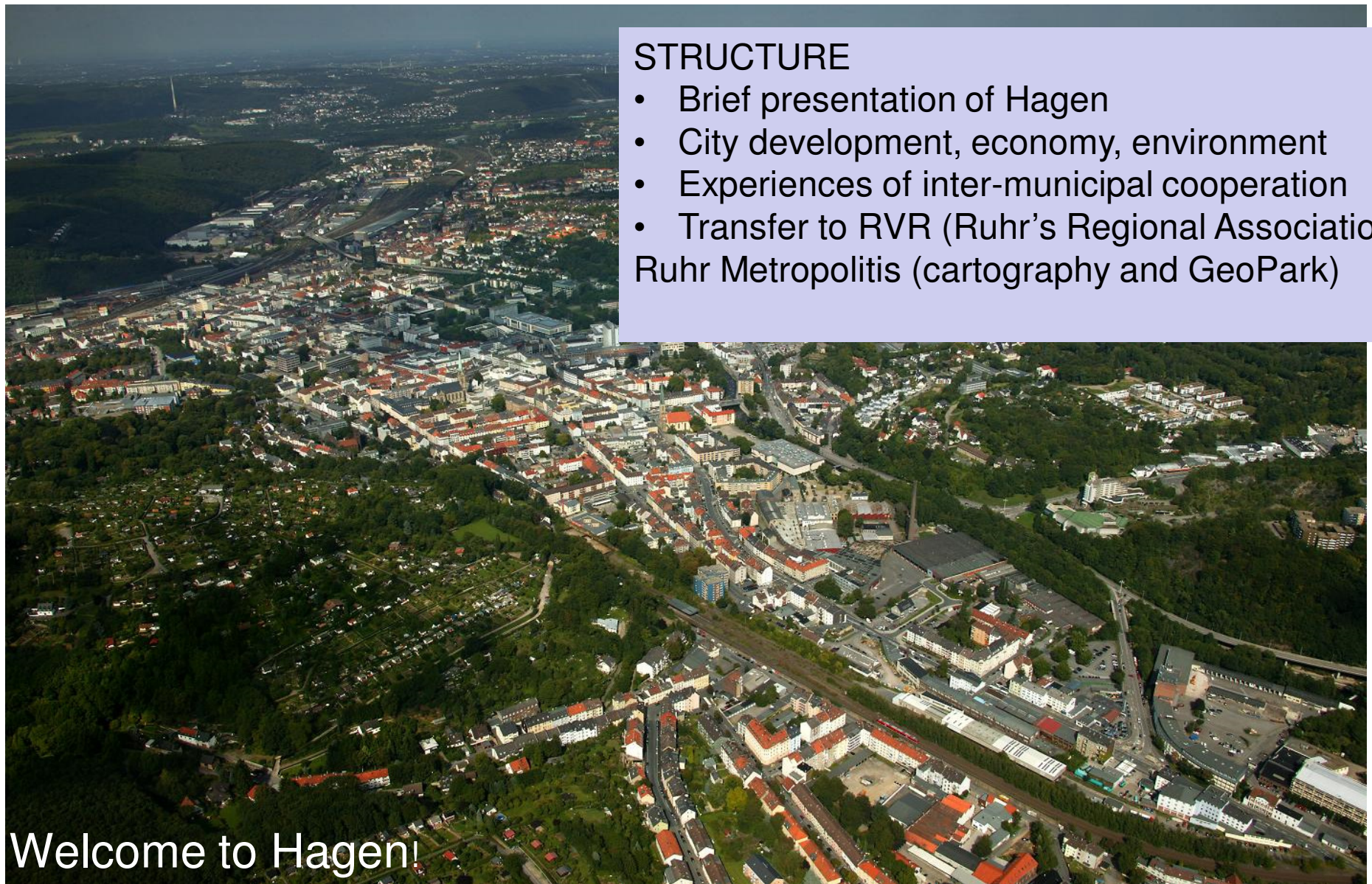


City of Hagen, North Rhine-Westphalia, Germany



STRUCTURE

- Brief presentation of Hagen
- City development, economy, environment
- Experiences of inter-municipal cooperation
- Transfer to RVR (Ruhr's Regional Association)
Ruhr Metropolis (cartography and GeoPark)

An aerial photograph of the city of Hagen, North Rhine-Westphalia, Germany. The image shows a dense urban area with numerous buildings, roads, and green spaces. The city is surrounded by lush green forests and hills. In the background, a large body of water is visible, likely the Ruhr River. The overall scene is a mix of urban development and natural landscape.

Welcome to Hagen!

City of Hagen



187,000 inhabitants

29,000 buildings

105,000 houses

160 km² surface

22 % building area

21 % agriculture

42 % woods



Hagen (1746) - History



Water castle of
Werdringen
13th century



Hohenlimburg Castle 13th century



Housing development along the river

Wappen



Deutschlandkarte



Basisdaten

Bundesland:	Nordrhein-Westfalen
Regierungsbezirk:	Arnsberg
Landkreis:	Kreisfreie Stadt
Höhe:	86-438 m ü. NN
Fläche:	160,36 km ²
Einwohner:	194.806 (30. Juni 2007) (1)
Bevölkerungsdichte:	1215 Einwohner je km ²

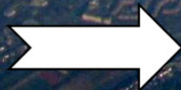
Ruhr

Lenne

Volme

Ennepe

2012: 187,500 inhabitants
2030: 163,800 ?



New industrial and commercial areas



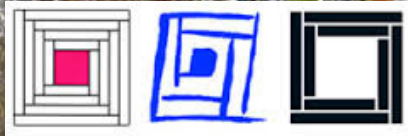
Small and medium metal-working industry, service industry



Heavy industry in the past

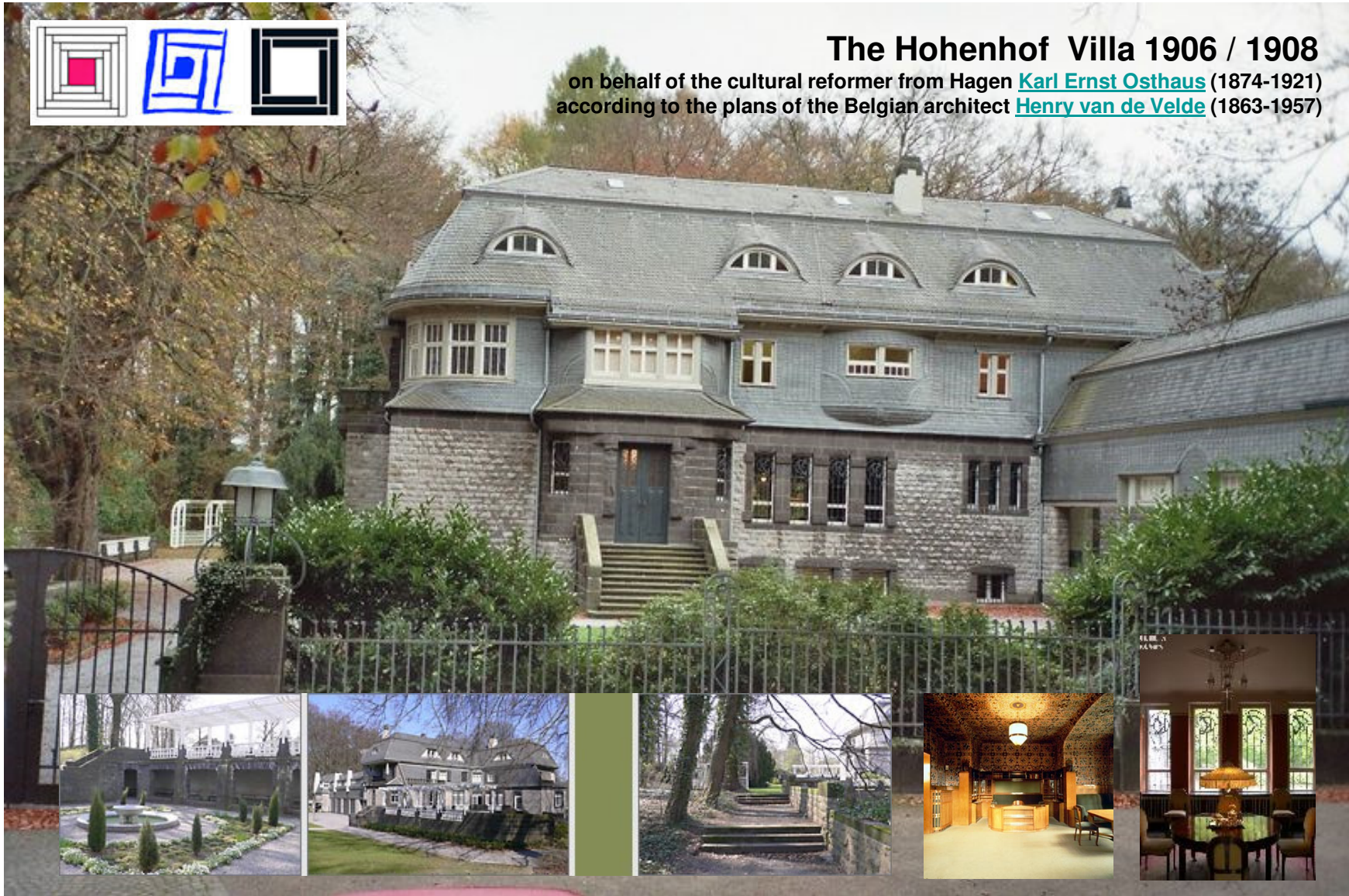


Hagen's momentum: Bringing beauty back to a leading role in life

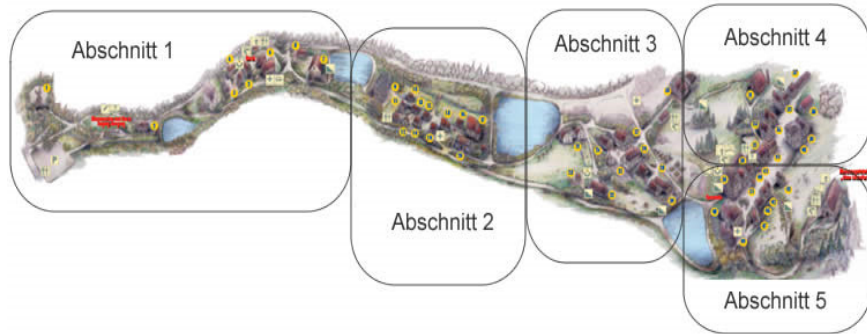


The Hohenhof Villa 1906 / 1908

on behalf of the cultural reformer from Hagen [Karl Ernst Osthaus](#) (1874-1921)
according to the plans of the Belgian architect [Henry van de Velde](#) (1863-1957)



Westphalian open air museum



Development of the City of Hagen



Town Hall upon Volme



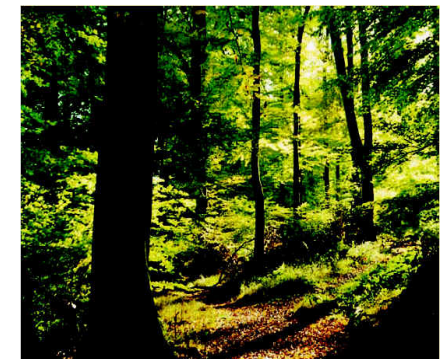
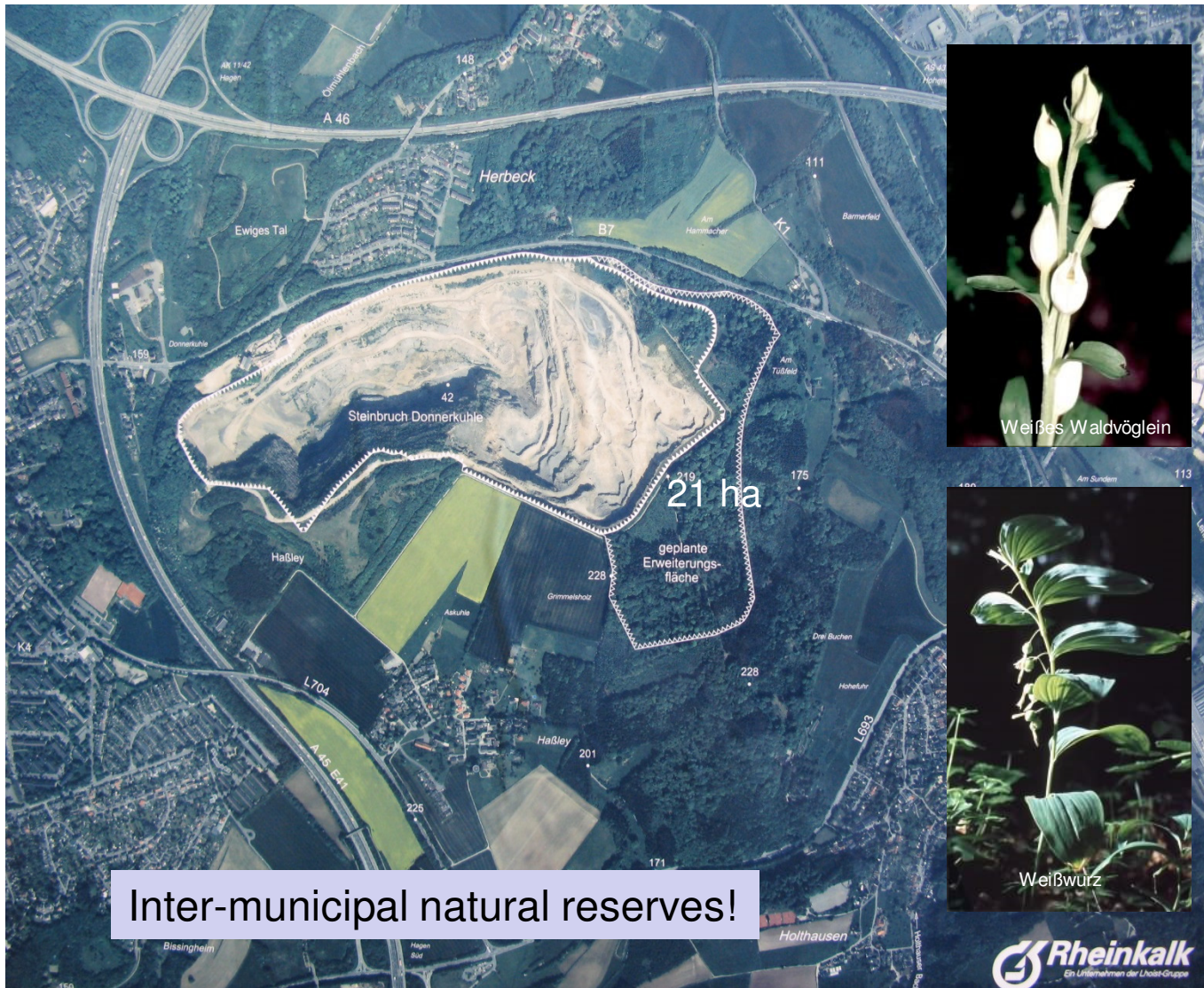
Hagen distance learning university

Nature and landscape



22 Naturschutzgebiete

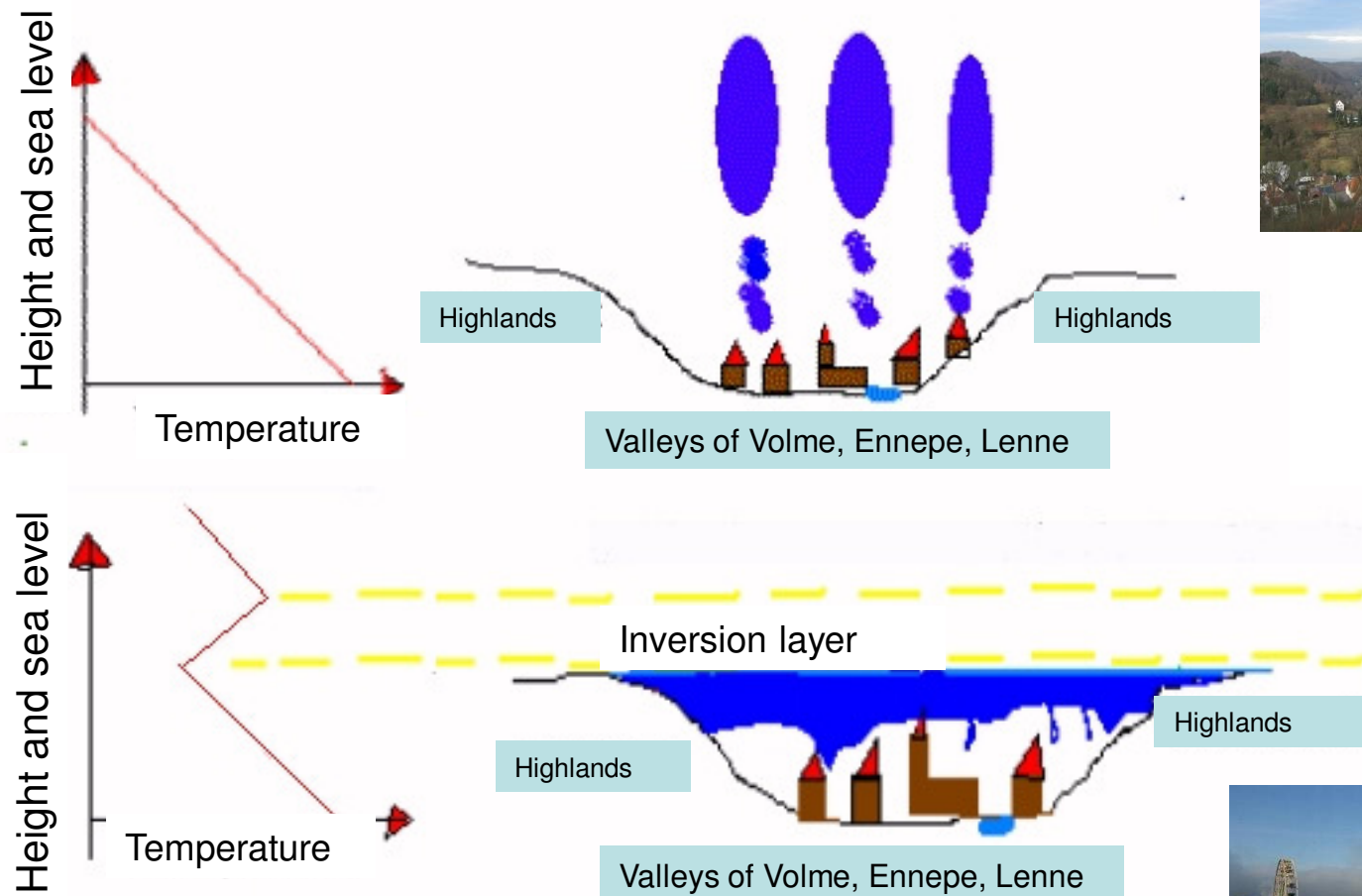
National and European environmental protection and massive limestone



Thermal inversions in the valley

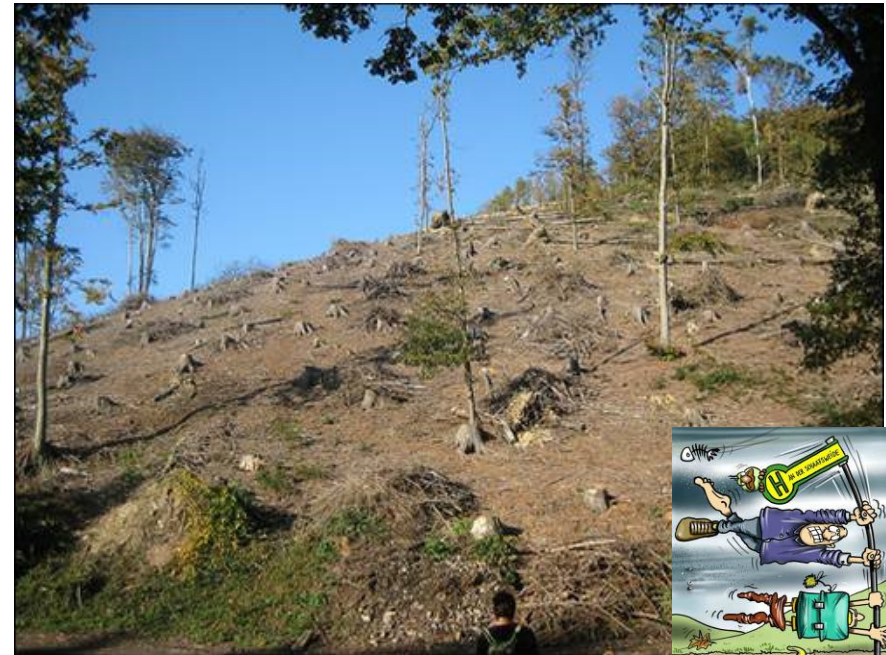
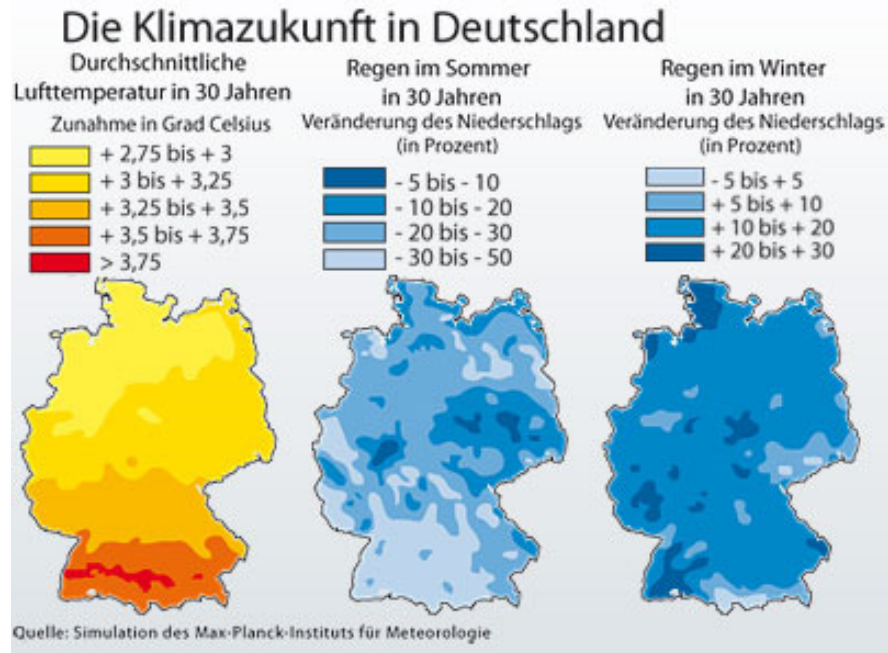


Atmospheric inversion

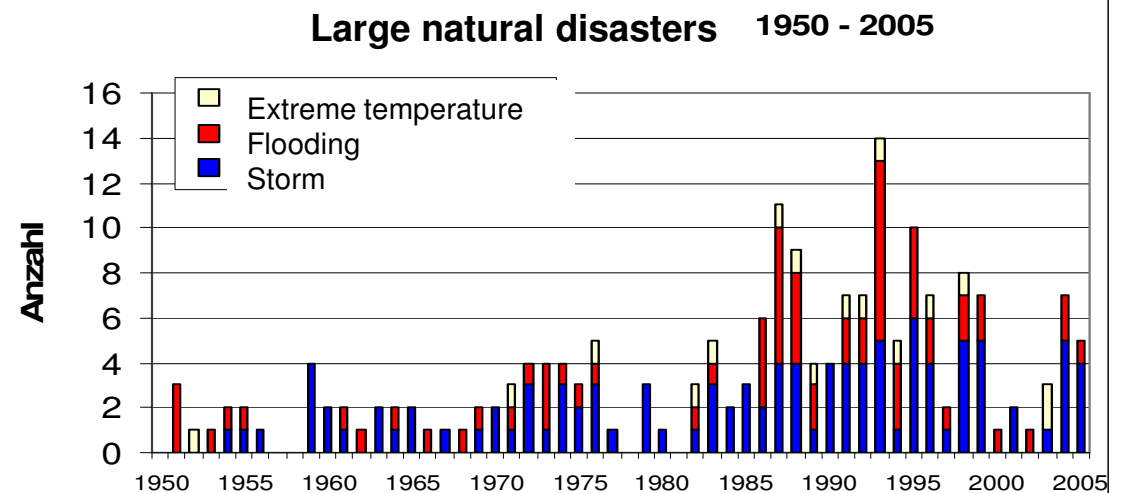


Up to 200 inversions, on average in winter half year

Increase in extreme weather events



Hurricane Kyrill Jan. 2007



Teamwork / Cooperation on air pollution and climate change



European Energy Award® awarded to the City of Hagen

Energy Team

Environment Bureau

Officials in charge of environmental protection and energy

Hagen's tramway AG

Energy management

Central organisation and Personnel administration

Town development and planning

europa
energy award



Coordination through "Consultor" Office

**Enterprise Hagen
Ruhr association District of Hagen**

Hagen's waste management enterprise (HEB)

Mark-E AG

Regional energy provider

GWH – Municipal housing development

Solar energy

- Solar heat
- Photovoltaic



- Roofs of public and private buildings
- Installation of larger plants also under private management
i.e. >150 kW plant
- Involvement of citizens through energy cooperatives
- Individual Google Earth-based solar potential cadastres for every single roof



Expansion of wind energy



Wind energy production in Hagen

Year	Quantity	Power	Annual capacity
1990	1	280 kW	360 MWh
2000	3	980 kW	1800 MWh
2004	8	9000 kW	19000 MWh
2007	10	12500 kW	27000 MWh

CO₂ Reduction 20 000 t

Repowering

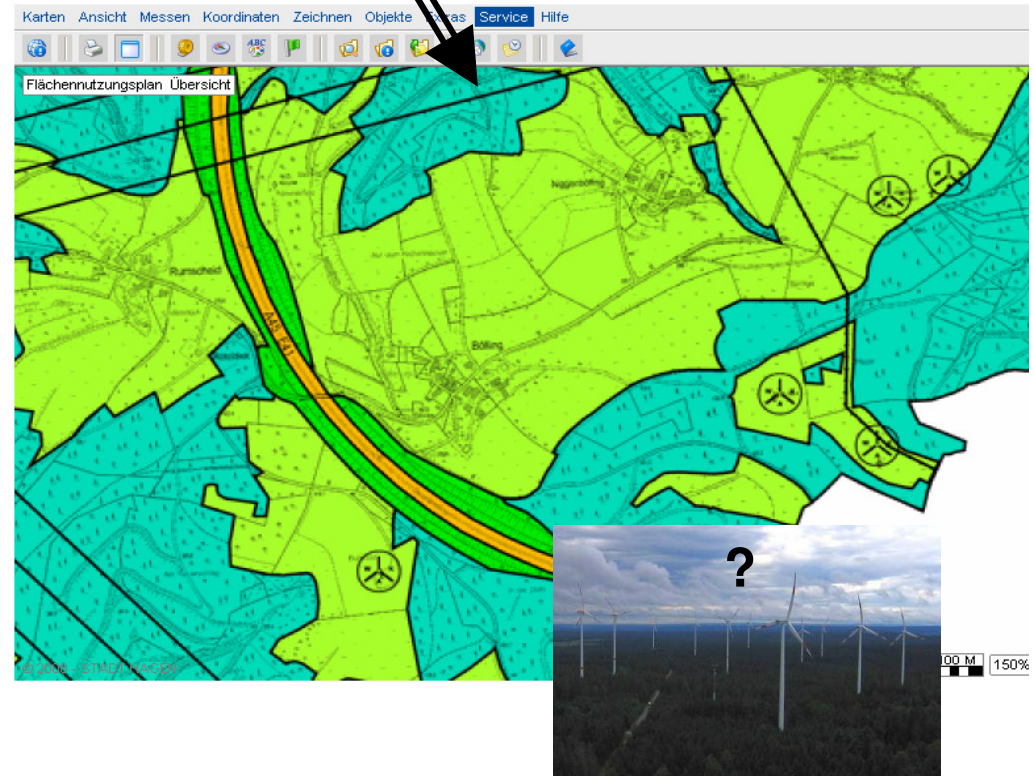
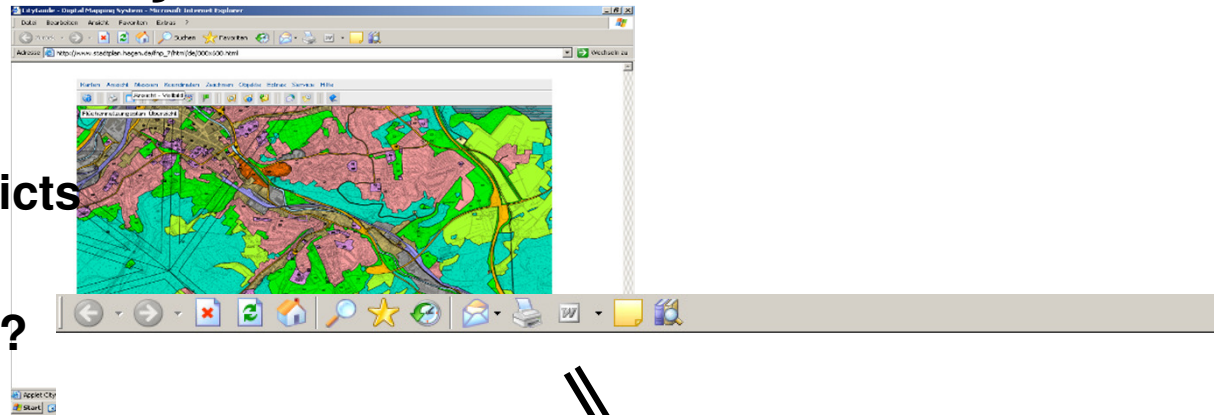
a. 280 kW → 600 kW
b. 600 kW → 2,5 MW

Geographic information system

Site finding

- No conflict of interests
- No neighbourhood conflicts

Wind turbines in woods too?



Applet CityGuide started

Lokales I