Interreg

Co-funded by the European Union

NEXT Black Sea Basin

Green Urban Resilience

Newsletter 01

Green Urban Resilience, BSB00006

What is Green Urban Resilience?

The Green Urban Resilience Project focuses on developing sustainable green solutions for climate adaptation in the Black Sea Basin (BSB) and beyond. Through cross-border cooperation, local authorities and academic experts are working together to integrate green infrastructure into urban planning to reduce heat stress and create climate-resilient cities.

Capacity Building and Community Involvement

The project emphasizes the importance of local communities in the fight against climate change. Through joint heat-walks, workshops, and training sessions, environmental and planning experts will gain the skills needed to measure heat stress and promote the benefits of green spaces. Community involvement will be integral at every stage of the project.

Scientific Expertise Meets Local Action

The project brings together landscape architects, urban planners, and forest experts to share their knowledge with local municipalities. By establishing an international Urban LANDLAB, experts will provide services to target cities across the BSB region, supporting the development of Heat Resilient Strategies and solutions.

Local Cooperation for a Greener Future

Cities and towns must invest in green infrastructure to reduce heat islands and mitigate urban warming. The Green Urban Resilience Project will guide local authorities in planning sustainable strategies and creating accessible green spaces, offering communities healthier, more resilient environments. Through collaborative efforts and knowledge-sharing, this initiative aims to enhance urban biodiversity, promote eco-friendly practices, and strengthen local climate resilience. By integrating nature-based solutions, municipalities can contribute to a greener, more sustainable future for all.

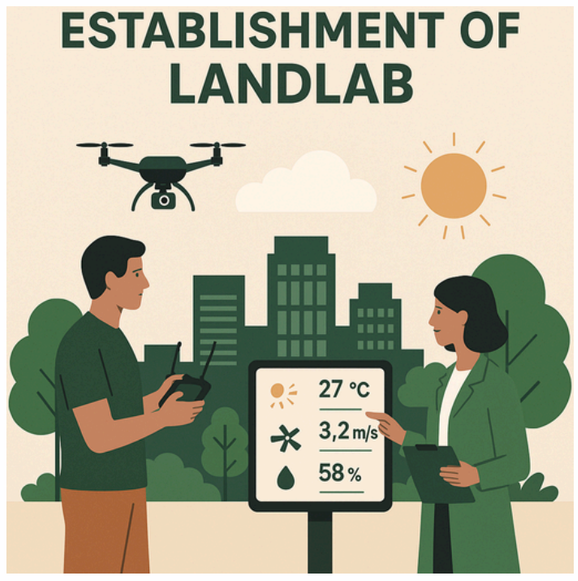
6 Strategic Steps for Resilient Cities

1 Coming together for analyzing current planning situation in the four target countries:

Project partners will analyze national, regional, and local climate adaptation strategies in the four target countries to assess how well green infrastructure is integrated. Through joint methodology and local initiative groups, they will evaluate existing measures against urban heat islands and identify the need for heat resilience strategies, shared findings during the kick-off meeting in Uzunköprü.

4 Adapting heat stress mitigation measures in urban areas: pilot green recovery measures in BSB:

Following heat measurements and analyses in each target city, LANDLAB experts will prepare digital heat stress maps to guide local decision-makers. Based on these maps and city-specific strategic reports, a guide titled “Climate Change Adaptation through Green Infrastructure in Urban Areas” will be developed. After the implementation of pilot green interventions in Uzunköprü, Sozopol, and Kavala, new measurements will be conducted to assess the effectiveness of these solutions in reducing the UHI effect with concrete data.



2 Establishing Climate Adaptation planning mechanism in BSB: Joint approach for evaluating microclimate in the target cities

PP2 will lead the establishment of the first LANDLAB in the BSB region at Istanbul University-Cerrahpaşa, serving as a hub for evaluating urban heat island effects and promoting green adaptation strategies. LANDLAB will support target municipalities through data collection, thermal discomfort workshops, and international collaboration, contributing to long-term climate resilience planning with practical measurements and expert guidance.

5 Capacity building on climate resilience: sustainable practices for green future:

A joint training program will be developed to build the capacity of municipal green area staff and local communities in planning and maintaining climate-resilient urban green spaces. Trainers will be educated through LANDLAB-led online sessions, followed by national face-to-face trainings in each partner country for municipal staff and residents. Two thematic booklets—on public green areas and residential gardens—will support the trainings and be made publicly available online in all partner languages.

3 Joint measuring of the UHI effect in the urban areas: application of the European assessment for mapping heat vulnerabilities in the Black Sea Basin:

LANDLAB experts, together with local measuring groups, will carry out Urban Heat Island (UHI) effect measurements starting in Batumi and continuing in the four target cities (Batumi, Uzunköprü, Sozopol, Kavala). Using thermal cameras and drone-assisted measurements, the collected data will be transferred to local experts, establishing a foundation for long-term monitoring and green solution planning

6 Incorporating Green measures in the long-term planning of the local and regional policy makers:

The four target municipalities will prepare their first Heat Resilient Strategies (HRSs), using data from thermal assessments, strategic city reports, and the Pathway Planning Guide. These strategies will guide evidence-based cooling interventions and support climate adaptation planning. To ensure long-term impact and replication, an international conference will be held in Istanbul, where a partnership memorandum will be signed to extend the LANDLAB’s work and promote resilient green city models across the BSB region.

THE STRENGTH OF THE PROJECT LIES IN ITS PARTNERSHIPS

Uzunkopru Municipality Administration
Cumhuriyet Mahallesi, 19 Mayıs Blvd
22200 Uzunkopru-Edirne,
Republic of Türkiye
https://uzunkopru.bel.tr/
yaziisleri@uzunkopru.bel.tr

Istanbul University-Cerrahpaşa
Avcilar Campus, Baglarici BLVD 7
34320 Avcılar/İstanbul
Republic of Türkiye
https://www.iuc.edu.tr
niluferk@iuc.edu.tr

Municipality of Sozopol
Han Krum sqr. 2
8130 Sozopol
Republic of Bulgaria
www.sozopol.bg
obshtina@sozopol.bg

City Hall of Batumi Municipality
L. Asatiani st. N25,
6010 Batumi
Georgia
https://batumi.ge
Miminoshvili@hotmail.com

Kavala Municipality
Kyprou Str 10
65302 Kavala
Greece
www.kavala.gov.gr
iochatzivaryti@gmail.com

MAIN OUTPUTS AND ACHIEVEMENTS: GREEN URBAN RESILIENCE FOR HEAT-RESILIENT CITIES IN THE BLACK SEA REGION

- Utilizing European experience in urban heat stress measurement and sharing knowledge with Black Sea countries.
- Establishment of LANDLAB within Istanbul University-Cerrahpaşa to conduct international urban studies that guide the development of heat-resilient strategies for the Black Sea Basin.
- Preparation of urban heat island maps for four target cities: Uzunköprü, Sozopol, Batumi, and Kavala.
- Supporting policymakers in the Black Sea Basin with a Planning Roadmap to develop local heat-resilient strategies.
- Implementation of green investments in urban areas of target cities to minimize heat stress.

Kick-Off Meeting:
6–8 November 2024, Uzunköprü

The kick-off meeting, marking the official launch of the project activities, was held on 6–8 November 2024 in the district of Uzunköprü, hosted by the Uzunköprü Municipality, the lead partner of the project. Over the course of three days, representatives of all project partners from Turkey, Bulgaria, Greece, and Georgia came together to initiate their joint efforts toward building climate-resilient cities. Participation was ensured both in person and online.

- On the first day, the GREEN URBAN RESILIENCE partners introduced their organizations and had the opportunity to get to know each other better. Detailed discussions were held on the project's implementation phases, general activities, expected outcomes, and deliverables. Experts from LANDLAB shared insights on blue-green infrastructure strategies for mitigating climate change and urban heat stress.
- On the second day, following comprehensive discussions aimed at aligning with the overall goals of the project and minimizing risks, the project team developed collaboration guidelines. LANDLAB experts presented the current analysis of the climate perception survey results and shared information on local and aerial measurement methodologies.
- On the third day, partners addressed the communication plan and program management guidelines, with a particular focus on public procurement processes and specifications. Reference reports and their delivery deadlines were also discussed. The meeting concluded with the strategic planning of upcoming actions and clearly defined next steps.

The GREEN URBAN RESILIENCE team held five online meetings within the first 6 months of the project to evaluate progress and discuss next steps.

- **1st Meeting – August 27, 2024:** The project team met online for introductions and developed roadmaps for the initial project activities.
- **2nd Meeting – October 30, 2024**: The team discussed the planning of press conferences under Activity 1.1, as well as kick-off events and the implementation of surveys.
- **3rd Meeting – November 22, 2024:** The Lead Partner provided detailed information to the partners regarding the first reporting period.
- **4th Meeting – January 21, 2025:** Future steps and upcoming phases of the project were discussed among the partners.
- **5th Meeting – March 6, 2025**: LANDLAB experts informed the partners about the thermal comfort surveys and walk-along studies. The meeting also covered the initiative group meetings planned for the third reporting period and the Kavala meeting scheduled for May.

Project Launch Press Confrences Held by Projec Partners

Uzunköprü Municipality Green Urban Resilience Project Launch Press Conference

On September 8, 2024, the kick-off press conference of the Green Urban Resilience project was held by the lead partner.

Local media representatives were invited to the event, which was attended by Uzunköprü Mayor Ediz Martin, Deputy Mayor Celal İnal, and municipal staff.

During the press conference, general information about the project was shared, and its goals and significance for the community were highlighted.

Istanbul University-Cerrahpaşa Green Urban Resilience Project Launch Press Conference

On October 22, 2024, the second project partner held the kick-off press conference at Istanbul University-Cerrahpaşa Avcılar Campus.

The university press was invited to the event, where the project's activities, expected outcomes, and the planned operations of LANDLAB, to be established within the Faculty of Forestry, were presented.

The event was attended by Vice Rector Prof. Dr. Erol İNCE, Project Coordinator Assoc. Prof. Dr. Nilüfer KART AKTAŞ, LANDLAB experts, and university staff.

Sozopol Municipality Green Urban Resilience Project Launch Press Conference

On March 20, 2025, the third project partner held a press conference to inform the public about the project's purpose, ongoing activities, and expected results.

The event was attended by Sozopol Mayor Tihomir Yanakiev, Deputy Mayor Andrey Nikolov, the project team, and press representatives.

Information was provided about the project’s implementation areas, main activities, and general outcomes.

Istanbul University-Cerrahpaşa Green Urban Resilience Project Launch Press Conference

On September 30, 2024, the kick-off press conference of the Green Urban Resilience project was held by Project Partner 3, introducing the project’s general activities and expected outcomes.

The event was attended by Kavala Mayor Alexis Goulas, Director of Technical Services Ilias Tsagkalidis, Project Coordinator Io Chatzivaryti, and members of the press. Information about the project was shared with the media.

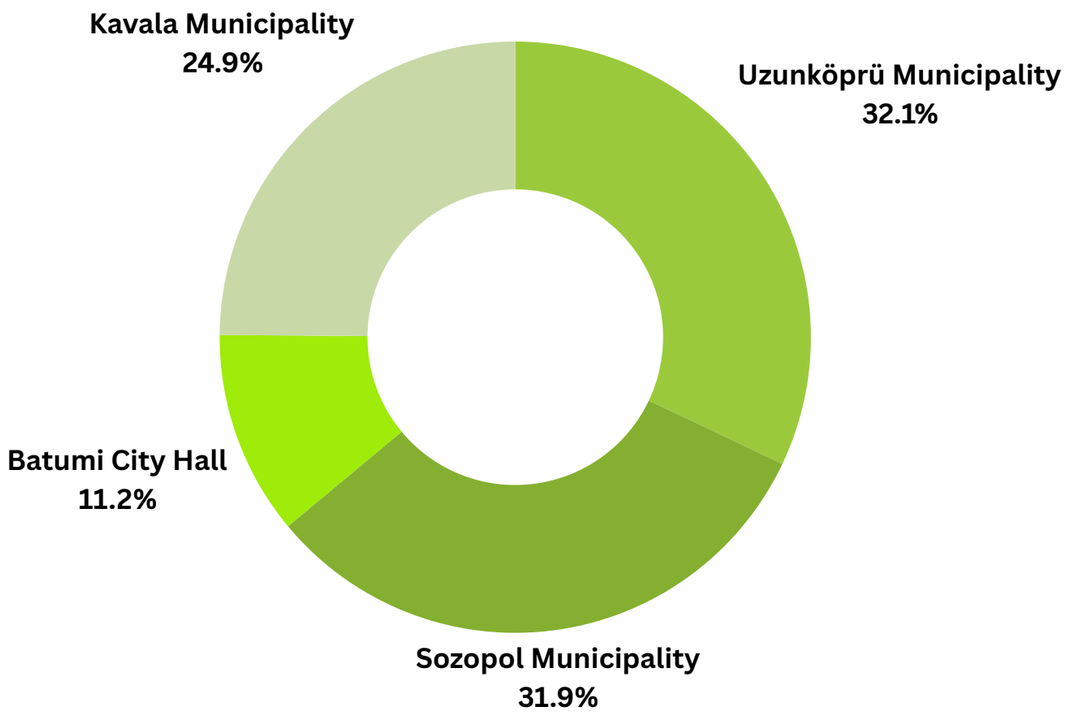
During the conference, Mr. Goulas emphasized the European Union’s strict environmental policies and highlighted the project's importance in creating critical urban green spaces.

Ms. Chatzivaryti stressed the increasing impact of heatwaves and the urgent need for adaptive measures.

Mr. Tsagkalidis outlined the main features of the project in Venizelou Junction and Kapsali Street, including sidewalk expansions, improved accessibility, and strategic tree planting to reduce noise pollution and strengthen urban resilience.

Six Months of Progress
Updates from the Green Urban Resilience Project

Within the first activity, the project partners for the local authorities of the 4 target cities - Uzunköprü, Sozopol, Batumi and Kavala municipalities analysed the existing legal and policy measures for climate adaptation set out in local, regional and national strategic plans. LANDLAB academics from the Department of Landscape Architecture, Faculty of Forestry, Istanbul University-Cerrahpaşa sought to answer the questions "Do local policy makers attach importance to green infrastructure and what is the rate of integration of Green Planning into the climate adaptation strategies of the target cities/regions?



Two different questionnaires were prepared to answer the questions 'What measures are taken to reduce UHIs in target cities'. The first questionnaire was prepared for policy makers and decision makers and was conducted with a total of 160 people in 4 target countries. The second survey group was prepared for the public living in the target regions. It consists of 26 questions in total. The questions are aimed at obtaining citizens' opinions on climate perception and solution mechanisms. **The surveys reached 1258 people (Uzunköprü 402/Sozopol 400/Batumi 140/Kavala 31**6). The analyses of the internal and external survey groups were analysed by LANDLAB experts. The results were analysed by LANDLAB academics:

- **In all municipalities, the majority of the respondents were between 25-49 years old.**
- **When asked about the possible consequences of climate change, the answers were determined as follows: The most frequently identified problems in all municipalities are water resources, ecosystems and biodiversity, agriculture and food security. Human health was particularly emphasised in Batumi and Sozopol, while forested areas were identified as an important factor in all locations. In addition, quality of life and migration are identified as concerns, indicating the socio-economic impacts of climate change.**
- **The answer to the question 'Are you aware of the measures taken by public authorities on climate change?' varied in the 4 regions. Kavala and Sozopol have the least knowledge, Batumi has medium level of knowledge, Uzunköprü has a higher level of knowledge.**
- **'Do you believe that urban green spaces can mitigate the effects of climate change?', participants in all target regions answered yes at a high rate.**
- **What is the most important benefit of green areas against climate change?', all participants in 4 target regions answered as improving air quality and reducing carbon emissions.**
- **To the question 'Do you think that the green areas in your city are sufficient for combating climate change?', participants from all 4 regions answered that they did not consider them sufficient. The highest level of dissatisfaction was found in Kavala, while Uzunköprü and Batumi gave relatively higher positive responses.**
- **In response to the question 'What do you think contributes to the increase in urban heat in cities', respondents from all 4 regions answered that urbanisation, lack of green areas and deforestation are the main factors contributing to high temperatures in city centres.**
- **In the question 'Which solutions can be applied to regulate heat in urban areas', the majority of the participants from 4 regions answered that the most preferred solutions to regulate heat in urban areas are urban parks / forests and tree planting on roadsides**

A meeting was held on 11 October 2024 with the initiative groups by the Lead Partner and during the meeting, information about climate change, global warming and its effects, the effects of green spaces on climate change mitigation were shared by the project coordinator and municipal staff.

A laboratory was established by PP2 to carry out the studies of LANDLAB experts consisting of lecturers from Istanbul University-Cerrahpaşa Forestry Faculty Landscape Architecture and Forest Engineering department. Work has started for the supply of equipment to determine the heat stresses of the target regions in the project and to carry out the analyses. Experts have finalised the work for the survey of thermal discomfort in the cities

FUTURE ACTIVITIES

Meetings with the initiative groups established in each target area will continue to be held within the scope of the project, focusing on the impacts of climate change and the resulting challenges for cities.

The first thermal discomfort measurement walks will be conducted in June–July 2025. These will begin with a short informative seminar for the target group, followed by physical thermal walks and thermal discomfort measurement studies in selected urban areas.

A working meeting will be held in the city of Kavala between 14–16 May with the participation of experts and project partners from four countries, especially LANDLAB experts. During this meeting, detailed planning of the thermal discomfort and urban thermal mapping activities will be carried out, a common methodology will be developed, and the thermal measurement equipment to be used will be finalized.

Follow us for updates!

www.facebook.com/Greenurbanresilience

www.instagram.com/Greenurbanresilience

Green Climate Change Adaptation Solutions for Smart and Resilient Cities in BSB
Green Urban Resilience
Material editor: Uzunkopru Municipality e-mail: yaziisleri@uzunkopru.bel.tr
phone: +90 284 513 11 43 website: https://uzunkopru.bel.tr
Publishing date: April 2025
The responsibility for the content of this material is that of the author(s). The content of this material does not necessarily represent the official position of the European Union. Reproduction is authorized, provided the source is acknowledged, and any changes are indicated.

Interreg NEXT Black Sea Basin Programme is co-financed by the European Union under the Neighbourhood, Development and International Cooperation Instrument (NDICI) and by the participating countries: Armenia, Bulgaria, Georgia, Greece, Moldova, Romania, Türkiye and Ukraine.