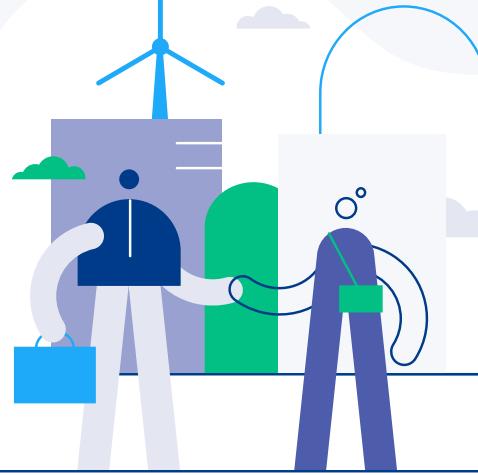


25 March 2022



This webinar focused on how cities and regions can create sustainable low-impact urban areas inspired and supported by nature.



Sebastien Goethals
cluster manager of IURC China

What is Nature-based Solutions?

Solutions that are inspired and supported by nature, which bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions.. They benefit biodiversity and support the delivery of a range of ecosystem services. They are:

- 1 Cost-effective:** NBS projects develop replicable intervention and financial models
- 2 Providing environmental, social and economic benefits:** citizens can participate in the co-design and co-creation of their cities, livability of cities improves, new jobs are being created
- 3 Helping to build resilience:** NBS projects carry out innovative research that leads to open scientific knowledge and green growth



"Integrating blue-green infrastructure at the local level has a significant impact on people's health and the prosperity of cities."

- Sebastien Goethals

"Nature is a vital ally in the fight against climate change. Planting trees and deploying green infrastructure will help us to cool urban areas and mitigate the impact of natural disasters."

- EU diversity Strategy for 2030

Both Europe and China have long histories and broad experience when it comes to urban planning, so it is interesting to learn from each other. Contributing to healthier, greener cities and creating synergies to improve urban metabolisms are common goals.

China has launched the national **Sponge City Program** (SCP) as a holistic, **ecosystem-based** approach to address urban water and environmental issues. The program is characterized by

- low impact development methods combined with grey infrastructures
- large-scale flood control projects
- rehabilitation of ecologies
- reduction of run-off and pollution

In Europe, efforts have been made to create integrated resilient streets and urban ponds within urban canal networks. Transforming streets and public spaces into **Blue-Green Infrastructure** (BGI) can absorb the impact of cloudburst events. Spatial design plays a key role in Europe's strategy to create resilience.



Case studies for integrating nature-based solutions in urban areas

Suggestions on the NBS Cooperation Areas

Some NBS **cooperation areas** are given higher priority including:

- Digital tools (GIS, CIM) to bring NBS to scale
- Urban green spaces and green infrastructure
- Nature-based solutions for flood-drought risks mitigation
- Technologies for water management (e.g., black and odorous water management)
- NBS for healthy ecosystem (e.g., Biodiversity, food and water security, air quality)



Nuovo Circondario Imolese-Bologna

NCI-Bologna has launched several projects regarding NBS

- **networks of urban parks** make the city more livable and mitigate the heat in central areas
- **urban reforestation** reduces pollution and improves the climate situation
- **ECO industrial parks** including greenery promote environmental quality

Challenges include fighting climate change through NBS and bringing back biodiversity.

Cooperation perspectives lie in sharing knowledge on creating greener cities and experimenting with NBS industrial symbiosis.



Stuttgart

Multifunctionality is key in developing NBS projects with three main principles

- Multifunctional use of space
- Generate synergy effects
- Create added value

Green belts and corridors reduce heat stress and air pollution, create an interconnected network of ecological value and foster recreation.

Lessons learnt based on data from their regional climate atlas are the localization of regional hotspots and prioritizing where climate change adaptation should primarily take place.



Haikou

Haikou has broad experience in strengthening **ecological urban planning**, preserving wetland and biodiversity, accelerating the promotion of **new energy** vehicles and planning a resilient water supply and drainage system.

One goal is to build a world-class **zero-carbon** new city.

Future cooperation

- Sharing valuable experiences and practices
- Developing low-carbon industrial parks
- Cooperating in ecological conservation and restoration
- Collaborating to promote new energy vehicles