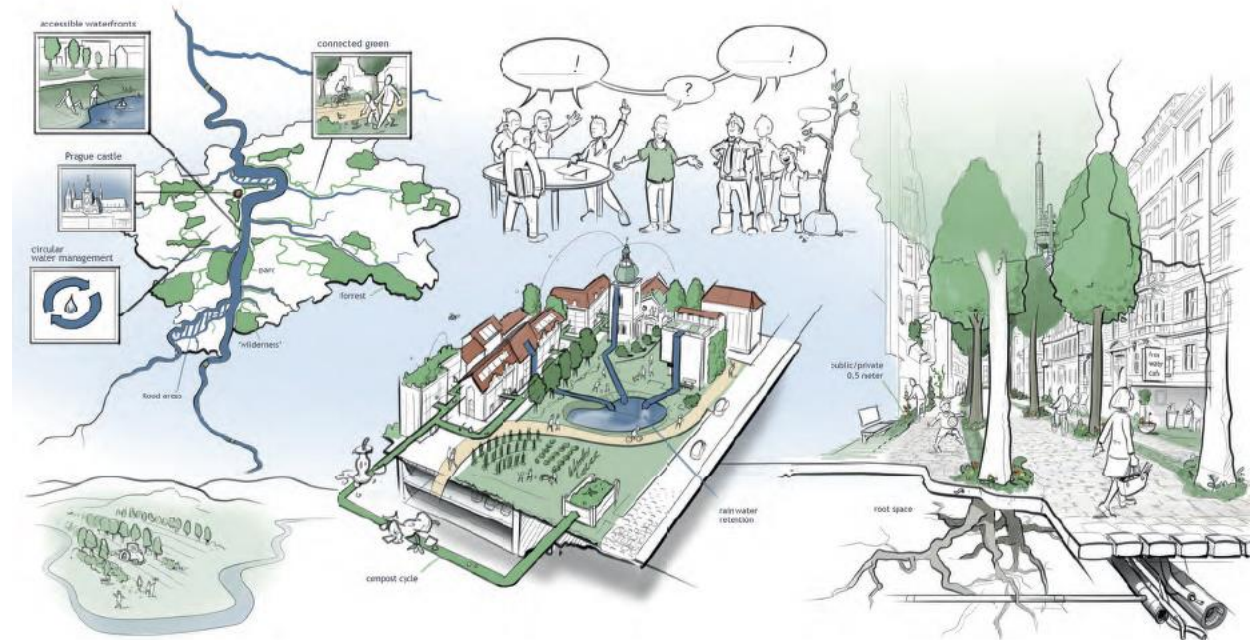


Roadmap to Prague 2050: A liveable city in harmony with nature

Presentation for the Joint roadmap workshop
Day Month 2020
Kamila Lohrová & Štěpán Špoula (IPR)

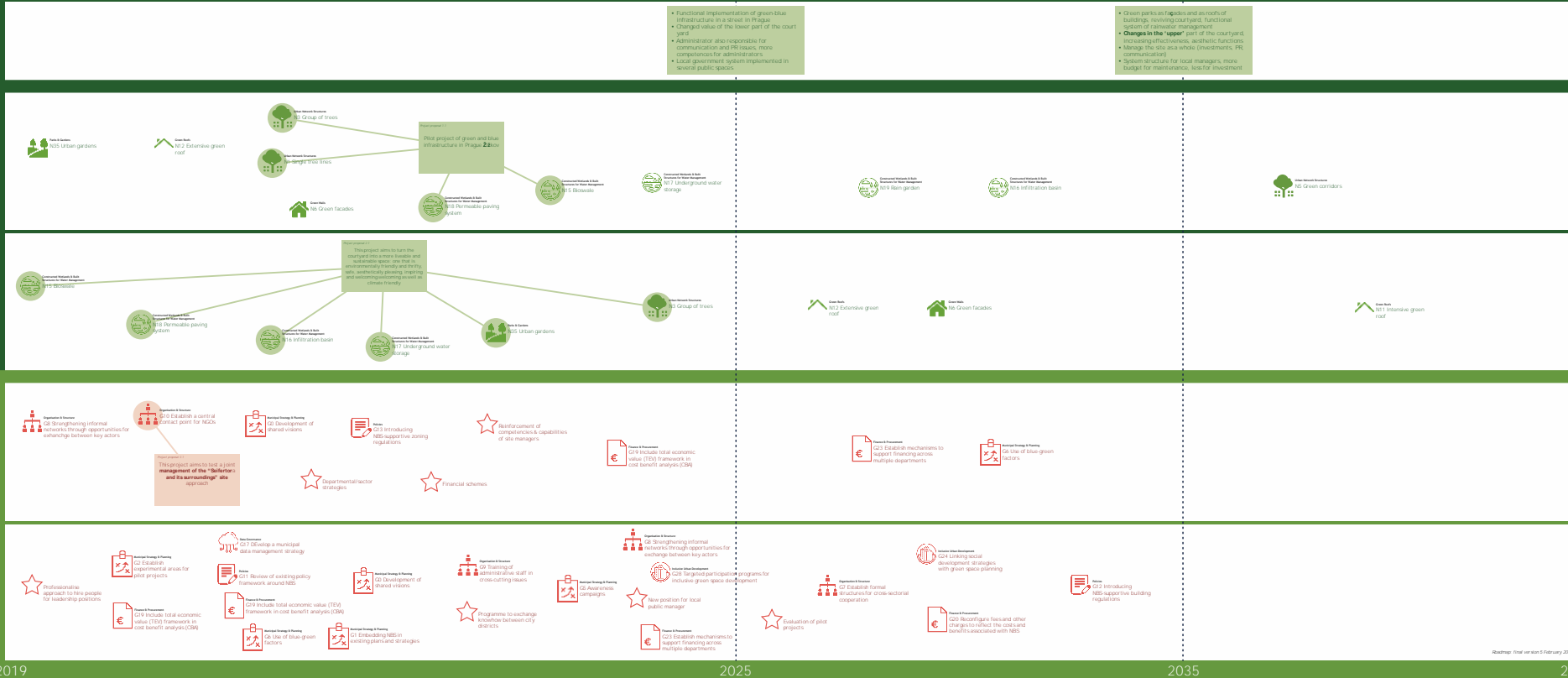




Prague roadmap to 2050

ROADMAP — NATURE-BASED SOLUTIONS FOR CLIMATE & WATER RESILIENCE

MILESTONES



Which NBS can create comfortable streets in the historical city centre, with shade and water retention systems, that enhance the quality and liveability of the historical setting?

Which NBS can create comfortable spaces in block structure neighbourhoods of the wider city centre, with shade and water retention systems?

How to facilitate cross-departmental collaboration in a way that contributes to a clear division of responsibility?

How to support openness towards innovative approaches and solutions and to boost creative capacity for change?

Prague 2050: A liveable city in harmony with nature

Desired future scenario

Key elements in the desired future scenario:

In 2050 Prague has a high-quality green infrastructure that is interconnected and provides multiple ecosystem services. Water is valued as an integral part of the city, used for both recreation and sustainable water management.

Prague is in symbiosis with nature, contributing to a high quality of living. Through a smart combination of technology and nature-based solutions, the city is flexible to adapt to the climate and changing circumstances. This is shown at all scales and levels in the city. In the visual this is indicated at 3 levels: the street, the neighbourhoods and the relationship with the surroundings. Smart planning & design are applied at all levels, to adapt to local circumstances and to allow flexibility over time and use.

A city in symbiosis with its natural landscape

In 2050 Prague is in harmony with its surroundings. The meandering rivers, creeks and ponds are accessible and permeable people to enjoy their clean water. A local circular system retains rain and waste water and makes it available for re-use. The water bodies provide protection against flooding and drought by retaining and providing space for rainwater. The available land is smartly managed, using it for agriculture, parks and "wild nature". There is a smart choice for different, small-scale crop production, to protect the soil and enhance biodiversity. The people of Prague enjoy the local food.

Neighbourhoods enriching the lives of people

In 2050 neighbourhoods in Prague are enjoyable areas to live, work, eat, shop, relax and learn, with green and blue infrastructure in public space that suit the local needs and possibilities. The local people and residents are involved in the design and implementation of green and blue. People feel ownership of their surroundings and there is a balance between private, public and semi-public areas. Local parks are multifunctional: rainwater retention, micro-climate improvement and recycling organic waste, as well as education and recreation. The vegetation structure is a linked system of different parts: parks and smaller green structures that spread like a web across neighbourhoods. Buildings are energy efficient, with green walls and roofs.

Comfortable streets

In 2050 the streets are of high quality and designed around people. Trees in the streets provide shade for people to enjoy being outside and reduce the heat island effect. Underground, space is created for the roots of trees and a smart water retention system for re-use of water on the spot. The streets are pleasant places to stay and meet, and indoor and outdoor spaces are connected at street level. Gardens, shops, bars, restaurants and other facilities on the ground floor are easily accessible and connected to outdoor terraces and gardens. This provides a good environment for walking and cycling. Flat and green roofs are also accessible for people.

Co-created spatial planning and spaces

In 2050 urban planning in Prague is transparent, coherent and effective process. "Local towards" have responsibility for overall aspects of places, parks and biotopes. To be adaptive to the site, each project is different, and managed by local multidisciplinary teams that take broader agreed goals into account and work towards a shared vision. Supported by clear legislation, these local initiatives are open to enable local solutions. In 2050 the people are involved and asked to co-create, handle different views and integrate different perspectives. People feel responsible, and volunteer to participate in the creation, development and maintenance of their own living environment.

UNA Lab
URBAN NATURE LABS



Prague NBS interventions

Which NBS can create **comfortable streets** in the **historical city centre**, with shade and water retention systems, that enhance the **quality and liveability** of the historical setting? P1

Which NBS can create **comfortable spaces** in the block structure neighbourhoods of the wider city centre, **with shade and water retention** systems? P2



Prague governance interventions

How to facilitate **cross-departmental collaboration** in a way that contributes to a **clear division** of responsibility?

How to support **openness towards innovative approaches** and solutions and to **boost creative capacity** for change?



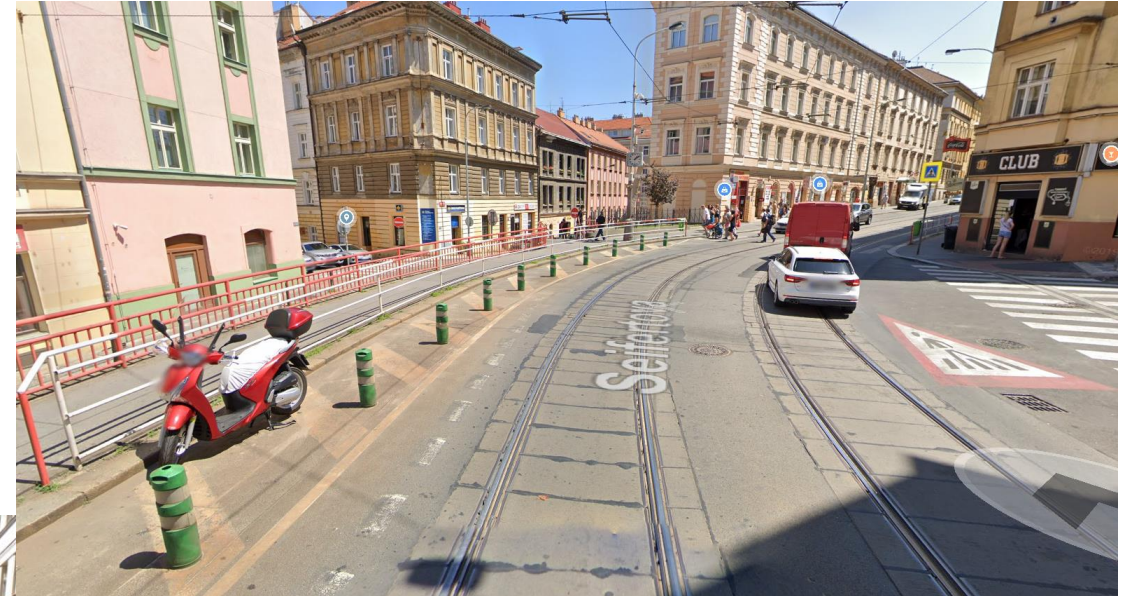
Prague Governance Project 1

Aims to test the joint management of the “Seifertova and surroundings” site approach

Project - new tram rails!

Description of Seifertova Street

- Old part of the city
- High transport pressure (vehicles, trams...)
- Long street running downhill
- Dark, paved areas



Prague Governance Project 1

Green and blue infrastructure pilot project in Žižkov, Seifertova Street

Challenges

- Old tram rails
- Lack of capacity to catch rain water
- Poor public space
- Barriers (not accessible for everyone)
- Lack of trees/greenery in the street
- Urban Heat Island



Prague Governance Project 1

Green and blue infrastructure pilot project in Žižkov, Seifertova Street

Proposed NBS Interventions

N3 Groups of trees

N1 Single three lines

N15 Bioswale ?

N18 Permeable paving system

(N6 Green facades)

(N17 Underground water storage)

(N12 Extensive green roof)

(N35 Urban gardens)

2025 – 2035

N19 Rain garden

N16 Infiltration basin



Prague Governance Project 1

Green and blue infrastructure pilot project in Žižkov, Seifertova Street

1. Proposed NBS

Study of rain water management

Water catchment area

2. Architects

Ground floor

Visual adjustments



Prague Governance Project 1

Green and blue infrastructure pilot project in Žižkov, Seifertova Street

Proposed Governance Interventions

2019 -2025

G8 – Strengthening informal networks through opportunities for exchange between key actors

G10 - Establish a central contact point for NGO´s

G0 - Development of shared visions

G13 – Introducing NBS supportive zoning regulations

G19 – Include total economic value framework in cost benefit analysis

2025 -2035

G23 – Establish mechanisms to support financing across multiple departments

G6 – Use of blue-green factors



Prague Governance Project 1

Governance interventions

How to facilitate cross-departmental collaboration in a way that contributes to a clear division of responsibility?

Implementation of the integrated site management

How to support cooperation between institutions and experts in order to have a clear shared responsibility?

Aims – One local team manages Seifertova and neighborhood in all aspects (maintenance, RWM, green, PR, events...)

Assumption – importance of quality management

Agreement to cooperate, create a local partnership, leadership, leading to Living Lab

Benefits – shared know-how, prestige, effectiveness

Barriers and problems to overcome...

Prague Project 2

This project aims to turn courtyards into more liveable and sustainable spaces

Description of project

- Association BIENO
- Community engagement projects, social inclusion
- Good contact with **City District Prague 4**

Braník courtyard - the furthest along

- About the courtyard:
 - 1300 m²
 - Four buildings
 - Green area
 - A bit abandoned/wild



Photo: www.vnitrobloky.cz

Prague Project 2

This project aims to turn courtyards into more liveable and sustainable spaces

Proposed NBS

Bioswale

Permeable pavement

Infiltration basin

Underground water storage

Urban gardens

Groups of trees

2025 - 2035

(N12 Extensive green roofs)

(N6 Green facades)

Prague Project 2

This project aims to turn courtyards into more liveable and sustainable spaces

Proposed Governance Interventions

How to support openness towards innovative approaches and solutions and to boost creative capacity for change? 2019 - 2025

G2 – Establish experimental areas for pilot projects

G19 – Include total economic value framework in cost benefit analyses (je to tam 2x, proč ??)

G17 – Develop a municipal data management strategy

G11 – Review of the existing policy framework around NBS

G6 - Use of blue-green factors

G1 – Embedding NBS in existing plans and strategies

G0 – Development of shared visions

G9 – Training of administrative staff in cross-cutting issues

STAR – Programme to exchange know-how between city districts

G5 – Awareness campaigns

G8 - Strengthen informal networks through opportunities for exchange between key actors

G28 – Targeted participation programs for inclusive greenspace development

STAR – New position for local public manager

G23 – Establish mechanism to support financing across multiple departments

2025 - 2035

STAR – Evaluation of pilot projects

G7 – Establish formal structures for cross-sectoral cooperation

G24 – Linking social development strategies with green space planning

G20 – Reconfigure fees and other charges to reflect the costs and benefits associated with NBS

G12 - Introducing NBS supportive building regulations

Prague Projects 1, 2

Conclusions of both projects

- Bringing diverse group together, interests, age differences
- Motivation to change
- Ownership and responsibility for own neighbourhood
- Emphasized usage of blue-green infrastructure (BIENO, Seifertova street)



Thank you for your attention 😊

Any questions?



Questions

Who is responsible for your public space?
If it is a specific stakeholder, how do you involve him in a project?
Is the stakeholder involved from beginning to the end?



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 730052 | **Topic: SCC-2-2016-2017: Smart Cities and Communities Nature based solutions**

