

**Interreg** 

CENTRAL EUROPE European Union  
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**MaGICLandscapes**

TAKING  
**COOPERATION**  
FORWARD



INTERREG Central Europe Project MaGICLandscapes



**Management of Green Infrastructure in Central European Landscapes**



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# PROJECT COORDINATES



## MaGICLandscapes Managing Green Infrastructure in Central European Landscapes

The main objective is to increase the capacity of institutions to improve the management of the green infrastructure resource and promote sustainable land-use, both in areas of high biodiversity and surrounding intensively used areas. Using assessment tools developed in the project and in cooperation with local communities in the pilot area of the Po Hill, Città Metropolitana di Torino will develop a Strategy based on local needs as well as those of a strategic nature. It will be aimed at making a comprehensive improvement to the ecological functionality of periurban landscapes and the ecosystem services provided by the green infrastructure.

[www.interreg-central.eu/Content.Node/MaGICLandscapes](http://www.interreg-central.eu/Content.Node/MaGICLandscapes)

	<b>2.191.263,66</b>	Project budget in EUR
	<b>1.777.120,21</b>	ERDF funding in EUR
	<b>07.2017 - 06.2020</b>	Project duration

- Interreg Central Europe Programme
- Duration: 07/2017 - 06/2020
- 10 partners from AT, CZ, DE, IT, PL
- 9 case study areas
- 33 Associated Partners

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# PARTNERSHIP

10 partners

5 scientific institutions,  
3 national parks,  
1 regional foundation,  
1 regional authority



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# BACKGROUND

- Multiple demands for land use
- Climate change, conservation, social change → need for integrated planning approaches
- Concept of Green Infrastructure (GI): cross-sectoral approach
- Global implementation of GI, but variety of assessment approaches and understandings
- Justify investments in GI by assessment approaches that highlight the needs and opportunities for GI at all spatial levels

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# WHAT IS GREEN INFRASTRUCTURE?

*‘Green Infrastructure is a **strategically planned network of natural and semi-natural areas** with other environmental features designed and managed to deliver a **wide range of ecosystem services and functions** such as water purification, air quality, space for recreation and climate change mitigation and adaptation. This **network of green (land) and blue (water) spaces** can improve environmental conditions and therefore citizens’ health and quality of life. It also supports a green economy, creates job opportunities and enhances biodiversity.’*

(DG Environment: [http://ec.europa.eu/environment/nature/ecosystems/index\\_en.htm](http://ec.europa.eu/environment/nature/ecosystems/index_en.htm))

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# BENEFITS OF GI



## ENHANCED EFFICIENCY OF NATURAL RESOURCES

- Maintenance of soil fertility
- Biological control
- Pollination
- Storage of freshwater resources

## HEALTH & WELL-BEING

- Air quality and noise regulation
- Accessibility for exercise and amenity
- Better health and social conditions

## AGRICULTURE & FORESTRY

- Multifunctional resilient agriculture and forestry
- Enhancing pollination
- Enhancing pest control

## WATER MANAGEMENT

- Regulation of water flows
- Water purification
- Water provisioning

## EDUCATION

- Teaching resource and 'natural laboratory'

## TOURISM & RECREATION

- Destinations made more attractive
- Range and capacity of recreational opportunities

## DISASTER PREVENTION

- Erosion control
- Reduction of the risk of forest fires
- Flood hazard reduction

## CLIMATE CHANGE MITIGATION & ADAPTATION

- Carbon storage and sequestration
- Temperature control
- Storm damage control

## INVESTMENT & EMPLOYMENT

- Better image
- More investment
- More employment
- Labour productivity

## CONSERVATION

- Existence value of habitat, species and genetic diversity
- Bequest and altruist value of habitat, species and genetic diversity for future generations

## LAND & SOIL MANAGEMENT

- Reduction of soil erosion
- Maintaining/enhancing soil's organic matter
- Increasing soil fertility and productivity
- Mitigating land take, fragmentation and soil sealing
- Improving land quality and making land more attractive
- Higher property values

## LOW-CARBON TRANSPORT & ENERGY

- Better integrated, less fragmented transport solutions
- Innovative energy solutions

## RESILIENCE

- Resilience of ecosystem services

Adapted from European Commission (2015). Green Infrastructure - Enhancing Europe's Natural Capital. (Emission: 04/16/15) King, Doulos et al.

# MGLS: OBJECTIVES AND TASKS

**OB:** Provide to Public administrations: Concepts, strategies, action plans, tool and training activities to improve and /or introduce the **green infrastructures management** to promote sustainable use of natural capital either in areas with high level of biodiversity nor in the whole territory.

- TA:**
- ☒ Inventory of GI regarding its spatial structure, functionality and ecosystem services on transnational, regional and local level
  - ☒ Integrated approach: considering cross-sectoral policy and planning objectives
  - ☒ Providing decision support for politicians, planners, land users/managers and communities to invest in GI
  - ☒ Raising awareness of the GI concept as (informal) aid for spatial planning
  - ☒ Communicating the benefits of GI

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# 9 CASE STUDY AREAS



- 1 Kyjovsko - CZ
- 2 Thayatal National Park - AT
- 3 Tri-Border Region - CZ, DE, PL
- 4 Dübener Heide - DE
- 5 Karkonosze National Park- PL
- 6 Krkonoše Mountains National Park -CZ
- 7 Östliches Waldviertel & Westliches Weinviertel - AT
- 8 Torino hill and Chieri Municipality - IT
- 9 Po River Plain -IT



# WORK PACKAGES - OVERVIEW

What is Green Infrastructure?  
For whom or what is it relevant?  
Where is it?

## WP1: CONCEPTS AND FRAMEWORK FOR GREEN INFRASTRUCTURE ASSESSMENT

07/2017 - 12/2018

## WP2: GREEN INFRASTRUCTURE FUNCTIONALITY ASSESSMENT

How does GI function?  
What are the services and qualities of GI?

06/2018 - 12/2019

How can we improve the functions of Green Infrastructure?  
What kind of investments are necessary?

## WP3: STRATEGIES FOR INTERVENTION AT EUROPEAN, REGIONAL AND LOCAL LEVEL

07/2018 - 06/2020

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## DRAWING A FRAMEWORK FOR GREEN INFRASTRUCTURE ASSESSMENT

- ➊ Identify current sectoral informational needs for GI
- ➋ Demonstrate how GI supports national, regional and local policy and planning objectives (e.g. nature conservation, tourism, energy, health, climate change etc.)
- ➌ Identifying the GI resource at transnational level tested and refined by ground-truthing in the 9 case study areas

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## KEY OUTPUTS:

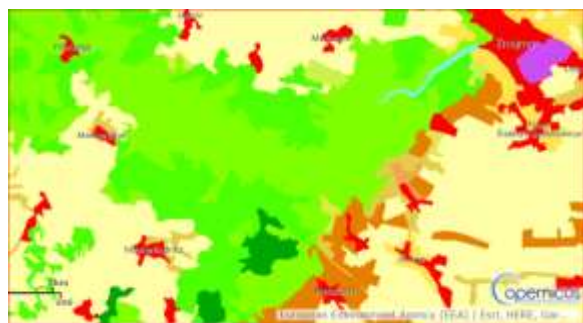
### Handbook of Conceptual and Theoretical Background

- Terms and definitions
- GI in EU Regulations/Programmes
- GI in National Laws/Policies AT, CZ, DE, IT, PL
- GI in Regional Laws/Policies on NUTS levels 1 and 2
- Local GI assessment needs on case study area level



## KEY OUTPUTS:

- ☺ Manual of Transnational GI Assessment -Decision Support Tool
  - ☺ Inventory of GI resource at transnational and regional level



Corine Land Cover

+



Orthophotos

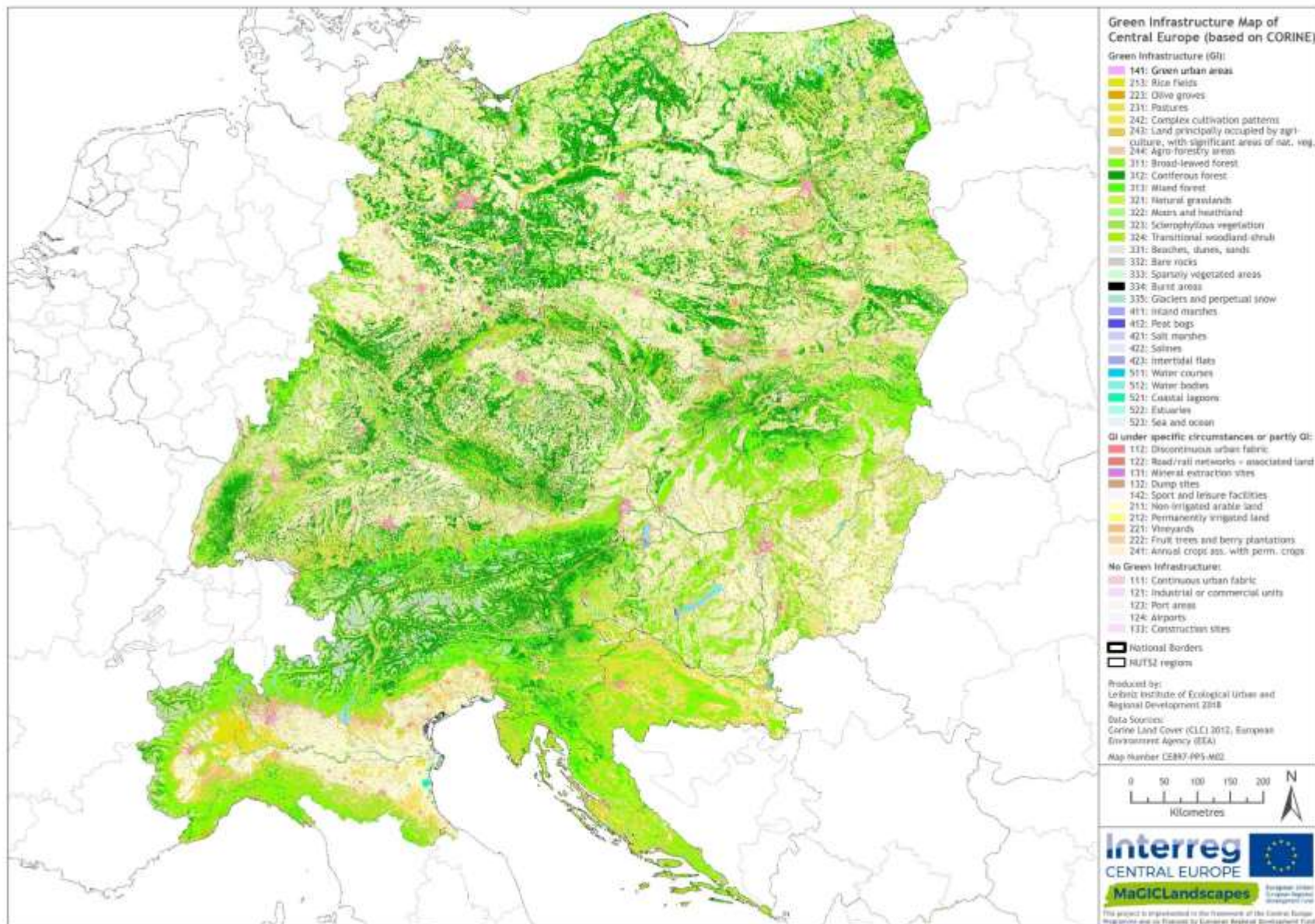
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Ground-truthing

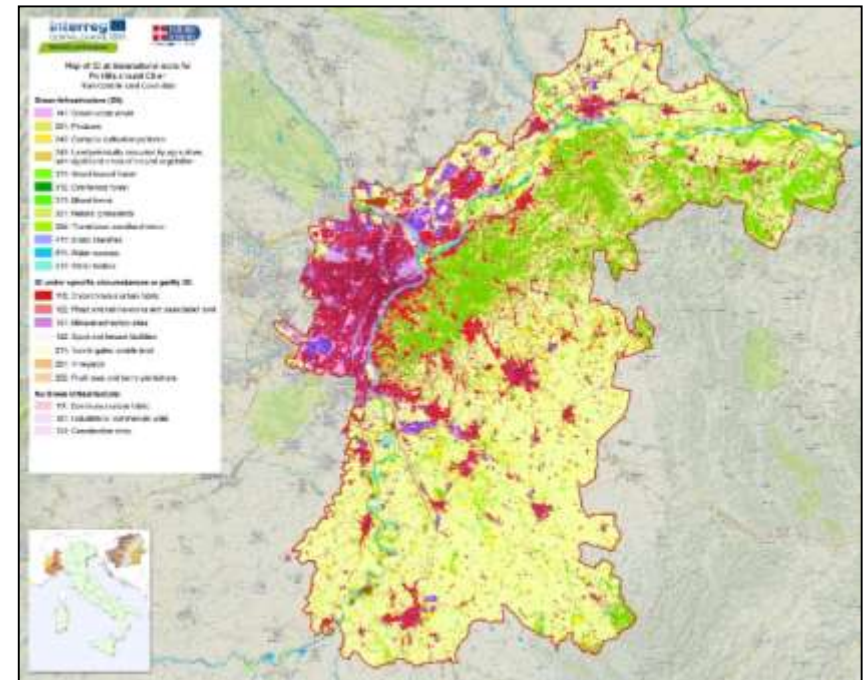
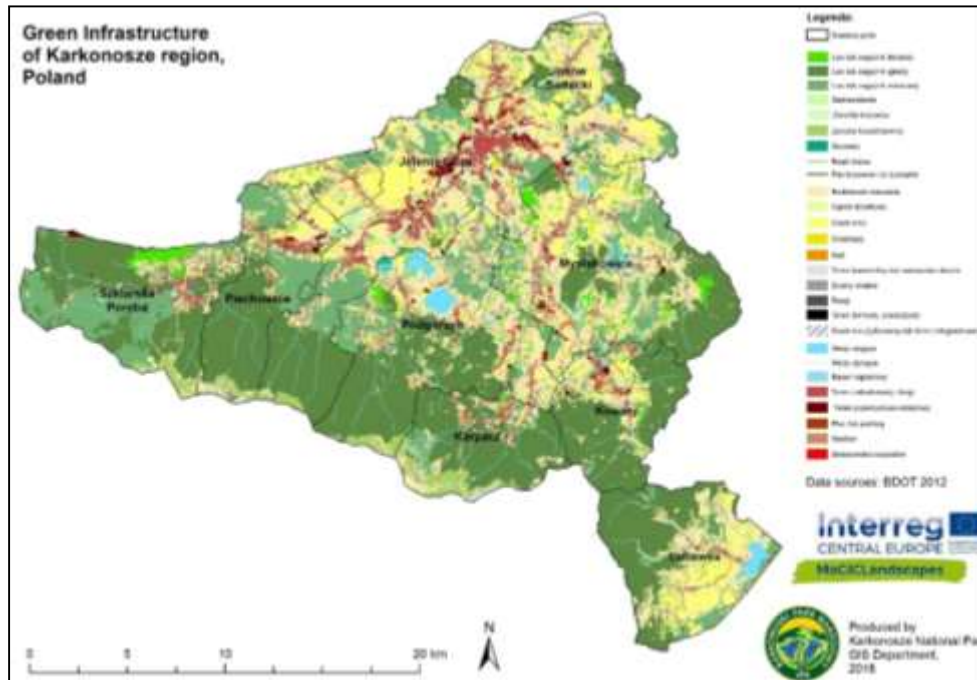
- ☺ Transnational map of the green infrastructure resource in Central Europe  
+ regional GI maps of each case study area





# WORK PACKAGE 1: CONCEPTS AND FRAMEWORK FOR GI ASSESSMENT

## Regional maps of case study: examples



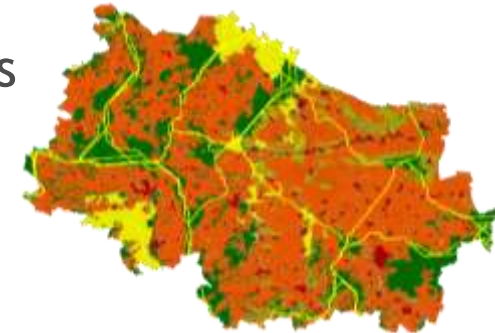
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# GREEN INFRASTRUCTURE FUNCTIONALITY ASSESSMENT

- ➊ Assessing the functional value of selected GI elements
- ➋ Develop & demonstrate GI assessment methods
  - ➊ Functionality in terms of landscape structure
  - ➋ Functionality in terms of ecosystem services (= landscape services)
- ➌ Adoption of those assessment methods through participatory approaches and training



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## KEY OUTPUTS:

- **Manual of GI Functionality Assessment -Decision Support Tool**
  - Identification of GI elements and their naturalness (biotope mapping & identification of hemerobic state in the field)
  - Assessing Connectedness & functionality of GI elements (GIS-analysis of cross-linking degree & capacity matrix of landscape services for each habitat type)
- **Regional maps of GI functionality in each case study area**





## STRATEGIES FOR INTERVENTION AT EUROPEAN, REGIONAL AND LOCAL LEVEL

- Bringing together the spatial (WP1) and functional assessments (WP2) with a local public benefit assessment PBA (WP3)
- Developing and testing of PBA approaches in the case study areas
- Developing strategies and action plans that meet strategic and local needs for GI
  - Landscape connectivity
  - Functional needs (landscape services)
  - Local public needs

## KEY OUTPUTS:

- **Public Benefit Assessment Tool** :Where and why plan GI?
- **Manual** for creating evidence-based Strategies and Action Plans
- **Strategies and Action Plans** that meet strategic and local public needs for GI in the 9 case study areas



# ROUND UP

- Outputs consistent with EU/national/regional policies and strategies
- Outputs developed and tested in 9 case study areas: comparability, wealth of information and experiences
- Local workshops/consultations: continuous involvement of stakeholders to make the outputs both usable and useful
- MaGICLandscapes enables evidence gathering for investment in green infrastructure

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# THANK YOU



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<https://www.interreg-central.eu/Content.Node/MaGICLandscapes.html>



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