

# LafargeHolcim Awards

New York City, September 24, 2015



# Foundations

# 18

December 2015

The 4<sup>th</sup> International LafargeHolcim Awards competition cycle concluded 2015 with celebrations for the three best entries out of more than 6,000 submissions. Pictured is the winning team of "The Dryline", a resiliency project to protect Manhattan from future floods; the consortium is led by BIG - Bjarke Ingels Group (Copenhagen/New York) and One Architecture (Amsterdam). Find out more about the Lafarge-Holcim Foundation for Sustainable Construction, its activities and its most recent events in this magazine.

# Personal and virtual networking around the globe

## Creating awareness and promoting excellence in sustainable construction

Welcome to Foundations18, the first issue in the attire of LafargeHolcim, a new leader for a new world. This newsletter-style magazine appears periodically in electronic form (and a few printed issues) to inform employees of the activities of the LafargeHolcim Foundation for Sustainable Construction and how it helps positioning LafargeHolcim as a thought leader in the construction sector – one which plays a key role in shaping tomorrow's building and construction industry.

The Foundation for Sustainable Construction operates independently from LafargeHolcim but is financially fully supported by the company. Since it was founded in 2003, the Foundation has been managed by a Board composed of members from throughout the world, a majority of whom are independent of the sponsor company. The Steering Committee is led by LafargeHolcim CEO Eric Olsen; it also includes Executive Committee members Roland Köhler and Gérard Kuperfarb as well as Marilyne Andersen, Marc Angéil and Harry Guger representing the Swiss Federal Institute of Technology.

Through the Foundation's activities including the international Awards competition, LafargeHolcim expands its advocacy in innovation and sustainability by promoting and rewarding the most progressive concepts along the building and construction value chain – triggering impact and recognition beyond the industry sector, business and markets, products and solutions.

To accumulate and share knowledge, the Foundation for Sustainable Construction relies on its academic network of experts and renowned technical universi-

ties on all continents. In addition, a designated Awards Coordinator in each country organization of Lafarge Holcim represents the interests of the Foundation and acts as a link between the operational activities of the Group and the Foundation's initiatives to promote sustainable construction.

At the corporate level, synergies are exploited through strategic and practical collaboration with various departments, from Innovation to Affordable Housing, from the Product and Solutions Research Center in Lyon to the Sustainable Development function, which includes Sustainable Construction.

The office of the Foundation for Sustainable Construction consists of motivated staff who in this issue reflect from a personal perspective on the activities of the Foundation during this year, in which the 4<sup>th</sup> International Awards competition was concluded (from page 6). On page 13 we look forward into 2016 and the start of the 5<sup>th</sup> cycle of the LafargeHolcim Awards for Sustainable Construction.

While this publication serves mainly to disseminate information within the Group, the website [www.lafargeholcim-foundation.org](http://www.lafargeholcim-foundation.org) plays a key role as a global platform for issues and examples of sustainable construction. It features project updates, event reports and much more in real time. Visit our website and become part of our social media community!

Edward Schwarz, General Manager



The Global Gold Award 2015 went to "Articulated Site – Water reservoirs as public park" in Medellín, Colombia. Page 6.



The Global Silver Award 2015 went to "Post-war collective – Community library and social recuperation" in Sri Lanka. Page 7.



The Global Bronze Award 2015 went to "The Dylene – Urban flood protection infrastructure" in New York City, USA. Page 8.



Mutual discovery meetings at the LafargeHolcim Research Centre (LCR) near Lyon: Steering Committee members of the LafargeHolcim Foundation Harry Gugger (second from the left), Gérard Kuperfarb, Marilynne Andersen and Marc Angéilil with Edward Schwarz (far left) and Dominik Baumann (right) from the office of the Foundation. Additional meetings with experts of LCR took place with members of the Academic Committee of the LafargeHolcim Foundation c/o Swiss Federal Institute of Technology (ETH Zurich) including Professors Philippe Block (architecture and structure), Dirk Hebel (architecture and construction) and Guillaume Habert (Chair for Sustainable Construction, initiated and funded by LafargeHolcim).



**LafargeHolcim**

### **Credibility beyond our industry**

Promoting sustainable construction supports our claim of sharing responsibility for the future of our planet and society, and of meeting the challenges of increasing urbanization; the LafargeHolcim Foundation for Sustainable Construction enhances the reputation of our brand and the image of our Group.

### **Competence beyond our products**

Inspiring, encouraging, teaching, promoting and enabling visions and projects in sustainable construction demonstrates our commitment to drive sustainable solutions for tomorrow's building and infrastructure; the LafargeHolcim Foundation for Sustainable Construction contributes to a higher quality of life.

### **Relationships beyond our business**

Living up to high expectations and acting in partnership with institutions and experts creates trust and global networks; the LafargeHolcim Foundation for Sustainable Construction fosters the buy-in and pride of all our stakeholders.

# Experts of the global LafargeHolcim Awards jury 2015

**“The Awards have not only brought awareness, but have also raised the standard for how we deal with sustainability.”**



**Alejandro Aravena, Chile**  
Partner Architect and Executive Director of Elemental; Curator of the Biennale de Venezia 2016, the 15<sup>th</sup> International Architecture Exhibition. Global jury member 2015 of the Awards for Sustainable Construction.

**“The Awards are the most significant – they are the only awards that focus purely on innovation in the context of sustainability.”**



**Maria Atkinson, Australia**  
Sustainability Business Advisor; CEO of the Green Building Council of Australia. Global jury member 2015 of the LafargeHolcim Awards for Sustainable Construction.

**“The Awards bring together an enriching variety of ideas and celebrate people’s ambitions to live better lives.”**



**Meisa Batayneh Maani, Jordan**  
Founder and Principal of Maisam Architects & Engineers. Global jury member 2015 of the LafargeHolcim Awards for Sustainable Construction.

**“The Awards are very valuable, very important and different: because they celebrate integrating sustainability in a holistic way.”**



**Yolanda Kakabadse, Ecuador**  
President of WWF International; Chair of the Advisory Board of Fundación Latinoamericana. Global jury member 2015 of the LafargeHolcim Awards for Sustainable Construction.

**“The Awards have become in many ways the standard bearer of the values of sustainability across the globe.”**



**Mohsen Mostafavi, USA**  
Dean of the Graduate School of Design at Harvard University. Global jury head 2015 of the LafargeHolcim Awards for Sustainable Construction.

**“The Awards are a great chance to present professional skills and smart design to the public.”**



**Matthias Schuler, Germany**  
Professor of Environment Technology, Graduate School of Design at Harvard University; Founder of Transsolar Energietechnik. Global jury member 2015 of the LafargeHolcim Awards for Sustainable Construction.

# Members of the Steering Committee of the LafargeHolcim Foundation

**“The Foundation is engaged in topics relevant to the circular economy of construction and tomorrow’s materials and building sector.”**



**Marilyne Andersen, Switzerland**  
Dean of the School of Architecture, Civil & Environmental Engineering, Swiss Federal Institute of Technology (EPFL Lausanne). Member of the Steering Committee of the Lafarge Holcim Foundation for Sustainable Construction.

**“The Foundation contributes to the evolution of sustainable construction from something rare to establishing a new convention within the discipline.”**



**Marc Angéilil, Switzerland**  
Professor of Architecture and Design, Swiss Federal Institute of Technology (ETH Zurich). Member of the Steering Committee and Head of the Academic Committee of the LafargeHolcim Foundation for Sustainable Construction.

**“The Foundation recognizes research in sustainable construction and is an important source of motivation.”**



**Harry Gugger, Switzerland**  
Professor of Architecture and Chair of Laboratoire Bâle, Swiss Federal Institute of Technology (EPFL Lausanne). Member of the Steering Committee and of the Academic Committee of the LafargeHolcim Foundation for Sustainable Construction.

**“The network of the Foundation supports the research, and sustainable development activities of LafargeHolcim.”**



**Gérard Kuperfarb, France**  
Member of the Executive Committee of LafargeHolcim, responsible for Growth and Innovation. Member of the Steering Committee of the LafargeHolcim Foundation for Sustainable Construction.

**“The Foundation provides non-commercial platforms to interact with the stakeholders of LafargeHolcim on all levels.”**



**Roland Köhler, Switzerland**  
Member of the Executive Committee of LafargeHolcim, responsible for Europe. Member of the Steering Committee of the LafargeHolcim Foundation for Sustainable Construction.

**“The Foundation acts as an information hub and enabler to intensify the global reputation of LafargeHolcim.”**



**Eric Olsen, Switzerland**  
Chief Executive Officer of Lafarge Holcim. Chairman of the Steering Committee of the LafargeHolcim Foundation for Sustainable Construction.

# Community project taking shape



Visitors to the construction site of UVA Orfelinato were impressed by the level of progress, and the characteristic roof decks already attracted a great deal of attention. The completed site will be handed over to the community on December 29, 2015.

## Global Gold Award ceremony in Colombia

Cradled by the mountains forming the Aburrá Valley, Medellín is often referred to as the “City of Everlasting Spring”. The lively town at an elevation of 1,500 meters enjoys spring-like temperatures year-round, and was the focal point of the Global Gold Award ceremony on August 5. Some 200 guests gathered to celebrate the winning project in a full-day event, deliberately scheduled to take place in the midst of the colorful “Fiesta de las Flores”.

The Gold Award was conferred to Colectivo720, a team of young Colombian architects from Cali, led by Mario Camargo and Luis Tombé. Instead of demolishing the decommissioned water tanks, their project “Articulated Site – Water reservoirs as public park” improves the urban fabric by converting the reservoirs into an open public park and venue for cultural and sporting activities. The urban project addresses socio-political issues by linking neighborhoods together and is part of a series of similar interventions initiated and enabled by Empresas Públicas de Medellín (EPM) in collaboration with the city council. The construction technology is based on

the use of available local materials and resources within a rationalized construction method, allowing active local knowledge with easy labor training programs, and promoting community participation in low-risk construction activities.

Following the ceremony in the morning and an open air lunch, the organizers arranged an exclusive city tour including a visit to the construction site of the winning project (also called “UVA Orfelinato”), and “UVA La Alegria” another recently completed community project of EPM. The excursion concluded with a ride on the “Metrocable”, a gondola lift that is part of the public transport system of Medellín. The gondola provides spectacular views of the vibrant city in the background and the peaceful vegetation below. An instant feeling of relaxation sets in when floating above the rainforest in an 8-person cabin. After a ten minute ride the “Metrocable” reaches “Parque Arví”, a 16,000 hectare ecological nature reserve known for its wildflowers, butterflies and hiking trails, where the group was welcomed with traditional musicians and tasty Antioquian specialties.

Carmen Zeindler, Awards & Events Coordinator



The project creates urban spaces around a series of water tanks to provide civic space at the intersection of architecture, landscape, infrastructure, and urban design. The pre-existing elements such as two decommissioned water reservoirs are transformed to create an outdoor auditorium and a venue for community activities.



Pictured from left: Juan Calle, General Manager of Grupo EPM; Jaime Hill, CEO of Holcim Colombia; Aníbal Gaviria, Mayor of Medellín; prize winner Mario Camargo of Colectivo720 and Pascal Casanova, LafargeHolcim Executive Committee member responsible for Latin America.

# On Site celebration with a view



More than 200 guests from 16 countries attended the Global Silver Award ceremony, which was held in the library wing of the building that won the prize.

## Global Silver Award ceremony in Sri Lanka

It was with much anticipation that the more than 200 guests of the Global Silver Award 2015 ceremony disembarked from the Viceroy Special steam train at the colonial-style Ambepussa station on September 1. After only a short walk to the nearby military base of the Sri Lankan Army, the old-world charm was quickly left behind and the Award winning project "Post-War collective: Community library and social recuperation" came into view between the trees in a dramatic hilltop setting. Already on first sight, it became evident to the visitors that project authors Milinda Pathiraja and Ganga Ratnayake from Robust Architecture Workshop in Colombo have invested a lot of effort in finding the ideal way to integrate their building into the breathtaking landscape: huge windows, rammed-earth walls and recycled wooden railway sleepers characterize the slender building which sits lightly in the landscape, respects the surrounding trees and encase an inner courtyard. For the very first time in the history of the Awards competition, the prize was celebrated on the site of the winning project, giving guests the opportunity to build their understanding of the creativity of sustainable construction.

During the ceremony hosted by Holcim Lanka, Member of the Global jury and of the Board of the LafargeHolcim Foundation, Maria Atkinson, as well as Major General Boniface Perera, Colonel of the Sinha Regiment, both emphasized the socio-economic merits of the project. The approach aimed to reintegrate former soldiers into post-civil war Sri Lankan society by training them in building techniques and thus providing them with skills that help them build a livelihood after they leave the army. A certificate stating the range of skills learnt through the construction of the community library was handed over to every soldier at the event. LafargeHolcim representatives Ian Thackwray, Exco Member Asia Pacific, Bi Young Chungunco, Area Manager South East Asia (West), and Philippe Richart, CEO of Holcim Lanka joined the winners on stage and congratulated them on creating a solution-driven approach to sustainable development that celebrates both community and structures aligned with local climate and materials. The ceremony concluded with a guided tour through the various rooms of the library and an atmospheric dinner on the premises of the army base.

Dominik Baumann, Head of Communications



In a short uphill procession the guests were accompanied to the ceremony venue by traditional Sri Lankan drummers.



The placement of the building on site retained all existing trees, while its linear footprint allows cross-ventilation and brings natural light into all rooms.



Presentation of the Global Silver Award 2015 including prize winners Ganga Ratnayake (holding trophy) and Milinda Pathiraja (holding certificate) of Robust Architecture Workshop, Colombo and team members, representatives of the Sri Lankan Army, LafargeHolcim, and the Global Awards jury.



Children's library: The finished building is a repository of knowledge for soldiers and the local community. For all, the project delivers the possibility of social cohesion and personal advancement.

# Celebrating a community driven vision



Aerial view of The Dryline showing Battery Park: The project proposes a protective ribbon in Southern Manhattan using a series of raised berms and other measures to create public spaces along the water's edge, forming a large-scale integrated flood protection system.

## Global Bronze Award ceremony in New York, USA

Corinthian columns, marble mosaic floors, a coved ceiling, and all of it stunningly lit: the atmosphere in the grand ballroom hall was – grand! The perfect setting for more than 200 guests to catch-up, make new friends and celebrate the Global Bronze Award 2015 on September 24. LafargeHolcim US, the host of the event, chose a time-honored New York City landmark to conclude the ceremonies of the 4<sup>th</sup> Awards cycle: the “Capitale”. The former Bowery Savings Bank opened in 1893 and was converted into an event location around 110 years later, a display of durability over time, completely in sync with the idea of winning project “The Dryline – Urban flood protection infrastructure”.

A team led by BIG – Bjarke Ingels Group and One Architecture received the Global Bronze Award for The Dryline. It addresses New York City's

vulnerability to coastal flooding following Hurricane Sandy with a protective ribbon in Southern Manhattan. The 12km-long infrastructural barrier incorporates public space with the high-water berms doubling as parks, seating, bicycle shelters or skateboard ramps. In an emergency, the shutters close forming a flood-water barrier. The design was developed in local workshops to integrate the needs and wishes of the affected communities.

Daniel Zarrilli, Director of the New York City Mayor's Office of Recovery and Resiliency highlighted the importance of the project in building social and infrastructural resiliency. “New York City has seen the devastation caused by Sandy. We are firmly committed to addressing these threats, strengthening our neighborhoods, and building a more tenacious New York,” he said. Alain Bourguignon, LafargeHolcim Exco member responsible for North America, explained

that the Awards is an integral part of the company's commitment to sustainable development. “We want to remain the most CO<sub>2</sub> efficient international cement producer. We want to leverage our position as the world leader in the building materials industry to support sustainable construction beyond our production plants and distribution chains. Through the Awards, we aim to advocate solutions that incorporate architectural excellence and enhanced quality of life”, he added. The head of the Global Awards jury 2015, Mohsen Mostafavi, praised the project in a video message: “This is a bold proposition to tackle future challenges by means of a construction that offers a multiple value to society – turning a problem into an opportunity, and making an outstanding contribution in terms of risk and resiliency”, he said.

Caterina Beffa, Awards Coordinator & Country Relations



The winners of the Global Bronze Award together with representatives of LafargeHolcim and the Global Awards jury.



Following the ceremony the guests enjoyed dinner in the fabulous former banking hall. Below the clock sits the old vault which has been transformed into an office.



# The challenge of re-materializing construction



The 2<sup>nd</sup> LafargeHolcim Roundtable was held in the Werner Oechslin Bibliothek in Einsiedeln, Switzerland. The library functions in co-operation with the ETH Zurich and specializes in primary sources on architecture and architectural theory.

## International Roundtable for Sustainable Construction

Due to its vast scale, the built environment has an enormous economic, environmental and social impact: but this scale also means improving the performance of the construction industry has a huge potential to contribute to a more sustainable future. With the objective of devising a clear agenda for retooling and reorienting construction, the LafargeHolcim Foundation brought together 18 of the world's foremost thinkers from 12 countries for its Roundtable 2015 dedicated to "Re-materializing construction".

The first Roundtable took place in 2014 and was hosted by the Massachusetts Institute of Technology (MIT) in Boston, USA. It focused on the same topic and led to concrete proposals which formed the basis of the follow-up event. The experts met at the Werner Oechslin Library in Einsiedeln, Switzerland in June. At

the two-day meeting, leading minds from materials science, engineering, architecture, sociology, policy and industry proposed a series of measures to reduce material use in individual buildings and to improve sustainability in the logistics that distribute these materials.

The built environment accounts for the use of 40 % of all gravel and sand, 25 % of virgin wood, 40 % of energy and about 20 % of water. By some estimates, buildings are directly or indirectly responsible for over half of all global CO<sub>2</sub> emissions. Better materials protocols can deliver lower emissions and reduced dependence on resource extraction from the natural environment. Beyond increasing energy efficiency, it is necessary to focus on material stocks and flows in order to accelerate momentum toward sustainable construction. 27 propositions were presented and debated amongst the group that focus on extraction

to processing, transport, installation, maintenance, and removal. The concepts included reducing building mass to enable materials savings; alternative strategies for heating and cooling; quantifying global materials flows; reducing materials wastage rates; labels and measures of life-cycle cost and embodied energy; improved recycling during demolition; designing for a flexible lifespan; leveraging local knowledge; and envisioning alternate futures.

The findings and strategies that could play a decisive role in improving global sustainability were summarized in a draft publication that will form the basis for further discussions (see [www.lafargeholcim-foundation.org/roundtable](http://www.lafargeholcim-foundation.org/roundtable)).

Kevin Jones, Senior Communications Consultant



The Roundtable developed concepts to enable measures of quality to be brought into sync with demands for quantity.



(l-r): Mark Swilling (South Africa), Marc Angéilil (Switzerland), Susan Parnell (South Africa), Mark Jarzombek (USA), Sarah Nichols (Switzerland), Philippe Block (Switzerland), Reed Kroloff (USA), Shrashtant Patara (India), Guillaume Habert (France/Switzerland), Werner Oechslin (Switzerland), Harry Gugger (Switzerland), Dirk Hebel (Singapore/Switzerland), Xuemei Bai (Australia), Vivian Loftness (USA), Anna Heringer (Austria), Alejandro Aravena (Chile), John Fernandez (USA), Maarten Gielen (Belgium), and Michael Braungart (Germany/Netherlands).

# Interaction between Next Generation prize winners from all continents



Pope Francis addressing the United Nations General Assembly on climate change the following day. Projects and teams represented Argentina, Austria, Bangladesh, Brazil, Canada, China, Costa Rica, France, Indonesia, Ireland, Lebanon, Mexico, Morocco, Russia, South Africa, Spain, and the United States.

The 24 teams were grouped into three Labs by project scale: S, M, and L. Each team introduced its project in a condensed 5 minute presentation, followed by a discussion moderated by Lab Operators on the future of sustainability. After lunch on a rooftop terrace overlooking Times Square, the Labs came together to present and discuss their findings. Interestingly, each of the groups emphasized the roles of culture, place, and communication within future developments of sustainability.

The S-Lab, moderated by architects Gloria Lee of Swift Lee Office in Los Angeles and Frano Violich of Kennedy & Violich in Boston, developed 12 points of sustainable design. They focused on basic elements as the building blocks of more complex works, summarized as "S has the power..."

The M-Lab was led by architecture school Dean Marilyn Anderson of the Swiss Federal Institute of Technology (EPFL Lausanne) and Reed

The Next Generation prize-winners 2014 from around the world met at the Knickerbocker Hotel on Times Square in New York.

## First Awards Lab for students and young professionals

"The Awards Lab was possibly the best event ever held by the LafargeHolcim Foundation", said Marc Angéilil, architecture professor at the Swiss Federal Institute of Technology (ETH Zurich) and Head of the Academic Committee of the Foun-

datation in the evening of September 24. Preceding the Global Awards Bronze hand-over event, more than 50 young Next Generation 2014 prize winners from around the world met in New York to exchange ideas about the future of sustainable construction. Significantly, the event was held during Climate Week NYC 2015, with



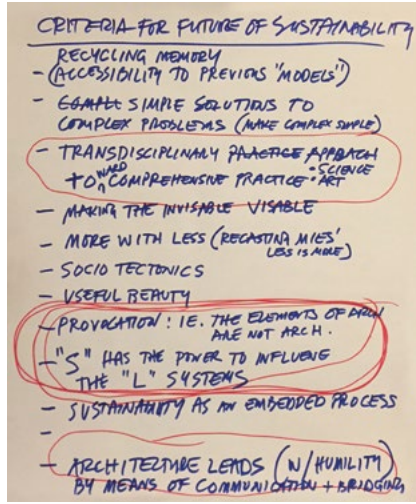
The Awards Lab gave participants the opportunity to get to know each other and to exchange ideas on the future of sustainable construction.



The Lab operators presented the workshop findings to the plenum: Marilyn Anderson and Reed Kroloff talk about the topics discussed in the M-Lab.

Lab presentation of Award-winning project "Children's Ziggurat" by Hilary Sample, MOS Architects, New York

Lab presentation of "The Dryline" by Kai-Uwe Bergmann, BIG - Bjarke Ingels Group and Matthijs Bouw, One Architecture, the Netherlands.



- VISIBILITY + POPULARITY
- ACCESSIBLE
- FULL CYCLE
- TRENDY IS OK
- INFRASTRUCTURE AS A CREATIVE OPPORTUNITY
- MULTIFUNCTIONAL
- HYBRIDIZATION
- RE-USING WHAT WE HAVE
- MOVING AWAY FROM COMPARTMENTALIZATION
- RE-CONCEIVING THE AUTOMOTIVE INFRASTRUCTURE
- MAKING THE SUSTAINABLE FUNCTIONS VISIBLE

Findings of the small, medium and large scale Labs.

Kroloff of the Cranbrook Academy of Art in Bloomfield Hills, USA. The group created a complex network of sustainable criteria, forming a critique of contemporary "blueprint" development.

The L-Lab, steered by architect Sarah Graham of agps in Los Angeles and policy director Laurie Kerr of the Urban Green Council in New York, underscored the roles of politics, cultural limitations and possibilities, and education within future sustainable development.

The panel discussion, moderated by Marc Angélli, noted the relative absence of technology, materials, and

environment within the group dialog. None of these, however, were lacking within the projects themselves, which proposed adaptive re-use, advanced environmental technologies, inventive site strategies, social innovations, and sophisticated aesthetics. The Next Generation participants appeared to consider these criteria as given, preferring to discuss the importance of social interaction and cultural appropriateness. The panel concluded, appropriately enough, on the importance of aesthetics within sustainable design and construction.

Bracketing the lab workshops were project presentations by two of the Global Awards finalist: Hilary Sam-

ple of MOS Architects in New York introduced the Children's Ziggurat, a locally adapted orphanage in Kathmandu, Nepal.

Kai-Uwe Bergmann of BIG in New York and Matthijs Bouw from One Architecture in Amsterdam presented "The Dryline", Urban Flood Protection Infrastructure in Manhattan, the Global Bronze Award winner 2015.

Sarah Graham, Founding Partner, agps architecture in Zurich and Los Angeles



The concluding debate focused on the importance of social interaction and cultural appropriateness, bringing the Lab scales together.



Participants were split up in three Labs to focus on small, medium or large scale projects. There each of them presented their prize-winning projects and engaged in lively discussions with the Lab operators and the rest of the group.

# What is sustainable construction?

Sustainable construction is in the center of all activities of the Lafarge-Holcim Foundation. How is sustainability in construction defined? Can it be measured? To make the criteria of sustainable construction concise and transparent, the Foundation and its

partner universities on all continents defined five “target issues”. They consider sustainable construction from a holistic perspective and serve as the basis for the adjudication process of the LafargeHolcim Awards competitions.



“Public Condenser – Low-cost flexible university building” by Muoto architectes, Paris, France (Silver Award 2014 Europe).



“Children’s House – Pedagogically aligned school”, San Andrés Payuca, by AT103, Mexico City (Bronze Award 2014 Latin America).

## Progress

### Innovation and transferability

Projects must demonstrate innovative approaches to sustainable development, pushing the envelope of practice and exploring new disciplinary frontiers. Breakthroughs and trend-setting discoveries must be transferable to a range of other applications.

## People

### Ethical standards and social inclusion

Projects must adhere to the highest ethical standards and promote social inclusion at all stages of construction, from planning and building to use and servicing; to ensure an enduring positive impact on communities. Proposals must demonstrate how they enhance the collective realm.



“Hy-Fi – Zero carbon emissions compostable structure” by The Living, New York, USA (Bronze Award 2014 North America).

## Planet

### Resources and environmental performance

Projects must exhibit a sensible use and management of natural resources throughout their entire life cycle. Long-term environmental concerns, especially pertaining to stocks and flows of material and energy, should be an integral part of the design philosophy.



“Megacity Skeleton – Stakeholder participation for urban up-grading”, Jakarta, Indonesia, by Unitydesign, Tokyo, Japan (Acknowledgement prize 2014 Asia Pacific).

## Prosperity

### Economic viability and compatibility

Projects must be economically feasible and able to secure financing – whether from public, commercial, or concessional sources – while having a positive impact on society and the environment. Avoiding the wasteful consumption of material resources, an economy of means in construction is to be promoted.



“Evergreen City – Urban pine forest rehabilitation” by Raed Abillama Architects, Beirut, Lebanon (Silver Award 2014 Africa Middle East).

## Place

### Contextual and aesthetic impact

Projects must convey a high standard of architectural quality as a prevalent form of cultural expression. With space, form and aesthetic impact of utmost significance, the material manifestation of the design must make a positive and lasting contribution to the physical, human and cultural environment.

# From (Forum) theory to (Awards) practice

## Activities in 2016 with inclusion of country operations

In 2016 the 5<sup>th</sup> cycle of the LafargeHolcim Foundation for Sustainable Construction will begin. Traditionally in the first year, an international Forum takes place, dedicated to a current topic in sustainable construction. In the second half of the year, the next LafargeHolcim Awards will open for entries, where country operations will play a vital role in promoting this “flagship” competition.

The 5<sup>th</sup> LafargeHolcim Forum will be in Detroit in April 2016 and focus on the topic of “Infrastructure Space”, while considering this theme at several levels: the architectural, the metropolitan, the territorial, and the planetary scale. The results of the three-day Forum with its 300 experts will be enriched with additional content and assembled into an academic publication. Country operations of LafargeHolcim may nominate and sponsor participants. The Forum also accepts individual registrations (for details see back cover page or [www.lafargeholcim-forum.org](http://www.lafargeholcim-forum.org)).

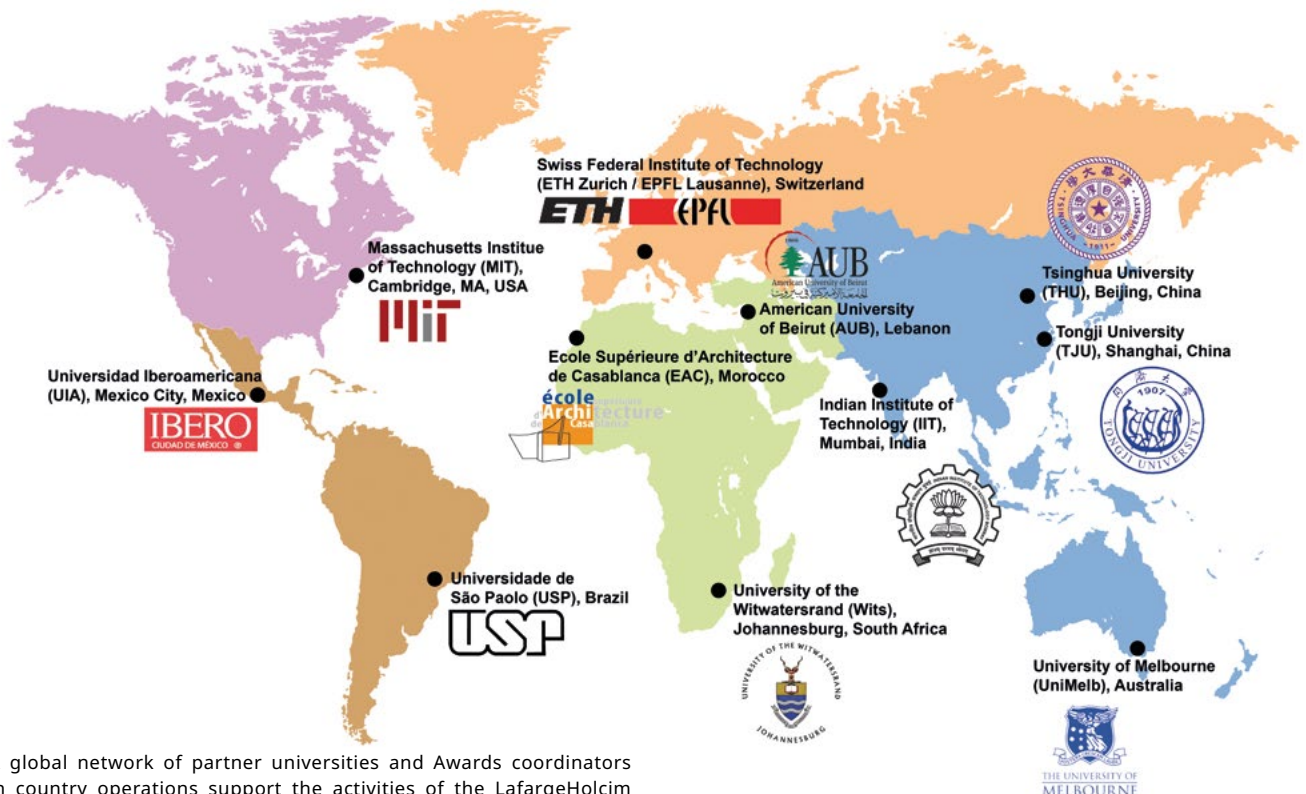
The LafargeHolcim Foundation for Sustainable Construction will be extending its network of partner universities in 2016 and also conduct workshops with representatives of country operations; traditionally, each country appoints an “Awards Coordinator”, a function linking and leveraging the activities of the Foundation to the benefit of the countries.

The Foundation provides access to its global network of academic and professional experts from key discipli-



nes involved in the production of the built environment including architecture, engineering, urban design, infrastructure planning, and materials sciences and makes an array of publications available to within the Group and beyond. Subscribe to the newsletter of the LafargeHolcim Foundation at [www.lafargeholcim-foundation.org/subscribe](http://www.lafargeholcim-foundation.org/subscribe).

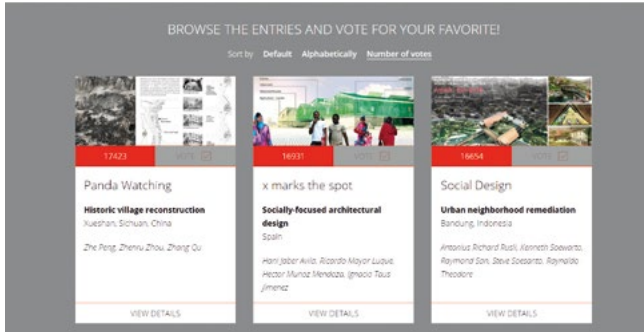
In July 2016, the 5<sup>th</sup> International LafargeHolcim Awards competition for projects and visions in sustainable construction will open for submissions. The competition remains open until early 2017 and offers prize money of USD 2 million for the 59 most progressive concepts along the value chain of the construction industry: 11 in each of the five regions in 2017 and 4 on global level in 2018. The promotion of the competition and celebration of the Awards winners exposes the global and local brands of LafargeHolcim to a broad audience including the next generation of professionals. Find out more about the Awards competition at [www.lafargeholcim-awards.org](http://www.lafargeholcim-awards.org).



A global network of partner universities and Awards coordinators in country operations support the activities of the LafargeHolcim Foundation for Sustainable Construction.

# Next Generation engages in community voting competition

In the 4<sup>th</sup> International Awards competition, the submissions in the Next Generation category for young professionals and students up to the age of 30 were more successful than ever: They accounted for nearly half of the total 6,103 entries and project teams in this category received 25 prizes. To give further exposure to the best ideas for projects and visions in sustainable construction, a community voting competition was introduced for all prize winners in close collaboration with studentcompetitions.com: "Holcim Awards – Your Choice".



A website dedicated to the 25 winning projects featured image galleries, project details and videos and allowed visitors to easily browse through the projects and to cast a vote for their favorite one. The competition ran for three months, attracted nearly 80,000 unique visitors and received more than 120,000 votes. The three projects with the highest number of votes were honored at the first Next Generation Awards Lab in New York City in September 2015 (see page 10).



1<sup>st</sup> – Zhe Peng and Zhenru Zhou (China/USA) together with Edward Schwarz (Lafarge-Holcim Foundation).



2<sup>nd</sup> – Hector Munoz Mendoza, Hani Jaber Avila, Ricardo Mayor Luque, and Ignacio Taus Jimenez (Spain).



3<sup>rd</sup> – Antonius Richard Rusli, Kenneth Soewarto, Raymond San, Steve Soesanto, and Raynaldo Theodore (Indonesia).

# Impressive media interest

The LafargeHolcim Foundation engages actively with media to build awareness of innovative projects and talents in sustainable construction. After the announcement of the Global Awards winners and the respective prize hand-over ceremonies, there was a great interest by media from all over the world to cover the competition and its main winning projects. Following hundreds of media reports in the regional phase of the competition in 2014, in this year again more than 150 articles appeared in print and online media with several more being published every week, proving that the LafargeHolcim Awards has clearly earned its place as the most significant competition for sustainable design.



# Country operations leveraging the Awards



Discussion panel at la Triennale in Milan organized by Holcim Italy: Italian Awards winners Pamela Larocca (Acknowledgement prize Africa Middle East 2014) and Lucia Pierro (Gold Award Europe 2014) presented their projects to architects and engaged in a lively discussion on the importance of community and heritage in sustainable design.

The activities of the Foundation have a long history of support by the country operations and their enthusiastic "Awards Coordinators". It's only thanks to their engagement that the Foundation can live up to its full potential and has a true impact on promoting the application of sustainable parameters in the built environment.

In many cases, representatives of the country operations engage with local Awards winners to create networking opportunities by jointly organizing events, lectures, and exhibitions. The Awards competition also provides them with the possibility to build brand awareness by engaging with media to place stories and interviews with winners.



At a reception for Christian Kerez (2<sup>nd</sup> from left) at the Club zum Rennweg in Zurich, the renowned Swiss architect explained his Award-winning project "Circular Voids - Energy efficient office building" to stakeholders of Holcim Switzerland.



Following a national competition with all Awards entries from Indonesia, Holcim Indonesia invited the winners on an educational tour through Switzerland to learn more about sustainable technologies in buildings.



"Architectes Français dans le monde" is a 510-page book published by Holcim France which commemorates the projects of the 146 entries which originated in France and were submitted in the 4<sup>th</sup> cycle of the Awards competition.



The architecture exhibition "New South" at Galerie Croux in Paris was supported by Lafarge France and the LafargeHolcim Foundation and featured Holcim Awards Next Generation prize-winning projects by Meriem Chabani and Chamms Oulkadi (pictured above).



## Impressum

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# Infrastructure Space

www.lafargeholcim-forum.org

Detroit, April 7 - 9, 2016

## Architectural Scale

Absorbing contemporary technologies

Laurent Stadler & Georges Teyssot

Tom Avermaete, Philippe Block,  
François Charbonnet,  
Salmaan Craig, Orit Halpern,  
Julia King, Reinhold Martin,  
Yoshiharu Tsukamoto

## Metropolitan Scale

Expanding toolsets for urban infrastructure

Jesse LeCavalier & Jason Young

Sara Dean, Paul N. Edwards, Guillaume Habert,  
Clare Lyster, Shannon Mattern, Rahul Mehrotra,  
Elliott P. Montgomery, Etienne Turpin,  
Chris Woebken

## Territorial Scale

Recognizing politico-environmental ecologies

Geoffrey Thün & Kathy Velikov

Marc Angéil, Bradley Cantrell, Dilip da  
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## Planetary Scale

Exploring patterns of worldwide urbanization

Neil Brenner &  
Christian Schmid

Ross Exo Adams,  
Martín Arboleda,  
Nancy Couling, Harry Guger,  
Nikos Katsikis, Milica Topalovic,  
Japhy Wilson, Tammy Kit Pit Wong

### 5<sup>th</sup> LafargeHolcim Forum for Sustainable Construction

Program and registration details at  
[www.lafargeholcim-forum.org](http://www.lafargeholcim-forum.org)

Infrastructure is the embodiment of long-term investments. Its impact in determining the organization of flows extends well into the future – for developed and developing countries alike. The international symposium “Infrastructure Space” including four concurrent workshops relevant to the scale of interventions takes place in Detroit from April 7 to 9, 2016 and seeks answers: Infrastructure for whom, to what end, where and how?

Keynotes: **Ricky Burdett**, UK; **Keller Easterling**, USA; **Stephen Henderson**, USA; **Carlos Lopes**, Ethiopia; **Henk Ovink**, the Netherlands. Moderator: **Reed Kroloff**.

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