

PROJECT BULLETIN



Project Title:

**Strengthening the Local Intervention Capacities for
Climate Change in the Black Sea Region – LAP BLACK**

BSB00353 LAP BLACK

Interreg



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**Strengthening the Local Intervention Capacities
for Climate Change in the Black Sea Region
BSB00353 LAP BLACK**

LAP BLACK

Overview



The LAP BLACK Project aims to strengthen institutional capacity against the local impacts of climate change, develop science-based adaptation processes, and enhance cooperation among stakeholders. Within the project, significant progress has been made in collecting data for the preparation of Local Adaptation Plans, identifying climate impacts, conducting risk and vulnerability analyses, and determining priority intervention areas. In this framework, a systematic and multi-stakeholder structure has been established to strengthen climate resilience at the local level.

During the project, partners established Local Adaptation Plan teams and activated mechanisms to provide institutional and technical support to the process. Through these teams, the regional impacts of climate change were assessed, and priority risk areas such as floods, droughts and heat waves were identified. In addition, climate data, socio-economic indicators, and local stakeholder perspectives were evaluated together to ensure that adaptation policies are based on a stronger knowledge foundation. This approach improved decision-making by integrating local knowledge with scientific assessments.

Purpose	Applications	Approach	Impact
Strengthening local climate resilience	Green infrastructure, water efficiency, waste management, energy efficiency, sustainable transportation	Participatory and multi-stakeholder governance	Translating climate adaptation from planning into practice and increasing local resilience

Building Local Capacity

Strengthening local capacity stands out as one of the core implementation areas of the LAP BLACK Project. In this context, a multidimensional process focused on institutional structuring, technical guidance, knowledge sharing, and stakeholder participation has been carried out to enhance the abilities of local governments to plan, implement, and monitor climate change adaptation processes.

Within the project, institutional coordination at the local level is strengthened through the establishment of Local Adaptation Plan (LAP) teams. Through these structures, municipalities, academic institutions, experts, civil society organizations, and various stakeholder groups are brought together on a common platform. Methodological coordination and technical guidance are provided by Istanbul Technical University, while stakeholder mapping, data sharing, meeting organization, and analytical processes are carried out at the local level by project partners. These developments demonstrate that local capacity is enhanced not only through knowledge development but also through strengthened institutional cooperation and decision-making mechanisms.

In addition, local capacity will be supported through training and awareness-raising activities. Connections will be established with youth groups, educational institutions, and local actors, and knowledge dissemination will be ensured through training programs, technical sessions, and online seminars. Through this approach, climate change adaptation will be promoted across a broader social base, contributing to a more inclusive and sustainable local governance model.



Istanbul
Technical
University
(ITU)



Sakarya
Metropolitan
Municipality (SMM)



Kobuleti
Municipality
City Hall
(KMCH)



Kavala
Municipality
(KAVALA)



Ukrainian
Association of
Business Support
Centers (UABSC)



Driving Scientific Excellence: Istanbul Technical University's Strategic and Methodological Leadership

As the Lead Partner of the LAP BLACK Project, Istanbul Technical University (ITU) is assigned a central role in ensuring the project's scientific integrity, methodological consistency, and overall coordination. During the project, a common framework for climate impact and risk assessment was developed under ITU's leadership, enabling data harmonization and comparability across partner regions.

Direct contributions were also made to analytical work, particularly in Adapazarı, where climate projections, historical data, and vulnerability indicators were integrated to identify key risks such as rising temperatures, uncertain nature of precipitation, droughts, floods, and heatwaves. In addition, the prioritization of adaptation strategies was supported through indicator-based evaluation and feasibility criteria, allowing analytical findings to be translated into practical planning. Throughout the process, continuous methodological guidance and coordination support were provided across the consortium and Local Adaptation Plan teams.

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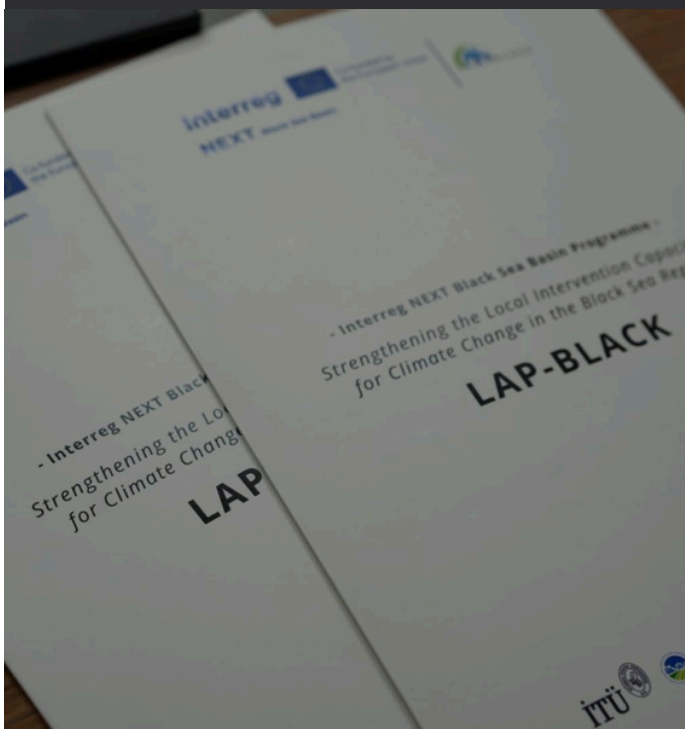
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Where We Stand: From Insights to Concrete Climate Solutions

Adapazari's climate vulnerabilities have been converted into a clear and actionable adaptation plan. Through a stakeholder-driven Analytical Hierarchy Process (AHP), six climate hazards were reduced to three priority threats: heavy rainfall, drought, and heat waves. These were matched with ten key sectors, including infrastructure, water resources, agriculture, public health, energy, biodiversity, transportation, industry, tourism, and social development. As a result, a complete adaptation framework has been developed, with tailored strategic responses assigned to each sector. Scattered risk data has thus been transformed into an evidence-based decision-making tool validated by local institutions.

From Analysis to Actionable Tools: The Technical and Digital Transformation of Climate Plans



More than a strategic document has been delivered. The plan has been made operational across short-, medium-, and long-term horizons, each supported by concrete actions and measurable goals. In the short term, fast-acting measures such as permeable-surface pilots, rain gardens, groundwater monitoring, sensor-supported irrigation, energy-efficiency audits, river rehabilitation, heat-wave awareness campaigns, and the establishment of a Climate Adaptation Office have been introduced. For the medium term, targets have been set to reduce flood risk by 40%, drought-related yield losses by 20%, and emissions by 10%, supported by drainage systems, renewable-energy incentives, wetland restoration, and inter-agency data sharing. In the long term, blue-green infrastructure is expected to reduce flood risk by 60%, water losses by 25%, and urban transport emissions by 30%, turning the analysis into a practical decision-support tool. In the long term, covering 5-10 years and beyond, the blue-green infrastructure goal has been designed to deliver a 60% reduction in flood risk, 25% lower water losses, and 30% lower city transport emissions. In this way, the analysis has been converted into a binding decision-support tool.

From Plans to Reality: Climate Solutions Taking Shape on the Ground

Within the scope of the LAP BLACK Project, climate-resilient designs are beginning to take shape in the field.

One of the most tangible achievements of this period is the transition of the sustainable park pilots from the preparation stage to physical implementation. In Adapazari, the park design is being reconsidered within the framework of the Sakarya Metropolitan Municipality (SMM)'s spatial development approach and through technical coordination with Water and Sewerage Administration of SMM. An implementation approach including low-consumption irrigation infrastructure and natural drainage components is being adopted. Site clearing, leveling, layout works, and the installation of irrigation infrastructure are being carried out under the supervision of a control committee, making this pilot one of the first sites where the transition from design to implementation is being successfully achieved.



The sustainable park constructed by the SMM in Adapazari now stands as one of the most visible physical outputs of the project. Following the revision of the feasibility study to reflect updated environmental requirements, the public-procurement process was completed and construction began. Within this pilot, renewable energy systems, climate resilient infrastructure, sustainable land use, and functional public green areas converge in a single site, with low-consumption irrigation and natural drainage components installed under the supervision of a control committee. Delivered through technical coordination with the Sakarya Water and Sewerage Administration, the park demonstrates how diagnosis, strategy, and on-site delivery combine to produce a working model of climate adaptive public space.

From Construction to Climate Outcomes: The Sustainable Park Pilot Delivers on the Ground

A Living Pilot for the Black Sea Basin

1. Water-Smart and Nature-Based Infrastructure

The irrigation system infrastructure has been fully installed, and soil filling works have been completed across all planting areas. To reduce surface runoff and support the natural water cycle, permeable concrete has been applied across designated zones a nature-based intervention directly addressing intensified rainfall and urban flooding risks identified in the Strengthening the Local Intervention Capacities for Climate Change in the Black Sea Region



2. Accessible and Low-Carbon Mobility

Subgrade preparations for the pedestrian network have been completed and curb stones have been fully installed, supporting universal accessibility and sustainable mobility. Concrete pouring has also been finalised at the children's play areas, ensuring safe and durable foundations for all public-use surfaces.

3. Renewable Energy and Resilient Electrical Systems

Grounding and cabling works for the electrical infrastructure have been completed, and the central electrical panel has been installed in line with energy-efficiency and safety standards. To promote renewable energy use on-site, solar-powered benches have been integrated into the park turning everyday public furniture into visible, functional clean-energy infrastructure.



4. Equipment, Environmental Monitoring and Sustainable Resource Management

Children's play groups and outdoor sports equipment have been procured and installed, with their dedicated surface flooring laid. To strengthen the park's environmental monitoring capacity, an air quality measurement device has been installed on site. In parallel, an atmospheric drinking water generation system and a composting device have been procured to support sustainable water and waste management complementary technologies that demonstrate circular-economy principles in a public space.

5. Landscape progress

Within the landscape works, the planting of broad-leaved and coniferous species has been completed, and aromatic plants and shrubs are currently being planted. The remaining works-final levelling and grass-seeding - will conclude the implementation, delivering a fully functional green public space.

LOOKING AHEAD...

Looking Ahead: Scaling Up Climate Action

1

The Sustainable Park in Sakarya will move from active construction to completion, transforming the site into a fully operational living laboratory for climate adaptation. Beyond its physical components, the park will be equipped with a digital monitoring framework to continuously track environmental performance, including water consumption, energy use, microclimate regulation, and visitor engagement. In this way, the park will serve not only as a pilot demonstration but also as a measurable, replicable model that can guide future adaptation investments across the Black Sea region.

2

Within the pilot implementation component, construction works in Adapazari will continue to progress, while the integration of green infrastructure, water efficiency, resilient landscaping, and digital monitoring components will remain a central priority throughout the implementation phase. In parallel, the sustainable park in Sakarya is envisioned as a living laboratory where climate adaptation solutions can be tested, demonstrated, and refined under real-world conditions. The park will incorporate energy-efficient systems powered by renewable sources, water-efficient design features such as rainwater harvesting and smart irrigation, and native, drought-tolerant landscaping that strengthens local biodiversity. Together with continuous digital monitoring of energy use, water consumption, and visitor engagement, the site will serve not only as a pilot application but also as a replicable model for other municipalities across the Black Sea region.

3

In terms of communication and awareness, further development of the project web portal, publication of newsletters, continuation of social media campaigns, and greater visibility of online surveys and city-scale communication activities are planned. These activities aim not only to increase visibility but also to ensure that project outputs are understood by local stakeholders, encourage participation in LAP processes, and support the wider replication of successful adaptation practices.

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