

Dear Reader,

IGRA has set its goal of making available practical green roof know-how aligned with new findings in the scientific and political sector. The International Green Roof Congress 2009 showed the whole variety of green roofs at its best. Now that the congress is over we are looking forward to intensify and expand the network. And we are in eager anticipation of the coming green roof conferences in Toronto (October 2009) and Singapore (November 2010). The increasing number of events all over the world proves the strong interest in networking and the fast distribution of the green roof idea.

Have fun reading!

Wolfgang Ansel  
Director IGRA

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

## **Review International Green Roof Congress: Green Roof Visions Perfectly Transferred**

**At the 2<sup>nd</sup> International Green Roof Congress in Nuertingen (25 – 27 May, 2009), architects, installers, scientists and municipal planners gave the proof that green roofs have become integral to modern urban architecture.**

Under the banner of "Bringing Nature Back to Town", almost 300 green roof professionals from around the world united for 3 intensive days of experience transfer. Participants from 40 countries and 5 continents substantiated very clearly that rooftop greening has become a "global player" in the field of sustainable building concepts. Building on the first event from 2004, Wolfgang Ansel, project manager for the congress, states that knowledge transfer is "no longer a one-way street". And while Germany is still the world leader for green roof coverage, in the meantime there are innovative and spectacular examples to be found in other countries. The experiences gained thereby may even also introduce new impulses to the German green roof market.

The congress, organized by the International Green Roof Association (IGRA) and the German Roof Gardeners Association (DDV), delivered the current state of affairs for green roofs in technological, political, ecological and economical respects. 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 was kindly supported by ZinCo GmbH (Title Sponsor) and Dow Hyperlast (Premium Sponsor).



Almost 300 green roof professionals from around the world joined the 2<sup>nd</sup> International Green Roof Congress.

## Green Architecture:

# Excursions and Presentations

On the first day of the event, green roof excursions in the Stuttgart region and to Freiburg were booked down to the last seat. Numerous congress participants used the opportunity to gain insight into the ecological capacity and beauty of green roofs while in the area. At the concluding evening reception hosted by the City of Nuertingen, IGRA-President Roland Appl and DDV-President Reimer Meier emphasized the importance of international experience exchange.



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



Excursion Freiburg: Meeting place "up on the roof"



Thermally insulation with green roofs



A memorable experience: green roof excursion with the Zeppelin NT airship



Zeppelin Excursion Friedrichshafen: Bird's eye view of the green roof landscape



IGRA president Roland Appl

For the following two days, representatives from numerous renowned architecture firms from around the world illustrated their innovative approaches to the use of the "fifth facade". They presented an unrivalled wealth of sample applications and really infected the delegates, with their enthusiasm and wealth of ideas. The project ACROS Fukuoka in Japan, by the American star architect Emilio Ambasz is only one of many visionary examples. With his innovative agro-urban edifice, Ambasz succeeded, in his own words, to reconcile "a developer's desire for profitable use of a site with the public's need for open green space."



Emilio Ambasz, acknowledged pioneer in the field of green architecture, inspired the audience with his concept "The Green over the Grey".



A masterpiece of green roof architecture: Fukuoka Prefectural International Hall in Japan. Courtesy: Hiromi Watanabe

Landscape planner Carlos Ávila imparted participants with a look to Spain, to the EXPO 2008 in Zaragoza, with its vegetated, photovoltaic, and partially accessible roof area of more than 43.000 m<sup>2</sup>.



The green roofs on top of the "Pavillones de las Naciones" at the EXPO 2008 in Zaragoza.

Detouring north to Copenhagen, Denmark, architect Kai-Uwe Bergmann of BIG Bjarke Ingels Group, presented "Mountain Dwelling" (distinguished with "Best Housing Award 2008"): an unconventional intermixture of parking garages and terraced condominiums, functionally blended, the façade covered with the silhouette of Mount Everest.



The Mountain Dwellings appear as a suburban neighborhood of garden homes, flowing over a 10-storey building – suburban living with urban density. Courtesy: Bjarke Ingels Group

Other architecture firms and planners complemented this diversity with objects from London (New Providence Wharf; Skidmore, Owings & Merrill), San Francisco (California Academy of Science; rana creek), Singapore (Fusionopolis; ZinCo Singapore Ltd.), Warsaw (Business park Platinum; RS Architektura Krajobrazu), Nijmegen (FiftyTwoDegrees; mecanoo architecten), Freiburg ("Solar Ship", architecture office Rolf Disch) and many many more. All served as examples of green roof architecture, as trendsetting, valuable and sustainable truths, with rooftop greening the integral component of building design given its ecological and economical advantages.

Prof. Manfred Koehler explained the energetic aspects of green roofs, and solar architect Rolf Disch presented the synergy effect of combining green roofs and photovoltaics: a significant factor here is that vegetation improves the performance of the solar modules, as the plants comparatively lower ambient temperatures. The adoption of green roofs as a module for urban water management (Prof. Stephan Roth-Kleyer) rounded off the palette of sample applications. Green roofs provide a meaningful contribution through their capacity to retain stormwater, to reduce peak runoff, and to delay runoff of excess water.

## The IGRA-Award Winners 2009

For their exemplary engagement in the promotion of green roofs, the cities of Duesseldorf and Copenhagen were distinguished with the IGRA-Award 2009 in the "Municipality" category.

Duesseldorf is the first large German city to implement a comprehensive green roof mapping program. The numbers are impressive. More than 730.000 m<sup>2</sup> are distributed across 1.680 buildings and parking garages.



Wolfgang Ansel, Director IGRA presented the Green Roof Award to Katja Holzmueller, Municipality of Duesseldorf

In Copenhagen the up-coming UN Climate Change Conference, which will be hosted in the Danish capital in December 2009, served to boost the city's new green roof initiative.



Stimulating the green roof idea in Denmark: Dorthe Romo, City of Copenhagen (left) and Finn Hansen, ZinCo Denmark (right)

For the category "Architecture/Construction", architecture firm Donnig + Unterstab of Rastatt received the prize for its 2008-opened education centre in Neckargemuend. The 4.000 m<sup>2</sup> roof area on this passive house-standard school was conceived with an extensive green roof which, besides additional insulation, also guarantees the anchorage of three large-scale photovoltaic facilities.



Sustainability and education: Germany's latest educational centre in "Passivhausstandard" also features a combination of green roofs and photovoltaics

As further prize winner, JTC Corporation from Singapore was distinguished for the project "Fusionopolis (Phase 1)". The highlights of this 2008-completed building are the themed roof gardens and intensive green roofs which were built on the 5<sup>th</sup>, the 17<sup>th</sup>/ 18<sup>th</sup> and the 21<sup>st</sup>/ 22<sup>nd</sup> floors of the complex. The highest roof garden sits at approximately 80 m altitude.



Ho Wan Weng, Managing Director of ZinCo Singapore Ltd and green roof consultant of the project "Fusionopolis Phase 1" received the IGRA Award on behalf of the JTC Corporation.



The roof gardens of Fusionopolis serve as the green lungs and social pockets for the office and lab staff. Courtesy: ZinCo Singapore Ltd

## The Congress Workshops:

# Technical Development and Political Support

## Technological Development

By international comparison, Germany already has retrospect on 30 years market development. However, in his presentation, "Past-Present-Future: Green Roof Techniques in Changing Times", IGRA President Roland Appl drew the timeline somewhat further and presented to date unknown examples from early 20<sup>th</sup> century Berlin.

Professor Gilbert Loesken (Head of FLL Green Roof Workgroup) subsequently clarified that the experiences from Germany cannot be transferred 1:1 to foreign green roof markets. Standards and quality specification must be aligned with national characteristics with regards to climate, vegetation, materials, and building laws. Practical expertise to the planning and realization of diverse green roof projects was conveyed by Bernd W. Krupka (green roof expert), Andreas Frank (Certified expert for flat roofs and waterproofing), Ralf Walker (Head of Technical Department, ZinCo GmbH) and Daniel Labhart (Nursery Labhart, Switzerland). Practical recommendations for the installation and maintenance of green roofs were imparted by green roof companies from Germany (Juergen Quindeau, Dach + Gruen), the Netherlands (Sijbrand Noome, van der tol) and Poland (Witoslaw Pastuszka, GCL), thereby deepening knowledge transfer to the audience. In conclusion Finn Hansen from ZinCo Denmark addressed marketing related issues.



30 years of green roof experience: landscape architect Bernd W. Krupka



Sijbrand Noome, van der Tol b.v. talked about his experiences with different green roof applications



Plenary sessions and workshops allowed further interaction and sharing of experiences between the participants and the speakers

## Political Sponsorship



Dusty Gedge, director of the UK green roof group "Livingroofs" and host of the World Green Roof Congress 2008 presented green roof policies in the Greater London area

The development of the green roof market is tightly conjoined with the commitment of municipally-funded support measures. To this end, Germany has many proven experiences that have been successfully implemented for many years. The range of funding incentives extend from direct financial subsidies, reduced stormwater fees and easier credit from the "KfW Bankengruppe" to the regulation of green roofs in development schemes. The field reports featured from Berlin, Duesseldorf, Munich, Stuttgart, Karlsruhe, Linz, London, Copenhagen and Portland clarified the various incentive situations in Germany cities and abroad. Internationally, it will be precisely such measures which must be further developed.



Surfaces of Creativity; Spaces of Delight: Singapore will host the Skyrise Greenery Conference 2010



Worth visiting: The rooftop park of Vivo City in Singapore – Skyrise Greenery Award Winner 2008

## Rendezvous Green Future

Sustainable urban development places high demand on the technical, ecological and aesthetic quality of construction. As formulated in his forward, Wolfgang Tiefensee, Federal Minister of Transport, Building and Urban Affairs and patron of the 2<sup>nd</sup> International Green Roof Congress states that, "the way in which we design our cities plays a key role in making our society sustainable". The goal is to build in harmony with nature and, thanks to green roof architecture, to create attractive living spaces and habitats. In this way, at least part of the green spaces lost to construction can be won back, presenting a diversity of returns for people. The harmony with which entirely greened urban districts influence the landscape was demonstrated by the Zeppelin excursion over the Friedrichshafen region on the last congress day. "Bringing Nature Back to Town" is the right device for a green future, which the 2<sup>nd</sup> International Green Roof Congress came one step closer to. The next green roof event is already in the pipeline. The Skyrise Greenery Conference 2010 in Singapore ([www.skyrisegreenery.com](http://www.skyrisegreenery.com)) will serve as a forum where international urban greenery experts from various disciplines will discuss the present and future trends of this growing sector.

### Now Available: The Congress Proceedings



Within 190 pages, the proceedings of the 2<sup>nd</sup> International Green Roof Congress contains contributions from the specialists, architects, planners, and installation companies demonstrating how green roofs can be safely planned and implemented today, using concrete object examples, from the simple garage greening to the 30.000 m<sup>2</sup> landscaped park. The section "Funding support for green roofs" offers a full overview of municipal green roof support in Germany and internationally.

The proceedings are available in English and German, and can be ordered for 39,80 Euro + shipping at:

[www.greenroofworld.com](http://www.greenroofworld.com)

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

- Masterpiece: Fusionopolis in Singapore – A Green Roofer`s Perspective
- Competitive: Integrated Rainwater Management with Green Roofs
- Successful National Green Roof Strategies: Case Study Denmark

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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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