

How the INTERREG IVc Project “GRaBS” can Change European Cities

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1 ABSTRACT

The three year project GRaBS is funded under INTERREG IV C. “GRaBS” is an acronym for Green and Blue Space Adaptation for Urban Areas and Eco Towns. The project has started in September 2008. 14 different partners, from 8 different EU-countries exchange their experiences on the challenge to adapt to the impacts of climate change in urban areas. The partners are: TCPA – Town and City Planning Association in London (lead partner), the University of Manchester (UK), the Northwest Regional Development Agency (UK), London Borough of Sutton (UK), Southampton City Council (UK), Province of Genua (Italy), Etnambiente in Sicily (Italy), University of Catania (Italy), Municipality of Kalamaria (Greece), Regional Environmental Centre for East Europe (Slovakia), Klaipeda University Coastal Research and Planning Institutes (Lithuania), City of Malmö (Sweden), City District Nieuw-West, Amsterdam (Netherlands) and Province of Styria, department for spatial planning (Austria).

2 AIMS AND CONTENT OF GRABS

2.1 The content and aim of the project

The international research community has demonstrated that the global climate is changing as a result of human activity. The weight of scientific research provides compelling evidence of current and projected changes in global weather patterns. Atmospheric carbon dioxide concentrations are at their highest level for 3 million years. The first policy response to such scientific evidence has been to try to influence the determining factors of climate change – in particular to reduce excessive emissions of greenhouse gases from fossil energy sources. Action of this nature has been termed climate change mitigation. Political interest has predominantly focused on the urgency of mitigation, through action to be agreed upon by the international community as a follow up to the Kyoto Protocol. As the effects of climate change have become increasingly apparent in our everyday lives, so awareness has been growing that, in addition to continued determined action to mitigate climate change, we will also need to improve our adaptive capacities. Climate change is no longer simply something that will need to be addressed in the future: it is happening now, and we will have to draw up climate change adaptation policies and strategies and implement them without delay. We cannot afford to passively await major flooding of our rivers as a result of increased rainfall, or simply accept exacerbated health problems – and even growing numbers of deaths – in our inner cities as a result of heat stress in hot summers (as demonstrated in the extremely hot summer of 2003).

Regional planning systems and urban spatial planning can help to reduce the vulnerability to all these risks. Green infrastructure including public and private parks, productive landscapes, green corridors and nets, green roofs and facades as well as blue infrastructure, such as water bodies, rivers, streams, sustainable drainage systems, are an essential resource within the urban landscape for our necessary responses to the impacts of climate change.

The GRaBS (Green and Blue Space Adaptation for Urban Areas and Eco-towns) project is one of the first European-wide projects to work towards raising awareness about the kind of actions involved in climate change adaptation in urban areas. It seeks to promote climate change adaptation action plans in urban regions and cities.

Its two main aims are:

- to improve local and regional planning policy so that green and blue infrastructure is put in place to ensure that existing and new mixed-use urban development is adapted to the impact of climate change; and
- to facilitate the much-needed exchange of knowledge and experience and the actual transfer of good practice on climate change adaptation strategies to local and regional authorities across Europe.

The GRaBS project has four main objectives:

To raise awareness and increase the expertise of key bodies responsible for spatial planning and development as to how green and blue infrastructure can help to adapt to projected climate scenarios.

Most of the partners develop adaptation action plans to coordinate the delivery of urban greening and adaptation strategies.

The University of Manchester develops an innovative, cost effective and user friendly risk and vulnerability assessment tool, to help strategic planners of climate change adaptation responses.

Improve stakeholders and community understanding and involvement in planning, delivering and managing green infrastructure in new and also existing planning instruments in urban planning, based on positive community involvement techniques.

During the GRaBS project period the priority is to exchange knowledge and experiences between European partner regions, to better inform decision makers, politicians, communities and planners across Europe about urban adaptation challenges and appropriate measures to accommodate climate change impacts. Knowledge exchanges are staged during the GRaBS steering group meetings, in an intensive mentoring programme between European regions and cities and by targeted study visits.

2.2 Participation

As action on adaptation for our towns, cities and regions is needed now, the involvement of their communities in such action is of even greater importance than the need to engage communities in plans for climate change mitigation. There is still some groundbreaking work to do, because there are as yet few completed participation processes involving our communities, NGOs (non-governmental organisations) and individual residents in climate change adaptation strategies. It is necessary to assess which aspects of such processes are crucial in setting up participation strategies for urban adaptation plans.

The participation challenge is very much akin to climate change adaptation, because adaptation is a basic mode of interaction of citizens with their living environment. By delivering socially inclusive adaptation plans we promote our cities as environments that both flexibly absorb the challenges of climate change and provide productive and inspiring living conditions for current and future residents and working communities.

2.2.1 Key Issues

There are some important dilemmas that we will have to address when considering community engagement in climate change adaptation.

Timescale – long-term problems and changing communities

A majority of adaptation strategies sets out proposals for the long term, offering solutions for problems that will manifest themselves in an urgent way only after a very long period of time (often 20 - 50 years). Engaging communities in the present might be very difficult because they will not be the key beneficiaries of the adaptation plans and so are unlikely to perceive a direct interest.

Degree of Influence – the objectivity of solutions:

Tensions may arise over the restricted planning options offered and the perceived openness to serious community influence. This difficulty must be resolved by determining the level of community involvement that is appropriate at the outset of the climate adaptation planning process.

Values – community attachment to the present and the necessity of change:

Communities may attach values to places that seem vulnerable to serious climate change impacts and are therefore in need of adaptation. Community involvement strategies will have to be sensitive to the ways in which values can be drivers for action or counteraction.

Integration vs stand alone policies for community participation:

Within the planning context, a choice has to be made whether to integrate community participation in existent planning processes or to initiate a stand-alone policy for climate change adaptation.



3 GOOD PRACTICE EXAMPLES OF THE CITY OF GRAZ

The department of spatial planning in the Styrian Government is one of the 14 partners in the GRaBS project and arranged the 4th project steering committee meeting in Graz in April 2010. During the 3 days of the meeting, best practice case studies in the urban area of Graz were presented in study visits and in thematic seminars. The content of these visits and the seminars as well as additional projects according to the GRaBS idea are documented in an expert paper by the department of spatial planning.

The city of Graz is the second largest town in Austria, with approximately 260,000 inhabitants. Graz is situated in the south of the province of Styria and is the capital of the federal state of Styria. Styria is called the “Green heart of Austria” because of its vast amount of forests and green areas. The City of Graz has an elaborate green infrastructure, covering 40% of its urban area. In its planning history it has been a challenge for planners and decision makers of the capital to preserve the green infrastructure while at the same time allowing for a productive spatial and economic development process. In the development concepts of the City of Graz, which are renewed every 10 years, green belts are protected by building restrictions and thus the size and dimensions of this green infrastructure remain intact. There is much scientific evidence that supports the policy to implement green elements for their adaptive qualities to climate change. Apart from that, the citizens of Graz have always appreciated the role of green infrastructure as an essential component in their urban environment.

The “Green net of Graz”, the “Standards for open spaces”, the “Revitalising the inner courtyards of Graz” and the “Measuring programme for the small river of Graz” are examples of policies of the planning department and the department for construction in the City of Graz, which bring forward the implementation of green spaces. All these policy principles and their concrete implementation are under procedure in the city of Graz. They could positively influence other cities in the Province of Styria.

“Green net of Graz”

The network is 560 km in size and extends over the entire urban area (see fig. 1). The net connects playgrounds and parks, linking them with the main residential areas and connecting the city centre of Graz with the surrounding countryside. The idea of planning or realising a green net, came up with the increasing population pressure on open spaces. As many sections of the green network are yet to be established, the network should be seen as a model for the longer term, serving as a framework for the work of the city’s urban planning department.

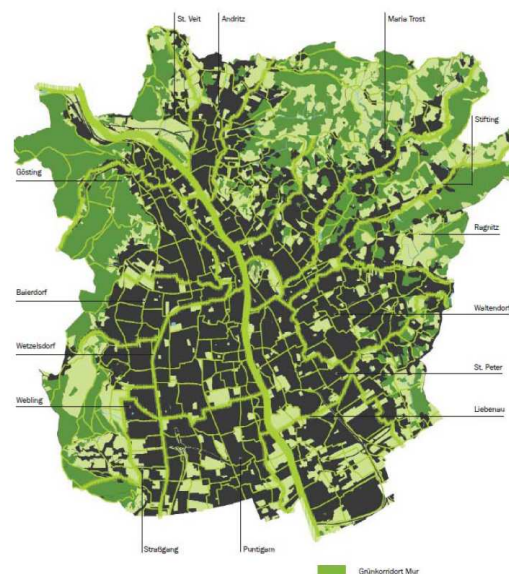


Fig. 1: “The Green Net of Graz” (City of Graz, department for Urban planning, development and construction, 2006)

“Revitalising the inner courtyards of Graz”

This initiative in the centre of Graz is a good example of what can be achieved in the heart of many of the cities and towns of Europe. The classic block border buildings of the pre-modernism period with their inner

shared courtyards are a common presence in the City of Graz. With their green inner courtyards and front gardens they help giving Graz the reputation of being a garden city. In the historical centre you will find semi-public and private open spaces, some of which are still intact with a lot of plants and provide a good micro-climate as well as improving the quality of life for the people living there. One of the key goals of the development concept of Graz is the conservation of these spaces and to motivate the private users on participate in an active and financial way.



Fig.2: transforming the inner courtyards to green

Within the GRaBS project each partner produces an **Adaptation Action Plan**. This plan offers a framework for the integration of green and blue infrastructures in spatial planning in each partner area. In the adaptaion action plan of Styria these and other examples are incorporated as guidance for the municipalites in the province of Styria. The planning department of Styria is in the process of providing recommendations for adaptation action within the context of existing planning instruments in spatial planning. The department will additionally produce a spatial planning guideline for the planners and municipalities as an outcome of the GRaBS project. The department of spatial planning itself will improve its controlling role, focussing on the integration of green and blue infrastructure in planning instruments. Municipalities will have to assess the insertion of green and blue elements in diverse plans as e.g. land use maps and masterplans, according to specific climate check lists. Three check-lists support municipalities to assess whether climate-relevant indicators are taken into account in municipal planning. The self-assessment can be carried out for different climate relevant themes such as green space, fresh air corridors, waterbodies/flood protection, ressource protection a.s.o in 5 categories (see fig. 3) for the partial result and also 5 categories for the overall result of the planning instrument (see fig. 4).

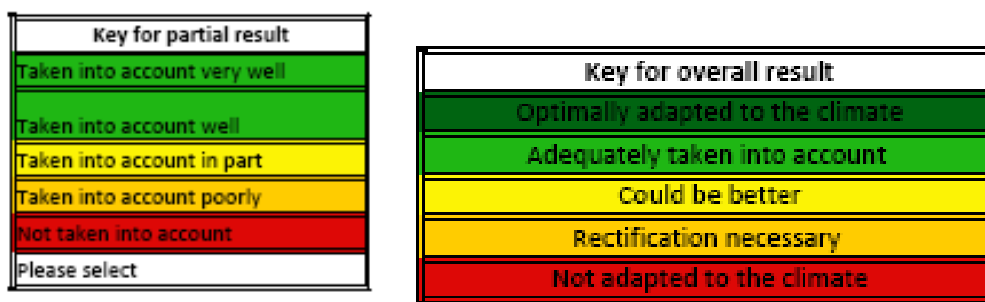


Fig.3: key for partial result, Fig. 4: key for overall result

The specific climate checklists for the planning instruments of the municipalities will be evaluated in a regular periode and should be updated with the help of the planners.

4 CONCLUSIONS: ADAPTATION TO CLIMATE CHANGE AS A MEANS TO ENHANCE THE SUSTAINABILITY OF OUR CITIES

The GRaBS project has both produced new insights in the necessary components in planning processes to adapt to the challenges of climate change and in the adaptive capacities of specific elements of our urban systems. Climate change already influences our environment and especially the cities in which we live. Sustainable planning methods are necessary to maintain the living standards in urban areas. Properly planned



and implemented participation processes will lead to better adaptation plans, with majority support among the communities involved and/or affected. Crucial components of these adaptation plans are the enlargement and improvement of the green and blue infrastructures in urban areas and eco cities. This spatial strategy in urban environments is also for the general benefit life of the well being and health of residents in European cities. A more generic positive effect of using green and blue infrastructure in climate change adaptation strategies, is that it will heighten attachment to urban landscapes. Investing in the blue and green quality of our urban landscapes also provides an opportunity to accommodate free time and leisure functions in the heart of city life. In this way climate change adaptation in urban areas is part of the larger planning strategy to prevent resettlement of urban resident to low density conurbation sites, which often results in the increase of urban sprawl and other unsustainable forms of urban development.

5 REFERENCES

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