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# *the* **grabs** *project*

green and blue space  
adaptation for urban  
areas and eco towns

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Anna Celenza – Province of Genoa Land planning Department

Ancona, ACT Conference 2010

14.12.2010

With the contribution of the LIFE financial instrument of the European Community



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## What is GRaBS?

**Green** and **Blue** **S**pace  
Adaptation for Urban Areas  
and Eco Towns



● three-year project funded under

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## partners from 8 EU member states

District of  
West  
dam

West Regional  
Development  
Agency

University of  
Westminster

City of  
London (Lead  
Partner)

London Borough  
of Camden



City of Malmö

Klaipėda University  
Coastal Research  
and Planning  
Institute

Regional  
Environmental  
Centre for Eastern  
Europe (Slovakia)

Province of Styria

Municipality of  
Kalamaria

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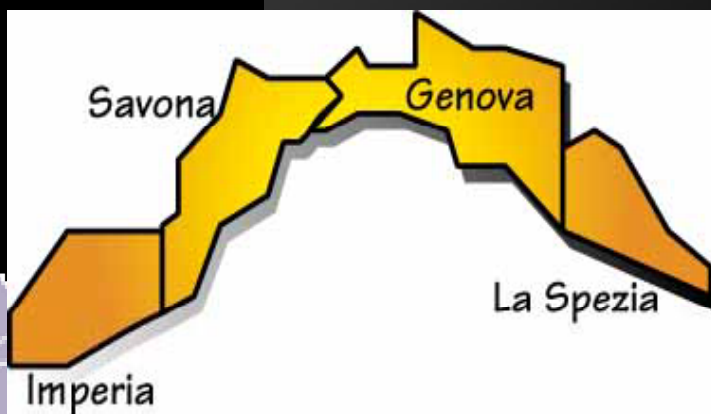
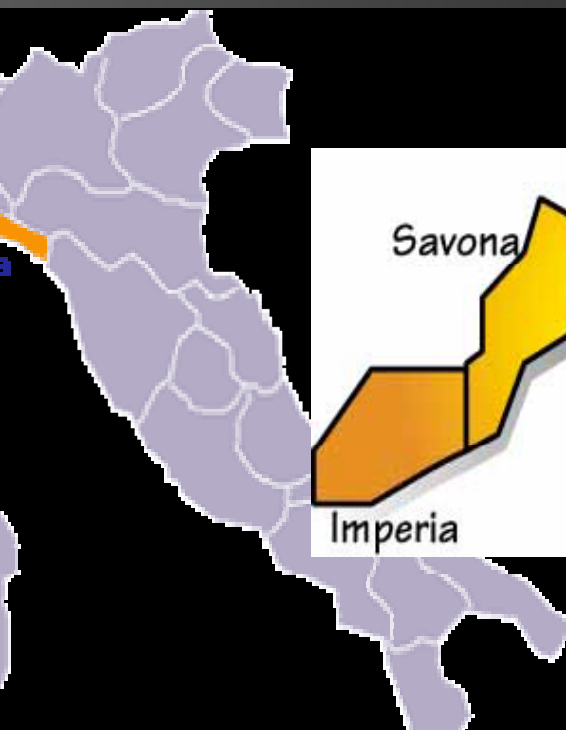
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## here's the Province of Genoa



The Province is an intermediate public administrative entity between Municipality and Region.

The Province of Genoa incorporates 67 municipalities and its main role is the

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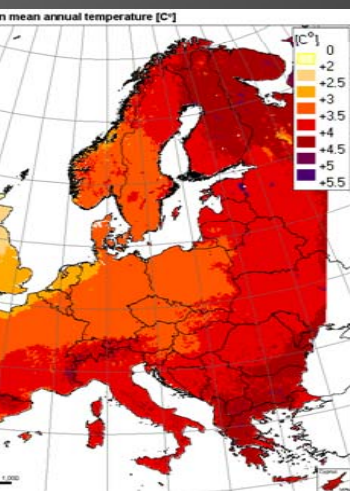
## why are we doing it?

IPPC 4<sup>th</sup> Assessment report (2007) found:

● Climate-related hazards will increase throughout Europe, according to regional geography

● Flash floods are expected to increase throughout Europe and up to 1.6 million people annually will be threatened by sea-level rise and coastal flooding

● Southern Europe and Mediterranean



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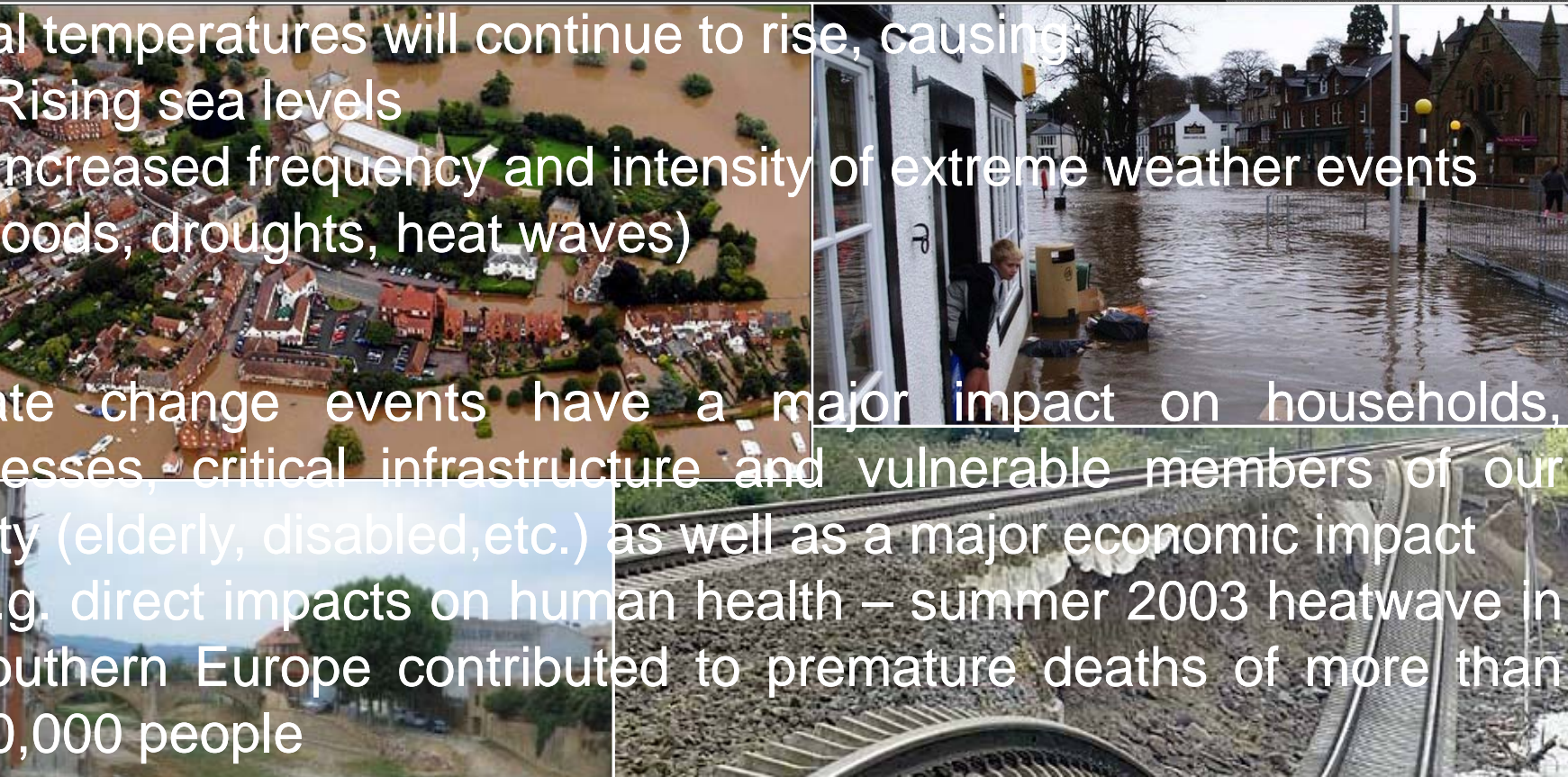


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Global temperatures will continue to rise, causing:  
Rising sea levels  
Increased frequency and intensity of extreme weather events  
(floods, droughts, heat waves)

Climate change events have a major impact on households,  
businesses, critical infrastructure and vulnerable members of our  
community (elderly, disabled, etc.) as well as a major economic impact  
e.g. direct impacts on human health – summer 2003 heatwave in  
Southern Europe contributed to premature deaths of more than  
70,000 people



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## the case for adaptation

*For the first time, wide-ranging impacts of changes in current climate have been documented... Nearly all European regions are anticipated to be negatively affected by some future impacts of climate change”*

(Source: IPCC, Working Group II Report, 2007)

**the impacts of global warming are already under way  
reducing emissions only part of the challenge**

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## why are we doing it?

- ⦿ climate change will make cities hotter and drier in summer, and wetter in winter
- ⦿ effects will be more dramatic in cities that suffer from **Urban Heat Island** effect and **poor drainage**

Designers, architects and planners have



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## GRaBS overall aim

‘to ensure existing and new mixed use urban development is adapted to the impact of climate change through **improving local and regional planning policy** to put in place **green and blue infrastructure**;

and to facilitate the much needed **exchange of knowledge and experience** and the actual **transfer**

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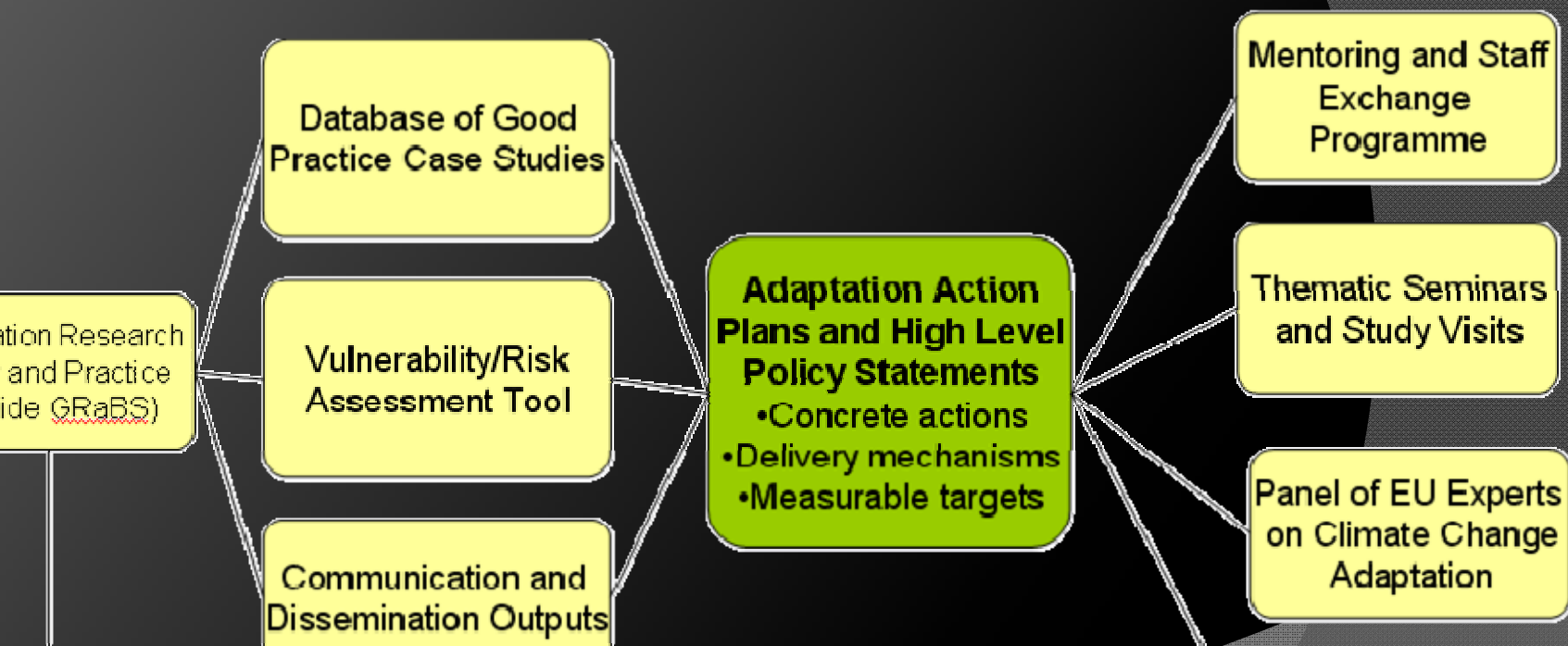


## GRaBS 5 key objectives

1. increase partner expertise on use of green and blue infrastructure
2. identify and influence regional planning policy and delivery ways for adaptation
3. develop and use a risk and vulnerabilities assessment tool
4. develop regional and local adaptation action plans including a high level policy statement



## Project Activities

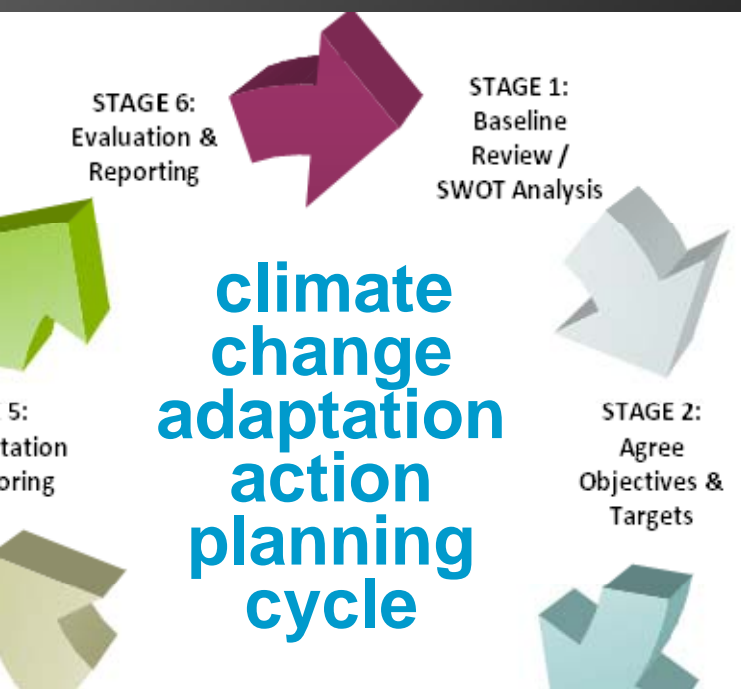


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## Adaptation action plans



- ⦿ A key output = **Adaptation Action Plan**, which will include a High Level Policy Statement
- ⦿ Each Adaption Action Plan will contain a SWOT analysis, the results generated by the **Climate Risk Assessment Tool** and a list of actions and delivery

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## VOT: some common themes

- Good and multi-discipline level of climate change expertise available
- Lack of political awareness – need ‘champions’ to drive for change
- Focus more towards mitigation over adaptation

‘Hooks’ for adaptation due to multifunctional nature of green and blue space, eg attractiveness for tourism/economic competitiveness

EU Directives as levers e.g. SEA/Floods/Habitats Directives, and Adaptation White Paper/Aarhus Convention

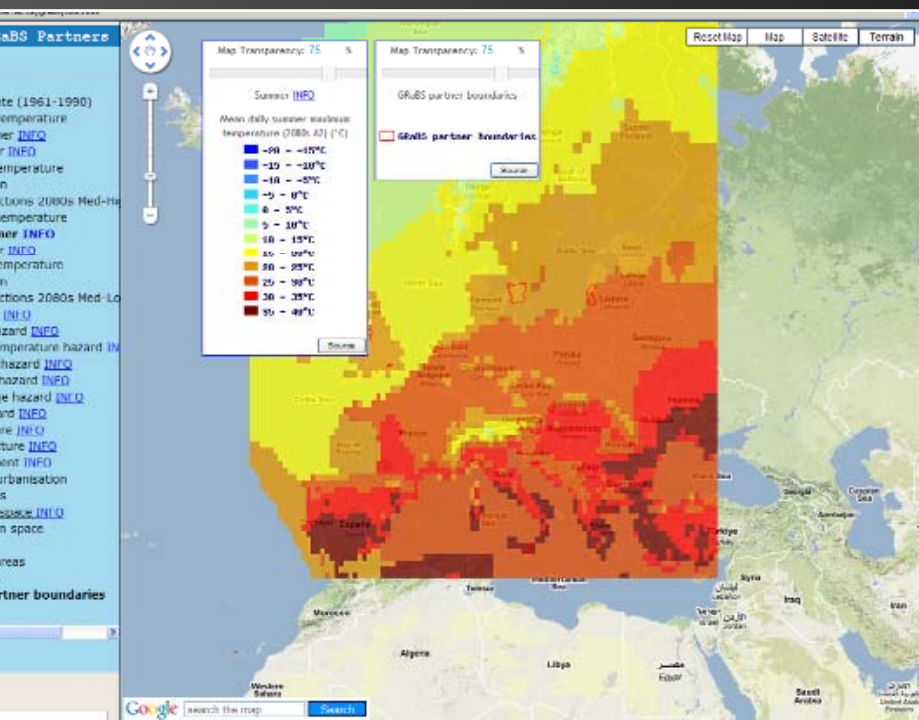
Economic climate (cut backs) + political climate (e.g. elections)

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## Assessment tool



Each AAP will contain the results generated by the **Climate Change Risk & Vulnerability Assessment Tool**

Partners piloted and tested the tool – now ready to apply

Used for e.g.: AAP development, community engagement events, mapping vulnerable groups and infrastructure

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## exchanging experience & network development

**Mentoring visits, workshops,  
thematic seminars, study visits:**

- facilitated contacts
- opportunity to build a stronger consensus
- opportunity to actively involve



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## Good practice case studies selection



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### Case study database

Aleksandra Kazmierczak and Jeremy Carter  
(University of Manchester)

- Toronto
- The Netherlands
- Stuttgart
- Slovakia
- Seattle
- New Orleans
- Faenza
- Dorset
- Berlin
- Augustenborg in Malmo
- North West England
- Basel
- Chicago
- London Borough of Sutton
- Nagoya



### Adaptation to climate change using green and blue infrastructure: A database of case studies (Full Report) (Executive Summary)

The aim of this database of case studies is to showcase climate change adaptation approaches, with a particular emphasis on those relating to green and blue infrastructure. The database is an important deliverable of the GRaBS project. Rather than focus on the physical elements of the case studies, the database describes in detail the process that have supported the implementation of adaptation responses in a range of urban areas across the world. The case studies were selected based on factors influencing the success of the development and implementation of adaptation responses as identified in previous studies, and on the analysis of strengths, weaknesses, threats and opportunities faced by the GRaBS partner organisations (see chapter 2 of the [main report](#)).

### The 15 in-depth case studies are as follows:

- Toronto: Ahead of the storm – development of the climate

Database of  
Good Practice  
Case Studies  
produced by  
the University  
of Manchester  
– available on  
the GRaBS  
website



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## 2009: visit to Malmo (Sweden)

Examples of urban drainage systems to manage stormwater in  
Northern Harbour

ed a 1960s neighbourhood called Augustenborg – frequently



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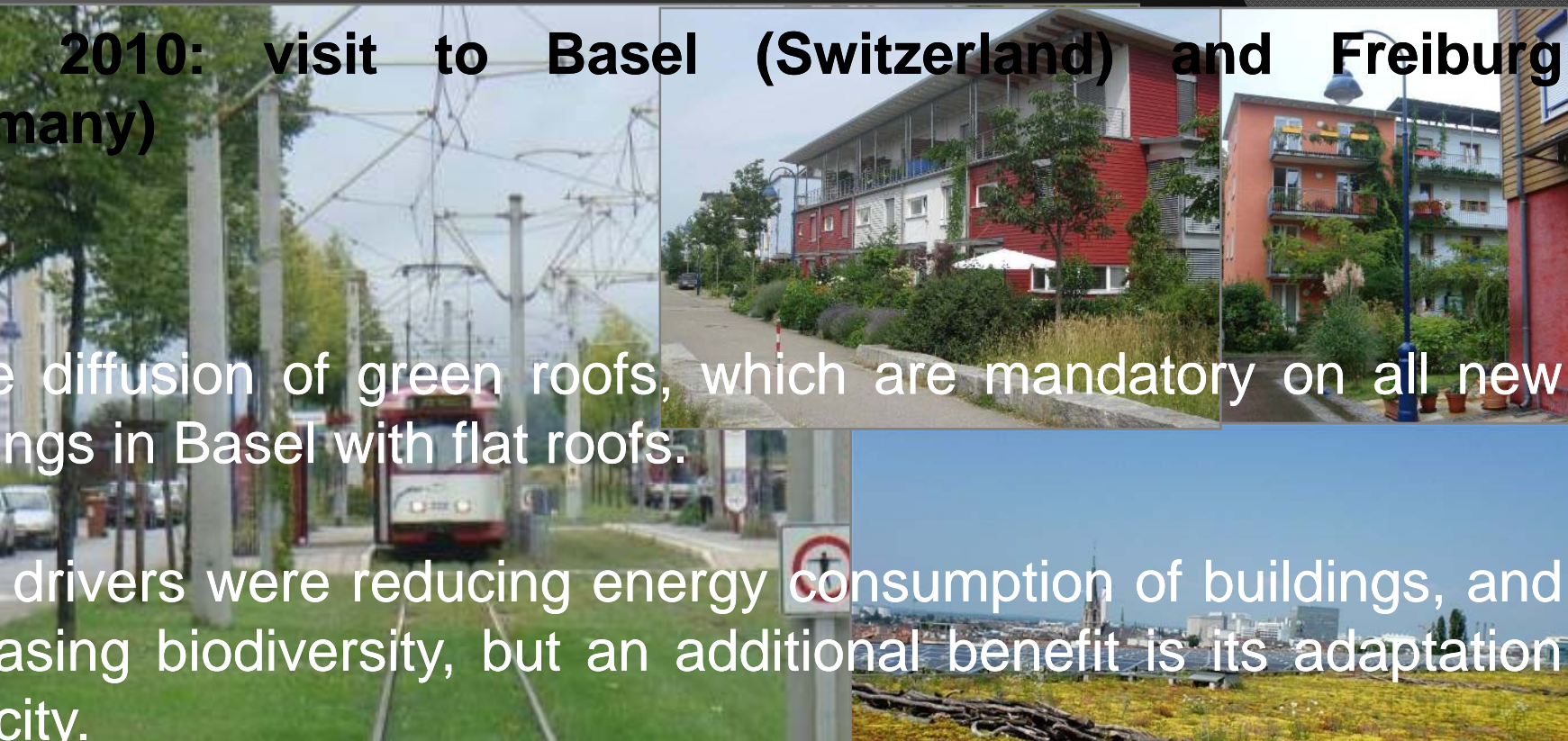
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**2010: visit to Basel (Switzerland) and Freiburg (Germany)**

the diffusion of green roofs, which are mandatory on all new buildings in Basel with flat roofs.

drivers were reducing energy consumption of buildings, and increasing biodiversity, but an additional benefit is its adaptation to a changing city.



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adaptation role of green infrastructure is significant



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## Further information

**RaBS project**

<http://www.grabs-eu.org>

**Jane Smith**

**Town and Country Planning Association**

**Carlton House Terrace**

44 (0)00 7000 0000