Milestone 19 - Pathways and draft solutions created

Report on Stakeholder Engagement

Report of T4.3.

Co-creating policy and management options for improvement of green infrastructure by involving local stakeholders

LIFE LATESTadapt (LIFE21-CCA-EE-LIFE LATESTadapt/101074438)

(MoEPRD (BEN), BEF-LV (BEN), Riga (BEN), Valmiera (BEN), Cesis (BEN), Viimsi (COO))

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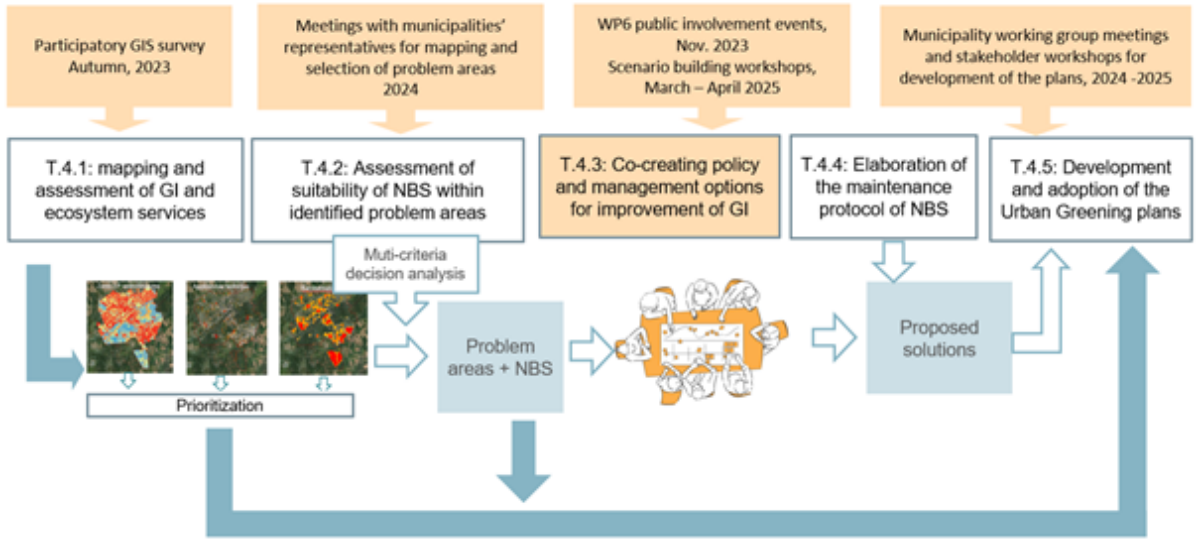
1. Overview on stakeholder engagement and co-creation process in Latvian demo municipalities

The stakeholder engagement in Latvian demo municipalities of the LIFE LATESTadapt project is organised as an interactive and iterative process involving broad range of municipality experts and decision makers in charge for planning as well as management of urban green space, representatives of citizens and other stakeholders. The co-creation process has started with the first stakeholder workshops organised by the three municipalities in co-operation with BEF-EE and BEF-LV as part of WP6 (7.11.2023 in Valmiera, 15.11.2023 in Cēsis and 27.11.2023 in Riga), where the climate-related issues and problem areas have been identified and potential solutions discussed. This information was complimented by the public online map-based surveys carried out by the BEF-LV in the three cities to identify the urban green spaces important for citizens and the sites where environmental problems are observed (described in T.4.1). Further on expert workshops were organised by the three municipalities (22.04.2024 in Riga, 04.06.2024 in Valmiera, and 16.10.2024 in Cēsis) to discuss the objectives of the urban greening plans and suitable nature-based solutions (NBS). All these events contributed to the co-creation process of seeking of solutions to improve the city's green infrastructure.



LIFE LATESTadapt stakeholder engagement process in planning of urban green infrastructure and nature-based solutions in Latvian demo municipalities

The essential part of the co-creation activities were the participatory workshops on pathways and draft solutions for implementation of the NBS (MS19) organised within the T.4.3. The approach for elaboration of pathways was discussed during several internal partners meetings, including an in-person workshop organised by the MoSARD on 12.12.2024 in Riga. Partners agreed to use the target-seeking scenario method and to organise at least one scenario building workshop per each municipality focusing on selected priority problem sites, which were identified within the previous steps of assessment of urban green infrastructure and problem areas (T.4.1 and T.4.2).

The participatory workshops for co-creation of scenarios for NBS implementation were held on 22.04.2025 in Valmiera (Pargauja living district and State Gymnasium),

6.05.2025 in Cēsis (Old town) and 8.05.2025 in Riga (secondary school), involving relevant target groups for each site, e.g. local inhabitants, entrepreneurs from the sites, schoolchildren as well as municipality representatives and other experts. All three workshops applied the similar methodology and agenda, starting with introductory part about the topic, followed by a visit to the site and group work first, on development of vision and then – elaboration of site-specific solutions by placing them on a map and estimation of costs.

For each workshop, two participant surveys were prepared. The first survey was distributed along with the application form before the event. Its purpose was to assess participants' existing knowledge and perceptions of NBS, as well as their views on the workshop's focus area, including the identification of problem zones affected by the heat island effect and/or flooding. The second survey was conducted after the workshop to evaluate any changes in participants' knowledge and perceptions of NBS and to gather their feedback on the event.

The participatory workshops held by the T.4.3 are followed up by further stakeholder engagement and participatory workshops organised by each municipality as part of T.4.5.

2. Overview on co-creation workshops on pathways of implementing the proposed NBS in demo municipalities

2.1. Valmiera municipality

Stakeholder engagement

What was organised: A co-creation workshop

Who organised: Valmiera Municipality, BEF Latvia

When: 22.04.2025

Where: Valmiera Pārgauja State Gymnasium, Zvaigžņu Street 4, Valmiera

How many participants: 56

What age groups participated: Ages 15–18: 59%, ages 18–30: 0%,ages 31-45: 18%, Ages 46-60: 5%, ages 60 and above: 18%

Which partners/experts participated: Partners and experts from Baltic Environment Forum Latvia, Ministry of Smart Administration and Regional Development of Republic of Latvia, Riga Technical University, Riga City Municipality, Cēsis Municipality, Valmiera Municipality

Summary of the event and programme

A co-creation workshop where local residents, experts, and municipal representatives explored the surroundings of Pārgauja and identified opportunities to implement nature-based solutions for improving the outdoor environment of the Valmiera's Pārgauja quarter.

Methods used in the event

The event started with an introduction to the site-specific problem areas, as well as more information on nature-based solutions that could contribute to adaptation and mitigation of climate change in the neighbourhood. Participants then went out in teams to explore the site, to look at and assess the situation in nature, and to start thinking about what could be implemented to reduce, for example, overheating during the hottest days of summer.

Participants worked together in groups to develop solutions to environmental challenges in the area. Everyone had access to a catalogue of nature-based solutions, which described the solutions in more detail, and the opportunity to ask questions to experts in the field, who provided support and helped them to understand more about the challenges of the area and the application of nature-based solutions.

The teams were tasked with developing a plan, within a given budget, to reduce the impact of the challenges posed by climate change on the territory. It should be mentioned that most of the participants (pupils, citizens) had not been familiar with the concept of “nature-based solutions” before, so the task was challenging for everyone. Each team planned to plant new trees, contributing to shading and thus to a decrease in temperature in the area near the trees. The students chose to plant them more on the school grounds, as the school courtyard heats up quickly in the warm spring and early autumn days, including the classrooms and the sports field. Residents, on the other hand, more often chose to plant trees along Stacijas street up to Meža street, as well as around Nākotnes street. Also, solutions such as rain gardens, permeable pavement, greenery, green walls and roofs were used.

Results of the event

- Five maps were created and presented during group work, illustrating ideas and proposed solutions to identified problems.
- Participants’ awareness of climate change and nature-based solutions (NBS) was raised.
- Stakeholders engaged in discussions about development, reflecting a variety of needs and perspectives.

Challenges experienced through the process

Challenges experienced:

- Uneven participation across age groups.
- Limited knowledge about green infrastructure among some participants.

Benefits of stakeholder engagement / conclusions

- Valuable local insights were gathered.
- Increased awareness and understanding of nature-based solutions.
- Input will support the ongoing thematic plan and future municipal decisions.
- Strengthened cooperation between residents, experts, and the municipality.

Conclusions of stakeholder surveys

The pre-workshop survey was completed by 39 participants, including high school students, teachers, and local residents from the workshop area. Approximately 26% of respondents reported experiencing issues related to the urban heat island effect in the workshop area, while 36% had encountered flooding. About 72% of participants agreed or partially agreed that they would like to see Nature-Based Solutions (NBS) implemented to improve conditions in the area. However, 39% stated they would not support NBSs if their implementation resulted in a reduction of parking spaces or other changes to the urban environment.
The most favoured types of NBS in the pre-workshop survey included planting trees and other greenery, green public transport stops, green parking lots, and the creation of urban grasslands. The primary reason for lack of support for NBSs was insufficient information.

Regarding participants' familiarity with NBS prior to the workshop, 15.4% reported having pre-existing knowledge, 59% had heard the term but did not know its exact meaning, and 25.6% were not familiar with the concept at all. The most valued benefits of NBSs were a more pleasant urban environment, improved air quality, and increased biodiversity.

The post-workshop survey (n=36) showed a significant increase in participants' understanding of NBSs—92% stated that they now know and understand the concept. Support for the implementation of NBSs also increased, with over 88% of participants expressing support for introducing such solutions in the workshop area. Notably, there was also a rise in support even in cases where implementing NBSs might lead to reduced parking availability or other changes to the urban setting. According to the post-workshop survey, the most favoured NBS remained planting of trees and other greenery, now followed by permeable pavements and green roofs.

Result implementation

The results will serve as additional input for the thematic plan 'Valmiera State City Green Infrastructure Development Plan,' which is currently being prepared.
The ideas and solutions proposed by participants may be used in future municipal actions aimed at improving and developing the Pārgauja neighbourhood.

Photos of the event:

Photos of the results of the group works:

2.2. Cesis municipality

Stakeholder engagement

What was organised: A co-creation workshop, where local residents, experts, and municipal representatives jointly sought solutions to improve the public outdoor space of Cēsis Old Town.

Who organised: Cesis Municipality

When: 6th of May 2025

Where: Cēsis Youth House (Rīgas street 23, Cēsis)

How many participants: 32

What age groups participated: Various age groups were represented at the event—including participants aged 18–30, 31–45, 46–60, and over 60—ensuring a diverse range of perspectives and experiences in the co-creation process.

Which partners/experts participated: Baltic Environment Forum LV, Ministry of Smart Administration and Regional Development of Republic of Latvia, Riga Technical University, Valmiera municipality

Summary of the event and programme

Objective of the Scenario Workshop - to revitalize the Old Town and enhance the potential of its public spaces by developing green infrastructure and applying nature-based solutions that promote sustainable development and improve quality of life.

During the workshop, participants analyzed environmental challenges in the Old Town—such as heatwaves, insufficient shading, poor green infrastructure, and water retention issues—and collaboratively explored nature-based solutions to address these problems. Ideas were proposed for creating green areas, developing green roofs and walls, managing rainwater, and implementing sustainable mobility on Rīgas and Vaļņu Streets.

The event emphasized the importance of public involvement in shaping such initiatives, gathered residents' suggestions, and developed visions of the Old Town as a sustainable, green, and attractive living environment. The outcomes of the event will serve as a foundation for further planning and experimental solutions in the Old Town.

Methods used in the event

During the event, various urban planning methods were used, including presentations and consultation sessions, work in groups, on-site surveys, and interviews with local residents encountered in the area, interactive platforms/ physical mapping. To prepare the results of the co-creation workshop, visualization and modeling techniques were applied. The outcomes of the co-creation process were also presented.

Results of the event

During the workshop vision for Cēsis old town outdoor space was created - The public outdoor space of Cēsis Old Town is envisioned as a sustainable, safe, green, and attractive urban environment.

As a result of the workshop, each group created a map with specific solutions that address heat, flood risks, and biodiversity loss in the Cēsis Old Town. Each group assessed the costs of their solution, discussed their proportionality and impact, and explained their choice. The ideas developed during the seminar can be further used by the municipality to develop project ideas, stimulate and continue discussions with inhabitants, and integrate the results into spatial planning documents. The workshop methodology can be replicated in other town neighborhoods, involving stakeholders in discussions about green solutions, cost and benefits of green infrastructure.

The workshop raised awareness and created valuable environment for discussions of development between different stakeholder needs about climate change and the city's resilience to it, with particular attention to such a sensitive area as the Cēsis Old Town.

Key Directions, identified after workshop, for Green Infrastructure Development:

Green Areas:
Establish green zones and planted areas that offer recreational opportunities while mitigating the urban heat island effect.

Green Roofs and Walls:
Promote the installation of green roofs and vertical greenery on buildings to reduce heat accumulation, improve air quality, and create aesthetically pleasing environments. These solutions also support biodiversity by providing habitats for various plant and animal species.

Water Resource Management:
Implement nature-based solutions for managing water resources, such as natural rainwater harvesting systems, to reduce flood risks and ensure water availability during dry periods. Solutions may include swales, infiltration systems, and other natural processes.

Sustainable Mobility:
Encourage sustainable mobility by developing bicycle lanes and pedestrian zones, transforming Rīgas Street into a pedestrian-friendly "Summer Street," and reducing daily car traffic in the area.

Community Engagement:
Involve the local community in the planning and implementation of green infrastructure through public consultations, workshops, and educational events.

Challenges experienced through the process

The revitalization of Cēsis Old Town's public space presents both significant challenges and promising opportunities. One of the main challenges lies in reconciling diverse opinions and perspectives within the specific context of the Old Town. While the area faces several environmental and social issues, it also holds great potential to become a vibrant and attractive part of the city.

A notable example is the "Summer Street" initiative on Rīgas Street, which has been implemented for two consecutive years. By closing the street to motor traffic, the project has contributed to reducing CO_2 emissions and improving air quality in the Old Town. However, pedestrian flow monitoring has shown that the area often experiences low foot traffic, indicating a need for further activation and engagement.

Public attitudes toward the initiative are highly polarized, reflecting differing values and expectations. Additionally, there are numerous myths and misconceptions surrounding the archaeological protection of the Old Town, which often hinder the introduction of new ideas and developments.
The co-creation workshop served as a valuable opportunity to foster open dialogue among various stakeholders, listen to different viewpoints, and work toward shared visions and goals for the future of the Old Town.

Benefits of stakeholder engagement / conclusions

The co-creation workshop in Cēsis Old Town demonstrated the value of inclusive stakeholder engagement in urban planning and sustainable development. Bringing together local residents, experts, and municipal representatives enabled a diverse exchange of perspectives, which is essential for addressing complex urban challenges.

Key benefits and conclusions include:

Enhanced Understanding of Local Context:
Stakeholder discussions revealed both the environmental and social dynamics of the Old Town, including low pedestrian activity, polarized public opinion, and misconceptions about heritage protection.

Informed and Balanced Decision-Making:
By involving a broad range of voices, the workshop helped identify shared priorities and areas of consensus, such as the need for green infrastructure, improved mobility, and better use of public space.

Conflict Mitigation and Trust Building:
Open dialogue helped reduce tensions between differing viewpoints and fostered mutual understanding, laying the groundwork for future collaboration.

Increased Public Awareness and Ownership:
The participatory process empowered community members to contribute ideas and take part in shaping their environment, which is crucial for the long-term success and acceptance of urban interventions.

Foundation for Future Planning:
The workshop outcomes—including visions, proposed solutions, and identified challenges—will serve as a strategic basis for further planning, experimentation, and implementation in the Old Town.

In conclusion, the event highlighted that co-creation is not only a method for generating ideas but also a tool for building resilient, inclusive, and sustainable urban communities.

Conclusions of stakeholder surveys

The pre-workshop survey was completed by 24 participants. Approximately 42% of respondents reported experiencing issues related to the urban heat island effect in the workshop area—the old town of Cēsis—while 21% had encountered flooding following extreme weather events. Overall, participants demonstrated a relatively strong prior understanding and acceptance of NBSs. About 80% agreed or partially agreed that they would like to see NBSs implemented to improve conditions in the area. In terms of familiarity with the concept, 71% stated that they know and understand what NBSs are, while 29% indicated that they were familiar with the term but lacked in-depth knowledge. Only one respondent expressed opposition to NBS implementation if it meant a reduction in parking spaces or other urban changes. Participants highlighted favorite gathering spots like Rožu laukums and Rīgas iela,

while also pointing out areas with issues such as heat stress, flooding, and noise pollution.

The most favoured types of NBS in the old town of Cēsis in the pre-workshop survey were planting of trees and other greenery, installation of eco-furniture, green parking lots, and the creation of urban grasslands. The most valued benefits from implementation of NBSs were a more pleasant urban environment, mitigation of the heat island effect, and increased biodiversity.

The post-workshop survey (n=22) revealed that, despite the participants' relatively high baseline knowledge, around 82% reported an improvement in their understanding of NBSs after the workshop. This underscores the value of co-creation workshops in building capacity and deepening knowledge. While overall support for implementing NBSs in the old town remained strong and consistent, the preferences for specific solutions shifted slightly. Trees and other greenery remained the most favoured option, now followed by permeable pavements and green parking lots, although eco-furniture continued to be rated highly as well.

Result implementation

The outcomes of the co-creation workshop will play a crucial role in shaping future planning and development efforts in Cēsis. The ideas, discussions, and proposed solutions are not only relevant to the specific context of the Old Town but also provide valuable input for broader municipal strategies.

The workshop results will directly inform the development of the Cēsis City Greening Plan, contributing to a long-term vision for a more climate-resilient and livable urban environment. Specific proposals from the workshop will be used in the design and planning of infrastructure projects, particularly the reconstruction of Old Town streets, ensuring they are adapted to the impacts of climate change.
The nature-based solutions and green infrastructure concepts developed during the workshop will support the city's efforts to adapt to climate change, addressing issues such as heatwaves, stormwater management, and biodiversity loss.
These solutions will serve as pilot ideas for testing and scaling up across other parts of the city.

The co-created solutions provide a strategic foundation for the continued development of the LIFE LATESTadapt project, ensuring that future actions are grounded in local needs and supported by community input.
The collaborative process itself serves as a model for participatory planning, which can be replicated in other neighbourhoods.

Photos of the event

Photos of the results of the group works

2.3. Riga municipality

Stakeholder engagement

What was organised: Full day workshop for the 8th grade students at 89th Riga secondary school

Who organised: Riga City Council City Development Department, Baltic Environment Forum, Ministry of Smart Administration and Regional Development of Republic of Latvia

When: 8th of May 2025

Where: 89th Riga secondary school, Hipokrāta ielā 27, Riga, Latvia

How many participants: 18 students

What age groups participated: 14-15 years old

Which partners/experts participated: experts from the following institutions participated at the workshop Riga City Council City Development Department, Baltic Environment Forum, Ministry of Smart Administration and Regional Development of Republic of Latvia, Riga Technical University.

Summary of the event and programme

During the workshop, students were educated on the issues of climate change, biodiversity and ecosystem services, and the role of nature-based solutions in addressing various challenges. During the workshop, students mapped the school surroundings and various environmental challenges (heat, water accumulation, rainwater drainage) and how these challenges can be solved with nature-based solutions. Students worked in groups and developed concrete solutions for the

school area. At the end of the workshop, experts provided feedback to students on the proposed solutions.

Methods used in the event

At the beginning of the workshop, students listened to several presentations on the following topics: climate change and risks, sustainable cities, nature-based solutions, Riga Urban greening plan. Following the presentations, a physical mapping of the school's territory took place. Afterwards students worked in groups and visualized solutions on a map. Additionally, a game element was introduced, and each group had to tackle a different quest related to development and maintenance of the green infrastructure.

Results of the event

As the result of the workshop, each group produced a map with specific solutions that address heat and flooding risks in the school territory. Each group estimated the costs of their solution and explained their choices. Students can use the ideas developed during the workshop to develop a project to receive municipal funding. Workshop methodology can be replicated in other schools.

The workshop took place in a school that was built during the soviet era, the architecture of the school and the planning of the outdoor territory is like many other schools in Latvia. During the heat island mapping, the results highlighted that in many soviet-era built schools the heat island is exacerbated when the outdoor stadiums are renovated with artificial surfaces.

Key directions for green infrastructure development:

Development of Green Areas
Planting trees, development of planted areas and use of eco furniture to decrease heat island effect and to make outdoor space more appropriate for recreational use.

Decreasing flood risk
Replacement of conventional surfaces to water absorbent surfaces to decrease flood risks.

Green roofs
Green roofs were proposed in several projects as the building's roof has a significant flat surface that provides a good basis for the development of green roofs. Green roofs were proposed to mitigate heat island and flood risks.

Biodiversity
Water elements and other solutions such as insect hotels to enhance biological diversity.

Challenges experienced through the process

Participants had almost no prior knowledge on the questions of nature-based solutions and climate change (one of 18 students had heard about these questions), participants age – 14-15 years old.
Participants were from Russian speaking families; on some occasions it seemed that the understanding of all the concepts was not optimal.

Benefits of stakeholder engagement / conclusions

As there was no prior knowledge of the topics of the workshop, it was a great opportunity to introduce the students to these issues and to raise their awareness. Learning through work in groups on specific territory was particularly beneficial to the engagement of the students.

Information presented during the workshop could be more beneficial to high school students. For the primary school students, the educational part of the workshop could be simplified.

Overall, the workshop is a great tool to raise awareness and educate.

Conclusions of stakeholder surveys

The pre-workshop survey was completed by 24 participants—all 8th-grade students from Riga's 89th Secondary School, the focus area of the workshop. In the pre-workshop survey, approximately 42% of respondents reported experiencing issues related to the urban heat island effect in the school territory, while none reported problems related to flooding. 62% participants indicated they would like to see NBS-related improvements in their school's surroundings in the pre-workshop survey. The most preferred solutions included planting trees and other greenery, incorporating small fauna elements, establishing community gardens, and installing eco-furniture.

In terms of familiarity with the concept of NBSs, 63% had heard the term but did not possess detailed knowledge, 29% were well familiar with the concept,8% had not heard of it at all.

The most valued perceived benefits of NBSs were: a more pleasant urban environment, improved air quality, increased biodiversity.

The post-workshop survey (n = 18) revealed a notable increase in participants' understanding of NBSs - 44% stated that their knowledge had increased significantly and 50% reported a slight improvement in understanding. Following the workshop, 44% of participants believed they now understood the concept and meaning of NBSs, although some uncertainties remained. This is likely due to the complexity of the topic, which can be challenging to fully grasp in a one-day session, especially for 8th-grade students.

Participants' preferences for NBSs also shifted slightly after the workshop. While trees and other greenery remained the most favoured solution, bioswales, rain

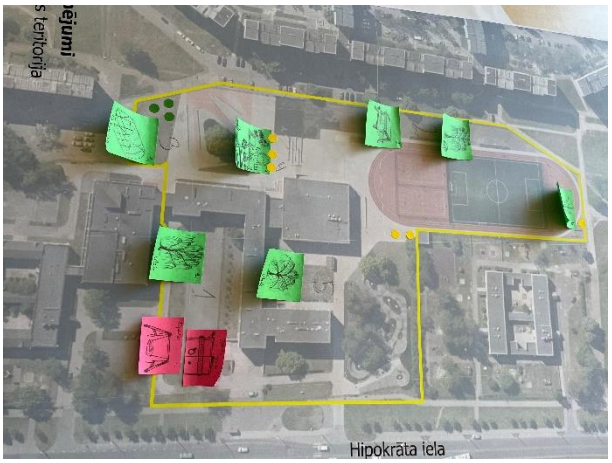
gardens, and urban grasslands gained more attention in the post-workshop responses. Additionally, acceptance of implementing NBSs on school grounds increased from 62% to 78%.

Result implementation

During the development of the Riga Urban Greening Plan development, one of the policy goals is to increase involvement of private actors which can be achieved through information and educational activities. The methodology and approach development of this workshop can be integrated into one of the policy measures of the plan to organize the workshops in Rigas schools.

Photos of the event:

Photos of the results of the group works:



3. Summary on main results and conclusions from the co-creation workshops held in the demo municipalities

Above described three stakeholder engagement events in the form of co-creation workshops promoted diverse input and generated localized, actionable solutions. These events acted as tools for both planning and public empowerment. The biggest value of the workshops were the increased awareness and knowledge about climate resilience and nature-based solutions overall for varied age and professional groups.

The surveys that all participants were asked to fill pre- and post-workshop to assess their knowledge and attitude towards NBSs clearly demonstrated that, despite the differences in backgrounds and local contexts, participants across all workshops showed a marked increase in NBS related knowledge, as well as increase in the acceptance of NBSs. Interestingly, in all three workshops, despite differences in participant backgrounds and focus topics, while mostly pre- and post-workshop preferred NBSs shifted, the most preferred NBS always remained planting of trees and other greenery, emphasising the importance of presence of plants in the urban environment.

To involve inhabitants of the municipalities in the creation of the ideas different approaches were used based on the event target groups. In all of them interactive techniques as group mapping, visualization and cost efficiency tasks were used. Each municipality chose different scale and challenge sites in their cities for the workshops, but for all of them specific site related target groups were invited to be involved. In Riga the workshop site was chosen the territory of the 89th Riga Secondary school and the invited target group was the students of the school. In Valmiera the workshop site was chosen a territory containing a school, apartment buildings as well as garage complex and the invited target group was the students of the school as well as the inhabitants and workers of the places in the territory. In Cēsis the workshop site was chosen the old city territory and the invited target groups were different stakeholders that are the inhabitants or workers of the territory. By choosing specific site and specific target groups the main challenges, opinions and plans of the workshop territories were easier to identify.

The main challenges noted regarding trying to engage stakeholders were:

- The lack of prior knowledge about project topic, especially among youth participants;
- The barriers of language, conceptual understanding and the use of specific definitions;
- Resistance on certain changes;
- Lack of believe about the result of the solutions or the possibility of implementing them;
- Myths or misconceptions hampered open innovation.

Summarizing all organised workshops the value that is the most important for the municipalities were the discussions, opinions and group work results that can be directly included in the greening plans that are in the process till the August of 2026. All the thoughts that were overlooked in the workshops identified possible solutions that can guide future infrastructure design and experimentation also in the demo site building in each of the municipality. These kinds of events are valuable as for the

municipality to engage with inhabitants as well as for inhabitants themselves to know the future plans of the city that they can still influence and feel heard.