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URBIO BAUHAUS

D.1.1.1 GUIDE ON CREATION OF LOCAL BIOCENTUM NODES

Prepared by Anja Prislan projektno svetovanje s.p.

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CONTENT

1.ESTABLISHMENT AND OPERATION OF BIODIVERSITY CENTERED URBAN MINDSET LOCAL NODES

The aim of Activity 1.1: Establishing and operating local BIOCENTUM nodes (Biodiversity Centered Urban Mindset) is to develop a guide for cities on how to establish local BIOCENTUM nodes. They will be set up by the partner municipalities in collaboration with the Quintuple Helix actors: local authorities, economic actors, scientists, citizens and NGOs.

By using methods of the **Living Lab approach**, the nodes will attract a wider urban population and ***act as a green urban awareness-raiser to identify challenges and find solutions for the specific local biodiversity targets***. The BIOCENTUM nodes will collectively create urban biodiversity design plans and feed these into Activity 2.1 to translate the expectations of the New European Bauhaus into current and future urban investments.

The guide will introduce New European Bauhaus (NEB) concepts, urban biodiversity solutions and the Living Lab (LL) approach that will lead the green urban transformation in local environments. Their working principles will serve as essential components of the BIOCENTUM nodes as they provide a framework for setting up activities, methodologies and the overall tone for engagement and capacity building for specific biodiversity challenges in each partner city and region.

1.1. General aims and objectives

- ✓ To build knowledge among citizens about the benefits of biodiversity in the city.
- ✓ Promote specific biodiversity objectives and change mindsets in the city.
- ✓ Facilitate the co-creation of solutions to identified biodiversity challenges.
- ✓ Interact with communities and stakeholders in the creation of the Urban Biodiverse Transition Roadmap.
- ✓ Support decision-makers in the development of the green transition in the city.

A participatory process is crucial as it ensures that decision-making includes different perspectives and promotes social cohesion. By involving representatives from science, politics, business and civil society in the process, this approach fosters a sense of ownership of the outcomes and ensures that the results reflect the needs and wishes of the wider community. Living Labs provide an environment that facilitates interactive schemas and encourages collaboration across different fields of knowledge to test and co-create solutions to real-world problems and complex challenges in a holistic way, creating societal value. In this way, stakeholders are immersed in a creative social space where they can shape and experience their own future. The Living Lab approach includes the following methods that enable stakeholders to jointly develop knowledge-based tools and activities:

- ✓ Informing stakeholders through a ‘design thinking’ approach
- ✓ Supporting civic engagement and capacity building
- ✓ Development of an impact-by-design research platform involving local stakeholders:
  - Collective ideation
  - Co-creation of solutions
  - Collective implementation.

1.2. A framework and a model

The structure, activities and objectives of the BIOCENTUM nodes are modelled on the initiatives of the New European Bauhaus, the European Green Deal, the UN Sustainable Development Goals and the Urban Nature and Biodiversity for Cities policy. The European Union plans to prioritise the modernisation of existing buildings and spaces in the future, which is in line with the European Commission's Renovation Wave initiative under the EGD.

The BIOCENTUM nodes provide an overall framework for systematic engagement and capacity building for stakeholder engagement, partnerships and co-operation as a means to implement biodiversity solutions at the local level. The proposed framework consists of the Living Lab model and the New European Bauhaus approach, which enables a knowledge-based ecosystem that allows project partners to choose the right co-creation practic es and participatory design tools for local research, learning and innovation. The concept of 'Living Labs' will help to create an environment where biodiversity challenges in urban areas can be recognised, and solutions found.

Their aim is to:

- ✓ jointly develop knowledge-based tools and activities,
- ✓ assess improved biodiversity solutions,
- ✓ promote biodiversity opportunities and
- ✓ build capacity to engage citizens as positive actors in achieving biodiversity goals.

1.3. Specific biodiversity challenges of the BIOCENTUM nodes

- ➢ Kranj, Slovenia – preserving depopulated plant and animal species by providing new urban living areas (biodiverse islands) for endangered species;
- ➢ Pula, Croatia – increasing the population of 3 keystone biodiversity species by creating several urban micro-interventions;
- ➢ Wroclaw, Poland – contributing to biodiversity increase by preserving natural patterns of wildlife;
- ➢ Erd, Hungary – developing a biodiverse urban area with specific plant species and application of edible plants.

The collaborative framework encourages multi-level engagement that combines local action with a global perspective and promotes both horizontal exchange between like-minded people and vertical exchange between groups at different levels.

The document presents theoretical concepts and a methodological approach for cities on how to set up local nodes using the co-creative and multiple helix approach. Together with templates, it serves as a guide for cities on how to utilise green, participatory and aesthetic elements of NEB in their performance.

1.4. Validation process

During periods 1 and 2, the validation process will allow for feedback, reflection and review by the project partners in three phases:

- Phase 1: Presentation of the draft guide for establishing local BIOCENTUM nodes to the project team. Peer review with feedback and discussion at the first partner meeting.

- Phase 2: Local reporting on the participatory experimentation of the New European Bauhaus Initiative using the BIOCENTUM nodes in Activity 1.2. A face- to-face meeting with the partners to capture the lessons learnt from the local implementation of the World Caffe workshops and Open call competition as well as the general experiences during the start-up phase of the BIOCENTUM nodes.

- Phase 3: Dedicated online session or on the project group meeting with all partners to optimise the potential for mutual learning to develop the procedures for creating a biodiversity-focused urban mindset.

2.CITIES OF THE FUTURE

2.1Striving for people and nature

More than half of humanity lives in cities today, and this figure is expected to rise to more than 70 per cent by 2050. Remarkably, it is estimated that 60 per cent of the urban areas that will exist by 2050 have not yet been built. This is both a great opportunity and a great responsibility for urban leaders to ensure the well-being of their populations and protect the natural systems on which they depend. Cities are hubs for social interaction, economic growth and innovation — but will they be able to provide for the health and well-being of their inhabitants in the future?

The consequences of man-made changes to the natural environment affect our daily lives and pose numerous challenges for us and future generations. Cities contribute to more than 70 per cent of global emissions, mainly through transport, infrastructure and the production of goods consumed by urban populations. In recent decades, we have experienced the impact of unsustainable economic growth that has ignored the limited and finite resources of the natural environment. Today, we are faced with pollution, climate change, loss of biodiversity and depletion of natural resources around the world. The increasing frequency of extreme weather events such as heat waves, wildfires, floods (from storms and sea level rise) and droughts are putting immense pressure on rural and urban communities and systems. Many people are or will be forced to leave their homes due to food insecurity, lack of access to drinking water, housing and public health.
The European Green Deal (EGD) has set itself three main goals: to make Europe the first climate-neutral continent, to decouple resource use from economic growth and to leave no person or place behind. If we take urgent action — such as reducing emissions, integrating climate adaptation into urban planning and better understanding migration caused by climate change — it is possible to reduce the number of people forced to move by 80 per cent.

- **How does urbanisation affect biodiversity?**

Tackling the rapid growth of urban populations and the use of land, water, timber and energy could also help prevent the main causes of biodiversity loss. Globally, three quarters of land areas have been altered by human activity, two thirds of oceans are under serious threat and over 85 per cent of wetlands have been destroyed. The average number of non-human species in their native habitats has declined by more than 20 per cent and around 1 million species are now threatened with extinction. Over the next few decades, the most dramatic loss of biodiversity since the extinction of the dinosaurs 65 million years ago is predicted.

Between 1985 and 2015, the urban land area grew by almost 10,000 km^2 every year. From 1992 to 2000, 190,000 km^2 of natural habitat was lost to urban growth, and by 2030 another 290,000 km^2 will be at risk. Better planning of urban growth, managing protected areas near cities, integrating biodiversity habitats into cities and utilising nature-based solutions to urban problems can help reverse the negative impacts of cities on biodiversity.

In some cities, the provision of habitat is key to the local and even global survival of plants and animals that are threatened with extinction. Other species thrive in urban habitats. Birds with greater environmental tolerance, for example, are more at home in cities. Birds with larger brains are also more likely to thrive in urban environments. In many cases, urban development leads to the replacement of native species with non-native species that are well adapted to urban environments worldwide. This shift leads to a biotic homogenisation that threatens to reduce the biological uniqueness of local ecosystems. For plants, birds and butterflies along urban gradients, the number of non-native species is increasing towards the centres of urbanisation, while the number of native species is decreasing.

Recognising the many societal benefits of nature in cities and the ways in which cities and urban cultures can support biodiversity has many advantages. It is therefore essential that cities are designed to maintain the provision of ecosystem services and that national and international nature conservation plans take urban centres into account. The benefits that urban nature and biodiversity provide to people are often referred to as urban ecosystem services.

2.2 Cities that impress with their beauty, sustainability and adaptability for all walks of life

In 2021, the European Commission included the New European Bauhaus (NEB) in its political and financial initiative to shape the living spaces of our next generations. It aims to transform the built environment and lead to holistically thought-out and designed buildings, open spaces and neighbourhoods as part of the EU Green Deal. The movement also incorporates art, culture, science, nature and technology to create beautiful, sustainable and inclusive places and lifestyles. It emphasises three core values:

- Aesthetics – Quality of experience and style, beyond functionality – A well-designed environment plays an important role in cultivating a sense of place and identity and allows for rich cultural expression. This aesthetic appeal evokes emotion and helps foster connections between individuals and communities.

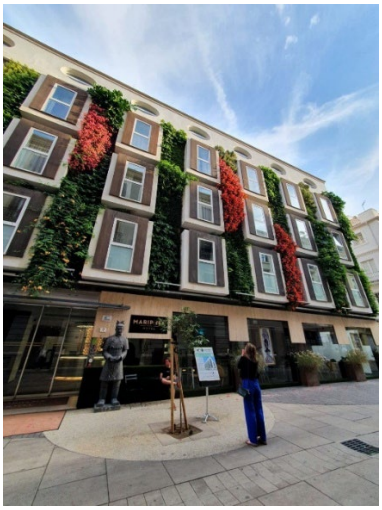
- Sustainability – from nature-based solutions to circular economy, zero pollution and biodiversity – aims to create a positive and harmonious relationship with nature that aligns with climate goals, works towards carbon neutrality and preserves biodiversity for future generations.

- Inclusion – from valuing diversity and equality for all to ensuring accessibility and affordability – This means creating environments that are not only inclusive, but also incorporate the contributions of different groups and ensure that everyone can benefit from and participate in the design process.

Looking at examples of the cities spanning across Europe that are supported by NEB projects:

(i) Vridsløselille site of a Former Prison: the municipality of Albert-slund in Denmark aims to transform a former housed a state into an into a new liveable and green neighbourhood with a distinct identity derived by its unique heritage and rich historic structure. The goal has been to create a flexible and holistic plan that lifts the eye over the prison's surrounding wall and strengthens the social, climatic and landscape cohesive force. The team has compiled a handbook of best practices for biodiversity assessment to promote sustainable transformation. The idea is to include greenhouses, sports facilities, a museum, rooms for creative workshops, art installations and performance halls, an amphitheatre and so on.


(ii) Vertical hydroponic garden in Málaga: the prototype of a vertical hydroponic garden with a grey water recycling station was built at the Mariposa Hotel in Malaga. The project showed how the combination of a grey water recycling station and a vertical hydroponic garden can replace the fresh water normally used to maintain gardens. Andalusia, like many other regions in southern Europe, faces significant challenges in expanding green areas due to increasing droughts and water scarcity. Hydroponic systems are suitable for both indoor and outdoor installations, and can be adapted to the dimensions of the available space. This greening solution increase of aesthetic and touristic value of urban hot spots and decreasing street noise for locals and visitors.




(iii) Enghaveparken – Climate park: In Copenhagen, the city park has been upgraded with a high-performance water catchment system that can be used both for daily recreation and during extreme rain events, helping to protect the surrounding areas in the city. This redesign not only addressed the water challenges, but also created a series of novel recreational opportunities and interactive experiences that subtly promote climate awareness in a positive way. The water harvesting systems are fully integrated and respectful of the neoclassical aesthetic of the park. The solution proves that co-existence with sensitive cultural heritage is possible.


(iv) The Rivers of Sofia: In Sofia, the urban riverbanks were listed as national cultural heritage in 1988 but they were largely neglected due to their inaccessibility from the street level. During the project workshops, architects, urbanists and students, in dialogue with Sofia's chief architect, developed proposals for the river beds' long-term integration into the urban fabric as green public spaces. The Rivers of Sofia have since become a platform for collective urbanism, leading to long-term change. The space is a place for lively shows on temporary stages

and pavilions, vibrant promenades among floating sculptures and cozy relaxation in the riverbanks decorated with lights, fabric, and art installations.


(v) +Limerick Citizen's Innovation Lab: In Limerick, the city of Ireland, a collaboration between the University of Limerick, Limerick City and County Council, as well as the citizens led to the creation of the Citizen Innovation Lab. It is a physical and digital space for observation, co-creation and experimentation that leads toward the climate-neutral city by 2050, guided by the Limerick Climate Action Plan. As a living lab, it leads and supports collaborative research projects, citizen-led initiatives, digital and citizen science tools, and public engagement activities.

(vi) Ecological planning strategies in the last decade in Barcelona implemented many nature-based solutions that serve to cool through shade and evaporation, increase the quantity, quality and connectivity of green spaces and protect people and valuable resources from sea level rise. Regenerating beach dune systems: project raises awareness for the protection of coastal ecosystems that have disappeared in the area. They mitigate the situation by improving access and infrastructure of beaches and make them more pleasant and valuable natural places.
Green Streets and Supreblock: projects introduce a new urban model by putting people at the centre of planning and improving their quality of life by reducing the impact of urban mobility and ensuring the short and long-term integrity of the environment. Inclusive and participatory urban planning of neighbourhoods of Poblenou and Sant Antoni, Cristobal de Moura, and others.



➢ **How can change be promoted?**

To achieve the goals of the European Green Deal and the transition to a sustainable society, a fundamental change must take place at many levels. All European citizens should reconnect with nature, increase awareness and willingness to address climate change and regain a sense of belonging to their local environment and social network. The transition is as much a cultural and social transition as it is a green one: this is the core idea of the New European Bauhaus.
The NEB initiative focuses on 4 key areas:

I. reconnecting with nature: helping people to connect more closely with the natural world by encouraging a shift from a human-centred to a life-centred perspective. These efforts aim to restore natural ecosystems and prevent the loss of biodiversity.

II. rediscovering a sense of belonging to a place: Highlighting cultural, natural and social values such as cultural heritage, art, local crafts, landscapes and community organisations to make people feel more connected to their surroundings.

III. focusing on the communities most in need: supporting solutions that are both affordable and accessible, promoting the inclusion of vulnerable groups and addressing physical and digital gaps, such as the urban- rural divide, the digital divide and access for the disabled.

IV. building a circular industrial ecosystem: promoting life-cycle thinking to tackle the unsustainable use of resources and waste. Key aspects include the reuse, regeneration and transformation of existing buildings, circular and sustainable design practises and the use of nature.

The name of the NEB initiative is inspired by the German Bauhaus School of Arts and Crafts from the early 1900s. Its legacy points to a common source of inspiration driven by the urgency to adapt to the social and technological changes taking place around the world with a multidisciplinary, collaborative and holistic approach. Today, we are faced with the goal of creating sustainable cities, countries and continents. This goal can only be achieved through the joint efforts of many stakeholders. Ecological innovations in society will only be possible through changes in the economic framework or the balance of power. Technological change must be supported by far-reaching changes that affect behaviour, world views and paradigms.

3.SOLUTIONS FOR BIODIVERSITY IN CITIES

In the past, cities were often built on exceptionally fertile land and in areas of high biodiversity. The areas surrounding cities provided water and food, and their natural landscapes provided mental and physical health, recreation and other benefits for the well-being of their inhabitants. Rapid urbanisation can lead to significant degradation of air quality, water purification, biodiversity habitat and recreational opportunities. With the rapid increase in urbanisation, the idea of incorporating nature-based solutions into urban development may offer a way out. EU Commission's defines nature-based solutions as solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions.

Solutions to urban problems will necessarily come from a range of interventions that include grey (or built) infrastructure, green (or natural) infrastructure and hybrids of both. Urban development that is limited to grey infrastructure risks inefficient use of resources and missed opportunities for synergy. Parks and other natural areas provide recreation, exercise, inspiration and social interaction and promote mental and physical health. Urban nature can also help mitigate climate change by storing and sequestering carbon. Street trees, rivers and wetlands cool the air and can play an important role in mitigating urban heat islands. Urban green spaces can improve the quality of life in cities by mitigating the urban heat island effect by 2°C during the day and up to 12°C at night. Green spaces connected to pavements and rooftops allow water to infiltrate into the soil, reducing flooding and pollution downstream and increasing the recharge of valuable groundwater.

Different elements of urban nature can be home to different types and amounts of biodiversity. For example, a city park with forested trails, a stream, and a pond may be rich in urban biodiversity because it is home to many types and large numbers of trees, birds, frogs, fish, and beneficial microbes.

Ecological planning is a guide to smart urbanisation that limits urban sprawl and directs new development to places with minimal impact on biodiversity and ecosystem services, while meeting a city's development objectives.

Depending on the decision-making context and strategy, various tactics can be used in the service of ecological planning to better integrate nature into the city. Some key examples of tactics include the following:

- Improve existing green spaces for local biodiversity (Beninde, Veith, and Hochkirch 2015).
- Identify habitats that used to exist in the city and restore them (Blaustein 2013).
- Enrich and/or reintroduce native plant and animal species (Burghardt, Tallamy and Shriver 2009).
- Plant native plants in parks, roadsides and gardens (Tallamy 2009).
- Encourage urban gardening to ensure food security, provide food for pollinators, and promote mental health and other benefits (Langmeyer et al. 2016; Soga et al. 2017).
- Connect fragmented ecosystems by expanding green spaces nearby, especially by adding vegetation corridors or other forms of connectivity (Beninde, Veith, and Hochkirch 2015).
- Expand the tree canopy with native species (Shackleton et al. 2015).
- Build tunnels or overpasses to allow the movement of animals in the city, especially over roads or other linear features (Riley et al. 2014; Teixeira et al. 2013).
- Add parks and other green spaces to the city (Beninde, Veith, and Hochkirch 2015).
- Use nature-based solutions for stormwater and flood management where possible (Ishimatsu et al. 2017)

- Use transdisciplinary collaboration between urban planners, engineers and ecologists to design stormwater and flood management plans (World Bank 2019).

All of the above tactics are useful for ecological planning, but often they are not particularly useful without a higher-level planning or strategy that helps explain the broader context — one that asks what species we are trying to support, what problems we are trying to solve, and what groups might benefit most from urban nature. Broader planning also helps to target tactics to the places where investments will have the greatest benefit for achieving stated goals (e.g. improving specific elements of biodiversity, nature and/or ecosystem services for key beneficiaries).

Various initiatives around the world provide examples of how to integrate urban nature into planning, how to promote urban biodiversity and how to share knowledge and experience. The Biophilic Cities Network brings together cities, scientists and advocates to develop a better understanding of the ways in which nature in cities contributes to the lives of city dwellers. The international Nature of Cities platform connects people around the world who are interested in designing and creating better cities for all. ICLEI's Cities with Nature programme is another example of an international network for sharing best practise between cities.

4.ECOLOGICAL URBAN PLANNING WITH LIVING LABS

The BIOCENTUM nodes (Biodiversity Centred Urban Mindset (BIOCENTUM) nodes will serve as practical think tanks where new tools, solutions and policy recommendations will be jointly developed, prototyped and tested. They will be able to facilitate the transformation of the pilot sites, raise citizens' awareness, promote education and training for sustainability, and strengthen people's skills and positive behaviour towards biodiversity, resource efficiency and overall respect for the natural environment.

The Biocentum nodes will function as social living labs, be it as a methodology, ecosystem or community. The Social Living Lab serves as a context for informal learning and a process for community problem solving (community development). People from different backgrounds come together to address common concerns and innovate through interactive and engaging activities – e.g. the practitioners who drive the experiments and people who make their valuable contributions as end-users, users, public administrators, company representatives or academic researchers. Living Labs focus on (a) co-creating innovations (b) in real-world contexts (c) involving multiple stakeholders with (d) the goal of creating sustainable value for all stakeholders.
Rather than sticking to a specific format, Social Living Labs are open-ended and organic. Unlike a formal course, there are usually no entry requirements for participation in a Social Living Lab. They are determined by the participants and not by external trainers and a general training agenda. Social Living Labs generally thrive on the exchange of knowledge and skills among like-minded people. The informed learning approach builds on an obvious synergy between informed learning, social living labs and interprofessional education. These are contemporary approaches to learning that promote collaborative and creative problem solving.

There is no single Living Lab method, they all combine and adapt different user-centred co-creation methods to best suit their purpose. However, three main building blocks can be identified in the phases of innovation development:

- ✓ Exploration: getting to know the "current state" and designing possible "future states"
- ✓ Experimentation: Testing one or more proposed 'future states' in practice
- ✓ Evaluation: Assessing the impact of the experiment with regard to the 'current state' in order to iterate the 'future state'.

❖ EXPLORATION

The exploration phase comprises activities in the innovation development phase from the idea to the concept or prototype. In this phase, the participants identify the main problem and possible customised solutions. In general, the exploration phase has three objectives: to understand the existing state of the art, to identify the needs and wishes of the users and to determine the measurements of the future impact of the innovation.

The first step, understanding the existing state of the art, involves analysing the current habits and practises of the target users and their problems, taking into account specific contexts. In this step, mainly methods and tools for observation, participation and in-depth interviews are used.

In the second step, activities focus on identifying the needs and wishes of the users. The second step helps to identify opportunities to improve the existing state of the art. In this step, we can use brainstorming, ideation and co-creation techniques. The most important outcome of this step is a concrete concept that can be co-created in the future. The purpose of exploration is therefore to develop new knowledge or new technologies and to benefit from the use of external resources.

At the end of the exploration phase, the current state of the art can be benchmarked. This is crucial because understanding the current state of the art is key to measuring future improvements and the impact of

innovations. The third purpose of the exploration phase is therefore to establish the preliminary measurements.

- EXPERIMENTATION

In the experimentation phase, the identified customised solution is tested in a prototype during the exploration phase. For the Living Lab approach, this phase involves a fundamental principle: experimentation in a real environment. The degree of possible testing in real life depends on the maturity of the prototype. Prototypes can come in many forms, from tangible products to intangible services. The main purpose of testing a prototype solution is to give users the opportunity to familiarise themselves with a new solution that may trigger new user habits and new ways of using it.

The main objective of the testing phase is to collect and understand the users' reactions to the proposed solution. Depending on the level of maturity, the prototype may be called a proxy technology assessment, user experience testing or field trial. The tests can be short or long term and involve only a few or many users. Finally, the trial phase provides an answer through the testing process to either return to the exploration phase or proceed to the evaluation phase.

- EVALUATION

The aim of the evaluation phase is to assess the innovation. The evaluation builds on two already implemented phases, the exploration phase, in which the existing state of the art is analysed, and the experimentation phase, in which users can test potential new solutions. The results of these two phases are compared with each other - the existing state is compared with the new state.

The focus is on understanding the acceptance of the proposed new solution. Activities in this phase should include use case evaluation, management strategy and communication of the new solution. Based on pre- and post-implementation measurements, developers should be able to quantify the value proposition and accept the decision whether or not to fully implement the proposed solution. Stakeholders may decide to continue post-launch activities, such as monitoring, redesigning or adding new features and use cases based on citizens' needs and habits and general civil society considerations, etc.

5.METHODOLOGY FOR THE ESTABLISHMENT AND OPERATION OF LOCAL BIOCENTUM NODES

In establishing and further developing local Living Labs in four partner cities, the project partners will work in the local context and with local stakeholders to enable knowledge transfer and open innovation processes between organisations and individuals across the quintuple helix. The Quintuple Helix approach enables a coordinated involvement of different actors: local authorities, economic actors, scientists, citizens and NGOs in the process of building more resilient, cooperative and flexible communities. They are placed at the centre of a co-creative process to find and develop solutions that meet the real needs of society. This is the idea behind the collaborative design approaches, such as Living Labs, that have emerged in recent decades to facilitate the empowerment of communities and solving, in the end, complex challenges.

The inclusion of the Quintuple Helix as a driver for greater coordinated participation of local actors has proven useful in many projects in the past and will be at the centre of the local BIOCENTUM nodes, which will be set up and operated according to a general approach presented in the following pages. The common goal of all BIOCENTUM nodes is to promote biodiversity, but also to support specific innovations for socio-technical transitions based on local biodiversity challenges. These are created through the Living Labs, which act as facilitators in test environments where Quaintuple Helix actors operate and co-create.

The framework describes four steps or levels of the Living Lab model to develop a strategy for a biodiversity challenge identified by cities in advance. Through this process, you create an overall vision for ecological urban planning that can later be implemented through activities proposed by citizens. In this way, local communities and citizens are empowered to develop capacities for social systems innovation.

KEY STEPS:

- ✓ Step 1: SETTING UP THE LOCAL BIOCENTUM NODES
- ✓ Step 2: OPERATION OF THE BIOCENTUM NODES
- ✓ Step 3: ANALYSE AND EVALUATE THE NATURE-BASED SOLUTIONS
- ✓ Step 4: STEP 4 CHANGE THE MINDSET WITH AWARENESS RAISING AND COMMUNICATION ACTIVITIES

5.1 Step 1: Setting up the local biocentum nodes

BIOCENTUM nodes will be established in four participating cities (Kranj, Pula, Erd and Wroclaw) to find solutions to local biodiversity challenges.

Local leaders (decision makers) set the framework for the BIOCENTUM nodes:

- ➢ Establish a network of relevant stakeholders, advisors and experts who will form the expert team.
- ➢ Review identified local biodiversity challenges;
- ➢ Set objectives and targets for biodiversity and the ecological planning process;

Different types of challenges require different types of information – in some cases qualitative results are sufficient, in others more detailed, quantitative assessments are required. Decision-makers identify useful data sources and experts within their network and collect available data on urban biodiversity and nature. Careful involvement of appropriate stakeholders in the process can help to illuminate the different visions and values of the challenges of biodiversity and ecological planning in the city. They can ensure support for the process and its final outcomes.

Type of Stakeholders

BIOCENTUM nodes should be composed from different stakeholders of Quaintuple Helix including local government, business stakeholders, academia and citizens as well as adding environmental advocators (NGOs) and aesthetic stakeholders (arts, creative industry...). BIOCENTUM nodes should be highly operative, having not too many or too few stakeholders. Therefore, each city will invite and select 6-10 stakeholders from the following fields:

- ***Decision makers*** (can be representatives of municipality)
- ***Business stakeholders*** (any type of business located in the city area of intervention or with some specific knowledge from the field of intervention)
- ***Academia*** (primary, secondary education or university – select the most relevant for the city)
- ***Civil society*** (can be environmental or other NGOs, or environmentally aware interested citizens of the area)
- ***Aesthetic stakeholders*** (can be arts, creative industry, architects…)

Stakeholders should be selected in a transparent process, e.g. through an open call, a best-fit model or other selection process. It should be publicised on the municipal website and social media or through other public means of communication. The invitation can be permanently open so that relevant stakeholders can join the NODES in the future.

The initial meetings of the Biocentum node team should include the following activities:

- Identifying the scope and reach of the ecological planning process;
- Draft a work plan and schedule of activities;
- Plan to engage the broader public and community voices to ensure broad participation in future activities.

Some important questions that could be asked in this step are the following:

- Whose voices do we need to hear?
- What is our shared vision for the future of our city and what role does nature play in that future?
- How could urban biodiversity and urban nature advance our city?
- What data, expertise and other resources do we need to achieve our goals?
- Is there any existing national, regional and/or municipal policy and planning framework serving as basis for activities and potential interventions? If yes, what is it?
- How can we work with groups within our city or a wider network to source these?
- What do we want to achieve, and what metrics will we use to evaluate and monitor success?
- What questions will we ask?
- What benefits can nature and biodiversity solutions bring to climate, society or health?

The most important results of this step include the following:

- A team of experts actively involved in all activities;
- A strategic, integrative vision of the BIOCENTUM nodes and a work plan of activities;
- Compilations of relevant data and other resources needed to implement the plan;
- Realistic expectations for resident and stakeholder participation.

- **Participatory design and co-creation process**

To define the vision and objectives of the local BIOCENTUM nodes, the decision-makers and the expert group in each city can apply the participatory design and co-creation approach.

The democratisation of design development and the development of the vision and strategy for the management of BIOCENTUM nodes can be ensured by using one of the co-creation working methods. A key feature of the co-creation process is the creation of value, and these approaches are central to ensuring that all stakeholders are involved in both determining the 'value' to be created and participating in the value creation process. Rather than simply asking participating stakeholders to comment on predetermined initiatives, outcomes or campaigns, as would be the case in public consultation processes, co-creative techniques see stakeholders as proactive actors. They are more directly involved in defining their needs and priorities, influencing decisions and working together to find solutions for a greener future.

5.2 Step 2: Operation of the biocentum nodes

The BIOCENTUM nodes serve as an umbrella for problem-solving and learning activities related to biodiversity and nature-based solutions. They will also act as a main advisory body for urban decision makers. By encouraging citizen participation in the transformation of the pilot sites, we will strengthen people's competences and positive behaviour towards biodiversity and resource efficiency.

The focus and activities will be specific to each city, depending on the local biodiversity challenges and objectives. However, the working principles and methods will be the same in all nodes and will be based on the NEB principles and the Living Lab approach.

The BIOCENTUM nodes should first identify and explore the local biodiversity challenges in each city. It is important to further explore these challenges with the wider society and social stakeholders to better understand the existing local situation and the needs, habits, practises and problems of citizens and stakeholders. Therefore, the World Café meetings should be organised in each city.

5.2.1 The World Café workshop in each city to identify biodiversity challenges

The World Café method is a simple, effective and flexible format for conducting dialogues in large groups. Each element of the method has a specific purpose and corresponds to one or more of the design principles.

World Café can be adapted to a variety of needs. The specifics of the context, number of participants, purpose, location and other circumstances are taken into account in the invitation, design and selection of questions for each individual event:

1) *The setting*: Create a "special" setting, usually modelled on a café, i.e. small round tables covered with a linen tablecloth, a pad of paper, colourful pens and other optional items. There should be four chairs at each table (optimal) – and no more than five.

2) *Welcome and introduction*: The host begins with a warm welcome and an introduction to the World Café process to set the scene, introduce the common goal and put the participants at ease.

3) *Small group rounds*: The process begins with the first of three or more twenty-minute rounds of dialogue for small groups of four (or maximum five) people sitting around a table. At the end of the twenty minutes, each member of the group moves to a different table. They can leave one person as the "table host" for the next round, who welcomes the next group and briefly informs them about what happened in the previous round, or not.

4) *Questions*: Each round is preceded by a question tailored to the specific context and the desired purpose of the World Café. The same questions can be used for several rounds, or they can build on each other to focus the conversation or determine its direction.

5) *Harvesting*: After the small groups (and/or between rounds, as needed), participants are asked to share insights or other outcomes from their conversations with the rest of the large group. These results are visualised in various ways, usually through graphic notes at the front of the room.

Graphic recording (also called reflection graphics, graphic listening, etc.) captures participants' ideas and statements in words, images and colours as they are spoken in the moment. If a recorder is working in large format, a recording of what is happening is visible to everyone. Allowing participants to see their contribution to the whole increases participation and promotes trust and connection. The large format representations of themes and insights naturally weave the different perspectives into a composite 'picture' that reflects the collective intelligence in the room.
Graphic recordings can also be made by the participants themselves at different tables. Coloured pens on the tables and a plentiful supply of blank paper provide the opportunity for participants to write down the key words, phrases, images and symbols that reflect the ideas from their conversations. The collective wisdom of the group begins to become more visible and accessible as the group works together.

Through these activities, citizens raise their awareness, gain new knowledge and activate their attitude towards sustainability, all of which amounts to a better connection to their local surroundings and a greater respect for the natural environment. The main objective of the activity is to identify the main problems faced by citizens and the local environment in relation to the biodiversity challenge.

After exploring the biodiversity challenges and gaining a better understanding of the problems, taking into account their specific context, the BIOCENTUM nodes should identify potential opportunities to develop customised solutions to the problems identified.

5.2.2 Advisory body for urban decision makers

Organization of Co-designing workshop to identify potential solutions to help decision makers design and implement cities' small-scale investments" planned in activity A2.1. Four implementation plans will focus on the New Bauhaus aspects identified in WP1:

CITY	NEW BAUHAUS ASPECT
PULA	Techniques, materials and processes for green construction and design of urban biodiversity space (hotels for insects)
KRANJ	The green co-evolution of living areas and nature focusing on aesthetics and cultural events connected with biodiversity (e.g. biodiverse islands)
WROCLAW	Bio-regenerated urban spaces using technological solutions for biodiversity improvement, especially nocturnal life (e.g. smart lightning
ERD	Green products and lifestyle safeguarding urban biodiversity and promoting green urban mindset change (biodiversity lawn)

5.2.3 Open Call for customised solutions for biodiversity

An open competition should be organised to collect the best solution concepts for the identified challenges. The competition should be open to natural and legal persons. Young talents (up to 30 years old) should also be encouraged to propose their visions and green solutions.

The expert team of the BIOCENTUM nodes should prepare the competition:

- A clearly formulated objective of the Open Call for biodiversity solutions;
- The conditions for designing the biodiversity solutions that include NEB values;
- Metrics and indicators that can be used to evaluate the proposed solutions;
- Information and promotion of the Open Call for the participation of local residents and stakeholders.

The objectives of the Open Call are based on the issues identified at the World Café meetings and the opportunities identified by the expert team in the region. This should be clearly presented in the Open Call documents.

The criteria for the design and evaluation of biodiversity solutions should reflect the values of the New European Bauhaus Initiative, which provide guidance on how transformative projects can be. The proposed solution must incorporate all 3 values: Beautiful, Sustainable and Together. Projects with the highest aspirations for each principle will receive the highest score in the evaluation criteria. Depending on the proposed solution, designers can choose how ambitious they want to be in each area.

The following values of the New European Bauhaus should be reflected in the proposed solutions of the Open Call for tenders:

1) **BEAUTIFUL (AESTHETICS)**

A beautiful project is created when its authors invest collective sensitivity, intelligence and expertise in creating a positive and enriching experience for people that goes beyond functionality. A project that is truly attentive to its context and its users fosters mutual care and can be a powerful engine for change.

☐ AMBITION I: Activating the qualities of a given context while contributing to our physical and mental well-being

• Context re-activation • Sensory experience • Aesthetics

A beautiful project improves people's physical and mental well-being by catering to their needs as well as their senses and emotions. It activates the cultural, social and natural qualities of a place to create unique and positive experiences. The project promotes awareness of the place and cultural heritage in all its diversity, while nurturing its own aesthetics

☐ AMBITION II: connecting different places and people and fostering a sense of belonging through meaningful collective experiences

• Connection across contexts • Collective experience • Sense of belonging

A beautiful project enhances opportunities for meaningful social interactions and collective experiences. It strengthens a sense of belonging and enriches lives by connecting different places and people. The new bonds created by the project promote openness and mutual care.

☐ AMBITION III: Integrating new lasting cultural and social values through creation

• Enabling creation • Restructuring values • Long-lasting movement

A beautiful project enables creation and the collective reinvention of the places, lifestyles and communities with which we identify. It integrates new cultural and social values, especially through the meaningful experience of a broader ‘we' (including the non-human world). In this way, it strives to anticipate future change and can create a lasting movement.

2) SUSTAINABLE

Sustainability means prioritising the needs of all life forms and the planet by ensuring that human activities do not exceed planetary boundaries.

☐ AMBITION I: to repurpose - the ability to maintain or prolong usability

• Preservation • Repair, re-use, reduce upgrade, renew

A sustainable project aims to repurpose in order to avoid and reduce environmental impact and favours durability, adaptability and recyclability. It aims to rethink services, products and places in order to reduce pollution and carbon footprint and minimise the use of resources, materials and energy. The entire life cycle of a product is taken into account. Repurposing projects are aware of the environmental impact of their initiative and have the ambition to reduce their environmental footprint.

☐ AMBITION II: closing the loop - looks at the entire system of a project

• (Industrial) system circularity • Waste transformation

A sustainable project aims to close the loop, reduce linear processes or transform them into circular processes in order to strive for zero pollution. It looks at the scale of an (industrial) system. Projects that close the loop actively involve all other stakeholders in the design, production, use and disposal cycle of their initiative.

☐ AMBITION III: regenerate - reconnect with nature

• Carbon storing • Enhancing biodiversity • Restoration and expansion of natural landscapes • Paradigm shift, behavioural change

A sustainable project aims to give back more than it takes in by enhancing biodiversity rather than destroying it and incentivising the restoration and expansion of nature. Regenerative sustainability also considers how contexts and environments influence worldviews, paradigms and behaviours. It looks at the scale of an ecosystem. Initiatives in this dimension are aware of the entire ecosystem in which they operate and the temporal and spatial impact of their project on biodiversity and natural resources.

3) TOGETHER (INCLUSIVE)

True to the spirit of togetherness, the NEB Compass takes a positive, open and non-discriminatory approach that goes beyond listing or categorising social groups based on their differences. Therefore, it does not explicitly refer to any of these groups.

☐ AMBITION I: equal access to opportunities and resources for all

• Equality • Accessibility • Prioritising disadvantaged people

An inclusive project ensures accessibility (physical, cognitive, psychological, etc.) and affordability for all, regardless of gender, racial or ethnic origin, religion or belief, ability, age or sexual orientation. Equal treatment and equal opportunities are important, but cannot be taken for granted. It is therefore important to prioritise less-represented individuals, groups and communities.

☐ AMBITION II: consolidate

• Overcoming segregation • Representation and social stability • Sharing resources and opportunities

An inclusive project promotes and equalises relations between users and/or communities and ensures the principle of equal treatment and social justice over time. Inclusion and open access to services are ensured through formal, structural mechanisms such as financing instruments, business models, planning, policies, regulations and other institutionalisation processes.

☐ AMBITION III: transform

• Fostering shared social values • Societal development and collective growth • New ways of living together

Inclusion inspires new forms of coexistence based on solidarity and co-operation and raises awareness of discrimination and injustice. An inclusive project becomes exemplary and replicable and has the potential to disrupt outdated social models, create value and bring transformative benefits at a societal level by influencing worldviews, paradigms and social behaviours.

Each BIOCENTUM node will collect the ideas and future solutions collected during the Open Call, analyse them and evaluate them according to their specific objectives. When planning an urban biodiversity and urban nature assessment, it is crucial to think about the objectives; a clear formulation of the objectives will determine the most important aspects of the assessment and planning.

The selected ideas will also be evaluated by a transnational panel of this project. The most promising transnational project will be supported in the application for the BAUHAUS Rising Stars Award 2026 of the European Commission.

5.3 Step 3: Analyse and evaluate the nature-based solutions

5.3.1 Articulate possible alternatives and evaluate the proposed solutions against the stated objectives

From the proposed solutions collected during the Open call, the expert team can use brainstorming, ideation or co-creation approaches to incorporate the solutions into the interdisciplinary planning of the city's urban biodiversity for a better and greener life. Decision makers and the BIOCENTUM team of experts can develop scenarios of possible futures for their city by adding, rearranging or rethinking the management of green and blue spaces. These scenarios can translate alternative visions or policy options into possible future maps of the city, district or neighbourhood. Ideally, the team will translate the stated goals into alternative future maps, with different maps representing different visions and policies.

Some important questions that could be asked in this step are the following:

- What is the baseline biodiversity situation in the region in question today?
- What ecosystem services are provided where?
- Are ecosystem services evenly distributed in our city? If not, which demographic groups currently benefit from urban nature and how might this situation change in the future?
- What alternative futures are there for our city, district or neighbourhood?
- How and where can we best invest in urban nature to achieve our stated goals?
- How do ecological or societal changes affect biodiversity and the provision of benefits for people?

Some of the key findings include the following:

- Current maps of biodiversity, ecosystem types and ecosystem services;
- Alternative future maps for the area in question;
- Maps and summary tables reflecting the agreed metrics of urban nature, urban biodiversity and urban ecosystem services compared to the proposed solutions and future alternatives.

Based on these analyses, the decision-makers of the participating cities will incorporate the selected proposed solutions and visions into the design plans of ecological urban planning. This analysis will also culminate in the transferable and implementable Roadmap for Creating Biodiversity Centred Urban Mindset. The BIOCENTUM nodes can include any number of initiatives of different types that contribute to an evolving learning process.

5.4 Step 4: Change the mindset with awareness raising and communication activities

Important function of the BIOCENTUM nodes will be to act as green urban "mindset changer" involving citizens to change their perception of green transition from something that “must be” done, to something citizens would “love to” do.

Within the project, especially in the final 12 months, cities will organize at least two events with stakeholders to raise awareness about urban biodiversity and NEB including small scale investments collecting feedback from public.

Communication activities will aim to raise awareness of the issue of biodiversity in order to improve knowledge and activate citizens. The short-term goal is to recruit BIOCENTUM nodes and promote a change in mindset among the wider urban population. The long-term goal is behaviour change (the implementation and use of the newly proposed biodiversity solutions), which cannot be achieved within the scope of this project alone.

Agreement should be reached among the local BIOCENTUM expert teams on the responsibility for recording the activities and producing the messages in the local language and in English. The news in the local language will be published at the local level through community media channels such as the website, social media, monthly publications, local TV and radio stations. The messages in English will be shared with the project communication coordinator and published on the project website and social media of the project.

The communication should be easy to understand and use storytelling techniques and infographics.

Communication will focus on behaviour change, therefore special attention will be given to communication with citizens and societal stakeholders.

Most of the communication will be done online to avoid unnecessary pressure and minimise environmental impact.

Public events, workshops and other physical actions should be promoted within the Urbio Bauhaus project with all necessary communication elements and a reference to the financial support from the European Union.

All project results will be publicly available on the website and can be disseminated to individuals, citizens' groups and NGOs, scientists and decision-makers.

5.4.1 Mechanism of changing the mindset can be described as the following:

Raising Awareness: The first step is making people aware of environmental issues. This includes information on how personal and collective actions impact the environment, such as carbon footprints, resource depletion, pollution, and biodiversity loss. It can be done through campaigns, media, education, and personal experiences.

Emotional Connection: People are more likely to change their mindset if they feel a personal connection to the environment. Encouraging experiences that allow individuals to appreciate nature, such as outdoor activities, can foster this bond. When individuals emotionally relate to environmental issues, they are more likely to adopt environmentally sensitive behaviours.

Education and Knowledge: Providing people with the knowledge and tools to understand complex environmental issues is critical. This includes education on sustainability, conservation practices, and how small changes in daily habits can contribute to larger ecological benefits.

Changing Social Norms: As more people adopt environmentally conscious behaviour, social norms begin to shift. For example, when recycling, using reusable products, or reducing energy consumption becomes widespread, individuals feel encouraged or pressured to follow suit. Social influence can be a powerful motivator for mindset change.

Behavioural Nudges: Subtle changes in policies, infrastructure, and incentives can push people toward more sustainable behaviour. This could include providing recycling bins in public spaces, offering tax breaks for environmentally friendly practices, or using renewable energy in public services. When environmentally sensitive options are easier and more convenient, people are more likely to adopt them.

Long-Term Habit Formation: Once these practices are adopted, they need to be repeated until they become habitual. Over time, the consistent application of sustainable practices helps solidify the mindset shift. Regular reinforcement through education, policy, and social interaction helps maintain this new mindset.

Feedback and Reflection: Providing people with feedback on the impact of their actions—such as how much energy they saved or how many resources they conserved—helps reinforce the positive change. Reflection on personal contributions to environmental goals can further strengthen commitment.

The green urban "mindset changer" should be measured before and after the main communication activities using the questionnaire in Appendix 7. The questions can be translated into the local language and the questionnaire can be digitised and published online or physically completed at events with stakeholders and a wider audience.

6. ROADMAP FOR IMPLEMENTATION OF BIOCENTUM NODES

STEP	ACTIVITY IN AF	Title	Description	Timeline	WORKING TEMPLATE TO USE
1	1.1.&1.2	Establishment of BIOCENTUM nodes	Selection of participants using quintuple helix, kick off workshop for defining responsibilities, action plan.	January - March 2025	ANNEX 1: REPORT ON ESTABLISHMENT OF BIOCENTUM NODE
1&2	1.1.& 1.2	Identification of urban biodiversity challenges	Using **world caffe workshop** for detailed specification of identification urban biodiversity challenges planned in application form.	January - March 2025	ANNEX 2: WORKING SHEET FOR WORLD CAFFE WORKSHOP
2	2.1	Co-creation of urban biodiversity design plans	Co-creation of implementation plans - using workshop **"project in a day" methodology.** Designing of potential solutions to help decision makers implement small scale investments.	March/ April 2025	ANNEX 3: "PROJECT IN A DAY-DESIGN THINKING METHOD" WORKING SHEET FOR THE CO-CREATION WORKSHOP
2&3	1.2	Open public call for BAUHAUS ideas as answer to identified challenges.	Biocentum NODES design a call text and criteria for selection (working group). Call is published by municipality Collection of feedback, pitching event, ranking and selection of best ones (public event).	May/June 2025 June/Sept. 2025 Sept/Oct 2025	ANNEX 4: OPEN CALL FOR BAUHAUS IDEAS AND PITCH EVENT REPORT

3	1.3	City level peer-review meeting	City level peer review workshop to discuss lessons learned - How to include New European Bauhaus criteria into municipal decision making about bio-based investments? - How to set up and run participative process? - How to motivate citizens to become active partner in urban biodiversity management? - Where to include "aesthetic" component and how to combine it with biodiversity goals? - How to set up participative municipal budget and connect it with NEB principles?	Feb./March 2026	ANNEX 5: CITY LEVEL PEER-REVIEW WORKSHOP REPORT ABOUT LESSONS LEARNED
4	1.3	Transnational peer review meeting	Transnational peer review by partners to discuss upper questions on transnational level, organized on the Project group meeting.	April 2026	Minutes of the peer review
5	3.3	Development of 4 action plans	BIOCENTUM NODES meeting(s) will be organized to get inputs for development of city action plans	Jan - Nov 2026	Minutes of meeting
5	Communication	Two awareness raising events to support mindset change	Municipalities will organize at lest two events with stakeholders to raise awareness about urban biodiversity and NEB including visit to small scale investments collecting feedback from public.	Jan - Nov 2026	ANNEX 6: COMMUNICATION EVENT REPORT

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ANNEX 1: REPORT ON ESTABLISHMENT OF BIOCENTUM NODE

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REPORT ON ESTABLISHMENT OF BIOCENTUM NODE

1. MISSION AND GOALS OF THE CITY NODE

Prepare a short overview description of main mission and identified goals.

(Up to 2.000 characters)

1.1 MISSON:

1.1. KEY GOALS:

2. KEY STAKEHOLDERS

Please describe your stakeholders and their roles in the city node. Insert rows according to your needs.

Name of organization	Stakeholder's field[1]	Potential role	Motivation / Benefits

[1] Stakeholder's field: Decison maker/ Business stakeholder/Academia/ Civil society/ Aesthetic stakeholder

3. ACTION PLAN

Identification of key activities, which will contribute to mission and goals.

Title & Description of Activity	Participating Stakeholders	Next steps (next tasks to do)
Give the title and/or short description of the activity (identification process, focus group meeting, survey, testing… etc.).	According to the Stakeholder table above. You can write "All" if all of the stakeholders participate in activity or name specific ones	What will be the next steps?

4. SYNERGIES WITH OTHER LOCAL/REGIONAL INITIATIVES

Can you identify local/regional/national/ EU initiatives which can contribute to operation of the NODE.

Name of the initiative	Potential contribution (to activities, events, capacity, network,…)

5. MOST RELEVANT COMMUNICATION CHANNELS FOR OPERATION AND COMMUNICATION

List the existing communication channels, which you will use to support operation of the NODE.

Communication channel	Purpose

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ANNEX 2: WORKING SHEET FOR WORLD CAFFE WORKSHOP

Task: to identify city biodiversity challenges

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WORLD CAFFE WORKSHOP: WORKING SHEET FOR WORKING IN GROUPS

Main topic of the World Caffe workshop: IDENTIFYING URBAN BIODIVERSITY CHALLENGES IN OUR CITY

2. Main discussion questions for work in groups: "WHAT WOULD IT MEAN FOR OUR CITY TO THRIVE IN THE FIELD OF BIODIVERSITY?"

Working in groups, 4-5 persons. Each working group Identifies 1 key challenge in the field of biodiversity and specifies them:

KEY CHALLENGE 1:

CITY SNAPSHOT (Current state of challenge) Description:	**HOW NATURE DOES IT?** (Which solutions in nature already exist) Description:
CITY TARGET (What we would like to change in long-term) Description:	**TO WORK LIKE NATURE** (Can we do the biomimicry[1] - innovation inspired by nature?) Description:

[1] Benyus, J. (1997), Biomimicry: innovation inspired by nature, London: Harper Collins

KEY CHALLENGE 2:

CITY SNAPSHOT (Current state of challenge) Description:	**HOW NATURE DOES IT?** (Which solutions in nature already exist) Description:
CITY TARGET (What we would like to change in long-term) Description:	**TO WORK LIKE NATURE** (Can we do the biomimicry[2] - innovation inspired by nature?) Description:

[2] Benyus, J. (1997), Biomimicry: innovation inspired by nature, London: Harper Collins

KEY CHALLENGE 3:

CITY SNAPSHOT (Current state of challenge) Description:	**HOW NATURE DOES IT?** (Which solutions in nature already exist) Description:
CITY TARGET (What we would like to change in long-term) Description:	**TO WORK LIKE NATURE** (Can we do the biomimicry[3] - innovation inspired by nature?) Description:

[3] Benyus, J. (1997), Biomimicry: innovation inspired by nature, London: Harper Collins

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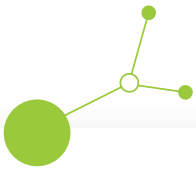
ANNEX 3: “PROJECT IN A DAY-DESIGN THINKING METHOD” WORKING SHEET FOR THE CO-CREATION WORKSHOP

Designing potential solutions to help decision makers implement cities ‘small scale investments



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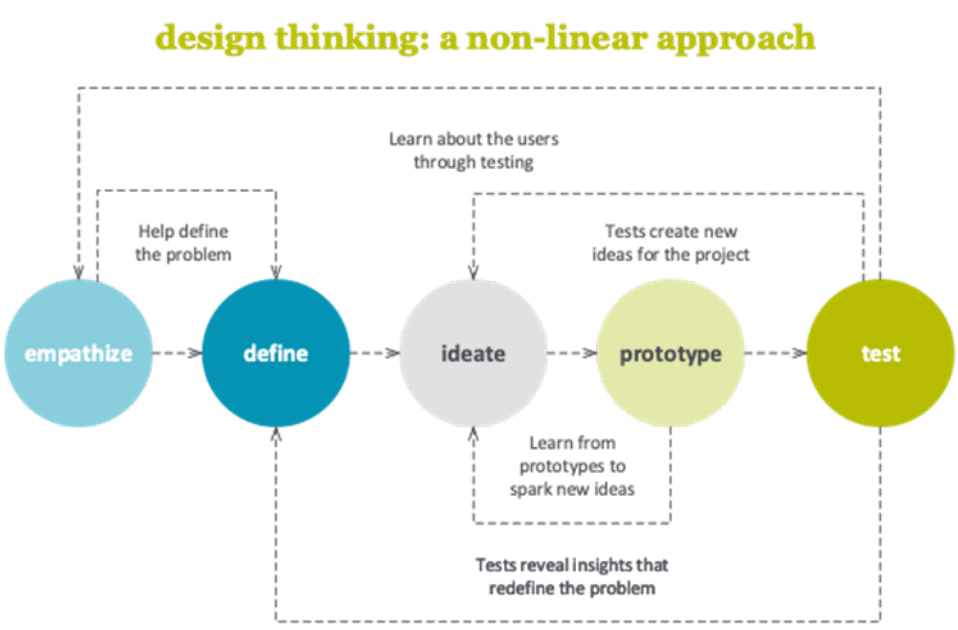
Scope of the method "PROJECT IN A DAY"

Short description	In the method "Project in a day" design thinking is centred around comprehending people's requirements and creating solutions that satisfy those requirements in a significant manner. It is extremely useful in tackling complex problems that are ill-defined or unknown, by understanding the human needs involved, by re-framing the problem in human-centric ways.
It includes NON-LINEAR approach  	
Implementation	The five stages of Design Thinking are: 1.Empathising: Understand the problem of the user for whom you are designing. 2.Defining: Form a problem statement. 3.Ideating: Generate creative solutions to this problem. 4.Prototyping: Build a tangible representation of this solution. 5. Testing: Validate this solution with your target audience
Objective of the method	Objective is to stimulate the unlock forms of value, not available clearly at the beginning of the process and to help create a sort of "multiplier effects". Hence, we also need to design processes that allow us to spot new

	patterns, encourage the evolution of new ideas, and help new ideas scale to the point where they have impact.
Benefits of the method	This method is very appropriate as a participatory method, because the complexity of the interactions cannot possibly be anticipated by even the smartest of plans, it is important to make plan and test them in participatory ways, letting others participate in the innovation activities. A design mindset is not problem-focused, it's solution-focused and action-oriented.
Target stakeholders that should be involved	Researchers, Academia, Industry, NGOs, Citizens
Geographical scope	Local/national/European
Online/offline	Offlinne
Impacts	Inform, Consult, Involve

WORKING SHEET FOR CO-CREATION WORKSHOP

PROJECT IN A DAY: CO-CREATION OF IMPLEMENTATION PLANS OF SMALL SCALE INVESTMENT

WHAT CHALLENGE THE IMPLEMENTATION OF SMALL SCALE INVESTMENT ADRESSES AND HOW IT WILL CONTRIBUTE TO IMPROVEMENT OF BIODIVERSITY IN THE CITY ?

ANSWER:

KEY TARGET GROUPS INVOLVED IN THE PREPARATION OF PLAN:
1. WHO ARE THEY ?
2. WHAT DO WE WANT FROM THEM ?

END-USERS OF INVESTMENT ?

ANSWER:

1.

2.

STAKEHOLDERS ?

ANSWER:

1.

2.

OTHER GROUPS ?

ANSWER:

1.

2.

KEY ACTIVITIES TO PREPARE QUALITY IMPLEMENTATION PLAN FOR SMALL SCALE INVESTMENT

-
-
-
-

HOW CAN THE THREE CORE VALUES OF NEW EUROPEAN BAUHAUS BE TAKEN INTO CONSIDERTION IN THE PREPARATION & IMPLEMENTATION OF SMALL SCALE INVESTMENT ?

AESTHETICS

ANSWER:

1.

2.

SUSTAINABILITY

ANSWER:

1.

2.

INCLUSION

ANSWER:

1.

2.

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ANNEX 4: OPEN CALL FOR BAUHAUS IDEAS AND PITCH EVENT REPORT

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1. OPEN CALL TEXT

Include the text of the city Open call for BAUHAUS ideas in English version.

2. EVALUATION AND RANKING OF APPLICATIONS

Summary evalution of applications from the PITCH EVENT.

Title of the project idea	Adressed city challenge	Score (taking into consideration NEB values)

3. PRESENTATION OF THE SELECTED PROJECTS

PROJECT IDEA 1:

PROJECT OWNER (NON-PROFIT ORGANIZATION)	Name of the organization: Contact person (Name & Surname, email):
PRESENTATION OF IDEA: Short description: Challenge/Issues	

Proposed solution, including NEB principles (aesthetic, sustainable, inclusive) Project development needs (information, finance, human resources)	

PROJECT IDEA 2:

PROJECT OWNER (NON-PROFIT ORGANIZATION)	Name of the organization: Contact person (Name & Surname, email):
PRESENTATION OF IDEA: Short description: Challenge/Issues Proposed solution including NEB principles (aesthetic, sustainable, inclusive) Project development needs (information, finance, human resources)	

PROJECT 3:

PROJECT OWNER (NON-PROFIT ORGANIZATION)	Name of the organization: Contact person (Name & Surname, email):
PRESENTATION OF IDEA: Short description: Challenge/Issues Proposed solution including NEB principles (aesthetic, sustainable, inclusive) Project development needs (information, finance, human resources)	

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ANNEX 5: CITY LEVEL PEER-REVIEW WORKSHOP REPORT ABOUT LESSONS LEARNED

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EVENT TITLE: CITY LEVEL PEER-REVIEW WORKSHOP REPORT ABOUT LESSONS LEARNED

Date & place of event:	
Partner(s) involved:	
Discussion questions	QUESTION 1: How to include New European Bauhaus criteria into municipal decision making about bio-based investments? QUESTION 2: How to set up and run participative process? QUESTION 3: How to motivate citizens to become active partner in urban biodiversity management? QUESTION 4: Where to include "aesthetic" component and how to combine it with biodiversity goals? QUESTION 5:How to set up participative municipal budget and connect it with NEB principles?
FEEDBACK & LESSONS LEARNED	SUMMARY FEEDBACK QUESTION 1: SUMMARY FEEDBACK QUESTION 2: SUMMARY FEEDBACK QUESTION 3: SUMMARY FEEDBACK QUESTION 4: SUMMARY FEEDBACK QUESTION 5:
Expected effects and follow-up, findings/conclusions that will contribute to achieving further project results	
Type of audience reached (project target groups)	Number of reached target groups in the framework of the event:

TARGET GROUP	NAME OF ORGANIZATION
Local public authority	
National public authority	
Infrastructure and (public) service provider	
Interest groups, including NGOs	
Higher education and research organisations	

	SMEs	
	General public	
Annexes (participant list, photo, media coverage, web-links, etc.)		

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ANNEX 6: COMMUNICATION EVENT REPORT

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COMMUNICATION EVENT REPORT

EVENT TITLE:	
Date & place of event:	
Partner(s) involved:	
Topics tackled and description of links to project activities	
Expected effects and follow-up, findings/conclusions that will contribute to achieving further project results	
Type of audience reached (project target groups)	Number of reached target groups in the framework of the event:

TARGET GROUP	NAME OF ORGANIZATION
Local public authority	
National public authority	
Infrastructure and (public) service provider	
Interest groups, including NGOs	
Higher education and research organisations	
SMEs	
General public	

Annexes (participant list, photo, media coverage, web-links, etc.)	

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ANNEX 7: BEHAVIOUR CHANGE QUESTIONNAIRE

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11 2024

1. PARTICIPANTS

Select at least 15 participants (citizens, NGOs and other representatives of society) who are actively or passively involved in the project pilots.

Name and surname	Organization	Participating in Biocentum activities?

2. QUESTIONNAIRE

The questionnaire is anonymous and can be digitised or printed out and distributed to the participants.

Socio-demographic variables

1. **Age:**

   10-20

   21-30

   31-40

   41-50

   51-60

   61-70

   71-80 or more

2. **Gender?**

   Male

   Female

   Other

3. **Education:**

   Primary school

   Secondary school

   Vocational school

   Bachelor's degree

   Master's degree

   Doctorate

   Other:

Environmental attributes:

1. **Are you currently a member of an environmental, conservation or wildlife protection group?**

   Yes

   No

2. **Have you contributed money or time to an environmental, conservation or wildlife protection organisation in the past year?**

   Yes

   No

3. **Have you actively participated in a project related to nature or the local environment in the past year? If yes, can you briefly describe the aim of the project?**

   Yes:

   No

4. **How often do you watch TV programmes, films or Internet videos on environmental issues?**

   Never

   Rarely

   Sometimes

   Often

   All the time

5. **How often do you talk to others about your environmental thoughts, feelings or actions?**

   Never

   Rarely

   Sometimes

   Often

   All the time

6. **How high would you rate your interest in environmental topics?**

   1 2 3 4 5

   Where numbers mean: 1 "non-existent", 2 "minimal", 3 "moderate", 4 "significant", 5 "I think it's urgent".

7. **If you had the opportunity, how willing would you be to participate in activities to improve the natural environment?**

   1 2 3 4 5

   Where numbers mean: 1 "not interested", 2 "minimal interest", 3 "moderate interest", 4 "significant interest", 5 "I think it's urgent".

8. **Do you believe that individual actions can have a positive impact on the environment? If so, how much?**

   1 2 3 4 5

   Where numbers mean: 1 "non-existent", 2 "minimal", 3 "moderate", 4 "significant", 5 "I think it's urgent".

9. **How important do you think ecological issues are in your daily life?**

   1 2 3 4 5

   Where numbers mean: 1 "non-existent", 2 "minimal", 3 "moderate", 4 "significant", 5 "I think it's urgent".

10. **How much do you agree with the sentence: "I want to live as ecologically as possible"?**

    1 2 3 4 5

    Where numbers mean: 1 "I strongly disagree", 3 "I am neutral", 5 "I strongly agree".

11. **How much do you agree with the sentence: "I am very concerned about environmental issues."?**

    1 2 3 4 5

    Where numbers mean: 1 "I completely disagree", 3 "I don't agree and don't disagree", 5 "I completely agree".

12. **Is there a place in your local environment that is special to you and you like to spend time there? If you would like to tell us what that place is, please describe it.**
    Yes:
    No

13. **Why is this place important to you?**

    Scenery, sights, particular beauty.

    Local history and culture.

    The opportunity to learn about, observe and experience nature.

    Sacred, religious or spiritual aspects.

    Inspiring aspects of nature that can stimulate new thoughts, ideas or creative impulses.

    Diversity of plants and animals.

    Significance for native animals, plants, ecosystems or geological features.

    Opportunity to meet friends and family.

    Opportunities for outdoor leisure activities and recreation.

    Not relevant.

14. **Would you commit yourself to make a change in this place if you had the chance to make a difference (e.g. to protect biodiversity, regenerate, develop infrastructure, organise activities, etc.)? If yes, how motivated are you?**

    1 2 3 4 5

    Where numbers mean: 1 "not available", 2 "minimal", 3 "moderate", 4 "considerable", 5 "very high".

In the second round of testing at the end of the project, we repeat the above questions and add these:

1. **How did your attitude towards ecological issues change after you took part in this activity?**

   Much less positive

   Slightly less positive

   No change

   Slightly more positive

   Much more positive

2. **How likely is it that you will take part in similar ecological activities in the future?**

   Very unlikely

   Unlikely

Neutral

Likely

Very likely

3. **Would you recommend similar ecological activities to others?**

Definitely not

Probably not

Maybe

Probably

Definitely

4. **What actions, if any, will you take to contribute to the local environment?**

Please describe this:

3. BEHAVIOUR CHANGE REPORT

Summarise the assessment of behaviour change among the pilot project participants.

For each question, analyse whether there is a difference in the answers and describe the trend, if any. Summarise in a conclusion the main changes observed before and after the project activities.