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D 3.2.1 Points of Inquiry

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1. Introduction 4

2. Overview of Participating Stakeholders 7

2.1. Respondent Selection and Adequacy of the Sample 8

3. Topic: "Governance, Legislation and Policy" (responsible project partner POR) 11

3.1. Main Difficulties in Implementing Biodiversity Actions 11

3.2. Policy Gaps 11

3.3. Institutional Cooperation 12

3.4. Priority Areas for Strengthening Governance and Policy 12

3.5. Examples of Good Practices 13

3.6. Implications for Training: "Governance, Legislation and Policy" (PP5 POR) 14

4. Topic: New European Bauhaus Architecture, Building & Engineering (responsible project partner HSW) 16

4.1. Main Challenges in Applying NEB Values 16

4.2. Gap Between Current Practices and NEB Goals 16

4.3. Policy Barriers 17

4.4. Skills and Knowledge Needs 17

4.5. Community Engagement 18

4.6. Priorities for Future NEB Actions 18

4.7. Implications for Training: "New European Bauhaus - Architecture, Building & Engineering" (PP HSW) 19

5. Topic: Environmental Sustainability & Decision Support Systems (responsible project partner Poliedra) 21

5.1. Integration Difficulties 21

5.2. Legislation 21

5.3. Overlooked Aspects in Decision-Making 22

5.4. Climate Change Integration 23

5.5. Institutional Fragmentation 24

5.6. Knowledge and Tools 24

5.7. Implications for Training: "Environmental Sustainability & Decision Support Systems" (PP Poliedra) 25

6. Topic: Urban biodiversity aspects within landscape architecture (responsible project partner UPWr) 27

6.1. Key Knowledge Gaps Identified 27

6.2. Importance and Knowledge Levels 28

6.3. Institutional Cooperation 28

6.4. Expected Results and Desired Effects 29

6.5. Implications for Training: "Urban Biodiversity Aspects within Landscape Architecture" (UPWr) 30

7. Conclusion 31

1. Introduction

As part of the Interreg Central Europe URBIO BAUHAUS project (New European Bauhaus for Increasing Urban Biodiversity), Activity 3.2 – Building Biodiversity-Friendly Institutional Capacities aims to strengthen institutional and professional capacities across participating Central European countries.

Within this activity, four transnational training and capacity-building sessions will be organised for stakeholders from six CE countries (Germany, Croatia, Poland, Italy, Slovenia, and Hungary). Each session will involve a minimum of 12–18 participants and will be delivered in the form of online conferences, seminars, or workshops to enable wide participation.

Training materials and sessions will be developed on the following **thematic areas**:

- Governance, Legislation and Policy – prepared by PP5 POR
- New European Bauhaus Architecture, Building and Engineering – prepared by PP8 HSW
- Environmental Sustainability and Decision Support Systems – prepared by PP7 Poliedra
- Urban Biodiversity Aspects within Landscape Architecture – prepared by LP UPWr

To ensure the training content is relevant and tailored to real needs, PP5 POR initiated the activity in June 2025 (at consortium meeting in Kranj) by coordinating a **stakeholder mapping process**. Each pilot city (Kranj, Pula, Wroclaw, Érd) together with Poliedra and HSW identified public stakeholders, including:

- Local and regional agencies responsible for environment, nature, agriculture, spatial planning, soil, or product regulation;
- Supervisory bodies (e.g. inspection, nature protection, and environmental protection authorities);
- Municipalities and other local/regional governing bodies;

- Public service providers (publicly owned companies and concession holders);

- Other public actors, such as public institutes, development and innovation agencies, and universities.

Project partners were instructed to take into account the following points of inquiry: the trainee, his/her superiors and subordinates, the human resources unit, and the public in order to capture most appropriate stakeholders.

These stakeholders **will be invited** to participate in the upcoming training sessions.

In parallel, POR, HSW, Poliedra, and UPWr analysed their assigned topics and prepared a set of 5–6 targeted questions to gather stakeholder perspectives on challenges, knowledge gaps, and priorities related to each area. The **questionnaire** was distributed by project partners from all six participating countries using Google Forms.

This document summarises the **feedback received from 23 stakeholders** across the partner countries. The way in which respondents were selected, and why this sample is considered sufficient to identify training needs, is explained in Section 2.1.

The **feedback serves to**:

- Provide a clearer understanding of the current situation in each city and region;
- Identify common challenges, gaps, and needs related to governance, planning, and biodiversity integration;
- Support the development of targeted training materials that directly respond to stakeholder priorities.

The results will guide the preparation of the **transnational training sessions, to be implemented between April 2026 and September 2026**, and will also inform the forthcoming Governance Guidebook for Boosting NEB-based Urban Biodiverse Transition.

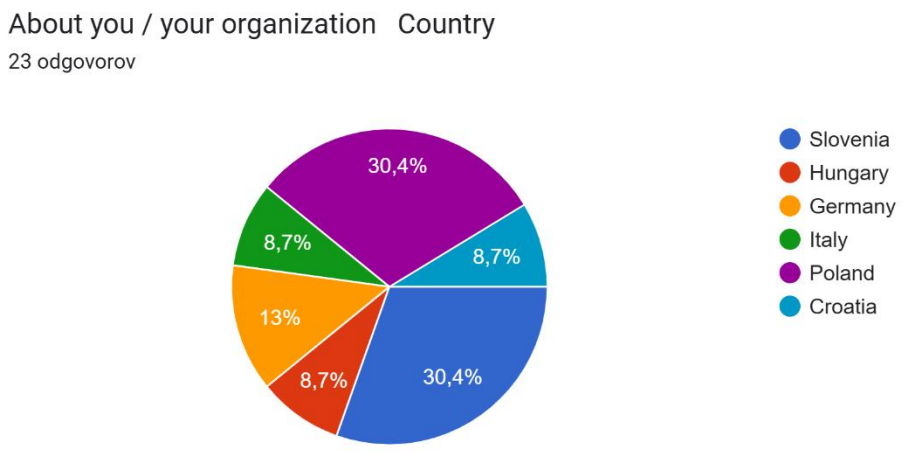
The project partners should use this document as a **guiding framework** for defining the **core focus** of each training and identifying **potential topics** to be included under the respective thematic

areas. The suggested training implications are intended as **recommendations**, providing direction and flexibility rather than prescriptive requirements.

Note: all figures are copied forms Google Forms document, whereas its Excel file counterpart is an annex to this deliverable. In the figures, “X odgovorov” indicates the number of responses received for each question.

2. Overview of Participating Stakeholders

Feedback to the questionnaire was collected from stakeholders representing **all partner countries**, with the largest share coming from Slovenia and Poland.

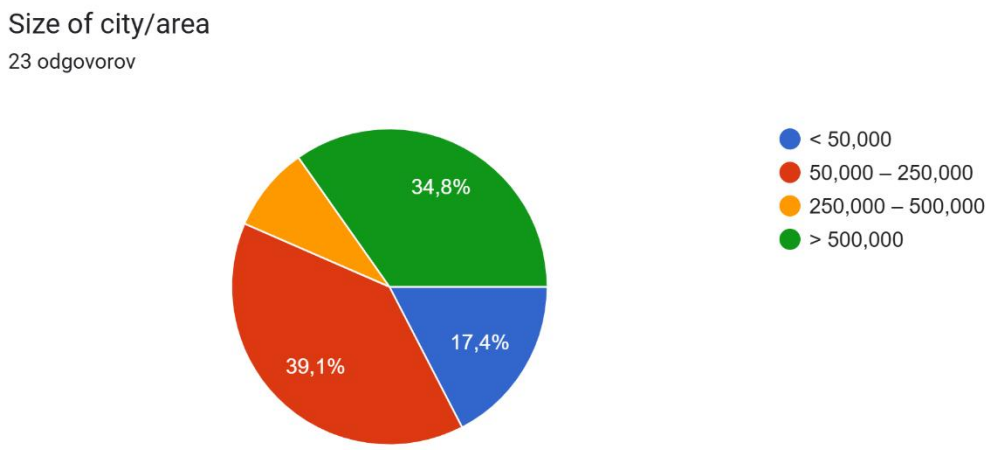


Participants came from a **broad range of public institutions and organizations** involved in urban management, spatial planning, environmental protection, and municipal services. These included municipalities, national or regional authorities, research institutes, public utility companies, national parks, and private consulting or design companies involved with public institutions.

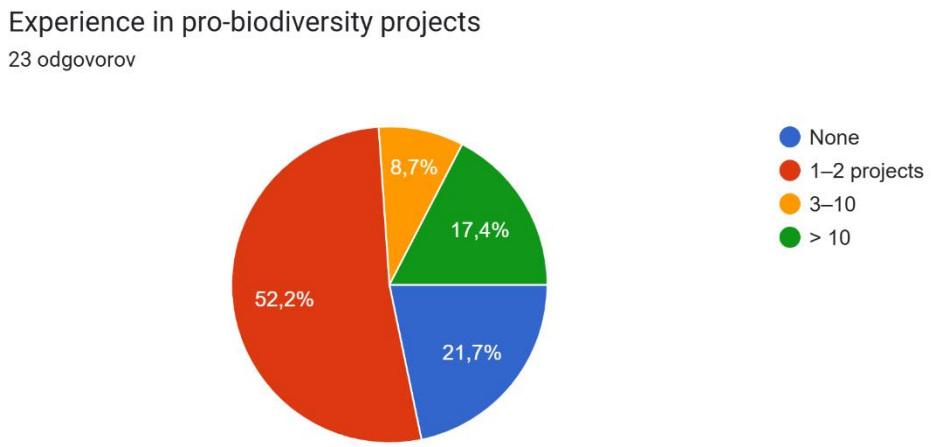
Stakeholders also covered a wide spectrum of **professional roles**. The most common functions reported were:

- Urban and environmental planning
- Design and project management
- Maintenance and implementation of green infrastructure
- Administrative and decision-making roles

The respondents represented **cities and territories of diverse sizes**, ranging from small municipalities (under 50,000 inhabitants) to large metropolitan areas (over 500,000 inhabitants). This offered a wide territorial perspective on challenges and needs related to biodiversity management in urban areas.



Experience with pro-biodiversity initiatives varied considerably across participants. While some stakeholders had no prior involvement, others reported 1-2 implemented projects, and a few had extensive experience (more than 10 projects). This diversity suggests that while there is growing awareness and interest across regions, practical experience is unevenly distributed, pointing to the need for knowledge exchange and capacity-building among partners.



2.1. Respondent Selection and Adequacy of the Sample

The Points of Inquiry exercise was **not designed as a statistically representative survey** of the general public or of all public institutions in the six partner countries. In line with the Application Form, its purpose is to determine the points of inquiry needed to optimise the capacity-building course, i.e. to capture the perspectives of the stakeholders who form the actual target group of

the training sessions under Activity 3.2. It is therefore a **targeted (purposive) training needs assessment**, and the size and composition of the sample should be read in that light.

How respondents were selected. Respondents were not recruited through open or anonymous dissemination of the questionnaire, but through the stakeholder mapping process described in the Introduction. Each pilot city (Kranj, Pula, Wrocław and Érd), together with Poliedra and HSW, identified the public stakeholders in its territory falling within the five stakeholder categories defined in the Application Form (local and regional agencies; supervisory bodies; municipalities and other local/regional governing bodies; public service providers; other public actors). In doing so, partners were asked to apply the points of inquiry foreseen in the Application Form – the prospective trainee, his/her superiors and subordinates, the human resources unit and the public – so that the persons mapped are those who will either attend the training, decide on attendance, or are directly affected by how trainees perform their tasks. The questionnaire was then circulated by the project partners in all six countries to these mapped stakeholders. The respondents are thus drawn from **the same pool of institutions and persons who are being invited to the four training sessions**, which is the population whose training needs this deliverable is meant to identify.

Why the sample is considered sufficient. Although 23 responses is a modest number in absolute terms, it is considered adequate for the purpose of this exercise for the following reasons:

- **Coverage of the target group:** responses were received from all six partner countries (Slovenia 7, Poland 7, Germany 3, Hungary 2, Italy 2 and Croatia 2), from the main stakeholder categories targeted by Activity 3.2, from a spread of professional roles (planning, design and project management, maintenance, administration and decision-making) and from territories ranging from small municipalities to large metropolitan areas. The key sources of variation that could influence training needs are therefore all present in the sample.
- **Proportionality to the training format:** the Application Form foresees a minimum of 12–18 participants per training session. The number of respondents is larger than a single training cohort, meaning that the content of each session is informed by more voices than it will serve. As the respondents are the prospective trainees and their superiors themselves, the results do not need to be generalised to a larger, unknown population.
- **Depth and consistency of the responses:** the questionnaire combined closed questions with open-ended questions (5–6 per thematic area) and yielded detailed qualitative input, including descriptions of barriers and good practice examples. In this consultation the same

core themes – insufficient financial resources, fragmented coordination between departments and administrative levels, unclear or complex regulation and weak enforcement, procurement rules favouring lowest cost, lack of data and public acceptance of biodiversity-friendly maintenance – recurred consistently across countries, institution types and all four thematic question sets. This indicates that the main training needs have been captured and that additional responses would most likely confirm rather than change the picture.

- **Triangulation with other project outputs:** the questionnaire results are not used in isolation. They were cross-checked by the responsible partners against their own thematic expertise, the experience of the pilot cities, and the analyses carried out under Activity 3.1 (D3.1.1 CE Strategy for NEB-based Urban Biodiverse Transition). The convergence between these sources and the questionnaire increases confidence in the needs identified.
- **Built-in feedback loop:** the implications for training set out in this document are recommendations and a guiding framework, not prescriptive requirements. The identified needs will be further validated through the registrations and participant feedback collected during the training sessions and reported in D3.2.2, allowing partners to adjust the focus of next activities.

Limitations. We acknowledge that a larger number of responses would have been welcome. Slovenia and Poland together account for around 60% of the responses, so country-specific conclusions for Germany, Hungary, Italy and Croatia rest on only a few responses each. For this reason the findings are presented at the aggregated, transnational level, which also corresponds to the transnational format of the training sessions. The percentages shown in the figures should therefore be understood as a general indication of stakeholder views rather than as precise figures, and the conclusions drawn from them are put forward with this limitation in mind.

3. Topic: "Governance, Legislation and Policy" (responsible project partner POR)

The consultation aimed to identify key governance-related challenges and opportunities in implementing pro-biodiversity actions at the local and regional scale.

3.1. Main Difficulties in Implementing Biodiversity Actions

Across the responses, the most prominent obstacle reported was the **lack of sufficient financial resources**, both for implementing new biodiversity measures and for maintaining them over time. **Administrative complexity and regulatory procedures** were also frequently mentioned. Many respondents highlighted **issues in public procurement**, where current tendering rules prioritize lowest-cost solutions rather than ecological value or long-term benefits.

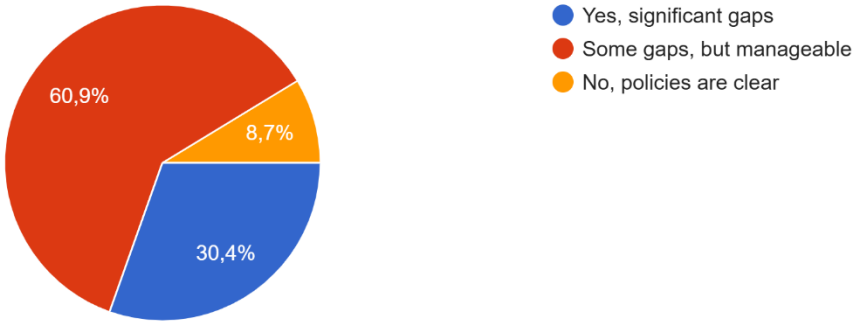
A recurring challenge relates to the **short-term decision-making horizon**, which makes it difficult to commit to long-term ecological goals. Another commonly noted barrier was the **lack of reliable data**, such as habitat inventories or up-to-date vegetation and species mapping, hindering evidence-based planning. Respondents also pointed to **fragmented responsibilities and limited coordination between different municipal departments or between local, regional, and national levels**, which often results in conflicting priorities and inconsistent implementation.

Finally, several stakeholders noted a **tension between biodiversity objectives and public expectations for urban cleanliness, tidiness, and safety**, as well as a **lack of qualified contractors and maintenance staff** experienced in nature-based and biodiversity-supportive practices.

3.2. Policy Gaps

The majority of stakeholders indicated that **existing policies contain gaps or unclear guidance**, though for many these gaps are manageable in practice. Very few respondents considered the policy framework to be fully clear and sufficient. Overall, this suggests that **the challenge lies less in the absence of legislation and more in its practical application, interpretation, and enforcement.**

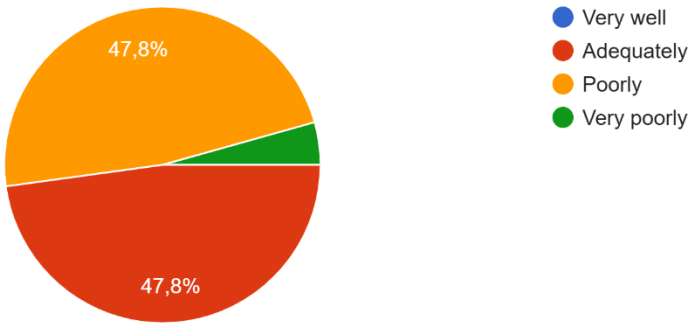
Policy gaps In your view, are there gaps or unclear areas in existing laws or policies on biodiversity that make your work more difficult?
23 odgovorov



3.3. Institutional Cooperation

Perceptions of institutional cooperation varied, but overall respondents assessed cooperation as **insufficient.** While a number described cooperation as adequate, most rated current coordination between local, regional, and national levels as **poor or very poor**.

Institutional cooperation How well do different public bodies (local, regional, national) cooperate on biodiversity issues?
23 odgovorov



3.4. Priority Areas for Strengthening Governance and Policy

When asked to identify priorities for improving biodiversity governance, respondents most frequently emphasized the need for **better coordination between institutions.** This was followed by the need for **increased financial resources**, indicating that both structural and budgetary

improvements are required. Many respondents also expressed the need for **updated or more detailed legislation**, **stronger enforcement of existing rules**, and **greater involvement of citizens and stakeholders** in the planning and co-management of green and natural spaces. Training and capacity-building of public officials was not highlighted as a top priority to strengthen governance and policy for biodiversity.

3.5. Examples of Good Practices

Stakeholders shared a diverse set of good practices from across partner countries, highlighting approaches that combine spatial planning, public participation, ecological enhancement, and innovative governance models.

In **Slovenia**, several examples emphasized the integration of biodiversity into urban planning and design. The City of Kranj showcased the protection and integration of the Kokra River ecological corridor into spatial planning. The corridor secures ecological connectivity, enabling species migration and reducing habitat fragmentation, while being embedded in local and regional spatial plans to prevent construction in critical areas. The initiative was carried out through cooperation between nature protection institutions (ZRSVN), planners, and local authorities, and was supported by public awareness and participation, which strengthened its long-term effectiveness. It is considered a good example of balancing urban growth with biodiversity conservation, although pressures from urbanization and infrastructure development remain a challenge.

Other Slovenian practices included the initiative “The seed of the past is the seed of the future” (original: "Seme preteklosti je seme prihodnosti"), and the greening of bus stop roofs using endangered plant species (note: this approach should be applied with caution, as endangered species may not be well suited for planting in urban heat islands and may also not be ideal as decorative plants). Additional local approaches also focused on listening to stakeholder interests in managing protected areas.

In **Poland**, good practices focused on adapting urban green space management and engaging residents. Municipalities highlighted the introduction of flower meadows that shifted maintenance standards and public perceptions, and the Kraków Forest Cover Increase Programme (2018–2040), which aims to expand urban forest areas. The GrowGreen project demonstrated how participatory design can transform courtyards into green spaces featuring green walls, pocket parks, thematic gardens, and green parklets that respond to local community needs and preferences, while enhancing biodiversity. The courtyards were interconnected by a 'green street' planted with additional trees, creating a cohesive green network within the urban fabric.

From **Croatia**, respondents presented the Silba Reefs co-management model, a pioneering stewardship agreement between a public protected area authority and an environmental NGO for the shared management of a Natura 2000 marine site.[1] Additional community-focused actions included tree planting and seedling distribution as well as invasive species removal campaigns (projects: Plant a tree, don't be a stump; Control and eradication of T. Japonica; Rent-a-tree)

In **Germany**, an example was provided from Rostock, where the **APIS project** focuses on planning and monitoring ecological compensation measures and developing biodiversity-supportive green spaces in urban environments.[2]

3.6. Implications for Training: "Governance, Legislation and Policy" (PP5 POR)

Based on these findings, the training should possibly address both structural and practical needs. It connects the key barriers, governance gaps, and good practices identified in the stakeholder consultation with practical learning objectives. Suggested content may possibly include:

- **Understanding Governance Challenges for Urban Biodiversity (**Overview of governance-related obstacles identified by stakeholders)
- **Ensuring financial resources to overcome Difficulties in Implementing Biodiversity Actions** (Explore opportunities to overcome budget limitations)
- **Integrating biodiversity criteria in public procurement** (How to include biodiversity criteria in tender specifications and evaluation).
- **Aligning maintenance regimes with biodiversity objectives**, including communicating changes to the public to reduce opposition.
- **Effective communication and community engagement strategies**, particularly for contested green space interventions.
- **Long-term planning tools and cost-benefit justification**, supporting decision-makers in defending ecological investments.
- **Strengthening the implementation and enforcement** of existing legislation through clearer operational guidance and staff training.
- **Mechanisms to improve coordination** between departments and administrative levels (Mapping institutional roles and overlaps; Tools for interdepartmental coordination:

[1] https://medpan.org/en/projects/co-silbareefs-building-mpa-connectivity-through-first-co-management-mpas-croatia
[2] https://rathaus.rostock.de/sixcms/media.php/rostock_01.a.5449.de/datei/NA_APIS_HRO_Projekt.pdf

working groups, inter-agency agreements, memoranda of cooperation, establishment of "project department").

- **Examples of Good Practices** (Review of good practices from the consultation (Kokra River corridor, Silba Reefs, GrowGreen, etc.)

This training will help build the institutional capacity required to overcome current governance barriers and support more consistent and effective pro-biodiversity planning and action.

4. Topic: New European Bauhaus Architecture, Building & Engineering (responsible project partner HSW)

The stakeholder consultation focused on understanding the main challenges, knowledge gaps, and opportunities in implementing the **New European Bauhaus (NEB)** core values – *Sustainable, Inclusive, and Beautiful* – across architecture, building, and urban design practices.

4.1. Main Challenges in Applying NEB Values

Across all responses, the lack of funding (note: it may also be that limited capacity to secure funds is an issue here) emerged as the most significant barrier to implementing NEB-inspired actions, particularly in achieving sustainability and aesthetic quality within public budgets. **Low public awareness** and **regulatory barriers** were also repeatedly highlighted.

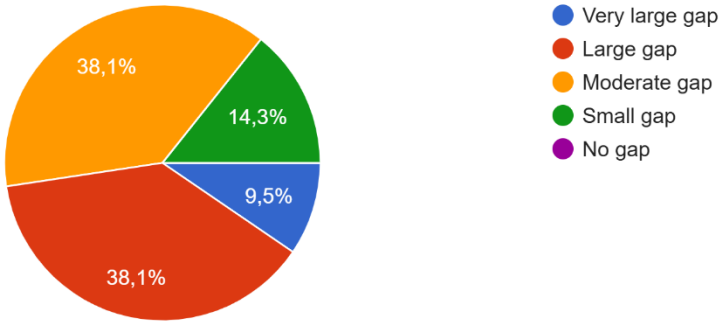
Other common challenges included **limited political will** and **insufficient technical knowledge** on sustainable and circular construction methods. Together, these issues show that while NEB principles are widely appreciated, their application is hindered by financial, administrative, and capacity-related constraints.

4.2. Gap Between Current Practices and NEB Goals

Most respondents identified a **moderate to large gap** between current architectural and urban design practices and the NEB objectives. While awareness of sustainable and inclusive design is growing, its **translation into everyday professional practice remains limited**. Only a few stakeholders described the gap as small, typically in municipalities with existing sustainability programs or experience with nature-based solutions.

This indicates that **mainstream design and construction practices still fall short of fully integrating the holistic NEB vision** of combining sustainability, inclusion, and beauty.

Gap assessment How would you rate the gap between current building/urban design practices and NEB goals?
21 odgovorov



4.3. Policy Barriers

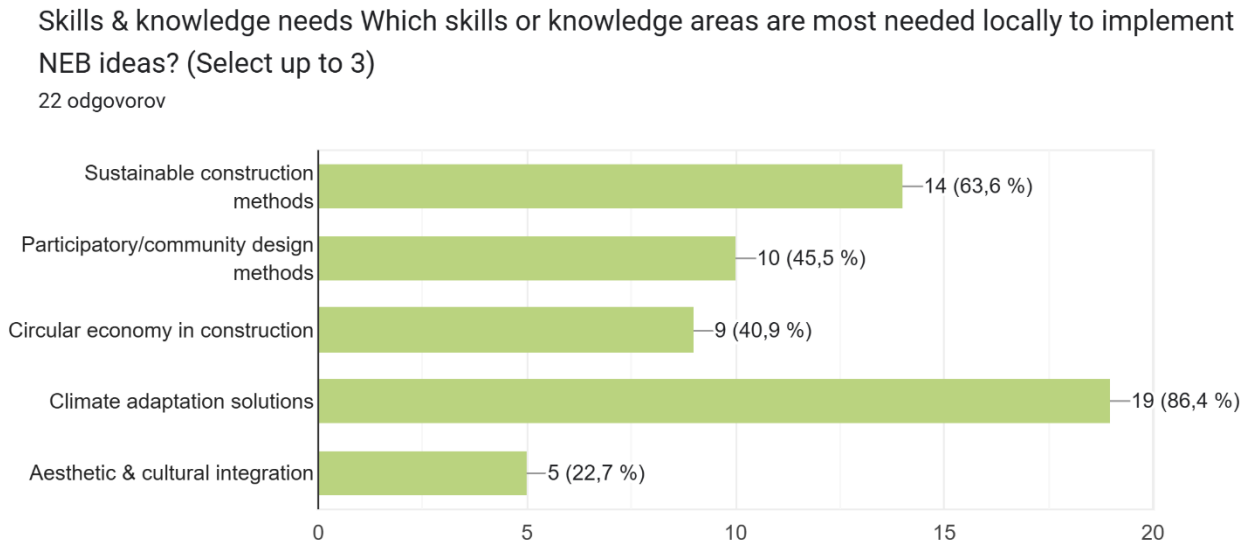
Regulatory and policy frameworks were frequently cited as obstacles. The majority of respondents described **significant or moderate barriers**, whereas only a small number reported no barriers at all.

This suggests the need for **policy modernization**—updating technical standards, simplifying approval processes, and embedding sustainability and inclusion criteria into building regulations and public procurement procedures.

4.4. Skills and Knowledge Needs

Stakeholders identified several priority areas where **capacity building** is required to support NEB implementation:

- **Sustainable construction methods** – low-carbon design, green materials, energy efficiency.
- **Climate adaptation solutions** – integration of resilience measures and nature-based design.
- **Participatory and community design methods** – effective tools for co-design and citizen involvement.
- **Circular economy principles in construction** – reuse, material cycles, and life-cycle assessment.
- **Aesthetic and cultural integration** – balancing innovation with local identity and heritage.



4.5. Community Engagement

Community involvement was seen as **valuable but inconsistent in practice**. It works best at the **neighbourhood scale**, through participatory budgeting and co-design of small urban spaces, as seen in Kranj and Wrocław (e.g. Grow Green project). These approaches have strengthened social cohesion, trust, and public satisfaction, ensuring that new projects respect the region's cultural heritage, landscape, and traditional architecture.

However, participation is **less effective in large-scale infrastructure or architectural projects**, where citizen input often has limited influence on final decisions. Barriers include insufficient communication, limited engagement tools, and competing priorities (e.g. parking, land use, development intensity), where public preferences may clash with financial, technical, regulatory or political constraints. Stakeholders highlighted that **effective participation requires a lot of effort from municipalities, clear feedback loops, inclusivity, and early involvement** in the design process.

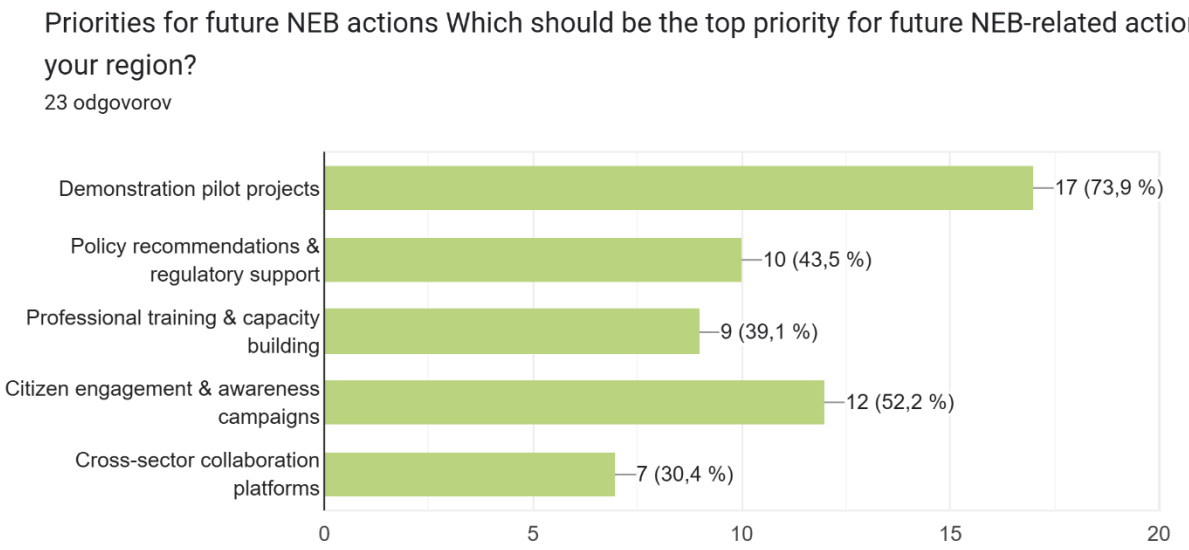
4.6. Priorities for Future NEB Actions

When asked to identify priorities for advancing NEB implementation, stakeholders emphasized the need for practical and collaborative measures. The following priorities were most frequently mentioned:

1. **Demonstration pilot projects** – to showcase tangible examples of NEB-inspired design.

2. **Citizen engagement and awareness campaigns** – to build public understanding and support.
3. **Policy recommendations and regulatory support** – to align legal frameworks with NEB objectives.
4. **Professional training and capacity building** – to strengthen technical and design competences.
5. **Cross-sector collaboration platforms** – to connect architects, engineers, planners, and communities.

Overall, stakeholders expressed a clear desire to **move from theory to practice**, emphasizing demonstrative and cooperative approaches.



4.7. Implications for Training: "New European Bauhaus - Architecture, Building & Engineering" (PP HSW)

Based on the stakeholder consultation findings, the training should focus on practical methods and technical skills that help translate **NEB values - Sustainable, Inclusive, and Beautiful -** into everyday planning, design, and construction practices. It connects the key barriers, policy gaps, and professional needs identified by respondents with targeted capacity-building priorities.

Suggested content may possibly include:

• **Understanding NEB Core Values and Local Application** (Overview of the NEB values and principles and how they can be embedded into municipal planning, architecture, and engineering practices.)

• **Sustainable and Circular Construction Methods** (Training on low-carbon materials, energy-efficient building design, material reuse, and life-cycle assessment approaches.)

• **Climate Adaptation and Nature-Based Design** (Integrating resilience, green infrastructure, and nature-based solutions into urban and building projects.)

• **Participatory and Inclusive Design Approaches** (Methods and tools for community co-design, participatory budgeting, and ensuring inclusivity in architectural and urban projects.)

• **Designing and Managing Demonstration Projects** (showcasing demonstration projects that include NEB values)

• **Effective Communication and Public Awareness** (Strategies for increasing public understanding of NEB values, promoting behavioural change, and communicating design quality.)

This training will help strengthen professional and institutional capacity to implement the **New European Bauhaus vision in practice**, bridging the gap between policy and design through applied knowledge and demonstrative action. The training could be designed to be more practical than theoretical (although national differences may apply). For example, a more exercise-based approach—such as the “project in a day” method—could make the training more engaging and effective.

5. Topic: Environmental Sustainability & Decision Support Systems (responsible project partner Poliedra)

The stakeholder consultation explored challenges, gaps, and opportunities related to the integration of **environmental sustainability and climate considerations** into local and regional decision-making processes.

5.1. Integration Difficulties

Stakeholders identified several persistent challenges in embedding environmental considerations into policy, planning, and everyday decision-making. The most frequently mentioned difficulties include **conflicts between development goals and conservation priorities**—for example, urban development agendas that emphasize economic growth, infrastructure expansion, and housing often push environmental criteria down the priority list.

Another recurring issue is **fragmented institutional responsibility**. Environmental concerns cut across multiple sectors—such as transport, water management, spatial planning, housing, and culture—yet decision-making remains largely **siloed**. In addition, **coordination with neighbouring municipalities, regional authorities, and national administrations** is often slow and inconsistent, further weakening integrated environmental governance.

Respondents also highlighted **insufficient environmental data and monitoring systems**, which hinder evidence-based planning and the ability to evaluate long-term impacts. **Limited political will**, **bureaucratic complexity**, and **short-term economic and political priorities** (often aligned with legislative cycles) were seen as major barriers to the consistent application of sustainability principles.

Several stakeholders noted that **environmental measures are still perceived as costs rather than long-term investments**, reducing their political appeal. Others pointed to **public resistance** as a growing challenge—certain climate and environmental actions, such as reallocating street space, reducing car use, or introducing more “wild” green areas, can face opposition from residents and businesses when perceived as inconvenient or disruptive.

5.2. Legislation

Stakeholders’ opinions on current environmental regulations varied:

- Many described them as **appropriate**, but often **unclear or overly complex** in practice.
- It was also emphasized that **implementation and enforcement** remain the main challenges, rather than the absence of legal frameworks.
- A smaller number viewed legislation as **too weak**, particularly in relation to climate adaptation and biodiversity protection, while a few felt it was **too strict**.

Legislation Do you find current environmental regulations and directives:
22 odgovorov

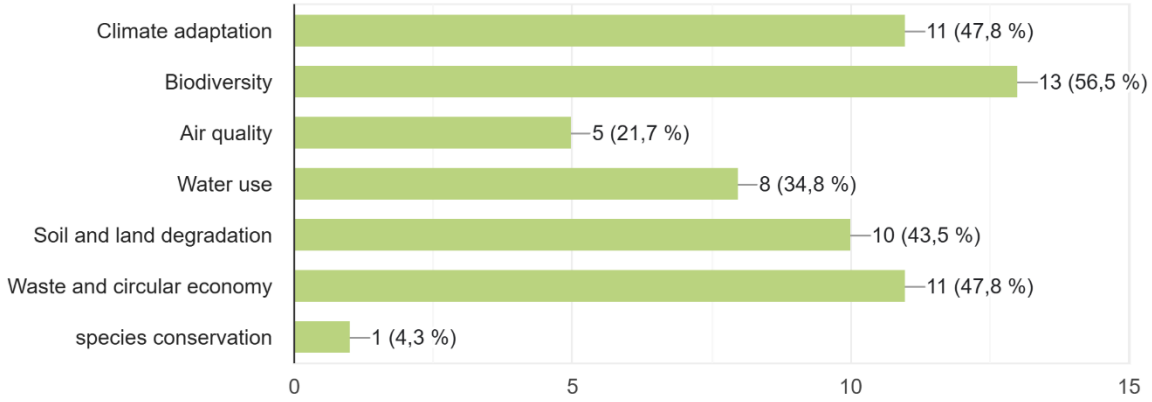
Legislation is generally adequate in scope but often **difficult to interpret, unevenly applied, and administratively burdensome**, leading to inconsistent results at the local level.

5.3. Overlooked Aspects in Decision-Making

Respondents were asked which environmental issues are most often overlooked in planning and decision processes. The most frequent responses included:

- Biodiversity and species conservation
- Climate adaptation
- Waste management and circular economy
- Soil and land degradation

Overlooked aspects Which environmental issues do you feel are too often overlooked in decision-making and planning?
23 odgovorov



5.4. Climate Change Integration

Most stakeholders reported that they **frequently or sometimes encounter difficulties** in integrating climate change considerations into decision-making. Common challenges include:

• Uncertainty in climate projections and a mismatch between long-term climate horizons and short-term political or investment cycles, which complicates planning and prioritization.

• Limited financial and technical capacity within municipal administrations, restricting the ability to design and implement adaptation and mitigation measures.

• Rigid administrative procedures and complex funding requirements, as accessing EU or national grants often involves heavy administrative workloads that delay implementation.

• Outdated planning standards and regulatory frameworks that make it difficult to integrate adaptation measures into spatial and infrastructure planning.

• Conflicts between urban development pressures and environmental needs, such as the continued expansion of built-up areas rather than renovation or densification of existing structures, leading to the loss of permeable and green spaces.

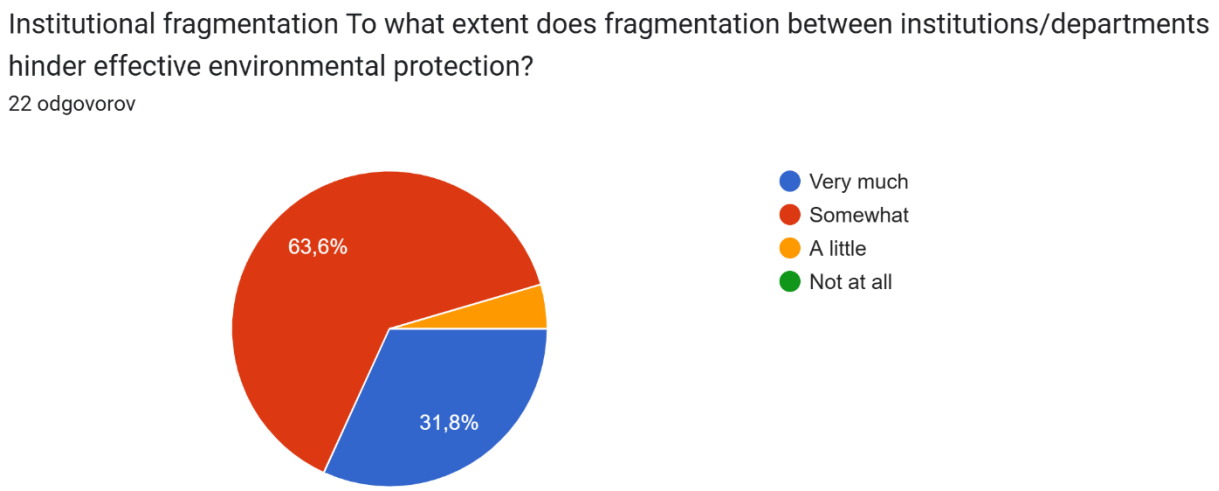
• Institutional fragmentation across departments (planning, transport, water, environment), resulting in a lack of coordinated climate action.

• Limited public awareness and social resistance to transformative measures, particularly those requiring behavioural change or reallocation of public space.

• Physical constraints of the built environment, especially in dense, historic urban areas with high proportions of impermeable surfaces, which complicate the implementation of nature-based or blue-green infrastructure solutions.

5.5. Institutional Fragmentation

The majority of respondents assessed institutional fragmentation as a **moderate to strong obstacle** to effective environmental protection. Lack of coordination between departments and across administrative levels (local, regional, national) leads to overlaps, delays, and inconsistent implementation.



5.6. Knowledge and Tools

Stakeholders emphasized the need for both technical and organizational support to better integrate environmental sustainability into decision-making. The most common needs included:

- **Access to reliable environmental and climate data**, and better use of GIS and modelling tools for e.g. stormwater management, and integrated spatial data platforms that allow for real-time environmental analysis and scenario-based planning.
- **Training in spatial-environmental impact assessment, ecosystem services valuation, and nature-based solutions.**
- **Cross-departmental workshops and training** to link sustainability with other policy areas (transport, housing, finance).
- **Practical and experiential learning**, such as on-site visits, case studies, and good practice exchanges.
- **Guidelines and standards** (e.g., ISO 14001, ISO 17298 on biodiversity) to support structured environmental management.
- **Participatory and communication tools** to improve citizen and stakeholder engagement.

5.7. Implications for Training: "Environmental Sustainability & Decision Support Systems" (PP Poliedra)

Based on these findings, the training should strengthen technical, analytical, and institutional capacities to support evidence-based environmental decision-making. It should address both **systemic governance barriers** and **practical skills** for integrating environmental and climate priorities across all policy areas.

Suggested content may possibly include:

• **Integrating Environmental Sustainability into Decision-Making** (Overview of the main governance and procedural barriers; tools for aligning development and environmental objectives.)

• **Climate Change Adaptation and Mitigation in Local Planning** (Incorporating long-term climate projections, risk mapping, and resilience measures into plans and investments.)

• **Addressing Overlooked Environmental Aspects** (Mainstreaming biodiversity, climate change considerations, soil protection, and circular economy principles into urban and regional policies.)

• **Decision Support Systems and Environmental Data Tools** (Using GIS, modelling, and data integration to assess environmental and climate impacts; scenario-based planning. Additionally, cost/benefit analysis of these tools could be presented to prove their worth.)

• **Participatory and Cross-Sector Approaches** (Engaging communities and non-state actors; participatory tools and communication strategies for building public support.)

• **Good Practice Exchange and Demonstration Examples** (Sharing lessons learned from cities and regions that successfully integrate environmental criteria into governance.)

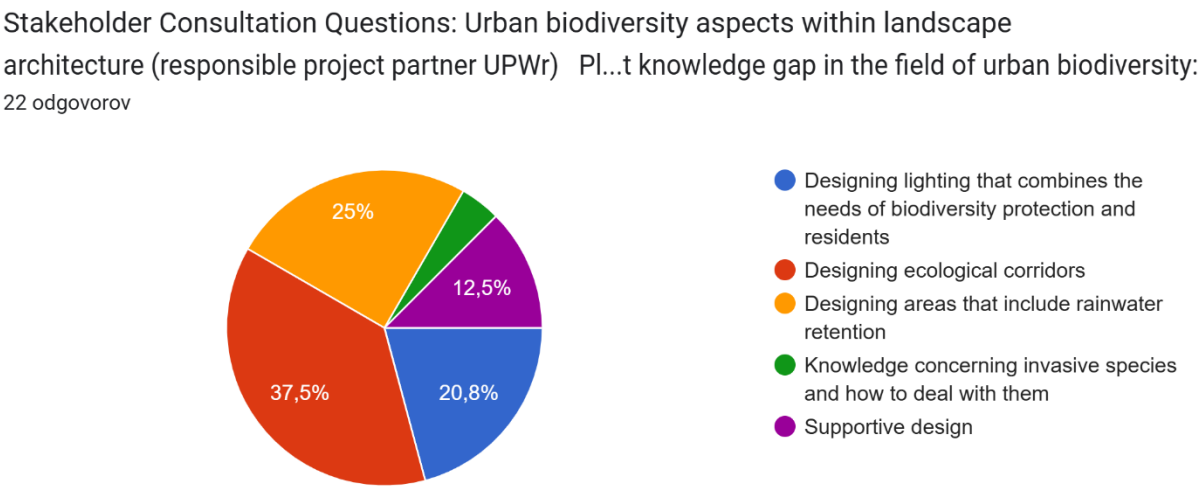
6. Topic: Urban biodiversity aspects within landscape architecture (responsible project partner UPWr)

The consultation explored how landscape architecture and urban design can contribute to biodiversity protection and enhancement, focusing on key knowledge gaps, priority areas, and institutional cooperation needs.

6.1. Key Knowledge Gaps Identified

Stakeholders most frequently identified the following as the main **knowledge gaps**:

- Designing ecological corridors
- Designing areas for rainwater retention
- Designing lighting that combines the needs of biodiversity protection with resident needs
- Supportive design approaches
- Knowledge concerning invasive species and how to deal with them



Respondents emphasized the need for stronger practical and technical competencies in ecological and climate-sensitive design, especially concerning connectivity, light pollution, and water retention in urban environments.

6.2. Importance and Knowledge Levels

Across topics, respondents rated **importance/local priority** consistently high (average scores between 4 and 5), but **institutional knowledge and competence** typically lower (averages between 2 and 4), revealing a strong **implementation gap**.

Key findings by topic:

Topic	Perceived Importance	Current Knowledge Level
Designing lighting that limits ALAN (artificial light at night)	3,52	3,10
Ecological corridors (road verges, streams, crossings)	3,86	3,48
Rainwater retention & NBS (rain gardens, wetlands, SUDS)	**4,62**	3,71
Invasive species management	3,81	3,57
Design for pollinators	**4,05**	3,76
Native/resilient species selection	3,90	3,57
Green roofs/walls as habitats	3,52	3,38
Public procurement & maintenance standards	3,76	**2,95**
Limiting pollution (light, noise, herbicides)	**4,09**	**3**
Greenery in road lines – safety vs biodiversity	**4,09**	3,57
Biodiversity monitoring & data	3,33	**2,62**
Public participation & conflict management	3,71	3,43
Data & tools (GIS, habitat maps, remote sensing)	3,81	3,57
Biodiversity vs. climate adaptation	**4,14**	3,57
Legal compliance (Natura 2000, EIAs)	**4,14**	3,71

6.3. Institutional Cooperation

When asked which departments require closer collaboration for implementing biodiversity actions, respondents most frequently mentioned:

- Spatial planning (most common answer across all respondents)
- Roads and waterworks departments
- Nature conservation units
- Procurement and education departments

Which departments do you most need cooperation with when trying to implement biodiversity actions? (multiple choice):
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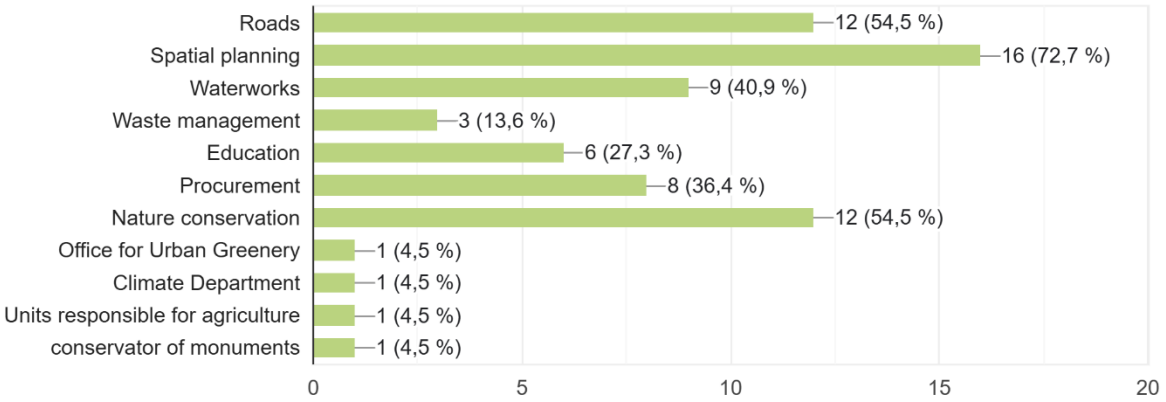

6.4. Expected Results and Desired Effects

Stakeholders expressed diverse expected outcomes from biodiversity measures, including:

- **Increased species richness and ecological connectivity** (via corridors, pollinator-friendly planting, and habitat restoration).
- **Improved water retention and ecosystem service provision** (e.g., microclimate regulation, stormwater management).
- **Expansion of ecologically valuable green spaces** and improved management practices.
- **Enhanced monitoring systems and measurable indicators** (habitat quality, species diversity, urban greening coverage).
- **Greater citizen engagement and awareness** through participatory projects.

Good practices, such as those in **Wrocław**, demonstrate integrated biodiversity monitoring and urban planning systems linking climate adaptation with ecological objectives—an approach seen as a model for others.

6.5. Implications for Training: "Urban Biodiversity Aspects within Landscape Architecture" (UPWr)

Based on these findings, the training should focus on bridging the gap between ecological knowledge and design practice, equipping professionals with both technical competencies and interdisciplinary cooperation tools. Suggested training content may include:

• **Designing Ecological Corridors and Connectivity Features** (Principles of ecological networks in urban settings; road verges, waterways, wildlife crossings; case-based design workshops.)

• **Biodiversity-Friendly Lighting and Pollution Control** (Guidelines for limiting artificial light at night (ALAN); integrating light design, safety, and ecological protection.)

• **Rainwater Retention and Nature-Based Solutions (NBS)** (Practical design of rain gardens, swales, wetlands, and green infrastructure for dual ecological and climate benefits.)

• **Species Selection and Genetic Diversity** (Choosing native and climate-resilient species; promoting genetic diversity in urban tree planting and green infrastructure.)

• **Design for Pollinators and Urban Fauna** (Habitat structure, flowering continuity, maintenance regimes, and citizen involvement.)

• **Invasive Species Identification and Management** (Practical control methods, communication strategies, and community monitoring tools.)

• **Data and Monitoring Tools** (Using GIS, remote sensing, and biodiversity indicators; citizen science in urban monitoring.)

• **Integrating Biodiversity and Climate Adaptation in Design** (Design strategies for drought, heat, and water retention that enhance biodiversity.)

• **Good Practice Exchange** (Showcasing local and European examples of: biodiversity-oriented urban landscape projects, diodiversity design integration into spatial planning, biodiversity design in public procurements, biodiversity design integration into local government regulations).

7. Conclusion

Through the analysis of stakeholder feedback and thematic areas, some overlaps between the proposed training topics were identified. To ensure clarity and complementarity, a distinction of focus areas for each training session has been outlined in the table below. This approach will help avoid duplication, ensure that all key aspects are covered efficiently, and strengthen the overall coherence of the training programme.

Training Session	Core Focus	Explanation
Governance, Legislation and Policy (PP5 POR)	Focus on how institutions can better organize, coordinate, and fund actions for biodiversity.	This training will help participants understand how to improve cooperation between departments, apply and enforce environmental laws, secure funding, and communicate biodiversity goals effectively within and beyond public administration.
NEB Architecture, Building and Engineering (PP8 HSW)	Focus on how to put New European Bauhaus (NEB) values—Sustainability, Inclusion, and Beauty—into real design and construction projects.	Participants will learn practical methods for designing and building in environmentally friendly and socially inclusive ways, and working together with communities through co-design.
Environmental Sustainability and Decision Support Systems (PP7 Poliedra)	Focus on how to make better, evidence-based decisions for the environment and climate.	This training will show how to use environmental data, digital tools, and models (like GIS or impact assessments) to support planning and policy decisions. It will also explain how to integrate climate and environmental goals into all areas of local governance.
Urban Biodiversity aspects within Landscape Architecture (PP1 UPWr)	Focus on how to design cities that work better for both people and nature.	Participants will gain practical knowledge about creating green spaces that support biodiversity—such as ecological corridors, pollinator-friendly areas, and rainwater-retaining landscapes—and learn how to monitor their impacts and involve local communities in managing them.

Next phase of the activity will be the consideration by URBIO BAUHAUS project partners on how to make webinars interesting and appealing.