MOUNT RESILIENCE

Co-creation methodology for development of GI Strategy

definition, objectives, stakeholders engagement and capacity building

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WP3 ICP #6, Gabrovo Municipality, 14.11.2025

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Learning objectives

1. **Lessons Learned –** Green Infrastructure Development Strategy 2017-2023, followed by SECAP and the Gabrovo Climate City Contract 2030. Sustainable Green Policies in the Municipality
2. **Co-creation Methodology for GI Strategy Development**
3. **Identifying the key objectives and benefits of implementing a Climate Change Adaptation Strategy**
4. **Defining the roles of different stakeholders in the co-creation process**
5. **Public engagement and involvement of stakeholders in planning**



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GI STRATEGY – Co-creation

32 project team meetings to define and implement co-creation methodology for GI Strategy development

3 meetings of Gabrovo Council for Sustainable Urban Development – the first in August 2024, followed by meetings in February and May 2025

3 workshops with partners, stakeholders, and citizens –the first in August 2024, and the others in April and July 2025

4 public events – Uzana Fest (July 2024), Gabrovo Innovation Camp (November 2024), tree planting (April 2025), and Green Day in the Neighborhood (October 2025)

Surveys for citizens, institutions and businesses - *launched in October and open for voting until mid-November*



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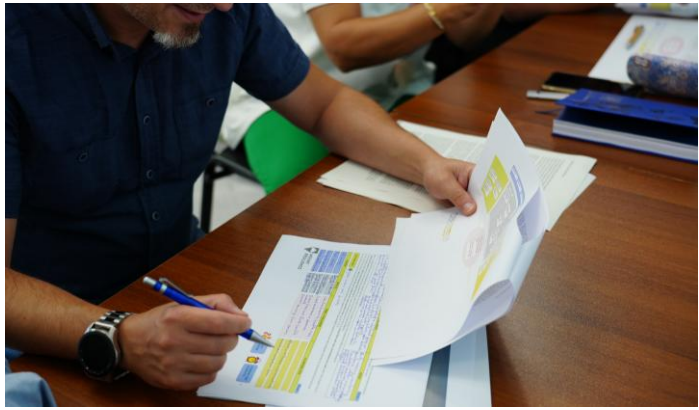
GI STRATEGY – Risk Identification Workshop

MAIN CLIMATE HAZARDS
Forest fires – higher risk due to heat and dryness
Floods & landslides – from intense rainfall in steep areas
Rising temperatures – heat stress for people, plants, and animals
Precipitation changes – extreme rainfall and drought periods
Water scarcity – pressure on groundwater and water supply

KEY EXPOSURE AREAS
Urban areas – heat islands, health risks, air dustiness.
Rural and agricultural lands – lower crop yields, soil fertility loss
Forests and suburban zones – biodiversity loss, fire risk, insect invasion
Water catchment areas – stressed water supply and local regimes

SECONDARY AND SOCIO-ECONOMIC IMPACTS
Health – heat-related illnesses, cardiovascular stress
Agriculture – reduced yields, pollination decline
Ecosystems – biodiversity loss, altered flora and fauna
Economy – higher costs, changes in traditional agriculture
Infrastructure – damage from floods, landslides, storms







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GI STRATEGY – SWOT Analysis Workshop

Strengths - **l**arge forests, rivers, and green areas; minimal industrial pollution; committed local authorities; partnerships with scientific institutions and international networks; innovative solutions and pilot projects

Weaknesses - lack of disaster protection infrastructure; old and unmaintained trees; low soil humus content; aging technical infrastructure

Opportunities - early warning systems for disasters; citizen training and awareness programs; vertical and rooftop landscaping; high- tech and innovative solutions; ecotourism and green economy development

Threats - extreme heat and floods; invasive species and climate migrants; low public interest



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GI STRATEGY – Measures & Ideas Workshop

Uzana Fest
50 participants - administration, experts, scientists, citizens and organizations, **4 thematic groups:**

Educational programs for climate adaptation
campaigns via podcasts, social media, games; competitions and live laboratories in schools; promoting home and school practices: rainwater collection, planting local species, using solar panels.

Innovative technologies and digital solutions
Art solar panels; renewable energy power districts; smart containers with sensors; biodegradable packaging; IoT and AI technologies; drones and LiDAR for monitoring heat islands and green spaces; mobile applications and info boards at bus stops and on buses

Green and blue infrastructure in urban areas
Urban forests and eco-islands; rooftop gardens and apiaries; QR codes on trees with ecological information; rain gardens, green facades and roofs; rainwater storage systems; green routes connecting tourist and cultural sites; updating the "green cadaster"; adoption of green spaces; urban gardening; volunteer campaigns

Forests and protected areas
Effective management of municipal forests, emphasizing water retention; afforestation with adaptive species; Installation of thermal imaging cameras for early fire detection; maintenance of forest roads for access and prevention; river water level sensors; maintenance of eco-trails to attract visitors









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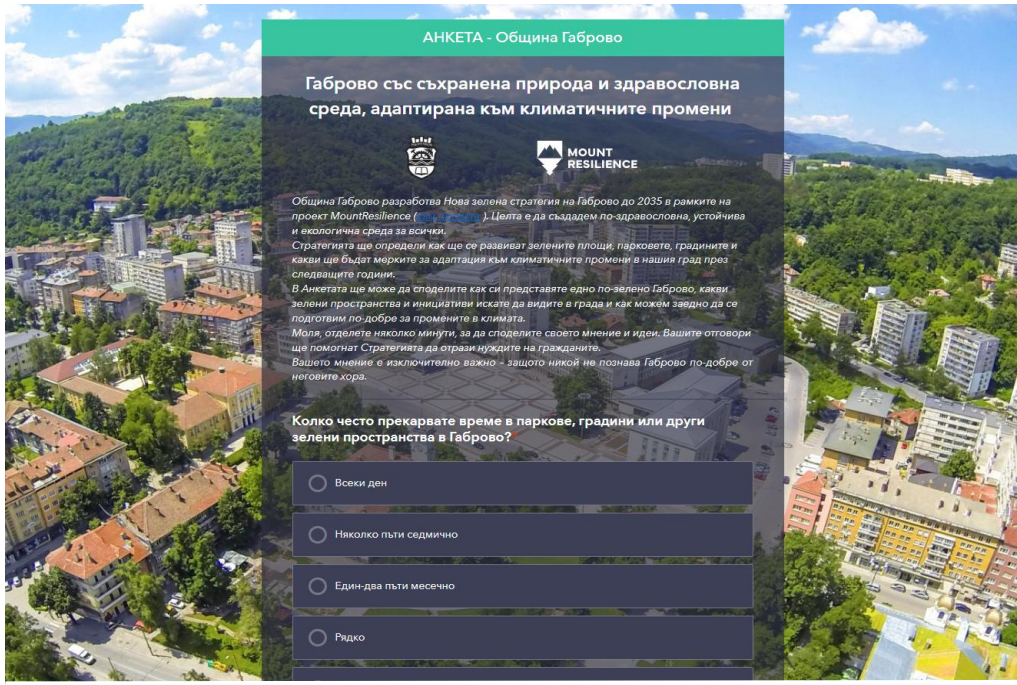
GI STRATEGY – Survey

Survey for suggestions from citizens, institutions and businesses – launched in October with a civic event and open for voting until mid-November

- Explores stakeholders opinions on the development of green infrastructure and specific measures to improve the quality of life in Gabrovo.
- Participants can propose actions related to: climate change adaptation, reducing the risk of natural disasters, efficient use of natural resources.
- Survey respondents can also share suggestions on: development of green spaces in the municipality, the need of new parks and recreational areas, ideas for climate change adaptation and natural risks prevention.

Responses – 400+ (5th November)





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GI STRATEGY – Co-working Events

Events inspiring collaboration and co-creation:

Uzana Fest (July 2024) – citizens, NGOs, and businesses shared ideas on sustainable living and biodiversity, shaping local climate priorities.

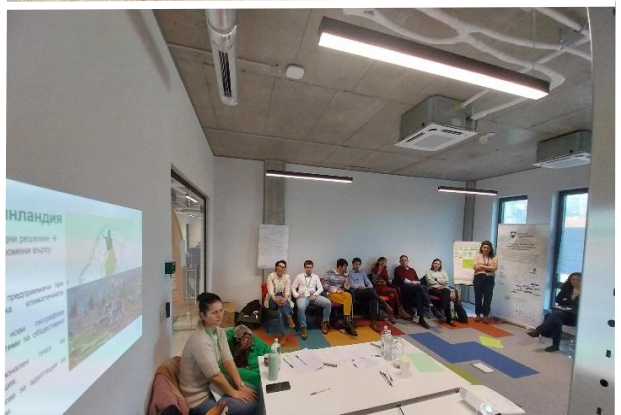
Gabrovo Innovation Camp (Nov 2024) – experts and youth co-created green and smart solutions for the city's sustainable future.

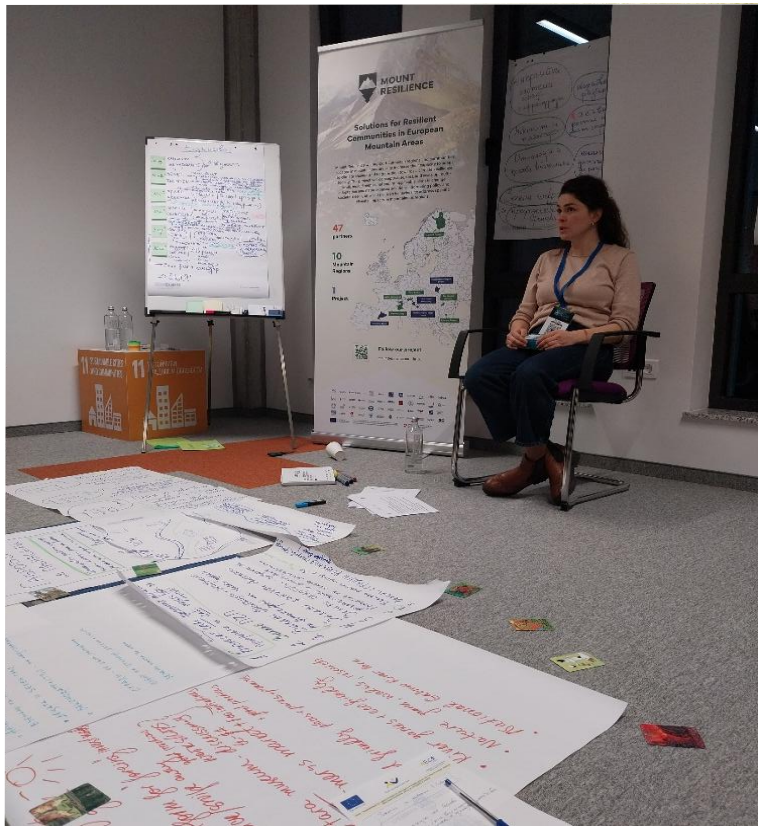
Planting Trees (Apr 2025) – community members and schools joined reforestation efforts, turning strategy goals into real action.











GI STRATEGY – Co-working Events

Green Day in the Neighborhood (Oct 2025) – residents promoted recycling and local cooperation, demonstrating how small actions drive big change.











GI STRATEGY Framework /what, why, how and when/

WHAT is **Green Infrastructure /GI/**

WHAT is the **Basis and Purpose for Developing GI Strategy**

WHY improve GI and develop a Strategy – **Benefits and Applications of the Strategy**

HOW to apply the **GI Planning Principles**
HOW to provide and enhance the **Functions of GI**
HOW to deal with the **Components and Characteristics of GI**

WHEN – **Vision** for development of GI, **Action Plan**

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Definition of GI

- **What is green infrastructure?**
- **Interconnection of green and blue infrastructure**

Basis and Purpose for Developing the Strategy

- Basis for Developing a GI Strategy
- Policy context
- Connection with CCC, SECAP, and other strategic documents

Benefits and Applications of the Strategy

- Key issues and opportunities
- Benefits
- Application of the GI Strategy and GI Standards
- Integration into planning and management of GI

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GI planning principles

Multi-functionality – environmental, social, economic and cultural purposes

Connectivity – a linked network of natural and built environments for nature recovery

Accessibility – evenly distributed and accessible to all green spaces, from large strategic parks to small local gardens

Flexibility – adaptive to climate change and evolving conditions

Diversity – a variety of green surfaces with different functions and benefits

Sustainability – long-term, resilient green space design for future challenges

Functions of GI

Ecosystem services

Nature recovery and biodiversity

Water sources and water bodies

Carbon footprint and renewable energy sources

Health and well-being, access to nature

Nature-based education, community engagement

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Components and Characteristics of GI

- High-density built-up areas
- Urban area
- Urban periphery
- Rural environment
- Publicly accessible green spaces
- Urban green areas with limited access
- Urban green areas without public access – private gardens
- Green engineering solutions
- Industrial zones
- Linear infrastructure, green corridors
- Water bodies and blue infrastructure

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Vision

- Potential challenges and Risks
- Opportunities for Action
- Strategic goals
- Action Plan

Appendices

- Quality aspect
- Environmental context
- Maps and spatial data
- On-going green infrastructure projects, Strategic documents
- Funding
- ….
- ….

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Final Key Messages/ Main Takeways

1. **Co-creation works:** inclusive collaboration strengthens partnership
2. **Engaged stakeholders drive innovation:** active participation fosters creative and practical solutions
3. **Data is the foundation:** combining mapping, research, and innovation provides a solid foundation for informed decisions
4. **Small actions drive big change:** open workshops, surveys, and community events generated locally relevant green solutions



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Thank you for your attention

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About MountResilience



Get in touch

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