

# Setting the scene - the first three months of the “BiodiverCity” URBACT Action Planning Network



Quarterly Network Report 1  
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#I. This is our challenge: activating residents through urban biodiversity, enabling them to understand ecosystem services and plan meaningful nature-based solutions.

The **URBACT Programme** requires the **Lead Expert** to draft a so-called **Baseline Study** for the **BiodiverCity** partnership at the beginning of the learning journey.

It has three parts:

- 1 the state-of-the-art report,
- 2 partner profiles and
- 3 the network roadmap describing the way to achieve desired outcomes.

As for the first chapter, we collected 10 crucial questions relevant to every European city that you must answer sooner or later.

**Are you ready to get to know them?**



# #1 “Vitamin N” for everyone – what is your plan to recover your city’ and your citizens’ relationship with nature which seems crucial to be able to make powerful climate actions?

In the shadow of inevitable climate change and rapid urbanism, our connection to nature, deeply rooted in cultural values, attitudes, and norms, plays a key role when we intend to increase the size and quality of urban green spaces as well as natural habitats and protected areas in and outside of the cities - in line with the EU Biodiversity Strategy for 2030 and the historic Nature Restoration Law.

We have the above, rightfully criticised, but still revolutionary regulation, and we have solutions in our hands. Nature not only provides unbelievable benefits for our physical and mental health, but cheap and aesthetic solutions to develop our cities and reshape our landscapes, to make the long-desired paradigm shift in all areas of economic life.

Nature-based solutions are 50% cheaper in urban infrastructure than grey infrastructure, yet they received just 0.3% of overall spending on urban infrastructure in 2021. So, what are we waiting for? We need to raise awareness of all actors to the effectiveness of NbS and lead by example.

Do you know what nature-based solutions are and why they are so high on the EU political agenda? Read the Baseline Study!

Does your municipality support green walls or simply the use of climbing plants?

Are you interested in climate adaptive  
grassland management?  
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#2 Do your residents understand why  
ecosystem services are so important?  
Do you communicate this?



Just a few examples from the Baseline Study:

- Wetlands are the world's most effective carbon sink, storing twice as much carbon as the world's forests!
- The summer cooling effect of a green wall is also amazing. Based on the calculation regarding Vienna's famous green wall (headquarters of the Municipal Department for Waste Management) this effect is equal to 8 hours of operation of 80 air conditioners (3000 W), while during the winter it mitigates the heat waste of the building with 50%.



© VKSZ Zrt., Veszprém

- Green roofs might retain 70-90% of the rainwater, while they provide habitats for many pollinators. Green roofs are also efficient in the insulation of buildings.

It is also time to ask ourselves: what is beauty? A wildflower meadow in our hardly used garden or a perfectly mown lawn (“egosystem”)? An ancient, primeval, but chaotic forest or the “cathedral” of beech forest (plantation)? A channelised stream flowing between concrete banks, or a more natural, restored stream?

**#3. Are you ready to tackle the disaster risks urban dwellers are being exposed to? Or is it better to act now as well as raise awareness?**



The entrance of a unique organisation: the Landscape Laboratory in Guimarães

Read the [Baseline Study](#), if you are interested in online inventories on nature-based solutions helping city planners.

*“More than 1.4 billion people living in the world’s largest urban centres are at high or extreme risk of environmental disaster” – says the [World Economic Forum’s 2022 Global Risks Report](#).*

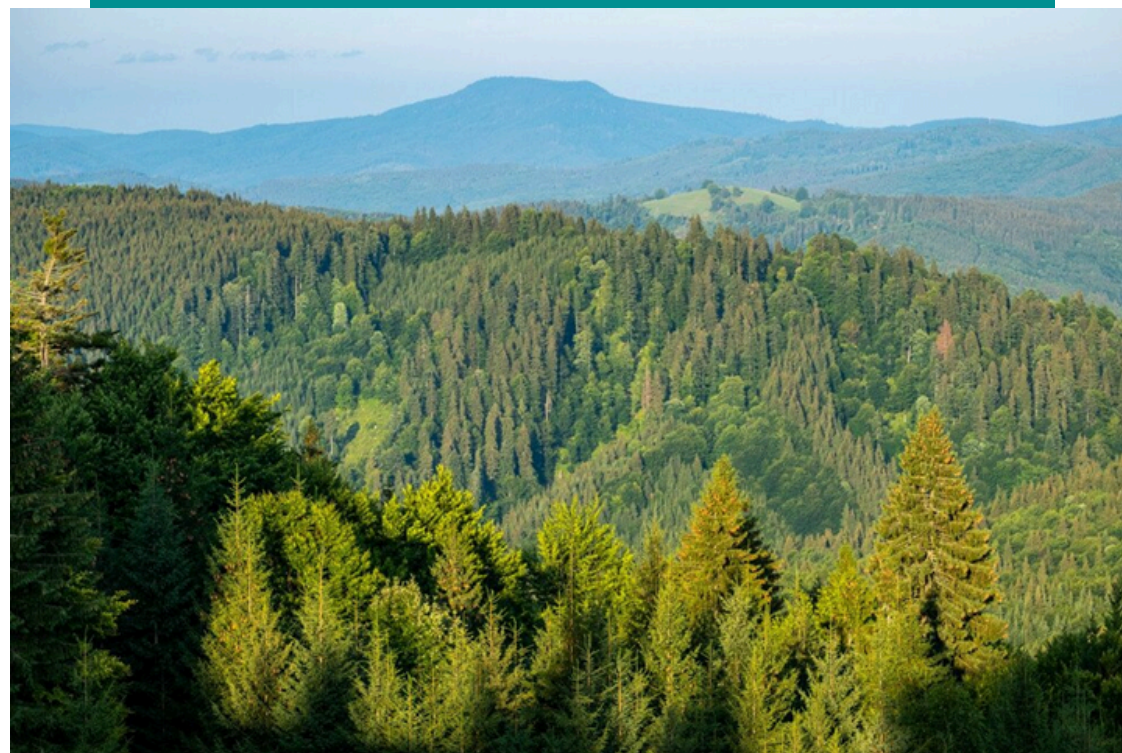
The good news is that cities can do a lot. Biodiverse cities can restore the balance between cities and nature by:

- 1 Increasing nature in their infrastructure and built environment;
- 2 Improving urban governance models to support nature-based solutions for cities' challenges;
- 3 Nurturing nature-positive values in citizens for health and wellbeing;
- 4 Forging positive links between urban and rural settings and helping to safeguard global biodiversity;
- 5 Prioritising bio-circular economy and bio-inspired innovations for economic competitiveness.

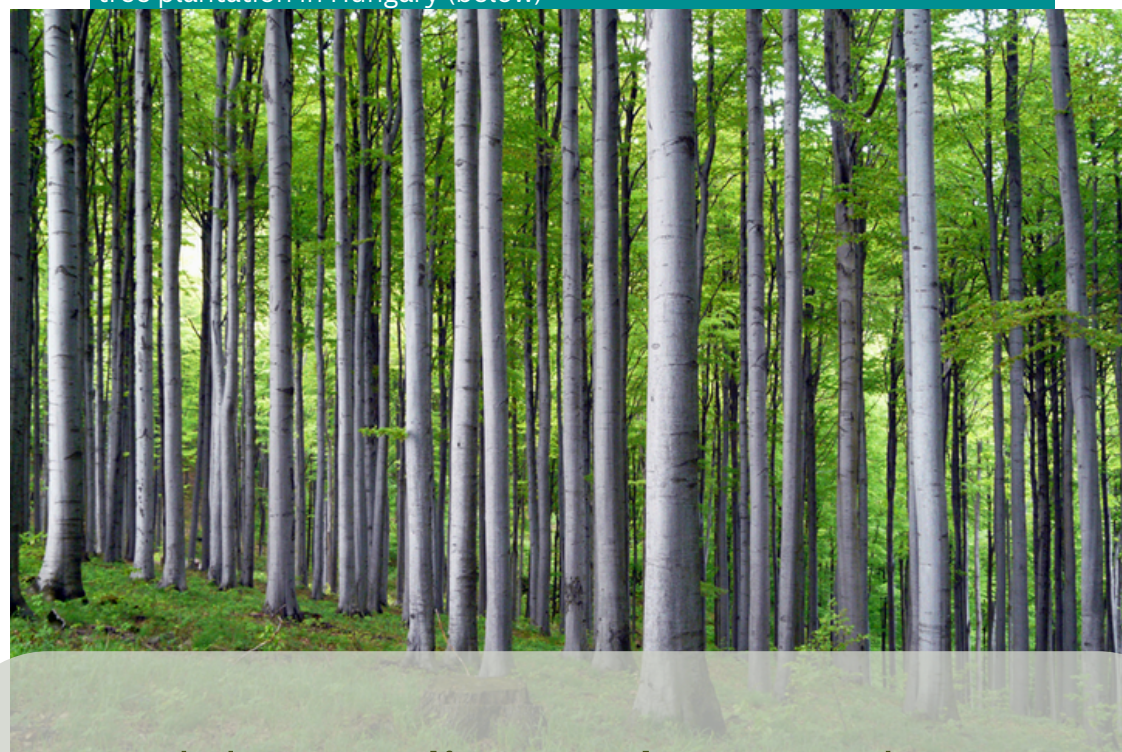
In addition, cities offer unique opportunities for learning and education about a resilient and sustainable future and have a large potential to boost innovations and governance tools.

## #4. Let's have a nature conservationist or city ecologist next to the chief architects!

Are you interested in why **biodiversity**, especially urban biodiversity is so important? If we want to get nature back, restore habitats and halt biodiversity loss, we must know what nature is. It seems easy, but it is worth learning a more scientific expression. According to Wikipedia, the shifting baseline syndrome is the “gradual change in the accepted norms for the condition of the natural environment due to a lack of human experience, memory and/or knowledge of its past condition”.



Beauty vs. biodiversity: a primeval forest in the Carpathians (above) and a tree plantation in Hungary (below)



Read the [Baseline Study](#) to see the most significant drivers of biodiversity loss!

If we lose (have already lost) our knowledge about the original conditions of nature, how can we restore it? Just ask a simple question for yourself as a European: have you been in an untouched (primeval) forest, a real wilderness? Do you know what is the difference between a “plantation” and a primeval forest and their relevant ecosystem services?

**Decision-makers** have finally understood that the different elements of the ecological crisis, as the most pressing issue facing humanity today, have to be tackled together if we are to advance the **Sustainable Development Goals**.

## #5. Are you ready to give some space back to nature? - what is in the EU policy arena?

Rewilding an area in the city?  
© Municipality of 's-  
Hertogenbosch



Check the [Baseline Study](#) to see the crosscutting issues between urban biodiversity, nature-based solutions and the **New European Bauhaus** or the [New Leipzig Charter](#), just to mention a few policies.

With its overarching target to restore 20% of land, river, and sea areas by 2030, and other ambitious targets, the [EU Nature Restoration Law](#) and the [EU Biodiversity Strategy for 2030](#), as parts of the **European Green Deal** foster cities and member states to meet these ambitious global goals. However, regarding urban areas, the draft of the Biodiversity Strategy consisted of an important target: no net loss of green urban space by 2030, and an increase in the total area covered by green urban space by 2040 and 2050. The approved strategy and law cancelled these indicators and states “only” that the increase of urban green space should apply on the national level: *“Member States shall ensure that there is no net loss in the total national area of urban green space, and of urban tree canopy cover in urban ecosystem areas”*.

The strategy also promotes the systematic integration of healthy ecosystems, green infrastructure, and nature-based solutions into all forms of urban planning.



## #6. Are you ready for public park 2.0?



Mosaics of different green area functions in Pünkösdfürdő Park, Budapest (© Municipality of Budapest (below))



In line with the **European Green Deal** and the **EU Biodiversity Strategy for 2030**, the **European Commission** emphasizes strategic planning of quality urban green and blue infrastructure at different spatial scales (from neighbourhood to city-wide), promoting ecosystem services and protection of biodiversity, and developing interconnected and multifunctional networks of blue and green spaces that potentially provide a wide range of environmental, social and economic benefits and simultaneously enhance the climate resilience of cities.

Urban green infrastructure includes different types of blue-green spaces, including single green elements such as street trees and green roofs, but also forests, agricultural land, public parks, private gardens, and even ponds and streams. These play a crucial role in enhancing climate adaptation and mitigation capacities and reducing negative impacts of climate change hazards such as heatwaves, flooding and drought in cities. In line with the EU Biodiversity Strategy for 2030, many European cities are transforming their urban parks and other green areas to climate-proof areas, and NbS are systematically integrated into urban planning. Ecological, biodiversity-driven and pollinator-friendly park maintenance and natural water retention (as NbS) play a crucial role here.

Check out in the [Baseline Study](#) what measures frontrunner cities do!

## #7. The secret of completely blue neighbourhoods

**TOP SECRET**



Blue is the new green – and indeed due to the importance of the “**sponge city**” concept complete residential areas were born in the last years without having grey infrastructure (channelisation) for rainwater. How is it possible?

Check out the answer in the [Baseline Study](#), but one thing is for sure: climate change is changing precipitation patterns across Europe, and due to urbanisation, there are more and more paved surfaces - thus rainwater retention will be an important question in most of the old continent. Frontrunner cities made urban rainwater collection an integral part of urban planning and enabled different professionals to sit at the same table to solve this challenge. Each year, rainstorms and flooding events are increasing in both frequency and severity and Europeans have been witnessing such dramatic examples of extreme weather events with very large social and economic impacts, including high mortality.

There are many scientific approaches related to the Mapping and Assessment of Ecosystems and their Services (e.g. MAES), but these do not tackle urban areas. The City Biodiversity Index prepared by the **Secretariat of the Convention on Biological Diversity** thus can be an interesting tool for cities planning to measure urban biodiversity and the efforts to protect it.

In an **URBACT network**, more emphasis will be put on community-based approaches like community valorisation of urban green spaces. Tree value calculation software, often embedded in tree registries can be very useful.

Using citizen science can be also powerful and the organisation of local bioblitz events have high dissemination potential as well. Two of our partner cities, **Guimarães** from Portugal and **Siena** from Italy have experience in the global bioblitz event, the City Nature Challenge. Their example was so inspirational to other partner cities that most of them will go with the 2025 event.

This is why we also drafted a case study with Italian colleagues on How to organise an efficient bioblitz event to map urban biodiversity and activate local communities.

#8. Do you know how much your urban trees cost?



## City Nature Challenge

Cities around the world collaborate to share observations of nature in the 2024 City Nature Challenge.

Participate 



## #9. Do you have programs to engage communities along your urban green spaces?

Green space stimulates identity and community spirit efficiently, they are great tools to mobilise citizens. This is important as cities can address the impacts of an ecological crisis

- 1 by changing their physical infrastructures and service systems and
- 2 as the most local forms of governance, by changing the attitudes of their residents.

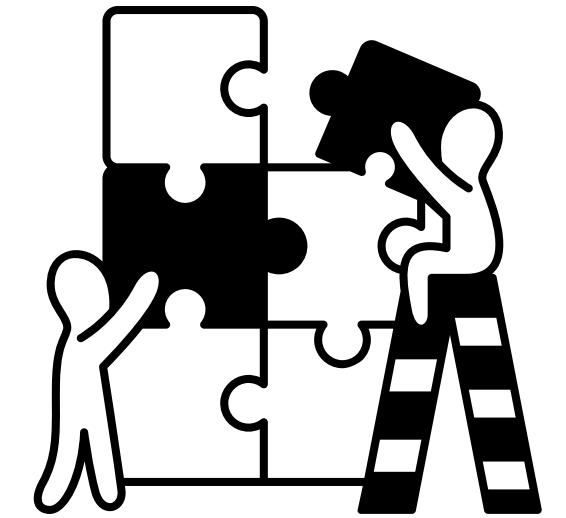
New, **biodiversity-driven green spaces** might be advocates of the mindset change required.

If you are interested in how and why to write an e-mail to a tree in **Melbourne**, how sound trails, **Jane Jacob Walks**, the **urban tree festival** or **Tallinn's Green Twins work**, check the [Baseline Study!](#)



Do you award the biodiversity rich gardens in your city?  
© Municipality of Hegyvidék

#10. Do you have a strong local partnership to plan nature-based solutions?



## IUCN Global Standard for Nature-based Solutions

A user-friendly framework for the verification, design and scaling up of NbS

First edition



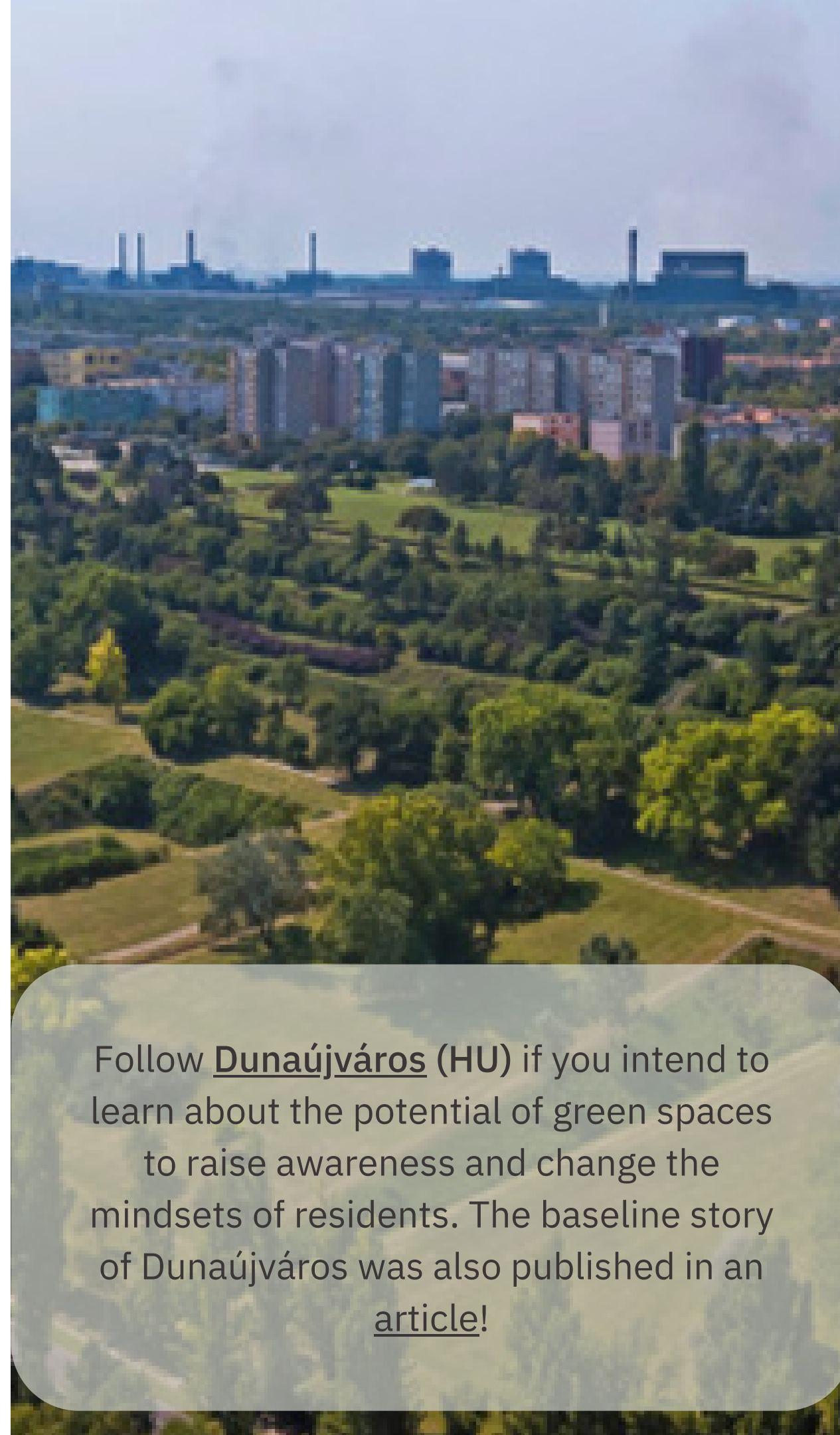
Nature-based solutions are always local, simply because of their geographical context. The International Union for the Conservation of Nature has created a user-friendly framework for the verification, design and scaling up of NbS. This process will be supported by the **URBACT network** which also emphasises the co-creation process.



#II. Get to know the BiodiverCity partnership and its key topics!



Follow [Guimarães \(PT\)](#), which puts biodiversity first even in a city and has great experience in biodiversity-related strategy creation, engagement and citizen science, as well as working with companies on nature conservation goals!



Follow [Dunaújváros \(HU\)](#) if you intend to learn about the potential of green spaces to raise awareness and change the mindsets of residents. The baseline story of Dunaújváros was also published in an [article!](#)



Follow [Cieza \(ES\)](#) if you – among others – intend to learn about climate-adaptive management of urban trees and the naturalisation of schoolyards!



Follow [Poljčane \(SI\)](#), if you are interested in using permaculture to strengthen the use of nature-based solutions!

Follow [Sarajevo \(BIH\)](#), if you are keen on using storytelling about nature to engage citizens to help co-create nature-based solutions!



Follow [Limerick \(IE\)](#) if you want to know how to have an overall strategy on blue and green infrastructure (GBI)!





Follow [Siena \(IT\)](#), if you would like to learn about creating a green corridor and planning nature-based solutions or how to provide systematic support for community gardens!



Follow [Veszprém \(HU\)](#) which has a systematic, comprehensive strategy on climate-adaptive management of urban grasslands!



Follow 's-Hertogenbosch (NL), which intends to create a stage to tell the story of climate action by rewilding an area!



Follow Vratsa (BG) where they will analyse nature-based solutions as financially viable opportunities for infrastructure development!





### #III. Be inspired with us!

In order to minimise our footprint, we do hybrid working within the partnership. We regularly organise online meetings called BiodiverCity Café sessions, where mostly we are having external speakers inspiring us.

## Café #1 - Have you heard about agroforestry?



During the first BiodiverCity Café session on 8 February 2024 we talked about nature-based solutions in agriculture. Well, for the first sight it does not seem relevant for cities (however, the theme is directly relevant for 2 BiodiverCity partners, Veszprém and Poljčane), but according to the International Union for the Conservation of Nature, agriculture is the No. 1 threat to biodiversity on the planet, thus it is the No. 1 opportunity for nature-based solutions.

This is why we started the hybrid work with this topic. Degradation of soil is a huge issue. According to FAO, more than 25% of arable soils worldwide are degraded, and the equivalent of a soccer pitch of soil is eroded every five seconds. According to the IPCC, due to droughts and water scarcity 30% of productive land will be lost globally by the end of the century. Soil humidity has decreased significantly on 50% of agricultural land in Europe in the past decades, while agriculture uses 70% of (sweet) water sources and we have to feed more and more people... Not to mention that soil is the best carbon sink (peatlands cover only 3-4% of the planet's surface, they store up twice as much carbon as the whole world's forest biomass).

## Café #1 - Have you heard about agroforestry?

We shortly talked about agroforestry which is an untouched potential: the Lead Expert explained the two main fields of agroforestry: 1. silvoarable (trees/bush + crops) and 2. silvopastoral agroforestry (trees/bush + animals), and other types: hedgerows, shelterbelts, riparian buffer strips, crops cultivated directly in the forest, permaculture.

As for agroecology, the other main field of NbS within agriculture, the partnership watched the Poisoned Earth, an awareness-rising, educational film



## Café #2 - How does a pollinator-friendly city work?



During the second BiodiverCity Café session on 22 February 2024 we invited Municipality of Hegyvidék (district 12 of Budapest) to talk about the successful adaptation of Ljubljana's bee-friendly initiative, the BeePath. This great journey, also highlighted by the URBACT Programme, is explained in [THIS](#) article.

## Café #3 - How to organise an efficient bioblitz event to map urban biodiversity and activate local communities?

Related experiences of Siena (Italy) within and beyond the City Nature Challenge was explained to BiodiverCity partners during the **third BiodiverCity Café session on 21 March 2024**.

Bioblitz is a great tool using citizen science to activate and raise awareness of local communities along with biodiversity. It is an event that focuses on finding and identifying as many species as possible in a specific area over a short period, usually 24 hours. A bioblitz brings together volunteer scientists, as well as families, students, teachers, and other members of the community. While a scientific survey often focuses on unique or isolated areas, bioblitzes usually focus on urban green areas. The first bioblitz was organised in the USA in 1996. Hundreds of bioblitzes have been conducted all over the world, primarily in the United States, Canada, Australia, the United Kingdom, and Europe and through the City Nature Challenge bioblitz has become an international activity.



Read the full [Case Study!](#)