Promoting and rewarding sustainable construction since 2003
The Holcim Foundation for Sustainable Construction recognizes and rewards sustainable construction solutions that include architectural excellence and enhance the quality of life. Using the Target Issues for sustainable construction as its roadmap, the Foundation conducts Awards competitions for projects and concepts, hosts academic symposiums, and promotes sustainable construction via its global network, publications, Internet presence and social media.

Front cover: Mariam Kamara (Niger) and Yasaman Esmaili (Iran) won the Global Holcim Awards Silver 2018 for their project “Legacy Restored”, a religious and secular complex in Niger.

Below: Sustainable construction requires innovation and courageous steps forward to embrace the opportunities of a circular and net-zero built environment.
The Holcim Foundation for Sustainable Construction was founded in 2003 to raise awareness of the important role that architecture, engineering, urban planning and the building industry have in achieving a more sustainable future. Sustainable construction aims to meet present day needs for housing, working environments, and infrastructure without hindering future generations from doing the same. Sustainable projects are located at the convergence of economic efficiency, environmental performance and social responsibility. They achieve the greatest impact when architectural quality, technical innovation and transferability are combined.

The Foundation is an initiative of Holcim, the global leader in building solutions, and expresses the commitment of its sponsor to advance sustainability in building and construction. Holcim is reinventing how the world builds to make it greener, smarter and healthier for all. On its way to becoming a net zero company, Holcim offers global solutions enabling carbon-neutral construction.
Target Issues for sustainable construction

The Holcim Foundation is committed to the underlying principles of sustainability, which assert that long-term development of the built environment requires a balanced interplay of responsible economic, ecological, and social agendas. To achieve this objective, the Holcim Foundation and its associated uni-

Innovation and transferability

Projects must demonstrate innovative approaches to sustainable development by pushing the envelope of practice and exploring new disciplinary frontiers. Breakthroughs and trend-setting discoveries must also be transferable to a range of other applications. Transferable innovations must comply with the principles of circularity and decarbonization, while demonstrating an awareness of the environmental impact of construction throughout a structure's use-cycle.

Best practice example in Mexico: “KnitCandela” using an innovative ultra-lightweight formwork system by Zaha Hadid Architects (UK) and Block Research Group (Switzerland).

Ethical standards and social inclusion

Projects must adhere to the highest ethical standards and promote social inclusion at all stages of the process, from planning and construction to use, servicing, renovation, and decommissioning. To ensure an enduring positive impact on communities, proposals must demonstrate how to enhance the collective realm and how affordable and socially inclusive habitats can be sustained, including the fair distribution and management of resources.

Best practice example in Lebanon: Enabling social inclusion by repurposing pavilions from the World Expo Milan as school buildings for Syrian refugees by CatalyticAction (UK).
Universities identified five Target Issues that aim to clarify principles for sustaining the human habitat for future generations. This framework serves as criterion for projects submitted for the Holcim Awards and as a road map for all other related activities of the Foundation.

Progress

People
Projects must exhibit a sensible deployment and management of resources throughout their entire use-cycle. Long-term environmental concerns, especially in view of optimizing circular flows of material, water, and energy, should be an integral part of the design and construction approach to minimize greenhouse gas emissions, reduce waste, and promote the use of regenerative resources throughout the industry.

Best practice example in Singapore: Net-zero energy consumption for the School of Design & Environment of the National University by Serie Architects and Multiply Architects (Singapore).

Projects must be economically feasible and able to secure financing, whether from public, commercial, co-operative or concessional sources, while having a positive impact on the social and physical environment. An economy of means in construction must be pursued in order to avoid the wasteful consumption of materials and limit carbon emissions. The products used as well as construction processes deployed must adhere to the logic of circular economies.

Best practice example in France: Transforming and upgrading the existing building stock at less cost than replacing it by Lacaton & Vassal (France).

Projects must convey a high standard of architectural quality in responding to the social and environmental urgencies of the present and those to come. With space, form, and aesthetic impact of utmost significance, the material manifestation of the design must make a positive and lasting contribution to the local context as a prevalent form of cultural expression.

Best practice example in Colombia: Creating contextual improvement by converting inaccessible parts of the city into public space by Colectivo720 (Colombia).
Leading thinkers and representatives of the next generation met at the Holcim Forum hosted at the American University in Cairo, Egypt.

More than 2,000 experts and students attended to the opening keynote address on sustainability and circularity by Lord Norman Foster at the Forum.

Foundation Board members Maria Atkinson (far left) and Alejandro Aravena (far right) in a panel discussion with keynote speakers Francis Kéré and Anne Lacaton.
The Holcim Forum is a triennial series of symposiums on sustainable construction, conducted in collaboration with the Foundation’s associated universities. The multi-day Forum, including workshops and site visits, is an academic platform to exchange information on creating a sustainable built environment. The Forum supports sustainable construction in the scientific field, among experts in the construction sector, business and society, and promotes interdisciplinary and intergenerational dialogue, brings forward new ideas, and examines potential solutions.

To prepare the next Forum, the Foundation organizes the Holcim Roundtables. These workshops bring together experts to devise a clear agenda in preparation for the Forum.

The 6th International Holcim Forum was hosted in 2019 by the American University in Cairo, Egypt, and was dedicated to the topic of “Re-materializing Construction”.

The 7th International Holcim Forum will take place as a hybrid event and explore the theme of “Re-manufacturing construction – Building a collective future”.
Hybrid Global Holcim Awards jury meeting 2021 in Switzerland. 33 finalists (all winners of Awards or Acknowledgement prizes in the regional competitions) submitted five project posters each.

Celebration of the Holcim Awards winning teams on five continents (pictured: the ceremony for Asia Pacific in Malaysia 2017).
The Holcim Awards is the world’s most significant competition for sustainable design. The Awards seek leading projects of professionals as well as bold ideas from the next generation that combine sustainable construction solutions with architectural excellence.

Each competition cycle spans three years, and a total of USD 2 million in prize money is awarded. There are two categories within the competition. The Main category (Awards, Acknowledgements) is open to architects, engineers, planners, project owners, builders and construction firms for projects at an advanced stage of design with high probability of execution. The Next Generation category for young professionals and students up to 30 years of age seeks visions and bold ideas.

The competition runs in two phases. In the regional phase, independent juries evaluate submissions and nominate winners in each of the geographic regions Europe, North America, Latin America, Middle East Africa, and Asia Pacific. In the global phase, the Main category winning projects automatically qualify to be evaluated by internationally renowned experts who allocate the Global Awards.

The 6th International Holcim Awards competition attracted almost 5,000 entries of projects in 134 countries. 2,507 passed preevaluation and were appraised in virtual jury meetings in 2020. They nominated 54 entries to receive prizes. The 33 winners were invited to submit to the Global Holcim Awards jury 2021 headed by Hashim Sarkis. The global jury recognized 8 projects with an Award or a Commendation.
Full house at the Next Generation Awards Lab at IBERO university in Mexico City.

Student Poster Competition at the Forum on “Re-materializing Construction” in Cairo, Egypt.

Recipients of the first Research in Practice Grants: Heidi Boulanger, University of Pretoria (South Africa); Nada Nafeh, American University in Cairo (Egypt); Stefano Romagnoli and Juan Serafini, Universidad Nacional de Córdoba (Argentina).
Advancement of the Next Generation

Recognizing the critical importance of encouraging future design and construction industry professionals, the Holcim Foundation includes the Next Generation in all its activities and offers further support to them.

The Holcim Awards competition includes a Next Generation category, enabling young professionals and students up to 30 years of age to participate with visionary design concepts and bold ideas in sustainable construction.

The triennial Next Generation Awards Lab offers prize winners from the Awards competition a platform to exchange ideas on a global level and to further develop cutting-edge projects in workshops across scales from micro to macro – from innovative materials and individual buildings, through to regional and global impacts.

Post-graduate students of the associated universities of the Foundation are invited to showcase innovative concepts living up to the Target Issues for sustainable construction in a Student Poster Competition at the Holcim Forum. Critically discussing their ideas with the attendees makes the experts of tomorrow a part of today’s debate.

To support the development of knowledge required to meet the challenges in the construction industry, the Foundation offers Research in Practice Grants for a two-year period. The program mentors and enables young practitioners in conducting ground-breaking research based on projects entered in the Next Generation category of the Awards competition.
Online Presence and Publications

The Holcim Foundation attaches great importance to providing information and serving as a turntable for knowledge and examples of sustainable construction. Digital communication takes place on the Foundation’s homepage as well as on its social media channels. The Foundation regularly reports on case studies and visions related to sustainability, publishes statements by and interviews with thought leaders, and about its own activities and publications.
MATERIALS TALK LIVE
Aligning buildings with the Paris Agreement 1.5°C scenario
What lessons can we learn in the pursuit of a net-zero future?
Register at: bit.ly/2ZXBBjl

September 23 | 2:00-3:00pm CET
The Holcim Foundation has developed a close-knit global network of experts and technical universities. Located around the world, the universities host symposiums and the Awards jury meetings.

Network of experts and universities

1. American University of Beirut (AUB), Lebanon
2. American University in Cairo (AUC), Egypt
3. École Supérieure d'Architecture et de Paysage de Casablanca (EAC), Morocco
4. Illinois Institute of Technology (IIT), USA
5. Massachusetts Institute of Technology (MIT), USA
6. National University of Singapore (NUS), Singapore
7. Swiss Federal Institute of Technology (ETH Zurich and EPFL Lausanne), Switzerland
8 Strelka Institute for Media, Architecture & Design, Moscow, Russia
9 Tongji University (TJU), China
10 Tsinghua University (THU), China
11 Universidad Iberoamericana (IBERO), Mexico
12 Universidade de São Paulo (USP), Brazil
13 University of British Columbia (UBC), Canada
14 University of Melbourne, Australia
Board of the Holcim Foundation
The Holcim Foundation is an independent legal entity audited by the Swiss Federal Office of Home Affairs. The sponsor company Holcim is represented by its CEO and its Chief Sustainability & Innovation Officer on the Board of the Foundation. This body ensures that the activities of the Foundation are aligned with current interpretations of sustainable development and construction.

1 Maria Atkinson AM, Chairperson
Sustainability Business Advisor and Founding CEO of the Green Building Council of Australia, Australia

2 Marilyne Andersen
Professor of Sustainable Construction Technologies and Head of the Laboratory of Integrated Performance in Design, EPFL Lausanne, Switzerland

3 Magali Anderson
Chief Sustainability & Innovation Officer and member of the Executive Committee of Holcim, Switzerland

4 Alejandro Aravena
Partner Architect & Executive Director of Elemental, Chile

5 Kate Ascher
Principal of Happold Consulting and Milstein Professor of Urban Development, Columbia University, USA

6 Meisa Batayneh Maani
Founder and Principal Architect of Maisam Architects & Engineers, Jordan

7 Harry Gugger
Professor em. of Architecture EPFL Lausanne and Principal of Harry Gugger Studio, Switzerland

8 Jan Jenisch
Chief Executive Officer and member of the Board of Directors of Holcim, Switzerland

9 Stuart Smith
Director of Arup, United Kingdom/Germany

10 Brinda Somaya
Principal Architect and Managing Director of Somaya & Kalappa Consultants, India