INTEGRATED ACTION PLAN - VRATSA

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Municipality of Vratsa

Final Version

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1. Executive Summary

The Integrated Action Plan (IAP) of the Municipality of Vratsa outlines a coordinated and forward-looking approach to strengthening urban biodiversity, improving green public spaces, and enhancing community engagement in environmental stewardship. Developed under the BiodiverCity project, the plan reflects a shared vision for a greener, healthier, and more resilient city.

The IAP builds on Vratsa's strong environmental foundations, including ongoing planting and clean-up "Green Vratsa" initiative and numerous EU-funded projects that focus on restoring degraded areas, revitalising brownfields, and investing in nature-based solutions. The plan prioritises practical, community-oriented actions that demonstrate immediate benefits while laying the groundwork for long-term ecological improvements.

Two key testing actions—the creation of a Miyawaki micro-forest and the Information Marking of Emblematic Plant Species—serve as pilot interventions that showcase how small-scale, participatory measures can foster ecological awareness and inspire broader environmental change. These activities were implemented with the active involvement of citizens, schools, NGOs, and municipal experts, creating momentum for future initiatives.

The IAP proposes is a structured implementation pathway supported by clear responsibilities, cross-departmental cooperation, and strong political commitment from the Mayor and Municipal Council. Its financial model combines project funding, municipal resources, and significant opportunities from national EU programmes, which will serve as the main drivers for scaling up the actions.

Overall, the Integrated Action Plan positions Vratsa as a city actively investing in biodiversity, innovative urban greening, and community participation. By combining practical interventions with long-term planning and diverse funding sources, the plan provides a robust roadmap for making Vratsa a more sustainable, attractive, and climate-resilient city.

2. Introduction

2.1 URBACT Programme

The URBACT Programme fosters sustainable urban development in cities across Europe. Its mission is to enable cities to work together and develop integrated solutions to common urban

challenges, by networking, learning from one another's experiences, drawing lessons and identifying good practices to improve urban policies.

The URBACT method embraces several principles:

Integration: The principle advocates for collaboration across different sectors (e.g., transport, housing, energy, and public services) to create comprehensive, long-term solutions.

Participatory Governance: This principle emphasizes the importance of involving citizens, local stakeholders, and communities in the decision-making process, thus cities can ensure that urban development strategies are reflective of local needs and priorities.

Exchange and Learning: The Programme enables cities to collaborate and share best practices, knowledge, and experiences.

Sustainability: The focus is on creating cities that can thrive in the long term without depleting resources or causing harm to the environment.

Innovation: This principle supports cities in exploring new ideas, technologies, and approaches to solve urban challenges.

Multi-level Governance: The programme recognizes the importance of aligning policies across all levels to ensure that urban strategies are coherent, effective, and well-resourced.

Evidence-based Decision-making: This allows cities to assess needs, measure progress, and make informed choices about the best interventions for sustainable development.

Social Inclusion and Equality: The principle of social inclusion ensures that URBACT supports actions that promote equality, justice, and the reduction of disparities in urban areas.

Collaborative Learning and Capacity Building: This involves empowering local stakeholders, including urban planners, local government officials, and community members, to enhance their knowledge and skills.

Long-term Vision: The aim is to create resilient and adaptable cities that are prepared for future changes in demographics, climate, and technology.

Action Planning Networks (APN)

In APN city practitioners will co-design integrated action plans with an URBACT Local Group comprising all relevant stakeholders (different city departments, different tiers of government, different policy relevant sectors and target groups). There will be an increased focus on implementation as networks will be able to test and experiment small actions from the integrated action plans.

2.2 The BiodiverCity network

BiodiverCity - Measuring urban biodiversity and accounting related ecosystem-services to verify, design and scale up nature-based solutions

The project encompasses an EU-wide partnership between 10 European cities, covering a diverse group of cultures, urban and green spaces and people - the beating heart of this project. The partners are as follows: Dunaújváros (HU) as Lead Partner, Cieza (ES), Landscape Laboratory (PT), Limerick City & County Council (IE), Poljčane (SI), Sarajevo (BA), Siena (IT), 's-Hertogenbosch (NL), Veszprém (HU) and Vratsa (BG).

BiodiverCity harnesses the immense potential of cities in raising awareness and driving innovation to create community-based approaches that value, measure, and account for biodiversity and its associated ecosystem services. The network seeks to empower communities, enabling them to plan and implement powerful nature-based solutions, while nurturing pro-environmental behaviours. With a vision of sustainable urban development, the project aims to make a significant contribution to the EU Biodiversity Strategy and the collective effort to safeguard our planet's precious natural heritage.

The central idea of BiodiverCity revolves around the concept of finding solutions in nature itself. By recognizing the value of ecosystem services, such as clean air, water, and pollination, communities can develop nature-based solutions to pressing urban challenges.

Through active participation, communities will contribute to the drafting of Greening Plans, ensuring a sustainable future where human activities and biodiversity thrive harmoniously. This can be achieved in a myriad of different ways, such as by increasing the green surfaces of a city to successfully combat the drastically increased urban heat of recent years - both by

increasing shade and air quality, and by maintaining and further increasing atmospheric humidity to reduce the 'curse' of concrete jungles. This way we can propagate a higher quality urban biome, while also bringing nature closer to us humans – or bringing us back „home", to nature.

The key project topics

2.3 An introduction to Vratsa and why we decided to participate to the BiodiverCity network

Situated in Northwestern part of Bulgaria, the Municipality of Vratsa (Population: 61,702 (2022)) covers a territory of 697 km^2 as parts of the Danube plain and the Fore Balkan. The municipality consists of 23 settlements – Vratsa as municipal and regional center and 22 villages. Important railway and road corridors of national and international significance pass through the territory of the Municipality. The infrastructure in the city is very well developed.

The municipality is governed by a Municipal Council and the Mayor. The Mayor is an executive authority who manages and controls the municipal administration, represents the municipality and organizes the implementation of the municipal budget. The Municipal council (37 advisors) sets development policy and discusses matters of local importance.

Vratsa has several relevant strategic documents relevant for the topic of the BiodiverCity network as follows:

- *Environmental Protection Program of the Municipality of Vratsa 2021-2028* to address the root causes of biodiversity loss and protect & restore green areas, to improve the support mechanisms for capacity building, knowledge exchange and access to the necessary financial resources, to improve the implementation of actions through community planning.

- *Plan for Integrated Urban Development of the Municipality of Vratsa 2021-2027*, which outlines the strategies for improving and increasing biodiversity on the territory of the municipality, as well as its reporting. It also includes the development of the Landscaping Plan and Greening Plan as its goal.

The Municipality of Vratsa has extensive experience in the development and implementation of national and international projects that include:

- *RESTART_4Danube*-Boosting cREative induSTries in urbAn Regeneration for a stronger Danube region funded by the Danube Transnational Programme addressed the challenges of developing a culture that creates synergies between public and private actors to promote SMEs and to support the development of creative urban communities.

- *Intelligent Cities Challenge* (ICC) of the European Commission, which demonstrates the City's aspiration towards developing smart solutions for urban issues related to sustainable tourism and green economy.

- Cities4CSR project implemented under URBACT III Programme

Given the richness of its biodiversity, Vratsa is strongly committed to the topic of the current URBACT network focusing on valorizing, measuring and accounting biodiversity and related ecosystem services in the city. The involvement of Vratsa in the network will contribute to the realization of one of the City's main goals: protecting and improving urban biodiversity and local ecosystems, increasing the percentage and quality of green spaces in the city (in line with the EU Biodiversity Strategy), planning and implementing NbS to address major urban challenges (such as flooding, heat waves, air pollution, etc.). The BiodiverCity network also puts a significant emphasis on awareness-raising and active engagement of stakeholders in all thematically relevant practices, which gives Vratsa a perfect opportunity to introduce and test a community-based approach at the very start of developing local biodiversity- and NbS-related strategies. One of the possible specific cases Vratsa would like to address is the

protection and restoration of the riverbed of the Leva river. The Municipality intends to carry out restoration activities in the riverbed and to designate an area next to the river for walks, recreation and sports (as a continuation of the already existing walking and cycling paths).

2.4 IAP introduction

The main objective of the project is to build an action plan which includes concrete steps to the sustainable green development of the region of Vratsa in particular. It will help stakeholders to find their right place in this network and wide range of initiatives, campaigns and activities that can be implemented. The most important thing is to increase the commitment of all stakeholders not only to one-off activities, but also to systematic actions that contribute to the generation of less waste, the planting of more trees and the overall responsible behaviour and attitude towards the environment.

ULG from the Municipality of Vratsa consists of organizations which work in different areas in order to cover more types of stakeholders.

Part of our ULG are Ekoproekt, BKS, Regional environmental and water inspection; Vrachanski Balkan National Park, Youth center-Vratsa, Sport and tourism Municipal Enterprise, Regional economic development agency, Chamber of commerce and industry-Vratsa, Experts in the Municipality of Vratsa who are responsible for urban planning, ecology and EU funding.

2.5 IAP contributors

The development of the Integrated Action Plan is grounded in the principle of participatory governance. The process began with an extensive series of consultations with stakeholders to ensure that the perspectives and needs of different groups are taken into account.

The project management team from the Municipality of Vratsa, in partnership with the representatives of the ULG, identified the city's most pressing challenges, such as urban regeneration, biodiversity preservation, climate change adaptation, and social inclusion. By integrating these concerns into a cohesive strategy, the IAP outlines the actions that the city will take to address these challenges in an integrated and sustainable way.

3. Context, Needs and Vision

3.1 The BiodiverCity network: urban biodiversity, ecosystem services and nature-based solutions

Located near Vratsa, Vrachanski Balkan Nature Park spans over 30,000 hectares and is rich in biodiversity. It hosts approximately 1,100 vascular plant species, representing about 28% of Bulgaria's flora, and supports diverse fauna, including numerous bird and mammal species. The park's proximity offers residents and visitors opportunities for recreation and environmental education, reinforcing the city's commitment to preserving natural habitats.

Vratsa has undertaken projects to revitalize urban areas by integrating green infrastructure. For example, the transformation of Polkovnik Lukashov Street incorporates nature-based solutions to enhance pedestrian spaces, improve air quality, and promote community engagement. These interventions aim to harmonize urban living with natural elements, providing ecological, social, and economic benefits.

Vratsa's initiatives align with the EU Biodiversity Strategy for 2030, which aims to restore degraded ecosystems and promote green urban planning. By integrating nature-based solutions and enhancing urban green spaces, Vratsa contributes to the broader goals of biodiversity conservation and sustainable urban development.

Through its involvement in the BiodiverCity network, Vratsa is committed to developing and implementing Greening Plans that enhance green infrastructure, promote biodiversity, and improve the quality of life for its residents. These plans are designed to address urban challenges such as climate change, air pollution, and loss of natural habitats, ensuring a resilient and sustainable urban environment.

By embracing these strategies, Vratsa exemplifies how cities can integrate natural elements into urban planning; fostering environments where both people and nature can thrive.

3.2 Current situation in Vratsa related to biodiversity, ecosystem services and nature-based solutions

The city of Vratsa boasts a rich natural heritage, including a diversity of species and ecosystems. The city and its surroundings are part of important natural areas, such as the Vrachanski Balkan Nature Park and other protected zones. These natural resources provide

the foundation for numerous ecosystem services that play crucial roles in climate regulation, improving air and water quality, as well as providing recreational and tourism opportunities.

Green and Protected Areas

Vrachanski Balkan Nature Park:

The Park covers an area of approximately 30,129.9 hectares and was established as a protected area in 1989.

It contains biodiversity-rich habitats, such as forests (oak and beech), rivers, wetlands, and other natural formations important for many species of flora and fauna.

The park hosts about 1,100 vascular plant species, which constitute around 28% of Bulgaria's total flora. It includes many protected species such as the black stork, steppe eagle, and other rare bird and mammal species.

While Vratsa itself is not part of the European Natura 2000 network, the surrounding areas are protected under European directives, including the Birds Directive and the Habitats Directive.

Efforts to Protect Biodiversity

Conservation Projects: Vratsa is involved in several local and national projects aimed at restoring natural habitats and protecting species. For example, projects are in place to restore habitats for species like the wild goose and other protected species.

Education and Community Engagement: Public awareness about the importance of biodiversity and sustainable use of natural resources is key to environmental protection in the region. There are educational programs and initiatives involving local communities in conservation activities.

Monitoring and Research: Regular surveys of biodiversity and ecosystem services provided by natural parks and protected areas in the region are conducted.

Local initiatives: The Municipality of Vratsa is actively working to enrich and improve the green spaces in the city through various initiatives and projects. Among them is the "Green Vratsa" campaign, aimed at planting new trees and shrubs in different neighborhoods. In November 2024, about 2,000 new plants were planted in the city, including lindens, acacias, Japanese quinces, hibiscus, cherry laurels and spires.

Green Infrastructure: In addition to planting, the Municipality of Vratsa has also launched projects to build new parks and improve existing green spaces. The Municipality is in the process of a new park in the "Seniche" neighbourhood development, aimed at improving the quality of life for local residents and creating a modern green space for recreation and leisure. The park will cover an area of over 17,000 square meters. An irrigation system for maintaining the vegetation and modern park lighting will be installed.

National and International Projects:

Vratsa Municipality has developed project proposals worth nearly BGN 30 million /≈ EUR 15 million/ under the Environment Program 2021-2027. These projects are aimed at creating more green areas, improving waste management infrastructure, and raising environmental awareness among citizens.

These initiatives demonstrate the commitment of the Municipality of Vratsa to sustainable environmental management and improving the quality of life of local residents.

3.3 Links between the IAP and wider strategies and policies

On local level the following policy documents regulate the environmental protection aspects:

- **Environmental protection program for the period 2021 – 2028** - sets goals for reducing pollution, preserving biodiversity, and ensuring the sustainable use of natural resources. It includes measures for managing water, soil, noise, and radiation, as well as activities for ecological education and raising public awareness.

- **Waste management program for the period 2021-2028** - defines priorities for reducing waste generation and increasing recycling and reuse. It includes the development of infrastructure for separate collection, improvement of construction waste management systems, and reduction of landfilling.

- **Air quality management program in the Municipality of Vratsa** - focuses on reducing fine particulate matter (PM10) and other pollutants. Key measures include the replacement of solid fuel heating appliances, modernization of transport, and control of industrial emissions.

- **Sustainable urban mobility Plan of the Municipality of Vratsa for the period 2021-2027** - foresees the development of a cycling network, pedestrian zones, and better

access to public transport. Its aim is to reduce dependence on private cars, lower congestion, and improve air quality.

- **Integrated development plan of the municipality of Vratsa 2021-2027** - a strategic framework document combining economic, social, and environmental priorities for sustainable development. It includes territorial investments, projects for infrastructure, social services, and environmental protection.

- **Ordinance on waste management on the territory of the municipality of Vratsa** - regulates the responsibilities of citizens, businesses, and the municipality in proper waste management. It includes rules for separate collection, transport, disposal, and penalties for violations.

- **Ordinance for the protection of air cleanliness in the municipality of Vratsa** - prohibits activities that lead to significant pollution and provides control over heating appliances, fuel installations, and construction activities. It also regulates measures to limit dust emissions in the urban environment.

- **Ordinance for the protection of green areas and trees on the territory of the municipality of Vratsa** - establishes rules for the creation and maintenance of parks, gardens, and urban greenery. It sets requirements for permits when removing trees, penalties for damaging green spaces, and incentives for new planting.

- **Ordinance for ensuring public order, maintaining cleanliness, protecting the environment and protecting property on the territory of the Municipality of Vratsa** - covers rules for maintaining cleanliness in public spaces, waste management, and the protection of public order. It introduces sanctions for pollution, vandalism, and breaches of public order.

On national level the following running operational programs support NbS:

- **Environment Programme 2021–2027** — the main operational instrument for investments in nature-based measures (including ecosystems and biodiversity, water management, and green infrastructure); projects for habitat restoration and urban greening can apply here.

- **Development of Regions Programme 2021–2027** — supports Integrated Territorial Investments (ITI), urban infrastructure, and sustainable local development; a suitable

instrument for NBS in an urban context (green corridors, urban forests, stormwater management).

- **National Recovery and Resilience Plan (NRRP / NextGeneration Bulgaria)** — includes a "green" component with opportunities for demonstrations and measures compatible with NBS (e.g., natural capacity for flood management/restoration of natural functions). The NRRP is often combined with other funds for larger investments.

- **Rural Development (Common Agricultural Policy Strategic Plan 2023–2027 and Rural Development Programme)** — agro-environmental measures, support for Natura 2000 lands, ecosystem restoration, and green infrastructure in rural areas; opportunities for NBS related to land use, wetlands, and agroforestry.

National strategies and framework documents:

- **National Environmental Protection Strategy 2021–2030 -** A key strategic document that sets priorities for clean air, water, soils, waste management, and climate change adaptation. It includes measures for an ecosystem-based approach and green infrastructure.
- **National Climate Change Adaptation Strategy and Action Plan (2020–2030) -** Emphasizes nature-based solutions for managing the risks of floods, erosion, droughts, and biodiversity conservation.
- **National Waste Management Programme 2021–2028 -** Aims at the transition to a circular economy through waste reduction, recycling, and recovery – further linked to NBS through ecosystem-based approaches to resource management.

- **Natura 2000 framework and priority actions 2021–2027** — the national plan/framework for the management of the Natura 2000 network defines measures often including habitat restoration and green infrastructure, and can be combined with European funding.

Regulatory acts on national level with a link to the NBS:

- **Environmental Protection Act** – a framework law for all environmental policies.
- **Biodiversity Act** – regulates protected areas, ecosystem services, and the Natura 2000 network.
- **Water Act** – regulates the sustainable management of water resources, including opportunities for NBS in flood risk management.

- **Spatial Planning Act** – includes rules for green systems and opportunities for integrating green infrastructure in urban areas.

On international level the following documents regulate NBs:

- **EU Biodiversity Strategy for 2030** - long-term plan for protecting nature and reversing the degradation of ecosystems.

- **Nature Restoration Regulation** - a key element of the EU Biodiversity Strategy, which sets binding targets to restore degraded ecosystems, in particular those with the most potential to capture and store carbon and to prevent and reduce the impact of natural disasters.

- **EU Adaptation Strategy** - focuses on improving knowledge of climate impacts and solutions, enhancing climate risk assessment and adaptation planning, accelerating adaptation actions, and strengthening global support for adaptation.

- **The European Green Deal** - aims to cut emissions by at least 50% by 2030, rising towards 55%, while legally binding the 2050 neutrality goal through the European Climate Law.

3.4 SWOT analysis

Strengths:	**Weaknesses:**
• **Protected Natural Areas:** The Vrachanski Balkan Nature Park, established in 1989, spans approximately 30,130 hectares and is managed by the Ministry of Environment and Water. It encompasses diverse habitats, including extensive karst terrains, gorges, and cliffs, notably the Vratsata Gorge with its 400-meter vertical cliffs, the highest in the Balkans. • **Rich Flora and Fauna:** The park boasts a diverse range of species. Flora includes around 1,100 vascular plant species, representing about 28% of Bulgaria's flora, with notable endemics like Campanula jordanovii and Silene velcevii. Fauna comprises approximately 1,231 invertebrate species	• **Limited Public Awareness:** Despite its rich biodiversity, there may be insufficient public awareness regarding the ecological value of the region, potentially leading to inadequate support for conservation initiatives. • **Resource Constraints:** Conservation efforts may face challenges due to limited financial and human resources, hindering comprehensive research, monitoring, and sustainable management practices.

and 276 vertebrate species, including 58 mammal species such as the European wildcat and 181 bird species, with 124 nesting. Significant bird species include the golden eagle and the Eurasian eagle-owl. • **Cultural and Natural Significance:** The Vratsa Karst Nature Reserve, situated within the park, is recognized as a UNESCO World Heritage Site. It features unique karst formations like sinkholes, gorges, and caves, contributing to both geological and ecological significance.	
Opportunities: • **Ecotourism Development:** Leveraging the park's natural beauty and biodiversity to promote ecotourism can generate revenue for conservation projects and foster sustainable economic growth for local communities. • **Educational Initiatives:** Establishing educational programs and partnerships with schools and universities can enhance public understanding of the region's ecological importance, fostering a culture of conservation. • **Research Collaborations:** Collaborating with national and international research institutions can facilitate studies on species conservation, habitat restoration, and climate change impacts, informing adaptive management strategies.	**Threats:** • **Climate Change:** Alterations in temperature and precipitation patterns can affect species distributions and ecosystem dynamics, posing challenges to current conservation strategies. • **Human Activities:** Unsustainable practices such as illegal logging, poaching, and unregulated tourism can degrade habitats and threaten wildlife populations. • **Invasive Species:** The introduction of non-native species can disrupt local ecosystems, outcompeting native flora and fauna, and leading to biodiversity loss.

3.5 Vision to be realised through the IAP

Vision

The Municipality of Vratsa envisions becoming a greener, more resilient, and healthier city through the integration of nature-based solutions into urban planning and development. The long-term vision is to create a well-connected urban environment where biodiversity and ecological functions are safeguarded and enhanced, while simultaneously improving the quality of life for residents. By fostering a stronger human–nature connection, Vratsa aims to position itself as a model for sustainable urban development in Bulgaria and in the wider URBACT network.

Main Objective

The main objective of the Integrated Action Plan is to address the challenge of biodiversity loss in the urban environment and the insufficient provision of ecosystem services. Through targeted actions, the plan seeks to introduce and scale up green infrastructure, restore degraded habitats, and promote community engagement in environmental stewardship. Specifically, the plan responds to the dual challenge of climate change impacts (heat islands, flooding, air quality) and declining natural assets in the city.

By implementing this objective, Vratsa aims to:

- Increase urban biodiversity through measures such as the Miyawaki forest initiative, pollinator-friendly plantings, and protection of green corridors.
- Integrate ecological principles into spatial planning and urban design.
- Strengthen local governance and cross-sector collaboration for sustainable management of natural resources.
- Raise environmental awareness and empower citizens to actively participate in the transformation of their living environment.
- The IAP sets the foundation for a climate-adapted, biodiverse, and inclusive Vratsa, aligned with European and national strategies for sustainable urban development and biodiversity protection.

4. Overall Logic and Integrated Approach

4.1 Main objective and strategic objectives

Main objective: Addressing the challenge of biodiversity loss in urban environments and the insufficient provision of ecosystem services through targeted actions for green infrastructure renovation and preservation, degraded habitats restoration, and promotion of community engagement in environmental protection.

SO 1: Enhancement and Restoration of Urban Biodiversity

This objective focuses on increasing biodiversity within Vratsa's urban environment through targeted ecological interventions. Actions such as the Miyawaki forest initiative, pollinator-friendly plantings, restoration of degraded habitats, and the protection and enhancement of ecological corridors will support healthier urban ecosystems.

SO 2: Integration of Ecological Principles into Urban Planning and Design

This objective aims to embed ecological thinking into all aspects of spatial planning and development. By incorporating green infrastructure, nature-based solutions, Vratsa will improve environmental quality and climate resilience. Measures include adapting planning regulations, promoting ecological connectivity, and ensuring that new developments contribute positively to the city's green network.

SO 3: Strengthening Local Governance and Cross-Sector Collaboration

This objective supports effective and coordinated biodiversity management by enhancing governance structures and fostering partnerships. Collaboration between municipal departments, local businesses, NGOs, schools, universities, and neighbouring municipalities will enable the pooling of expertise and resources.

SO 4: Increasing Environmental Awareness and Citizen Participation

This objective seeks to empower residents to take an active role in improving and protecting their environment. Educational programs, public campaigns, citizen science activities, and community-based greening initiatives will encourage participation from all age groups.

4.2 Intervention Areas to deliver the Strategic Objectives

The Integrated Action Plan is structured around six Intervention Areas that together support Vratsa's transition toward a climate-adapted, biodiverse, and inclusive urban environment. Each Intervention Area groups complementary actions that directly contribute to the enhancement of urban ecosystems, sustainable land use, public engagement, and effective governance as follows:

- Enhancing Urban Green Spaces;
- Sustainable Land Use and Ecosystem Restoration;
- Community Engagement and Environmental Education;
- Climate Change Adaptation and Nature-Based Solutions;
- Sustainable Tourism and Eco-Friendly Business Development;
- Strengthening Policy and Governance for Biodiversity Protection.

4.3. List of actions set under the Intervention Areas:

Enhancing Urban Green Spaces

- Development and expansion of green infrastructure, including parks, public gardens and tree-lined streets;

- Creation of biodiversity corridors connecting urban green spaces with the Vratsa Balkan Nature Park;

- Ensuring the health and safety of urban ecosystems by conducting regular assessments of plant species and proactively managing risks associated with diseased or deceased trees to mitigate potential hazards to public safety and biodiversity;

- Promotion of native plant species in urban landscaping to support pollinators and wildlife;

- Establishment of pollinator-friendly zones with wildflower meadows and insect hotels;

- Implementation of vertical gardens and green walls to increase biodiversity in urban areas.

Sustainable Land Use & Ecosystem Restoration

- Implementation of nature-based urban planning practices to limit urban sprawl and habitat fragmentation such as afforestation of areas with a permanent lack of vegetation, focusing on higher-density, mixed-use developments that reduce urban sprawl and make better use of existing urban spaces, while also preserving surrounding natural areas;

- Restoration of degraded ecosystems such as riverbanks and wetlands to improve biodiversity. This objective includes the flood risk prevention along the Skat River that passes through 4 municipalities one of which is Vratsa and it is considered as one of the most dangerous rivers in Bulgaria, because of the flooding and deaths that the river has caused for the past ten years;

- Reconstruction of the municipal gardens;

- Promotion of afforestation and reforestation initiatives in collaboration with the local community;

- Development of an urban forestry plan to increase tree coverage in residential and commercial areas.

Community Engagement & Environmental Education

- Awareness-rising of biodiversity conservation through educational campaigns and school programs;

- Promoting citizen science initiatives for monitoring local biodiversity;

- Continuation of eco-volunteer programs for tree planting, habitat restoration and clean-up activities;

- Organization of biodiversity festivals and public engagement events to foster a conservation mind-set.

Climate Change Adaptation & Nature-Based Solutions

- Implementation of green infrastructure solutions such as green roofs, rain gardens, and permeable pavements;

- Promote sustainable agriculture and urban farming to enhance biodiversity and food security especially in the villages of Vratsa municipality;

- Planting new trees along busy roads to reduce urban heat island effects and improve air quality;

- Continuation of small civic initiatives to promote the improvement of green spaces in residential complexes.

Sustainable Tourism & Eco-Friendly Business Development

- Development of eco-tourism initiatives that promote local biodiversity while benefiting the economy;

- Support for businesses that adopt sustainable and biodiversity-friendly practices;

- Partnerships fostering with local entrepreneurs for green innovations in tourism and conservation.

Strengthening Policy & Governance for Biodiversity Protection

- Municipal policies and activities aligning with the EU Biodiversity Strategy for 2030;

- Improve enforcement of environmental regulations to prevent habitat destruction and pollution;

- Foster cross-border cooperation and knowledge exchange on biodiversity conservation.

4.4 12 aspects of Integration

The 12 aspects of Integration include:

№	Aspects of integration	How the aspects fit to the Municipality of Vratsa

1	**Policy Integration**	There are several policy documents that regulate the environmental protection aspects: • Environmental protection program for the period 2021 – 2028 • Waste management program for the period 2021-2028 • Air quality management program in the Municipality of Vratsa • Sustainable urban mobility Plan of the Municipality of Vratsa for the period 2021-2027 • Integrated development plan of the municipality of Vratsa 2021-2027 • Ordinance on waste management on the territory of the municipality of Vratsa • Ordinance for the protection of air cleanliness in the municipality of Vratsa • Ordinance for the protection of green areas and trees on the territory of the municipality of Vratsa • Ordinance for ensuring public order, maintaining cleanliness, protecting the environment and protecting property on the territory of the Municipality of Vratsa The strategies and other normative documents that are in force in the municipality of Vratsa and that are related to the environment protection and biodiversity provide the basis for the sustainable development of the region. These documents include both municipal plans for the development and management of natural resources, as well as national and European directives and laws that require integrated and sustainable management of the natural environment. Local ordinances on the territory of the municipality of Vratsa cover various aspects of environmental management, including waste management, water resources protection, and noise pollution, management of green areas and maintenance of natural areas. These normative acts play a major role in creating sustainable and ecologically clean conditions for the development of the municipality.

2	**Sectorial Integration**	• Promotion and development of eco-tourism initiatives that highlight the natural beauty and biodiversity of the Vratsa region, particularly in protected areas like Vrachanski Balkan Nature Park. • Community Engagement in Eco-Tourism • Reconstruction of a water supply system • Implementation of energy-efficiency measures in public and residential buildings.
3	**Spatial Integration**	• Applying zoning laws that preserve green spaces and limit construction near sensitive ecosystems or biodiversity hotspots. • Requirement of environmental impact assessments for all urban development projects. These assessments should evaluate the potential effects on local biodiversity, recommending measures to mitigate adverse impacts such as habitat destruction or pollution.
4	**Governance Integration**	This involves the creation of coordinated governance structures across various stakeholders, including local authorities, community organizations, businesses, and the public with the objective to foster cross-sector and multi-level governance models where decision-makers will collaborate on environmental issues.
5	**Economic Integration**	The main objective is to be recognized the economic value of biodiversity to incentivize conservation through policies like green taxes, eco-certifications, or subsidies for sustainable practices.
6	**Cultural Integration**	Incorporation of the specific cultural values, traditions, and local knowledge of the region of Vratsa into biodiversity conservation strategies. The main objective is to build community ownership of biodiversity initiatives by aligning them with local cultural values, indigenous knowledge, and social practices.

7	**Social Integration**	Ensuring that biodiversity and sustainability efforts are inclusive and address social equity, providing opportunities for vulnerable and marginalized groups to benefit from environmental improvements. The main objective is to promote fair access to green spaces, jobs in sustainability, and education on biodiversity across all segments of society.
8	**Environmental Integration**	Integrating biodiversity and ecosystem services into environmental management systems, such as water, air quality, and waste management. This includes the management of natural resources holistically, considering their interconnectedness and the need for integrated environmental solutions that protect both urban and natural environments.
9	**Technological Integration**	The main objective is the use of technology to collect data, track ecosystem health, optimize resource use, and support informed decision-making for sustainable urban development.
10	Educational Integration	The main objective is the integration of biodiversity and sustainability education into school curriculums, public awareness campaigns, and professional training programs; awareness-raising and build capacity among citizens, professionals, and policymakers to support biodiversity conservation efforts and sustainable practices.
11	**Public Participation Integration**	The main objective is the engagement of local communities and stakeholders in biodiversity planning, decision-making, and implementation processes; ensuring that the needs, aspirations, and knowledge of local populations are considered in biodiversity strategies, fostering community-driven conservation initiatives.
12	**Adaptive Integration**	The focus is on that biodiversity and sustainability strategies remain flexible and adaptable to changing conditions, such as climate change, urban expansion, or shifting social needs.

4.5 Analysis of the URBACT cross-cutting themes

Based on the abovementioned specific objectives (SO 1–SO 5), the following challenges can be anticipated when implementing them in Vratsa's urban context:

- Sustainability

Local challenges: Urban pressures in Vratsa such as habitat fragmentation, air and water pollution, heat islands, and loss of green spaces threaten ecosystem services and biodiversity.

IAP response: Implementation of NBS interventions (Miyawaki forest, urban greening) to enhance ecosystem services, improve climate resilience, and integrate green infrastructure into urban planning.

- Social Inclusion

Local challenges: Public awareness of biodiversity issues is low, and access to participation opportunities may be uneven across social groups.

IAP response: Community activities conduction, school programs, and participatory initiatives to ensure broad engagement and inclusive decision-making.

- Innovation and Learning

Local challenges: Limited local expertise in nature-based urban solutions and lack of tested models suitable for Vratsa's climate, urban density, and available public spaces.

IAP response: Pilot testing and transnational learning usage through URBACT exchanges to generate practical knowledge, improve methodologies, and scale up effective NBS interventions.

4.6 Actions integration

The Intervention Areas defined in the Integrated Action Plan of Vratsa under the BiodiverCity project are fully integrated and designed to address multiple urban challenges simultaneously. The planned actions combine ecological, social, and educational components, ensuring a holistic approach that aligns with the cross-cutting themes of the URBACT Programme—particularly sustainability, social inclusion, and participatory governance.

Integration of the actions:

- Ecosystem-based urban interventions: The implementation of the Miyawaki Forest and restoration of urban green spaces integrates biodiversity enhancement, climate adaptation (e.g., heat mitigation, flood control), and improvement of air quality in a single intervention.
- Educational and participatory components: Information marking of emblematic plant species and community engagement activities link ecological objectives with social inclusion, raising awareness and promoting stewardship among citizens.
- Urban planning integration: Actions are coordinated with spatial planning strategies and local environmental policies, ensuring that green infrastructure and NBS are embedded into urban development plans.

Alignment with cross-cutting themes

- Sustainability – Interventions promote long-term ecological resilience, resource efficiency, and climate adaptation, ensuring benefits for both the environment and the urban population.
- Social Inclusion – Community participation in planting, monitoring, and educational activities fosters inclusivity, strengthening the sense of ownership among citizens.
- Participatory Governance – Local stakeholders, schools, and NGOs are actively engaged in decision-making and implementation, ensuring co-creation and shared responsibility.
- Innovation and Learning – Testing actions serve as pilot initiatives that generate knowledge, allowing the city to scale up NBS and replicate successful solutions in other urban contexts.

Justification

The integrated design of the Intervention Areas ensures that each action delivers multiple co-benefits, addressing environmental, social, and governance objectives simultaneously. By linking biodiversity enhancement, climate adaptation, and citizen engagement, the plan exemplifies a multi-dimensional, cross-cutting approach fully in line with the URBACT Programme principles.

4.7 Testing Actions details

Overview of Testing Actions

As part of the BiodiverCity project, the Municipality of Vratsa implemented two key actions to explore practical, nature-based solutions and to inform the development of the Integrated Action Plan:

Biodiversity festival together with Miyawaki Forest

The Municipality of Vratsa organised a Biodiversity Festival aimed at raising public awareness and fostering community engagement in urban nature-based solutions. The central activity of the festival was the creation of a Miyawaki micro-forest, an innovative afforestation method that accelerates ecosystem development and supports high levels of biodiversity in compact urban areas.

During the festival, citizens, students, local organisations, and volunteers were invited to participate in the planting of a diverse mix of native tree and shrub species. This hands-on activity provided an educational experience on the importance of native vegetation, soil health, climate adaptation and the role of micro-forests in improving air quality, mitigating heat islands, and increasing ecological connectivity within the city.

The event also included informational sessions, guided demonstrations, and interactive activities that highlighted Vratsa's commitment to sustainable urban development. By framing the planting event as a celebration of local biodiversity, the municipality fostered a sense of stewardship and encouraged long-term community involvement in caring for the newly established Miyawaki forest.

Information Marking initiative for emblematic plant species

Information Marking initiative for emblematic plant species located in key public spaces was also implemented This action aimed to enhance citizens' understanding of the city's natural heritage by making urban biodiversity more visible, accessible, and engaging.

A total of 10 educational signs were designed and installed next to selected native and culturally significant plant species across the main pedestrian zone. Each sign includes user-friendly information such as the common and scientific name, ecological role, habitat characteristics, traditional uses, and conservation status, etc.

This intervention transformed everyday public spaces into open-air learning environments, enabling residents and visitors to discover the ecological value of urban flora while moving through the city. The action proved especially effective for families, students, and tourists, offering an informal yet informative way to explore Vratsa's green areas.

By highlighting emblematic plant species, the initiative strengthened the connection between the community and its natural environment, fostered a culture of environmental stewardship, and contributed to the long-term vision for integrating biodiversity considerations into urban planning. The Information Marking activity will continue to serve as a replicable model for expanding educational tools and participatory approaches to nature-based solutions in Vratsa.

Support to the Action Planning Process

These actions provided hands-on insights and evidence that directly shaped the Integrated Action Plan:

- Identification of best-performing plant species and planting techniques for urban biodiversity.
- Understanding community response and engagement, ensuring the action plan includes socially inclusive NBS measures.
- Generating practical guidelines for scaling up green infrastructure interventions in Vratsa.
- Informing spatial planning decisions, such as optimal locations for urban greening and biodiversity enhancement projects.

By combining practical implementation with monitoring and public engagement, these actions strengthened the quality, feasibility, and citizen-centered focus of the Integrated Action Plan.

5. Action Planning Details

5.1. Biodiversity festival

Implementation steps: Identify and secure municipal land parcel; Soil testing and site preparation; Community engagement (workshops, school activities); Procurement of native seedlings and planting materials; Miyawaki method plantation (dense, multi-layer native planting); Initial maintenance and watering (first 2 years); Handover to local community/NGOs for long-term care.

Timing: Preparation – month 1; Planting – month 2; Maintenance – ongoing.

Responsibilities: Lead: Municipality of Vratsa, Partners: ULG, NGOs, schools, citizen volunteers.

Costs: 15 000 euro.

Funding: URBACT programme.

Monitoring indicators: Number of trees/shrubs planted; Area restored; Survival rate after 2 years; Number of citizens engaged.

Risk Mitigation

Risk: Low survival rate of seedlings → **Mitigation:** use resilient native species, proper irrigation plan;

Risk: Lack of community engagement → **Mitigation:** organize planting days with schools/NGOs, awareness campaigns;

Risk: Insufficient maintenance → **Mitigation:** The municipal enterprise that deals with cleaning and maintenance of urban green areas will be responsible for the Miyawaki Forest maintenance.

5.2. Information Marking of Emblematic Plant Species

Implementation Steps: Selection of emblematic plant species; Mapping of locations in public spaces; Design of educational signage; Production and printing of durable, weather-resistant signs; Installation of signage at selected locations; Public communication campaign (social media posts, press release, community introduction).

Timing: Species selection & site mapping - month 1; Sign design & content development-month 1; Production of signage - month 2; Installation of signage: month 3; Public communication & launch: month 3; Monitoring & maintenance: Ongoing (quarterly checks)

Responsibilities: An external expert was engaged to identify and propose suitable emblematic plant species based on ecological value, cultural relevance, and visibility within the urban environment. The proposed list was then reviewed and formally approved by the Environment Department of the Municipality of Vratsa. The Communication Department played a key role in developing and disseminating the public awareness campaign, ensuring coherence with the municipality's visual identity and promoting the educational value of the initiative. Additionally, local schools and NGOs were involved as partners, contributing to the development of educational content and engaging citizens in understanding and appreciating local biodiversity.

Costs: 15 000 euro.

Funding: URBACT programme.

Monitoring Indicators: Number of installed signs - 10; Number of emblematic species marked- 10; School/NGO involvement - number of future educational activities linked to the signage /ongoing/.

Risk Mitigation: Vandalism or damage: use of durable materials; regular checks; quick replacement protocol; Low public visibility: strategic placement; stronger communication campaign; integration with city tours or school programs; Weather deterioration: UV-resistant printing and sturdy metal/plastic panels; Limited engagement: add interactive digital features (audio guides, mini quizzes); promote through local events; Budget limitations: phased implementation or scaling number of signs to available funds.

6. Implementation Framework

6.1 Governance mechanisms

Governance mechanisms - The main responsibility for the implementation of the IAP will take the Municipality of Vratsa. But also the municipality will use a multi-level governance model where decisions are co-created between the municipality, citizens, NGOs, businesses and ULGs.

A formal body chaired by Vratsa Municipality, including representatives from key stakeholder groups, will oversee the implementation and monitoring of the IAP.

Regular public reporting (online platform, town hall meetings, newsletters) to ensure accountability and visibility of progress.

The processes - Participatory workshops and focus groups to refine actions and ensure alignment with citizens' priorities. Actions carried out jointly by the municipality and ULGs, with local community groups contributing to on-the-ground activities (e.g., urban greening, biodiversity corridors, awareness campaigns).

After Project Closure: The Municipality will integrate the governance structure into existing municipal planning frameworks, ensuring longer sustainability.

6.2 Participatory approach after the project closure

The participatory approach established during the planning phase will continue into implementation through the active involvement of the Urban Local Group (ULG). As the activities of the IAP are closely linked to the interests and expertise of ULG members, they will remain engaged in monitoring, advising, and co-delivering actions together with the

Municipality. After the formal project closure, the ULG will continue to function as a consultative body, ensuring that the principles of participation, transparency, and community ownership are embedded in the long-term governance of biodiversity initiatives in Vratsa

6.3 Costs and funding approach

The implementation of the Integrated Action Plan relies on a combination of financial sources that together ensure both the feasibility of the initial testing actions and the long-term sustainability of the proposed measures. In the first stage, the costs associated with the testing actions are covered through the project budget of the URBACT BiodiverCity initiative, which provides the necessary resources for piloting small-scale interventions, stakeholder engagement, and awareness-raising activities.

Following the completion of the testing phase, additional costs for scaling up, maintaining, or expanding the actions will be supported through the municipal budget of Vratsa. The municipality allocates regular funds for environmental management, maintenance of green areas, public information activities, and community initiatives, which can be aligned with the priorities set in the IAP.

However, the primary source of funding for the full implementation of the IAP will come from European Union-funded projects. The Municipality of Vratsa actively prepares and submits project proposals under national operational programmes, particularly the Environment Programme and the Programme for Regional Development, which offer substantial financial opportunities for nature-based solutions, restoration of degraded spaces, urban regeneration, and enhancement of biodiversity. These programmes represent the key mechanism through which larger-scale investments, such as the renovation of brownfield sites or creation of new green infrastructure, can be realised.

This combined funding approach—starting with project-based testing, supported by municipal resources, and expanded through EU financing—ensures that the IAP is not only achievable but also scalable, financially sustainable, and aligned with broader regional and European policy frameworks.

6. Timeline for the implementation of the IAP

Phase / Activity	M1–3	M2–6	M5–8	M8–16	M6–20	M12–24	M22–24
1. Preparation & Coordination							
2. Technical Design & Content Development							
3. Procurement & Contracting							
4. On-Site Implementation of Actions							
5. Communication & Public Engagement							
6. Monitoring, Evaluation & Adjustments							
7. Final Reporting & Dissemination							

6.5 Overall approach to monitoring the implementation of the IAP

Monitoring Framework

The monitoring of the IAP will follow a participatory, multi-level framework coordinated by the Municipality of Vratsa in cooperation with the Urban Local Group. Monitoring will ensure that implementation stays on track, that resources are used effectively, and that impacts are measurable and transparent.

6.6 Details of overall approach to risk management

The implementation of the Integrated Action Plan follows a proactive and structured approach to risk management to ensure that all planned actions are delivered effectively, on time, and

within the available resources. Risk management is treated as a continuous process that begins in the early planning stages and continues throughout implementation and follow-up.

- Early Identification and Assessment of Risks

During the preparation phase, potential risks—operational, financial, environmental, and social—are identified through internal consultations, stakeholder workshops, and expert input. Each risk is assessed in terms of likelihood and potential impact on project delivery. This initial assessment forms the basis for prioritising mitigation measures.

- Clear Roles and Responsibilities

Each action within the IAP has a designated responsible unit or partner. These actors are responsible not only for implementation but also for monitoring risks relevant to their activities. The Environment Department, acting as the coordinating unit, oversees the overall risk management process, ensures that risks are regularly reviewed, and facilitates communication between departments when escalation is necessary.

- Integration of Risk Mitigation into Action Design

Risks are not addressed as separate or reactive issues; they are embedded into the design of each action. Examples include using durable materials to reduce vandalism risks, ensuring early engagement with stakeholders to avoid delays, and securing co-financing or alternative funding paths when financial risks are identified. This integrated approach increases the resilience of each action.

- Continuous Monitoring and Adaptation

Risk monitoring is carried out throughout implementation with regular progress checks, site visits, and feedback loops with contractors and community partners. Monthly internal coordination meetings allow departments to report emerging issues early. When necessary, the timeline, budget allocations, or implementation methods are adjusted to avoid disruptions.

- Transparent Communication and Stakeholder Involvement

Open communication with citizens, NGOs, schools, and other local actors helps identify community-related risks, such as low participation or negative public perception. Transparent communication helps maintain support for the actions and ensures early detection of concerns that may influence implementation.

- Documentation and Learning

All risk-related incidents, mitigation measures, and solutions are systematically documented. This information is used to improve ongoing actions and to strengthen the city's long-term capacity for managing nature-based solutions and other urban interventions. Lessons learned feed into future planning cycles and policy development.

7. Conclusion

7.1 The plans for communicating and disseminating the IAP locally

At first the final version of the IAP will be presented to the URBACT Local Group (ULG), as the plan was developed in close collaboration with its members and reflects their inputs, discussions, and priorities. This meeting will serve both to validate the completed plan and to discuss the next steps for supporting its implementation.

Following the ULG presentation, the IAP will be introduced to other municipal employees, particularly those whose departments are directly involved in the actions. This internal communication step will help ensure institutional understanding, alignment of responsibilities, and smooth coordination across municipal units.

Once the internal dissemination is completed, the Integrated Action Plan will be published on the official website of the Municipality of Vratsa, making it accessible to the wider public. The publication will be accompanied by a short explanatory text that summarises the objectives of the plan and informs citizens about where they can find additional details or follow implementation updates.

The IAP will also be shared during relevant local events, including environmental initiatives, public discussions, educational activities with schools, and community gatherings. These opportunities will help raise awareness among citizens, local organisations, and other stakeholders, ensuring that the plan reaches diverse audiences and that the broader community remains informed and engaged in the city's efforts to enhance biodiversity and implement nature-based solutions.

7.2 Guarantees of implementing the IAP

The implementation of the Integrated Action Plan is backed by strong institutional, organisational, and community-based guarantees that ensure the continuity and sustainability of the proposed actions. The plan is fully aligned with the strategic priorities of the Municipality of Vratsa, which provides a solid policy framework and long-term

administrative commitment. Its development in close cooperation with the URBACT Local Group further strengthens ownership and ensures that the plan reflects locally agreed priorities.

Clear responsibilities have been assigned to the relevant municipal departments, ensuring that each action has a designated unit accountable for implementation. This structure is supported by well-established internal coordination mechanisms, regular monitoring, and cross-departmental cooperation, which together form a reliable system for managing and delivering the plan.

In addition to these organisational guarantees, the Municipality of Vratsa maintains an active role in environmental initiatives that reinforce the IAP's objectives. The city regularly organises tree-planting campaigns, clean-up days, and nature-focused volunteer events that involve the wider public and demonstrate strong community engagement. The municipal initiative "Green Vratsa" further supports ongoing activities related to urban greenery, awareness-raising, and public participation, helping to build a culture of environmental responsibility among residents.

Vratsa also implements a wide range of EU-funded projects that contribute directly to improving the urban environment. These include projects focused on the renovation of brownfield sites**,** the restoration of neglected public spaces, and the recultivation of former landfill areas. Such initiatives not only improve environmental quality but also provide practical experience and institutional capacity that strengthen the municipality's ability to carry out the actions included in the IAP.

Combined, these elements provide strong guarantees for the effective implementation of the Integrated Action Plan and ensure that its actions are embedded within broader municipal policies, community initiatives, and long-term development efforts.

7.3 Contact details of key individuals responsible for implementing the IAP

Project Management Team – BiodiverCity / IAP Coordination Team

This team is responsible for the operational management of the IAP, coordination between municipal departments, communication with stakeholders, and monitoring progress.

Contact:

- Project Coordinator: Polina Georgieva – p.georgieva@vratza.bg
- Financial Coordinator: Valia Georgieva – v.georgieva@vratza.bg
- Communication Coordinator: Teodora Avramova – t.avramova@vratza.bg
- ULG Coordinator: Galia Blehova - gblehova@vratza.bg

Additional partners, including NGOs, schools, and community organisations, will support communication, engagement, and sustainability efforts throughout the implementation period.