

Cities and climate change

**Tuesday December 8
Holland Climate House (Pavilion C7)**

Organized by: TNO, KWR Watercycle Research Institute, Deltares, Waternet

Time	Topic	Session contents
10.30 - 11.30	Film 'Connecting Delta Cities'	A film about four coastal cities affected by sea level rise: Alexandria, Jakarta, New York and Rotterdam. The film is made by the Rotterdam Climate initiative and the Free University of Amsterdam.
11.30 – 13.00	Climate robust cities	In this session we will provide an overview of the challenges of climate change adaptation in cities against the background of urban development. All aspects, from urban climate, vulnerability and impacts to measures and urban climate governance will be discussed.
12.30		Lunch
13.00 – 15.00	Water robust cities	Excess precipitation, flooding risks, periodic droughts and heat are the upcoming challenges for urban planners and city managers. As the infrastructure and buildings of the future are built now, this session discusses upcoming solutions for water robust cities.
15.00 - 17.00	Energy, transport and water solutions for cities	Cities are main sources of greenhouse gas emissions; they therefore have a special responsibility to take mitigation measures. This session will highlight some technologies and approaches for cities that go beyond the traditional solutions of renewable energy and energy efficiency.
17.00 – 18.00	Film 'Connecting Delta Cities' and drinks	A film about four coastal cities affected by sea level rise: Alexandria, Jakarta, New York and Rotterdam. The film is made by the Rotterdam Climate initiative and the Free University of Amsterdam.
17.00		Reception
18.00 - 19.30	Master class cities and climate change: creating capacity to connect science, policy and people	A short introduction on capacity building and its role in dealing with climate change in European cities, will be followed by a demonstration of capacity building activities. Adriaan Slob (TNO) will lead a workshop on local climate policies and ways to connect citizens, policy makers and scientists.

Contents of the day

Cities are complex entities. Therefore reducing greenhouse gases and adapting to climate change in cities pose specific challenges. Cities are vulnerable to the impacts of climate change due to the concentration of people and capital goods. At the same time cities provide a range of possibilities to reduce CO2 emissions. But to do so, adaptation and mitigation measures need to be incorporated in the already dense urban fabric. Integration, also in policy processes, is a key concept for success.

We will present approaches and solutions to climate adaptation and mitigation developed for Dutch cities. These solutions all use a so-called systems approach: looking for energy solutions along the whole water cycle, looking for integral solutions in adapting existing residential areas, improving adaptive capacities and comfort of buildings. We will also explore capacity building as an important step to link knowledge with governance.

Overview of presentations

11.30-12.00 Climate adaptation in cities, by Peter Bosch (TNO)

12.00-12.30 Water, heat and health, by Patrick Smeets (KWR)

12.30-13.00 Lunch

13.00-13.30 Water robust infrastructures, by prof. Chris Geurts (TNO)

13.30-14.00 Water robust buildings, by Frans van de Ven (Deltares)

14.00-14.30 WATERgraafsmeer: an example of innovative climate adaptation and urban transition, by Paulien Hartog (Waternet Amsterdam Region)

15.00-15.20 Reducing the GHG emissions of transport by half, by Isabel Wilmlink (TNO)

15.20-15.40 Geothermal Greenhouses: the Dutch case - Low temperature, High performance, by Henk Pagnier (TNO)

15.40-16.00 Underground thermal energy storage and drinking water production in an urban environment: conflicts, risks and synergies, by Matthijs Bonte (KWR)

16.00-16.20 Towards a climate neutral watercycle, by Jan Hofman (KWR)

16.20-16.40 Building for a Changing Climate, by prof. Chris Geurts (TNO)

16.40-17.00 Concluding notes on the combination of adaptation and mitigation measures, by Peter Bosch (TNO)

17.00 Reception