

Dear Reader,

No other element in sustainable architecture has seen technical innovations develop so fast, as in the field of green roofs. Therefore it is about time to reinforce the green roof network and to provide a platform for an intensive exchange of knowledge and expertise.

The International Green Roof Congress 2009 will address fascinating projects designed by renowned architecture firms, as well as the international trends and standards relating to green roofs. In addition, the congress programme will have a distinctively interactive style with practical workshops and green roof excursions.

In this and the next issue of "Green Roof News" we will present some highlights of the agenda.

Have fun reading!

Wolfgang Ansel  
Director IGRA



**International Green Roof Congress**  
**25 - 27 May 2009**  
**Nuertingen/Germany**

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## "Bringing Nature Back to Town":

# International Green Roof Congress 2009

From the 25th to the 27th of May 2009, Stuttgart/Nuertingen (Germany) will become the platform for the world of green roofs. The event, which is under the patronage of the German Federal Ministry of Transport, Building and Urban Affairs, is being organized by the International Green Roof Association (IGRA) and the German Roof Gardener Association (DDV). The congress languages are English and German (simultaneous translation).

Along with the Landscape Research, Development & Construction Society (FLL), the network of cooperation partners for the congress comprises further important German stakeholder organizations in the field of green roofs (gardeners, roofers, landscape architects, architects and municipal delegates) as well as the International Federation of Landscape Architects (IFLA), the European Landscape Contractors Association (ELCA) and the International Federation of the Roofing Trade (IFD). The congress is kindly supported by ZinCo GmbH (Title Sponsor) and DOW Hyperlast (Premium Sponsor).

The impressive list of more than 30 speakers from 12 countries includes Emilio Ambasz (Argentine/US Architect and Green Building Pioneer), Prof. Gilbert Lösken (Head of the FLL Green Roof Workgroup, Germany), Roland Appl (Green Roof Engineer, IGRA President), Paul Kephart (US Horticulture Expert for Ecological Design), Rolf Disch (Office for Solar Architecture, Germany) as well as international architecture firms, such as BIG Bjarke Ingels Group (Denmark), SOM Skidmore, Owings & Merrill (United Kingdom), Mecanoo (Netherlands), RS Architektura Krajabrazu (Poland) and many more.



30 Lectures – 3 Excursions – 2 Workshops – 1 Vision: Bringing Nature Back to Town

## Green Roof Architecture: Lectures and Projects

Project presentations will include the integration of green roofs to optimize the energy balance of buildings; as natural rainwater reservoirs; in the field of environmental protection and as a place for recreation and leisure.

### New Providence Wharf & Ontario Tower (London) – Roof Gardens by the Thames

The London project "New Providence Wharf" is, for example, a spectacular site, which combines living space, office space and leisure facilities, and comprises a 27-storey hotel and apartment complex. It has created a new dimension of used rooftop space, which captivates its visitors with its cascade-style rooftop gardens and its views of the River Thames. Whereas the roof gardens with walkways, water features and ponds have been designed to meet the human need for nature, the biodiverse roof at the Radisson Hotel (Ontario Tower) delivers an ecological resource for wildlife in the heart of the city (e.g. a habitat for ground nesting birds like the Black Redstart). The architecture firm SOM Skidmore, Owings & Merrill will explain this futuristic and environmentally sound concept in detail.



Photo + Text Courtesy BIG Bjarke Ingels Group

### Mountain Dwellings (Copenhagen) – Best Housing Project – World Architecture Festival 2008

What if the parking area became the base upon which to place terraced housing – like a concrete hillside covered by a thin layer of housing, cascading from the 11<sup>th</sup> floor to the street edge? Rather than doing two separate buildings next to each other – a parking and a housing block – the Bjarke Ingels Group (BIG) decided to merge the two functions into a symbiotic relationship. The parking area needs to be connected to the street, and the homes require sunlight, fresh air and views, thus all apartments have roof gardens facing the sun and amazing views.

The Mountain Dwellings appear as a suburban neighbourhood of garden homes flowing over a 10-storey building – suburban living with urban density. It is a unique city centre living concept in Copenhagen, which allows its inhabitants to enjoy nature on their doorsteps.



### Prefectural International Hall (Fukuoka) – Masterpiece of Green Roof Design

A classic among green roofs is the project ACROS Fukuoka – Prefectural International Hall in Japan which is on the cover of the book "Green Roofs – Ecological Design and Construction" by the Earth Pledge Foundation. The design of Emilio Ambasz, Honorary Fellow AIA and pioneer in the field of green architecture is a perfect example for the reconciliation between architecture and nature.

One can say that the building has a "Janus Face". Whereas the north facade presents the elegant urban design of a modern office building, the south facade extends with a series of 15 stepped terraced gardens into the adjacent Tenjin Central Park. As a result, the building gives back a 10,000 m<sup>2</sup> green open space to the public and doubles the size of the park.



Photo Courtesy Hiromi Watanabe

### Fusionopolis (Singapore) – Science, Technology & Media Powerhouse with Sky Gardens

Fusionopolis, a science and technology powerhouse for Singapore, integrates 13 roof gardens amounting to some 3,000 m<sup>2</sup> of sky greenery, including 6 large-scale thematic ones on the 5<sup>th</sup>, 18<sup>th</sup> and 21<sup>st</sup> storeys. They serve as the green lungs and social pockets for the office and lab staff. The highest roof garden is located at the 24<sup>th</sup> storey.

A wide spectrum of tropical vegetation ranging from turf, groundcovers, climbers, shrubs, ferns, palms and trees were planted amidst a good balance of hardscape and water features. The presentation by green roof expert Ho Wang Weng (Managing Director of ZinCo Singapore) shall highlight the some of the unique features of this sky greenery from various perspectives – installation operation, choice of materials and vegetation.



## Platinum Business Park (Warsaw) – A Place of Beauty and Recreation for City Dwellers

The Platinum Business Park is an opened for city dwellers park in which modern office buildings are located. A well-designed pedestrian route layout allows both walkers and those working in the business park for a recreation. A huge pond in the central part of the park acts as a mirror reflecting buildings and trees. Wavy lawns and coppiced mounds of growing medium on roofs totally hide the edge between green roofs and open ground.

Apart from the Platinum Business Park, IGRA Award Winner Dorota Rudawa (RS Architektura Krajobrazu) will feature four other projects where architecture becomes part of the landscape and vice versa (Office Building SPECTRA, TOPAZ/ NEFRYT Office Buildings, TUIR WARTA Tower and AGORA S.A. Headquarter).



Photo Courtesy RS Architektura Krajobrazu



Pavillones de las Naciones (Zaragoza) – A landscape park on the rooftop of the EXPO exhibition hall

## Innovative approaches for utilising the fifth façade – Nijmegen, Zaragoza, Essen, Cologne

Other project presentations, such as the FiftyTwoDegrees in Nijmegen (Mecanoo Architects; see *Green Roof News Spring 2008*), the 60.000 m<sup>2</sup> landscape park on the Pavillones de las Naciones (EXPO 2008; Zaragoza; see *Green Roof News Summer 2008*) and the Ronald McDonald Hundertwasserhaus (Gruga Park; Essen; see *Green Roof News Winter 2006*) demonstrate how green roofs can help to symbiotically combine nature with modern architecture. The same applies to the combination of green roofs and photovoltaics, which has been installed on the office building "Etrium", in line with the "Passive House Standard", and has contributed to an increase in the efficacy of the PV installation.



FiftyTwoDegrees (Nijmegen) – Natural stormwater management with green roofs

## The Workshops: Practice-Oriented and Tailor Made

The practice-oriented workshops will see certified green roof experts, designers, landscape architects, landscape contractors, plant experts and delegates of municipal authorities from Europe, Asia and North America sharing their knowledge and answering questions and queries put forward by participants.

### Topics Workshop 1

- Basic green roof planning: roof construction and vegetation technology
- Plant selection: biodiversity, quality criteria and production
- Installation and maintenance of green roofs – field experiences
- Insurance questions and fire prevention
- Promotion and marketing of green roofs in the private and public sector

### Workshop 1: "Planning, Installation and Maintenance of Green Roofs"

Workshop 1 will offer participants practical expertise on how to successfully plan and create a green roof – from a simple garage landscaping to a 30,000 m<sup>2</sup> landscaped park. Green roof expert Bernd W. Krupka is on the list of speakers, along with the internationally experienced plant expert Dr. Nigel Dunnett from Sheffield. Practical construction experience will be presented by landscape contractors from Germany, the Netherlands and Poland.



### Workshop 2: "An International Comparison of Funding and Support Programmes for Green Roofs"

Workshop 2 will provide an overview of political incentives in Germany and on an international level. The main findings of the workshop will be included in a "Best Mode of Practices-Guideline for Local Authorities".

Delegates from the cities of Stuttgart, Munich, Berlin, Karlsruhe, Duesseldorf, Linz, London, Copenhagen, Singapore and Portland will present their favorite instruments so the information exchange will be very vivid.

Duesseldorf e.g. has made a comprehensive green roof inventory for the complete city. The numbers are very impressive – more than 1,400 buildings have green roofs. The total amount of green roof space (including green roofs on underground garages) is 660,000 m<sup>2</sup>.



Aerial photo analysis and mapping of Green Roofs in Duesseldorf  
Photo Courtesy Umweltamt Duesseldorf

### Topics Workshop 2

- Incentive programmes for green roofs – a review of 30 years of application
- Key criteria for municipal green roof support programmes
- The effect of green roofs on urban ecology
- Evaluation of municipal programmes: ecological targets, economic efficiency, management costs, easy application



Excursions:

## An Eye on the Green Roof



Photo Courtesy ZLT\_J\_Wuertz



Excursions in and around Stuttgart, to the German solar capital, Freiburg, and to Friedrichshafen, Lake Constance, will show the various ways in which green roofs can be applied, using both individual case studies and within the context of modern town planning.

The fact that the city of Stuttgart alone houses over 300,000 m<sup>2</sup> of green rooftops and has made provisions for more than 1.5 million m<sup>2</sup> in the local development plans says a lot. Here more than anywhere else, ecological architecture is consistently achieved by means of landscaped rooftops. Special highlight: The excursion to Friedrichshafen includes an airship tour with the famous Zeppelin NT. Cruising at a height of 300 metres will give participants a unique view of the green roofs around Lake Constance.

The International Green Roof Congress 2009 has a vision – to bring nature back into modern city architecture. Combining green roofs with other future-looking technology like solar energy, thermal insulation and utilising rainwater offers new potential for progress. Nature + Architecture = Beauty, it's as simple as this.

### Excursion 1: Stuttgart Region

Modern urban ecological living with green roofs – Representative office building with extensive and intensive green roofs – School building with extensive green roofs – Green roofs and photovoltaics – Site visit: green roof contractor

### Excursion 2: Freiburg Region

Reconstruction of a historic green roof building – Thermally insulating green roof - Green roof and photovoltaics – Court yard green roof on an underground garage deck of a science and office building

### Excursion 3: Friedrichshafen Region

Bird's eye view of the green roof landscape around Lake Constance – Intensive green roof: Public park on an underground garage deck – Residential area with intensive and extensive green roofs - Private house with a pitched green roof – Site visit: green roof contractor

For more information please visit the congress website [www.greenroofworld.com](http://www.greenroofworld.com).

### The next IGRA-newsletter will feature the following topics:

#### International Green Roof Congress

- Technology Workshop – Speakers, Topics, Presentations
- Green Roof Policies and Funding – The German Perspective
- Green Roof Excursions – Enhanced Learning Experience On Site

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The International Green Roof Association (IGRA) is a global network for the promotion and dissemination of Green Roof topics and Green Roof technology.

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