



SESSION DESCRIPTION

E2 Designing with nature: Global examples of holistic ecosystem-based adaptation

Presentations

Date: Friday, May 30, 2014

Time: 14:30-16:00

Rooms: S29-31

Language: English

ICLEI contact: Laura Kavanaugh/ Franziska Schreiber

Organized by: ICLEI

OBJECTIVE

Ecosystem-based adaptation (EBA) combines human ingenuity with natural ecosystem services to create living systems that mitigate the impacts of climate change while enhancing quality of life for urban residents. This session will explore the benefits of EBA and blue-green infrastructure. Specific case studies will show how cities around the world are leveraging EBA for integrated urban adaptation and development approaches.

The session will open with a presentation of the Blue-Green Dream project and a pilot project in Zagreb, Croatia which illustrates the benefits of blue-green infrastructure for planning new developments and retrofitting existing ones. This will be followed by best practice examples of blue-green infrastructure from London, Singapore, and Copenhagen: wetland creation in the London 2012 Olympic Park, Singapore's recently built Bishan Ang-Mo Ki Park, and Copenhagen's Cloudburst Management Plan. These cases demonstrate how resilience and livability can be embedded into urban planning. The session will conclude with a presentation of the City of Copenhagen's new Green Climate Adaptation Plan. The plan interacts with the Cloudburst Plan to advance the use of EBA approaches while addressing other key aspects of urban development.

OUTCOMES

- Participants will learn about the benefits of ecosystem based adaptation;
- Through the case studies, they will gain a deeper understanding of how EBA can be used for integrated adaptation and development approaches; and
- They will be able to take this knowledge with them to apply in their own cities and regions.

METHODOLOGY

- The facilitator will provide an overall introduction to the session topic and contributors. **(5 minutes)**
- Each presentation will be allotted 10 minutes. **(4 x 10 minutes)**
- The facilitator will manage questions and answers. **(40 minutes)**
- Closing remarks by the facilitator. **(5 minutes)**



CONTRIBUTORS

Facilitator *Sarah Birch, Climate Risk and Biodiversity Program Manager, ICLEI Global Cities Biodiversity Center, ICLEI Africa Secretariat, Cape Town, South Africa*

Presenters *Cedo Maksimovic, Professor, Imperial College London, UK*
Ivana Mirosavic, PhD Candidate, University of Bonn, Germany

Blue-Green innovations in spatial planning

Current approaches which consider urban water systems and vegetated areas as two separate systems are no longer optimal. Instead, integrated approaches for planning and managing the urban environment are required to prepare for the intensifying impacts of climate change. The Blue-Green Dream project has been jointly developed to deliver streamlined blue and green infrastructure solutions. A pilot project implemented on the University campus in Zagreb will be examined and the benefits of blue-green infrastructure both for planning new developments and retrofitting existing ones discussed. Inter alia the benefits include significant improvement of quantified and optimized ecosystem services by the methodology which can be replicated in other projects. The customization of integrated solutions for specific cases and the replication of existing pilot projects at the national and international scale will also be addressed.

Presenter *Jonas P Svensson, Senior Advisor, ATKINS, Malmö, Sweden*

The ecosystem approach to wetland creation at the London 2012 Olympic Park

Atkins designed the river edge enhancement and wetland creation within the Olympic park. Wetland creation was designed to restore a more natural relationship between the river and the adjacent land, thereby providing a variety of ecosystem services. These include the contribution the wetland makes to the amenity value of the Park, the new habitat created for wildlife, carbon capture in the new habitats, and reduced flood risk for nearby homes. This talk shares Atkin's experience and showcases a project where the Ecosystem Approach has contributed to making London a more resilient city, benefiting people, wildlife, and the economy.

Presenter *Bettina Dreiseitl-Wanschura, Managing Consultant, Ramboll Liveable Cities Lab, Überlingen, Germany*

Holistic planning of Singapore's blue-green infrastructure

Hydrology offers an opportunity to respond to changes in urban climates as well as urban societies. This presentation will discuss international examples of blue-green infrastructures where good governance, intelligent engineering, and high design performance work hand in hand to enhance resilience and livability. The case will be made primarily by Singapore's recently built Bishan Ang-Mo Kio Park, an excellent example of holistic adaptation thinking that addresses social, ecological, and economic needs. Other innovative cases like the Cloudburst Management Plan in Copenhagen will also be touched upon. The presentation will conclude with a discussion of how



resilience and livability can be embedded into urban planning to meet the needs of future societies.

Presenter *Lykke Leonardsen, Head of Climate Section, City of Copenhagen, Denmark*

Green climate change adaptation in Copenhagen

Following the completion of its Cloudburst Management Plan, the City of Copenhagen has produced a supplementary Green Climate Adaptation Plan in order to pursue an integrated urban adaptation and development strategy. The new plan concentrates on the further advancement of blue and green infrastructure in a way that interacts with the cloudburst plan while also considering important issues such as urban mobility, biodiversity, and recreation. The presentation will focus on the creation of the Green Climate Adaptation Plan and how it will be combined with the implementation of the Cloudburst Management Plan at the local level in each of the seven water catchment areas.

Further recommended reading

Blue-Green Dream Project:
www.bgd.org.uk

Sustainability at the London 2012 Olympic Park:
<http://learninglegacy.independent.gov.uk>

Regular updates on ecosystem services:
@johnbox_ecology on twitter

Ramboll Liveable Cities Lab:
www.ramboll.com/liveablecitieslab

Atelier Dreiseitl design practice:
www.dreiseitl.com
