Co-funded by the European Union

Milestone 29 - At least 8 training events for local government specialists dealing with spatial planning and project development and 2 international training events or remote sensing data use for data professionals organised

Report of Seminar

“Bērniem draudzīga vide un dabas risinājumi: teorija un prakse”

(“Child-Friendly Environments and Nature-Based Solutions: Theory and Practice”)

Report of T7.1. - Training for developing follow-up projects to replicate project results in other Baltic Sea Region cities

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

(MoSARD (BEN), RTU (BEN), TalTech (BEN), Baltic Coasts (BEN), BEF-Latvia (BEN), BEF-Estonia (BEN))

11 - 12 June 2026

Co-funded by the European Union

Ministry of Smart Administration and Regional Development Republic of Latvia

Republic of Estonia Ministry of Climate

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General description

Aim of the seminar: To inform regional specialists and stakeholders about climate change projections in Latvia, nature-based solutions (NBS), and the principles of the New European Bauhaus in creating sustainable, child-friendly urban environments.

Project specific activity: Milestone 29 - At least 8 training events for local government specialists dealing with spatial planning and project development and 2 international training events or remote sensing data use for data professionals organised

Participants: seminar: 118; excursion: 38 - municipalities from Latvia, planning regions, different maintenance companies of municipalities, MoSARD, Baltic Environmental Forum, environmental experts, architects, landscape architects

Who organised: MoSARD

When: 11. - 12.06.2026.

Where: Online and Zemgale, Latvia

Which partners/experts participated: Baltic Environmental Forum, MoSARD

1. Summary of the seminar programme

11.06.2026. - seminar

Līdzšinējās un nākotnes klimata pārmaiņas Latvijā

Climate Change and Projections in Latvia

Rūdolfs Murāns, Latvian Environment, Geology and Meteorology Centre
(Latvijas Vides, ģeoloģijas un meteoroloģijas centrs)

The current climate norm (1991–2020) shows a 1.2°C increase in average air temperature compared to the 1961–1990 period. Projections based on three scenarios (SSP1-2.6, SSP2-4.5, and SSP5-8.5/SSP3-7.0) indicate that by the end of the century, average temperatures could rise by 8.4°C to 10.5°C. The most significant warming is expected in winter (up to 5.6°C increase). Precipitation is projected to increase, especially in winter (up to 62%), while snow cover will decrease. Indices like tropical nights (nights >20°C) are expected to increase significantly (up to 17 nights per year), impacting vulnerable groups like children and seniors.

To provide accurate forecasts for Latvian municipalities, the LVGMC utilizes data from 33 observation stations dating back to 1945 for precipitation and 1957 for temperature. These datasets undergo rigorous quality control and mathematical interpolation to model climatic changes between stations. By applying bias correction to global socio-economic pathway models, the center can provide high-resolution projections down to the municipal level, which are publicly accessible through the "klimats.meteo.lv" portal to assist local planners in risk assessment.

On the LVGMC website, it is possible to find and test the climate change analysis tool using different indicators: https://klimats.meteo.lv/

NEB saikne ar dabā balstītiem risinājumiem

New European Bauhaus (NEB) and NBS

Mārīte Sprudzāne, *Latvian Association of Architects (Latvijas arhitektu savienība)*

The NEB movement focuses on three pillars: Sustainability, Aesthetics, and Inclusion. It promotes environments that are beautiful, sustainable, and inclusive. Key principles include community engagement beyond simple questionnaires and the use of adaptive design for resilient systems. Examples cited include the Salaspils kindergarten (incorporating rain gardens and natural play elements) and Tondiraba Park in Tallinn (utilizing existing structures and vegetation). A self-assessment tool is available to help projects meet NEB criteria.

Implementation of NEB principles requires a shift from standard procurement to professional architectural competitions and the involvement of experts from the initial task-setting phase. Meaningful community engagement is vital, moving beyond simple questionnaires to collaborative design processes that involve all social groups throughout the project lifecycle. To support these goals, a self-assessment tool is available for municipalities to evaluate their projects across categories like sustainability and aesthetics, aiming for a target score of 50-70% to ensure high-quality, inclusive urban spaces.

LIFE LATESTadapt projekts un iespējas uzzināt par dbr

LIFE LATESTadapt Project Overview

Luīze Eglīte*, Project Representative*

The project involves 16 organizations from Latvia and Estonia, focusing on NBS demo sites, digital tools, and urban greening plans. Mapping of heat and flood risks has been conducted for Riga, Valmiera, and Cēsis. Demo sites include Tērbatas Street in Riga (parklets and rain gardens), a heat-mitigating parking lot in Valmiera, and rainwater management on slopes in Cēsis. An integrated guideline for NBS implementation is being developed for December release.

A core component of the project is the development of digital tools, including a cost-effectiveness calculator to help planners estimate NBS implementation and maintenance expenses. The project emphasizes the importance of long-term monitoring, recommending that even early-stage designs reserve space for environmental sensors to track the performance of demo sites. Despite challenges

such as rising construction costs and a shortage of specialized builders, the project will culminate in a comprehensive set of integrated guidelines in three languages, scheduled for release in December, to facilitate the replication of these solutions across the Baltic region.

Dabā balstīti risinājumi, kuri saistīti tieši ar bērnu uzturēšanās vietām, dimensijām

NBS from a Child's Perspective

Anda Ruskule, *Baltic Environmental Forum (Baltijas Vides Forums)*

NBS are actions inspired by nature to solve environmental and social challenges while ensuring human well-being. For children, natural environments improve cognitive development, reduce stress, and strengthen connections to nature. Mapping reveals that many schools and kindergartens are urban heat islands due to asphalt and rubber surfaces. Recommendations include prioritizing natural shade (trees) over artificial structures and using local plant species.

Mapping results from the project identified 186 critical environmental "hotspots" in Riga, with educational institutions frequently highlighted as significant heat islands due to excessive asphalt and rubber surfaces. Co-creation workshops at schools in Riga and Valmiera revealed that students have a strong desire for more natural elements, such as trees for shade and raised garden beds for biology lessons. The seminar emphasized that successful NBS implementation in schools requires not only physical changes but also a cultural shift, allowing children to actively interact with green spaces rather than treating them as purely decorative areas.

Kafijas pauze

Coffee break

Bērniem draudzīga āra vide - no idejas līdz praktiskai rīcībai

Practical Experience: Eco-school "Zīļuks" in Jelgava

Inga Lūce & Ludmila Kudreņicka*, Jelgava Kindergarten "Zīļuks"*

The kindergarten transitioned from standardized certified equipment to an outdoor environment based on nature (logs, stumps, water, stones). Key features include raised garden beds for each group to learn biology and math, a greenhouse for heirloom seeds, and a rainwater collection system for irrigation. They maintain a "meadow corner" and "forest corner" to foster biodiversity and allow children to explore natural textures and risks.

The institution actively involves the community through annual "Big Cleanup" events, where over 100 parents collaborate to build and maintain the natural play environment based on children's observations. This participatory approach extends to learning about the circular economy through composting and rainwater harvesting for the garden. To balance biodiversity with safety, the school employs strategic maintenance, such as mowing 10cm buffer zones to satisfy neighbors while maintaining a "meadow corner," proving that natural, "unpaved" environments are both pedagogically valuable and logistically manageable.

Dabas materiāli projektos - ilgtspēja, drošība, bioloģiskā daudzveidība

Sustainability in Construction and Bio-based Solutions

Gunita Ķiesnere, *New Construction School (Vidzeme University)*

Focus is on the circular economy in construction, prioritizing wood and bio-based materials (hemp, reeds, miscanthus) over energy-intensive industrial products. Since children are physically closer to the ground, they are more exposed to heat and particles from synthetic surfaces. Advice for municipalities includes digitalizing existing resources to reuse materials and focusing on the entire life cycle of an outdoor space, including maintenance and repairability.

Beyond traditional wood, the seminar highlighted the potential of bio-based materials like miscanthus and cattail-derived products for urban paths and small-scale structures, promoting a transition from "equipment" to "landscape". A critical recommendation for municipalities is to conduct Life Cycle Assessments (LCA) that evaluate both the carbon footprint and the long-term economic maintenance of materials. Furthermore, the introduction of "edible landscapes" featuring fruit trees and berry bushes was proposed as a way to enhance biodiversity while providing direct educational and sensory benefits to urban youth.

Kā salāgot drošību un estētiku? + piemēri

The Value of Risk and Natural Esthetics

Edgars Neilands, *"Labie Koki"*

Proposes a "provocative" shift: returning controlled risks to play areas to build child resilience. Modern playgrounds are often "too safe," leading to boredom and lack of skill development. Using fallen trees (with roots intact), un-impregnated wood, and local stones creates complex, non-linear environments that require children to be attentive and physically active. Examples include the use of large logs in Uzvaras Park and creating "climbing trees".

The philosophy behind these natural playgrounds is that children must be allowed to manage their own risks to develop physical resilience and doughtiness. Using storm-fallen trees with intact root plates or large boulders creates non-linear challenges that require constant attention and coordination, unlike the predictable rhythms of standard playground equipment. By integrating recycled industrial materials—such as concrete pipes or old roof tiles—into the landscape, municipalities can create high-value "discovery" zones at a fraction of the cost of new synthetic installations.

Kā salāgot drošību un estētiku? + piemēri

Case Studies: Salaspils and Sigulda Projects

Santa Krēsliņa, ALPS Landscape Studio *(ALPS ainavu darbnīca)*

Salaspils 7th kindergarten was designed around six senses (sight, hearing, smell, taste, touch, and balance). It features an all-wood structure, water play elements, and a velo-track with real traffic signs. The Rainis Park project in Sigulda utilizes the identity of Rainis and Aspazija (Sun and Moon themes) to create a unique space with integrated bioswales to solve local flooding issues.

In the Rūjiena "Vārpiņa" kindergarten project, the landscape was divided into symbolic "biotopes" such as forests and riverbanks, directly correlating with the names of the children's groups to foster a sense of belonging. The Sigulda Rainis Park case study demonstrated how technical challenges, like runoff from a nearby skatepark, can be solved aesthetically using 60cm deep bioswales planted with moisture-loving vegetation. Both projects underscore the importance of thematic identity, where elements like "Sun and Moon" or "Six Senses" are woven into the design to create a cohesive, educational, and emotionally resonant urban environment.

12.06.2026. – site visits

Salaspils 7. bērnudārza apskate

7th kindergarten of Salaspils

Ieva Dimante, ALPS darbnīca

As it was the morning of a working day, site visitors couldn't go inside of the kindergarten's courtyard as there were children outside in their daily activities, but it also gave an opportunity to see how well they feel and use the space. Courtyard is well thought with different topography, plants and playful activities that help children to learn about different things as well as to develop their physical skills. Are also contains rain gardens to collect rainwater from the courtyard and pavement along the school. Natural materials as wood and rocks are used together with stainless steel elements.

Olaines mežaparka bērnu rotaļu pilsētiņas apskate

Children's Playground in Olaine Forest Park

Katrīna Lapiņa, Fixman

This playground is in a forest area by the town, but there is used also rubber materials as it is more comfortable to maintain the site and is more protectable against unwanted interruptions on the site by children and teens. The elements are well thought out and for different ages and situations for example for parents with 2 small children too. Some trees are between the playground elements and some of the site is also connected to the big trees and in a zone covered with wooden chips.

Jelgavas Uzvaras parka bērnu laukuma apskate

Children's Playground in Uzvaras Park, Jelgava

Zane Cukura, Andrejs Lomakins, Jelgavas pašvaldība

This playground now is the biggest playground in Jelgava. It has different zones that relates to different animals, activities and ages. There is a mix of rubber, stone, gravel and sand pavement, but all the elements are made from wood with stainless steel elements. It is very popular and attractive for everyone although from the maintenance side it is very complex as nothing can't be fixed fast and easy because the used wooden materials are artistic and styled just for this park.

Dobeles Saules parka apskate

Dobele Sun Park

Katrīna Lapiņa, Fixman, Ilze Krištobāne, Projekts3

This is a unique playground as it was created by the finances and motivation of the local entrepreneurship. It developed as a local gift to the town and now is very cherished. It contains different activities from parkour, basketball, playground with different elements, table football and table tennis. Although it is lacking some shade, the used colors are very comfortable for the eye and also points out each safety zone for the activity.

2. Summary and conclusions of the seminar

Climate Normals are Shifting Rapidly

Latvia's current climate norm (1991–2020) already shows a 1.2°C increase in average temperature compared to the previous period. These shifts lead to more frequent tropical nights and intense precipitation, necessitating infrastructure that can handle both extreme heat and high water volumes.

Educational Institutions as Critical Heat Islands

Mapping results highlight that schools and kindergartens often serve as urban heat islands due to excessive use of asphalt and rubber surfaces. Because children are physically smaller and spend more time close to the ground, they are disproportionately exposed to heat and particles from synthetic materials. Transitioning from these "hard" surfaces to natural shade and greenery is essential for child health and developmental well-being.

Holistic Design through NEB and NBS

Implementing the New European Bauhaus (NEB) principles—Sustainability, Aesthetics, and Inclusion—requires a shift from standard procurement toward professional competitions and meaningful community engagement. Nature-Based Solutions (NBS) are not merely decorative; they are multifunctional tools that solve environmental challenges (like flood and heat risk) while enhancing social inclusion and creating "climate classrooms" for future generations.

The Value of Controlled Risk and Natural Materials

Modern play environments are often "too safe," leading to boredom and a lack of physical resilience. Reintroducing controlled risks through non-linear natural elements like fallen trees, boulders, and varied topography forces children to actively manage their safety and fosters cognitive development. Moving from synthetic "equipment" toward a natural landscape reduces the carbon footprint and provides a superior sensory experience.

Practical Implementation and Site Visit Insights

- Salaspils 7th Kindergarten: Showcased the integration of topography, rain gardens, and all-wood structures to stimulate the "six senses".
- Jelgava Uzvaras Park: Highlighted the use of artistic, non-standard wooden elements and varied pavements (stone, gravel, sand) to create a highly popular regional destination.
- Eco-school "Zīļuks": Demonstrated how involving over 100 parents in "Big Cleanup" events can build and maintain sustainable, biodiversity-rich environments like "meadow corners" and greenhouses.
- Dobele Sun Park: Proved the impact of local entrepreneurship in gifting unique, aesthetically pleasing multi-use spaces (parkour, sports) to the community.

3. Photos of the event