LafargeHolcimFoundation for Sustainable Construction



corporate hat at the Awards jury meetings. Page 6



From project to reality: LafargeHolcim Better **Building Recongnition.** Page 8



Inclusive and leading edge: The trophies of the LafargeHolcim Awards. Page 10



"If you want to stand out, you have to deliver truly special results!"

Five different juries selected the regional prizewinners in the current 5th cycle of the LafargeHolcim Awards competition. Participating in all the jury meetings were Sarah Nichols and Marc Angélil as representatives of the Academic Committee of the LafargeHolcim Foundation. They explain how the juries operate, how challenging the evaluation process is, and how a good thing can be further improved.

"Only the juries are authorized to disqualify projects"

You literally traveled around the world to work with the five regional juries. What impressed you most?

Sarah Nichols: How different the notions of sustainability in the world regions are – and how diverse the submitted projects were! Specific challenges were at the forefront in each region; for instance, in Latin America many of the projects dealt with water, in Middle East Africa poverty is one of the vital issues, and in Asia Pacific community building was a prevalent theme.

Marc Angélil: The discussion culture also differed from jury to jury. But the things that all the regions share in common also impressed me very much. Ultimately, the similarities are much greater than the differences. This is not surprising, of course, because today we are seeing an exchange across all world regions on the topic of sustainable construction.

More than 5,000 projects and visions in sustainable construction were submitted worldwide. However, only about 1,900 entries were examined by the juries. What happened to the other projects?

Marc: Many entries were incomplete and were not further evaluated. Many failed to meet the competition criteria and were sorted out in a prescreening stage by [phase 1], a Berlin office that specializes in conducting architectural competitions. Nevertheless, only the juries are authorized to disqualify projects, so they had to review these projects too. In the end, however, each jury still had to examine several hundred projects (see page 4).

Each of the juries comprised qualified experts from the region. Who selected the jury members?

Marc: The Academic Committee of the LafargeHolcim Foundation submits a proposal to the Board of the Foundation. When selecting jury members, we pay attention to their interdisciplinarity, their networks, their knowledge of sustainability, gender and other factors. It's also imporant to have a certain continuity, so every jury includes some members who have participated before. And each jury includes a representative of LafargeHolcim (see page 6), a representative of the local partner university, a representative of the Academic Committee and, if possible, a former prizewinner.

How does a jury meeting work?

Sarah: The details differ from region to region, but all the meetings last two days and begin with a dinner on the evening before the first day. This informal meeting is important because not all members of the nine-person jury know each other – and it's essential that they feel

comfortable with each other. On the morning of the first day, the jury head gives a brief introduction. Among other things, he reviews the "target issues"; these are the criteria the LafargeHolcim Foundation uses to assess sustainability. The jury then splits into three groups, each of which studies a third of the entries to identify the best ones.

Marc: They discuss these 50 to 100 projects for half a day and search out the pearls. In the afternoon, each group presents to the entire jury six entries in the Next Generation category and eight projects in the main category. Then the big discussion begins. It lasts until the evening of the second day, when the prizewinners and rankings are decided.

What are these discussions like?

Sarah: Sometimes they are very emotional! Some jury members fall in love with certain projects and defend them passionately.

Which means?

Sarah: This means that sometimes there is considerable disagreement and things can become quite loud.

Marc: When that happens, the jury head moderates to keep things orderly. But it's esentially very gratifying that the juries handle their work with such dedication, and 90 percent of the discussions proceed in a quite objective and focused manner. After all, the jury meetings are hard intellectual work for everyone involved.

Be candid now: How strongly does the sponsor influence the juries' decisions? Are the jury members more likely to select projects featuring concrete?

Marc: On the contrary! This was the first time that LafargeHolcim engineers were on the juries, and they know so much about concrete that they are especially critical. Many projects in concrete that were touted as being particularly innovative and sustainable merely drew a weary smile from them.

After the meeting, a jury report is drawn up.

Sarah: Yes, first, we try to come up with lively titles for the projects, then we write project descriptions and finally the jury assessment. We write these texts in hotels, on the plane, or wherever we find the time. Then they are proofread and edited sent to the jury head and then to all the jury members. The jury report is a legal document that must be broadly based.

Marc: But the work is still not done when the final version of the report is complete. [phase 1] then carries out the

"Some jury members fall in love with certain projects"

verification process in which all the selected projects are once again comprehensively checked. Are the people who submitted the entry really the ones who are responsible for the project? Is the project not just a copy of another? How will the authors split the prize money? All this and more has to be clarified before the prizes are presented.

Marc, you were already a jury member in the first competition of the Awards 2005. How has the quality level of the entries changed since then?

Marc: The standards are much higher now. At the start, sustainability meant that a project would be enhanced with some sustainable components – for example, solar panels were added. Today, sustainability is seen as being much more comprehensive, systematic and specific. And sustainability has become a standard issue – if you want to stand out, you have to deliver truly special results!

Interview: Marius Leutenegger

"They know so much about concrete that they are especially critical"



Marc Angélil is an Architect and Professor of Architecture & Design at the Swiss Federal Institute of Technology (ETH Zurich), Switzerland. He practices architecture with his partners Sarah Graham and Manuel Scholl at agps.architecture, an architectural firm based in Los Angeles and Zurich.

Sarah Nichols is a Ph.D. candidate at the Institute for History & Theory of Architecture (gta) at the Swiss Federal Institute of Technology (ETH Zurich), Switzerland and teaches design and urban research in architecture. Her thesis project is "Opération Béton: Constructing Concrete in Switzerland 1939-1973."

Around the world in 27 days

Marc Angélil participated in Awards jury meetings in Cairo, Lausanne, São Paulo, Vancouver and Melbourne earlier this year (see interview). He had a lot of distance to cover to attend all meetings – and looked for a smarter and more sustainable way to represent the Academic Committee of the LafargeHolcim Foundation in the evaluation process for the five regional competitions. Marc decided to combine the trips to Brazil, Canada and Australia with an extended visit at his architecture practice in Los Angeles, instead of returning to Zurich following each meeting. This "round-the-world" trip saved him 30 hours in total travel time, 4 tons of CO₂ emissions, as well as reducing expenses.

On June 7, Marc Angélil started his "27 days around the world trip" with a flight from Zurich to São Paulo, Brazil. He spent a total of 68 hours and 29 minutes on board eight

aircraft – almost three full days and nights. He travelled a distance of 50,764 kilometers; 10,000 kilometers more than the distance around the equator.

Marc spent five nights sleeping on a plane instead of in a bed, and set foot on five continents. His longest time spent on board a single aircraft was just under 16 hours from Los Angeles to Melbourne. Currently, the longest non-stop scheduled airline flight is from Auckland, New Zealand to Doha, Qatar with a flight time of 17 hours and 40 minutes. On July 4, Marc landed back in Zurich with 55 sustainable construction projects nominated for prizes in the LafargeHolcim Awards 2017. Mission accomplished!

Carmen Zeindler

41 experts nominated the best 55 projects

Out of more than 5,000 entries in the 5th International LafargeHolcim awards, 3,606 were valid. 1,836 passed the formal and quality checks, and were assessed by independent regional juries. These juries were

hosted by the respective partner universities of the LafargeHolcim Foundation for Sustainable Construction and consisted of regionally renowned representatives from science, business and society.



The jury for the region **Middle East Africa** met at the American University in Cairo (AUC), Egypt, May 19/20, 2017. From left: Marc Angélil, Switzerland; Joe Osae-Addo, Ghana; Meisa Batayneh Maani, Jordan; Nagwa Sherif, Egypt (Head of jury); Mohsen Ech, France; Howayda Al-Harithy, Lebanon; Fasil Giorghis, Ethiopia; Kunlé Adeyemi, Nigeria; and Chrisna du Plessis, South Africa.



The jury for the region **Europe** met at the Swiss Federal Institute of Technology (EPFL Lausanne), Switzerland, June 2/3, 2017. From left: Marc Angélil, Switzerland; Sandra Bartoli, Germany; Anne Lacaton, France; Matthias Schuler, Germany; Yvette Vašourková, Czech Republic; Jane Wernick, United Kingdom; François de Larrard, France; Karen Scrivener, Switzerland; and Harry Gugger, Switzerland (Head of jury).



The jury for the region Latin America met at the University of São Paulo (USP), Brazil, June 9/10, 2017. From left: Angelo Bucci, Brazil (Head of jury); Vanessa Gomes da Silva, Brazil; Carlos Espina, Argentina; Philippe Block, Switzerland; Pietro Stagno, Costa Rica; Emilio de la Cerda, Chile; Marc Angélil, Switzerland; Tatiana Bilbao, Mexico; and Fernando Diez, Argentina.





The jury for the region **North America** met at the University of British Columbia (UBC), Vancouver, Canada, June 23/24, 2017. From left: Dominique Corvez, USA; Kevin Daly, Canada; Ray Cole, Canada (Head of jury); Harry Gugger, Switzerland; Jeanne Gang, USA; Marc Angélil, Switzerland; Forrest Meggers, USA; and Jennifer Wolch, USA.



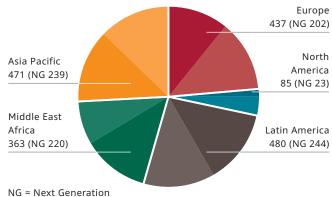
The jury for the region **Asia Pacific** met at the University of Melbourne, Australia, June 30 and July 1, 2017. From left: Jay Sanjayan, Australia; Doreen Heng Liu, China; Nirmal Kishnani, Singapore; Guillaume Habert, Switzerland; Emmanuel Garcia, France; Donald Bates, Australia (Head of jury); Marc Angélil, Switzerland; Rahul Srivastava, India; and J. Meejin Yoon, USA.

Assessed entries by location of project

Entries before formal and quality check

Entries evaluated by the regional juries







Representatives of LafargeHolcim on the Awards competition juries

Setting aside the corporate hat

Over 5,000 projects and visions for sustainable construction were entered in the 5th cycle of the LafargeHolcim Awards. Determination of the best entries was handled by top-notch international juries in the five world regions (see page 4). A delegate of the global Research Centre of LafargeHolcim (LCR) in Lyon, France, was part of each jury. What impression did the only "dependent" representatives in the juries have of the entries and of the adjudication process? Erik Brühlmann asked them.

Of the five competition regions, **North America** has the smallest population. The entries from this highly developed region may be relatively small in number; but they are big on innovation and future vision. This was confirmed by **Dominique Corvez**, Head of Ductal North America in the Growth & Innovation Department of LafargeHolcim – he was a member of the Awards jury for the region.

Even though he was representing LafargeHolcim, Dominique Corvez set aside his corporate hat while he reviewed the projects. "For me it was back to the roots, to the time when I was working as an architect and civil engineer," he says. It was important to him to maintain neutrality – after all, the juries should assess the quality of the submitted entries in a completely unbiased manner. "We had very original entries," praised Dominique Corvez, "there was a huge diversity of projects and approaches."

Also very gratifying was the fact that most of the submitted projects had good chances of soon being realized. "Sustainability is no longer just a dream of what might eventually become feasible," says Dominique Corvez. It is also noteworthy that many projects do not rely whatsoever on extreme high-tech solutions: "The low-tech approaches made up for it by being very innovative!"



Head of Ductal North America Dominique Corvez at the LafargeHolcim Awards jury meeting in Vancouver, Canada.

Giving the imagination full scope

François de Larrard, Civil Engineer and Scientific Director, Research & Development at the LCR, was member of the jury for the region of Europe. "It was interesting to see how differently projects can be assessed," tells François de Larrard. "A majority of my colleagues were architects, and I am an engineer – so sometimes we had a completely different understanding of things."

In light of the large number of projects and the limited time for assessment, it was not possible to discuss some of the interesting entries in fine detail, notes the representative of LafargeHolcim. "The typology of the submitted projects was extremely varied," says François de Larrard. He would have liked to see more projects dealing with issues such as energy efficiency of buildings, renewable energy sources, or the use of innovative materials.

In evaluating the Main category, the jury placed special emphasis on projects that stand good chances of actually being implemented. In contrast, projects in the Next Generation category could be much more of visionary character. "This is important, because the world can only build better if we give the imagination of designers full scope," says François de Larrard. Some entries seemed almost futuristic – "together with the project renderings, almost like a bande déssinée!"



LCR Scientific Director François de Larrard at the LafargeHolcim Awards jury meeting in Lausanne, Switzerland.



Allowing affordable solutions

Mohsen Ech represented the sponsor company in the Awards jury for the competition region Middle East Africa. He is Civil Engineer and Research & Development Program Manager for Infrastructure Solutions at the LCR and considered himself as a "complementary element" in the jury, because as an engineer he views projects with other eyes than an architect. He found the composition of the jury perfectly suited to the competition region: "I'm very satisfied with the results."

Although the variety of projects submitted in the region was large, Mohsen Ech was able to identify some trends: "Many authors have sought to improve the standard of living in their respective environments." A great number of projects use local means and resources for local solutions to local problems: "This allows for affordable solutions," he explains.

In addition, many projects respond perfectly to their circumstances, which is particularly important in this region. "Here we have areas with almost no level of education, regions where building materials are difficult to acquire, zones of conflict and so forth," says Mohsen Ech. For all the innovation and quality of the entries, he missed approaches that embrace new or unusual building materials or technologies. "The ratio between architecture and material was a bit off," he sums up in retrospect.



LCR Program Manager Mohsen Ech at the LafargeHolcim Awards jury meeting in Cairo, Egypt.

Helping projects move forward

In the region Latin America
LafargeHolcim was represented in the jury by Carlos Espina, former Head of LCR and CEO of LafargeHolcim in Argentina since March 2017. "Everybody in this multidisciplinary jury was willing to put the Awards above their own views of the projects," commented the trained mining engineer. The greatest difficulty was to make a balanced assessment of the architecture projects side by side with the engineering projects, because in many cases, these are worlds apart.

All in all, the quality of the projects was very high: "Many projects dealt with the social aspects of sustainability," Carlos Espina reports. "And I also saw a lot of projects addressing water problems. This is important because sanitation and clean water are major issues in certain parts of Latin America. So it's good to see so many projects considering ways to manage water cycles properly."

Carlos Espina was struck by the great many projects having good prospects for being built. "I'd like to think that the Awards will give the winning projects additional recognition that helps them move forward." As a CEO, Carlos Espina also had his eyes open for interesting projects in his geographic domain: "Finding exciting projects and working with those authors is good for the projects as well as for the company."



Former LCR Head Carlos Espina at the LafargeHoclim Awards jury meeting in São Paulo, Brazil.

Reflecting diversity

Participating in the jury for **Asia Pacific** was **Emmanuel Garcia**, Building Solutions R&D Director at the LCR. "I'm quite used to working with architects," he says, "but most of the time we are three people from LafargeHolcim surrounding one architect. This time it was the opposite: I was surrounded by architects!"

Emmanuel Garcia had to set aside his personal and professional preference for concrete - because the material alone is not a criterion in the LafargeHolcim Awards. "The arguments and choices of my fellow jury members were sometimes so different from mine. Listening to all that was very enriching and interesting for a technical guy like me." While he had his professional eye peeled for technology and materials, others evaluated aspects that he had not even been aware of. "Everybody was open to be convinced by the arguments of the others. Thus, the winning projects are the result of a concerted team effort."

The Asia Pacific competition region comprises many countries and cultures, with great differences among them. The spectrum of projects submitted perfectly reflected this diversity. Emmanuel Garcia saw a golden thread in the aspect of materialization – many project authors used bamboo, which is economical and readily available almost everywhere across the region.



Building Solutions R&D Director Emmanuel Garcia at the LafargeHolcim Awards jury meeting in Melbourne, Australia.

From project to reality

In the current LafargeHolcim Awards, the Building Better Recognition will be awarded for the first time. With it, LafargeHolcim recognizes in each world region an outstanding construction project that won a prize in a previous Awards competition and has since been built and is standing the test of time. The message behind this new accolade is clear: Ultimately, it's not the idea that makes our world build better – but its implementation.

The presentation of a LafargeHolcim Awards prize marks the beginning of an intensive dialog between the prizewinners and the LafargeHolcim Foundation. The Foundation remains in close contact with all the winning authors and follows the develoment of their projects. One of the Foundation's goals is to build awareness of exemplary ideas around the world and constantly point out particularly good projects – so the world builds better and, hence, more sustainably.

To this end, a new prize is being introduced: In each of the five competition regions, a previous prizewinner will be honored with a LafargeHolcim Building Better Recognition. The Awards themselves are restricted to projects in the design phase that are not finished works; the new prize affirms that a winning project has become reality, passed the test of time, and met the goals of sustainable construction over the long term.

These goals are defined by the five "target issues for sustainable construction" of the LafargeHolcim Foundation which serve as a benchmark for the assessment of sustainable construction projects:

Innovation and transferability:

Projects must demonstrate innovative approaches to sustainable development, providing transferable ideas.

Ethical standards and social inclusion: Projects must adhere to the highest ethical standards and enduringly enhance the collective realm.

Resource and environmental performance: Projects must exhibit sensible use and management of natural resources throughout their life cycle.

Economic viability and compatibility: Projects must be economical throughout their life cycle and provide significant socioeconomic benefits.

Contextual and aesthetic impact:

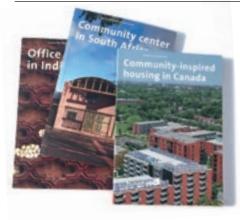
Projects must display a high level of architectural quality and make a lasting contribution to the cultural context.

The "target issues" also serve as a guideline for the juries of the LafargeHolcim Awards competition. But oftentimes, whether a project actually fulfills the target issues can be proven only after its implementation – and ultimately, it's only practical measures that can improve sustainability, not visionary thinking or ideas on paper.

The Building Better Recognitions are being presented at the regional Awards ceremonies by a local representative of LafargeHolcim.



Outstanding projects become successful objects: The new Building Better Recognition honors buildings in which everything is "plumb and square."



Publications featuring exemplary buildings

From project to reality: Ultimately, the only thing that counts for a more sustainable world is what actually gets built, which is why the LafargeHolcim Foundation regularly publishes books on outstanding sustainable buildings on all continents. These include projects that won LafargeHolcim Awards during the design phase – for instance, the Benny Farm social housing project in Montreal or the community center in a township in Cape Town. The practical books on such best-practice examples can be downloaded at the Foundation's website under "Publications" and "Construction examples."

The winners of the Building Better Recognitions 2017

Europe: From project to reality in Paris

muoto architects, Paris, France, for "Public Condenser – Low-cost flexible university building," a project that received the LafargeHolcim Awards Silver 2014. The jury said about the project that its "minimal deployment of architectural and technical means is considered a remarkable contribution to sustainable construction." Today, the university building is reality for countless scholars.



North America: From project to reality in California

SwiftLeeOffice, Los Angeles, USA, for the "Net Zero Energy High-Performing School Building" on three sites, a project that earned a LafargeHolcim Awards Silver 2011. The jury was impressed that the "promising approach for sustainability considers the full life-cycle of the structures and integrates a pragmatic concept for the use of renewable energy sources." Today, the schools are reality for many students.



Latin America: From project to reality in Medellín

colectivo720, Cali, Colombia, for "Articulated Site – Water reservoirs as public park," a project that received the Global LafargeHolcim Awards Gold 2015. The jury applauded that it "foregrounds the value of water as an important resource of urban life, celebrating a piece of infrastructure as a civic work of collective pride and beauty." Today, "UVA Orfelinato de la imaginación" is reality for the local residents.



Middle East Africa: From project to reality in Burkina Faso

Kéré Architecture, Berlin, Germany, for "Earth, wind and sun – Village school in Gando," a project that earned the Global LafargeHolcim Awards Gold 2012. The jury was impressed by its "beauty and innovative architectural concept and example for new sustainable construction from a materials and technology perspective." Today, the secondary school is reality for hundreds of children.



Asia Pacific: From project to reality in Sri Lanka

Robust Architecture Workshop, Colombo, Sri Lanka, for "Post-War Collective – Community library and social recuperation," a project that received the Global LafargeHolcim Awards Silver 2015. The jury was impressed that it "outlines a set of tangible measures, ranging from the introduction of an educational program to the deployment of particular construction techniques." Today, the library is reality for soldiers of the camp and neighborhood children alike (see also page 15).





At the five regional Awards ceremonies 2017, a total of 60 Awards and "Building Better" trophies will be handed over to the authors of winning projects. Traditionally, the trophy artwork is mounted on a base made of concrete. This cycle's bases are completely new, and made of two innovative building materials, Ductal and Airium, developed by LafargeHolcim, the Foundation's sponsor.

Wearing appropriate protection equipment, Élodie pours Ductal into a mold of acrylic glass. Making the base for a LafargeHolcim Awards trophy requires skill, patience, and stamina. The result, a rectangular block with a perfectly smooth surface, is a great source of satisfaction and pride for Élodie. Élodie works in a manufacturing studio of the Messidor Association near Lyon, France. Messidor has been supporting people with differing abilities to find their way into the labor market for more than 30 years. The assignment to produce the concrete bases of the Awards is ideal for the association's employees, precisely because it is a challenge. Élodie and her colleagues obviously appreciate the task, carrying out their work with dedication and accuracy.

A shell made of Ductal

The shell of the new base is made of Ductal, an ultra-high fiber-reinforced performance concrete. It offers superior ductility, longevity, and resistance to compression. Ductal is ideal for forming complex structures, textures, and surfaces. "Ductal is on the leading edge of building materials innovation," says Gérard Molines, Technical Engineer at the LafargeHolcim Research Center (LCR) in Lyon. "It was used in the construction of iconic structures such as the MuCEM in Marseille and the new TGV terminal in Montpellier. Furthermore, it symbolizes what the LafargeHolcim Awards stand for: innovation and sustainability."

A core made of Airium

After the shell has cured, Élodie and her colleagues pack and ship the blocks to LCR for the final step in the production process. To reduce the weight of the trophies, the bases are molded with a hollow cavity. At the LCR, the core of each base is filled with Airium: a new, cement-based, fully mineral foam which can be used for floors, wall filling, roofs and many more applications. "The fresh mix is very plastic and can fill voids in concrete blocks - or add insulation to other materials," explains Patrick Tintillier, Research Engineer at LCR. "It insulates and regulates the indoor climate, is durable, recyclable, provides acoustic damping, and is non-combustible." Working with Airium requires experience and special equipment. That's why the material experts at LCR took over the task of filling the Ductal shells with a core of Airium.









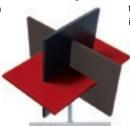
The Modulor which decorates the Next Genera-

tion prize trophy, is the result of Swiss architect

Trophies on a solid base

The main prize and the Awards competition are symbolized by the icosahedron. The icosahedron is a three-dimensional embodiment of the golden section: The three rectangles

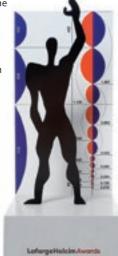
that form the skeleton of the polyhedron are arrayed in the renowned ratio, frequently used in architecture, design and the visual arts.



The trophies presented at the LafargeHolcim Awards ceremonies were designed by Swiss graphic designer Ernst Schadegg in 2003. The golden mean gauge, mounted on the Acknowledgment prize trophy is an instrument to apply the golden ratio in practice.



Le Corbusier's intention to combine the human scale with the golden ratio and apply this measurement system to the realm of architecture.





This year's Awards trophies are a visual and tangible example of what can be created through sustainable thinking – and a passion for innovation. The trophies are also the reason why at least one airport security officer in Lyon is a devout fan of the LafargeHolcim Foundation.

Receiving a LafargeHolcim Awards trophy to the applause of industry leaders, diplomats, media representatives, and peers is the ceremony highlight for every prize winner. The trophy artwork is mounted on a base made of concrete. Prize winners raise the trophy aloft several times during the ceremony, and carry it back to the hotel later in the night. To avoid sore triceps the next day, the core of each concrete base has previously been filled with lightweight polystyrene. But not this year.

While commissioning the Research & Development Center of LafargeHolcim in Lyon (LCR), with the production of this year's concrete bases, Ductal was selected for the outer shell. Examining the old polystyrene insert sparked grins amongst the technical engineers. "We might have something better," they noted. It turns out that "something better" is a completely new building material developed by LCR. Airium, a quite fitting name, is a new, cement-based, fully mineral foam. The fresh mix is very plastic, with the consistency of shaving foam. It fills the core of a trophy base, adding negligible weight.

In the LafargeHolcim Awards competition, sustainability is viewed and measured against five "target issues." One "target issue" of sustainable construction calls for ethical standards and social inclusion. "Why not appoint

Association Messidor for the manufacturing of the outer shell?" Gérard Molines, Technical Engineer at LCR (pictured above), suggested. The association supports people with differing abilities to enter the labor market. Gérard's suggestion turned out to be a great success: "Making the trophy bases is an important activity for us," says Laurent Pigeyre, Production Manager at Messidor (image below): "It makes us very proud!"

Documenting the process in Lyon

These three success stories, Ductal, Airium, and Messidor were the reason we decided to visit the LCR and Messidor. Within 24 hours, we had documented the entire production process and captured statements by the people involved in the making of the trophies. The video is a testimony of what can be achieved with passion for innovation and will be shown at the Awards ceremonies and beyond. Satisfied and exhausted, we checked in at Lyon Saint-Exupéry Airport.

Everything had worked out perfectly well, until a senior airport security officer beckoned me over. I had the feeling it might have something to do with the trophy base in my carry-on luggage, causing the x-ray machine to blink and beep. I was proved right.

Now, explaining what the Foundation does and what the LafargeHolcim Awards competition aims to achieve is something I greatly enjoy. Even though the security officer showed sincere interest in the initiatives of the Foundation and the production of the trophy bases, he showed very little interest in negotiating with me: Solid blocks of concrete, even filled with lightweight Airium, fall into the category of weapons and must be checked-in. Ten minutes later and one block of concrete lighter, I was escorted to the gate - still talking to the security officer about the Foundation.

So should you find yourself at Lyon Saint-Exupéry Airport a little too early one day, have a chat with the security officer. With a little bit of luck, you'll be talking to a fan of the LafargeHolcim Foundation.

Marc Zutter



Carlos Piles: Pursuing passion for innovation

From Awards winner to Head of Ductal Europe

A prize in the LafargeHolcim Awards competition opens new doors for many of the winners, like the Spanish architect Carlos Piles: thanks to two prizes from the LafargeHolcim Foundation, he has made an exciting step in his career – to LafargeHolcim!

In 2011, Carlos Piles was a member of a team of budding architects that won a Next Generation prize for their project CASTonCAST, and a year later the Global Innovation Award. "Back then we were four crazy students," he recounts, "we wanted to break the boundaries and play outside the box, and that made us push for innovation."

The LafargeHolcim Awards prize money enabled the young architects to apply for a patent for CASTonCAST and thus to keep the project in their own hands during the next phase of development.

A career catalyst

The two prizes gave the project and its creators significant publicity and attention – and opened numerous doors as well. "After completing my Master's studies, I had the chance to work with Zaha Hadid Architects and then Skidmore, Owings and Merrill in London, among others," tells the

Spaniard. "At both interviews, the first project I mentioned was CASTonCAST and the fact that it had been awarded by the LafargeHolcim Foundation; and everyone was duly impressed."

The prizes also helped him successfully make contacts in the industry sector. "I had the chance to present the prize-winning project to people such as Carlos Espina, who was intrigued by our project." Espina, today CEO of LafargeHolcim in Argentina, was at that time head of the Group's Research & Development Center in Lyon. He ultimately brought Carlos Piles on board at LafargeHolcim.

Innovation on another level

What persuaded Carlos Piles to switch to industry and management and join LafargeHolcim? "This company places great value on innovation, and that's also one of my key interests," explains the 34 year-old architect. "After we won the prizes, I had the chance to get to know quite a few people at

LafargeHolcim. They explained to me the vision the company is pursuing." And it's precisely this innovation drive that has made the company the leader in its industry, explains Piles. The ambition to remain ahead is obvious: "Just take a look at what's going on at the Research Centre in Lyon!"

Carlos Piles has been Head of Ductal Europe, an entity of LafargeHolcim based in Paris, since February 2017. But can he quench his thirst for innovation in his new role, which mainly involves management and corporate strategy? "Innovation has to do not only with materials and products but also with how businesses are managed", asserts Carlos Piles.

Marius Leutenegger



Although the students who were once celebrated for CASTonCAST have today gone their separate ways, their idea has echoed into their future. The former project has developed into a veritable research object, which Lluis Enrique is continuously developing as part of his Ph.D. studies at the Swiss Federal Institute of Technology (ETH Zurich).

Last year he succeeded in integrating structural criteria into the design of shell structures made of stackable concrete components. In the next step, a prototype will be produced and there are plans to realize the system with the support of industry. First talks with the Start-up Accelerator of LafargeHolcim in Lyon have already taken place!







LafargeHolcim Awards Coordinators meetings

Creating and working within a great network

Promoting the LafargeHolcim Awards competition is an opportunity to closely collaborate with different colleagues from all over the world. The LafargeHolcim Foundation kicked-off the 5th Awards cycle with three regional Awards Coordinator meetings in 2016: in Zurich, Singapore, and Bogota. These two-day meetings were organized by the Foundation - Corporate Communications (including Sustainable Development, Public Affairs and Branding) - dovetailed news and strategy sessions into the program to take advantage of having the communication representatives from the Countries gathered together.

The Foundation gave a broad introduction to its goals and initiatives, explained the Awards and the role of the Country Awards Coordinator in detail, and also introduced its strategies and tactics for promoting its competition. The meetings also focused on sharing the experience of Country communications teams in creating a successful promotion of the competition in their markets. The focus sessions leveraged past experience and new ideas on how to integrate the Awards competition and experts from the Foundation's network into local communications and marketing activities.

For me as responsible of the Awards promotion, these workshops were extremely valuable. Not only did I have the opportunity to share the Foundation's objectives for the 5th LafargeHolcim Awards competition – but also had the chance to meet colleagues from all over the world, to understand their needs and issues, and also to create fun shared memories. All this helped a lot when it came to the day-to-day work; it is much easier to collaborate when

Creating also fun shared moments: Awards Coordinators meeting in Singapore.

you have developed an understanding of someone!

Considering that the Awards Coordinators have a full-time job, promoting the Awards on top of "business as usual" is no small thing; especially for the Countries new to the Foundation and the Awards competition. Meeting all these wonderful people in person laid the foundation for a fruitful and friendly collaboration over the following months. Together we were able to keep up the good submission numbers with a smaller budget than in previous years, and also to include additional Countries.

In just two days, we broke down silos, forgot borders and created an enthusiastic, reliable and very agile global network. So the world builds better

Caterina Beffa







LafargeHolcim Awards as first significant "pat on the back"

Sustainability at the heart of the matter

Sustainability flows through my veins, even before the term became commonly used and modern challenges became so urgent and complex. When my parents built their first house in rural Australia, facing the north to catch the sun but using wide eaves to keep out summer heat wasn't called "emphasising renewable energy in building use," and using timber roof trusses from Uncle Albert's mill down the road wasn't "integrating local economic flows." It was all just "common sense."

I have been a member of the team since the Foundation was created in 2003, with an enviable role of sharing contemporary visions of sustainable design and creating a "hub of common sense." I've nursed a bruised national pride since connections to projects Down Under have been sadly quite few and far between – but this all changed in the 4th Awards cycle.

The Awards jury process is fascinating. Each group of experts comes together and deftly selects the cream of the crop in a matter of days using the "target issues" for sustainable construction to compare diverse projects. When the jury for Asia Pacific opted for a project by a then Melbourne-based architect, it really caught my attention. Architect Milinda Pathiraja (pictured above) was displaced



from Sri Lanka by the long-running civil war. He moved to Australia where he continued his practice as Robust Architecture Workshop and furthered his research at the University of Melbourne.

His winning community library project on the camp of the Singha Regiment in Ambepussa enriched the skills of the workforce, used local materials and recycling, and also created a process that could be applied to other sites in Sri Lanka and beyond. When I met Milinda at the regional Awards ceremony in Jakarta 2014, it was immediately clear that he was strongly people-focussed and had a passion for making a difference through architecture. "My project transfers knowledge and builds skills – so my notion of sustainability is both social and ecological," he explained.

His project "Post-War Collective – Community library and social recuperation" went on to win the Global Silver Award in 2015 – and a prize handover was held on-site 2015. A historical train journey with all the majesty of the British Raj through lush Sri Lankan countryside brought us to the prize-winning project that crowned a verdant hill. My heart began to beat faster – partly from an eagerness to ensure all guests enjoyed the day and also from the walk up the steep incline in familiar tropical heat. But mostly, I was awestruck by the enthusiasm of the local people and the sheer beauty of the structure before me that eloquent words could hardly describe.

Milinda has since returned to Sri Lanka and continues to design and build with a clear responsibility, not only to architecture and the client – but also to society. He's also a sought after speaker at conferences on architecture where his ideas nurture and inspire – as well as continuing his research and exhibiting at the 2016 Venice Biennale.

Like many prize-winners, the LafargeHolcim Awards were the first significant "pat on the back" for his sustainable design that leads the building and construction industry. The competition alumni are an immense and diverse source of inspiration on how to build better.

Kevin Jones

Milinda Pathiraja and his Robust Architecture Workshop will be honored with the first LafargeHolcim Building Better Recognition Asia Pacific. See page 8.

Celebrating the winners of the 5th regional LafargeHolcim Awards



LafargeHolcimAwards

September 7/8 in Nairobi, Kenya

Bamburi Cement Nairobi National Theatre susan.maingi@lafargeholcim.com kathrin.rueegger@lafargeholcim-foundation.org



September 28/29 in Marseille, France

Lafarge France MuCEM - Museum of European and Mediterranean Civilizations marion.machon@lafargeholcim.com carmen.zeindler@lafargeholcim-foundation.org



October 5/6 in San José, Costa Rica

Holcim Costa Rica Teatro Nacional oliver.cuellovelasquez@lafargeholcim.com kathrin.rueegger@lafargeholcim-foundation.org



October 12/13 in Chicago, United States

LafargeHolcim US Venue Six10 stephanie.sulcer@lafargeholcim.com carmen.zeindler@lafargeholcim-foundation.org



November 23/24 in Kuala Lumpur, Malaysia

Lafarge Malaysia Grand Hyatt

ping-ping.ong@lafargeholcim.com marc.zutter@lafargeholcim-foundation.org

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