From some 6,000 submissions in the third cycle of the Holcim Awards competition, the best were celebrated at five two-day events held in Casablanca, Milan, Buenos Aires, Washington D.C. and Singapore. Architects, other building professionals, and guests of Holcim came together to honor the 53 prize winners and to exchange ideas on the subject of sustainable construction. The winners of the regional main prizes are all nominated to compete for the Global Holcim Awards. All regional winners are eligible to compete for a Global Holcim Innovation prize. The two juries will make their selections in the first quarter of 2012. This issue of Foundations is dedicated to the groundbreaking projects showcased in the regional Holcim Awards 2011 presentations.

And the winners are...

High five: Julie Snow and Matthew Kreilich celebrate winning the Holcim Awards Bronze for the region North America for their project "Energy and water efficient border control station, Van Buren, ME, USA."
Regional Holcim Awards:

**North America**

- **Holcim Awards Gold**
  Regional food-gathering nodes and logistics network, Iqaluit, NU, Canada

- **Holcim Awards Silver**
  Zero net energy school building, Los Angeles, CA, USA

- **Holcim Awards Bronze**
  Energy and water efficient border control station, Van Buren, ME, USA

**Acknowledgement prizes**

- Energy efficient university building, Lawrence, KS, USA
- Energy neutral portable classroom, Honolulu, HI, USA
- Energy, water and waste efficient military installation, Fort Leonard Wood, MO, USA
- Environmental center and bird-watching facility using recycled materials, Chicago, IL, USA

**“Next Generation” prizes**

- Reinforced mangrove protective infrastructure, Miami, FL, USA
- Temporary festival structure using recyclable building components, Providence, RI, USA
- Foam concrete utilization research, Toronto, ON, Canada

**Latin America**

- **Holcim Awards Gold**
  Urban remediation and civic infrastructure hub, São Paulo, Brazil

- **Holcim Awards Silver**
  Sustainable post-tsunami reconstruction master plan, Constitución Chile

- **Holcim Awards Bronze**
  Urban regeneration master plan, Ciudad Juárez, Mexico

**Acknowledgement prizes**

- Ecological awareness and recreation reserve, Banderilla, Mexico
- Green university library, Santiago, Chile
- Library with integrated community outreach, Rosario, Argentina
- Recovery of the rail transport network, Oaxaca Valley, Mexico
- Urban transit corridor and river remediation master plan, Mexico City, Mexico

**“Next Generation” prizes**

- Energy self-sufficient water desalination facility, Córdoba, Argentina
- Reinvigorated waterways for transportation and sustainable development, Puerto Suárez, Bolivia
- Densification and upgrade of university buildings, Rio de Janeiro, Brazil

**Europe**

- **Holcim Awards Gold**
  Urban renewal and swimming-pool precinct, Berlin, Germany

- **Holcim Awards Silver**
  City hall and civic center recycled from former factory, Oostkamp, Belgium

- **Holcim Awards Bronze**
  Lifestyle apartments and infrastructure recycled from former freeway viaducts, near Scilla, Italy

**Acknowledgement prizes**

- High-density cottage garden structure, Appeltern, Netherlands
- High-efficiency concrete formwork technology, Zurich, Switzerland
- Low-cost apartments incorporating smart materials, Hamburg, Germany
- Medium rise timber office building in low-to-no carbon emissions district, Helsinki, Finland

**“Next Generation” prizes**

- Efficient fabrication system for geometrically complex building elements, London, UK
- Materials reuse and regional transformation scheme, Gijón/Xixón, Spain
- Bioluminescent devices for zero-electricity lighting, Seville, Spain
53 winners in 29 countries

Africa Middle East

Holcim Awards Gold
Secondary school with passive ventilation system, Gando, Burkina Faso

Holcim Awards Silver
Sustainable refurbishment of a primary school, near Al Azarije, Palestine

Holcim Awards Bronze
Training center for sustainable construction, Marrakesh, Morocco

Acknowledgement prizes
Affordable building materials from recycled agricultural waste, Zaria, Nigeria
Building implementing holistic architectural design, Masdar City, UAE
Sustainable public eco-tourism facility, Cape Town, South Africa
Urban precinct reconstruction and rehabilitation, Fez, Morocco

"Next Generation" prizes
Adaptive re-use of industrial site for urban agriculture, Pretoria, South Africa
Passive floodplain agricultural system, Gohatsion, Ethiopia
Culturally-sensitive urban master plan, Agadir, Morocco

Asia Pacific

Holcim Awards Gold
Locally-manufactured cob and bamboo school building, Jar Maulwi, Pakistan

Holcim Awards Silver
Urban agriculture and factory conversion, Bangkok, Thailand

Holcim Awards Bronze
Ecologically-designed retail and commercial building, Putrajaya, Malaysia

Acknowledgement prizes
Community structure to encourage social cohesion and development, Cepogo, Ngargorejo and Bongkok villages, Indonesia
Post-earthquake housing renovation, Kobe, Japan
Primary healthcare center, near Dharmapuri, India
Socially-integrated rural school, Sukoharjo, Indonesia
Urban renewal and transport circuit, New Delhi, India
Vertical informal settlement and waste recycling center, Jakarta, Indonesia

"Next Generation" prizes
Bicycle use for commuting revitalization project, Beijing, China
Town plan revitalization and urban development, Navi Mumbai, India
Decentralized sanitation system, near New Delhi, India
Lively and emotional

Ceremony for Africa Middle East in Casablanca, Morocco

The first of the five regional Holcim Awards ceremonies took place on September 8 in one of the world’s most beautiful Art Deco cities – in pulsating Casablanca. Rarely does a Holcim Awards event evoke as much emotion as here: the enthusiasm of the winners for their visions and prizes was immediately taken up by the audience of some 260 guests. During the festive dinner in the Palais du Ménouar the building professionals enjoyed intensive exchange with one another. On the thought-provoking guided tours the following day, it was confirmed that cosmopolitan Casablanca with its diversity and rich architectural heritage, was an ideal location for the ceremony.

Gold winners for Africa Middle East: Diébédo Francis Kéré and Dominique Mayer, Kéré Architecture, Germany.

Foulane Bouhssine from Agadir, Morocco, served an array of musical treats during the ceremony.

Winner of the Holcim Awards Gold, Diébédo Francis Kéré, congratulated by founding member of the Holcim Foundation Management Board, Claude Fussler.

The winners of the Holcim Awards from across Africa and the Middle East showed an enormous range of sustainable solutions across a diverse region.
At the poster exhibition immediately following the ceremony, the guests had the opportunity to learn in detail about the prize-winning projects.

The banquet following the Awards ceremony took in a beautiful setting – in the spectacular Palais du Méchouar.

Javier de Benito, Holcim Area Manager for Africa Middle East, with jury member Abderrahim Lahbabi, Ecole Supérieure d’Architecture de Casablanca, Morocco.

Casablanca is a laboratory for residential forms – the guests could see this on informative tours held on the second day.

Winners in the main category of the Holcim Awards 2011 Africa Middle East

Holcim Awards Gold
Secondary school with passive ventilation system, Gando, Burkina Faso
Main author: Diébédo Francis Kéré, Kéré Architecture, Germany

Acknowledgement prize
Affordable building materials from recycled agricultural waste, Zaria, Nigeria
Authors: Charles Oluwole Job, Frédéric Pichelin, and Andreas Rosenkranz, Bern University of Applied Sciences, Architecture, Wood & Civil Engineering, Switzerland, and others

Holcim Awards Silver
Sustainable refurbishment of a primary school, near Al Azarije, Palestine
Authors: Giovanna Romano, Diego Torriani, Alessio Battistella, Luca Trabattoni, Carmine Chiarelli, Valerio Marazzi, and Alberto Alcalde Villacampa, ARCò, Italy

Acknowledgement prize
Building implementing holistic architectural design, Masdar City, UAE
Main authors: Bob Gysin, Rudolf Trachsel, Sebastian El Khouri, Nadja Heitz, and Carmen Held, Bob Gysin Partner BGP Architekten, Switzerland, and others

Holcim Awards Bronze
Training center for sustainable construction, Marrakesh, Morocco
Authors: Anna Heringer, Germany; Elmar Nägele and Ernst Waibel, Austria; Martin Rauch, Baukunst GmbH, Austria; Salima Naji, Morocco

Acknowledgement prize
Sustainable public eco-tourism facility, Cape Town, South Africa
Authors: Andrew Justin Cooke and Jessica Tami Cohen, Architecture co-op, South Africa

Acknowledgement prize
Urban precinct reconstruction and rehabilitation, Fez, Morocco
Authors: Michel Mossessian, mossessian & partners, UK; Yassir Khalil, Yassir Khalil Studio, Morocco
Stylish and elegant

Ceremony for Europe in Milan, Italy

In the Italian economic metropolis Milan, the nearly 100-year-old Palazzo del Ghiacco provided an elegant setting for an atmospheric show on September 15. The gigantic former ice-skating hall with its impressive steel dome was divided into three for the ceremony: in the first section the reception was held, in the second the Awards presented, and in the third the festive banquet enjoyed. Well-known speakers and an attractive show program turned the evening into an adventure for all the senses for the 270 guests from 17 countries. The supplementary program on the second day took the guests to places of interest including the National Museum of Science and Technology Leonardo Da Vinci.

Engaging keynote speaker: Pietro Guindani, Chairman of the Board of Vodafone Italy.

The Kataklò Athletic Dance Theatre by Olympic rhythmic gymnast Giulia Staccioli entertained the guests with a performance at once dynamic and subtle.

The winners of the main prizes for Europe (from left): Tim Edler (Gold), Carlos Arroyo and Vanessa Cerezo (Silver), Tanguy Vermet, Samuel Nagotte and Philippe Rizzotti (Bronze).

The Palazzo del Ghiaccio was cleverly prepared and partitioned for the Awards ceremony.
An exhibition of project posters that proudly show progress of former prize winners confirms that the Holcim Awards is about creating tangible results towards sustainable construction.

A media breakfast is held on the morning following each Awards ceremony. This offers a chance to present the winning projects more fully – and to explain the goals of sustainable construction.

During the tour on the second day, guests ascended the Pirelli Tower, designed by Giò Ponti, and enjoyed spectacular views of Milan.

In the National Museum of Science and Technology Leonardo Da Vinci, guests admired the visionary creations a man revered both for his artwork and his technological ingenuity.

**Winners in the main category of the Holcim Awards 2011 Europe**

**Holcim Awards Gold**
Urban renewal and swimming-pool precinct, Berlin, Germany
Authors: Tim and Jan Edler, realities united, Germany; Denise Dih, DODK, Germany

**Acknowledgement prize**
High-density cottage garden structure, Appeltern, Netherlands
Authors: Marijke Bruinsma, De Stuurlui Stedenbouw, Netherlands; Marjan van Capelle and Arjen de Croo, Atelier Gras, Netherlands

**Holcim Awards Silver**
City hall and civic center recycled from former factory, Oostkamp, Belgium
Authors: Carlos Arroyo and Vanessa Cerezo, Carlos Arroyo Arquitectos, Spain Project development: Wolkenbouwer (Carlos Arroyo Arquitectos, Spain + ELD Partnership, Belgium)

**Acknowledgement prize**
High-efficiency concrete formwork technology, Zurich, Switzerland
Authors: Matthias Kohler, Fabio Gramazio, Silvan Oesterle, and Axel Vansteenkiste, Gramazio & Kohler, Architektur und Digitale Fabrikation – ETH Zurich

**Holcim Awards Bronze**
Lifestyle apartments and infrastructure recycled from former freeway viaducts, Scilla, Italy
Authors: Philippe Rizzotti Architects, France; Samuel Nageotte Architecture, France; Tanguy Vermet and Manal Rachdi, Off Architecture, France

**Acknowledgement prize**
Low-cost apartments incorporating smart materials, Hamburg, Germany
Authors: Frank Barkow and Regine Leibinger, Barkow Leibinger Architects; Mike Schlaich, Schlaich Bergermann und Partner, Matthias Schuler, TRANSOLAR Energietechnik, all Germany

**Acknowledgement prize**
Medium rise timber office building in low-to-no carbon emissions district, Helsinki, Finland
Authors: Matthias Sauerbruch, Sauerbruch Hutton, Germany; Adrian Campbell, Arup, UK; Jan-Christoph Zoels, Italy
Spirited and brilliant

Ceremony for Latin America in Buenos Aires, Argentina

The Awards ceremony in Buenos Aires on October 6 was imbued with South American flair and an air of history. Some 360 guests celebrated at “El Zanjón”, an important archaeological site containing a labyrinth of wide vaulted brick tunnels beneath a restored 1830s mansion. The participants enjoyed a flamboyant show featuring an ardent tango performance. Tours of the city’s architectural heritage on the second day included the 100-year-old Teatro Colón, acknowledged as one of the best theatres in the world; Casa Curutchet, one of only two buildings in the Americas by Le Corbusier; and crowned by an evening aboard “Madero Mystic”.

Latin Grammy award-winning pianist Lito Vitale contributed to the excitement of the ceremony with a performance of adapted classic tango pieces in a jazz style.

The Awards winners for Latin America (from left): Alejandro Aravena, Juan Cerda and Diego Torres (Silver); Alfredo Brillembourg and Hubert Klumpner (Gold); Jose Castillo and Saidee Springall (Bronze).

Markus Akermann, CEO of Holcim, welcomed the guests to Buenos Aires.

Elated Acknowledgement prize winners Lucie Nguyen and Delfin Montañana from Mexico.
The dinner reception was held in the majestic salon of “El Zanjon”, now a restored feature of the urban fabric of Buenos Aires.

Proud cultural heritage for guests of the ceremony: The tango evolved in Buenos Aires in 19th century, and is considered an essential element of the national psyche.

“El Zanjón” provided an inspiring setting for the exchange of ideas among the building experts.

A masterpiece right in front of the hotel: The Puente de la Mujer by Santiago Calatrava.

Winners in the main category of the Holcim Awards 2011 Latin America

Holcim Awards Gold
Urban remediation and civic infrastructure hub, São Paulo, Brazil
Authors: Alfredo Brillembourg and Hubert Klumpner, Urban Think Tank, Brazil

Acknowledgement prize
Green university library, Santiago, Chile
Main Author: Mathias Klotz, klotz y asociados Ida, Chile

Holcim Awards Silver
Sustainable post-tsunami reconstruction master plan, Constitución, Chile
Authors: Alejandro Aravena, Victor Oddó, Gonzalo Arteaga, Fernando García-Huidobro, Diego Torres, Cristián Martínez, and Juan Cerda, ELEMENTAL S.A., Chile; Alejandro Gutiérrez, Arup, UK; Eugenio Tironi, Tironi Asociados, Chile

Acknowledgement prize
Library with integrated community outreach, Rosario, Argentina
Authors: Alfredo Tapia and a team of 19 additional architects and engineers, AFT Arquitectos, Argentina

Holcim Awards Bronze
Urban regeneration master plan, Ciudad Juárez, Mexico
Authors: Jose Castillo and Saidee Springall, arquitectura 911sc, Mexico

Acknowledgement prize
Recovery of the rail transport network, Oaxaca Valley, Mexico
Main Author: Gustavo Madrid Vazquez, espacio entre tiempo Architects, Mexico

Holcim Awards Bronze
Sustainable post-tsunami reconstruction master plan, Constitución, Chile
Authors: Alejandro Aravena, Victor Oddó, Gonzalo Arteaga, Fernando García-Huidobro, Diego Torres, Cristián Martínez, and Juan Cerda, ELEMENTAL S.A., Chile; Alejandro Gutiérrez, Arup, UK; Eugenio Tironi, Tironi Asociados, Chile

Acknowledgement prize
Ecological awareness and recreation reserve, Banderilla, Mexico
Authors: Jorge Ambrosi, Ambrosi Arquitectos, Mexico; Pablo Rodolfo Pardo, Pardo Cué Arquitectos, Mexico

Acknowledgement prize
Urban transit corridor and river remediation master plan, Mexico City, Mexico
Authors: Elias Cattan, Delfin Montañana, Lucie Nguyen, David Mandujano, and Miguel Mercado, Taller13 Arquitectura Regenerativa, Mexico
Classic and jubilant

Ceremony for North America in Washington D.C., USA

Over 300 invited guests assembled on October 20 for the presentation of the Holcim Awards North America in the heart of the United States federal government district, just a stone’s throw from the White House. Fittingly, the Awards ceremony itself was held in the cavernous hall of the National Building Museum where tradition and innovation were mixed into an especially attractive cocktail. The program ran like proverbial clockwork amongst the prominent edifices of the city. Guests enjoyed well-orchestrated tours that enthusiastically presented the meeting place of the United States Congress, the United States Capitol, in both an architectural and historic context.

The Honorable Edward J. Markey, United States Representative, Massachusetts, commanded great attention during his address.

The winners the Holcim Awards Gold, Silver and Bronze for the region North America, together with the jury members and official guests.

Participants were introduced to the sustainability aspects of the famous Capitol building during the second day tour.

The National Building Museum was an appropriate and strikingly elegant setting for the Awards ceremony and celebratory banquet.
Benot-H. Koch, Member of the Executive Committee of Holcim, thanks keynote speaker Shelly Poticha, Director, US Office of Sustainable Housing and Communities.

The entertainment program during the ceremony was as diverse as North American culture: spanning from the modern string fusion of “La Femme Classique”...

...to the electrifying dance performance of “Urban Beat Alliance.”

After a day full of fascinating excursions, the farewell reception took place in the stylish Willard Intercontinental Hotel.

**Winners in the main category of the Holcim Awards 2011 North America**

**Holcim Awards Gold**
Regional food-gathering nodes and logistics network, Iqaluit, NU, Canada
Authors: Mason White, Lola Sheppard, and Fionn Byrne, Lateral Office / InfraNet Lab, Toronto, Canada; Nikole Bouchard, Lateral Office / InfraNet Lab, Princeton, USA

**Acknowledgement prize**
Energy efficient university building, Lawrence, KS, USA
Main Author: Dan Rockhill, Studio 804, Lawrence, USA

**Holcim Awards Silver**
Zero net energy school building, Los Angeles, CA, USA
Main authors: Gloria Lee, Nathan Swift, Swift Lee Office, Los Angeles, USA; Peter Simmonds, IBE Consulting Engineers, Sherman Oaks, USA; Steve Ratchye, Thornton Tomasetti Inc., San Francisco, USA; and others

**Acknowledgement prize**
Energy neutral portable classroom, Honolulu, HI, USA
Authors: Mark Anderson, Peter Anderson, Johnson Tang, Brent Sumida, Christopher Campbell, and Yevgeniy Ossipov, Anderson Anderson Architecture, San Francisco, USA

**Holcim Awards Bronze**
Energy and water efficient border control station, Van Buren, ME, USA
Authors: Julie Snow and Matthew Kreilich, Julie Snow Architects, Minneapolis, USA

**Acknowledgement prize**
Energy, water and waste efficient military installation, Fort Leonard Wood, MO, USA
Authors: Lyndsey Pruett and a team of 25 additional architects and engineers, US Army Corps of Engineers, Washington, D.C., USA

**Holcim Awards Silver**
Zero net energy school building, Los Angeles, CA, USA
Main authors: Gloria Lee, Nathan Swift, Swift Lee Office, Los Angeles, USA; Peter Simmonds, IBE Consulting Engineers, Sherman Oaks, USA; Steve Ratchye, Thornton Tomasetti Inc., San Francisco, USA; and others

**Acknowledgement prize**
Energy neutral portable classroom, Honolulu, HI, USA
Authors: Mark Anderson, Peter Anderson, Johnson Tang, Brent Sumida, Christopher Campbell, and Yevgeniy Ossipov, Anderson Anderson Architecture, San Francisco, USA

**Holcim Awards Bronze**
Energy and water efficient border control station, Van Buren, ME, USA
Authors: Julie Snow and Matthew Kreilich, Julie Snow Architects, Minneapolis, USA

**Acknowledgement prize**
Energy, water and waste efficient military installation, Fort Leonard Wood, MO, USA
Authors: Lyndsey Pruett and a team of 25 additional architects and engineers, US Army Corps of Engineers, Washington, D.C., USA

**Acknowledgement prize**
Environmental center and bird-watching facility using recycled materials, Chicago, IL, USA
Main Author: Jeanne Gang, Studio Gang Architects, Chicago, USA
Ceremony for Asia Pacific in Singapore

The series of regional Awards ceremonies reached its final crescendo in Singapore: On November 24 in the Ritz-Carlton Hotel, 430 guests from over 20 countries enjoyed a perfectly-orchestrated event full of emotion. Particularly great enthusiasm was generated by the supplementary program, which carried the group to places of interest in a future-focused urban environment including the soon-to-be-unveiled “Gardens by the Bay” and later to the top of highest hotel in town where everyone was impressed by the unique evening panorama of radiant Singapore.

Precise and radiant

Inspiring the international audience: The impressive drum show of the Tian Eng Troupe.

Explaining Holcim’s commitment to sustainability: Rolf Soiron, Chairman of the Board of Holcim.

A musical fusion of cultures was presented including the er-hu “Chinese violin” of Tony Tan.
Honored for their innovative and contextual visions for sustainable construction: Winners of the “Next Generation” prizes in Asia Pacific.

Winners of the Holcim Awards Silver for Asia Pacific for a factory conversion to urban agriculture in Bangkok, Thailand.

Exclusive event for the guests the Holcim Foundation: “Gardens by the Bay” shortly before its official inauguration.

Reaching its peak: In the New Asia Bar in the Swissôtel high above Singapore, the series of regional Awards ceremonies came to a stylish close.

Winners in the main category of the Holcim Awards 2011 Asia Pacific

Holcim Awards Gold
Locally-manufactured cob and bamboo school building, Jar Maulwi, Pakistan
Main author: Eike Roswag, Ziegert Roswag Seiler Architekten Ingenieure, Germany

Acknowledgement prize
Primary healthcare center, near Dharmapuri, India
Authors: Rajesh Renganathan and Iype Chacko Vernperampil, Flying Elephant Studio, India

Acknowledgement prize
Urban renewal and transport circuit, New Delhi, India
Authors: Madhav Raman and Vaibhav Dimri, Anagram Architects, India

Acknowledgement prize
Socially-integrated rural school, Sukoharjo, Indonesia
Main author: Dian Susilo, deesignhandmade, Indonesia

Holcim Awards Silver
Urban agriculture and factory conversion, Bangkok, Thailand
Authors: Isavaret Tamonut, TTH Trading Co., Ltd, Thailand; Architect Kidd Co., Ltd, Thailand; and others

Acknowledgement prize
Post-earthquake housing renovation, Kobe, Japan
Authors: Masaaki Takeuchi, uzulab, Japan; Shihoko Koike, Osaka City University, Japan

Acknowledgement prize
Vertical informal settlement and waste recycling center, Jakarta, Indonesia
Authors: Steven Brunsmann and Johan Krol, nunc architects, Netherlands; and others

Acknowledgement prize
Community structure to encourage social cohesion and development, Cepogo, Ngargorejo and Bongkok villages, Indonesia
Authors: Yandi Yatmo, Paramita Atmodiwirjo, Cindy Charisa, Adhiyia Pradana, Putera Anarta, and Susanto Putro, Dept of Architecture, Universitas Indonesia, Indonesia

Acknowledgement prize
Ecologically-designed retail and commercial building, Putrajaya, Malaysia

Holcim Awards Bronze

Holcim Awards Silver
Urban agriculture and factory conversion, Bangkok, Thailand
Authors: Isavaret Tamonut, TTH Trading Co., Ltd, Thailand; Architect Kidd Co., Ltd, Thailand; and others

Acknowledgement prize
Post-earthquake housing renovation, Kobe, Japan
Authors: Masaaki Takeuchi, uzulab, Japan; Shihoko Koike, Osaka City University, Japan

Acknowledgement prize
Vertical informal settlement and waste recycling center, Jakarta, Indonesia
Authors: Steven Brunsmann and Johan Krol, nunc architects, Netherlands; and others

Acknowledgement prize
Community structure to encourage social cohesion and development, Cepogo, Ngargorejo and Bongkok villages, Indonesia
Authors: Yandi Yatmo, Paramita Atmodiwirjo, Cindy Charisa, Adhiyia Pradana, Putera Anarta, and Susanto Putro, Dept of Architecture, Universitas Indonesia, Indonesia
The trophies that winners of the Holcim Awards receive are small works of art. They all signify special elements of architecture that are truly appreciated by the trophy recipients.

Holcim Awards Gold, Silver and Bronze
These are so-to-speak the skeleton of an icosahedron, a twenty-sided geometric solid. The icosahedron is one of the five Platonic solids, and it occurs frequently in nature, for example in molecules. The individual elements of this solid in red, black and grey – the colors of Holcim – represent the golden ratio in their proportions – a symbol of perfect harmony, which is what building professionals strive for in their sustainable projects.

Acknowledgement prizes: A pantograph
This instrument, invented in 1603, was used to reproduce drawings in all possible scales – before copiers and printers entered the working world. A special attribute of the pantograph is that it can easily reproduce the golden ratio, which does not lend itself to calculation.

“Modulor” inspires the “Next Generation”
It is an invention of the Swiss architect Le Corbusier. The system is considered the most important modern attempt to give architecture a mathematical order that reflects both the golden ratio and human proportions.

All trophies are mounted on a base made of the self-consolidating micro-concrete produced by the Product Innovation and Development department of Holcim Group Support Ltd. CEMROC® cement is evidence of Holcim’s recognition of products that display sustainable performance both during production and later during use. The concrete notably includes blast-furnace slag, and the production emits about 95% less CO2 than that of conventional Portland cement. It is ideal for building bridges, dams, and other hydraulic structures – and for the bases of the Holcim Awards trophies!

Concrete on the level
Concrete is a material of many uses. The first applications that usually come to mind are solid foundations and massive walls. But concrete can also be used to build light and sweeping buildings. It is a construction material that finds diverse usage – even when it comes to delicate precision. And the Holcim Foundation proves this, when the speakers at the Holcim Awards ceremonies are thanked and presented with a practical memento: a spirit level made of concrete.

As a measuring instrument, the level also symbolizes sustainability in a certain sense: It stands for balance and equilibrium. And a level made of concrete shows that even unusual solutions can function perfectly and be aesthetically pleasing.
Regional Holcim Awards juries 2011

Europe
1 Jean-Philippe Vassal, France
2 Leo Mittelholzer, Germany
3 Marta Malé-Alemany, Spain
4 Jürgen Mayer H., Germany
5 Kai-Uwe Bergmann, Denmark
6 Winy Maas, The Netherlands
7 Lucy Musgrave, United Kingdom
8 Hans-Rudolf Schalcher, Switzerland
9 Hansjürg Leibundgut, Switzerland

North America
1 Sheila Kennedy, USA
2 Nader Tehrani, USA
3 Harry Gugger, Switzerland
4 Mohsen Mostafavi, USA
5 Hans-Rudolf Schalcher, Switzerland
6 Bernard Terver, USA
7 Mark West, Canada
8 Ray Cole, Canada
9 Keller Easterling, USA

Latin America
1 Bruno Stagno, Costa Rica
2 Marc M Angélil, Switzerland
3 Vanderley M John, Brazil
4 Daniel Bermúdez Samper, Colombia
5 Michel Rojkind, Mexico
6 Carolyn Aguilar-Dubose, Mexico
7 Hans-Rudolf Schalcher, Switzerland
8 Angelo Bucci, Brazil
9 Andreas Leu, Switzerland

Africa Middle East
1 Javier de Benito, Switzerland
2 Hashim Sarkis, Lebanon
3 Joe Osae-Addo, Ghana
4 Abderraflf Lahbabi, Morocco
5 Amer Moustafa, UAE
6 Hans-Rudolf Schalcher, Switzerland
7 Mphethi Morojele, South Africa
8 Chrisna du Plessis, South Africa
9 Holger Wallbaum, Switzerland

Asia Pacific
1 Hans-Rudolf Schalcher, Switzerland
2 Olivia la O’ Castillo, Philippines
3 Gunawan Tjahjono, Indonesia
4 Wowo Ding, China
5 Momoyo Kaijima, Japan
6 Valérie Portefaix, China
7 Paul Hugentobler, Switzerland
8 Ashok B Lall, India
9 Uday Athavankar, India
The Holcim Awards competition is surely the one activity of the Holcim Foundation that gains the most media attention. Other initiatives have a deep effect, but are out of the spotlight: The Foundation directly supports sustainable building projects, including a vocational training center in Jakarta and the administration building at Tuban cement plant in Indonesia. These projects hold an importance that extends far beyond their locality – and both generate significant momentum toward sustainable construction.

Better buildings – thanks to the know-how of the Holcim Foundation

The Akademi Tehnik Mesin Industri (ATMI) is Indonesia’s leading educational institute for manufacturing engineering. A new building for offices, laboratories, classrooms and student areas will now reinforce this reputation. Holcim Indonesia, together with the Holcim Foundation, is helping cover the construction costs – and the project is also being jointly supported in another way.

Two experts for Jakarta

After the architecture of the new building was decided through a design competition, the plans were carefully assessed by the Technical Competence Center of the Holcim Foundation at the ETH Zurich. The experts recognized the project’s potential with regard to sustainability had not yet been fully exploited. To change this, the Holcim Foundation enabled two experts to conduct dedicated workshops in Jakarta: the ETH professors Hansjürg Leibundgut, an engineer who is regarded as a European authority in the field of sustainable building systems, and the renowned architect Dirk Hebel. The duo led a multi-day workshop with the local architect and engineers who designed the plans to create not just a good building, but an exceptional one.

No simple technology transfer

The declared intent of the two experts from Zurich was that the design should respond to the technical, social, economic and ecological conditions of Indonesia as fully as possible; thus their task was expressly not a matter of transferring Western technologies. The new four-story ATMI building is to have a minimal environmental footprint. A geothermal system, the concrete structure of the building, controlled ventilation, and a sophisticated shading system together provide cooling. The butterfly roof will harvest rainwater and accommodate photovoltaic panels to generate the power required by the building. Furthermore, sustainable materials such as pressed bamboo and recycled concrete will be used for the building. The groundbreaking building is set for completion by the end of 2012.
Cities do not always grow according to plan. In fact, in Mexico urban development is almost always informal. Architect Arturo Ortiz Struck studied the mechanisms of this informal development – and the Holcim Foundation supported his important work with a grant.

The municipality of Chimalhuacán is at the east of Mexico City. Most of its 500,000 residents live in informal neighborhoods and dwellings. Such a situation is typical for Mexico, where urban development is frequently decided and executed by newly arrived migrants. The mechanisms at work in this process are the subject of a long-term study by Mexican architect Arturo Ortiz Struck. In 2007 the Holcim Foundation gave the architect and his colleague Rozana Montiel a Ph.D. research grant for the project "Sustainability in poor areas: Chimalhuacán Informal squatter settlements in the context of the local and global discourses." In previous years, Struck and Montiel had examined how informal settlements arise, what rules shape the development, what relationship networks become established, and how development is influenced and supported by large companies.

Theory and practice
Upon this theoretical basis Arturo Ortiz Struck organized workshops with newly arrived citizens. The topic: sustainable construction. The architect directed the attention of the participants to aspects such as natural lighting, natural ventilation, heating, and cooling. Following the workshops, 17 new houses were constructed by residents who applied their new knowledge with great success.

Ambitious future plans
Arturo Ortiz Struck insists on children being taught very clearly about sustainability at an early age – when the children become older, many drop out of school. An interdisciplinary team, still to be established, is supposed to elaborate a new national elementary education curriculum – so that in the future the ideas of sustainable construction can be increasingly brought into informal settlements too.
Two new books on exemplary projects in France and Mexico

The Holcim Foundation regularly publishes monographs on leading sustainable construction projects. The latest two books in this attractive series present outstanding works in France and Mexico. They are available online as PDF or can be ordered as hardcopies at www.holcimfoundation.org/booklets

University building in Nantes

The Nantes School of Architecture in France is a perfect example of how one can make the most of limited resources. In this project, with a minimum budget, Lacaton & Vassal Architects succeeded in doubling the programmed usable surface area to 26,000 m² – at zero additional cost. One way they did this was by using industrial building systems and energy-efficient strategies. The university is being developed with a long-term view into the future. Because even if itself the architecture school moves out some day, the building can be used in other ways, thanks to its flexible structure, which is easy and simple to change. The book describes the project step by step.

86 pages, ISBN 978-3-7266-0092-1

Producing cement in the desert

The Holcim Apasco cement plant at Hermosillo, Mexico sets new industry standards for thermal efficiency, safety, water efficiency, and environmental stewardship. Members of the Holcim Awards jury for the region Latin America toured the new plant and were deeply impressed. Never before in a cement plant have the “target issues” for sustainable construction been applied as consistently as at Hermosillo, the experts found. Besides the technical description of the plant and an explanation of the green buildings of the plant, the publication gives insight into the strategies and philosophies practiced by Holcim concerning sustainable development.

98 pages, ISBN 978-3-7266-0093-8
The Holcim Awards recognize not finished works, but visions and works in progress. What happens to these projects after the competition? Do they remain lines on paper, or do they become reality? Two new videos show impressively what has become of the winning projects from the first two competition cycles.

There are good reasons why the Holcim Awards recognize projects rather than finished structures: In this way the Holcim Foundation intends to give visionary designs and progressive ideas a better chance. Also, the international acknowledgment a project receives can be a crucial help in stepping into the realization phase. The Holcim Awards are not an after-the-fact congratulation for an achievement, but an important driver – and this certainly does more to promote sustainable construction, which still requires a great boost.

However, this scheme carries an undeniable risk: It is possible that pipe dreams could be premiated that will never be built. The Foundation regularly reviews the status and development of the winning projects. The findings are encouraging: More than half of the nearly one hundred projects being monitored have been realized or have good chances of being built in the near future.

Some of the winning projects that have been built are such excellent models of sustainable construction that the Holcim Foundation decided to present them in films. These films were shown at the regional Holcim Awards ceremonies – and can also be viewed at www.holcimfoundation.org.

A focus on Canada
In no country have as many Holcim Award-winning projects been completed as in Canada. A film crew therefore visited some of the local winners – and asked them about the significance of the Holcim Awards for their project. The responses show that the competition plays the role of a driver for sustainable construction: “Had we not won a Holcim Award, we would not be standing here in front of a finished building today,” says for example John Gunn. His “Living with Lakes Center for freshwater restoration and research, Sudbury, Canada”.

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Success Stories
The film “Success Stories” is a “journey around the world in seven minutes”: It presents ten winning projects from all world regions and all categories that have been built and are in use today. The portraits of the buildings document the enormous diversity of sustainable construction – as well as the sound judgment of the juries, who select from a multitude of entries the projects that can fill the role of shining examples.

The Holcim Awards have great depth because it follows a design through its growing pains and construction phase and is therefore able to share the lessons learned.” – Danny Pearl, Global Holcim Awards Bronze 2006 winner for “Greening the Benny Farm, Montréal, Canada”.

““The Holcim Awards gave us the international recognition we needed - and without it, the project simply wouldn’t have been able to go ahead.” – John Gunn, Holcim Awards Bronze 2008 winner for “Living with Lakes Center for freshwater restoration and research, Sudbury, Canada”.

The Holcim Awards are full of “Success Stories” – an impressive array of updates are now presented in a film.

See www.holcimprojects.org for a current status report of all winning projects.

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“Success Stories” is the Group-in-ternal magazine of the Holcim Foundation for Sustainable Construction and distributed as PDF to the readers of the Holcim News.

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The Holcim Foundation thanks everyone who contributed to the success of the regional Awards competitions and ceremonies in 2011.