



BiodiverCity Integrated Action Plan

Green-Blue infrastructure developments in Veszprém for period 2026-2031



2025

URBACT



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Integrated Action Plan URBACT IV 20273 BiodiverCity

Green-Blue infrastructure developments in Veszprém for period 2026-2031

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Veszprém, 2025

Introduction



For Municipality of Veszprém it is a great honour to be part of the URBACT IV BiodiverCity Network, a big opportunity to continue our initiatives to preserve and enhance urban biodiversity, to turn the focus of the decision makers on the nature-based solutions and start to appraise and value the ecosystem services we use daily.

Veszprém has strongly invested in European values and cooperations: it was the European Capital of Culture in 2023 and was a finalist candidate for European Youth Capital in 2024. Veszprém and its region was awarded with the title of

European Region of Sport 2026 recently. We were and are also leaders and partners of many EU-funded projects, one of them is the URBACT Programme.

Since last year, Veszprém has had appointed a sustainability councillor and I was happy to take the challenge although I've been tasked with nothing less than finding solutions that are cost-effective, yet spectacular and viable in the long term for protecting the city's environment, find effective solutions for climate adaptation and care for all aspects of the sustainability on the local level.

But I'm not alone. My work philosophy is to gather and bring together all those experts who live and work in Veszprém and whose professional standards and commitment to common goals are unquestionable. The URBACT Local Group of the BiodiverCity project is the best example where municipal departments and institutions, researchers, practitioners from various fields, civil society organization worked together for 2,5 years to co-create the plan of Veszprém's blue and green infrastructure developments for the next years. In my opinion this professional workshop must not be allowed to fall apart, I'm convinced that the members will play crucial role in implementation of the actions listed in the IAP.

The intervention areas described in our Integrated Action Plan have developed naturally, the green issues, the blue infrastructure and – maybe most importantly – working with the local communities to enhance the quality of life of the residents. Our IAP is integrated in many ways. For me the most important is the integration to the policy documents of the Municipality, like the Green Surface Strategy, the Sustainable Urban Development Strategy, the Environmental Programme, the SECAP and some others, listed in this document.

We have good natural base, compared to other Hungarian cities, for example, the proportion of green spaces in Veszprém is exceptionally high. The Wildflower Veszprém program since 2016 has created a good practice in green surface management in a climate conscious way that was recognised as URBACT GP in 2024.

There is still lot to do – as you can see in the following chapters – to meet our target, set by the Mayor of Veszprém, Mr Gyula Porga in 2022 – to be one of the most liveable cities in Europe in our category by 2030. As this is our common vision, we, the members of the General Assembly will support the initiatives of this action plan to the best of our knowledge.

Veszprém, September 2025

*Áron Kovács, elected representative,
Sustainability Councillor*

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1. Executive Summary

The BiodiverCity Integrated Action Plan (IAP) of Veszprém is part of the URBACT IV programme, designed to foster urban biodiversity through community-based approaches, nature-based solutions (NbS), and integrated blue–green infrastructure. Veszprém, the “City of Queens,” enjoys over 33 m² of green space per capita, enriched with valuable historical vegetation, and a well-connected park network. However, climate change, urbanisation, invasive species, and competing land uses threaten these assets, while water scarcity and flash floods present further challenges.

The city joined BiodiverCity to revise its Green Surface Strategy (2019; updated 2024), improve biodiversity monitoring, implement NbS, and strengthen community engagement. Key challenges identified include replacing climate-sensitive conifers, promoting climate-adaptive grasslands over high-maintenance lawns, reducing conflicts between parking and green areas, controlling invasive species, increasing water retention, revitalising the Veszprém stream, and making private gardens biodiversity-friendly.

The IAP was co-created through the URBACT Local Group (ULG), a broad coalition of municipal departments, the University of Pannonia, the National Park Directorate, NGOs, utility companies, and resident associations. This participatory process ensured that proposed measures align with local, national, and EU strategies, and are backed by strong community ownership.

The Eight Actions:



1. Expanding Climate-Adaptive Grasslands

Since 2015, Veszprém has practised extensive mowing—twice yearly after seed ripening—through the “Wildlife Veszprém R&D Program,” resulting in species-rich, drought-tolerant grasslands and significant maintenance savings. The action will expand these areas, especially in the periphery, employ mosaic mowing to preserve habitats year-round, develop a “Veszprém seed mix” from local donor sites, and use BioBlitz events to map biodiversity. Private gardens will be encouraged to adopt wildflower lawns, improving connectivity with surrounding landscapes.



2. Urban Beekeeping

A successful pilot in 2025 demonstrated the feasibility of keeping bees in urban conditions, supported by wildflower meadows and pollinator-friendly planting. Permanent hives will be placed at municipal and institutional sites, operated by contracted beekeepers. Honey will be used for representation purposes and awareness raising campaigns, while educational programmes will engage schools and communities.



3. City in the Forest – Forest in the City

This long-term urban forestry initiative will create micro-forests (e.g. Miyawaki method), extend green corridors, plant shrub layers, and integrate deadwood habitats for biodiversity. A GIS-based digital tree inventory and a Local Green Infrastructure Plan will guide planting and maintenance. Public involvement

will be fostered through “Adopt a Tree” schemes, school planting days, volunteer programmes, and small community grants.



4. Community Composting

Community-scale composting sites will be established in gardens, parks, and housing estates to recycle green waste, enrich soils, and support pollinator habitats. The programme includes identifying interested communities, selecting locations, obtaining permits, installing composters, and providing education and awareness campaigns.



5a. Rain Gardens

Pilot rain gardens will be installed in public spaces to retain and filter stormwater, reduce runoff, and provide microhabitats. Sites will be chosen based on a set of ecological, technical, and social criteria, ensuring high visibility and replicability.



5b. Water Retention for Irrigation

Stormwater harvesting systems, such as tanks and cisterns, will be introduced to irrigate parks and street trees using collected rainwater, reducing reliance on potable water and enhancing drought resilience.



6. Integrated Municipal Water Management Plan

A comprehensive plan will integrate blue and green infrastructure, optimise water retention, manage flood risk, and guide NbS investments. It will be data-driven, using GIS systems developed with the University of Pannonia, and informed by community consultation.



7. Therapeutic Gardens

A network of therapeutic gardens will be established to promote health, social inclusion, and community building. Designed for elderly residents, disadvantaged groups, homeless individuals, and people with disabilities, these gardens will be managed in partnership with NGOs and health institutions.



8. Residential Green Office

A dedicated hub will coordinate citizen biodiversity initiatives, offering technical advice, seed distribution, composting support, and NbS guidance. It will act as a bridge between the municipality and residents, supporting bottom-up greening projects.

These eight actions combine ecological restoration, climate adaptation, education, participatory governance, and digital innovation. Measurable indicators will track biodiversity gains, ecosystem services, and public involvement. Together, they aim to make Veszprém a climate-resilient, biodiverse, and community-driven city by 2030, setting an example for other European municipalities.

The above **actions form a coherent sequence** where ecological, social, and infrastructural elements reinforce each other over time. Action 1 (climate-adaptive grasslands) begins 2026 through 2030 and creates a biodiversity base. Its awareness raising programs and Veszprém seed-mix directly connects with Action 2 (urban beekeeping), since pollinators depend on

wildflower habitats, while honey production strengthens public engagement. Both provide ecological continuity into Action 3 (urban forests), starting in 2026, which expands tree cover and green corridors; together they reduce heat-island effects and support pollinator pathways.

Action 4 (community composting, from 2026) links thematically with Actions 1–3 by improving soil quality and enabling nutrient cycles that sustain grasslands, trees, and private gardens. In parallel, Actions 5a (rain gardens, 2026–27) and 5b (water retention, 2027) address stormwater, directly benefiting green areas created in Actions 1–3. Both water actions are strategically embedded into Action 6 (Integrated Water Management Plan, 2025–27), which provides the comprehensive framework ensuring consistency across all water-related measures.

From 2027 onward, Action 7 (therapeutic gardens) builds on the earlier ecological base, focusing on vulnerable groups. It combines biodiversity (plants) with social sustainability (care institutions), reflecting synergies with Actions 1, 3, and 4. Finally, Action 8 (Residential Green Centre, 2026–) institutionalizes citizen involvement, offering education, tools, and demonstration gardens. It ties back to all previous actions: composting (4), rain gardens (5a), water retention (5b), grasslands (1), beekeeping (2), forests (3), and therapeutic uses (7).

Thus, timing creates a chain: ecological groundwork (1–3), resource cycles (4–6), social embedding (7), and community mainstreaming (8). No action stands alone: each feeds thematically and temporally into others, ensuring resilience, biodiversity, and active community participation.

Very much connected to the BiodiverCity action plan there is a strong will to hire a full-time expert, who oversees biodiversity policy, monitors progress, ensures consistency with strategies, and liaises with city agencies, stakeholders, and citizens. This new role within the Municipality coordinates projects, manages indicators, and ensures ongoing commitment.

2. Introduction

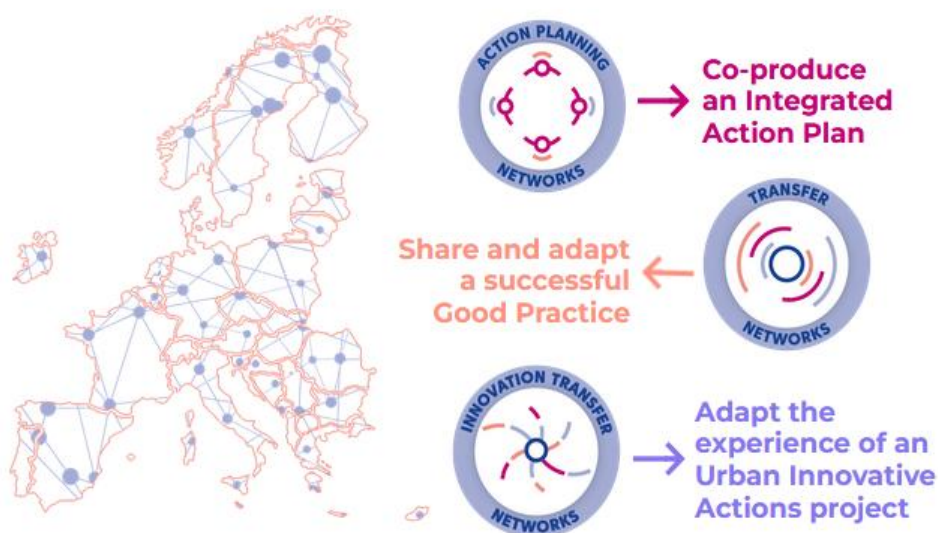
2.1 URBACT Programme

Since 2002, URBACT has been driving change all over Europe by enabling the cooperation and idea exchange amongst cities within thematic networks, by building the skills of local stakeholders in the design and implementation of integrated and participatory policies, and by sharing knowledge and good city practices. URBACT promotes integrated development to support cities implement horizontal and vertical policy integration. Positive change can best be made when local authorities collaborate with different levels of governance (regional, national, EU) –vertical integration – and when they tackle challenges and problems in a holistic way that considers environmental, economic, and social dimensions at the same time – horizontal integration.

Since 2002, URBACT helps cities to develop an integrated set of actions for sustainable urban development in Europe.



Three types of city networks



Source: <https://urbact.eu/>

URBACT supports its APNs to lead them through the action planning process with various methodological guidelines (ULG setup, IAP preparation etc), tools (<https://urbact.eu/toolbox-home>); set of events (Summer University, national URBACT Campuses, URBACT City Festival), good practices, knowledge hub. It encourages cities to re-think centralised governance structures and shift towards more inclusive and holistic models. URBACT's **integrated and participatory approach** recognises that sustainable urban development is driven by action-oriented strategies, which are co-created and implemented with local people.

In January 2023 URBACT launched a call for proposals to support APNs, Action Planning Networks across Europe in various themes and topics tackling burning questions of the sustainability and the sustainable development of European cities and settlements. Among the 30 supported APNs the BiodiverCity project got the green light to deal with the urban biodiversity, ecosystem services, nature -based solutions, blue and green infrastructure in the partner cities.

2.2 The BiodiverCity network

URBACT IV APN BiodiverCity - Community-based approaches to foster urban biodiversity



<p>Network duration 01/06/2023 - 31/12/2025</p> <p>Network Partners</p> <ul style="list-style-type: none"> • Cieza, ES • Dunaújváros, HU • Landscape Laboratory, PT • Limerick City & County Council, IE • Poljčane, SI • Sarajevo, BA • Siena, IT • 's-Hertogenbosch, NL • Veszprém, HU • Vratsa, BG <p>Total network budget EUR 849 522,00</p> <p>EU funding EUR 636 242,85</p>	<p style="text-align: right;">urbact.eu/ networks/biodivercity</p> <p>BiodiverCity</p> <p>Community-based approaches to foster urban biodiversity</p> <p>In 10 European cities URBACT Local Groups will work out community-based approaches to valorise, measure and account urban biodiversity and related ecosystem services.</p> <p>The BiodiverCity partners will support and enable communities to plan powerful nature-based solutions, foster pro-environmental citizen behaviours and draft Urban Greening Plans, contributing to the achievement of the EU Biodiversity Strategy as well.</p>
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Urban green spaces – from parks, urban forest, gardens to green roofs to natural or semi-natural habitats – offer many benefits. They provide important habitat for birds and pollinators, help reduce air, water and noise pollution, and provide protection against floods, droughts and heatwaves. Maintaining functioning urban ecosystems can significantly improve the health and well-being of their inhabitants and contribute to climate change mitigation and adaptation. In addition, cities offer unique opportunities and potential for learning and education about a sustainable future, and for creating innovations and solutions, and therefore need to play a leading role in sustainable development.

Despite all positive effects we experience in Veszprém, as possibly other part of Europe that green spaces often lose out in the competition for land when it comes to infrastructural investments, building houses or just parking lots.

Participating cities, supported by URBACT local working groups (ULGs), are developing participatory methods to understand the value, represent, assess, measure and monitor urban biodiversity and related ecosystem services, be there to conserve and enhance urban biodiversity. We need to involve all possible stakeholders from the city to have strong standpoint in favour of urban biodiversity.

BiodiverCity partner cities support local communities in developing nature-based solutions, encouraging environmentally friendly behaviour among city dwellers and developing Urban Greening Plans, thereby contributing to the implementation of the EU Biodiversity Strategy.

A further objective is to link the Integrated Action Plan with the Veszprém Green Space Strategy and other relevant urban strategies. The expected outcome of the project is closer cooperation between stakeholders within the framework of the URBACT local working group actively operating during the project and by involving the urban population, closer linking of relevant urban strategies, and effective measurement, assessment and monitoring of urban biodiversity and ecosystem services.

The three key principles of the BiodiverCity network are:

1. Urban biodiversity

Based on the latest census National Statistical Office (KSH) published (2024) that in Hungary 70,22% of population is living in the cities, the proportion for Veszprém county is 60,14% (https://www.ksh.hu/stadat_files/fol/hu/fol0008.html), and proportion of population living in cities is growing. The worldwide trend is the same, rapid and massive urbanization has occurred over the past century. Today, 57,2 percent of the world's population live in cities (https://data360.worldbank.org/en/indicator/WB_WDI_SP_URB_TOTL_IN_ZS).

The above data emphasizes the importance of trees and green spaces, creeks and wetlands and their flora and fauna, and the importance of the ecosystem in the city we need to preserve and strengthen. Urban biodiversity offers shade, reduces the heat island effect, by moderating temperature extremes with special microclimate helps to mitigate the impacts of climate change, like heatwaves, heavy rains and flash floods; protects residents from heat-related health risks and creates more favorable living conditions. Besides that, green space stimulates identity and community spirit efficiently, they are great tools to mobilise citizens. New, biodiversity-driven green spaces might be advocates of the mindset change required.

2. Ecosystem services

Ecosystem services are the various benefits that humans derive from ecosystems. The interconnected living and non-living components of the natural environment offer benefits such as pollination of crops, clean air and water, decomposition of wastes, and flood control. Ecosystem services are grouped into four broad categories of services:

1. Provisioning services: providing timber, mushrooms, fruits, and honey.
2. Supporting services: they form the basis of all other services (nutrient cycles, soil development, photosynthesis, water circle).
3. Regulating services: evaporation, absorption of pollution, cleaning water, carbon sequestration.
4. Cultural: recreation, landscape, environmental education, research, art.

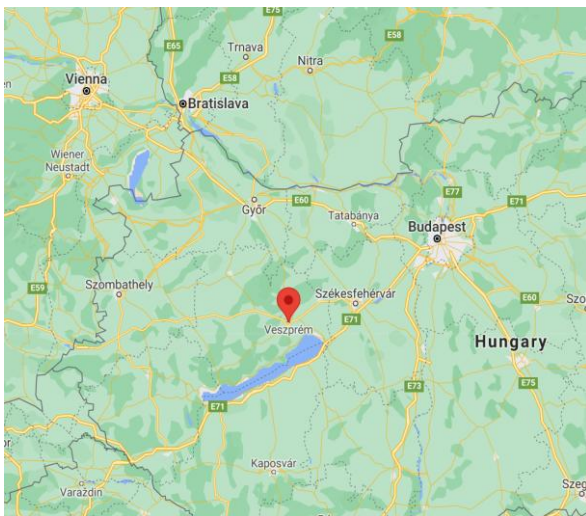


Nature-based solutions: There are several definitions concerning NbS. The most useful one comes from the initiator organisation (IUCN): nature-based solutions “*are actions to protect, sustainably manage, and restore natural and modified ecosystems that address societal challenges effectively and adaptively, simultaneously benefiting people and nature*”. Conservationists have been restoring habitats for decades, but now, in the shadow of the ecological crisis, there is a huge emphasis on the other side of the coin, the unbelievable ecosystem services natural and modified ecosystems can provide (besides providing habitats for species) and what we have forgotten. What is good for nature, is good for society and the economy.

2.3 Veszprém and the BiodiverCity network

Veszprém is a historical town in the Central Transdanubia region, Hungary with an administrative territory of 126,9 km² (of which green Surface: 48,84 km² area taken out of cultivation 78.06 km²) and 55.910 inhabitants, slightly declining in the last decade. Population density: 440,6 people/km² (2022). Veszprém is also known as the “City of queens” (because

the city was always the property of the reigning queen) and is located on the hills and valleys surrounding the Séd stream, at the confluence of three small regions: the Bakony mountain range to the north, the Balaton Uplands to the south and to the east it is bounded by the north-western extension of the plain Mezőföld. This central situation played a significant role in the development of the city and in its socio-economic role and significance throughout history. Veszprém is the educational centre of its region with 12 secondary and numerous primary schools and is also a university town. University of Pannonia offers various qualifications at its Faculty of Business and Economics, Faculty of Engineering, Faculty of Modern Philology and Social Sciences and Faculty of Information Technology. Veszprém also host the College of Theology. Veszprém held the title the European Capital of Culture in 2023, we believe that we won the title with our regional territorial focus and focus on investing into the people, into the community development beside being attractive to tourist.



In our strategic document “Veszprém for 2030” the declared long-term strategic aims of the local government are:

- harmony, high quality of life and strong communities
- to create a favourable environment for its prosperity
- to maintain and enrich the natural ecosystem, green surfaces, community spaces
- to improve quality of life of all inhabitants

Veszprém has joined the BiodiverCity project to:

- Get inputs for revision and amendment of the Green Surface Strategy from 2019 (it was fulfilled in December 2024), learning need: how the EU “Greening plan” is structured, what are the focus areas, what are the expectations
- Continue working with and extend membership of our local ULG from previous URBACT project (Global Goals for Cities)
- Strengthen green thinking and SDG-based planning, implementing and monitoring - within our staff and our stakeholder
- Gain more insight via peer learning about how to launch successful public awareness campaigns
- Find future project partners for related international projects and develop a strong cooperation with the Hungarian LP
- Learn about measuring Urban Biodiversity / Biodiversity index
- Find the good examples on synergies in the joint, parallel development of green spaces and water areas, green corridors
- Develop actions for ecological survey and monitoring of the waters of Veszprém: running (Veszprém Séd) and standing waters with the involvement of the University of Pannonia and Bakonykarszt Zrt.

- Promoting pro-environmental behaviour (communication, sensitisation)
- Verifying, designing and scaling up nature-based solutions.

2.4 Development of IAP and the role of ULG

We understood that key element of a well-designed, answering the needs Integrated Action Plan is a wide group of stakeholders within and outside of city administration as the IAP is developed for Veszprém, not as a next strategic document for the Municipality. Invited ULG members from the strategic, urban development and urban management departments and representatives of the University of Pannonia, Hungarian University of Agriculture and Life Sciences, Public Utility Company (VKSz), Balaton Upland National Park Directorate, Bakony-Balaton UNESCO Geopark, Veszprem 2030 Development Ltd, environmental (e.g. Csalán Association, Bakony-Balaton Environmental Educational Centre) and residential NGOs (e.g. local zero-waste shop), local water directorate, a local landscape architect, VERGA local forestry company and the local office of the Hungarian Chamber of Agriculture.

Right at the first meeting we interviewed the potential members that to what extent do they have capacity to actively in the following journey and most of the members present expressed their commitment to the BiodiverCity project and most of them remained active members of our ULG. The professionals represented in the group required their ideas and contribution to be heard, so we can state that in Veszprém the IAP development is real co-creation process.

We have tackled the IAP development process on almost all ULG meetings, the following table summarises the journey:

Date	Topic	IAP related content
14.03.2024.	Learning needs	Introduction of the Baseline study prepared by the lead expert; interactive part: defining our learning needs in the project
02.05.2024.	Surveys	At the meeting on March 14, it turned out that according to the group members, “surveys” are the basis, local situation analysis is needed. There are already surveys by various actors, e.g. tree surveyors, VKSZ insects, flora, birdwatchers, GIS systems. This data is also good for the Biodiversity Index. University of Pannonia, water data series, utility map. On the meeting the above were discussed.
07.05.2024.	Visioning	Short presentation on visioning, Interactive part: Newspaper of Tomorrow exercise in three groups (Blue issues, green issues, mobilising citizens), report back
18.07.2024.	Strategic objectives, testing action	Vision, strategic goals, actions, testing action – interactive part

Date	Topic	IAP related content
04.09.2024.	Strategic goals, actions and testing (cont.)	Interactive part on actions through MIRO
16.10.2024.	Testing actions, IAP first steps	Testing action working groups report; IAP structure and interactive work on action ideas in MIRO
19.11.2024.	Testing action working groups	Planning meeting for the two actions to be tested urban beekeeping and raingarden. Site plan was prepared of the potential areas visited on October 11 for bees; present discussed which areas in Veszprém would be suitable for of raingardens.
11.12.2024.	Closing and evaluating meeting of 2024	What does integration mean in our case? – group discussion of the aspects provided by URBACT
23.01.2025.	Testing action	Status and next steps on 2 actions in test (urban beekeeping, raingarden)
20.02.2025.	IAP 1 st draft preparation,	Formulation of the IAP focus group within the ULG
29.04.2025.	Action program reports	Report from two IAP focus groups: Urban apiary and Urban Water group
29.05.2025.	IAP 2 nd draft preparation	Discussing about the structure. Report from the focus groups.
17.07.2025.	IAP draft closing	Finalising the Action Plan topics and start the final editing part.

The **good practices** of the partners are also present in our developed IAP. After CNMs the members of delegations gave a detailed presentation on the next ULG meeting and shared the most important lessons learned.

Here you are the most relevant examples

Introduction to Green and Blue Infrastructure Strategy of **Limerick** is useful in terms that the experts are convinced that the two areas should be designed jointly, however Veszprem has no integrated municipal water management strategy yet (it is in the plans for 2026); our Green Surface Strategy has been renewed lately and some connection of green and blue issues are trackable there. Visit to **Baggot estate**, the place that has urban forest, community gardens, gym in the nature and using Native Irish seed mixture for renewing the meadows, some of the elements present in Veszprém, too – Gulyadomb urban forest and outdoor gym; deep mulch community gardens and wildflower meadows, we found some similarities here and we could

learn about their challenges. The **Natural play area** was a great experience and there were some talks about the possibility of such a site in Veszprém, but the idea is not elaborated further, yet. The position of **biodiversity officer** has been created in the city of Limerick. This specialist works on biodiversity conservation and restoration in cooperation with the Heritage Council and local communities. Veszprém took this example as base to plan and create a similar position in 2026 in the frame of the planned Green Office.

Guimarães visit was very much awaited by us and experience gained during the visit is a great opportunity to rethink some aspects of the sustainable urban development of Veszprém. The role and professional operating system of the Landscape Laboratory and its sustainability activities, the tested and working organizational model can serve as a model for Veszprém, studying the operation of the LL and modelling it for our conditions was share with the Mayor and Sustainability Councillor. As a result of the visit Veszprems' municipal companies are being restructured in 2025 and Veszprems Urban Development and Innovation Ltd is being established with similar role as LL in Guimaraes. Professional support and involvement of the Guimarães **Green Brigades** civil society in urban sustainability issues. Active civil society relations are very important in promoting, accepting and validating the city's sustainability efforts. The Guimarães network can be a very good example for Veszprém how to involve and make civil society organizations interested in the protection and care of urban green spaces. **Green-blue infrastructure** experiment NBSs on flood-control, blue issues are in focus of the Veszprems' IAP and the NBs methods being tested in Guimarães; their results will be valuable when it comes to the revitalisation of the Veszprém stream.

In Cieza we've learned some important good practices like **gentle pruning** (Biofílica Cieza) In 4 years one of the most atmospheric streets in the city was created, just by allowing the trees to grow. We will use this experience in the planned urban forest transfer network. **Conscious tree planting technique** when a network of pipes is installed under the sidewalk to guide the root system and provide space for utilities good practice is share with our colleagues at the respective department. The practice of a well working **Jane Jacob's** Walk initiates us to design our Jane's Walk based on the 9 Principles (<https://janeswalk.org/janes-walk-principles/>).

Poljčane is the smallest municipality in this action planning network located in both sides of a NATURA 2000 protected valley at the foot of Boč mountain. In the middle of the valley runs the Dravinje river which regularly floods the area. This a special case when beyond learning from our colleagues our expert, Miklós Toldy gave a presentation where he evaluated the possible root causes of the regular flooding and gave proposal to prevent further damages by using natural based solutions and considering the natural protection regulations. We have suggested to the municipality to conduct deep research of the area to determine the core elements of the flash flood like compacted soil in the hillside and lack of vegetation etc. Our proposal aimed at natural water retention on the hillsides preventing surface runoff water also increase penetration into the soil and the time of water concentration.

3. State of the city

3.1 Current situation in Veszprém

Veszprém has an adequate amount of green space, with more than 33 m² per capita, excluding park forest and protective forest. Almost half of the green areas are public, which have a special, unique character due to the valuable woody vegetation left over from the last century (that's why Veszprém is called sometimes the Urban Arboretum). The green spaces are relatively well-dense and fragment, a public park or garden is within walking distance of 500 metres from any resident. Thanks to developments in recent years, high quality green spaces can be found in several parts of the city, such as along the Veszprém Séd stream (Cloisters and Gardens), in the city centre and in the Jutas housing estate.



#<https://www.veszpreminfo.hu/hu/hely/kolostorok-es-kertek> (Cloisters and Gardens)

- The green spaces in the transport areas are a prominent urban feature, mostly in the form of tree-lined areas along the footpaths and cycle paths. The 39 ha of green strips along urban roads in the transport area contain more of the third of the city's tree population, around 10 000 trees. In addition to urban conditioning, the role of tree belts is also important from an urban landscape point of view. It is worth mentioning a problem caused by the acceleration of motorisation, which is reflected in the increased space requirements of stationary traffic and the reduction of urban green spaces within the transport area.
- There are 187 ha of public green space in the city centre, which is managed by the public utility company of Veszprém
- In addition to the horticultural areas, the area of the Veszprém Zoo (30 ha) and the area of the city cemeteries (24 ha) are considered as important green spaces, as well as the 24 ha of park woodland (Gulyadomb) open to the public.
- Locally protected areas: there are 10 identified sites, altogether around 30 ha, each has separate management plan (the reinforcement is not always effective though)

- Veszprém and its surroundings are part of the Bakony-Balaton UNESCO Geopark, and our territory belongs to the Balaton-upland National Park Directorate.
- Nature-based solutions present in Veszprém like extensive grassland management, pollinators meadows, in plans – flash flood control on natural ways – rain gardens; microforests (e.g. Miyawaki).

Summary data in public green areas in Veszprém (source: Green Surface Strategy, 2019 and 2024)

Feature	2019	2024
grassland (m ²)	2 133 422	2 133 422
shrubs (m ²)	48 071	63 967
flowers and perennials (m ²)	5 028	7 085
trees (pcs)	26 179	28 896

Assessment of the Ecological and Integrated Status of the Veszprémi-Séd (VGT3, 2022)

Surface Water Body Name	Biology	Physical-chemical	Specific Pollutants	Hydro-Morphological Risk	Ecology	Chemical	Integrated Status of the Water Body
Veszprémi-Séd upper	Moderate	Moderate	Good	Good	Moderate	Good	Moderate
Veszprémi-Séd middle	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Veszprémi-Séd lower	Moderate	Poor	Moderate	Good	Good	Moderate	Moderate

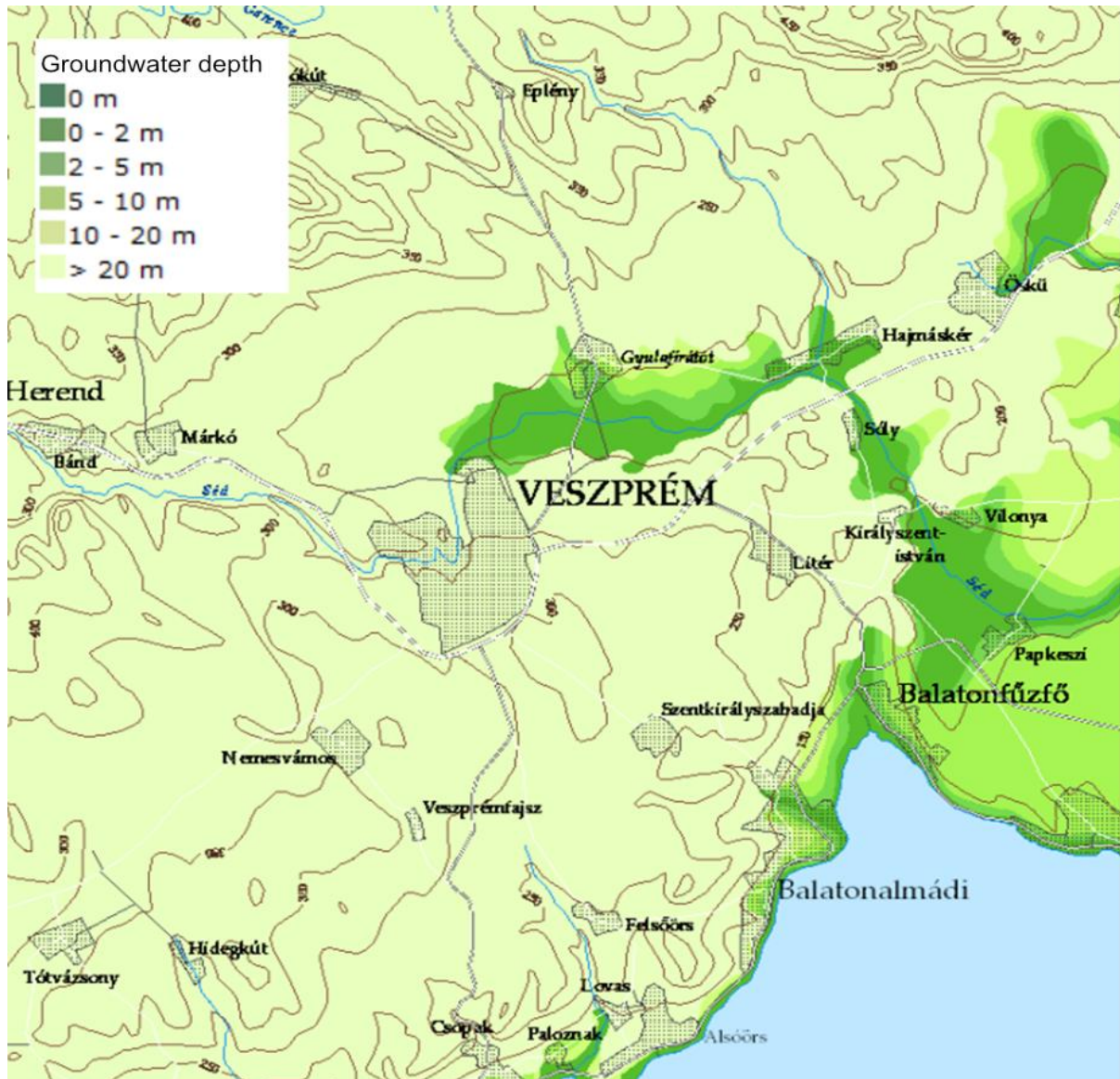
- The city's stormwater network consists of closed stormwater channels, open ditches, and stormwater reservoirs.
- The municipality operates an open ditch network of 98,000 linear meters and a closed channel network of 66,482 linear meters.

Veszprém's Water Supply Situation

- Veszprém is in a poor position in terms of precipitation, but water from the surrounding mountains provides an adequate supply of drinking water through the karst system.
- most groundwater resources consist of the karst water reserves stored in the carbonate rock masses of the Bakony and Balaton Uplands. Consequently, 80-85% of the region's water supply is based on karst water sources.
- Due to the vulnerability and contamination of shallow groundwater resources, only groundwater bases with favorable recharge areas (e.g., forest cover) are suitable for

public water supply purposes. As a result, groundwater now accounts for only about 2-5% of the extracted water resources.

- Within Veszprém's administrative area, a continuous groundwater table has only formed in the valley along Veszprém Stream, where it lies 2-5 meters below the surface. The quantity of shallow groundwater is limited.
- The number of wells tapping into deeper groundwater (karst water) is small, and their depth and yield vary widely (karstic area)



Groundwater depth in Veszprém area (Source: NATÉR - National Adaptation Geographic Information System)

Challenges we face and some foreseen solutions

For decades, Veszprém has paid considerable attention to the city's green spaces. The town of Veszprém - also known as the arboretum town - has a significant green space which is home to several rare species and plant communities.

Unfortunately, climate change and trends amongst the city's inhabitants are creating new challenges:

- The city's significant conifer population is not predicted to be able to adapt to the effects of climate change. These trees need to be replaced in a planned and timely manner.
- The public's vision of a city park is an English lawn, the biodiversity of these lawns is almost zero, so the only way to keep them alive in the heatwave days of climate change is intensive watering. *Our aim is to use a public awareness campaign to spread the word about extensive grassland management – resp. the climate adaptive grassland management, and the construction of insect-rich parks that will increase the biodiversity of these areas.*
- Under current park maintenance practices, green waste generated in Veszprém's green spaces is removed from the city. *Our aim is to return the green waste from the parks as mulch after shredding, thus providing nutrient recycling and habitat for insect populations, increasing biodiversity.*
- The city of Veszprém has many large areas characterized by steep slopes. A significant increase in flash floods is expected due to climate change. *Our aim is to regenerate vegetation in areas prone to erosion and to increase the species richness of the vegetation to make it more resistant to the water flowing down from the Bakony hills.*
- In line with current popular trends, the urban population is keen to plant invasive alien species in their gardens, which, when they spread into urban parks, significantly reduce their biodiversity. *Our aim is to organize an awareness campaign that demonstrates the damage these plants cause and offers real alternatives. Connected challenge is to control invasive species in the city (e.g. Japanese knotweed) and restore habitats within the city*
- There is a gap between up-to-date local regulation and their implementation, the enforcement of the management plans should be increased
 - there is conflict between parking and green spaces: the steady increase in the number of cars is causing conflicts with green spaces. Vehicles Park on green spaces and destroy them due to the lack of sufficient parking. The aim is to develop programmes and strategies of action to reduce and eliminate undesirable damage to green spaces by various means.
 - revitalisation of the Séd: a channelised watercourse could be transformed into wetland-seasonal floodplains intertwined in close symbiosis with the city's green spaces, thus increasing biodiversity,
- There are unnecessary enclosures that should be to be removed and turn into green surface,
- The school yards, factory yards are usually covered with concrete and stone - we could increase the territory of green spaces by rethinking and greening parts of institutional and industrial areas,
- Influence on privately owned family house zone: how to increase the biodiversity of the green areas, how to involve the citizens in the sustainable management of these areas (e.g. planting, watering, rainwater harvesting, development of rain gardens or dry gardens)

3.2 Connection to the local strategies and policies

Veszprém's sustainability actions and objectives are closely aligned with, complementing and strengthening, city, regional, national and European strategies. The Municipality of Veszprém has developed range of strategies and programmes that supports the BiodiverCity project as well.

- **Sustainable Urban Development Strategy (SUD)** for the period 2021–2027, which defines the city's medium-term goals and development directions. This strategy is in line with the city's **Smart City Strategy** (2024–2030), which aims to make Veszprém "a city of harmony, high quality of life and strong communities" by 2030.
- The **Carbon Neutral Veszprém 2030 Strategy** action plan, adopted last year, includes considering new recreational needs in the development of green spaces, improving the accessibility of parks, shaping attitudes, improving the environmental values of society, and developing a municipal environmental education and attitude-building program.
- The **Green Surface Strategy** from 2019 was recently revised (Dec 2024) and the planning process and themes described in BiodiverCity and the actions from project Global Goals for Cities got their place in the new document. Veszprém should concentrate on improving the quality of green infrastructure, introducing new, modern methods and procedures, valuing the ecosystem services. focus on water retention and its blue infrastructure.
- The **Environmental Program** deals with measures to promote water retention interventions, improve the quality of park soil, spread bee pastures more widely in the city and encourage green wall surfaces.
- One part of the **Youth Strategy** deals with the protection of the state of the natural environment and urban green spaces, and the expansion of young people's knowledge of sustainability and environmentally conscious lifestyles.
- **Agenda 2030 - Veszprém** actively participated in international cooperation "Global Goals for Cities" project, working with 18 other European cities on the local implementation of UN sustainability goals, the SDGs. This initiative promotes the exchange of experiences and the adoption of best practices, thereby strengthening sustainability efforts at European level.

3.3 SWOT analysis

The URBACT BiodiverCity project offers Veszprém a significant opportunity to promote sustainable urban development by introducing nature-based solutions. By capitalising on strengths and opportunities, Veszprém can develop its green infrastructure, while building on the active participation of the local community and stakeholders. However, potential weaknesses and threats need to be addressed for success, in terms of long-term sustainability, financing and administrative barriers.



Strengths

- Veszprém promotes the increase of urban biodiversity and the development of green infrastructure, contributing to the adaptation to climate change
- Being open to transnational cooperation for about a decade now we incorporate EU experience to our sustainable urban development
- Alignment with sustainability goals: The BiodiverCity project fits into the city's climate protection and green space development strategy, as well as the European and Hungarian sustainability goals.
- Community participation, active civil life of the city (makes easier the involvement of the locals in urban biodiversity programmes)
- long term and high-quality cooperation with the University of Pannonia
- ULG of the project (dedicated and active stakeholders from different organisations and sectors of Veszprem)
- dedicated management of the project
- Increasing quality of urban green spaces along strategy - the development of green infrastructure improves air quality, reduces the heat island effect and creates a more liveable environment.



Opportunities

- The BiodiverCity GPs can contribute to the implementation of Veszprém's green city strategy and to making the urban environment more liveable.
- Exploring and involving new financing opportunities: EU and domestic sources, green investments, as well as corporate and community support (e.g. CSR programs) can also support the maintenance and expansion of the project.
- Stimulating tourism and the economy: Developing green areas and increasing biodiversity can have a positive impact on local tourism and the city's economy.
- Building partnerships: Cooperation with the University of Pannonia, research institutes, local businesses and civil society organizations can promote innovation and the sustainability of the project.

- Applying digital solutions: The introduction of smart city technologies (e.g. sensors, data-driven environmental management) can optimize the efficiency of nature-based solutions.



Weaknesses

- Limited local experience with nature-based
- Lack of human and financial resources - the successful implementation of the projects requires adequate professional capacities and stable financing.
- Long-term maintenance issues: The follow-up and maintenance of completed projects can be challenging, especially if there is no appropriate institutional background.
- Change of mindset is a long process
- Uncertain governance structure
- Administrative obstacles: The permitting and bureaucratic processes related to the development of green infrastructure and the introduction of new solutions can slow down the progress of the project.



Threats

- Political and economic uncertainty: The continuation of the project may be jeopardized by changes in urban policy directions and possible lack of resources.
- Climatic and environmental challenges: The effects of climate change, such as extreme weather events, may affect the sustainability of the implemented green infrastructure.
- Public resistance: Acceptance of nature-based solutions and urban developments may vary, especially if there are no appropriate communication and social involvement.
- Imbalance between “hard” and “soft” investments: In addition to the development of physical infrastructure, investment in human capital (e.g. attitude formation, education) is also crucial, the lack of which may reduce the long-term impact of the project.
- Changeable legislative background.

3.4 Vision

City **main challenge**: mitigation and adaption to the adverse effects of climate change, maintain the long-term resilience of Veszprém in favour of its environment, society and economy. Veszprém plans to meet this challenge through various measures, strategies and programmes like the BiodiverCity project.

BiodiverCity Vision

created by the ULG members of Veszprém

Characteristics of urban biodiversity of Veszprém in 2030

By 2030, Veszprém - while preserving its natural and built heritage - will flexibly adapt to changing environmental conditions - significantly increase its water retention capacity and further improve the quality and functions of green spaces, involving urban communities in planning, decision-making, implementation and maintenance, to improve the sense of belonging and quality of life of city residents.

4. Integrated Approach

4.1. Strategic Objectives

As reaction to the main challenge and based on the vision our main objective is to keep sustainable Veszprém in all aspects.

Strategic Objectives

- In the line with the renewed Green Surface Strategy continues the management of its green values consciously and sustainably, to keep its green spaces of high quality to provide diverse ecosystem services. By 2030, green spaces will form a unified network, significantly increasing the quality of life of the residents
- Veszprém develops measures and technology to keep as much of the precipitation in its territory as possible in the line with the Integrated Municipal Water Management Plan
- Flexibly adaptive management to environmental conditions with the broad scale involvement of stakeholder, the community, with the participation of the private, institutional, non-profit and business sectors, both in strategy creation and implementation.
- Mapping of functioning and sustainable ecological system is preceded by coordinated data collection, structured data analysis and the coordination of geographic information systems, the challenges and conflicts are identified and prioritized.

4.2. List of Actions set under the Intervention Areas



4.3 Integration

Assessment of compulsory integrated approaches

Aspects of integration	Description	Comment
Stakeholder involvement in planning	The full range of stakeholders (considered horizontally and vertically) are engaged in identifying priorities and potential solutions	<p>Invited and involved in the IAP planning (ULG members and other partners)</p> <ul style="list-style-type: none"> - Public sector (Veszprém Municipality esp. Strategic, Urban Development and Urban Management departments; Balaton Upland National Park directorate; environmental authorities) - Private sector and economic actors (municipal companies - Public Utility Company (VKSz); Verga Zrt- local forestry company; Veszprém 2030 Ltd – local development company; water utilities – Bakonykarszt Ltd and other local businesses, like the Package free shop; National Chamber of Agriculture representing the farmers and forestry) - the academic and civil sector (University of Pannonia and other research institutes, environmental and sustainability NGOs like BABAKO, V-meteo Association) - residents and local communities (community groups, schools, youth, retirement communities and social organizations).
Coherence with existing strategies	Actions and objectives are aligned and complementary to existing strategies in place at city, regional, national or European levels	<p>Municipality of Veszprém has developed range of strategies and programmes that support the BiodiverCity project</p> <ul style="list-style-type: none"> • Sustainable Urban Development Strategy (SUD) for the period 2021–2027) • Smart City Strategy (2024–2030) • Green Surface Strategy from 2019, recently revised (Dec 2024) • Carbon Neutral Veszprém 2030 Strategy • Environmental Program • Youth Strategy • At <u>national level</u>: The National Sustainable Development Framework Strategy (NFFS), National Environmental Protection Program (NKP), National Energy and Climate Plan (NECP, 2020–2030) National Climate Change Strategy (NCS), National Biodiversity Strategy is linked to the EU Biodiversity Strategy; National Sustainable Urban Development Strategy. Plus, EU strategies and Agenda 2030.

Aspects of integration	Description	Comment
Sustainable urban development	Actions address all three pillars of sustainable development in terms of economic, social and environmental objectives	In pilot URBACT project Global Goals for Cities Veszprém – with 18 other European cities – worked on localising the Sustainable Development Goals (SDGs) set in UN's Agenda 2030. All aspects – social, economic and ecologic – of sustainability are present in the developed IAP, but we have to admit, that the environmental aspects, the blue and green infrastructure planned actions are stronger. In BiodiverCity project we continue the development of some actions, like the climate adaptive grassland management, the water retention options with the residents to find bonds to the society. Sustainability is the leading principle of the BiodiverCity, we plan in align of the strategic documents and vision of Veszprém.
Integration over time	Planning relevant actions in the short, medium and longer terms and considering any necessary order in implementing actions	<p>Short-term measures (1–3 years) focus on optimizing the existing infrastructure and on quick interventions - green areas – climate adaptive grassland management expansion; wildflower meadows to create habitat for pollinators etc; urban afforestation – microforest tests, rehabilitation of neighbourhood parks, therapic gardens; raingardens; urban beekeeping</p> <p>Medium-term measures (4–10 years) larger investments possible, climate adaptation measures avoiding heat island - and nature-based solutions in urban green spaces, green walls/green roofs; water reservoirs; community programmes: composting, rain-water harvesting; possible institutional investments educating on sustainability and climate change.</p> <p>Long-term measures (10+ years) city/region level well prepared developments towards sustainability, includes projects aimed at introducing a city-wide circular economy, completely transforming water and energy management, developing sustainable urban mobility, protecting biodiversity and ecosystems, increasing the proportion of green spaces, and creating urban microhabitats.</p>

Aspects of integration	Description	Comment
Stakeholder involvement in implementation	The full range of relevant stakeholders (horizontally and vertically) are engaged in implementing planned actions	The stakeholders described in section 1 are deeply involved in IAP planning, their ideas formulate the IAP action list; Veszprém IAP is not the action plan for the Municipality only, it is the AP for the city and in some cases its region. The owners of the planned actions are different actors, those who know the project through-out and are determined to be part of the implementation. In the implementation phase new stakeholders will be involved according to the nature of the action and the needs.

4.4 Analysis of the local challenges

Green transition is in the line of main objectives of BiodiverCity.

The gender aspects were discussed on one of the BiodiverCity Café sessions after Marieke Muilwijk's presentation, the presentation and Marieke's article was shared with our ULG. We feel that in our ULG the composition, decision-making, representativeness is appropriate, the expertise is important not the gender.

Digital: Veszprém's Smart City Strategy (2024-2030) is currently working on data collection and processing, application of digital platforms, sensitization, smartening of the spatial information system, where the data can be channelled. The University of Pannonia is very strong in geoinformatics; thus a potential theme is how to use digitalisation to support the elaboration of an integrated municipal water management (retention) plan.

4.5 Testing Actions

ULG Veszprém has decided to test two actions which are relevant to the city's biodiversity after conducting the exercise 'Newspaper of Tomorrow' in May 2024. The 2 chosen topics are: urban beekeeping and the raingarden.

Urban beekeeping

The practice is increasing its popularity worldwide, and the city of Veszprém offers great opportunities in this field. As urbanisation increases, so does the demand for environmentally friendly solutions and the protection of urban animals, including urban beekeeping. The environmental characteristics and community spirit of Veszprém and the activities of public utility company responsible for the maintenance of green areas (biodiverse grassland management in the city's public parks, perennial beds adapted to local climatic conditions, dead tree programme) can create ideal conditions for urban beekeeping. **We should test if** the urban beekeeping is feasible within the city boundaries of Veszprém? Our wildflower meadows are also bee-pastures? What legal requirements do you need to meet to have a beekeeping facility established?

The test has the following phases

- Preparatory phase – till March 2025
- Testing phase - 04.2025-09.2025.
- Evaluation phase - continuous, closing 10.2025.

We have formed a thematic group within our ULG to discuss the possibilities of the urban beekeeping in Veszprém. The sub ULG group has considered several possible locations all over the city including the flat rooftop of University of Pannonia and some other designated areas. With the help of a beekeeper, we have set up a list of criteria against the most suitable location. We have planned to test urban beekeeping near the extensively maintained green space in the high-density residential area with two families and see what quality and quantity of honey can be produced on the test area. The Public Utility Company of Veszprém has offered a place for the testing action at their heating plant. The produced honey was



introduced and share with locals on our Biodiversity Festival on 22nd June, 2025 and was highly welcomed. Awareness raising and educational programmes are integrated part of the testing.

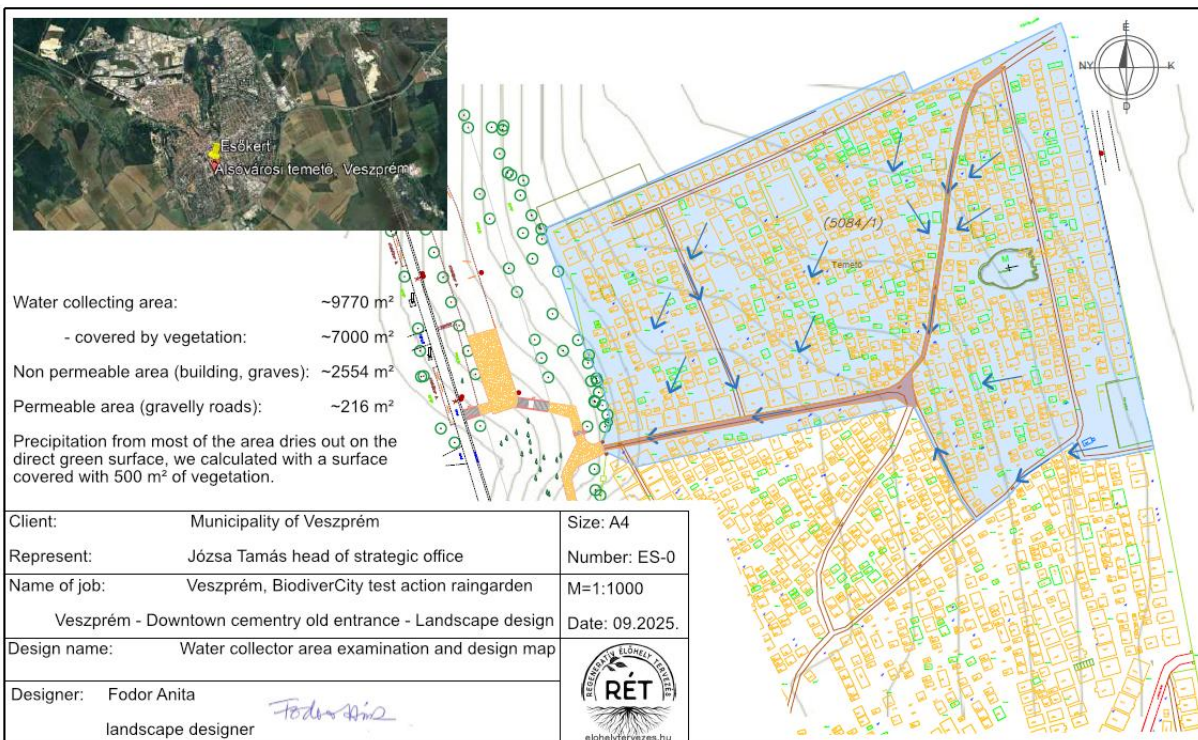
The experiences gained during the preparatory and testing period showed that urban beekeeping is feasible in Veszprém and that the designated green areas provide good living conditions for bees. Among the experimental sites, the hives located on the premises of the public utility company and near green parks also produced enough and good quality honey.

Raingarden

One of the crucial elements of green space management is water and that's why blue issues are in focus of our IAP as well. In the recent years more heatwaves struck the city, the air humidity significantly decreased therefore large areas of green fields dried out. Meanwhile due to the change of yearly distribution of the rain we can expect less water during the vegetation period. Another problem is the increased intensity of the precipitation which prevents the water from infiltrating deep into the soil but causes more runoff water. It is vital that we retain more water in the soil, so we have decided to choose and test a NbS to examine how we can implement it in our city.

The main objectives of this testing action were discussed during the ULG meetings and for the implementation a focus subgroup was formed. We have decided to test the implementation of a raingarden in a public space where we can measure the effects of water retention and where we can easily disseminate for the residents. Relying on the local knowledge of the ULG members one area has emerged to be suitable for the implementation but the result of a deeper inspection of the site concluded that it won't be suitable for multiple reasons.

Considering the experiences of the first attempt the thematic group has collected a list of possible implementation areas which were marked on a map and put to an evaluation form. The 13 proposed implementation sites were reduced to 9 with the help of twenty selection criteria and in June one test site was selected. Anita Fodor, landscape architect and ULG member prepared detailed technical plans for the site in September, and the implementation of the raingarden was fulfilled in November 2025, the results of the test will be evaluated later.



5. Action Planning Details

Action no1: Expanding the area of climate-adaptive grasslands

A semi-natural urban grassland area is more resistant to external influences and provides a habitat and food source for much more animals and is an excellent beekeeper. A wildflower urban grassland has a natural character, allowing nature to come closer to the city dwellers. It requires much lower maintenance than a lawn Veszprém proactively addresses the challenges of climate change, and sustainable grassland management plays a key role in its green space strategy. As part of the Climate adaptive grassland management and Wildflower Veszprém Program the mowing frequency. A total of 91 plant species were found in the sampling areas between 2016 and 2019, with 74 new species in the first year, indicating an increase in biodiversity and the proportion of perennial species. This approach has several significant advantages. Grasslands are better adapted to the urban climate, reduce surface temperatures, and retain more water, effectively mitigating the urban heat island effect, especially during hot summers. In addition to increasing biodiversity, significant maintenance cost savings are also achieved, for example, 62% savings in the green belt along the bike path. The "Long Table Picnic + Biodiversity Festival (2025)" and other communication activities raise environmental awareness among the population, promoting social acceptance of the program and collective responsibility for the urban environment. Veszprém has received numerous national and international awards for these efforts, including the Entente Florale Europe gold rating or became URBACT GP in 2024. This conscious, ecology-based lawn management is exemplary in increasing urban resilience, contributing to a more liveable and sustainable future.

Future: work on the greater social acceptance of the process and - beside expanding the climate adaptively managed areas on public spaces – the involvement of private gardens into the new thinking for more sustainable and more wildflower-rich areas is planned for the next 3-5 years.

The habitat and health protection role of these areas can only truly manifest themselves if they are able to become coherently sustainable and resilient systems, which is why we urge the extension of the good practice of wildflower lawns to the large, typically peripheral areas of Veszprém, as well as to private gardens.

Action Coordinator

Future Municipal Green Office with the involvement of Public Utility Company (VKSz)

Connection of local strategies

Green surface strategy

([https://veszprem.hu/wp-content/uploads/2023/08/Zoldfeluleti Strategia II resz Strategia.pdf](https://veszprem.hu/wp-content/uploads/2023/08/Zoldfeluleti_Strategia_II_resz_Strategia.pdf))

Sustainable urban development strategy

([https://veszprem.hu/wp-content/uploads/2023/08/VMJV Fenntarthato varosfejlesztesi strat 2021-2027.pdf](https://veszprem.hu/wp-content/uploads/2023/08/VMJV_Fenntarthato_varosfejlesztesi_strat_2021-2027.pdf))

Implementation steps

Nr	Milestone	timing	indicator	resources needed
I.	Expand the areas included in climate-adaptive grassland management in public areas	2026-2030 each autumn 2 months	m ² of newly incorporated areas annually	1 person who is aware of urban managed areas, 2 professionals who micromanage (periodic area visits, scheduling and determining mowing schedule).
II.	Public information campaign	2026-2031 continuous	quantity of signs, information materials	communication cost from 1000 EUR/year HR: designers, professionals
III.	Creation of Veszprém seed mix	2027-2029 (preparation in spring, collection of seeds in from late summer)	collected quantity and species list	HR: 1 gardener, 1 assistant
IV.	Bioblitz Party: organization in the already operating urban sample areas	2027 spring	city map with species lists	communication costs from 4 000 EUR 2-3 professional manager + 1 professional manager per location
V.	Assisting and accompanying the wildflower planting of garden city residents.	2027-2030 spring	m ² of private wildflower gardens created	2-3 professional guide

Overall timing of the programme: 2026-2030 with annual planning

Overall resources needed:

Financing: All milestones should be implemented from local government funds, possibly by involving funding from tenders. The maintenance of the extensive areas could be achieved at lower cost with fewer mowing and working hours than at present, and in the case of public involvement planned for later stages, since the program targets the private gardens of the population, the maintenance does not impose a financial burden on the local government.

Operation: 1 person who is aware of urban managed areas, 3-4 other professionals

Risk assesment

Nr	Risk	Probability	Possible impact	Risk reduction
I.	There are no areas that can be involved.	low	it makes it unsuccessful	preliminary assessment
II.	Information, education is not clear enough, or does not reach the goal	medium	its continuation and extension to private gardens becomes uncertain	professional content production
III.	Missing technology to produce the right seed mixture	high	it makes it unsuccessful	adopting “good practice” from appropriate sources
IV.	Description of expected risk: residents living in suburban areas do not participate in BioBlitz in an adequate proportion	high	it leads to less success than expected	appropriately positioned communication can address the target audience
V.	Dissatisfaction of private garden owners due to impatience	high	it makes effectiveness uncertain	appropriate education among those affected and the entire population

Action no2: Urban beekeeping in Veszprém

The pollinators play a vital role in the reproduction of many plant species which is critical for maintaining the diversity and health of urban green spaces. We have launched an experimental project about urban bee keeping within the framework of URBACT IV BiodiverCity program. Relying on the results of the testing action we have decided to proceed on with the urban bee keeping and make it a long-term project of the city. The long-term objective of the project is to enrich the urban biodiversity by give place to the small pollinators throughout the city furthermore to promote and boost the consumption of the locally produced honey.

Action Coordinator

Municipality of Veszprém city / Green office (to be established)

Connection of local strategies

Ensuring species diversity in urban green spaces by introducing pollinating bees into the urban environment, Green Surface Strategy of Veszprém.

Implementation steps

Nr	Milestone	timing	indicator	resources needed
I.	Evaluation of the testing action.	2025 – 2026 Jan	documentation	HR: 2-3 expert (1000 EUR)

II.	Development of an operating model	2026 Jan	operational model	1 expert (400 EUR)
III.	Contracting the beekeeper	2027 Feb	contract document	2 000 EUR/year HR: 2 beekeeper
IV.	Educational campaign.	each spring	number of reached people	500 EUR/year HR: 1 expert
V.	Monitoring, re-design, involve new areas based on the need and possibilities	2025-2031 annually, November	results of the years (kg of produced honey) nr of sites	HR: expert (300 EUR/year)

Overall timing of the programme: 2025 - continuous

Overall resources needed:

1 400 EUR of start + 2 800 EUR/year

For educational campaign – 500 EUR/year

Financing: Municipality buys and utilises the produced honey and this keeps the program in motion and progress

Risk assessment

Nr	Risk	Probability	Possible impact	Risk reduction
I.	No provided place for the hives.	low	medium	long term agreement with Municipality of Veszprém city
II.	Public resistance.	medium	high	educational campaign
III.	Disinterest in consumption of the city' s honey.	low	low	tasting and educational campaign

Action no3: City in the forest – forest in the city

The city of Veszprém has made a long-term commitment to environmental sustainability, a liveable urban environment, and the development of green infrastructure. The city's geography provides an ideal basis for the conscious development of urban forests and the implementation of climate-conscious urban planning. The Urban Forests project gives Veszprém the opportunity to develop its local strategies, green infrastructure, and community connections to urban nature based on international best practices. Participation in the project is of strategic importance for achieving the city's long-term green goals. Veszprém's "arboretum city" concept, which aims to use urban green spaces, woody plants, and habitat diversity as an integrated urban development tool, can gain new momentum in the URBACT project.

As part of the project, Veszprém aims to introduce a digital tree inventory and monitoring system that will help track the life cycle of trees, optimize maintenance, and plan planting programs. At the same time, the city also plans to develop a green public space management protocol. The city's main goal is to actively involve the population, local civic organizations, schools, and businesses in the planning and implementation of green projects. This can be achieved through community tree planting programs, an "adopt-a-tree" system, and volunteer participation in the maintenance of green spaces. Veszprém's goal is to reduce the urban heat island effect, improve air quality, and increase shade in densely built-up downtown areas. This is a key area of so-called urban climate resilience, which it aims to achieve by creating new urban microforests, green corridors, and multifunctional green public spaces. The goal is to strengthen the urban landscape by focusing on sustainability and closeness to nature.

Action Coordinator

The Municipality of Veszprém in partnership with the municipally owned city management and urban development companies, the University of Pannonia and interested NGOs.

Connection of local strategies

1. Integrated Urban Development Strategy of the City of Veszprém

Time frame: 2014–2020, but its updated version is also linked to the 2021–2027 EU cycle.

2. Veszprém Green City Program

3. Climate strategy of City of Veszprém and Climate Strategy of County of Veszprém

(link: https://vpvarmegye.hu/images/joomlatools-files/docman-files/hivatal/palyazatok/klimastrategia_vm.pdf)

4. Veszprém Sustainable Urban Development Strategy

5. Veszprém 2030 urban development concept – focus on cultural and environmental sustainability.

6. Local Equal Opportunities Program, Children and Youth Concept – community participation, health awareness.

7. Green Surface Strategy (2025): prefers the establishment of additional micro -forests and forest gardens within the framework of activities serving to maintain urban biodiversity.

Implementation steps

Nr	Milestone	timing	indicator	resources needed
I.	Creation of a Local Green Infrastructure Development Plan	2026 may-oct	City wide development plan	20 - 30 000 EUR
II.	Development and introduction of the Urban Forest Data Platform	2026 nov – 2027 oct	number of trees in the Data Platform	30 – 50 000 EUR

		data maintenance - continuous		
II.	Encouraging community green programs	2026 jun - continuous	Number of participants	1 000 EUR/year
IV.	Urban forestry pilot projects	2027 - 2031	number of forest patches	10 000 EUR/year
V.	Review and correction of urban tree, hedge and shrub care practices	from 2028 febr – apr annually	quantity of areas maintained (m ²)	2 000 EUR/year
VI.	Expansion of the dead tree program	2026 – when possible	number of dead trees in the city	600 EUR/boards
VII.	Strengthening the shrub layer	2026 - continuous	number of renewed shrub layers	1 000 – 10 000 EUR/parks

Overall timing of the programme: starting in 2026 with some elements

Overall resources needed

Financing: 50 000 – 80 000 EUR investment and 15 000 – 30 000 EUR/year

Operation: expertise cost for Local Green Infrastructure Development Plan and the Data platform; human resources for the coordination and the data maintenance

Risk assessment

Nr	Risk	Probability	Possible impact	Risk reduction
I.	Organizational and institutional challenges	low	high	Strategic partnership building: with internal and external partners (forestry, civil organizations, university)
II.	Site-specific environmental challenges	medium	low	Knowledge sharing and training: URBACT workshops, public awareness raising
III.	Social and community barriers	medium	medium	Knowledge sharing and training, pilot projects
IV.	Financial constraints	medium	high	The action might start later aligning with the raised funds from Municipal budgets, from institutional budgets and projects

Action no4: Community Composting in Veszprém

The growing demand for sustainability in cities and the spread of environmental awareness are increasingly highlighting community composting as a key tool for waste management and environmental protection. This practice is not only an effective way to treat organic waste but also has a several positive social and environmental impacts. The on-site treatment of green waste has an indirect positive impact on biodiversity. The resulting humus substances improve the soil structure, thereby protecting the soil from erosion, improving its water and heat management. It increases the activity of soil-dwelling organisms and strengthens the immune system of plants.

Action Coordinator

The Municipality of Veszprém

Connection of local strategies

Energy Strategy 2010–2025 Home composting, composting plant, campaign for green waste composting

Environmental Protection Program 2026 Green waste compost + compost incorporation, promotion in public areas and among the population

Implementation steps

Nr	Milestone	timing	indicator	resources needed
I.	Studying good practices	2026 – continuous	nr study visits plan: 3	650 EUR/study visit
II.	Searching for contributing communities	2026 sept	list of possible contributors	coordinator
III.	Select the location and coordination with supervisory authorities	2027	number of permits plan: 10 sites	500 EUR/composter
IV.	Education of garden communities	2027 spring – ongoing twice a year	educated participant	1 500 EUR/year
V.	Installation of composters	2027 – 2029 3-4/year	number of installed composters	1 000 EUR/composter
VI.	Awareness campaign, press conference	2027 marc – ongoing plan: 3	number of press conference nr of communities reached	1 500 EUR/campaign

Overall timing of the programme: starting in spring 2026 – ongoing

Overall resources needed:

1 000 - 3 000 EUR for starting, + 500 – 1 500 EUR/composter, + 1 500 EUR/campaign

Risk assessment

Nr	Risk	Probability	Possible impact	Risk reduction
I	Public resistance	low	medium	information campaign
II	Unproper usage	medium	low	education campaign
III	Vandalism	medium	medium	civil awareness

Action no5a: Establishment of rain gardens

Due to climate change, intense rainfall events are becoming more frequent in the city of Veszprém, which, among other things, require the creation of municipally maintained rain gardens to address them. These facilities naturally reduce the intensity of surface runoff, reduce the risk of flooding, prevent erosion, collect and filter rainwater, improve the urban microclimate, mitigate summer heat waves, and increase biodiversity. A cost-cutting factor for the municipality is that the load on the existing rainwater drainage infrastructure will be reduced; new facilities can be smaller in capacity and cheaper when considering water retention in the watershed. City residents will receive an aesthetic, more liveable environment, where air quality improves and the number of recreational areas increases. Priority is given to residential areas, areas around educational institutions, and busy public spaces within the project. A community education campaign is being launched to engage the public, increasing local climate awareness and encouraging further individual initiatives.

Action Coordinator

Veszprém Urban Development and Innovation Ltd; Maintained by: Public Utility Company (VKSz)

Connection of local strategies

Economic Program 2025–2030 – Water Conservation and Rain Gardens

The City's medium-term economic program specifically includes the installation of rain gardens as part of the green infrastructure in the city centre and in condominium green areas.

Related chapter: “Supporting the water cycle – creating rain gardens in public parks and condominium green spaces”

Green Space Strategy 2025

This document details tools for strengthening urban resilience and biodiversity, including new green infrastructure developments such as rain gardens.

Related chapter: “Development of green infrastructure – climate adaptive solutions”

Sustainable Energy and Climate Action Plan (SECAP)

SECAP – as part of the Integrated Urban Development Strategy – aims to strengthen climate resilience, which can also include rain gardens.

Related chapter: “Climate adaptation – water management interventions and green infrastructure”

Implementation steps

Nr	Milestone	timing	indicator	resources needed
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I.	Identification of possible locations	2026 nov	number of selected sites (pcs), water collection capacity (m ³)	32 man-hours ~1 800 EUR
II.	Planning	2027 Jan – Feb	Number of approved plans (pcs)	2 man-weeks, ~2 100 EUR
III.	Preparatory work	2027 March	size of prepared area (m ²)	1 250 EUR/piece
IV.	Construction	2027 May	number of implemented rain gardens (pcs)	1 250 EUR/piece
V.	Preparation of Maintenance Handbook	2026 Nov	1 document	2000 EUR

Overall timing of the programme: 6 months/ raingarden

Overall resources needed: 2 000 EUR + 5 000 EUR/piece + 2000 EUR handbook

Financing: It is recommended to involve the representative framework for the establishment, or the municipal urban development framework. Perhaps a TOP application.
The maintenance is included in the local government's VKSZ contract.

Operation: Public Utility Company

Risk assesment

Nr	Risk	Probability	Possible impact	Risk reduction
I.	Lack of proper sites	medium-low	significant	Extensive expert involvement, thorough on-site analysis (e.g. utilities)
II.	Extinction of plants, incorrect plant selection	low	low	Hiring an expert who knows the local climate and soil conditions. Periodic inspections and preparation of an appropriate maintenance handbook. Public education on plant protection.
III.	Lack of maintenance work or improper performance	medium	low	Preparation of a regular maintenance schedule, delegation of maintenance tasks to designated responsible persons, continuous public involvement (public feedback system) and awareness campaigns.

Action no5b: Exploring water retention options in Veszprém for watering urban green spaces with rainwater

The municipality of Veszprém is launching an action to map out urban water retention options to reduce the load on the stormwater drainage infrastructure, to ensure that as much of the fallen, preferably clean, stormwater as possible is infiltrated, and to ensure that the retained precipitation can be used to sustainably irrigate green areas with rainwater. More efficient water management can reduce the likelihood of water damage and the risk of local water shortages, and increase the proportion of infiltrating water, which positively affects the replenishment of the city's drinking water supply, as well as improving the urban microclimate and reducing heat island effects. All these effects contribute to making the city more resilient to the negative effects of climate change. The cost of watering green areas is reduced by reducing the use of tap water, thus achieving significant savings in the long term. The city's climate adaptation performance is improving, which can help it successfully participate in further EU and national tenders, and increase Veszprém's prestige in the field of sustainability. The better condition of green spaces directly increases the comfort of city residents, reduces summer heat and improves air quality. The population's climate awareness is increasing, which can lead to the development of further environmentally conscious, sustainable lifestyle habits at the community level. The new rainwater treatment infrastructure created during the project will make the urban environment more liveable and greener in the long term.

Action Coordinator

Green Office

Connection of local strategies

Veszprém Sustainable Urban Development Strategy (2021–2027)

Sustainable Energy and Climate Action Plan (SECAP)

Smart City Strategy of the County Town of Veszprém (2024)

Veszprém County Environmental Protection Program

Veszprém City Green Space Strategy (2025)

Implementation steps

Nr	Milestone	timing	indicator	resources needed
I.	Geospatial survey of the drainage conditions. Location determination.	2027 april-may	number of potential water retention sites (pcs)	2 man-months (8 000 EUR)
II.	Technical proposal.	2027 jun-aug	Number of locations supported with technical proposals (pcs)	3 man-months (18 000 EUR)

Overall timing of the programme: 5 months

Overall resources needed: 5 expert man-months

Cost: 25 000 – 30 000 EUR

Financing: It is recommended to involve the representative framework for the establishment, or the municipal urban development framework. Perhaps a TOP application. The maintenance is included in the local government's VKSZ contract.

Risk assessment

Nr	Risk	Probability	Possible impact	Risk reduction
I.	Lack of resources.	medium-high	significant	Preliminary, detailed budget planning, allocation of appropriate reserves, continuous monitoring and risk analysis during implementation.
II.	Inappropriate location selection.	low-medium	medium	Thorough preliminary on-site inspections, involving experts in the design phase, using pilot projects to identify potential errors early.
III.	Deterioration, maintenance difficulties.	medium-low	low	Development of a regular maintenance schedule, preliminary calculation of maintenance costs, public awareness and involvement in maintenance tasks (e.g. voluntary community programs).

Action no6: Preparation of an Integrated Municipal Water Management Plan

The Integrated Municipal Water Management Plan is a documentation that can be treated as a basic water management document for the administrative area of the city, which, following a specific theme, explores the problems and connections between certain areas of water management and spatial development concepts in the administrative area of the city. The plan takes into account the watercourses, lakes, reservoirs in the administrative area of the settlement, reviews the rainwater drainage infrastructure, the sub-catchment areas of watercourses, ditches, protection facilities, wells, hydrogeological protection areas, the characteristics and facilities of public drinking water supply and wastewater disposal systems, industrial and agricultural water uses, the totality of water quality problems, the relationship between these, the water management relationship with neighbouring settlements, the common points with certain development plans and concepts, etc. The basic goal of preparing the Integrated Municipal Water Management Plan is to provide decision-makers with a comprehensive picture of the water management problems affecting the city's everyday life and other issues generated by these problems (e.g. land use restrictions, capacity problems, conditions affecting the quality of the city's surface and groundwater, areas exposed to flash floods and erosion, ecological spatial planning, water retention, increased infiltration), which may affect the development of certain areas of the city. The material lists the most significant water management problems, for the solution of which financial resources and applications can be sought. The management of these problems must be prepared at the plan level and in all cases must be coordinated with other spatial development ideas. It is important to emphasize that the problems identified by the Integrated Municipal Water Management Plan must be solved in the spirit of adapting to increasingly extreme weather conditions. One of the goals of the Integrated Municipal Water Management Plan should definitely be to create a long-term liveable urban environment that is balanced in terms of water management, resilient to the effects of climate change, and resilient to the effects of climate change by properly addressing the problems outlined in the plan.

Action Coordinator

Municipality of the City of Veszprém (Strategy Office)

Connection of local strategies

Urban Water Retention, Green Space Strategy

Implementation steps

Nr	Milestone	timing	indicator	resources needed
I.	Decision to prepare the Municipal Water Management Plan.	2025 dec	General meeting resolution on procurement	-
II.	Submit a TOP application for preparation	2026 Jan-Feb	Application documentation, grant agreement	10 000 EUR
III.	Announcement and implementation of a public procurement procedure	2026 Apr-Sept	Selected design specialist	2 500 EUR/piece

IV.	Preparation of documentation	2026 Oct-2027 Marc	Completed documentation draft	175 000 EUR/piece
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Overall timing of the programme: 15 months

Overall resources needed: 200 000 EUR

Financing: TOP tender

Risk assessment

Nr	Risk	Probability	Possible impact	Risk reduction
I.	Short budget	high	high	well prepared documentation

Action no7: Therapeutic gardens in Veszprém

Therapeutic gardens represent a special form of urban green spaces, the purpose of which is to use plants and related activities as therapeutic tools for positive nature-based psychological interventions. These calming, self-confidence-building and physically and mentally stimulating activities promote the social integration, education, psychological and physical development of individuals and certain special groups (elderly, people living in vulnerable families, people suffering from mental illness). They also promote acceptance and inclusion, as well as strengthening community belonging and can be successful tools for increasing commitment in the management of social sustainability at the city level. Veszprém is particularly suitable for the implementation of such projects, especially since the European Capital of Culture (ECOC) 2023 community development programmes, when a strong partnership network and good cooperation have been established between existing institutions and city civil society organizations. This project can strengthen the cohesion and quality of life of Veszprém communities in the long term.

Invited institutions:

1. The city's **Care Centre** deals with the elderly and those in need of care. The therapeutic garden can provide them with dementia-reducing activities, a healing-supportive environment, community programs, and a location for individual and group therapies.
2. **Maltese Charity** Service has experience in implementing and maintaining social programs e.g. for homeless and deprived families, they provide professional support and facilitate the involvement of volunteers.
3. The involvement of the local **Family Support and Child Welfare Centre** allows the therapeutic gardens to become accessible to families in need, the program offering to be expanded with children's programs and educational activities, and the actions to reach broader segments of the community.
4. Viktor Göllesz **Day Care Centre for People with Disabilities**

Action Coordinator

Coordinator: Veszprém Development and Innovation Ltd in partnership with the above-described institutions and with the active support of the Municipality

Connection of local strategies

1. *Integrated Urban Development Strategy (ITS) (original period 2014–2020, but its updated version is also linked to the 2021–2027 EU cycle.*
2. *Veszprém Green City Program project aimed at renewing urban green spaces and public spaces, treated as a priority investment.*
3. Climate strategies (e.g. Climate strategy of Veszprém County / SECAP of Veszprém) - main goals are: adaptation to climate change, energy efficiency, sustainable resource use
4. Local Equal Opportunities Programme (HEP_2025) designs in details all programs aimed at improving the situation of vulnerable groups

Implementation steps

Nr	Milestone	timing	indicator	resources needed
I.	Location selection on the participating institutions' own territory or in an easily accessible area close to it.	2028 jan-feb	number and placement of the sites	1 expert (with the help of a local action group) 800 EUR
II.	Development of the therapeutic garden: preparatory work with the soil, selection of plants, professional supervision of the garden installation	2028 marc-aug	number of developed therapeutic gardens	15 000 EUR/garden
III.	Training: Teaching horticultural therapy skills to those involved in the program, preparation of a methodological manual/guide.	2028 sept	number of caretakers involved number of participants 1 guide created	800 EUR/garden
IV.	Operation. Conducting therapeutic programs (special programs for the elderly, families, active people, children).	2028 oct continuous	number of programmes annually number of participants	1 000 EUR/garden/year
V.	Monitoring the health and mental state of those affected with the involvement of psychologists (1 test per year based on a to be developed methodological manual).			2 000 EUR

Overall timing of the programme: short and medium term; start in 2026, develop 5 therapeutic gardens in the /close to the institution till the end 2027; continuous operation after

Overall resources needed: design and development investment cost: 17 000 EUR/garden; operation: 1000 EUR/garden/year

Financing: Prosed as of the elements of the TOP+ “Veszprém Lifts Up” project, which aims to develop local human services

Operation: 2 care takers, 1 therapeutic gardener – providing training and supervision Created therapeutic gardens (5 pcs), Number of people participating in the training, number of people participating in the activities.

Risk assessment

Nr	Risk	Probability	Possible impact	Risk reduction
I.	Uncertainty of project financing	medium	lack or delay of external funding implementation start may be delayed underestimated budget	Preparation of a feasibility study (technical, financial, legal aspects) Preparation of financing plan for 3+ years
II.	Infrastructure and zoning risks	medium	Lack of a suitable location Soil quality problems Area affected by noise or air pollution: Creating a calm, therapeutic environment is only possible with certain spatial conditions.	careful selection of more possible locations with the cooperation of all involved institutions involvement of landscape architect
III.	Social and operational risks	low	Difficulties in involving target groups Lack of clarity on maintenance and operational responsibilities Public resistance	planning communication
IV.	Occupational and operational risks	low	Lack of therapeutic expertise Lack of gardening knowledge Inappropriate species selection	
V.	Legal and administrative risks	medium	Permit difficulties Personal data management Regulatory deficiencies: If there is no local regulatory framework to protect green space functions, it will jeopardize the garden's survival in the long term.	

Action no8: Veszprém Residential Green Centre

Climate change, urbanization and biodiversity loss are challenges that require urgent responses at the local level. There are a significant number of privately owned green spaces in the residential areas of the city of Veszprém, which can become an important ecological network through coordinated and conscious management. The aim of this action plan is to strengthen education and community support so that the population can become an active player in increasing biodiversity.

The main objective is to establish a Veszprém Residents' Green Centre, which performs a professional, attitude-shaping and community-building function and supports residents in the application of biodiversity-friendly gardening solutions (planting native species, rain gardens, dry gardens, water retention, creation of natural habitats).

Main elements:

- Public education programs: organizing regular lectures, workshops and on-site consultations on garden maintenance, composting, water retention, and pollinator-friendly plants.
- Establishing a demo garden in the Green Centre: creating a model rain garden and dry garden that illustrates good practices.
- Free plant and seed exchange campaigns: encouraging a planting program that prefers local, native species.
- Residential advice and site visits: providing garden-friendly diagnosis and development suggestions for garden owners.
- Creation of a community platform: an online interface where residents can share their experiences, ask questions, and organize events.
- Equipment rental system: making compost bins, water collection tanks, and soil loosening tools available.

The program will increase biodiversity in residential areas, improve the microclimate, reduce irrigation needs, and increase environmental awareness among the population. The urban ecosystem will become more resilient to extreme weather events, and Veszprém will become a more liveable city.

Action Coordinator

Veszprém Urban Development and Innovation Ltd. (VVI)

Connection of local strategies

The project fits into the Veszprém 2030 Sustainable Urban Development Strategy, especially the chapters “strengthening green infrastructure” and “climate adaptation”. The action contributes to the expansion of the city’s ecological network and the application of nature-based solutions by involving the population.

Implementation steps

Nr	Milestone	timing	indicator	resources needed
I.	Creation of a green centre.	2026 jan - july	number of cooperation agreements (pcs), website and social media accounts (pcs)	125 000 EUR
II.	Launching educational and community programs	2026 aug-dec	number of educational events (pcs), number of direct accesses (people), number of online followers (people), number of demo gardens (pcs)	50 000 EUR in 1 st year later: 100 000 EUR/year
III.	Opening of a tool rental shop.	purchase: 2026 apr rental – ongoing	number of borrowed devices (pcs), number of participants in the competition (persons)	10 000 EUR/start 350 EUR/months

Overall timing of the programme: 18 months

Overall resources needed: Establishment: 125 000 EUR, Maintenance: 100 000 EUR/year

Financing: The Green Centre can be maintained from local government (mainly the communal tax) and grant funds, as well as on a partnership basis (e.g. involving ecologically minded professionals, civil organizations, and gardening businesses).

Volunteering and the activation of local communities ensure the long-term operation of the program. *Operation:* Veszprém Urban Development and Innovation Ltd. (VVI)

Risk assessment

Nr	Risk	Probability	Possible impact	Risk reduction
I.	Low public participation and interest.	medium	significant	Communication campaign, involvement of role models, gamification.
II.	Selection of an inappropriate or unsustainable site for the Green Centre.	low	medium	Preliminary environmental, accessibility and logistical analysis of the site. Search for a multifunctional facility (existing community centre, such as ActiCity).
III.	Improper maintenance or drying out of the demo garden.	low	significant	Use of resistant, native plants (low maintenance requirements). Regular use of rainwater harvesting and mulching to stabilize water balance. Digital intelligent irrigation system.

6. Implementation Framework

6.1 Mechanisms of the governance

Local Implementation of the Action Plan

Reaching the objectives outlined in the Environmental Strategy requires well-organized and accountable implementation, shared responsibility, and the engagement of the widest possible community. At the same time, responsibility and transparency cannot be compromised. The following section summarizes the main actors and their responsibilities within the strategy.

General Assembly

The general assembly approves the municipality's annual budget and regulates various aspects of city life through its decrees. It also deals with wide range of policy documents ensuring the long-term development of the city.

Vice-Mayor responsible for Environmental Protection

The Vice- Mayor ensures that sufficient resources are provided for implementation, establishes processes, and supervises their progress. Effective action depends on clear roles, deadlines, and measurable objectives. The Vice-Mayor chairs the Environmental Council and uses political authority to promote consensus-based decision-making. In addition, the Vice-Mayor must issue the annual environmental report.

Mayor's Office and Municipal Departments

The Mayor's Office, led jointly by the Mayor and the Chief Notary, serves as the professional administrative body. Its structure is both vertical and horizontal. The Chief Notary allocates tasks among units and department heads, monitors performance, and secures staff development or fills knowledge gaps as needed. Civil servants, by their oath and mandate, must represent the city's interests—thus also the objectives of the strategy—in their daily activities, and are expected to suggest improvements to its processes. The other departments involved: Strategic, Urban Development, Urban Management, Social.

Sustainability Councillor

Plays a crucial role in shaping and implementing policies that promote long-term environmental, social, and economic well-being. Their responsibilities include developing climate action plans, coordinating energy efficiency and renewable energy projects, and ensuring compliance with national and international sustainability targets. They engage with local businesses, schools, and community groups to raise awareness and encourage active participation in sustainable practices. The councillor also advises the municipal council on resource management, waste reduction, sustainable mobility, and biodiversity protection. Monitoring progress through data collection and reporting is another key duty, as is securing funding from regional, national, or EU programs. Importantly, a Sustainability Councillor acts as a bridge between citizens and decision-makers, ensuring that local voices are reflected in policy, while fostering partnerships that strengthen resilience and improve quality of life for current and future generations.

Environmental Council

The Council's role is to embody and represent the principles of the Environmental Strategy in professional and public spheres, while actively pursuing its goals. It is also tasked with communicating the strategy within its constituencies.

Environmental Forum

The citizens' forum encourages public awareness, participation, and mobilization for strategy implementation. However, as it is not a permanent body, it holds no formal mandate or obligations.

Veszprém Public Utility Company Ltd. (VKSZ Zrt.)

As the local utility provider, VKSZ Zrt. plays a central role in carrying out the strategy's processes. Its operational knowledge and datasets are indispensable for monitoring results and providing feedback. The company is expected to keep municipal ownership of services and infrastructure as high as possible, foster energy efficiency, renewable use, and sustainable heating, and at times act with business-like pragmatism. In coming years, it will need to reassess non-residential activities (e.g., waste recycling) and adopt an economic approach.

Veszprém Urban Development and Innovation Ltd.

The Veszprém Urban Development and Innovation Ltd. is a municipally owned company responsible for planning and implementing projects that shape the city's future. Its main tasks include managing urban regeneration, coordinating infrastructure and public space development, and supporting innovative solutions in mobility, energy efficiency, and digital services. It also assists in attracting investment, preparing EU-funded projects, and ensuring that Veszprém's growth remains sustainable and forward-looking.

Civil and Community Organizations

Community groups are vital in representing local society. Beyond defending their members' interests, they also symbolize the city as a whole. Their environmental awareness and knowledge of the strategy are critical. They must balance advocacy with cooperation with city administration. Because miscommunication often causes tensions, their role in maintaining accurate public dialogue is crucial. The city works particularly with three major NGOs: BaBaKo (Bakony-Balaton Environmental Education Centre Association) and MOKE (National Environmental Association of Technicians).

Local Media

Contrary to the widespread notion that only negative events are newsworthy, the media should highlight positive outcomes of the strategy, share its benefits, and publish educational content to raise awareness among residents.

University of Pannonia

Universities bear responsibility beyond education and research. The University of Pannonia is committed to the social and sustainable development of the Central Transdanubian region. Its research groups contribute to innovation and solutions for economic and social challenges. The Rector ensures that university experts support the city in achieving the strategy's aims. The University also plays a decisive role in driving technological change, advancing sustainability, and addressing environmental or industrial risks.

Business sector stakeholders

Although Veszprém is not home to heavily polluting industries, it does host several major energy consumers. Achieving the strategy's targets requires their active involvement. Many companies are already planning efficiency improvements and renewable energy projects in line with the strategy. Their collaboration is indispensable to the city's sustainable future.

6.2 How the participatory approach will continue into the implementation phase and after the project closure

The participatory approach that has been central to the planning of the BiodiverCity Integrated Action Plan will remain a cornerstone during implementation and beyond the official closure of the project. This continuity is ensured by embedding participation into both governance structures and practical activities. During implementation, citizens, NGOs, schools, and businesses will be actively involved through community planting events, educational workshops, and volunteer programs. Each action plan—whether focused on climate-adaptive grasslands, urban beekeeping, community composting, or therapeutic gardens—includes milestones that require citizen engagement, such as BioBlitz biodiversity surveys, “adopt-a-tree” schemes, or seed exchange campaigns. These activities are designed not only to achieve technical outcomes but also to strengthen long-term civic ownership.

Institutionally, the Environmental Forum and the Environmental Council will serve as platforms to keep dialogue open between the municipality, professional stakeholders, and the public. The University of Pannonia will continue to support scientific monitoring and knowledge transfer, ensuring that community contributions relate to expert evaluation. Civil organizations such as BaBaKo and MOKE will maintain their advocacy and educational roles, helping to mediate between the city and residents.

After project closure, the participatory model will be sustained by integrating community-based activities into municipal strategies and budgets. For instance, maintenance of rain gardens and wildflower meadows will rely on shared responsibility between public services and residents, while the Green Centre will function as a hub for continuous training, advisory services, and community exchange. By institutionalizing these mechanisms, participation evolves from a project requirement into a cultural norm. This ensures that local communities remain empowered to shape, monitor, and expand biodiversity-friendly practices, securing resilience and sustainability in Veszprém's long-term development.

6.3 Funding approach for the implementation of the IAP

Principles to be followed in financing the actions: diversification of funding sources, creation of innovative financing instruments (e.g. social impact bonds, public-private partnerships, crowdfunding, participatory budgeting), efficient financial management, and continuous mapping of available funding opportunities.

In the case of crowdfunding, many people contribute the necessary financial background for a specific project or development, usually via the internet. The advantage of crowdfunding is that it enables community members to take part in shaping the city by putting forward and realizing their ideas and proposals. As a result, developments can be implemented that would not otherwise materialize within the traditional municipal framework. Thus, crowdfunding not only provides additional financial resources but also increases civic engagement and activity,

empowers the community to drive change, and fosters dialogue and cooperation among the city's stakeholders.

One of our designed actions specifically aims to involve economic actors in financing. In this regard, it is important to consider the frameworks of corporate social responsibility. For instance, larger companies often assess the expected fulfilment of relevant ESG criteria when evaluating projects for financing. When applying for bank financing, it is crucial to highlight the economic potential of the action—namely, how it contributes to the local economy. For example, if a project helps retain residents, increases the number of primary school children, or reduces outmigration, it strengthens the municipality's economic potential and thus stands a greater chance of securing bank support.

It is equally important to demonstrate the professional expertise behind the actions. Financial aspects of risk assessment should also be considered. The extensive toolbox of URBACT (URBACT Toolbox, Resourcing) provides useful methodologies for designing a financing mix as well.

6.4 Details of the overall approach to monitoring the implementation of the IAP and recording performance against specific indicators.

The monitoring of the action plans in Veszprém follows an integrated and multi-level approach designed to ensure transparency, accountability, and continuous improvement. The system is structured around the principle that implementation should be measured not only by outputs but also by outcomes and long-term impacts, using a combination of quantitative and qualitative indicators. Each action plan is linked to clear milestones, with dedicated indicators that track progress from preparation through to implementation and post-project sustainability. These indicators are aligned with local strategic frameworks, such as the Green Space Strategy and the Sustainable Urban Development Strategy, ensuring coherence with broader policy objectives.

At the operational level, monitoring is conducted through periodic data collection and reporting, led by the responsible municipal departments, partner organizations, or external experts. Data sources include GIS-based mapping (e.g., for green space extension or tree inventories), field surveys (e.g., biodiversity counts, BioBlitz activities), infrastructure assessments (e.g., composters, rain gardens, water retention systems), and community participation records (e.g., number of residents engaged, training sessions delivered). These data are systematically stored in digital platforms, where possible, enabling comparability across different projects and facilitating public communication.

Performance is recorded against specific indicators defined in each action plan, ranging from physical measures (hectares of grassland, number of beehives, installed composters) to ecological outcomes (species richness, proportion of native trees, improved air quality) and social results (public satisfaction, number of educational events, community participation rates). Indicators are reviewed annually, allowing for the adjustment of methods and the reallocation of resources if necessary. Risk assessments, already embedded in the action plans, are also part of the monitoring framework, ensuring that challenges such as public resistance, technical failures, or resource shortages are identified and mitigated early.

To enhance transparency, monitoring results are communicated through public reports, awareness campaigns, and participatory events. The integration of community-based monitoring tools, such as mobile applications for biodiversity reporting or online platforms for feedback, strengthens civic engagement and builds ownership of the outcomes. Independent evaluations and external audits may be commissioned at key milestones to validate results and provide recommendations.

Overall, the monitoring approach is cyclical: planning, implementation, measurement, evaluation, and feedback are interlinked in a continuous loop. This ensures that the action plans not only meet their immediate objectives but also contribute to the long-term resilience, sustainability, and liveability of Veszprém.

6.5 Details of the overall timeline for the implementation of the IAP

	Year		2026					2027					2028					2029					2030					2031				
			4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
1	Expanding the area of climate-adaptive grasslands	I.																														
		II.																														
		III.																														
		IV.																														
		V.																														
2	Urban beekeeping in Veszprém	I.																														
		II.																														
		III.																														
		IV.																														
		V.																														
3	City in the forest – forest in the city	I.																														
		II.																														
		III.																														
		IV.																														
		V.																														
		VI.																														
		VII.																														
4	Community Composting in Veszprém	I.																														
		II.																														
		III.																														
		IV.																														
		V.																														
		VI.																														
5a	Establishment of rain gardens	I.																														
		II.																														
		III.																														
		IV.																														
5b	Water retention	I.																														
		II.																														
6	Integrated Municipal Water Management Plan	I.																														
		II.																														
		III.																														
		IV.																														
7	Therapeutic gardens in Veszprém	I.																														
		II.																														
		III.																														
		IV.																														
		V.																														
8	Veszprém Residential Green Centre	I.																														
		II.																														
		III.																														

6.6 Details of overall approach to risk management

Risk management across the action plans follows a structured, preventive and adaptive approach designed to identify potential challenges early, assess their likelihood and impact, and define clear mitigation strategies. The process is built on four key stages: risk identification, assessment, mitigation, and continuous review. Each action plan integrates a dedicated risk register where technical, financial, social, environmental, and institutional risks are documented together with proposed countermeasures.

Risks are classified by probability and potential impact to allow prioritization. For example, high-probability, high-impact risks—such as resource shortages, technical failures, or insufficient community engagement—are addressed through detailed contingency measures, while lower-level risks are monitored but require proportionally fewer resources. This graded system ensures that efforts are focused where they are most needed.

Mitigation measures are aligned with the nature of each project. Technical risks are reduced through expert involvement, feasibility studies, and pilot projects; financial risks through diversified funding sources, reserve allocation, and strict cost control; social risks through communication campaigns, participatory planning, and educational programs; environmental risks through preliminary assessments and adaptive design; and institutional risks through clear distribution of responsibilities, interdepartmental coordination, and partnership building with universities, NGOs, and private actors.

Risk management is not a one-off exercise but an ongoing process. Risks are reviewed at each milestone of implementation, and monitoring results feed directly into the reassessment of the risk register. This cyclical process ensures flexibility and responsiveness to changing circumstances. Transparency is supported by documenting both risks and responses in public reports, building trust among stakeholders.

By embedding risk management into all phases of planning and execution, Veszprém ensures that the action plans remain realistic, resilient, and capable of delivering long-term environmental and social benefits even under uncertain conditions.

			Risk	Probability	Possible impact
1.	Expanding the area of climate-adaptive grasslands	I.	There are no areas that can be involved.	low	significant
		II.	Information, education is not clear enough, or does not reach the goal	medium	medium
		III.	Missing technology to produce the right seed mixture	high	significant
		IV.	Description of expected risk: residents living in suburban areas do not participate in BioBlitz in an adequate proportion	high	low
		V.	Dissatisfaction of private garden owners due to impatience	high	medium

2.	Urban beekeeping in Veszprém	I.	No provided place for the hives.	low	medium
		II.	Public resistance.	medium	high
		III.	Disinterest in consumption of the city's honey.	low	low
3.	City in the forest – forest in the city	I.	Organizational and institutional challenges	low	high
		II.	Site-specific environmental challenges	medium	low
		III.	Social and community barriers	medium	medium
		IV.	Financial constraints	medium	high
4.	Community Composting in Veszprém	I.	Public resistance	low	medium
		II.	Unproper usage	medium	low
		III.	Vandalism	medium	medium
5.a	Establishment of rain gardens	I.	Incorrect location selection	medium-low	significant
		II.	Extinction of plants, incorrect plant selection	low	low
		III.	Lack of maintenance work or improper performance	medium	low
5.b	Exploring water retention options in Veszprém for watering urban green spaces with rainwater	I.	Lack of resources.	medium-high	significant
		II.	Inappropriate location selection.	low-medium	medium
		III.	Deterioration, maintenance difficulties.	medium-low	low
6.	Preparation of an Integrated Municipal Water Management Plan	I.	Short budget	high	high
7.	Therapeutic gardens in Veszprém	I.	Uncertainty of project financing	medium	high
		II.	Infrastructure and zoning risks	medium	high
		III.	Social and operational risks	low	medium
		IV.	Occupational and operational risks	low	medium
		V.	Legal and administrative risks	medium	medium
8.	Veszprém Residential Green Centre	I.	Low public participation and interest.	medium	significant
		II.	Selection of an inappropriate or unsustainable site for the Green Centre.	low	medium
		III.	Improper maintenance or drying out of the demo garden.	low	significant