

THE GREEN INFRASTRUCTURE ACTION TOOLKIT



GRAHAM BENNETT

One of the main outputs of the GreenInfraNet project will be the Green Infrastructure Action Toolkit, a means of disseminating

the experience and knowledge acquired and the results achieved by the project to other green infrastructure actors across Europe. The toolkit will be organised around the project's main components:

- Development strategies and process management
- Green infrastructure methodologies
- Green infrastructure planning, policies and instruments
- Implementing green infrastructure
- Developing and implementing green infrastructure in urban regions
- Developing and implementing green infrastructure in natural areas
- Developing and implementing green infrastructure in rural areas
- Green infrastructure as a climate change adaptation measure

Each section of the toolkit will be made available online as it is completed. The entire toolkit will be published as a project document, and the plan is to disseminate the toolkit electronically in order to ensure wider distribution following the close of the project.

Graham Bennett, external expert to the Green Infrastructure Network project

Communication is the key

The overall goal of the GreenInfraNet project is to strengthen the development and implementation of green infrastructure in EU regions. It is at the regional and local levels that innovative approaches are being pursued. This work has built valuable experience in how the green infrastructure approach can be developed and applied by local and regional authorities, particularly with respect to methodologies, process management, policy development and implementation in a range of settings, such as largely natural areas or regions characterised by agriculture or urban development.

The project partners are keen to share their experience and apply best practices. Some are pioneering green infrastructure approaches, methodologies, policies and implementation programmes. Others have developed expertise in conserving biodiversity in relation to certain land-use types, such as natural areas including Natura 2000 implementation, agricultural and urban or suburban regions, or policy making. Some partners are keen to learn about and apply specific best practices, for example in relation to green infrastructure policy making, or to apply the approach in urbanised regions. The partners will work together to increase capacity to develop and implement green infrastructure, to transfer best practices and to improve green infrastructure policies in the different regions.

To achieve these results, partners are organising workshops for exchanging experience and sharing and transferring best practices. Wide awareness of the project and its results will be ensured by communicating and disseminating outputs and results to relevant actors and stakeholders in other European regions. Partners will organise dissemination events in their regions and give presentations at other events. A DVD containing examples of green infrastructure in the partner regions will also be developed and circulated to all stakeholders.

One of the project's most important products will be the Green Infrastructure Action Toolkit. Workshop outputs will be codified as guidance to partners and other stakeholders with the aim of contributing to the further development and implementation of European, national and regional green infrastructure policies.

To ensure continued cooperation and the exchange of expertise and experience between European regions, the partners will establish the European Green Infrastructure Knowledge Network, to be launched at the final conference in 2014.

Ingrid Henzen, GreenInfraNet Project Manager

WIDENING AWARENESS: Lake Brasimone, one of two artificial reservoirs that make up a protected area in Emilia-Romagna region, Italy.



Learning by exchange

FINGAL, JULY 2012

Project partners find out at first hand about successful European initiatives and the kind of challenges that remain in terms of promoting the green infrastructure concept

In July 2012, the first GreenInfraNet exchange of experience workshop was held in Fingal, Ireland. It was the first opportunity for project partners to learn about how green infrastructure thinking is developing in different regions across Europe. Although each region has its own story to tell, common themes arose from across the regions. The emergence of green infrastructure thinking is strongly related to the need to implement nature conservation measures, such as those required by the Habitats and Birds Directives, and in doing this to integrate nature conservation with other land uses. The green infrastructure concept and approach brings the nature conservation message to a wider audience by emphasising the ecosystem services provided to society by nature and natural systems. It provides a mechanism that can bring together a range of stakeholders from different policy areas in pursuit of common goals.

Increasingly, green infrastructure thinking has been integrated into plans and strategies at national, regional and local level. The Dutch National Ecological Network is an example of green infrastructure planning at national level. At regional level, GIS tools, such as SITxell developed in the Province of Barcelona, are providing access to high-quality data that can then drive the development of green infrastructure initiatives at local level.

Green infrastructure is also being integrated into spatial plans at local level, for example in Fingal. Across Europe, on-the-ground implementation of green infrastructure projects is happening using a variety of funding mechanisms from a range of policy areas such as nature conservation, agriculture and spatial planning.

While much progress has been made, many challenges remain in relation to green infrastructure initiatives in Europe. These include the need to ensure that there is integration between efforts that originate in different policy areas and the need to ensure that there is ongoing buy-in from key stakeholders and buy-in at political level. In some regions, the current difficult economic circumstances mean that green infrastructure has become less of a political priority. A key outcome from the workshop was the need to explain the wider social (e.g. public health) and economic (e.g. tourism) benefits of green infrastructure to stakeholders across many different policy areas, and in this way to generate support for the planning and implementation of green infrastructure projects. Greater participation by a range of stakeholders in formulating and implementing green infrastructure plans and projects will be a key element in achieving this.

Gerry Clabby, Fingal County Council

IMPLEMENTATION ON THE GROUND: Participants at the Fingal workshop learnt about green infrastructure developments in Europe. Fingal's biodiversity programme includes the protection of sites such as the river Tolka (left) and the Baldoyle Estuary, home to Brent Geese and Greylag Geese.



Working solutions

WALKING THE ALTA VIA DEI PARCHI: EMILIA-ROMAGNA REGION

The Alta Via dei Parchi trail in Italy's Emilia-Romagna region links two national parks, one interregional park and five regional parks. The 500-kilometre path winds through the varied Apennine landscape, passing glacial cirques, lakes, high-altitude grasslands, forests, streams, volcanic rocks and gypsum cliffs. The wealth of the natural and environmental heritage is matched by the richness of the region's history, evident in the old streets and bridges, monasteries, abbeys and hermitages. Traces of centuries of rural life are still to be found, including lumberjacks' and shepherds' huts, coal extraction sites, cultivated woods and terracing. After exerting huge pressures on the environment for centuries, the traditional mountain economy has now disappeared: vast areas have been left uninhabited to revert to their natural state. In many areas, natural vegetation is rapidly reclaiming land once worked by the local population. However, the creation of a wide network of protected areas in the region has encouraged and guided this process, giving concrete expression to the general and growing concern for environmental protection and sustainable development.

Mario Vianelli and Sandro Bassi, Based on the leaflet "A Long Hike in the Northern Apennines"



LIVING SPACE: Swans on a canal in Flevoland, the Netherlands.

COMBINING URBAN EXPANSION WITH GREEN INFRASTRUCTURE PROVINCE OF FLEVOLAND

In the polders of Flevoland, 6 metres below sea level and enclosed by dikes, the city of Almere is to expand into the surrounding agricultural area to create houses and jobs for 200,000 citizens by 2030. Almere is directly adjacent to the Natura 2000 site Oostvaardersplassen, where wetland vegetation is managed using herbivore herds that need more room than the site's 2,000 hectares.

The expansion of Almere could have a significant negative impact on conservation objectives related to birds that feed outside the nature reserve. New feeding areas must therefore be created, in keeping with the EU Habitats Directive. In addition, part of the agricultural land near Almere has wet clay soil, which can hamper the work of farmers. Due to the impacts of climate change, in the near future more regular excessive rainfall is expected.

The goal is to create a multifunctional green-blue area near the Oostvaardersplassen to strengthen the Dutch Ecological Main Structure for the exchange of populations of plants and animals, but also to collect excessive water, create new living space for herbivores, and compensate for the loss of bird feeding areas. Added benefits will be the creation of recreational areas for the citizens of Almere, which economic experts predict will attract over 2 million visitors a year, and 6,200 new jobs related to the project as a whole!

Andre van den Berg, Province of Flevoland

THE SITXELL PROJECT BARCELONA PROVINCE COUNCIL

The SITxell territorial analysis system (www.sitxell.eu) is used to evaluate open areas in the Province of Barcelona based on their ecological, landscape and socio-economic characteristics. The initiative is designed to promote a new territorial analysis based on a multidisciplinary view of the territory, incorporating existing knowledge about open areas.

Its specific aims are to:

- provide accurate, reliable information about the ecological and socio-economic values of open areas;
- function as a territorial analysis tool providing support for planning and decision making in the territory;
- contribute to organising and managing the territory in an integrated way; and
- publicise the importance of ecosystems and the benefits and services they provide to society.

Based on work with research centres, universities, sectoral institutions and businesses, SITxell has made it possible to develop cartographical information that evaluates open areas in accordance with experts' criteria and parameters.

In 2012, SITxell gained first prize in the UN Public Administration Awards (UNPSA 2012) in the category "Advancing Knowledge Management in Government."

Carles Castell Puig, Barcelona Province Council

TECHNICAL TOOL: The prize-winning system provides data for land-use planning.



Focus on good practice

SZENTENDRE, OCTOBER 2012

The project's second exchange of experience workshop and the second Steering Committee meeting took place on October 10–12, 2012, at the Regional Environmental Center in Szentendre, Hungary. The first day was dedicated to the Steering Committee meeting and a visit to the Sas-hegy Nature Conservation Area in Budapest, where a good-practice example of nature conservation activities in urban protected areas was presented.

The exchange of experience workshop took place on the second day, with a focus on green infrastructure planning as well as related policies and instruments in the partner regions. Based on a questionnaire distributed prior to the meeting, partners evaluated their regional or national green infrastructure-related policies and instruments according to six criteria. Results were then compared at the meeting and will feed into the workshop report.



BUILDING EXPERTISE: Workshop participants shared ideas on green infrastructure planning at the REC Conference Center, Szentendre.

On the final day of the event, project partners participated in a study visit to the eco-farm run by Kiskunsagi Non-profit Ltd. in Apaj. Representatives of the managing company and the Kiskunsagi National Park Directorate guided participants on a tour of the farm, describing wetland habitat restoration efforts and sustainable grassland management in the area. Participants were also able to observe the Great Bustard (*Otis tarda*), a key species in the grassland management programme.

Zsuzsanna Keri, Regional Environmental Center

Spreading the word

The project partners are successfully raising awareness of the green infrastructure concept, promoting solutions and sharing their experience through a variety of regional events. Interest in the topic is clearly growing, with the project website attracting high visitor numbers since its launch in 2012.

FLEVOLAND, THE NETHERLANDS
January 10, 2013

FELSOTARKANY, HUNGARY
November 16, 2012

NICOSIA, CYPRUS
December 13, 2012

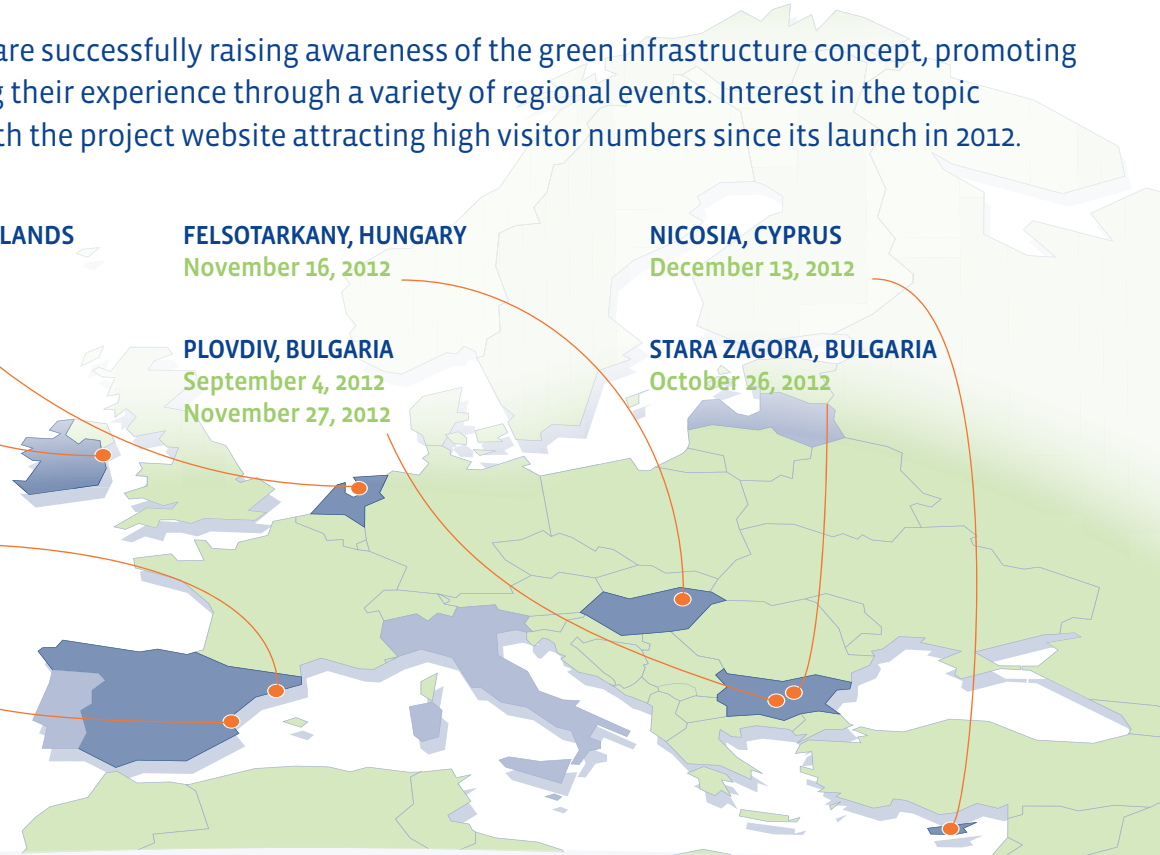
FINGAL, IRELAND
November 27, 2012

PLOVDIV, BULGARIA
September 4, 2012
November 27, 2012

STARA ZAGORA, BULGARIA
October 26, 2012

BARCELONA, SPAIN
June 14, 2012
December 4, 2012

VALENCIA, SPAIN
September 21, 2012



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With the aim of establishing the European Green Infrastructure Knowledge Network, we are keen to find out about similar initiatives, individual regions with good practice in the field, as well as companies and/or organisations carrying out research on the topic. If you have experience to share, please get in touch!