efforts of insurance on low-income households facing extreme weather. The panel discussion shall reflect lessons learned and recommendations on the combination of risk management and insurance.

Organised by	Kehinde Balogun, Munich Climate Insurance Initiative (MCII), Germany
Partner	Gesellschaft für Internationale Zusammenarbeit (GIZ), Germany
Chair	Koko Warner, Munich Climate Insurance Initiative (MCII), Germany
Moderator	Anke Rasper, Deutsche Welle, Germany
Rapporteur	Kehinde Balogun, Munich Climate Insurance Initiative (MCII), Germany

Presentations	Integrated risk management on droughts and floods with the African Risk Capacity (ARC) in Ghana Charlotte Norman, NADMO Climate Change / Disaster Risk Reduction Department, Ghana
	Climate risk adaptation and insurance in the Caribbean Jordon Tait, GK General Insurance Company Ltd, Jamaica
	Natcat relief safety net insurance program for farmers In Peru Lourdes del Carpio, La Positiva Ltd., Peru (tbc)



## Issue 8. Risk assessment, adaptation planning and evaluation

11.00 – 12.45

Mees Auditorium

### SP 8.6 Monitoring, evaluating, and scaling up adaptation: evidence-based learning

Sufficient adaptation options have been implemented to assess lessons learned in monitoring, evaluating, learning, and scaling up. Case studies from two climate funds will be explored, covering 51 least developed countries (LDCs) and a wide range of Non-Annex 1 countries. Technical papers commissioned by UNEP's Global Programme of Research on Climate Change Vulnerability, Impacts and Adaptation (PROVIA) and the Scientific and Technical Advisory Panel (STAP) of the Global Environmental Facility (GEF) will be discussed to demonstrate progress in adaptation interventions. These presentations will be followed by a roundtable discussion about how lessons learned might shape future adaptation monitoring, evaluation, learning, and scaling up.

<b>Organised by</b>	Dennis Bours, Global Environment Facility's Independent Evaluation Office (GEF IEO), USA
<b>Partners</b>	Scientific and Technical Advisory Panel of the Global Environment Facility (STAP GEF), USA United Nations Environment Programme / Global Programme of Research on Climate Change Vulnerability, Impacts, and Adaptation (UNEP/PROVIA), Kenya Global Environment Facility (GEF) Secretariat, USA Adaptation Fund (AF), USA
<b>Chair</b>	Anna Viggh, Global Environment Facility's Independent Evaluation Office (GEF IEO), USA
<b>Rapporteur</b>	Dennis Bours, Global Environment Facility's Independent Evaluation Office (GEF IEO), USA
<b>Presentations</b>	Climate change adaptation monitoring, evaluation, and learning: lessons from climate-vulnerable sectors Anand Patwardhan, Scientific and Technical Advisory Panel of the Global Environment Facility (STAP GEF), USA Linking monitoring, evaluation, and learning across scale: establishing the two-way linkages between institutional and national level actions and local impacts and benefits Kristie Ebi, University of Washington, USA and Global Programme of Research on Climate Change Vulnerability, Impacts, and Adaptation (UNEP/PROVIA), Kenya Learning to scale up: lessons from the GEF adaptation portfolio Saliha Dobardzic, Global Environment Facility (GEF) Secretariat, USA Lessons from Adaptation Fund (AF) South-South cooperation to advance adaptation Mikko Ollikainen, Adaptation Fund, USA



## Issue 8. Risk assessment, adaptation planning and evaluation

11.00 – 12.45

Beurs Lounge

### SP 8.10 Delta approaches: adaptive delta management and other support tools for improving resilience of the world's deltas

Delta Alliance (DA) is a knowledge driven network of organisations in over 15 deltas, whose mission is to improve the resilience of the world's deltas and reduce vulnerability to flooding and ecosystem degradation. In a process of co-creation between scientists and practitioners from various deltas, the Delta Approach is being developed consisting of policy and technical tools such as Adaptive Delta Management (ADM). In this session, the DA would like to take a next step in this co-creation process. We will present the developments so far and facilitate an active knowledge exchange between the participants on effective tools. After the session the results and the (links to) the tools will be presented on the DA website.

Organised by	Catharien Terwisscha van Scheltinga, Wageningen UR, the Netherlands Martine Rutten, Water Resources Management, Delft University of Technology, the Netherlands
Partners	Delta Alliance International Secretariat, the Netherlands Delta Alliance Wings, Argentina, Bangladesh, Ghana
Chair	Catharien Terwisscha van Scheltinga, Wageningen UR, the Netherlands
Rapporteur	Martine Rutten, Delta Alliance International Secretariat / Delft University of Technology, the Netherlands

Presentations	Design and assessment of delta strategies: tools and methods in the Bangladesh Delta Plan Jaap de Heer, Twynstra Gudde, the Netherlands Catharien Terwisscha van Scheltinga, Wageningen UR, the Netherlands
	Design and assessment of delta strategies: tools, methods and experiences in the Netherlands Delta Plan Jos van Alphen, Staff Delta Commissioner, the Netherlands
	Design and Assessment of Delta Strategies: reflections from Delta Alliance Wings Renske Peters, Delta Alliance, the Netherlands Peter Odhengo, Delta Alliance, Ghana Veronica Zagare, Delta Alliance, Argentina Mohammad Monowar Hossain, Delta Alliance, Bangladesh



## Issue 9. Institutions and governance

11.00 – 12.45

Penn Room I

### SP 9.1 Resilient risk governance systems: enhancing integration and adaptive capacity across scales

Resilience programmes aimed at strengthening risk governance are faced with several challenges: understanding the components of the system, the vertical and horizontal interactions, and how these shape resilience and efforts to build adaptive capacity. Thus research can only be undertaken in the context of practice and vice-versa. The praxis of theorising, acting and reflecting on interactions with and within risk governance systems will be discussed in this session. Participants will consider findings from programmes that have worked at the interface of governance and resilience, and discuss how resilient risk governance systems can be promoted through actions targeted at different scales.

**Organised by** Emily Wilkinson, Climate and Environment Programme, Overseas Development Institute (ODI), United Kingdom

**Partners** Near East Foundation, USA  
Mercy Corps, United Kingdom

**Chair** Emily Wilkinson, Climate and Environment Programme, Overseas Development Institute (ODI), United Kingdom

**Rapporteur** Elizabeth Carabine, Overseas Development Institute (ODI), United Kingdom

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**Presentations** Cross-boundary adaptation to climate change: learning from challenges and opportunities in Senegal

Florence Crick, LSE Grantham Research Institute on Climate Change and the Environment, United Kingdom

Hayley Leck, Kings College London, United Kingdom

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Governance approaches to climate resilient development: lessons from Indonesia, Ethiopia and Kenya

Eliot Levine, Mercy Corps, United States

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Decentralized climate resilient planning: integrating climate adaptation and disaster risk reduction in India

Shiraz Wajih, Gorakhpur Environmental Action Group, India

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Local governance and decentralised finance for community-driven climate adaptation: lessons from Kenya, Mali and Senegal

Yacouba Deme, Near East Foundation, Mali



## Issue 9. Institutions and governance

11.00 – 12.45

New Orleans Room

### SP 9.7 Indigenous climate change adaptation and transformations: adapting to future challenges by learning from the past

The impacts of climate change alongside other environmental changes create new challenges and opportunities for indigenous groups worldwide. However, current discussion about climate change often do not consider how adaptation can be linked with indigenous peoples' aspirations to attain more meaningful systems of governance. This panel session explores the ways Indigenous Knowledges (IK), values, and modes of living can be brought into conversation with Western science and governance structures to enable more sustainable adaptation initiatives. Four presentations of case studies from China, New Zealand, Panama, Peru, Samoa, Thailand, and Vanuatu highlight the enablers and constraints to successful indigenous-led adaptation.

<b>Organised by</b>	Johanna Nalau, Griffith Climate Change Response Program and Griffith Institute for Tourism, Griffith University, Australia Meg Parsons, School of Environment, University of Auckland, New Zealand Alejandro Argumedo, Indigenous Peoples' Biocultural Climate Change Assessment Initiative (IPBCCA), Peru
<b>Partners</b>	Network of Indigenous Experiences of Changing Environments (NIECE), New Zealand Asociación ANDES, Peru
<b>Chair</b>	Alejandro Argumedo, Indigenous Peoples' Biocultural Climate Change Assessment Initiative (IPBCCA), Asociacion ANDES, Peru
<b>Rapporteurs</b>	Jill Huinder, Indigenous Peoples' Biocultural Climate Change Assessment Initiative (IPBCCA), Peru

<b>Presentations</b>	Transforming governance in Vanuatu: incorporating Kastom, cultural diversity, and complex social-ecological changes in policy-making Paul Nalau, Vanuatu Government, Vanuatu and Johanna Nalau, Griffith University, Australia
	Practical adaptation pathways through traditional governance in New Zealand and Samoa Cilla Brown, Pacific Dance, Samoa, Meg Parsons and Karen Fisher, University of Auckland, New Zealand
	Adapting to future challenges learning from the past: the IPBCCA Synthesis Report Alejandro Argumedo, Indigenous Peoples' Biocultural Climate Change Assessment Initiative (IPBCCA) – Asociacion ANDES, Peru
	Indigenous spirituality: new ethics for holistic adaptation Mindahi Bastidas, Centre for Earth Ethics, Columbia University, USA and Co-chair, Steering Committee IPBCCA

12.45 – 13.45

Lunch



**Round Table**  
**13.45 – 15.30**  
**Town Hall**

## RT 7 **Adaptation Forum: adaptation under the UNFCCC after the Paris Agreement**

The Adaptation Forum is organised by the Adaptation Committee, the overall advisory body on adaptation to the United Nations Framework Convention on Climate Change (UNFCCC) to reach out to stakeholders and gather new insights, knowledge and experiences on adaptation action and support.

The goal of this Adaptation Forum is two-fold:

- a) To inform conference participants of the adaptation aspects of the Paris Agreement; and
- b) To receive input from participants on tasks under the Paris Agreement where the Adaptation Committee has a clear role.

Input received from participants will help in shaping the future adaptation regime under the UNFCCC and inform Parties' planning, implementing and evaluating of adaptation actions and support.

Organised by	UNFCCC Adaptation Committee
Partner	Government of the Netherlands
Chairs	Minpeng Chen and Don Lemmen, Co-Chairs of the Adaptation Committee
Rapporteur	Klaus Radunsky, Member of the Adaptation Committee, Austria
Moderator	Vivienne Parry, United Kingdom
Rapporteur	Klaus Radunsky, Member of the Adaptation Committee

Presentations	Overview of adaptation-relevant provisions of the Paris Agreement and tasks for the Adaptation Committee Don Lemmen, Co-Chair of the Adaptation Committee
	What can be done to effectively and efficiently recognize the adaptation efforts that have been undertaken by developing countries? Katherine Vincent, Kulima, South Africa
	What is needed to objectively review the adequacy and effectiveness of adaptation actions and the support for adaptation in countries? Roger Pulwarty, National Oceanic and Atmospheric Administration (NOAA), USA



## Theme 1. Cities and infrastructure

13.45 – 15.30

Goudriaan Room I

### SC 1.4 Heat in the city

Chair

Rapporteur

Emma Porio, Ateneo de Manila University, Philippines

Kathrin Merkelbach, Wageningen UR, the Netherlands

Presentations

The role of urban green infrastructure measures in improving outdoor thermal comfort  
Teresa Zoelch, Technische Universität München, Germany

Low carbon options for adapting heating and cooling of dwellings in 29  
Portuguese municipalities

Sofia Simões, NOVA University of Lisbon, Portugal

Housing adaptation measures to extreme heat for the urban poor in South Asia  
Tanya Singh, Wageningen UR, the Netherlands

Heat stress measurements in Amsterdam

Lisette Klok, University of Applied Sciences Amsterdam, the Netherlands



## Theme 2. Food, forestry and rural livelihoods

13.45 – 15.30

New York Room

### SC 2.3 Food production systems

Chair

Rapporteur

Åsa Gerger Swartling, Stockholm Environment Institute (SEI), Sweden

Marielise van Raaij, Wageningen UR, the Netherlands

Presentations

Fitting neglected and underutilised crops into climate change adaptation strategies  
Tafadzwanashe Mabhaudhi, University of KwaZulu-Natal, South Africa

Understanding food security in the context of drought: evidence from subsistence  
farmers in Central America

Bárbara Viguera, Environmental Economics for Development, CATIE, Costa Rica

Shrimp farming as adaptation to salt intrusion in coastal Bangladesh: a social  
tipping point

Saskia Werners, Wageningen UR, the Netherlands

Stretching boundaries for food production: identification and cultivation of salt  
tolerant potato

Arjen de Vos, Salt Farm Texel, the Netherlands



## Theme 4. Public health

13.45 – 15.30

Leeuwen Room I

### SC 4.1 Limits to human health system adaptation

Adaptation can reduce the burdens of climate-sensitive health outcomes over the short term. Sustainable development pathways could reduce but not eliminate projected health burdens. The session will explore the extent to which additional capacity, knowledge, and tools are needed by ministries of health and national to local health organisations to manage current and to keep pace with projected risks. Five presentations will explore lessons learned from research and from vulnerability and adaptation assessments in low-, middle-, and high-income countries and their implications for evidence-based public health adaptation policies and programmes. An open discussion will follow.

Organised by	Kristie Ebi, University of Washington, USA
Partner	Columbia University, USA
Chair	Kristie Ebi, University of Washington, USA
Rapporteur	Perry Sheffield, Columbia University, USA

Presentations	Limits to health adaptation in a changing climate Kristie Ebi, University of Washington, USA
	Imagining the unmanageable: limits to health system adaptation in high-income countries Hilary Bambrick, Western Sydney University, Australia
	The importance of evidence-based public health research to address the risks to health from climate change Kathryn Bowen, Australia National University, Australia
	Child-focused health system adaptation to climate change Perry Sheffield, Columbia University, USA
	Is adaptation to a warming world effective? Difficulty in implementing heat-health warning system even in developed countries Yasushi Honda, University of Tsukuba, Japan



## Theme 5. Ecosystems and ecosystem based adaptation

13.45 – 15.30

Zaal Staal

### SC 5.3 Implementing ecosystem-based approaches for adaptation

Chair	Jos Verhoeven, Utrecht University, the Netherlands
Rapporteur	Olaf Meynecke, Griffith University, Australia

## Presentations

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Adapting whale watching to climate change – a case study from the east coast of Australia

Olaf Meynecke, Griffith Centre for Coastal Management and Griffith Climate Change Response Program, Australia

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Adaptation by wide green dikes: opportunity to improve biodiversity along the coast? Jantsje van Loon-Steensma, Wageningen UR, the Netherlands

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Vegetated foreshores as coastal protection strategy: coping with uncertainties and implementation

Stephanie Janssen, Delft University of Technology, the Netherlands

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Protecting people and nature through ecosystem-based adaptation in the Atlantic Forest, Brazil

Lukas Hach, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany

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## Theme 5. Ecosystems and ecosystem based adaptation

13.45 – 15.30

Mees Auditorium

### SC 5.5

## Economic assessment of climate adaptation

## Chair

Pam Berry, Oxford University, United Kingdom

## Rapporteur

Justin 't Hart, HZ University of Applied Sciences, the Netherlands

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## Presentations

Trading-off ecosystem services with engineered and economic benefits to inform investment decisions

Anthony Hurford, University of Manchester, United Kingdom

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The socio-economic vulnerability of coastal communities in Ghana to the impact of climate change

Gawusu-Toure Kassim, Ghana Wildlife Society, Ghana

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Economic values of ecosystem services benefits in pastoralist institutional arrangements in Kenya

Caroline Kanyuru, International Livestock Research Institute, Kenya

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Carbon stocks and biodiversity conservation on a small island: Pico (the Azores)

Helena Palado, University of the Azores, Portugal

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Governance analysis on natural resource management and ecosystem protection in Bangladesh

Sz Chowdhury, Institute of Water and Flood Management, Bangladesh University of Engineering and Technology, Bangladesh

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## Theme 6. Disaster risk reduction

13.45 – 15.30

Diamond Room I

### SC 6.4

## Planning for climate change

Chair

Paulina Aldunce, University of Chile, Chile

Rapporteur

Valerie Eijrond, Wageningen UR, the Netherlands

Presentations

Heat vulnerability index for London: an update

Tanja Wolf, Geography, King's College London, United Kingdom / World Health Organization (WHO), Germany

Development of heat wave health plan in South Asian Plains

Ali Tauqeer Sheikh, LEAD Pakistan, Pakistan

Application of ClimAdaPT: local to Vila Franca do Campo Municipality (Azores, Portugal)

Helena Palado, Municipality of Vila Franca do Campo, Portugal

Cost-effectiveness of adaptation strategies to increase the resiliency of power distribution poles

Sigrídur Bjarnadóttir, University of Hartford, USA

Managing rainfall risks in agriculture: a case study on index-based micro-insurance in Senegal

Lena Weingärtner, University of Amsterdam, the Netherlands



## Theme 6. Disaster risk reduction

13.45 – 15.30

Tokyo Room

### SC 6.6

## Linking climate change adaptation, disaster risk reduction, and loss & damage: lessons toward resilient Asia-Pacific region

Disaster resilience through science-based climate adaptation and loss and damage have become part of Climate Adaptation Framework of the Asia-Pacific Network for Global Change Research network. This was inspired by the UNFCCC Cancun Agreement for Adaptation (2011) and the Warsaw International Mechanism for Loss and Damage (2013). This session will present case studies and guidelines for strengthening adaptation and risk reduction plans from national to grassroots levels in the Asia-Pacific region. We will promote knowledge on approaches to respond to slow onset and extreme climatic events; economic and non-economic Loss and Damage; impacts on most vulnerable; and integrating slow onset events and extreme events into climate-resilient development processes.

Organised by	Linda Stevenson, Communication and Scientific Affairs Division, Asia Pacific Network for Global Change Research, Japan
Partner	Stockholm Environment Institute-Asia (SEI-ASIA), Thailand
Chair	Linda Stevenson, Asia Pacific Network for Global Change Research (APN) Secretariat, Japan
Rapporteur	Michael Boyland, Stockholm Environment Institute-Asia (SEI-ASIA), Thailand
Presentations	Twenty years of research and scientific capacity development in Asia Pacific Region: Integrating climate change adaptation, disaster risk reduction, and loss and damage Linda Anne Stevenson, APN Secretariat, Japan
	An analysis of longer-term (5-10 years) recovery following major disasters in the Asia-Pacific region: lessons for resilient development Michael Boyland, Stockholm Environment Institute-Asia (SEI-ASIA), Thailand
	Assessing linkages between CCA, DRR and L&D: case studies in the floodplains of Cambodia, Indonesia, Philippines, Thailand and Vietnam Perlyn Pulhin, Oscar M. Lopez Center for Climate Change Adaptation and Disaster Risk Management Foundation, Inc., Philippines
	Integrating climate change adaptation, disaster risk reduction, and loss & damages to address emerging challenges due to slow onset processes Joy Jacqueline Pereira, Southeast Asia Disaster Prevention Research Initiative (SEADPRI-UKM), Malaysia
	Addressing non-economic losses and damages associated with climate change: Learning from recent past extreme climatic events for future planning S.V.R.K Prabhakar, Institute for Global Environmental Strategies, Japan



## Issue 8. Risk assessment, adaptation planning and evaluation

13.45 – 15.30

Van Oldenbarnevelt Room

### SC 8.3

## Multi-sector integrated assessments of impacts and adaptation

Chair	Paula Harrison, University of Oxford, United Kingdom
Rapporteur	Ryan Bellison, University of Amsterdam, the Netherlands

Presentations	Model of integrated impact and vulnerability evaluation of climate change in South Korea Jongsik Ha, Korea Environment Institute, Republic of Korea
	The value added of combined sector and macroeconomic model use in adaptation assessment Adriaan Perrels, Finnish Meteorological Institute, Finland
	Climate change, water scarcity and health adaptation in Southwestern Bangladesh Anwarul Abedin, Bangladesh Agricultural University, Bangladesh

Climate change adaptation in the EU: an integrated assessment for flood, agriculture and health

Francesco Bosello, Euro-Mediterranean Center on Climate Change, Italy

Population, health and urban land use in integrated climate modelling

Emma Terama, Finnish Environment Institute and University College London, United Kingdom



## Issue 8. Risk assessment, adaptation planning and evaluation

13.45 – 15.30

Beurs Lounge

### SC 8.16 Planning the next generation of adaptation research: how to coordinate, broker and amplifying large research consortia to achieve development impact

The session aims to critically reflect on how large multi-stakeholder consortia can best support adaptation research and practice. It will draw on the experience of a number of ongoing research programmes, seeking lessons learned and new directions for coordinating, brokering and amplifying adaptation research in multi-stakeholder consortia. The session will start by presenting the results of a review of opportunities/barriers to coordinating large adaptation research consortia, setting the scene for subsequent discussion (six min). In an extended panel discussion, six panellists will present personal experiences via 'lightning presentations' (1-2 key messages). Audience members will then be encouraged to take the podium and share thoughts as part of the panel through a 'fish-bowl' session.

Organised by	Lindsey Jones, Overseas Development Institute (ODI), United Kingdom Ken De Souza, Jane Clark, Department for International Development (DFID), United Kingdom
Partners	The Netherlands Organisation for Scientific Research (NWO), the Netherlands Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED), United Kingdom
Chair	Lindsey Jones, Overseas Development Institute (ODI), United Kingdom
Rapporteurs	Jane Clark / Ken De Souza, DFID, United Kingdom
Presentations	Synthesising common opportunities and barriers to the coordination, brokering and amplification of adaptation research through large multi-stakeholder consortia Blane Harvey, Overseas Development Institute (ODI), United Kingdom Lightning presentations from a series of knowledge managers, researchers and funders Bernard Cantin, International Development Research Centre (IDRC), Canada Declan Conway, London School of Economics (LSE), United Kingdom Emily Wilkinson, Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED), United Kingdom

Lightning presentations from a series of knowledge managers, researchers and funders  
 Bara Guèye, Innovations Environnement Développement (IED), Senegal  
 Stef Raubenheimer, SouthSouthNorth (SSN), South Africa  
 Corinne Lamain, The Netherlands Organisation for Scientific Research (NWO),  
 the Netherlands



## Issue 9. Institutions and governance

13.45 – 15.30

Oscar Auditorium

# SC 9.11 Institutional economics of adaptation

A consensus has been emerging regarding the key role that institutions play in adaptation, and yet institutions have been largely studied descriptively in the adaptation domain. This presents a significant opportunity for adaptation researchers to engage with scholarly findings from institutional economics, as the latter offers a wealth of theories for understanding and overcoming barriers directly relevant to climate adaptation. This session aims at crystallising new insights from recent institutional economics work on climate adaptation, and enabling exchange on key insights of institutional economics relevant for adaptation. Four papers addressing adaptation from an institutional economics perspective in different sectors will be presented followed by a plenary discussion on the insights provided by institutional economics to the contemporary adaptation governance debate.

Organised by	Alexander Bisaro, Global Climate Forum, Germany
Partners	Humboldt Universität zu Berlin, Albrecht Daniel Thaer-Institute of Agricultural and Horticultural Sciences, Germany
Chair	Alexander Bisaro, Global Climate Forum, Germany
Rapporteur	Matteo Roggero, Humboldt Universität zu Berlin, Germany
Presentations	Adapting institutions: exploring climate adaptation through integrative & segregative institutions Matteo Roggero, Humboldt Universität zu Berlin, Germany
	Institutional adaptations in Dutch and American flood governance: the expert-politics nexus Emmy Bergsma, University of Amsterdam, the Netherlands
	Leveraging private finance for coastal adaptation Alexander Bisaro, Global Climate Forum, Germany
	Understanding barriers and drivers of coastal protection Anke Wolff, Global Climate Forum, Germany



## Issue 9. Institutions and governance

13.45 – 15.30

Diamond Room II

# SC 9.13 Adapting scientific methodologies – how to compare and evaluate case studies as well as integrate and upscale data and information?

Climate change adaptation happens mainly at the local level but it is often governed and supported by regional, national/federal, and also international (e.g. in Europe) strategies and policies. To improve governance at all levels this session shares knowledge and experience from a diversity of 23 European case studies. The first presentation focuses on the process of designing and implementing a comparative and integrative research methodology. The second presents a multipurpose guide for adaptation based on a world survey, while the last one highlights improved processes of upscaling local adaptation relevant information for better policy and decision-making.

Organised by	Filipe Duarte Santos, University of Lisbon, Portugal
Partners	University of Leeds, United Kingdom Helmholtz Centre for Environmental Research, Germany Deltares, the Netherlands
Chair	Filipe Alves, University of Lisbon, Portugal
Co-chair	Hans Sanderson, University of Aarhus, Denmark
Rapporteur	Filipe Alves, University of Lisbon, Portugal

Presentations	BASE methodology framework for 23 case studies Gil Penha-Lopes, University of Lisbon, Portugal
	BECCA – a multi-purpose guide and evaluation tool for adaptation Jenny Trolzsch, Helmholtz Centre for Environmental Research, Germany
	Upscaling adaptation economics: challenges and successes Ad Jeuken, Deltares, the Netherlands



## Theme 1. Cities and infrastructure

13.45 – 15.30

Penn Room I

### PR 1.6 Urban design and flood management in resilient cities Nijmegen and Mumbai

To gain success in complex urban design where flood management is an issue, a change of perspective and an integral design attitude is needed. To make adaptation strategies successful, cooperation between designers and engineers needs to be close. Also cultural aspects should be taken into account. In this session we want to learn from flood resilient cities Nijmegen and Mumbai to turn threats into opportunities. These two case studies cover an international comparison between living with water in a Western European city and in an Asian metropole, taking social and economic benefits into account as well.

#### Organised by Partners

Mariska van der Deen, Rijkswaterstaat, Room for the River, the Netherlands  
Municipality Nijmegen, the Netherlands  
The city of Mumbai, India  
NP-Bridging Antwerp, Belgium

#### Chair Rapporteur

Mathieu Schouten, Municipality of Nijmegen, the Netherlands  
Eline de Bruin, NP Bridging, Belgium

#### Presentations

Room for the Waal, City of Nijmegen, the Netherlands  
Mathieu Schouten, Municipality of Nijmegen, the Netherlands  
Masterplan Mumbai, India  
Sanjeev Jaiswal, Thane Commissioner, India  
Commentator Masterplan Thane  
Gul Kripalani, Thane Commissioner, India



## Issue 8. Risk assessment, adaptation planning and evaluation

13.45 – 15.30

Goudriaan Room II

### PR 8.6 Climate adaptation platforms in action and networks: the practical challenges and lessons learned from designing and operationalising web-based platforms

This session brings together users and developers of climate adaptation platforms, but also those considering developing and using such platforms. The session seeks to answer the following questions: What are the strengths and weaknesses of web-based platforms in enabling effective climate adaptation? Which tools (e.g. maps, visualisations, databases) are most suitable for integration in web-based platforms and which

are not (and why not)? How to communicate uncertainties when working with web-based platforms? How to address practicalities of developing and using web-based platforms (incl. funding, institutional aspects, and continuity)? Additional information on this session can be found on the Climate Adaptation Services [website](#).

<b>Organised by</b>	<p>Kim van Nieuwaal, Hasse Goosen, Climate Adaptation Services (CAS), the Netherlands          Roger Street, UK Climate Impacts Programme (UKCIP), United Kingdom          Julien Hoyaux, Service Public de Wallonie (SPW), Belgium          Barry O'Dwyer, Center for Marine and Renewable Energy (MaREI), Ireland          Robert Webb, Australian National University (ANU), Australia          David Rissik, National Climate Change Adaptation Research Facility (NCCARF), Australia</p>
<b>Partners</b>	<p>Tiago Capela Lourenco, Ana Ferrada Gomes, University of Lisbon (UL), Portugal          European Environment Agency (EEA), Denmark          European Joint Programming Initiative – JPI Climate          Ministry of Infrastructure and the Environment, the Netherlands          PBL Netherlands Environmental Assessment Agency, the Netherlands</p>
<b>Chair</b>	Kim van Nieuwaal, Climate Adaptation Services (CAS), the Netherlands
<b>Rapporteur</b>	Marit Heinen, Climate Adaptation Services CAS, the Netherlands
<b>Presentations</b>	<hr/> <p>Welcome and introduction          Kim van Nieuwaal, Climate Adaptation Services (CAS), the Netherlands</p> <hr/> <p>Overview of EEA activities including recent reports and Climate-ADAPT          André Jol, Kati Mattern, European Environment Agency (EEA), Denmark</p> <hr/> <p>Challenges for adaptation platforms          Roger Street, UK Climate Impacts Programme (UKCIP), United Kingdom</p> <hr/> <p>Climate Ireland: a case study on facilitating local authority planning for climate change          Barry O'Dwyer, Center for Marine and Renewable Energy (MaREI), Ireland</p> <hr/> <p>The Australian adaptation strategy and practical experience in adaptation support products          Robert Webb, Australian National University (ANU), Australia          David Rissik, National Climate Change Adaptation Research Facility (NCCARF), Australia</p> <hr/> <p>The Dutch national climate adaptation portal and the real time use of the touch table          Hasse Goosen, Climate Adaptation Services (CAS), the Netherlands</p>



## Theme 9. Institutions and governance

13.45 – 15.30

Penn Room II

# PR 9.7 Synergies between adaptation and mitigation: integration of resilience in LEDS in Latin America

Adaptation and mitigation agendas are increasingly gaining importance, yet are generally designed and carried out separately despite multiple potential synergies between them, particularly in the agroforestry and housing sectors. This session aims to show the need for, advantages of and advances in the integration of adaptation and mitigation climate policies in development strategies in Latin America. After two framing presentations including key considerations, advances, and conceptual developments, government representatives from Chile and Colombia will present their experiences. Participants will then be invited to share their experiences and challenges, contributing to an interactive discussion.

Organised by	María José Gutierrez Murray, LEDS LAC Platform (Regional Low Emission and Resilient Development Strategies Platform for Latin America and the Caribbean), Costa Rica
Partners	EUROCLIMA programme, European Commission, Belgium Tropical Agricultural Research and Higher Education Center (CATIE), Costa Rica Low Carbon Resilient Development Program financed by USAID/USFS Inter-American Development Bank (IDB)
Chair	Aida Figari / María José Gutiérrez, LEDS LAC Platform (Regional Low Emission and Resilient Development Strategies Platform for Latin America and the Caribbean), Costa Rica
Rapporteur	Guillermo Dascal, EUROCLIMA programme, European Commission, Belgium
Presentations	Advances in integrating adaptation and mitigation climate policies in Latin America: key considerations
	María José Gutierrez Murray, LEDS LAC Platform (Regional Low Emission and Resilient Development Strategies Platform for Latin America and the Caribbean), Costa Rica
	Synergies between adaptation and mitigation in the agroforestry sector
	Bastiaan Loumar, Centro Agronómico Tropical de Investigación y Enseñanza (CATIE), Costa Rica
	Case study from Latin America
	Carolina Hernández, LCRD Program Colombia, Representative of the Ministry of Housing, City and Territory, Colombia



## Theme 9. Institutions and governance

13.45 – 15.30

Rotterdam Hall

### PR 9.9 What does a day of a student look like in Rotterdam in 2030

Education has evolved drastically over the last couple of decades. The use of computers and electronics in the classroom has contributed to improving the learning facilities, but the challenge remains: How do we continue this progress in protecting the environment while maintaining educative integrity? How can students commute sustainably, efficiently and safely to school? How can schools be improved to reach a higher standard of sustainability? In this session we will explore questions like these.

This session is organised and chaired by students and staff from Wolfert Bilingual Secondary School.

(ADVERTORIAL)



Three regional water authorities work together with the municipality to create an attractive and climate proof Delta City Rotterdam. Together they work out actual water projects which fit well in the urban development. Like extra water storage, more efficient waste water treatment, cleaner surface water and initiatives to make the city more healthy and green.

The cooperation between the regional water authorities and the municipality of Rotterdam is an example for a successful collaboration for a sustainable future. The mutual experiences are also important for the next decades. Maintaining the cooperation is crucial for creating an attractive, climate proof and sustainable city. Especially for a Delta City like Rotterdam it is essential to act before the expected change.



Please visit our networking location on Water Governance in the Netherlands at Pavilion Cities and Infrastructure, stand 1.2



## Theme 2. Food, forestry and rural livelihoods

13.45 – 15.30

New Orleans Room

### SP 2.3 Adapting forest management for climate change: improving research-policy-practice partnerships

Climate change impacts on forests and their capacity to supply goods and services. This session will explore the ecological, social and institutional dimensions of forest management to address climate change by bringing together forest adaptation researchers from the developing and the developed world to consider best practice options for adaptation using scene setting presentations and facilitated discussion at table groups (designed to include a mix of researchers, policy makers and practitioners). Groups will be asked to identify approaches for improving research-policy-practice partnerships in climate adaptation. Results will be summarised in a policy brief and a journal publication.

<b>Organised by</b>	Rodney Keenan, School of Ecosystem and Forest Sciences, University of Melbourne, Melbourne, Australia Carina Keskitalo, Department of Geography and Economic History, Umea University, Umea, Sweden
<b>Partner</b>	International Union of Forest Research Organisations, Austria
<b>Chair</b>	Rodney Keenan, University of Melbourne, Australia
<b>Rapporteur</b>	Harry Nelson, University of British Columbia, Canada

<b>Presentations</b>	Analysis of adaptive capacity in seven European states: the United Kingdom, the Netherlands, Norway, Sweden, Finland, Italy and Russia Carina Keskitalo, Umea University, Sweden
	The challenges of integrating adaptation and mitigation in forest management to achieve rural development objectives in Western Africa Fobissie Kalame, University of Helsinki, Finland and World Wildlife Fund, Cameroon
	Policies for achieving forest management objectives under a changing climate In Western Canada Harry Nelson, University of British Columbia, Canada



### Theme 3. Fresh water availability and access

13.45 – 15.30

Leeuwen Room II

## SP 3.2 Moving towards tailored climate services in the Water Sector

Many weather services have been developed for the water sector. While these services are now firmly established, climate change poses a new challenge. In this session we discuss experiences in innovating weather and climate services, including case studies on flood risk management, reservoir operation and power generation, and European approaches including the Roadmap for Climate Services. Together with the audience we will draw lessons from good practice in water management organisations and weather and climate services providers. We will discuss needs to improve access to these services, stimulate joint product development, and discuss improvements in stakeholder interactions by dedicated organisations.

#### Organised by

Laurens Bouwer, Deltares, the Netherlands

#### Partners

Royal Netherlands Meteorological Institute (KNMI), the Netherlands

National Laboratory for Civil Engineering (LNEC), Portugal

#### Chair

Laurens Bouwer, Deltares, the Netherlands

#### Rapporteur

Laurens Bouwer, Deltares, the Netherlands

#### Presentations

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Improving prediction and management of hydrological extremes

Bart van den Hurk, Royal Netherlands Meteorological Institute (KNMI), the Netherlands

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Bringing innovation to ongoing water management

Rafaela Matos, National Laboratory for Civil Engineering (LNEC), Portugal

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European research and innovation roadmap on climate services: demonstrating the added value of climate services

Marco Gemmer, European Commission



## Theme 6. Disaster risk reduction

13.45 – 15.30

Antwerp Room

# SP 6.5 Increasing resilience through Building with Nature along tropical coasts

All across the tropics, coastlines have become increasingly vulnerable. Much of this vulnerability is exacerbated by man-made changes: mangroves are converted, ground water extraction causes soil subsidence and man-made infrastructures interfere with sediment flows. Engineered solutions such as dikes are often expensive and unsustainable. It is time for a new way of working: from fighting nature, to working with nature. This requires an inclusive planning approach combining engineering with restoration of ecosystems. This session explores how the Building with Nature approach can help accomplish these objectives. We will map the drivers to coastal vulnerability in the tropics and explore case examples from rural and urban environments. We will conclude the session discussing requirements to adopt inclusive Building with Nature solutions.

### Organised by Partners

Pieter van Eijk, Wetlands International  
Ecoshape partners  
Ministry of Marine Affairs and Fisheries, Indonesia Panama city administration,  
Panama  
Conservation International

### Chair Rapporteur

Jane Madgwick, Wetlands International  
tbd

### Presentations

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Introduction: New challenges require new solutions. The road towards inclusive approaches to coastal zone management  
Pieter van Eijk, Wetlands International

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Pitch: Building with Nature solutions to address coastal vulnerability along tropical coasts: an overview  
Bregje van Wesenbeeck, Deltares, the Netherlands

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Opportunities for Building with Nature along rural coastlines: examples from Indonesia  
Hendra Siry, Ministry of Marine Affairs and Fisheries, Indonesia

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Nature-based solutions for protecting Surinam's vulnerable coasts  
Sieuwath Naipal, Anton de Kom University, Surinam

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Building with Nature in Panama city: a new paradigm for urban development?  
Raisa Banfield, Vice Mayor, Panama city, Panama (tbc)

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Interview: Building with Nature going global? Business cases for upscaling  
Henk Nieboer, Witteveen and Bos/Ecoshape, the Netherlands

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Plenary discussion on addressing the barriers to inclusive coastal zone management



## Issue 10. Finance, investment and business

13.45 – 15.30

Van Walsum Room

### SP 10.1 Unlocking the potential of pastoralism: opportunities for adaptation and development in Africa's drylands

In the drylands of Africa, pastoralism is one of the most viable economic activities and also the most ecologically and culturally appropriate, particularly under a changing climate. However, the evidence based on which adaptation policy and investment decisions can be made is relatively poor. This session aims to share evidence from three programmes exploring the opportunities around climate-resilient livestock systems for adaptation in West and East Africa. Practitioners and researchers together will discuss ways to promote private sector investment and better economic integration of livestock markets in adapting to climate change at subnational, national and regional scales.

**Organised by** Elizabeth Carabine, Climate and Environment Programme, Overseas Development Institute (ODI), United Kingdom

**Partners** Kenya Markets Trust, Kenya

Innovations Environnement Développement Afrique, Senegal

**Chair** Eva Ludi, Overseas Development Institute (ODI), United Kingdom

**Rapporteur** Chloe Stull-Lane, Adam Smith International Africa

**Presentations** Livestock systems in a changing climate: options for resilient beef value chains in East and West Africa

Ali Hassan, Kenya Markets Trust, Kenya

Waounde Diop, University of Dakar, Senegal

Mapping resilient livestock market systems in West Africa

Catherine Simonet, Overseas Development Institute (ODI), United Kingdom

Ending drought emergencies: Policies to enable a resilient pastoral economy in Kenya

Elizabeth Carabine, Overseas Development Institute (ODI), United Kingdom

**15.30 – 16.00 Break**



## Plenary

16.00 – 17.30

### Rotterdam Hall

Moderator Vivienne Parry, United Kingdom

Sharon Dijksma, Minister for the Environment, the Netherlands

Presentation outcomes of the conference

- Laura Canevari, Acclimatise, United Kingdom
- Richard Klein, Stockholm Environment Institute (SEI), Germany

Award ceremony Young scientist best presentation and best poster award AF2016

Joyeeta Gupta, University of Amsterdam, the Netherlands; Co-Chair Scientific Advisory Committee Adaptation Futures 2016

Impressions from the Earth Journalism Network and from Wolfert Bilingual Secondary School students

Panel

- H.R.H. Princess Abze Djigma, AbzeSolar S.A., Burkina Faso
- Jos Delbeke, Director General DG Climate Action, European Commission
- Ian Burton, Emeritus Professor, University of Toronto, Canada
- Áile Jávo, President Saami Council
- Christian Blondin, Director World Meteorological Organization

Ayman Bel Hassan Cherkaoui, COP 22 Advisor to the Minister, Morocco

Co-Chair PROVIA Scientific Steering Committee to announce Adaptation Futures 2018



Vivienne Parry



Laura Canevari



Richard Klein



Joyeeta Gupta



H.R.H. Princess Abze Djigma



Sharon Dijksma



Jos Delbeke



Ian Burton



Áile Jávo



Christian Blondin

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## Joint Programming of European Research Strategy Agendas in the field of climate change and sustainable urbanisation



In Europe about 75% of the population lives in urban areas – a percentage that will increase even more over the next years. The consequences of climate change are already influencing nearly all aspects of urban environment and people. In this context, cities as hubs of economic transactions, social life, innovation and knowledge-creation have to develop complex adaptation strategies in order to ensure their sustainability.

JPI Urban Europe and JPI Connecting Climate Knowledge for Europe are both member state driven initiatives involving **major European Research funding bodies**. They coordinate research activities in order to provide **usable climate knowledge for climate services** and contribute to tackle the Grand Societal Challenges.

UNFCCC-COP21 Agreement in Paris, December 2015 lays the ground:

[...] Article 7 point 7 c)

*(c) Strengthening scientific knowledge on climate, including research, systematic observation of the climate system and early warning systems, in a manner that informs climate services and supports decision-making: [...]*



For further information :

JPI Climate, [www.jpi-climate.eu](http://www.jpi-climate.eu), @JPIClimate or contact Petra Manderscheid : [petra.manderscheid@jpi-climate.belspo.be](mailto:petra.manderscheid@jpi-climate.belspo.be)  
JPI Urban Europe, [www.jpi-urbaneurope.eu](http://www.jpi-urbaneurope.eu), @JPIUrbanEurope or contact Jonas Bylund : [jonas.bylund@jpi-urbaneurope.eu](mailto:jonas.bylund@jpi-urbaneurope.eu)

(ADVERTORIAL)

# IN 2030 THERE'LL BE 9 BILLIONS MOUTHS TO FEED. A SMARTER FOOD SYSTEM IS NEEDED.

The Rotterdam Region, where the entire food supply is represented, knows how to apply this smart technology in all climate conditions. Please visit our booth no. 5.5 to discover our Smart Fresh Food Solutions!



For more information please contact:

Sharon Janmaat, Projectmanager Food Cluster, City of Rotterdam, [sj.janmaatbouw@rotterdam.nl](mailto:sj.janmaatbouw@rotterdam.nl)

(ADVERTORIAL)



# Joined forces for climate adaptation and resilience

Rotterdam is one of the lowest-lying cities in Europe. While dikes, dams and barriers protect us, we remain vulnerable to local flooding in times of extreme weather. To prevent future problems, the City of Rotterdam actively invests in solutions: proven technology and smart innovations. A balance of the two helps create a water-safe and resilient Rotterdam.

Smart inclusion of water adaptation measures in regular schedules for city maintenance and renovation, helps reduce cost while making climate adaptation and resilience an integral part of city policy. Combinations of water-safety measures with adding more quality and more green to public space have priority. This includes small-scale solutions, implemented at a large scale. Solutions by government, companies and residents alike. Every contribution counts.



**City of Rotterdam**

18.30 – 21.00 IABR architecture biennale reception



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# FRIDAY 13 MAY 2016

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## Field trips

On Friday 13 May participants are offered a choice among 13 field trips (half day or full day). The trips will provide a good overview of how various places in the Netherlands have adapted to climate change over the centuries.

If you booked a field trip you will receive a voucher together with your registration package at the registration desk. Please bring this voucher with you on Friday to the WTC. You can only join the field trip when handing in the voucher. Did you not book a field trip yet, please visit the registration desk on Tuesday, Wednesday or Thursday during opening hours to purchase your ticket.

**Costs** € 35 (including travel, refreshments and packed lunch)

**Field trip bookings** [via the conference registration](#)

1

### Visit our biggest multifunctional water storage in the Netherlands!

(site visit by bus and bicycle excursion)



In the Eendragtspolder several organisations together developed a recreation area, an international rowing course and storm water storage system to manage four million cubic meters of water.

The design and realisation of this 300 hectare multifunctional area required close and continuous cooperation. We combined our knowledge and created a typically Dutch solution for the problems caused by heavy precipitation in one of the most densely populated and lowest-lying areas in Western Europe: seven meters below sea level.

The excursion offers a breathtaking view of the Eendragtspolder site. It reveals Dutch experiences in technique and design, costs and the various processes of implementation. The regional water authority Schieland en de Krimpenerwaard is happy to tell you how it implemented this large scale water storage system, which keeps Rotterdam safe from flooding in times of extreme weather. Thereafter, you will have an opportunity to visit the water storage system by bicycle.

**Organiser** Water Authority Schieland en de Krimpenerwaard

**Max number of participants** 40

**Times** 09.00 – 14.00

2

## We are going to simulate a flood! (site visit)



The excursion will take you by bus to Flood Proof Holland, the unique test and demonstration facility for innovative temporary flood defences and flood prevention measures in Delft. You will be able to see some of the latest innovations during a real life flood simulation. At Flood Proof Holland, Dutch entrepreneurs are working together with public parties, staff and students of various knowledge institutes (e.g. Delft University of Technology) to find innovative and practical means of protection against rising water. This facility is also used for testing and demonstrating other innovations related to water management. Over the last year, many national and international delegations and film crews (for example BBC and Discovery Channel) visited the site. For more info, please watch this video.

[www.youtube.com/watch?v=1j6ernOI7BE](http://www.youtube.com/watch?v=1j6ernOI7BE)

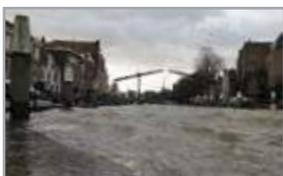
**Organiser** VPdelta

**Max number of participants** 40

**Times** 09.00 – 14.00

3

## Dordrecht flood management walking tour (city tour)



Over centuries Dordrecht has developed by making use of the water surrounding the city. But the city has also been tested by the powerful combination of sea and river water. The Historic Harbour area of Dordrecht provides a good example of how people learned to live with the challenges of living in a delta. Both old and new water management approaches and measures can be observed while walking through Dordrecht's inner city. The walking tour ranges from a century-old sea dike protecting the city to new urban development sites based on living and working alongside the rivers.

**Organiser** City of Dordrecht

**Max number of participants** 40

**Times** 09.00 – 14.00

4

## IJsselmeer region (field trip by bus and boat)



Since the construction of the IJsselmeer Dam in 1932, the IJsselmeer region has been protected against flooding by the North Sea. In addition, land could be reclaimed. The remaining waters constitute the Netherlands' most important freshwater reservoir. However, new challenges related to past and future water management issues have to be met. The delta programme provided us with adaptation strategies to guarantee water safety and freshwater supply, and to increase the flexibility of the water system. To improve water quality and biodiversity, nature development programmes were started. A further issue is the climate-proof development of the Amsterdam Metropolitan Region using the full potential of the lakes.

The success of these developments depends on the commitment to follow an integrated approach combining water management with nature development and recreational and economic goals. This field trip will take you to the IJsselmeer region. We will take a boat trip, enjoy the scenery and see several examples of innovative and multi-purpose projects in water management.

**Organiser** IJsselmeer Blue Challenge Platform

**Max number of participants** 40

**Required** weather-proof clothing

**Costs surcharge** € 30

**Times** 08.00 – 18.00 (arrival time cannot be guaranteed due possible traffic jams in rush hour)

5

## The water city of the future (city trip)



As a delta city, Rotterdam is vulnerable to the effects of climate change. Therefore the city council aims to ensure Rotterdam remains a pleasant living environment, where the impact of climate change on its residents is kept to a minimum. The measures that guarantee this help make it an attractive and liveable city.

Climate Proof ZoHo (Zomerhofkwartier) shows the implementation of the Rotterdam Climate Adaptation Strategy on the district scale aiming to make Zomerhofkwartier climate proof and at the same time a more resilient and vivid district. This field trip takes you by foot through the ZoHo district, the urban laboratory in Rotterdam where promising climate measures are combined with the urban transition and its local initiatives. Local experts will explain innovative projects like water square Benthemplein, raingarden, rain(a)way garden and Europe's biggest urban rooftop farm.

**Organiser** City of Rotterdam

**Max number of participants** 35

**Times** 09.00 – 14.00

6

## Noordwaard expedition: lowering the dike to prevent flooding (site visit)



Flood prevention not by raising, but by lowering the dike? Remarkable but true. As part of the 'Room for the River' programme, the Noordwaard Polder (2000 ha), has been 'depolderised' through partial excavation of the dikes over several kilometres. This allows the river Nieuwe Merwede, one of the Rhine branches, to let its waters flow more rapidly seawards when water levels are high. This results in lower water levels upstream and consequently in increased water safety. After 'depolderisation', the central area of the Noordwaard is flooded several weeks per year, especially during the winter months. The plots outside this central catchment area remain (partly) suitable for agriculture and livestock. Residents continue to live and work on existing or newly constructed mounds. Nature and new recreation possibilities are created. We welcome you in the new Biesbosch Museum. Thereafter, the excursion proceeds to the beautiful and unique project area. You will get a true experience of flood protection within the Noordwaard polder.

**Organiser** Rijkswaterstaat, Room for the River programme

**Max number of participants** 40

**Times** 09.00 – 14.00

7

## Nijmegen Waal expedition: creating an urban river park (site visit)



Nijmegen is situated alongside the River Waal at the Dutch-German border. Over the past 2000 years the river brought prosperity but also floods. Today, due to climate change more peaks in water levels are expected. Raising dikes will not be enough; innovative solutions are needed. In Nijmegen the dike will be relocated as part of the 'Room for the River' programme. As a result, the Waal will not flood as frequently as before and Nijmegen's waterfront will be safe. Nijmegen has successfully turned threats into opportunities. A river park is being built in the heart of the city, featuring an island shared by houses, nature, and leisure facilities. The old town (south bank) and the new town (north bank) are being transformed. The Nijmegen Waal expedition along urban riversides and the new island will allow you to see how the oldest town in the Netherlands is embracing the river – and the future.

**Organiser** City of Nijmegen

**Max number of participants** 40

**Times** 09.00 – 16.00

**Picture** © Thea van den Heuvel /DAPH

8

## National Flood Protection Programme (site visit)



Seventy percent of the Dutch Delta is subject to flooding. To protect it, all 3500 kilometres of the Netherlands' prime water defences are inspected every six years. Higher peak discharges are expected in the near future. Dikes that need reinforcement are included in our National Flood protection programme. We invite you to visit two pioneering protection projects in the Rhine Delta.

First of all, the dike improvement at the island of Dordrecht. In the densely populated old city of Dordrecht, citizens and regional government were closely involved in deciding about the most suitable flood protection method. Through a new multi-level safety concept, a combination of dike improvement, town planning and safety measures is being developed. To get there, the primary level of security, the dikes, are being reinforced at the west and east side of Dordrecht. Dealing with nature, agricultural and citizen interests, this 11 km project is an example of good stakeholders management and good collaboration between government and contractors. With a new innovative integrated contract, giving more responsibility to contractors. Second, the dike between the villages Kinderdijk and Schoonhoven is being reinforced. Two innovative techniques are used to keep the old dike houses intact. Houses are lifted to make room for the heightened dike. This all takes place in a scenic surrounding with historic windmills.

**Organiser** HWBP National Flood Protection Programme

**Max number of participants** 40

**Times** 09.00 – 18.00

9

## Smart Solutions, great results (site visit)



Over 1,2 million people live and work in the area of the Delfland Water Authority. It is an important economic hub that includes cities such as The Hague, Delft and part of Rotterdam. It also contains the world's largest greenhouse horticulture area. The region is one of the most densely populated areas of the Netherlands and a large part is situated below sea level.

The Water Authority plays a number of important roles. Continuous adaptation of the water system is needed to combat the effect of climate change and to facilitate further economic development. At the same time the area must be protected against flooding. The available space is limited. Smart, innovative and as a rule multi-functional solutions are needed. Close cooperation with local partners is a must.

This field trip takes you along various innovative solutions in Delfland, ranging from measures in the urban area such as water plaza's and ingenious compartmentalisation solutions, to smart innovations in the greenhouse area.

**Organiser** Delfland Water Authority

**Max number of participants** 40

**Times** 09.00 – 14.00

10

## Subsoil water buffers to enlarge fresh water availability (site visit)



Harbour cities, industries and productive agricultural soils make delta regions strategic centres of high economic value. However, climate change and the increasing demand for fresh water endanger the balance between salt and fresh water. We can increase the availability of fresh water by storing it underground. This field trip leads you to the show case Waterbuffer in the Westland area, the largest contiguous Greenport area in the world. We will present you with various subsoil fresh water storage solutions applied in the Dutch agricultural and horticultural sectors, varying from relatively simple, regulated drainage systems which improve existing fresh water 'lenses' to advanced vertical well designs to create fresh water bubbles. At this location we will also visit an ASR-installation (aquifer storage and recovery).

**Organiser** Waterbuffer Foundation

**Max number of participants** 40

**Times** 09.00 – 14.00

11

## Hondsbossche Sea wall (site visit)



Until 2015, the Hondsbossche and Pettemer Sea wall was a weak link in the Dutch defence system against the North Sea. The coast was reinforced with sand. To plan the improvement of the 'Hondsbossche Zeeweering', the Water Authority Hollands Noorderkwartier, the province of North Holland and the Dutch national department of Public Works worked together. In addition, the province, together with some local municipalities and organisations for the preservation of nature, cooperated to make the coast more attractive.

The coastal works are used to increase the potential for recreation, nature and tourism and to uplift the regional economy. Residents and local entrepreneurs offered their ideas to improve the plans. The contractor, van Oord-Boskalis, was free to come up with its own ideas for the implementation, while adhering to certain conditions to assure safety. Creative ideas and innovative techniques resulted in a beautiful design.

We are happy to offer you an interesting tour with many highlights, each with its own story.

**Organiser** Water Authority Hollands Noorderkwartier

**Max number of participants** 40

**Times** 09.00 – 16.00

12

## Experience the Delta Works (site visit)



A large part of the Netherlands lies below sea level. For a country as small as the Netherlands, relatively many big rivers discharge their waters into the sea. This makes the Netherlands vulnerable to flooding. In addition to this, we have to deal with rising sea levels, soil subsidence, increasing number of extreme storms, heavy rain and high river levels. Flood prevention is and will remain vital. The 13 Delta Works in the provinces of Zuid-Holland, Zeeland and Noord-Brabant protect us already for over 50 years against flooding. They are unique and complex seawalls. Register for an educational and fun outing to the main Delta Works.

Read more: [website Delta Works](#)

**Organiser** Experience the Deltaroute (Rijkswaterstaat (Ministry of Infrastructure and the Environment)/The Royal Dutch Touring Club ANWB)

**Max number of participants** 40

**Times** 09.00 – 17.00

13

## Amsterdam rainproof (site visit)



Annual rainfall has increased in the last century and rains have become more intense. Amsterdam Rainproof is a movement of all Amsterdam citizens to prepare the city for extreme rainfall. They do that by implementing, in public and private spaces, many small measures that together increase the city's capacities to function as a sponge. Water-permeable pavement materials, green roofs and wall gardens: there are many solutions to prevent flood damage that at the same time embellish the city. The Amsterdam Rainproof programme (2014 – 2017) informs, inspires and connects residents, entrepreneurs, civil servants and scientists to build in rainproof measures in all physical changes in the city. The excursion takes you to a 'rainproof neighbourhood' and a water conserving roof: the polderroof.

**Organiser** Rainproof Amsterdam

**Max number of participants** 30

**Times** 09.00 – 14.00

**Picture** © Betondorp – Merlijn Michon

## The poster sessions will be held on:

Tuesday, 17.30 – 19.00

Wednesday, 17.30 – 19.00

### Theme 1. Cities and infrastructure



Challenges for urban resilience: the global crisis of urban water

Carlos Betancourth, Universitat Politècnica de Catalunya, Spain

Climate change adaptation in European cities: insights from responses to the CDP's cities programme

Markus Groth, Climate Service Center Germany (GERICS), Germany

A multi-hazard city level impact assessment for the concepción metropolitan area, Chile

Dahyann Araya Muñoz, University of Edinburgh, Edinburgh, United Kingdom / Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile

Making Room for Water? Contested visions of urban adaptation and development in Jakarta

Kian Goh, Northeastern University, USA

Potential of urban vegetation for reducing heat-related hospital admission in western Sydney

Xiaoming Wang, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia

Urban adaptation planning in Asian coastal megacities: Jakarta as a case study  
Cities and infrastructure

Yara Van Holten, Leiden University, Leiden, the Netherlands

The effects of training & distance on resilience: biogas interventions in informal urban settlements

Stefano Moncada, University of Malta, Malta

The U.S. adaptation resources and services landscape: an overwhelming array of resources

Sara Meerow, University of Michigan, USA

Design guidelines for thermally comfortable and attractive streetscapes in harbour areas

Wiebke Klemm, Wageningen UR, the Netherlands

Guidelines for adaptation to climate change in city planning and spatial design

Bart Van Gassen, Tractebel Engineering, Belgium

Demonstrating adaptation: the pivot towards climate adaptive storm water management in Miami beach

Galen Treuer, University of Miami, USA

Adding the scenic benefits as an element in cost-benefit analysis of green roofs

Väinö Nurmi, Finnish Meteorological Institute, Finland

### Theme 2. Food, forestry and rural livelihoods



Can mangroves help combat sea level rise through sediment accretion and accumulation?

Abu Hena Mustafa Kamal, Universiti Putra Malaysia Bintulu Campus, Malaysia

Effects of climate change on natural resource base of the Valley bottoms in central Kenya region

Hellen Kamiri, Karatina University-Kenya, Kenya

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Future potential productivity: an analysis of global crop yield using process based model  
Gen Sakurai, National Institute for Agro-Environmental Sciences, Japan

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Rural livelihoods and cropping pattern under climate change in the Zio District of Togo,  
West Africa

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Martial Amou, West African science service Center on Climate Change and adapted Land  
Use (WASCAL), Benin

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Measuring vulnerability index for climate change impact on agricultural production in India  
Dhriti Mulakalapalli, St. Joseph High School, India

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Gender and climate change adaptation technology needs of oil palm farmers in Edo  
State, Nigeria

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Margaret Koyenikan, University of Benin, Nigeria, Nigeria

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Mapping of multiple stressors contributing to vulnerability across scales in semi-arid zone  
of Ghana

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Philip Antwi-Agyei, Kwame Nkrumah University of Science and Technology, Ghana

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Mapping experience and adaptation to climate change across two semi-arid rural sites  
Saurabh Sood, S.M. Sehgal Foundation, India

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Improving climate change adaptation practices: lessons from smallholder  
commercialisation in Ghana

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Rex Gerchie, University of Ghana, Ghana

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Coping with climate variability and water stress in rainfed farming of India: a study  
Dhananjay Dutta, Bidhan Chandra Krishi Viswavidyalaya, India

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Assessing rural farm households perception and adaptive capacity to climate change  
in Nigeria

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Olaniran Thompson, Federal University of Technology, Nigeria

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Women's adaptive innovations in land and water management under climate change in  
Himalaya

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Bhagwati Joshi, Government Post Graduate College, India

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Adaptive capacity and factors that influence adaptation strategies among Kassena  
Nankana Farmers

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Louisa Kabobah, University of Ghana, Ghana

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A holistic approach to analysing farmer decision-making: implications for adaptation policy  
& practice

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Chandni Singh, Indian Institute for Human Settlements, India

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Assessing vulnerability and adaptive capacity to potential drought for winter-wheat in China  
Yingchun Li, Chinese Academy of Agricultural Sciences, China

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A holistic approach to analysing farmer decision-making: implications for adaptation policy  
& practice

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Chandni Singh, Indian Institute for Human Settlements, India

### Theme 3. Fresh water availability and access



Assessing community capacity towards climate induced water shortages in urban cities  
Sandhya Sri Bonela, AVN College, India

A waterharmonica to close loops and to enhance availability of fresh water and environmental values

Ingrid ter Woorst, Delfland Water Authority, Delft, the Netherlands

Water and climate change on average Garonne: adaptation as a bargaining unit  
Guillaume Simonet, Institute for Climate Economics (I4CE), France

The Dutch Delta programme: applying the NEXUS approach for a resource efficient and circular economy

Stijn Reinhard, Wageningen UR, the Netherlands

Evaluation of small scale water harvesting techniques for water supply in semi-arid environments

Ralph Lasage, Institute for Environmental Studies (IVM), VU University Amsterdam, the Netherlands

Climate adaptation to water scarcity in glacier-dependent city of the Indian Himalayas  
Shailendra Mandal, National Institute of Technology Patna, India

Water quality index for irrigation of cropping area using MODIS sensors' based MOD13Q1-NDVI data

Pavan Kumar, Kumaun University, India

Studies on iron pollution in ground water samples of Dandakaranya Area, Chhattisgarh State, India

Anand Kamavisdar, Ministry of Science & Technology, India

### Theme 4. Public health



Impact of climate change on vulnerable medicinal plants

Tabassum Fathima, Trans-Disciplinary University, India

Projection of rural and urban human thermal comfort in the Netherlands for 2050: a methodology

Gert-Jan Steeneveld, Wageningen UR, Netherlands

Standing the heat during the 2013 heatwaves in the Dutch province of Limburg

Maud Huynen, Maastricht University, the Netherlands

### Theme 5. Ecosystems and ecosystem based adaptation



Ecosystem-based adaptation approaches as an integral component of sustainable groundwater management

Andreas Antoniou, International Groundwater Centre (IGRAC), the Netherlands

Development of climate change risk assessment and delivery of adaptation in the natural environment

Paul Munday, Atkins, United Kingdom

Exploring benefits and co-benefits of ecosystem-based approaches to support urban adaptation

Eliška Krkoška Lorencová, Global Change Research Centre (CzechGlobe), Czech Republic

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Framing climate adaptation in nature conservation: stakeholder perspectives in Dutch brook valleys

Hens Runhaar, Utrecht University, the Netherlands

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Perennial fresh water

Aisha Khan, Mountain and Glacier Protection Organization (MGPO), Pakistan

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Linking plant diversity and soil properties to the climatic resilience of farmland riparian buffer

Emmanuel Amoah Boakye, Université Felix Houphouët Boigny, Côte d'Ivoire

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Adaptation tipping points of urban wetlands under climate change and urbanisation

Amar Nanda, The University of Western Australia, Australia

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Climate change impact assessment on natural forests in Japan and adaptation measures

Tetsuya Matsui, Forestry and Forest Products Research Institute, Japan

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Perennial fresh water

Aisha Khan, Mountain and Glacier Protection Organization (MGPO), Pakistan

## Theme 6. Disaster risk reduction



Social network maps for understanding community preparedness and response: an Alpine case study

Lydia Pedoth, European Academy Bolzano (EURAC), Italy

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Live at sea as an adaptive solution: a pattern language for floating cities

Luciana Araujo, Federal University of Rio de Janeiro (UFRJ), Brazil

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Unfolding differential livelihood vulnerability for disaster resilience in Indian sundarbans

Subhakanta Mohapatra, Indira Gandhi National Open University (IGNOU), India

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Towards a disaster risk reduction lessons learned portal for EL Nino: insights from South Africa

Marie-Ange Baudoin, University of Cape Town, South Africa

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Coping with flooding in informal settlements in rapidly urbanising peripheries in the Mumbai region

Nidhi Subramanyam, International Development Research Centre, Canada

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Vulnerability of Almeria watershed to man-made and natural hazards

Arturo Esclamado Pasa, Visayas State University, Philippines

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Indigenous knowledge and resilience in climate variability and change: Chereponi, Ghana and Oti, Togo

Alberta Aryee, Université de Lome, Ghana

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Ecosystems based adaptations of climate change on the western slopes of mt Kenya forest ecosystems

David Karienyé, Garissa University College Kenya, Kenya

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Indigenous knowledge and resilience in climate variability and change: Chereponi, Ghana and Oti, Togo

Alberta Aryee, Université de Lome, Ghana

## Cross-cutting issue 8. Risk assessment, adaptation planning and evaluation



Communicating climate change: exploring effects of climate change and adaptation training workshops

Claire Van Wyk, University of Cape Town, South Africa

Adaptation research – getting information into the right hands

Sarah Boulter, National Climate Change Adaptation Research Facility (NCCARF), Australia

Shaping climate resilient development – open-source adaptation

David N. Bresch, Swiss Re, Switzerland

Measuring and predicting the effect of land use change on climate adaptation capacity

Andrea Chu, National Taiwan University, Taiwan

Adaptation to the impacts of climate change in Scottish island communities

Fiona Cunningham, University of St Andrews, United Kingdom

Situating climate change risks in socio-economic vulnerabilities: case study from northern Ethiopia

Million Gebreyes, University of Bonn, Germany

The 'future cities adaptation compass': a tool to assess vulnerability & adaptation options easily

Bjoern Gruen, Emschergerossenschaft/Lippeverband, Germany

Adaptation to climatic hazards in coastal Taiwan communities: building effective warning systems

Hung-Chih Hung, National Taipei University, Taiwan

When is it 'good enough'? Comparing datasets for tick-borne disease surveillance and adaptation

Amy Poole, Department of Geosciences, East Tennessee State University, Johnson City, USA

Multi-sectoral drought strategies. The World Bank pilot experiences and next steps

Marcus Wijnen, The World Bank

Insights on bringing climate change adaptation on to the sub-national political agenda in Ecuador

Nadia Manasfi, Gesellschaft für Internationale Zusammenarbeit (GIZ), Ecuador

Role of participatory approaches and communication in the implementation of the NAPAs and NAPs

Federica Matteoli, Ca Foscari University, Italy

Knowledge empowering adaptation: climate change, sea level rise and local governments

Jean Palutikof, Griffith University, Australia

Participatory development and application of progress indicators for local adaptation plans

Cristóbal Reveco, Adapt-Chile, Chile

A global analysis of adaptation case studies: state of the art

Jenny Tröltzsch, Ecologic Institute, Germany

Evaluating the effectiveness of climate change communication and discussing future research

Gregor Vulturius, Stockholm Environment Institute (SEI), Sweden / University of Edinburgh, United Kingdom

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Towards a methodological framework for participatory research on adaptation in a sectorial context

Åsa Gerger Swartling, Stockholm Environment Institute (SEI), Sweden

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The Vulnerability, Impacts, Adaptation, and Climate Services Advisory Board (VIACS AB) for CMIP6

Alex Ruane, NASA Goddard Institute for Space Studies, United States

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Global climate risk management: introduction to ICA-RUS report 2015

Kiyoshi Takahashi, National Institute for Environmental Studies, Japan

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An assessment of the adaptation scenarios for the Croatian coast

Jochen Hinkel, Global Climate Forum, Humboldt Universität zu Berlin, Germany

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Priorities and options for adaption to changing flood risks in the EU

Laurens Bouwer Deltares, the Netherlands

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Managing Water quality in the face of climate and other uncertainties

Robert Lempert, RAND, USA

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Smart use of flood-risk management resources starts with a flood risk vision

Hanneke Vreugdenhil, HKV Consultants, the Netherlands

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The potential uses of climate analogues for awareness-raising and urban climate adaptation

Guillaume Rohat, University of Geneva, Switzerland

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A framework for evaluating and comparing climate change adaptation in US cities

Chen Chen, University of Notre Dame, USA

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Integrated approaches to analysis and deliberation in community climate risk management

Christopher Moore, Simulation for Collective Action, Berlin, Germany

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A way forward for mainstreaming measures for flood resilience in development projects

Jeroen Rijke, UNESCO-IHE, the Netherlands

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Migration as adaptation to climate change in Mahanadi Delta

Sugata Hazra, Jadavpur University, India

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Current adaptation and planning priorities at the district level: Volta delta case study

Adelina Mensah, University of Ghana, Ghana

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Asset-based analysis of social vulnerability of inner city of Ile-Ife, Nigeria

Grace Oloukoi, Lead City University, Nigeria

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Climate change adaptation in small and medium-sized cities: an example from the Czech Republic

Marie Hubatova, Global Change Research Centre, Academy of Sciences of the Czech Republic, Czech Republic

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Comprehensive impact assessment and adaptation measures based on new scenarios in Japan

Yasuaki Hijioka, National Institute for Environmental Studies, Japan

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Priorities and options for adaption to changing flood risks in the EU

Laurens Bouwer Deltares, the Netherlands

## Cross-cutting issue 9. Institutions and governance



What constitutes transformation? Reviewing adaptation to social-ecological risks in semi-arid lands

Roger Few, University of East Anglia, United Kingdom

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Climate change adaptation policies in agriculture and rural development sector in Vietnam

Pham Thi Dung, Climate Change Office, Ministry of Agriculture and Rural Development, Vietnam

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Bolivian climate change adaptation experiences from the Altiplano norte region and Beni department

Dirk Hoffmann, Friedrich Ebert Foundation (FES) and Bolivian Mountain Institute (BMI), Bolivia

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Risk perceptions, awareness and status quo of climate change adaptation in Austrian municipalities

Brigitte Allex, University of Natural Resources and Life Sciences, Austria

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Adaptation and the big picture: an evaluation of multi-scalar linkages and barriers in Nunavut

Jolène Labbé, McGill University, Canada

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A multi-sector-partnership in transnational risk management – challenges for the Wadden Sea Forum

Birgit Gerkenmeier, Helmholtz-Zentrum Geesthacht, Germany

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Non-market loss and damage evaluation

Petra Tschakert, University of Western Australia, Australia

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Assessing the institutional constraints to adaptation through social network analysis in Tabasco(MX)

Elisa Calliari, University of Venice, Italy

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Improving social-ecological governance in Atlantic Canada communities to adapt to climate change

Liette Vasseur, Brock University, Canada

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Social services in five Nordic countries in times of disaster

Ingibjörg Lilja Ómarsdóttir, University of Iceland, Iceland

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Adaptation planning and the use of climate projections in local government in England and Germany

Susanne Lorenz, University of Leeds, United Kingdom

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From a typology of adaptation strategy to adaptation pathways

Sandrine Dhenain, UMR G-EAU, IRSTEA, France

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Climate change mitigation and adaptation: perceptions, planning and action at the municipal level

Gil Penha-Lopes, University of Lisbon, Portugal

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Is scientific knowledge used for the implementation of sectoral adaptation policies in Europe?

Eleni Karali, Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC), Italy

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Opportunities for adaptation in Central America: a view from decision makers in agriculture

Ruth Martinez, Conservation International, Costa Rica

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Governance to respond to climatic impacts: evaluating the Paris outcomes for policy and practice

Soenke Kreft, Germanwatch / United Nations University, Germany

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A case for Adaptation Laboratories? The potential for radical realignment of adaptation paradigms

Stephen Woroniecki, Lund University, Sweden

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Media discourse analysis on climate change in Chile: construction of public and political agendas

Paulina Aldunce, University of Chile, Chile

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Monitoring and evaluating climate adaptation governance in Sweden

Lisa Van Well, Swedish Geotechnical Institute, Sweden

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Local institutions and climate change adaptation governance in Hindu Kush Himalaya

Prakash Chandra Tiwari, Kumaun University, India

USAID's experience on climate-resilient development and national adaptation planning

Joel Smith, Abt Associates, USA

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Building resilience of the Great Barrier Reef through partnerships, integrated plans & implementation

Carolyn Cameron, Cameron Strategies, Australia

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Climate change adaptation policies in agriculture and rural development sector in Vietnam

Pham Thi Dung, Ministry of Agriculture and Rural Development, Vietnam

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Bolivian climate change adaptation experiences from the Altiplano Norte region and Beni department

Dirk Hoffmann, Friedrich Ebert Foundation (FES) and Bolivian Mountain Institute (BMI), Bolivia

## Cross-cutting issue 10. Finance, investment and business



The use of non-monetary metrics in adaptation decision-making

Jenny Tröltzsch, Ecologic Institute, Germany

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Short term adaptation cost? The case of Mauritius as a small island developing state

Lutchmeeduth Bullywon, Ministry of Finance, Mauritius

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Enhancing climate change adaptation funding in Africa through microfinance

Dumisani Chirambo, Brandenburg University of Technology Cottbus-Senftenberg, Germany

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Weather index based crop insurance as an adaptive mechanism for climate change in coastal Bangladesh

Meer Omar, Bangladesh University of Engineering and Technology (BUET), Bangladesh

(ADVERTORIAL)



# ADAPTATION FUTURES 2016: CLIMATE CHANGE AS AN INNOVATION DRIVER

Faced with the increasing impact of climate change, the need to be prepared for and adapt to its consequences is greater than ever. At Royal HaskoningDHV we see this challenge as an opportunity to drive innovation, developing responsible solutions that will last far beyond our generation.

## OUR WORK IS ABOUT:

- Connecting with those around us – joining forces to deliver resilient responses to the climate challenges we face
- Solutions that make a difference – maximising outcomes by addressing the needs of many
- Designing with nature in mind – future-proofing our services by working with the natural world and implementing circular economy approaches

As Sponsor of Adaptation Futures 2016, Royal HaskoningDHV is hosting a session on Climate Change as an Innovation Driver, together with James Dalton of IUCN, and Anthony Hurford of the University of Manchester on **Wednesday 11 May, 13.30-15.15** in the **Goudriaan Room II**, or you can come and find us anytime throughout the conference at our stand.

[www.royalhaskoningdhv.com](http://www.royalhaskoningdhv.com)



## Adaptation Expo

The Adaptation Expo is at the heart of our conference. During the three-day conference this will be the central place to share practices and solutions. Over 1500 conference participants can view exhibitions, projects, tools and poster presentations.

### Exhibitors

The Adaptation Expo will be held in the Exchange, Mercurius and Shipping Hall of the World Trade Centre. Various exhibitors will showcase their adaptation products, practices and solutions and are ready to engage with you (page 190).

### Tool Shed

During the conference, the tool shed, a special pavilion on the exposition floor, will demonstrate adaptation tools. The programme for the tool shed is published in a separate flyer that you will find in your conference bag and in the tool shed itself. Presentations last for between 20 and 30 minutes.

Spontaneous initiatives for a presentation of a tool, that are not announced before the conference and thus not published in the folder, can be granted in a special block if time slots are left. If you are interested, please contact the registration desk.

[www.adaptationfutures2016.org](http://www.adaptationfutures2016.org)

### Project Expo

The Project Expo displays innovative adaptation projects from a diverging range of countries. In selecting the projects, it was recognised that the focus should not only be on success stories: one should also acknowledge components that could be improved, and lessons that can be learned for future similar projects. Most importantly, the selected projects are considered innovative, inspiring adaptation solutions, which could prove examples for future adaptation approaches.

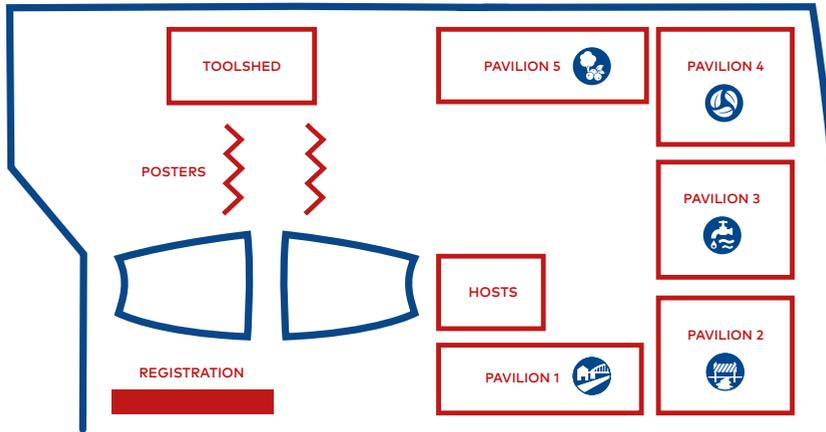
An overview of all the projects can be found on page 198 and the conference [website](#).

### Posters

Scientific abstracts are at the basis of the poster sessions. All these posters will also be shown at the Adaptation Expo (page 179).



## Exhibition and floorplan



### HOSTS

- H1 PROVIA, Global Programme of Research on Climate Change Vulnerability, Impacts and Adaptation
- H2 European Commission
- H3 Government of the Netherlands

### PAVILION 1

#### Cities and Infrastructure

- 1.1 Royal HaskoningDHV
  - 1.2 City of Rotterdam and 3 water authorities
  - 1.3 SWECO
  - 1.4 VpDelta
  - 1.5 The Covenant of Mayors for Climate & Energy (integrating Mayors Adapt)
  - 1.6 JPI Climate / JPI Urban Europe
- Projects  
Science posters Theme 1. Cities and Infrastructure

### PAVILION 2

#### Disaster risk reduction

- 2.1 Deltares
  - 2.2 ENHANCE partnership for risk reduction  
IMPRES: IMProving PRedictions and management of hydrological EXtremes
  - 2.3 CDKN Climate and Development Knowledge Network  
BRACED Building Resilience and Adaptation to Climate
  - 2.4 NWP Netherlands Water Partnership
- Projects  
Science posters Theme 6. Disaster risk reduction

### PAVILION 3

#### Fresh water availability and access

- 3.1 Dutch Water Authorities
  - 3.2 Urbanising Deltas of the World (UDW NWO)
  - 3.3 Arcadis
  - 3.4 UNESCO-IHE
- Projects  
Science posters Theme 3. Fresh water availability and access

### PAVILION 4

#### Ecosystems and ecosystem based adaptation

- 4.1 Elsevier publisher
  - 4.2 WASCAL West African Science Service Center on Climate Change and Adaptive Land Use  
SASSCAL Southern African Science Service Centre for Climate Change and Adaptive Land Use
  - 4.3 Trinomics, Energy, Environment & Climate Change
  - 4.4 Wetlands International
- Projects  
Science posters Theme 5. Ecosystems and ecosystem based adaptation

### PAVILION 5

#### Food, forestry and rural livelihoods

- 5.1 Global Alliance for Climate-Smart Agriculture
  - 5.2 Springer publisher
  - 5.3 Netherlands Space Office (NSO)
  - 5.4 Knowledge4food, Food & Business Knowledge Platform
  - 5.5 Smart Fresh Food Solutions
  - 5.6 Stockholm Environment Institute (SEI)
- Projects  
Science posters Theme 2. Food, forestry and rural livelihoods

### TOOLSHED

See separate flyer

### SCIENCE POSTERS

Theme 4. Public health  
Issue 8. Risk assessment, adaptation planning and evaluation  
Issue 9. Institutions and governance  
Issue 10. Finance, investment and business

## Exhibitors



### Arcadis

Arcadis the leading global Design & Consultancy firm for natural and built assets. Applying deep market sector insights and collective design, consultancy, engineering, project and management services we work in partnership with our clients to deliver exceptional and sustainable outcomes throughout the lifecycle of their natural and built assets. We are 28,000 people active in over 70 countries. We support UN-Habitat with knowledge and expertise to improve the quality of life in rapidly growing cities around the world.

Let's make the connection for new ideas. Tomorrow's water challenges call for a transition with an innovative and integrated approach.

[www.arcadis.com](http://www.arcadis.com)



### City of Rotterdam, Water Authorities Delfland, Hollandse Delta, Schieland & de Krimpenerwaard

The water authorities of Delfland, Hollandse Delta, Schieland & de Krimpenerwaard and the City of Rotterdam have invested in a strategy based on innovative approaches and concrete solutions throughout the city and the region. Water safety and climate resilience combine nicely with a better, more liveable city for residents and benefits for cities around the world and local businesses. These activities attract delegations from around the globe, which we are happy and proud to host. At the same time, we are keen to learn from our global peers and their takes on climate adaptation, in any aspect imaginable.

[www.rotterdamclimateinitiative.nl](http://www.rotterdamclimateinitiative.nl)



### CDKN: Climate and Development Knowledge Network

#### BRACED: Building Resilience and Adaptation to Climate Extremes and Disasters

CDKN works with partners in Asia, Africa, Latin America and the Caribbean to design and deliver climate compatible development. Pick up our 'What's in the IPCC AR5 for developing countries' reports and Inside Stories on subnational adaptation successes, and to learn about our sister programme: Future Climate for Africa. BRACED is enhancing resilience to climate extremes in Africa and Asia, and the team will be on hand to discuss all things related to resilience. Pick up literature on building climate resilience, including approaches for measuring resilience and integrating gender equality into your programming.

[www.cdkn.org](http://www.cdkn.org)

[www.braced.org](http://www.braced.org)



### Deltares

Deltares is an independent institute for applied research in the field of water and subsurface. Throughout the world, we work on smart solutions, innovations and applications for people, environment and society. Our main focus is on deltas, coastal regions and river basins. We have the latest knowledge on climate adaptation and support public and private bodies, and society as a whole, to help manage risks and build resilience.

In our booth you can meet the experts and they will explain the tools and methods they use to put science into practice.

[www.deltares.nl](http://www.deltares.nl)

DUTCH WATER  
AUTHORITIES**Dutch Water Authorities**

Dutch Water Authorities will be present at the Adaptation Expo. In our stand you can find information on flood prevention, water & environment issues, and information about the contribution of water authorities on the circular economy. We will organise a few discussions with executives and professionals on these themes in our stand. More information about three organisations in which the water authorities are organised you can find below:

[www.dutchwaterauthorities.com](http://www.dutchwaterauthorities.com)

[www.deltacommissaris.nl](http://www.deltacommissaris.nl)

[www.stowa.nl](http://www.stowa.nl)



ELSEVIER

**Elsevier**

We are proud to announce a new journal, Climate Services. Climate Services brings science and practice together. It serves as a means of communication, dialogue and exchange forum between researchers and stakeholders. The journal Climate Services is at the interface between climate research and application, specifically related to climate services. Climate Services address all sectors affected by climate, at global, regional and local scale. They connect natural and socio-economic research with practice.

Drop by our booth to find out more about the journal.

[www.journals.elsevier.com](http://www.journals.elsevier.com)

**ENHANCE - IMPREX**

Swing by our booth and find out about the results of ENHANCE, a 4-year EU-funded project that has been developing new risk scenarios and multi-sector partnerships, with emphasis on the financial sector, to enhance society's resilience to disasters. The hazards examined concern floods, droughts, forest fires, heat waves, storm surges and volcanic eruptions.

Seize the occasion to also learn about a recently launched project IMPREX - IMproving PRedictions and management of hydrological EXtremes.

[www.enhanceproject.eu](http://www.enhanceproject.eu)

[www.imprex.eu](http://www.imprex.eu)

**European Commission**

Visitors will have the opportunity to explore the European Commission's investment programmes for climate adaptation such as:

- Global Climate Change Alliance plus (GCCA+)
- LIFE Programme
- Horizon 2020 including Climate Services and Nature-based Solutions (NBS)
- Mayors Adapt
- Copernicus Climate Change Service

Our experts at the booth will communicate our policies, practices, our investment actions and our open funding opportunities.

[www.ec.europa.eu](http://www.ec.europa.eu)



### Global Alliance for Climate-Smart Agriculture

An alliance of partners created to stimulate accelerated scaling up of Climate-Smart Agriculture and thereby facilitating concrete food security and agriculture initiatives by tapping the wealth and diversity of resources, knowledge, information and expertise from its members. The vision of the Alliance is to improve people's food security and nutrition in the face of climate change. Its mission is to help governments, farmers, scientists, businesses, and civil society, as well as regional unions and international organizations, to adjust agricultural, forestry and fisheries practices, food systems and social policies.

[www.fao.org/gacsa](http://www.fao.org/gacsa)



### Government of the Netherlands

Centuries of battling with the sea have transformed the Netherlands into the world's safest delta country. In the Netherlands' stand you will find information on how we work nationally and internationally to help ensure an inclusive, safe and sustainable future, including through:

- The Delta Programme
- The Spatial Adaptation Knowledge Portal
- Partners for Resilience initiative
- The 13 field trips on Friday 13 May

Also you can find more information on other events during the Netherlands' EU Presidency.

[www.government.nl](http://www.government.nl)



### JPI Climate / JPI Urban Europe

JPI Climate is an intergovernmental initiative gathering European countries to coordinate jointly their climate research and fund new transnational research initiatives. JPI Climate connects scientific disciplines, enables cross-border research and increases the science-practice interaction.



JPI Urban Europe is an intergovernmental initiative gathering European countries to join their research and innovation programmes on urban transition. The ambition is to develop and validate new solutions for sustainable and liveable cities. A cooperation platform and programme is provided to connect urban stakeholders, scientists, cities, business and society. Please stop by our booth to learn more about these initiatives and our funding opportunities.

[www.jpi-climate.eu](http://www.jpi-climate.eu) [www.jpi-urbaneurope.eu](http://www.jpi-urbaneurope.eu)



### Knowledge4food

The Food & Business Knowledge Platform seeks to facilitate a better understanding of how food systems work and how they can be strengthened. The Platform aims to nourish practices and policies with local and global solutions and business opportunities for sustainable food and nutrition security. We identify knowledge issues that are relevant now and in the future. We create partnerships, initiate joint learning, invest in research and disseminate best practices and existing knowledge. The platform is an open and independent initiative where representatives from international networks and organizations of business, science, civil society, and policy come together.

[www.knowledge4food.net](http://www.knowledge4food.net)



### Covenant of Mayors for Climate & Energy



#### The Covenant of Mayors for Climate & Energy (integrating Mayors Adapt)

The new Covenant of Mayors for Climate & Energy (integrating the Mayors Adapt initiative) brings together local and regional authorities voluntarily committed to adopting and implementing an integrated approach to tackling adaptation and mitigation to climate change on their territory. New signatories commit to develop local adaptation strategies and/or plans and to reduce emissions by 40% by 2030. By joining the new Covenant initiative, local and regional authorities benefit from: public recognition and visibility of their leadership and actions; wide-ranging support and knowledge sharing; increased financial opportunities; engagement of various stakeholders; etc.

[www.covenantofmayors.eu](http://www.covenantofmayors.eu)

### Netherlands Space Office



#### Netherlands Space Office / Geodata for Agriculture and Water (G4AW)

The food producers of our planet face the extraordinary challenge of feeding 9 billion people by the year 2050. As a consequence of climate change, there will be a growing competition in using water and finding fertile land. Further, reliable weather forecasts for food producers are scarcely available in developing countries. The G4AW Facility supports fourteen public/private partnerships to deliver financially sustainable services. Involved organisations are using satellite data and existing technology and services, empowering the most important actors in the food production chain: farmers, fishermen and pastoralists.

[www.g4aw.spaceoffice.nl](http://www.g4aw.spaceoffice.nl)



NETHERLANDS  
WATER PARTNERSHIP

#### The Netherlands Water Partnership

The Netherlands Water Partnership (NWP) is your one-stop-shop for the Dutch Water Sector. Come to our booth and be inspired by best practices on adaptation in cities worldwide. The Dutch Water Sector presents cases in urban environments in the Netherlands, Indonesia, Mozambique, New York, Columbia and Bangladesh. Learn about the 'Building Blocks for a Delta Approach', developed with our worldwide counterparts, and get a sneak preview of the new 'Resilient Cities' campaign. Are you looking for expertise, partners, products? Leave your card and question at our booth and we will make the connection for you. Or go on a speed date with selected cities at the 'City & Business Match' on the 11th of May lunchtime around our booth. Your solution might be just what these cities are looking for. Let's work together!

[www.nwp.nl](http://www.nwp.nl)



#### PROVIA

One of the conference hosts is the Global Programme of Research on Climate Change Vulnerability, Impacts and Adaptation, established by UNEP, WMO and UNESCO. Acknowledging emerging policy strategies, new scientific developments and lessons learned from past programmes, we deliver, in collaboration with our implementing partners, improved coordination of international research on the impacts of and responses to climate change, and provide the credible scientific information that is being increasingly requested by decision makers. In our booth we will be showing recent PROVIA products and future projects.

[www.unep.org/provia](http://www.unep.org/provia)



### Royal HaskoningDHV

Royal HaskoningDHV is an independent, international engineering and project management consultancy with more than 130 years of experience. Backed by the expertise and experience of 7,000 colleagues all over the world, our professionals combine global expertise with local knowledge to deliver a multidisciplinary range of consultancy services for the entire living environment from over 130 countries.

By showing leadership in sustainable development and innovation, together with our clients, we are working to become part of the solution to a more sustainable society now and into the future.

[www.royalhaskoningdhv.com](http://www.royalhaskoningdhv.com)



### Smart fresh food solutions

In 2030 there'll be 9 billion mouths to feed, 80% of which will live in cities. How will people be taken care of in these mega-cities? 'Smart' solutions are necessary. A smarter food system is more productive, less wasteful and more profitable. If all the horticultural acreage worldwide was as productive as that of the Netherlands, the world would produce at least three times as much food, using a fraction of the amount of water, energy and pesticides. The Rotterdam Region – where the entire food supply is represented – knows how to apply this technology in all climate conditions. Please visit our booth to explore our smart food solutions."



### Springer

Springer fosters communication among researchers, students and professionals enabling them to work more efficiently, thereby advancing knowledge and learning. Our dynamic growth allows us to invest continually all over the world. With more than 200 Nobel Prize winners among the authors of our books and journal articles, it is safe to say that Springer has earned its place among the world's foremost STM publishers. As an e-first company our publishing editors discover the best authors and help to disseminate their research, while our developers deliver the next big thing in scholarly communications.

[www.springer.com](http://www.springer.com)



### Stockholm Environment Institute (SEI)

Adaptation to climate change is a major focus of SEI's work: from policy and finance, to vulnerability assessments, to capacity-building. SEI has particularly engaged in the discussion of adaptation finance under the UN Framework Convention on Climate Change (UNFCCC). It has also been a leader in developing methods and tools for assessing climate change vulnerability and impacts, for planning adaptation, and for sharing relevant knowledge. Another aspect of SEI's work addresses community-based and local adaptation, to understand the drivers of adaptive capacity, including how national and global development processes strengthen or weaken adaptive capacity at the local level, and increase or reduce vulnerability to climate risks.

[www.sei-international.org](http://www.sei-international.org)

### Sustainable Urban Delta, proven model for future growth

Being a model sustainable urban delta, the Netherlands provides real-world solutions for delta cities today. With proven systems, the Dutch can support to secure the future of low-lying delta regions around the world. The cooperation between the government, private sector and knowledge institutes to tackle challenges related to the urban delta has been pivotal in safeguarding the sustainable development of the Dutch delta. Nowadays, this form of cooperation still provides the stable base for the integral solutions that keep the Dutch sustainable urban delta a prosperous and lively place to live. The presentation 'sustainable urban delta, proven model for future growth' proudly presents 6 outstanding showcases as smart innovations for these global challenges.



#### Sweco

Sweco plans and designs the communities and cities of the future. Our work results in sustainable buildings, efficient infrastructure and access to electricity and clean water. With 14,500 employees in Europe, we offer our customers the right expertise for every situation. We carry out projects in 70 countries annually throughout the world. Sweco is the leading architecture and engineering consultancy in Europe, with sales of approximately SEK 15.2 billion (pro forma 2014). The company is listed on NASDAQ Stockholm.

[www.sweco.nl](http://www.sweco.nl)



#### Trinomics, Energy, Environment & Climate Change

Trinomics is an international consultancy that provides research and advice in the fields of energy, environment and climate change policy. Our experts use economics as an analytical basis and aim to develop sustainable solutions to emerging socio-economic challenges on a local, regional, national and international level together with our clients. Together, we aim to find creative solutions for the transformation to a truly sustainable economy! Come to our booth to find out more about the research and strategic policy advice we provide in fields such as climate finance, green infrastructure, climate change adaptation, climate extremes and ecosystem services.

[www.trinomics.eu](http://www.trinomics.eu)



**UNESCO-IHE**  
Institute for Water Education

#### UNESCO-IHE Institute for Water Education

UNESCO-IHE Institute for Water Education carries out education and training, research and innovation, and capacity development activities in the broad fields of water engineering, water management and governance, aquatic environment, water supply and sanitation. Come and visit our booth to meet our staff and learn more about ongoing project activities at the Institute. In particular UNESCO-IHE is a key partner in both the AfriAlliance and City-to-City networks, both aimed at sharing knowledge and facilitating peer learning, to prepare for future climate change challenges.

[www.unesco-ihe.org](http://www.unesco-ihe.org)



### Urbanising Deltas of the World (UDW)

Urbanising Deltas of the World (UDW) is an NWO research and innovation programme that aims to contribute to global water safety, water and food security, and sustainable economic development in river deltas worldwide. The programme is funded by NWO-WOTRO and the Dutch Ministry of Foreign Affairs. A wide variety of delta specific issues is addressed, such as planning processes, water supply and reuse strategies, groundwater management, disaster risk reduction and flood proof technologies. 13 Integrated projects cover innovative approaches towards challenges in Bangladesh, India, Vietnam, Indonesia, Mozambique and Ghana. Learn more about UDW and its first results at our booth.

[www.nwo.nl](http://www.nwo.nl)



### VPdelta programme

The VPdelta programme was set up by the Dutch region of South-West Holland to increase entrepreneurship and innovative solutions for the challenge of remaining safe in delta areas. Knowledge institutes, companies and governmental organisations collaborate in VPdelta. VPdelta offers SMEs and startups from the Deltatechnology cluster in the South of Holland, various locations and facilities for testing and showcasing their innovations. VPdelta supports entrepreneurs, researchers and students in various aspects of their R&D and market introduction of innovative solutions for Urban, Safe or Smart watermanagement. VPdelta facilitates collaboration and progress on the development and implementation of innovations for the delta of tomorrow.

[www.vpdelta.nl](http://www.vpdelta.nl)



### WASCAL / SASSCAL

Visitors to the booth of WASCAL and SASSCAL will receive spoken, visual and print information about the institutional arrangements of the African Science Service Centres on Climate Change and Adaptive Land Management and on the regional mandates in west and southern Africa to conduct research, to provide services to decision-makers and to develop scientific capacity. The two African Science Service Centres aim to achieve a regionally integrated approach to adapting to and mitigating climate change and its consequences, based on robust scientific data, as politically defined by the needs and demands of stakeholders.

[www.wascal.org](http://www.wascal.org) [www.sasscal.org](http://www.sasscal.org)



### Wetlands International

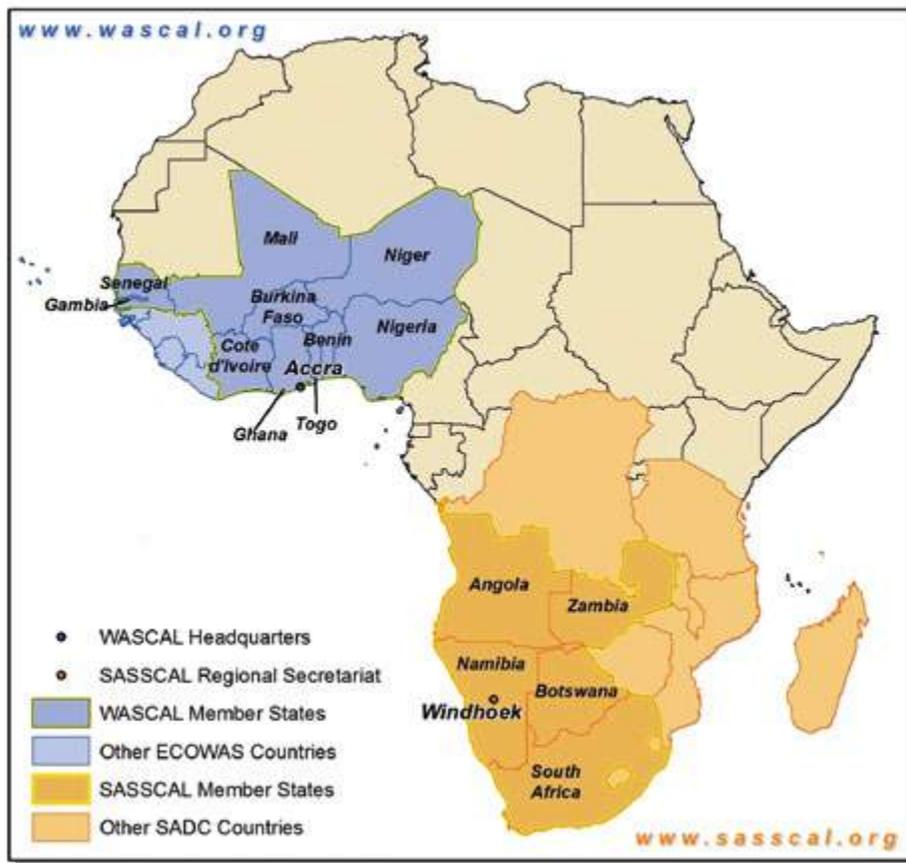
Wetlands International is working to conserve and restore vulnerable wetlands as a sustainable solution for mitigating and adapting to climate change. Through the Building with Nature approach we combine engineering with restoration of ecosystems to protect coastlines in Indonesia. As a partner in the Partners for Resilience alliance, Wetlands International combines the sustainable management of wetlands and climate change adaptation to improve livelihoods and increase community resilience to nature disasters. Come to our stand to speak with staff and experts about the work we are doing and pick up a copy of our Wetlands in Urban Deltas brochure.

[www.wetlands.org](http://www.wetlands.org)

(ADVERTORIAL)

# The African Regional Science Service Centres WASCAL and SASSCAL

In compliance with the Bali Action Plan of the UNFCCC, and following the recommendation of the African Union to have a coordinated network of climate service institutions that share scientific information for policy adjustments and the design and implementation of appropriate adaptation and mitigation actions, ten west and five southern African countries established Science Service Centres on Climate Change and Adaptive Land Management in 2013 in their respective regions with the support of the German Federal Ministry of Education and Research (BMBF).



## Projects Expo

### Cities and infrastructure



[National capital integrated coastal development in Jakarta, Indonesia \(NCICD\)](#)

Indonesian government

Dutch water sector consortium led by Witteveen+Bos

[Polish-Dutch Cooperation on Climate Adaptation](#)

Dutch water sector consortium led by KuiperCompagnons

[Seasonal wind predictions for the energy sector: project UKKO](#)

EUPORIAS.EU, an FP7 project

[Nature-based solutions: success stories](#)

European Commission

[Climate Services: transitioning to a climate resilient society](#)

European Commission

[Country level impacts of climate change \(CLICC\)](#)

Global Programme of Research on Climate Change Vulnerability, Impacts and Adaptation (PROVIA)

### Food, forestry and rural livelihoods



[Climate smart business models in India: experiences from CCAFS](#)

Research Program on Climate Change, Agriculture and Food Security (CCAFS)

Alterra, Wageningen UR

[Innovative weather censoring and information services for cocoa farmers in Ghana](#)

Farmerline, Ghana

Delft University of Technology, the Netherlands

Kwame Nkrumah University of Science and Technology, Ghana

[Adaptation without borders: indirect impacts of climate change](#)

Stockholm Environment Institute (SEI), Sweden

[Adaptation case studies on agriculture](#)

BASE-ADAPTATION.EU, an FP7 project

[Tackling climate change in developing countries: case studies from the Gambia and Papua New Guinea's](#)

European Union Global Climate Change Alliance Plus Programme (GCCA+)

Supporting developing countries to respond to climate change

[Climate impacts research capacity and leadership enhancement \(CIRCLE\)](#)

Department for International Development (DFID), United Kingdom

Association of Commonwealth Universities, (ACU) United Kingdom

### Fresh water availability and access



[Alternative Regulatory Pathways for Innovative Onsite Wastewater Technologies](#)  
Water Technology Acceleration Project (WaterTAP), Canada

[Water resources: planning through climate change capacity building: Rios del Páramo al Valle, por urbes y campiñas](#)  
Stockholm Environment Institute (SEI), Sweden

### Ecosystems and ecosystem based adaptation



[Building with nature: coastal protection in Suriname](#)  
Conservation International Suriname (CIS)

[Building with nature Indonesia: reaching scale for coastal resilience](#)  
Wetlands International

[Understanding responses to simultaneously and sequentially occurring abiotic stresses typical of climate change in rice and arabidopsis](#)  
Netherlands Organisation for Scientific Research (NWO)

[Mangroves and markets: climate adaptation in the Vietnamese aquaculture sector](#)  
SNV Netherlands Development Organisation

### Disaster risk reduction



[Banger polder pilot in Semarang: Dutch solution for daily flooding](#)  
Municipality of Semarang, Indonesia

[Living along the Tullahan river: how communities in Malabon and Valenzuela deal with increased flood risks](#)  
Partners for Resilience (PFR), the Netherlands

[Designing for Resilience](#)  
Rebuild by Design in Partnership with 100 Resilient Cities

[Protecting coastal chars in Bangladesh from climate change: role of char development and settlement project- IV \(Forest Component\)](#)  
Char Development and Settlement Project Phase IV (CDSP IV)

[The Hydro Climate Strategy Riga project](#)  
European Union LIFE Programme

## Honorary Committee

- Melanie Schultz van Haegen, Minister of Infrastructure and the Environment, the Netherlands
- Achim Steiner, Executive Director, United Nations Environment Programme
- Ahmed Aboutaleb, Mayor of Rotterdam, the Netherlands
- Petteri Taalas, Secretary-General of the World Meteorological Organization

## Steering Committee

### PROVIA

- Richard Klein, Stockholm Environment Institute (SEI), Germany
- Saleemul Huq, International Centre for Climate Change Development, Bangladesh / International Institute for Environment and Development, United Kingdom

### European Commission

- Marco Gemmer, DG Research and Innovation, co-chair
- Andrea Tilche, DG Research and Innovation

### The Netherlands

- Christiaan Walle, Ministry of Infrastructure and the Environment, co-chair
- Pieter Terpstra, Ministry of Foreign Affairs

Advisor to the Steering Committee: Diogo de Gusmão-Sørensen, European Commission

Former Steering Committee members, with thanks to their contributions:

### The Netherlands

Vincent van den Bergen, replaced by Marit van Zomeren

Marit van Zomeren, replaced by Pieter Terpstra

### PROVIA

Martin Parry, replaced by Saleemul Huq

## Practice Advisory Committee

- Laura Canevari, Co-Chair, Acclimatise, United Kingdom / Colombia
- Henk Ovink, Co-Chair, Special Envoy on International Water Affairs, Kingdom of the Netherlands
- Maarten van Aalst, International Red Cross Red Crescent Climate Centre, the Netherlands
- Stephan Baas, FAO, Italy
- Saliha Dobardzic, Global Environment Facility (GEF), USA
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- Habiba Gitay, The World Bank, USA
- Mandy Ikert, C40 Cities Climate Leadership Group, USA
- Filipe Domingos Freires Lúcio, World Meteorological Organization (WMO), Switzerland / Mozambique
- Jane Madgwick, Wetlands International, United Kingdom
- Ravi Narayanan, Governing Council, Asia-Pacific Water Forum, India
- Alex Nickson, Greater London Authority, United Kingdom
- Hiro Nishigushi, Japan Innovation Network, Japan
- Michael Nolan, United Nations Global Compact Cities Programme, Australia

- Leonard Nurse, Centre for Resource Management and Environmental Studies (CERMES), University of West Indies, Barbados
- Kate Orff, SCAPE / Landscape architecture PLLC, USA
- Chantal Oudkerk Pool, City of Rotterdam, the Netherlands
- Gaby Ramm, Member of the Munich Climate Insurance Initiative, UN University, Germany
- Liette Vasseur, UNESCO / Brock University / IUCN, Canada
- Sarah Wade-Apicella, UNISDR, Prevention Web, Switzerland
- Carolina Zambrano-Barragán, Fundación Avina, Ecuador

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- Richard Klein, Stockholm Environment Institute (SEI), Germany
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- Uma Lele, Independent Scholar, India
- Bruno Locatelli, Centre for International Cooperation in Agricultural Research (CIRAD) / Centre for International Forestry Research (CIFOR), Peru
- Nobuo Mimura, Ibaraki University, Japan
- Rupa Mukerji, HELVETAS Swiss Intercooperation, Switzerland
- Ian Noble, Monash Sustainability Institute, Australia
- Balgis Osman Elasha, Afrian Development Bank, Sudan
- Jean Palutikof, Griffith University, Australia
- Martin Parry, Centre for Environmental Policy, Imperial College London, United Kingdom
- Anand Patwardhan, University of Maryland, USA
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- Koko Warner, United Nations University, Germany
- Yinlong Xu, Chinese Academy of Agricultural Sciences, China
- Carolina Zambrano-Barragán, Fundación Avina, Ecuador

## Convenors

### Theme 1. Cities and infrastructure

- Darryn McEvoy, RMIT University, Australia (lead convenor)
- David Dodman, International Institute for Environment and Development (IIED), United Kingdom
- Robert Kiunsi, Ardhi University, Tanzania
- Emma Porio, Ateneo de Manila University, Philippines
- Debra Roberts, Environmental Planning and Climate Protection Department, eThekweni Municipality, Durban, South Africa
- Chris Zevenbergen, UNESCO-IHE/TU Delft, the Netherlands

### Theme 2. Food, forestry and rural livelihoods

- Mark Rounsevell, University of Edinburgh, United Kingdom (lead convenor)
- Pramod Aggarwal, CGIAR Research Program on Climate Change, Agriculture and Food Security, International Water Management Institute, India
- Rodel Lasco, World Agroforestry Centre (ICRAF), Philippines
- Cheikh Mbow, World Agroforestry Centre (ICRAF), Kenya
- Laurent Sédogo, West African Science Service Center on Climate Change and Adapted Land Use, Ghana
- Åsa Swartling, Stockholm Environment Institute (SEI), Sweden

### Theme 3. Fresh water availability and access

- Gualbert Oude Essink, Deltares, the Netherlands (lead convenor)
- Nigel Arnell, University of Reading, United Kingdom
- Holger Hoff, Stockholm Environment Institute (SEI), Sweden / Potsdam Institute for Climate Impact Research, Germany
- Tong Jiang, National Climate Centre, China
- Ainun Nishat, Asian Region IUCN, Bangladesh
- Roland Schulze, University of KwaZulu-Natal, South Africa

### Theme 4. Public health

- Sari Kovats, London School of Hygiene and Tropical Medicine, United Kingdom (lead convenor)
- Leendert van Bree, PBL Environmental Assessment Agency / Utrecht University, the Netherlands
- Kristie Ebi, University of Washington, USA
- Bettina Menne, WHO European Centre for Environment and Health (ECEH), Germany

### Theme 5. Ecosystems and ecosystem based adaptation

- Pam Berry, Oxford University, United Kingdom (lead convenor)
- Guy Midgley, Stellenbosch University, South Africa
- Rebecca Shaw, Stanford University and Environmental Defense Fund, USA
- Jos Verhoeven, Utrecht University, the Netherlands

### Theme 6. Disaster risk reduction

- Robert Nicholls, University of Southampton, United Kingdom (lead convenor)
- Paulina Aldunce, University of Chile, Chile
- Zbigniew Kundzewicz, Polish Academy of Sciences, Poland
- Shuaib Lwasa, Makerere University, Uganda
- Rina Sutyani Oktari, Syiah Kuala University, Indonesia
- Maarten van der Vlist, Wageningen, UR, the Netherlands

### Theme 7. The Arctic

- Grete Hovelsrud, University of Nordland, Norway (lead convenor)
- Marcus Carson, Stockholm Environment Institute (SEI), Sweden
- James Ford, McGill University, Canada
- Joan Nymand Larsen, Stefansson Arctic Institute and University of Akureyri, Iceland

### Cross cutting issue 8. Risk assessment, adaptation planning and evaluation

- Paula Harrison, University of Oxford, United Kingdom (lead convenor)
- André Jol, European Environment Agency, Denmark
- Felix Olorunfemi, Institute of Social and Economic Research, Nigeria
- Roger Street, UKCIP, United Kingdom
- Rob Swart, Wageningen UR, the Netherlands
- Sebastian Vicuña, Pontificia Universidad Católica de Chile, Chile

### Cross cutting issue 9. Institutions and governance

- Tiago Capela Lourenço, Lisbon University, Portugal (lead convenor)
- Mike Brklacich, Carleton University, Canada
- Peter Driessen, Utrecht University, the Netherlands
- Jochen Hinkel, Global Climate Forum, Germany
- Robert Kibugi, Centre for Advanced Studies in Environmental Law (CASELAP) and the School of Law, University of Nairobi, Kenya
- José A. Marengo, National Center for Monitoring and Early Warning of Natural Disasters (CEMADEN), Brazil

### Cross cutting issue 10. Finance, investment and business

- Reinhard Mechler, International Institute for Applied Systems Analysis, Austria (lead convenor)
- Anthony Bigio, The George Washington University, USA
- Pieter Pauw, German Development Institute, Germany
- Åsa Persson, Stockholm Environment Institute (SEI), Sweden
- Timmons Roberts, Brown University, USA
- Swenja Surminski, London School of Economics and Political Science, United Kingdom
- Paul Watkiss, Paul Watkiss Associates / University of Oxford, United Kingdom

## Local Organising Committee

- Florrie de Pater (chair), consultant Climate and Water
- Helena de Boer, Ministry of Foreign Affairs
- Matthijs van den Brink, Ministry of Infrastructure and the Environment
- Iris Dijkers, MCI, Conference Secretariat
- Bart van Gent, Ministry of Foreign Affairs
- Sophie Sanders, MCI, Conference Secretariat
- Ottelien van Steenis, Wageningen UR Alterra

## Registration desk

### Opening hours registration desk

Monday 9 May	17.00 – 19.00
Tuesday 10 May	08.00 – 19.00
Wednesday 11 May	08.00 – 19.00
Thursday 12 May	08.00 – 18.00
Friday 13 May	08.30 – 09.30 (field trip participants only)

## Speaker Service Centre (SSC)

The Speaker Service Centre (SSC) is located in the Captain's Lounge, on the first floor of the conference centre.

### Opening hours SSC

Tuesday 10 May	08.30 – 18.00
Wednesday 11 May	08.00 – 18.00
Thursday 12 May	08.00 – 15.30

## Posters / poster desk

Half of the posters will be on display from Monday evening to Tuesday evening, the other half from Wednesday morning to Thursday afternoon.

### Time block 1

#### Mounting posters

Monday 9 May, between 17.00 – 20.00 or  
Tuesday 10 May, before 09.00

#### Presentation

Tuesday 10 May, 17.30 – 19.00

#### Dismantling

Tuesday 10 May, after 19.00

### Time block 2

#### Mounting posters

Tuesday 10 May, after 19.00 or  
Wednesday 11 May, before 09.00

#### Presentation

Wednesday 11 May, 17.30 – 19.00

#### Dismantling

Thursday 12 May, before 18.00

### Opening hours Poster desk

Monday 9 May	17.00 – 19.00
Tuesday 10 May	08.00 – 19.00
Wednesday 11 May	08.00 – 19.00
Thursday 12 May	08.00 – 18.00

## Coffee / tea breaks, lunches, receptions

During the entire conference coffee and tea will be served free of charge to all participants wearing their name badge on the exhibition floor. Lunches and receptions are included in the registration fee and will be served in the exhibition area.

## Working area and internet

There will be a relatively quiet area to work and meet at Lloyds Lobby, close to the exhibition area. WTC offers all participants access to its extensive Wi-Fi network at all locations on the premises.

## Staff

If you have any questions, please do not hesitate to contact the registration desk or one of the staff members who can be recognised by their black polo shirts.

## Message board

Looking for someone? Or do you want to promote your session? Please go to the registration desk and leave a message on the electronic message board. Or use the fuseami Conference and Networking App to contact another participants.

## Information tables

On the exhibition floor tables are available to stall your free information (reports, flyers etc.) for the participants of the conference. Adaptation Futures 2016 does not assume any responsibility for the material displayed. Material that has not been taken away in time will be removed by the organisation and destroyed. Dismantling tables: Thursday, 12 May, after 18.00

## Wardrobe / luggage storage

A guarded wardrobe and luggage storage is available.

## Useful contacts

Conference secretariat	Via the registration desk
Organising Committee	Ottelien van Steenis +31 317 48 6540 (also mobile)
Press officer	Florrie de Pater +31 6 2509 3551
Social media officer	Fokke de Jong +31 317 48 1434 (also mobile)
Hotel service	Please visit the registration desk if you need assistance
Rotterdam Public Transport (RET)	<a href="http://www.ret.nl">www.ret.nl</a>
Rotterdam Taxi	+31 10 262 1173
Rotterdam Tourist Information	<a href="http://www.rotterdam.info">www.rotterdam.info</a>
Train information	<a href="http://www.ns.nl">www.ns.nl</a>

## Press

The Adaptation Futures 2016 Conference Press Team deals with all media enquiries relating to the conference activities and its speakers. Access our media releases, download photographs, follow us on Twitter.

### Contact

Florrie de Pater  
+31 6 2509 3551

Opening hours press desk (located at the registration desk):

Tuesday 10 May	08.30 – 11.30
Wednesday 11 May	08.30 – 11.30
Thursday 12 May	08.30 – 11.30

## Social media



This conference is all about sharing ideas, knowledge and expertise. Get social and interact with other participants and people following the conference from the outside. During the conference we will give you updates, highlights, showcase interesting sessions and keep you updated with conference news. You can follow us on twitter [@confAF2016](#) and by using hashtags [#confAF2016](#) | [#climateadaptation](#) for joining real time discussions.

Have a look at the LinkedIn community <https://www.linkedin.com/grp/home?gid=8321209> or use fuseami to keep connected with your community members.

If you have any questions, tips for our social media news feed or need help promoting your event through social media, don't hesitate to contact the Media Coordinator during the conference. Enjoy the conference, and share your knowledge!

### Contact

Fokke de Jong  
+31 317 48 1434 (also mobile)

## Conference and networking app fuseami

To improve networking at the conference the organisation is pleased to adopt the fuseami app, a new type of conference app. It allows delegates to network smarter while providing access to all the essential event information, including the ability to create a personalised agenda.

More information can be found at [www.adaptationfutures2016.org/conference/networkingapp](http://www.adaptationfutures2016.org/conference/networkingapp)



## Venue of the conference

### Location

Located in the heart of Rotterdam, the Postillion Convention Centre WTC Rotterdam offers a full service concept. The 37 different rooms accommodating from 10 to 1000 people do not only vary in size but also in ambience and design. The venue is ideally for organising conferences, exhibitions, meetings or events. With the green, elliptical office tower and the grand staircase at the entrance and catchers monument radiates naturally allure.

### Green standards

Postillion Convention Centre WTC Rotterdam has consciously chosen a sustainable policy, maintaining the standards of the International Green Key.

**Postillion Convention Centre WTC Rotterdam**  
**Beursplein 37**  
**3001 DB Rotterdam**  
**The Netherlands**



### Accessibility

The Postillion Convention Centre WTC Rotterdam (streetview) is located in the business centre of Rotterdam and is easily accessible by both public transport and car. Car parking facilities are available in the Centre's own multi-storey car park, and for public transport the metro station Beurs is just outside the building.

## Carbon footprint

Adaptation Futures 2016 is about climate change and adaptation. This obliges the organisation even more to minimise the carbon footprint of the conference. Carbon dioxide emissions will be reduced through efficiency and conservation in the use of electricity, paper, supplies and travel. Not only will we do an effort to minimise the carbon footprint, we also look at issues of social responsibility, pollution and water saving. We encourage participants to offset their CO<sub>2</sub> footprint for their flight. We will offset the carbon emissions for the flights AF2016 is paying for.

Read more on the conference [website](#)

## Major sponsors

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### Arcadis

Arcadis the leading global Design & Consultancy firm for natural and built assets. Applying deep market sector insights and collective design, consultancy, engineering, project and management services we work in partnership with our clients to deliver exceptional and sustainable outcomes throughout the lifecycle of their natural and built assets. We are 28,000 people active in over 70 countries. We support UN-Habitat with knowledge and expertise to improve the quality of life in rapidly growing cities around the world.

Let's make the connection for new ideas. Tomorrow's water challenges call for a transition with an innovative and integrated approach.

[www.arcadis.com](http://www.arcadis.com)



### City of Rotterdam

Rotterdam's dense urban environment must cope with water from four directions: from upriver, from the sea, from the sky and from the ground. While basic challenges have remained unchanged, the perspective over the last ten years has shifted from trouble-shooting to seizing opportunities. Water safety and climate resilience combine nicely with a better, more livable city for residents; water challenges also promote innovations for peer cities elsewhere in the world as well as local businesses. Every year, Rotterdam is proud to host dozens of delegations from peer cities seeking to learn from Rotterdam and, in return, offering experience and solutions of their own.

[www.rotterdamclimateinitiative.nl](http://www.rotterdamclimateinitiative.nl)



### Global Alliance for Climate-Smart Agriculture

An alliance of partners created to stimulate accelerated scaling up of Climate-Smart Agriculture and thereby facilitating concrete food security and agriculture initiatives by tapping the wealth and diversity of resources, knowledge, information and expertise from its members. The vision of the Alliance is to improve people's food security and nutrition in the face of climate change. Its mission is to help governments, farmers, scientists, businesses, and civil society, as well as regional unions and international organizations, to adjust agricultural, forestry and fisheries practices, food systems and social policies.

[www.fao.org/gacsa](http://www.fao.org/gacsa)



**Royal HaskoningDHV**

Royal HaskoningDHV is an independent, international engineering and project management consultancy with more than 130 years of experience. Backed by the expertise and experience of 7,000 colleagues all over the world, our professionals combine global expertise with local knowledge to deliver a multidisciplinary range of consultancy services for the entire living environment from over 130 countries.

By showing leadership in sustainable development and innovation, together with our clients, we are working to become part of the solution to a more sustainable society now and into the future.

[www.royalhaskoningdhv.com](http://www.royalhaskoningdhv.com)



**WASCAL / SASSCAL**

Funded by the Federal Ministry of Education and Research, Germany (BMBF), WASCAL and SASSCAL are institutions whose goal is the regional integration of Southern and West African countries in the endeavour to address the regional dimension of environmental change. In both Regional Centres, a portfolio of research projects contributes to improved understanding and the provision of evidence-based quantitative data for policy- and decision-making. By strengthening the research capacity related to climate change, and by pooling the resources and expertise of West and Southern African states and other cooperating partners, WASCAL and SASSCAL are addressing the challenges of climate change, thereby enhancing the resilience of human and environmental systems to increased variability.

[www.wascal.org](http://www.wascal.org)

[www.sasscal.org](http://www.sasscal.org)



**Other sponsors**



## Hosts and main sponsors



### PROVIA

The overall aim of PROVIA is to help provide international direction and improve the coherence of research on climate change vulnerability, impacts and adaptation (VIA).

PROVIA addresses the critical need to harmonise, mobilise, and communicate the growing knowledgebase on VIA research that decision makers and the rest of society need in order to understand and adapt to risks from climate change. With this in mind, it is our vision to create a new and vitally important interface between the scientific community and decision-makers involved in VIA issues, and improve the availability and accessibility of such knowledge to the people that need it most.

[www.unep.org/provia](http://www.unep.org/provia)



### European Commission

The Directorate-General for Research and Innovation's mission is to develop and implement the European research and innovation policy with a view to achieving the goals of Europe 2020 and the Innovation Union.

As such, the DG contributes to making Europe a better place to live and work, improving Europe's competitiveness, growth and job creation while tackling the main current and future societal challenges. To do so, the Directorate-General for Research and Innovation supports research and innovation through European Framework Programmes, coordinates and supports national and regional research and innovation programmes, contributes to the creation of the European Research Area by developing the conditions for researchers and knowledge to circulate freely, and supports European organisations and researchers in their cooperation at international level.

[www.ec.europa.eu](http://www.ec.europa.eu)



### Government of the Netherlands

For the Dutch government the need for climate change adaptation is real and acute. This is true for the Netherlands itself as well as for its partners in the vulnerable parts of the world, for example in low-lying deltas. The Dutch policy focuses on the prevention of the negative consequences of climate change and local and international collaboration. Based on the vision that sustainable development and resilience can only be achieved through inclusive green growth, the Dutch put forward their expertise in food security and water.

On a national level, action on climate change adaptation takes place through the formulation of a National Adaptation Strategy and the implementation of the Delta Programme. This is a joint effort of national government, provinces, municipalities and regional water authorities with input from social organisations and the business community.

[www.government.nl](http://www.government.nl)

## Contact

### Adaptation Futures 2016 Organising Committee

Ottelien van Steenis

Wageningen UR, the Netherlands

+31 317 48 6540

Ottelien.vansteenien@wur.nl

## Colophon

### Graphic design

[www lijnontwerp.nl](http://www lijnontwerp.nl)

### Photographs

Cover above left, below right: @Kadir van Lohuizen/Noor

Page 80, Photo of Wim Kuijken: @Frank van Beek of Capital Photos

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[www.adaptationfutures2016.org](http://www.adaptationfutures2016.org)

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[FLOOR PLAN](#)

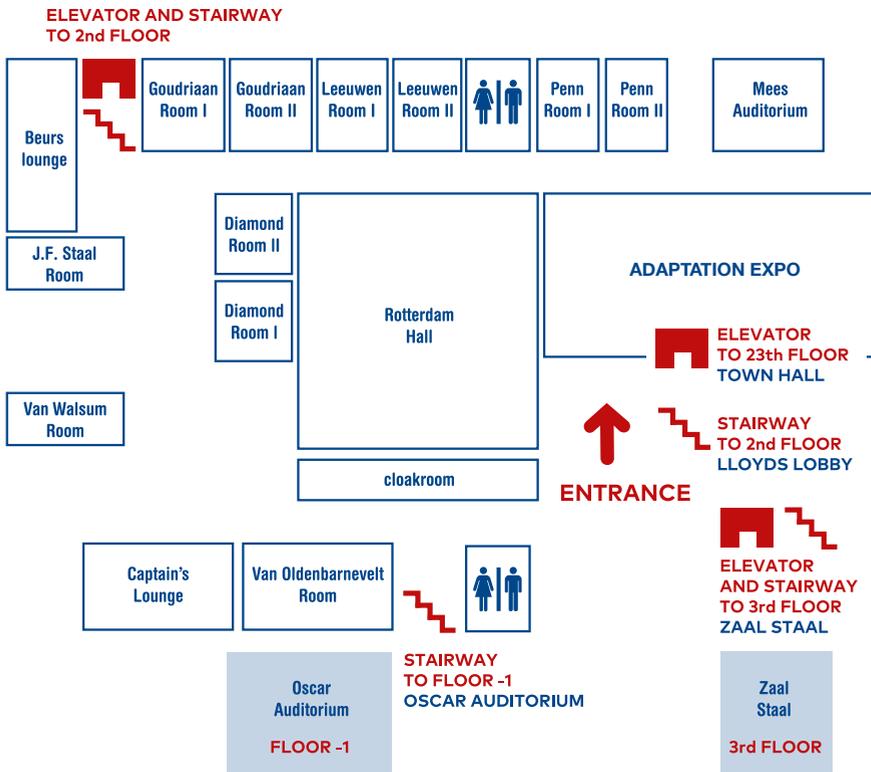
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8.00	<b>Registration Adaptation</b>																				8.00	
9.00	<b>Expo 8.00-19.00</b>																				9.00	
10.00		<b>Plenary</b> 9.30-10.45		<b>Plenary overflow</b> 9.30-10.45	<b>Plenary overflow</b> 9.30-10.45																10.00	
11.00	<b>Break</b>																				11.00	
12.00		<b>Plenary</b> 11.15-12.15		<b>Plenary overflow</b> 11.15-12.15	<b>Plenary overflow</b> 11.15-12.15																12.00	
13.00	<b>Lunch 12.15-13.30</b>																				13.00	
14.00		<b>SP 8.13</b> Policy pathways planning 13.30-15.15	<b>SC 9.5</b> Implementation challenges 13.30-15.15		<b>PR 9.2</b> Access to adaptation funding 13.30-15.15	<b>SC 6.1</b> Enhancing resilience 13.30-15.15	<b>SP 2.2</b> The Sahel: food & livelihood 13.30-15.15	<b>SC 1.1</b> Critical infrastructure 13.30-15.15	<b>SC 10.3</b> Loss & damage mechanism 13.30-15.15	<b>SC 3.1</b> Drought: driver for fresh water conflict 13.30-15.15	<b>SP 6.1</b> Enhancing adaptation 13.30-15.15	<b>SP 6.3</b> Flood risk governance 13.30-15.15	<b>SP 1.1</b> Mainstreaming adaptation 13.30-15.15	<b>SC 8.12</b> Adaptation guidance 13.30-15.15	<b>SC 8.4</b> Impact indicators & models 13.30-15.15	<b>SP 8.4</b> Droughts: three perspectives 13.30-15.15	<b>PR 8.1</b> Regional climate adaptation 13.30-15.15	<b>SC 7.1</b> Scenarios & governance 13.30-15.15	<b>SP 8.1</b> Community based adaptation 13.30-15.15	<b>PR 8.7</b> Mainstreaming resilience 13.30-15.15	<b>SP 8.9</b> Adaptation potential of technologies 13.30-15.15	14.00
15.00	<b>Break</b>																				15.00	
16.00		<b>SP 4.3</b> Financing solutions health risks 15.45-17.30	<b>SC 9.7</b> Policy-economic responses 15.45-17.30	<b>RT 2</b> Cities 15.45-17.30	<b>SP 9.6</b> Local climate adaptation 15.45-17.30	<b>SC 6.2</b> Floods experience & planning 15.45-17.30	<b>PR 9.8</b> Territorial development 15.45-17.30	<b>SP 1.3</b> Highway infrastructure 15.45-17.30	<b>SC 4.2</b> Heat adaptation: OECD 15.45-17.30	<b>SC 3.2</b> Guidelines & methodologies 15.45-17.30	<b>SP 5.2</b> Ecosystem-based approaches 15.45-17.30	<b>SP 9.3</b> Ethics in climate adaptation 15.45-17.30	<b>SC 8.6</b> Knowledge: participation & co-production 15.45-17.30	<b>SC 8.10</b> Coastal systems 15.45-17.30	<b>SP 10.2</b> Liquid assets & adaptation 15.45-17.30	<b>SP 2.1</b> Climate resilient crops 15.45-17.30	<b>PR 8.4</b> Risk & opportunities 15.45-17.30	<b>SC 7.2</b> Understanding adaptation 15.45-17.30	<b>SP 8.5</b> Action plans: cost & benefit 15.45-17.30	<b>SC 8.5</b> Stakeholder needs 15.45-17.30	<b>SC 2.4</b> Mitigation co-benefits 15.45-17.30	16.00
17.00																					17.00	
18.00	<b>Reception and poster session 17.30-19.00</b>																				18.00	
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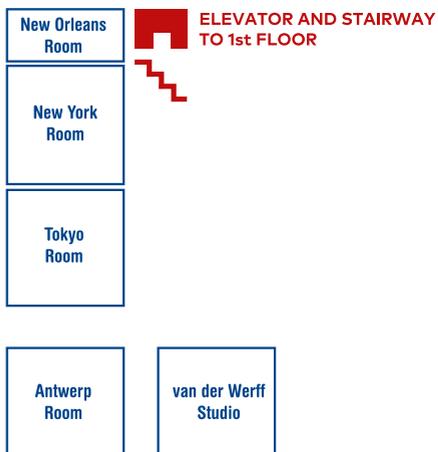
	Exchange Hall / Shipping Hall	Rotterdam Hall	Oscar Auditorium	Town Hall	Diamond Room I	Diamond Room II	Goudriaan Room I	Goudriaan Room II	Leeuwen Room I	Leeuwen Room II	Penn Room I	Penn Room II	Van Oldenbarnevelt Room	Mees Auditorium	Antwerp Room	New York Room	Tokyo Room	Van Walsum Room	Zaal Staal	Beurs Lounge	New Orleans	
8.00	<b>Registration</b>																					8.00
9.00	<b>Adaptation Expo 8.00-19.00</b>																					9.00
10.00			<b>SC 9.4</b> Governance challenges 8.45-10.30	<b>RT 3</b> Business 9.00-10.30	<b>PR 8.9</b> Designing (sub) national adaptation 8.45-10.30	<b>SC 6.3</b> Tools and approaches 8.45-10.30	<b>SC 1.5</b> Adaptation processes 8.45-10.30	<b>SP 5.1</b> Wetlands & adaptation 8.45-10.30	<b>SP 4.1</b> Health: early warning systems 8.45-10.30	<b>SC 3.3</b> Measures to improve availability 8.45-10.30	<b>SP 5.3</b> Ecosystem-based adaptation 8.45-10.30	<b>PR 1.1</b> Concepts urban deltas 8.45-10.30	<b>PR 8.3</b> Beyond city government 8.45-10.30	<b>SP 8.3</b> Adaptation pathways 8.45-10.30	<b>SC 8.11</b> Gender & adaptation 8.45-10.30	<b>SC 2.2</b> Smallholder farming systems 8.45-10.30	<b>SP 6.4</b> Policy at governance scales 8.45-10.30	<b>SC 7.3</b> Narratives & discourses 8.45-10.30	<b>SP 9.2</b> Building flood resilience 8.45-10.30	<b>PR 8.8</b> Current evaluation practices 8.45-10.30	<b>SC 2.8</b> Adapting cropping systems 8.45-10.30	
11.00	<b>Break</b>																					11.00
12.00		<b>Plenary</b> 11.00-12.15				<b>Plenary overflow</b> 11.00-12.15		<b>Plenary overflow</b> 11.00-12.15														
13.00	<b>Lunch 12.15-13.30</b>																					13.00
14.00		<b>SC 6.5</b> Disaster risk preparedness 13.30-15.15	<b>SC 9.2</b> Power & agency issues 13.30-15.15	<b>RT 4</b> Poverty/inequality 13.30-15.15	<b>PR 1.3</b> City resilience strategies 13.30-15.15	<b>PR 10.6</b> Private adaptation finance 13.30-15.15	<b>SC 1.2</b> Decision support 13.30-15.15	<b>PR 1.2</b> Climate change innovation 13.30-15.15	<b>SP 4.2</b> Vulnerability & adaptation 13.30-15.15	<b>PR 3.1</b> Green water utilities 13.30-15.15	<b>SP 10.3</b> Adaptive value chains 13.30-15.15	<b>PR 10.4</b> Women and climate finance 13.30-15.15	<b>SP 8.8</b> Climate services: user needs 13.30-15.15	<b>PR 10.7</b> Bankable adaptation investments 13.30-15.15	<b>PR 10.3</b> Climate insurance & PPPs 13.30-15.15	<b>SC 2.7</b> Societal responses in agriculture 13.30-15.15	<b>SC 5.1</b> Ecosystem services 13.30-15.15	<b>SP 7.1</b> Arctic research & industry 13.30-15.15	<b>SC 8.13</b> Investment & business 13.30-15.15	<b>PR 8.5</b> Monitoring & reporting city adaptation 13.30-15.15	<b>SC 8.14</b> Role of PROVIA 13.30-15.15	
15.00	<b>Break</b>																					15.00
16.00			<b>SP 8.7</b> Risk management & critical infrastructure 15.45-17.30	<b>RT 5</b> Adaptation Finance 15.45-17.30	<b>PR 9.3</b> Urban resilience approaches 15.45-17.30	<b>SP 10.4</b> Adaptation: innovation & opportunity 15.45-17.30	<b>SC 2.6</b> Risk, vulnerability & resilience 15.45-17.30	<b>PR 1.4</b> Flood risk management 2.0 15.45-17.30	<b>SC 4.3</b> Heat adaptation: South Asia 15.45-17.30	<b>PR 3.2</b> Implementing water management 15.45-17.30	<b>PR 10.1</b> Climate adaptation & SMEs 15.45-17.30	<b>PR 9.5</b> Pathways to resiliency 15.45-17.30	<b>SP 8.12</b> Climate risk information 15.45-17.30	<b>SP 1.2</b> Resilient cities connect 15.45-17.30	<b>SC 6.7</b> Towards justice & resilience 15.45-17.30	<b>SC 2.10</b> Farming systems 15.45-17.30	<b>PR 8.2</b> Integrated risk management 15.45-17.30	<b>SP 1.4</b> Risk management in ports 15.45-17.30	<b>SC 9.3</b> Science-policy interfaces 15.45-17.30	<b>SP 8.2</b> Goals, targets & metrics 15.45-17.30	<b>PR 10.2</b> Accountants & adaptation 15.45-17.30	
17.00																						
18.00	<b>Reception and poster session 17.30-19.00</b>																					18.00
19.00	<b>Conference dinner (optional) 19.00-22.00</b>																					19.00
20.00																						20.00

	Exchange Hall / Shipping Hall	Rotterdam Hall	Oscar Auditorium	Town Hall	Diamond Room I	Diamond Room II	Goudriaan Room I	Goudriaan Room II	Leeuwen Room I	Leeuwen Room II	Penn Room I	Penn Room II	Van Oldenbarnevelt Room	Mees Auditorium	Antwerp Room	New York Room	Tokyo Room	Van Walsum Room	Zaal Staal	Beurs Lounge	New Orleans	
8.00	<b>Registration</b>																					8.00
9.00	<b>Adaptation Expo</b> 8.00-18.00	<b>SC 9.8</b> New governance challenges 8.45-10.30	<b>SC 9.9</b> Planning & flood risk: US/NL 8.45-10.30	<b>RT 6</b> National adaptation planning 8.45-10.30	<b>SP 8.11</b> Resilience of adaptation 8.45-10.30	<b>SC 9.12</b> Local governance cities 8.45-10.30	<b>SC 1.6</b> Designing resilience 8.45-10.30	<b>PR 1.5</b> City resilience leadership 8.45-10.30	<b>PR 9.1</b> South Asian water governance 8.45-10.30	<b>SP 3.1</b> Droughts: methods for community resilience 8.45-10.30	<b>SP 9.4</b> National & local agendas 8.45-10.30	<b>SP 9.5</b> OECD Principles on Water Governance 8.45-10.30	<b>SC 8.1</b> Risk management & perception 8.45-10.30	<b>SC 8.8</b> Pathways & maladaptation 8.45-10.30	<b>SC 10.1</b> Finance for adaptation 8.45-10.30	<b>SC 2.9</b> Food system assessments 8.45-10.30	<b>SC 9.6</b> Adaptation goes global 8.45-10.30	<b>PR 9.6</b> Adaptation standards 8.45-10.30	<b>SC 5.4</b> Ecosystem-based knowledge 8.45-10.30	<b>SC 8.9</b> Using climate information 8.45-10.30	<b>SC 4.4</b> Infectious diseases risks 8.45-10.30	
10.00	<b>Break</b>																					10.00
11.00		<b>SC 9.1</b> Water adaptation governance 11.00-12.45	<b>SC 9.10</b> Uncertain scientific evidence 11.00-12.45	<b>RT 1</b> IPPC 11.00-12.45	<b>SC 8.7</b> Adaptation support tools 11.00-12.45	<b>PR 9.4</b> National adaptation plans 11.00-12.45	<b>SC 1.7</b> Adaptation challenges cities 11.00-12.45	<b>SC 2.1</b> Farming systems 11.00-12.45	<b>SC 4.5</b> Health impacts & environment 11.00-12.45	<b>SC 1.3</b> Regional perspectives 11.00-12.45	<b>SP 9.1</b> Risk governance systems 11.00-12.45	<b>SP 6.2</b> Risk transfer solutions 11.00-12.45	<b>SC 8.2</b> Vulnerability assessment 11.00-12.45	<b>SP 8.6</b> Evidence-based learning 11.00-12.45	<b>SC 10.2</b> Sectoral aspects 11.00-12.45	<b>SC 2.5</b> Barriers & conflicts 11.00-12.45	<b>SC 8.15</b> Tracking adaptation 11.00-12.45	<b>PR 10.5</b> Access to climate finance 11.00-12.45	<b>SC 5.2</b> Ecosystem management 11.00-12.45	<b>SP 8.10</b> Adaptive delta management 11.00-12.45	<b>SP 9.7</b> Future challenges <> past 11.00-12.45	
12.00	<b>Lunch</b> 12.45-13.45																					12.00
13.00		<b>PR 9.9</b> A students' day in 2030 13.45-15.30	<b>SC 9.11</b> Economics of adaptation 13.45-15.30	<b>RT 7</b> Adaptation Forum 13.45-15.30	<b>SC 6.4</b> Planning climate change 13.45-15.30	<b>SC 9.13</b> Compare & evaluate case studies 13.45-15.30	<b>SC 1.4</b> Heat in the city 13.45-15.30	<b>PR 8.6</b> Climate adaptation platforms 13.45-15.30	<b>SC 4.1</b> Health system adaptation 13.45-15.30	<b>SP 3.2</b> Climate services & water 13.45-15.30	<b>PR 1.6</b> Resilient Nijmegen and Mumbai 13.45-15.30	<b>PR 9.7</b> LEDS Adaptation & mitigation 13.45-15.30	<b>SC 8.3</b> Multi-sector assessments 13.45-15.30	<b>SC 5.5</b> Economic assessment 13.45-15.30	<b>SP 6.5</b> Building with nature 13.45-15.30	<b>SC 2.3</b> Food production systems 13.45-15.30	<b>SC 6.6</b> Lessons Asia-Pacific region 13.45-15.30	<b>SP 10.1</b> Pastoralism in drylands 13.45-15.30	<b>SC 5.3</b> Ecosystem-based approaches 13.45-15.30	<b>SC 8.16</b> Planning next generation 13.45-15.30	<b>SP 2.3</b> Adapting forest management 13.45-15.30	
14.00	<b>Break</b>																					14.00
15.00		<b>Plenary</b> 16.00-17.30		<b>Plenary overflow</b> 16.00-17.30	<b>Plenary overflow</b> 16.00-17.30																	
16.00	<b>Plenary</b>																					16.00
17.00	<b>Plenary overflow</b>																					17.00
18.00	<b>Plenary overflow</b>																					18.00
19.00	<b>IABR reception</b> 18.30-21.00																					19.00
20.00	<b>IABR reception</b>																					20.00

# 1st FLOOR



## 2nd FLOOR



## 23th FLOOR

