

Session DP UP 2.3b: Innovations in water infrastructure and urban design (part 2)

Thursday, 30 September 2010, 15.15-17.00h

Session agenda and main speakers

The session innovations on water infrastructure and urban design was part of a series chaired by Frans van de Ven (Deltares) which focussed on sustainable architecture and urban designs for water related challenges on the local scale.

The second part of the session focussed on urban solutions on adaptation plans for water supply problems and local storm surge flood problems. This second part of the session was chaired by Karin Stone (Deltares). Main speakers:

- Prof. Vicki Elmer of the University of California / Berkeley presented Ecoblocks, water and closing the loop
- Ms. Virna Bussadori presented an adaptive approach of comprehensive planning against climate change

Main conclusions, themes, insights or messages

Prof. Vicki Elmer presented some interesting ideas on the integration of urban design and water and energy saving efforts in a concept “Eco block”, which has been designed as part of a study on sustainable urban development in China. The concept of integrating water and energy concepts in existing PRC’s or super blocks proved to be an efficient way of dealing with climate change in emerging countries, like China or India. One of the most interesting ideas Vicky Elmer presented was a completely closed system of recycling waste water, grey water and fresh drinking water supply, within the boundaries of the Eco block.

The second half of her presentation was focused on different ways of which recycled water systems can be integrated in community planning. This recycled water system has already been implemented in some cases in California. The re-use of domestic or recycled water is particularly suitable to be implemented in countries with similar climatologically conditions like California.

Ms. Virna Bussadori, president of the ECTP-CEU presented a comprehensive climate adaptation planning approach for her hometown. The main message of her presentation was that planning has a key role in helping to tackle climate change. This can be done by mitigation tools, reducing greenhouse emissions and adaptation tools, reducing vulnerability and risks.

Ms. Karin Stone presented some locally implemented measures of climate change adaptation in developing countries. These cases proved that also in countries with a weak economy or a reluctant government that climate change efforts can be implemented, by using local groups and integrating solutions. The most successful cases were integrated solutions, where climate change solutions were combined with the need for public space or urban agriculture.

During the discussion the main topics discussed were the difference between water use in America and Europe and the challenge of re-using water in urban areas. This task is especially large in America and the presented solutions can be interesting for emerging countries. In Europe, many of the proposals are already implemented or are less valuable because of the high level of water use reductions. The generally shared conclusion of this session is that small locally implemented and comprehensive solutions for water and energy saving efforts are probably the most feasible strategies.