Interreg Co-funded by the European Union

NEXT Black Sea Basin

Green Urban Resilience

Newsletter 02

Green Urban Resilience-BSB00006

Welcome to the 2nd Edition of the Green Urban Resilience Newsletter!



Dear readers,

We are delighted to share the **second edition of the Green Urban Resilience (BSB00006) newsletter** — a space where we continue our journey toward more sustainable, climate-resilient, and livable urban environments.

In this issue, we bring you updates on our latest project milestones being implemented across partner cities, and inspiring stories for a resilient future.

Together, we are strengthening cross-border cooperation and building the capacity to adapt to climate challenges. Thank you for being part of our growing community.

Stay with us as we continue to turn green ideas into concrete actions for a more resilient tomorrow!

Warm regards,

The Green Urban Resilience Project Team

The Interreg NEXT Black Sea Basin Programme is co-financed by the European Union through European Funds

Learning Together in Kavala – Study visit on May 2025

As announced, in our previous issue, a **three-day study visit** took place in Kavala on 14 - 16 May 2025, bringing together all partners of the GREEN URBAN RESILIENCE project. Among the participants were representatives from the Municipality of Sozopol, Uzunköprü, and Batumi, alongside the LANDLAB experts from the Faculty of Forestry, from Istanbul University - Cerrahpaşa — all of whom played an active role in the discussions, training sessions, and field visits.

During the visit, the team finalized the common methodology and technical protocols for data collection, while training sessions helped equip teams with the necessary tools and know-how.



Partners also had the chance to explore Kavala's bioclimatic renovation projects and engage in productive discussions between mayors and local experts.

Feedback from the evaluation showed a high level of satisfaction, along with useful ideas for making future partner meetings even more engaging and impactful.





Exploring Urban Heat: Thermal Comfort Walks

During the summer of 2025, **thermal discomfort measurement walks** and participatory workshops were conducted in the cities of **Kavala, Batumi, Sozopol, and Uzunköprü**, as residents actively participated, guided by scientific field teams. The main objective was to gain a better understanding of how heat affects urban environment and how citizens experience thermal discomfort in their everyday lives.



To achieve this, LANDLAB experts collaborated closely with the field team of each participant to design the walking routes and the participation frameworks, to strengthen the methodological approach, and oversee the overall implementation of the activity. This included the strategic selection of dates, based on climatic data analysis, ensuring that each walk was conducted during the hottest days of the season to capture realistic conditions of urban heat stress. Before each walk, participants attended an introductory workshop about climate change, the urban heat island phenomenon, and the measurement methodology, and received a participation kit including all necessary materials. Each walk followed a one-kilometre route with designated checkpoints where scientific teams recorded environmental data using specialized equipment, while participants completed questionnaires reflecting their personal perception of heat and comfort in real conditions.

Uzunköprü

In Uzunköprü, a thermal discomfort measurement walk took place from July 2 to 4, 2025. The activity kicked off with a short briefing session, where participants learned about the goals and methods of the walk. After that, the group headed out along Gazi Street, one of the town's main urban arteries, to carry out measurements and observations.







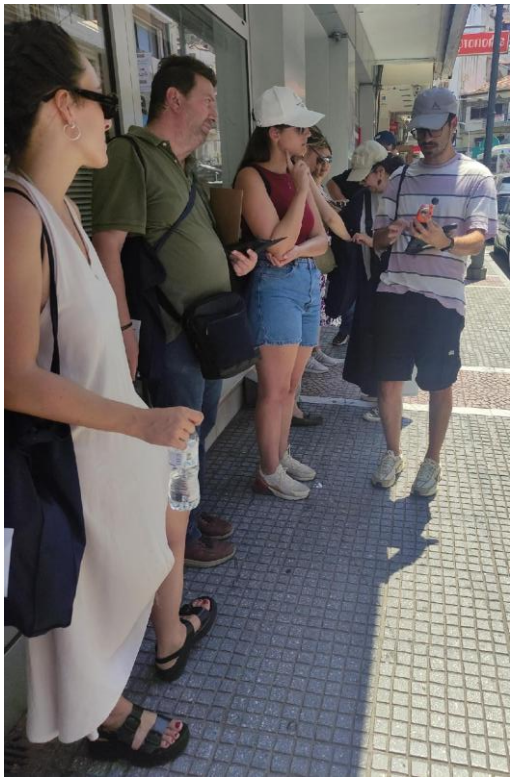
During the walk, participants were able to see surface temperature variations in real time and reflect on how they personally experienced heat in different parts of the street. The event brought together a wide range of people — including municipal staff, NGOs, local experts, and residents — creating a great opportunity for shared learning and discussion.

The data collected during these walks **will help inform future strategies** to make Uzunköprü's public space more comfortable and climate-resilient.



Kavala

In Kavala, the walks took place between 14–16 July 2025, with the participation of 30 local citizens. Over the course of three days, groups walked along a central one-kilometre route, with ten fixed measurement points across key streets in the city center. Participants shared their subjective experiences of thermal comfort, while scientists recorded objective data such as temperature, humidity, and wind speed. This collaboration helped bridge scientific insight with real-life experience, fostering a deeper understanding of the impacts of climate change at the local level.









Batumi



In Batumi, the walks were carried out from 17–19 July in ten selected locations, involving 30 participants including municipal staff, youth groups, students, and school pupils. Participants experienced thermal discomfort first-hand, completed questionnaires, and contributed to field data collection.







A key measurement site was the pedestrianized Heroes' Boulevard — a central urban space combining green areas and fountains with dense traffic, high-rise buildings, and nearby hotels. Its complex microclimatic profile, influenced also by proximity to the sea, offered valuable insight into the thermal behavior of the city.

In Sozopol, the thermal walk activity was scheduled for 21–23 July 2025. On the first day, a detailed presentation was delivered to all participants, outlining the methodology to be followed, the selected walking route, and nature-based solutions such as green and blue infrastructure that could be implemented in the city. Each day, ten participants walked the designated route, contributing to the data collection process and sharing their thermal perceptions. The structured approach and the focus on adaptation solutions made the Sozopol case particularly relevant for informing future local climate planning.



Bridging Cities, Measuring Heat: Strengthening Urban Climate Collaboration in Batumi

As part of the joint Urban Heat Island (UHI) measurement activities, project partners from the cities of Kavala, Uzunköprü, and Sozopol conducted a **three-day visit to Batumi** from July 17 to 19, 2025.

The visit aimed to strengthen collaboration with local partners — **Batumi Shota Rustaveli State University and the Municipality of Batumi** — and gain a deeper understanding of the area's unique climatic and environmental conditions.

The program began with a roundtable session at Shota Rustaveli State University, where project objectives, methodologies, and expected outcomes were presented. Representatives from all partner cities, technical experts, municipal staff, and local stakeholders exchanged views and best practices on enhancing urban resilience in the face of climate change.





Simultaneously, the partners observed the thermal discomfort measurement walks taking place across Batumi, witnessing firsthand how thermal data is collected in different urban microclimates.

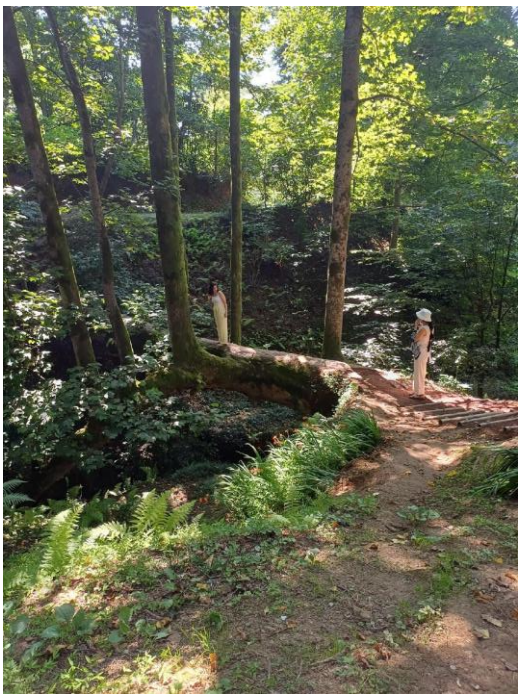
Although they did not actively participate in data collection or complete questionnaires, partners had the opportunity to closely follow the practical application of the project's common methodology by the LANDLAB scientific team — which involved drone-based thermal imaging, mobile sensing equipment, fisheye lens urban photography, and engagement with local groups through questionnaires.



The visit also included a side trip to the Batumi Botanical Garden, a key natural landmark, where participants learned about the crucial role of urban green spaces in mitigating heat island effects and improving urban environmental quality.









From Data to Action: Heat Mapping Wraps Up

A major milestone was reached this summer within the framework of the Green Urban Resilience project. Under the scientific leadership of the LANDLAB team from Istanbul University – Cerrahpaşa, local experts and municipal staff completed comprehensive thermal measurements across all four partner cities. These campaigns aimed to identify urban heat hotspots and provide the scientific foundation for planning green resilience based on nature-based solutions.

Batumi

17–19 July 2025

Batumi hosted the first round of thermal measurements. The LANDLAB experts, together with local teams, carried out both ground-based and aerial thermal scans across densely built urban areas. The collected data revealed several zones of critical heat stress, offering valuable insights into the city's microclimate and serving as a crucial foundation for future urban greening and climate adaptation initiatives.

Uzunköprü

21–23 July 2025

In Uzunköprü, the measurements focused on the future climate-resilient park. Using ground-based and aerial thermal scanning methods, the team gathered detailed temperature data. The information will serve as a comprehensive baseline, helping the assess of the overall environmental impact of the green infrastructure once the park is developed.



From Data to Action: Heat Mapping Wraps Up



Sozopol

23-25 July 2025

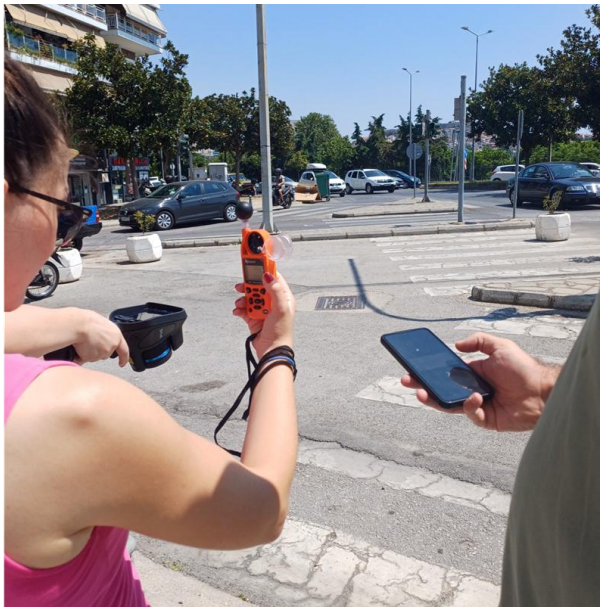
In Sozopol, thermal assessments were carried out across a variety of city zones, identifying key urban heat islands. These insights will guide the integration of green and blue infrastructure into the city's local climate adaptation planning.



Kavala

11–12 August 2025

In Kavala, LANDLAB scientists worked jointly with the municipal technical services to conduct fieldwork and surface temperature monitoring. The collaboration provided valuable data to support the design of pilot interventions in heat-vulnerable urban areas.



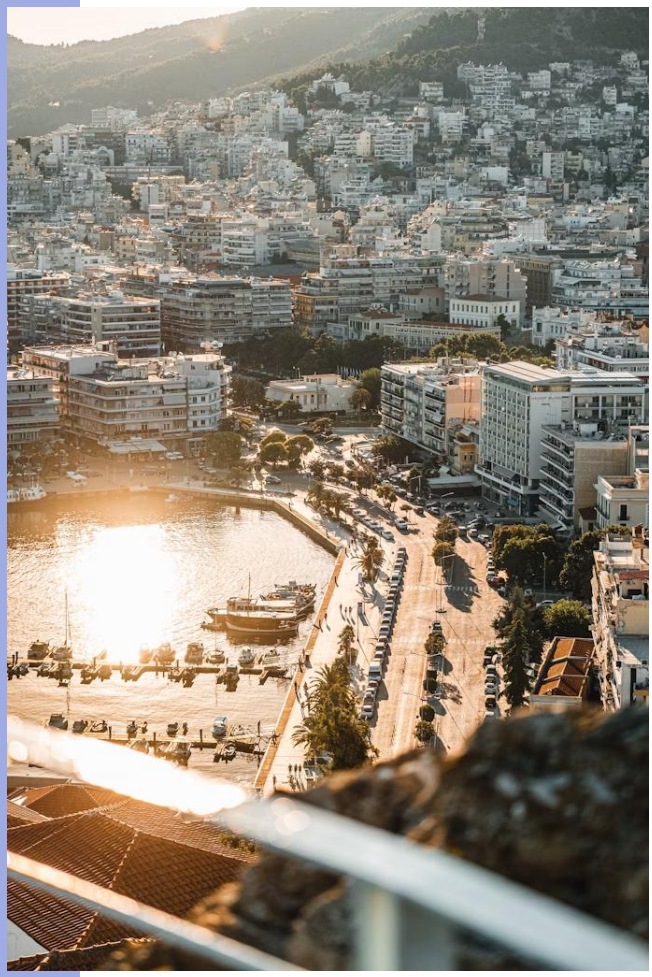
The collected data is now being processed to produce high-resolution Urban Heat Stress Maps, which will serve as a scientific basis for each city's local resilience strategies and pilot adaptation actions.

RECENTLY COMPLETED

Kavala

Who Shapes the Future of Urban Green Areas?

A recent study mapped the institutional and political framework shaping urban green areas at the European, national, and local level, implementing in the city of Kavala. Green infrastructure is increasingly recognized as a key element for sustainable, climate-resilient, and people-friendly city. In Greece, interest in developing urban green areas is growing, but significant challenges remain in policy coordination and access to funding. With its natural advantages and strong institutional readiness, Kavala has the potential to become a leading city in urban green development. Strategic investment in green infrastructure—as both essential public services and effective tools for tackling climate change—can significantly enhance residents' quality of life and position the city as a model of sustainable, resilient urban planning. The study was carried out by external consultants in collaboration with the Municipality of Kavala.



Trees and Shrubs of the City in Focus

Also, an illustrated catalogue of woody species found in urban green areas has been developed. Over 60 species of trees and shrubs were identified, carefully documented, and visually represented, providing a valuable resource for the management, care, and future planning. Beyond its practical use for city planners, the catalogue serves to engage residents, helping them reconnect with the natural elements of their urban environment. By showcasing species diversity, it emphasizes the vital role of urban biodiversity in promoting ecological balance, enhancing urban aesthetics, and supporting a resilient ecosystem.

RECENTLY COMPLETED

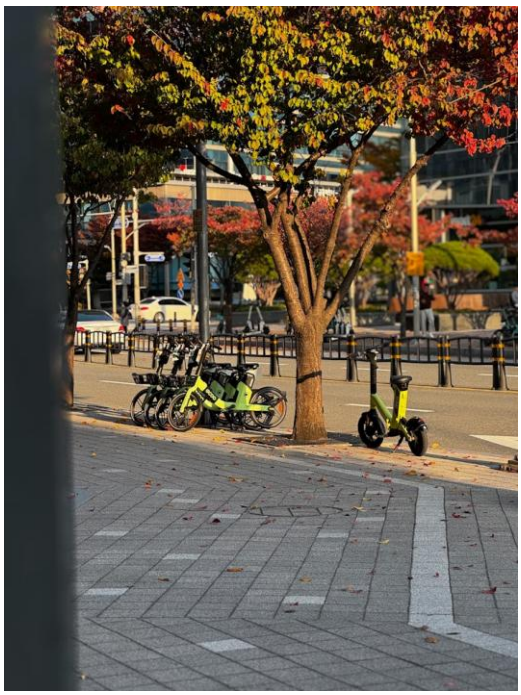
Batumi

Strengthening Partnerships and Technical Capacity

In the recent period, the Municipality of Batumi focused on mobilizing local stakeholders and raising public awareness on issues related to heat stress and climate adaptation. Initiative groups were formed, bringing together municipal services, environmental authorities, academic institutions, and the local community. At the same time, training seminars and site visits were organized to enhance the technical knowledge and capacity of involved actors.

Building Bridges with National and Academic Stakeholders

Batumi Municipality strengthened the technical and scientific foundation of the project through close cooperation with key national and academic stakeholders, including the National Environmental Agency of Georgia, the Adjara Environmental Protection Department, and Shota Rustaveli University, under long-term collaboration agreements.





Their involvement ensures continuous scientific support, high-quality data analysis, and reliable strategies to address heat stress and climate adaptation. Additionally, this partnership promotes scientific research, educational activities, and the engagement of young researchers with local government, academia, and the community.

RECENTLY COMPLETED

Uzunkopru & Istanbul University - Cerrahpaşa

Urban Heat Measurements Successfully Completed Across the Black Sea Basin

As part of the “Green Urban Resilience” project (BSB00006), co-funded by the EU Interreg NEXT Black Sea Basin Programme, urban temperature measurements were successfully carried out in four partner cities: Batumi (Georgia) from July 17–19, Uzunköprü (Türkiye) from July 21–23, Sozopol (Bulgaria) from July 23–25, and Kavala (Greece) from August 11–12, 2025. Led by LANDLAB experts from Istanbul University-Cerrahpaşa, the studies analyzed the Urban Heat Island effect, identified local heat-stressed areas, and provided crucial scientific data to support green, nature-based solutions for urban climate resilience. These field measurements, using advanced thermal cameras and drone imaging, will guide future climate adaptation strategies such as green infrastructure development and urban planning to mitigate heat stress and improve residents’ quality of life.





Sozopol

Analysis of the Current Planning Situation in the Targeted Countries

In March 2025, two meetings were organized with the initiative groups, during which the project’s goals and activities were presented, along with key topics such as climate change adaptation and the urban heat island effect. The measures already taken and the citizens’ needs were discussed. The participants expressed their support and commitment to active involvement. At the same time, a press conference was held with the participation of local authorities and NGOs, receiving extensive coverage from local media.

RECENTLY COMPLETED

Sozopol

Pilot Green Interventions and Preparation of Investment Projects

The procurement of specialized equipment for the preparation of the intervention site, which includes clearing excessive vegetation and maintaining the surrounding environment, was completed at the end of 2024, marking a significant step towards the implementation of upcoming investment projects. Additionally, a detailed technical study was prepared for landscaping, irrigation systems, and electrical infrastructure, which has been submitted for approval to the relevant authorities. Tender documentation for the project implementation has also been prepared.



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Green Climate Change Adaptation Solutions for Smart and Resilient Cities in BSB



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