



# Green Infrastructure as a Planning Approach to brownfield regeneration

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Workshop on „Brownfield regeneration: mitigating perceived risks and stigma through image branding”

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# Green infrastructure: a definition

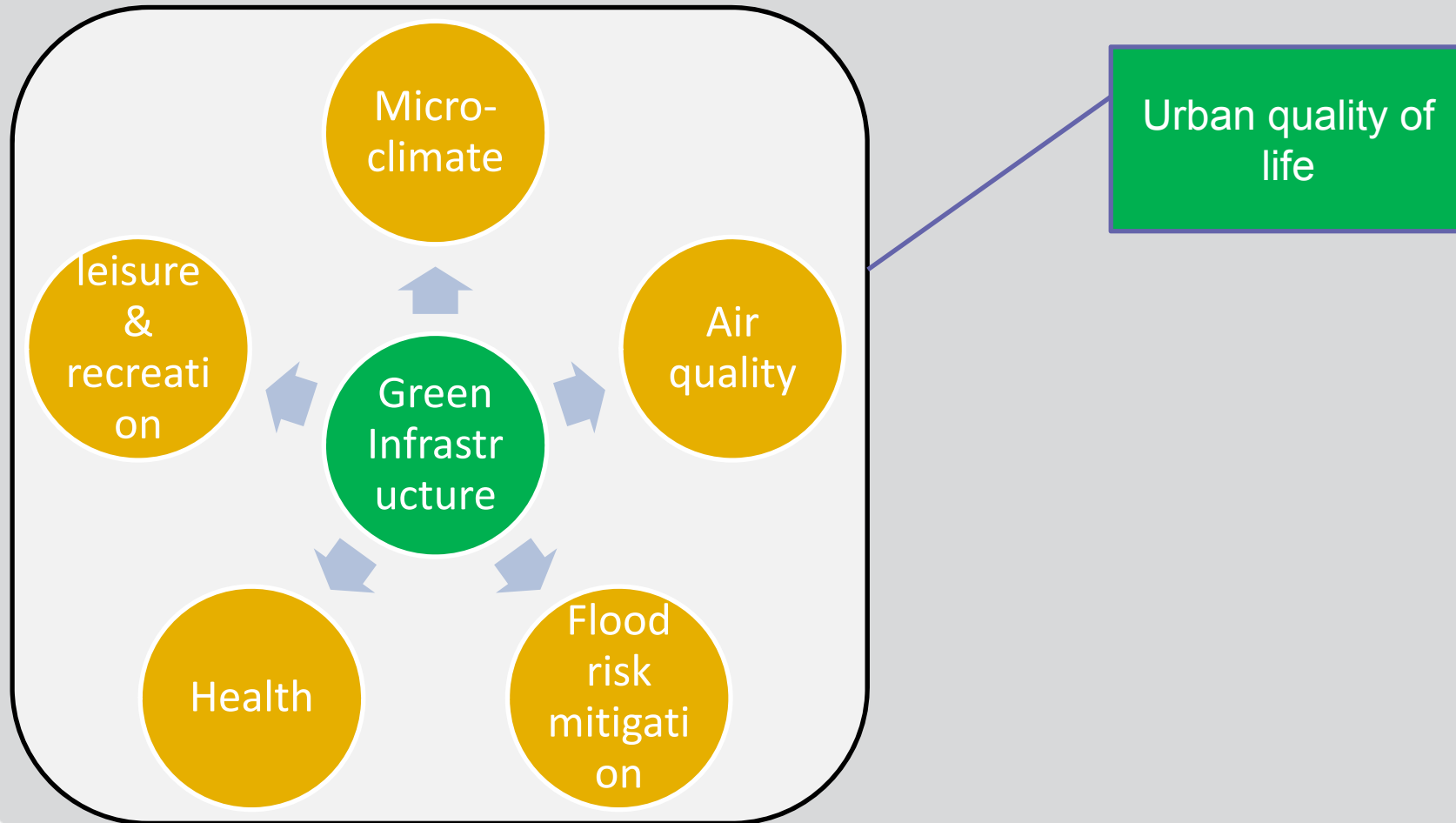
- “**strategically planned network** of high quality natural and semi-natural areas with other environmental features, which is **designed and managed** to deliver a wide range of ecosystem services and protect biodiversity in both rural and urban settings”

(European Commission, 2013)

- „**strategically planned** and delivered network comprising the broadest range of high quality green spaces and other environmental features“

(Natural England 2009, Green Infrastructure Guidance)

## Green infrastructure: a multi-beneficial public good



# Strategic spatial planning: Using Green Infrastructure

- Those many benefits for society, nature and economy should be enforced
  - Unfortunately, for many of those benefits there is no direct market price, thus benefits can hardly be compared
  - Therefore, public authorities need to take action
  - Green infrastructure provides a maximum of benefits when it is planned integrative and holistic
- This needs to be embedded in a planning approach!



# Green infrastructure Planning Approach

- What is a green infrastructure planning approach? (Roe/Mell 2013)
    - Looking at quantity and quality
    - Defines green infrastructure as a network, i. e. consisting of a concept of linkages, nodes and hierarchies
    - Integrated the assessment and thinking in ecosystem service terms
    - Checks for multifunctionality of planning alternatives
- It is holistic, evidence-based, participatory, long-term thinking and stresses the importance of green infrastructure in relation to other policies

# Linking green infrastructure to brownfield regeneration

- Brownfield sites offer a huge potential for green infrastructure investments
- Besides offering benefits as mentioned above,
- Green infrastructure helps to change images and perceptions.
- People are invited to reuse derelict land and experience the improvements through green infrastructure

# Case study: The Ruhr Metropolis “from grey to green”



Source: Wirtschaftsförderung metropol Ruhr GmbH (wmr)

## Characteristics:

Geographical spread of 116 kilometres from east to west and 67 kilometres from north to south

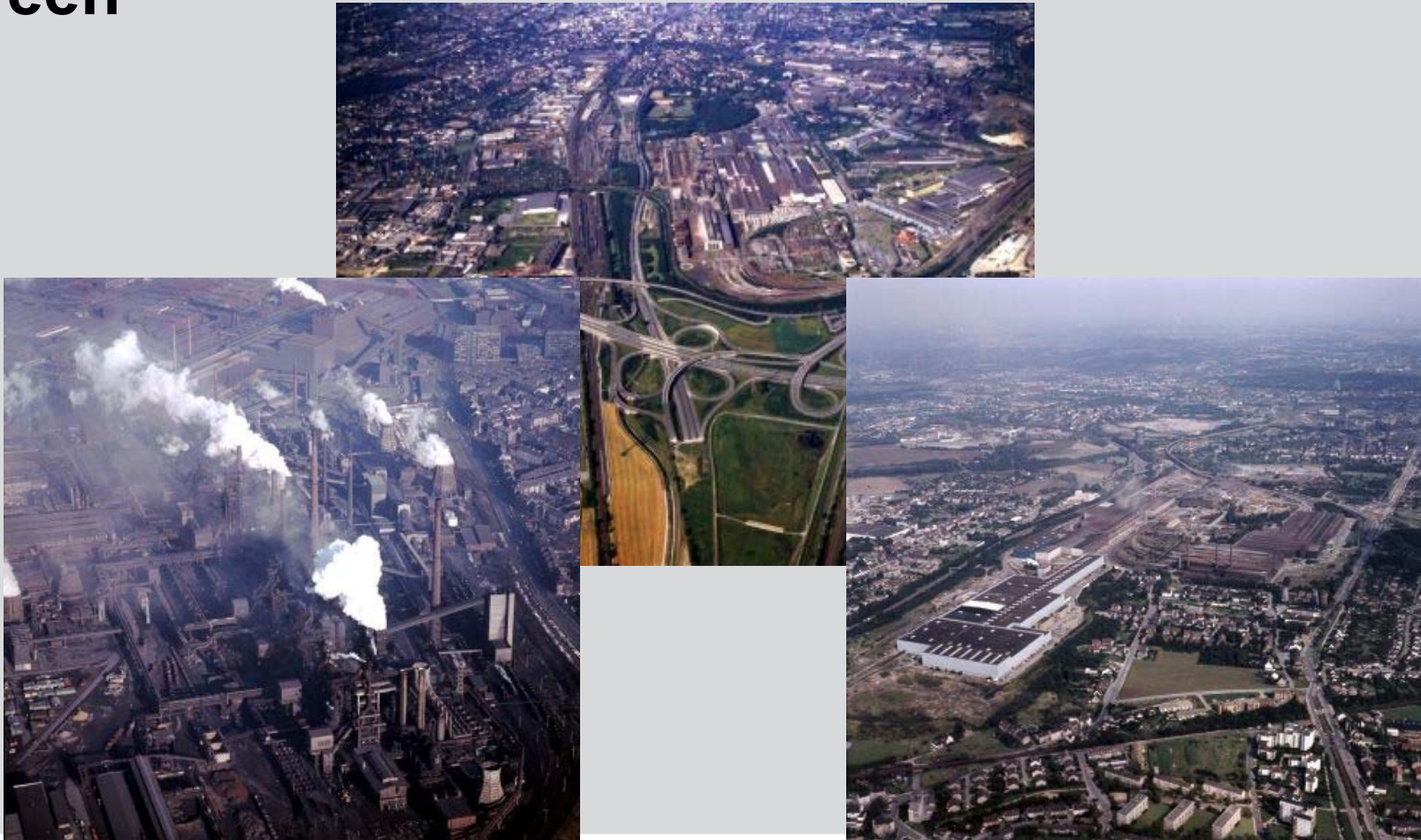
Comprised of 53 administrative units

Population of about 5.2 million people (~ 6.5 % of German population), producing 5.6 % of the national GDP

→ Especially in this region there is a long history of dealing with urban shrinkage and green infrastructure



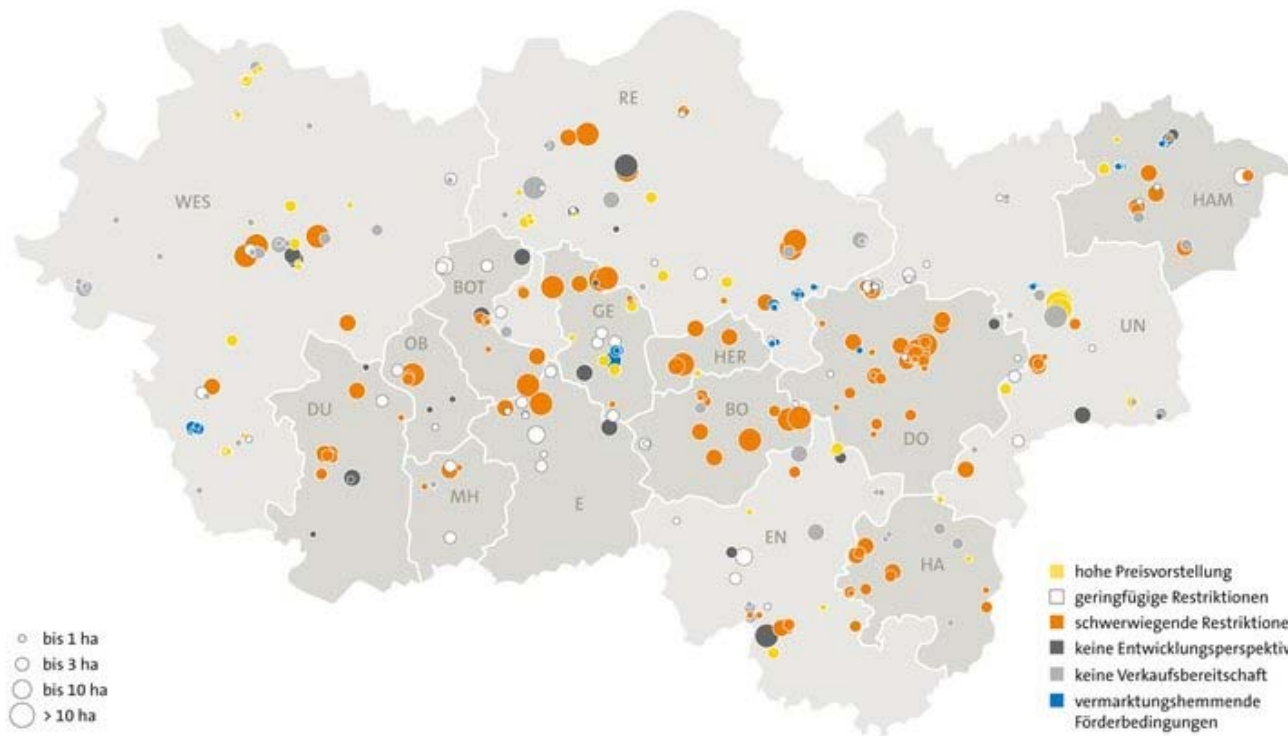
# Case study: The Ruhr Metropolis “from grey to green”



Source: Ruhr Regional Association

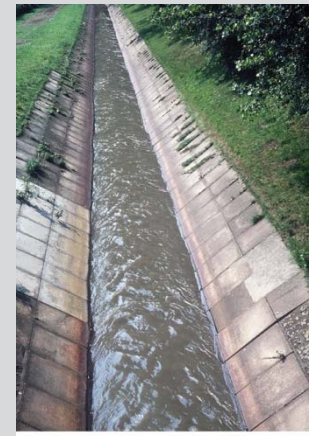


# Case study: The Ruhr Metropolis: still a lot of brownfield sites



# Case study: The Ruhr Metropolis “from grey to green”

- Phase 1 (1989-1999): IBA
  - 225 million Euro invested over a ten years period
  - Improve quantity and quality of green infrastructure
  - Built a network
  - Branding the landscape park as a soft location factor
- Phase 2: Masterplan Emscher Landscape Park 2010
  - Improve regional governance and participation
  - Area was extended, including 2500 ha brownfields
  - No inhabitant shall live more than 15 minutes from GI

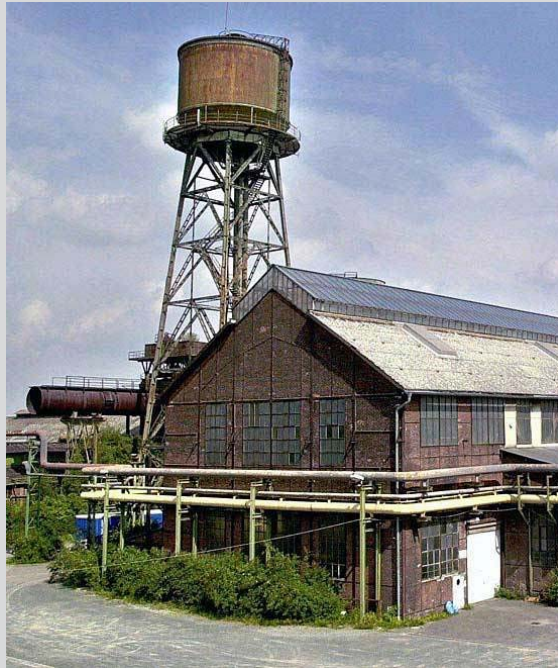


# Case study: The Ruhr Metropolis “from grey to green”





# Case study: The Ruhr Metropolis “from grey to green”







The green heart of the Ruhr Metropolis, a park for more than 5.3 million inhabitants, is: a fairground of international culture, new gardens in an urban landscape, wild beauty in an industrial nature, sports and leisure between Dortmund and Duisburg – all this is the Emscher Landscape Park.

Peaceful idylls with a modern park design as well as high culture in the Hall of the Century West Park, Bochum.



Close-up or at a distance – North Duisburg Landscape Park attracts 700,000 visitors each year.



Walkable wavy lawns in Dani Karavan's «Garden of Memories», Duisburg Inner Harbour.



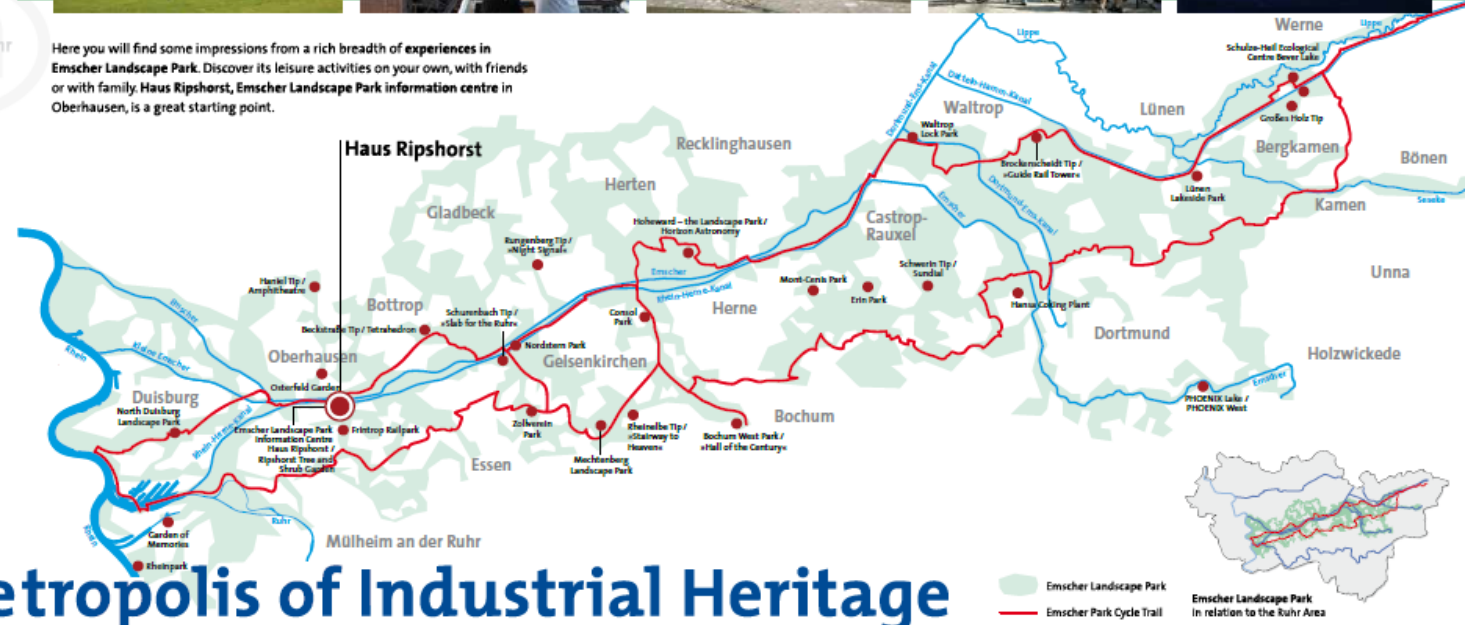
Experience the highlights of the park – tours and guided tours, e.g. North Duisburg LP.



Education, architecture and public park – a successful mixture at the Akademie Mont-Cenis, Herne.



Here you will find some impressions from a rich breadth of experiences in Emscher Landscape Park. Discover its leisure activities on your own, with friends or with family. Haus Ripshorst, Emscher Landscape Park information centre in Oberhausen, is a great starting point.



## Green Metropolis of Industrial Heritage

# Conclusion

- Green Infrastructure is an important element of urban quality of life
- It should be planned carefully in a strategic planning approach
- Especially in a the context of brownfield regeneration, improved green infrastructure can change images and perceptions of city regions