Learning by doing – and by sharing experience: Holcim CEO Markus Akermann in an interview

The construction industry affects life not only now but also in the future. Everything we build today consumes our planet’s finite resources such as energy and space. What we build influences the way we live, how we move, how we work, and how we interact with one another.

Every planner, engineer, and architect today faces the same questions: How can I build my projects with the lowest possible resource consumption and at the same time provide the best quality of life for people today and tomorrow? How do I design and build in the most sustainable way?

As a leading global producer of construction materials Holcim faces these questions every day. Holcim established the Holcim Foundation for Sustainable Construction in December 2003 to take a more active role in the discussion and directly promote sustainable construction. The most prominent activity of the Holcim Foundation is the global Holcim Awards for Sustainable Construction, a global competition that recognizes outstanding construction projects. The Holcim Foundation also works together with renowned technical universities to hold conferences that promote the academic investigation of sustainability in building.

“Foundations” will outline the aims of the Holcim Foundation and keep you updated on its activities.

Holcim Foundation website takes sustainable construction online

School of thought: Our partners are specialists from leading technical universities

Why was the Holcim Foundation for Sustainable Construction established?

Learning by doing – and by sharing experience

Why would a globally-active company in the cement industry be so committed to sustainable construction?
Markus Akermann, Holcim CEO and Chairman of the Board of the Holcim Foundation, discusses the topic with “Foundations”.

Yes. The physical framework within which societies grow and develop defines opportunities and constraints, and can create antagonism and dissatisfaction. Suitable housing and adequate infrastructure directly influence quality of life. Such basic needs are essential if a society is to develop and flourish. Holcim believes that architectural and engineering works are decisive in creating a sound and sustainable future.

The cement industry is a mature one, yet the Holcim Foundation adopts an innovative, radical stance. Is that a paradox?
That’s no paradox – quite the contrary. A diversity of approaches to sustainable construction will provide an opportunity to learn, encourage innovation, and lead to more suitable forms and solutions. How industries operate needs to be redefined in terms of sustainability. As a leading cement producer we have been doing this for many years – on the production side; in resource use, with emissions controls, through environmental stewardship, and by rethinking our interaction with communities and society. The Holcim Foundation provides an opportunity for interested people to become aware of successful solutions from other regions. The Holcim Foundation will create a learning exchange for stakeholders from every culture.

How will the Holcim Foundation benefit Holcim?
We are sure this engagement will reflect positively on our company, strengthen brand and reputation. Our employees will take pride in working for the company that stands behind the Foundation. As an indirect benefit our effort might spur business growth and improve company earnings – and that’s how it should be. For any global company operating in a competitive and transparent environment a commitment to sustainable development is possible only if there is genuine synergy between profitability and sustainability.

Why has Holcim launched such a significant initiative aimed at achieving advances beyond the cement industry?
The Holcim Group believes that every company should actively support sustainable development. Holcim is a member of the World Business Council for Sustainable Development and an active partner in the Cement Sustainability Initiative. The Holcim Foundation for Sustainable Construction is a continuation of the activities Holcim has been supporting for years as a corporate citizen on both global and local levels. We see the Holcim Foundation as a long-term opportunity to make tangible advances in sustainable development and thereby create more value, beyond our own industry – for society as a whole.

Do you see a leadership role for the cement industry in finding sustainable answers to the challenges of the future?
Markus Akermann, CEO of Holcim Ltd and Chairman of the Board of the Holcim Foundation: “Tangible advances in sustainable development beyond our own industry.”
How will the Holcim Foundation blend local circumstances with global perspectives?
The nature of the cement industry requires Holcim to be at the same time a global company and a local one wherever we operate. We believe we can learn from local experience and share our findings with others. Sustainability requires the willingness to learn from one another but also the opportunity for doing so. Providing that opportunity is the way Holcim sees its ability to contribute globally. Understanding and responding to the needs and expectations of all stakeholders is central to our approach.

How will the Holcim Foundation assist the exchange of ideas and experience?
The Holcim Foundation will provide an authoritative and non-biased forum for all stakeholders. This forum will be the place to share best practices – both within and among the regions of the world – as we work together to promote sustainability in the way we build. The work of the Holcim Foundation is independent of the economic interests of the Holcim Group. The Holcim Foundation enjoys decision-making freedom regarding its activities in sustainable construction. It's only obligation to Holcim as its sole sponsor is to use funds effectively and appropriately.

It is striking that Holcim should directly tackle the issues that many other sectors leave to environmentalists.
Our approach is practical. We are a practical company in a practical industry. The Holcim Awards competition will help us find good solutions and make them known worldwide – solutions that are, should be, or could become broadly influential. The projects we seek are those that make a local difference and that have the potential to enhance sustainability worldwide. We are looking for innovative construction concepts and projects that add fuel to the discussion and are also practical solutions to be built. Learning by doing, and above all learning by sharing experience, is the practical way the Holcim Foundation intends to make a difference.

Holcim: Progress through sustainability
Holcim Deputy CEO and Deputy Chairman of the Holcim Foundation for Sustainable Construction Urs Bieri introduced the Holcim Foundation and Holcim Awards at the Holcim Management Meeting in Switzerland – the top-level meeting of our CEOs and senior managers.

Sustainable construction is a key element to sustainable development – and supports the Holcim objective of building foundations for society’s future, said Bieri: The credibility of the Holcim Foundation is enhanced through a predominantly independent Board, an Advisory Board with internally-renown experts and partnerships with leading technical universities.

To make the Holcim brand synonymous with sustainable construction we must build competence and offer support; track building projects and encourage sustainable solutions; develop business in sustainable construction; and, include the topic of sustainable construction in marketing and public relations events, Urs Bieri explained: “The success will reflect positively on Holcim in the marketplace and with other stakeholders.”
Sustainable development: A duty of nations and companies

The United Nations Environment Programme UNEP works worldwide for sustainable development – and places great value on private-sector commitments such as the Holcim Foundation for Sustainable Construction.

The Holcim Foundation for Sustainable Construction promotes sustainability in a specific area: building. This area is in our field, where we are competent, where we can achieve things.

But of course sustainability is needed in many other areas too. The United Nations Environment Programme UNEP, an organization of the United Nations, pursues the overall promotion of sustainability. Under the direction of the former German environment minister Klaus Töpfer, UNEP is active in many areas: fighting for clean energy, promoting the conservation of coral reefs, trying to protect the habitat of anthropoids with a large-scale initiative, promoting the sustainable development of mountain landscapes, and more. To meet such diverse goals UNEP works together with governments, organizations, and local stakeholders. An important aspect of the program is informing children and adolescents. These generations must learn the importance of sustainability at an early age because they will share a hand in shaping the fate of our planet.

September 2002 in Johannesburg UNEP held the much observed World Summit for Sustainable Development. In the closing declaration the national delegates named the greatest future challenges: the growing gap between rich and poor nations, the loss of biodiversity, overexploitation of fish, water and air pollution, and war and disease. The delegates put together an extensive action catalog addressing the problems of the present which must be solved to pass on to the next generations a planet worth living on. Nations and organizations are not the only ones who can contribute to realizing the ambitious plans – but also private enterprise. Holcim recognized this obligation with the creation of the Holcim Foundation. And we will continue our engagement to sustainable construction as it is defined by UNEP: “Sustainable construction is a way for the building industry to move towards achieving sustainable development, taking into account environmental, socio-economic, and cultural issues.”

Our website takes sustainable construction online

The Holcim Foundation website is set to become a central pillar of communications for the Holcim Foundation. The site contains information about the structure of the Holcim Foundation and the seminars and awards programs it will run. During the Holcim Forum, the site will provide a virtual exhibition space so that individuals beyond those attending the conference in Zurich will be able to inform themselves. Holcim employees, prospective Award nominees, and journalists, amongst others, are able to subscribe to an e-mail alert service to stay up to date with the latest information.
Our target issues for sustainable construction

Sustainability – the term is open to interpretation. That’s why the Holcim Foundation in collaboration with its Technical Competence Center developed an idea of sustainability in building by defining five objectives:

**Quantum change and transferability**  
The project must demonstrate innovation at the forefront of sustainable construction – a quantum leap in comparison to conventional procedures. Breakthroughs and trend setting approaches must be transferable and applicable to other construction projects – irrespective of scale.

**Ethical standards and social equity**  
The project must meet the highest ethical standards and support social equity at all stages of the construction, from planning and building process to the long-term impact on the community’s social fabric. The project is to deliver an advanced response to ethical and social issues.

**Ecological quality and energy conservation**  
The project must exhibit sensitivity to the responsible use and management of natural resources throughout the construction’s life cycle, including operation and maintenance. Long-term environmental concerns, whether pertaining to the flow of materials or energy, should be an integral part of the built entity.

**Economic performance and compatibility**  
The project must prove to be economically feasible and innovative as to the deployment of financial resources. The project’s funding must promote economy of means and be compatible with demands and constraints encountered all through its life cycle.

**Contextual response and aesthetic impact**  
The project must provide evidence of architectural quality as to the manner in which it addresses its cultural and physical context. With space and form of utmost relevance, the construction must have a positive, long-term aesthetic impact on its physical environment.

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**Special section in the Holcim Image Bank**

The Holcim Foundation uses the Holcim Image Bank on HolSpace to store photography and graphics relevant to its activities. The content will be supplemented by photographs of awarded projects and Awards ceremonies.

Quicklink via HolSpace  
web.holcim.com
How we promote sustainable construction

Merely by stating its intent the Holcim Foundation for Sustainable Construction has not yet brought about change. Now that the Holcim Foundation has been established, action is at hand. Activities on several levels are beginning in 2004.

The most significant activity of the Holcim Foundation – at least in the public eye – will be the Holcim Awards. Competitions are an outstanding way to inspire and encourage new ideas and ways of thinking, and to recognize exceptional approaches.

We will invite our partner universities as well as architects, planners, engineers who strive toward sustainable construction to submit their projects, ideas, and initiatives to our global competition. Judging panels appointed by the universities will select the best entries. At ceremonies next year three regional awards plus special recognitions and sponsoring prizes will be conferred in each of five geographic regions: Europe, North America, Latin America, Africa/Middle East, and Asia-Pacific. The regional Award winners will then qualify for the global competition that will culminate in a prize-giving ceremony in Bangkok in 2006. An unbiased jury will grant Holcim Awards to the three best projects from around the globe – projects that represent milestones in the advancement of sustainable construction, projects worthy as models of sustainable development. The competition is funded with prize money totaling USD 2 million per cycle.

The Holcim Awards are being initiated as a permanent and progressive program. A new competition cycle will be held every three years. Every three years the Holcim Foundation will make available an additional USD 1 million to assist or make possible the realization of one or more sustainable construction project(s) which would otherwise be underfunded.

A forum for experts of today and tomorrow

The competition is the central activity of the Holcim Foundation but it is only one aspect of our engagement. Conferences will be organized in collaboration with our partner universities. Through these events we aim to promote the exchange of ideas and experience at a high level.

We will bring together architects, planners, scientists, as well as members of the economic, political, and social fields to discuss solutions to the pressing challenges in sustainable construction. The discussion will engage not only the leading experts of today but the budding experts of tomorrow. Each Holcim Forum will invite students as representatives of the next generation to set forth their visions.

The first Holcim Forum will be held in September 2004 in Zurich. The theme will be building to meet the basic needs of humanity: housing, education, health care, and access to goods. The Holcim Forum will be documented and proceedings from the event published to give additional weight to the academic discussion – after all, the findings can make a lasting mark only with sustainability.
We are committed to sustainable construction

The Holcim Foundation for Sustainable Construction is an independent foundation established under Swiss law. Because its objectives are extremely complex and demanding, the Holcim Foundation requires broad support from many people. Our direction is led by the Board of the Holcim Foundation, supported by an Advisory Board, and by five universities from around the world.

The Board of the Holcim Foundation
The Board of the Holcim Foundation is its “Executive Committee” and responsible for directing the activities of the Holcim Foundation to fulfill its purpose. The Foundation Board monitors the activities of the Holcim Foundation and ensures that financial resources are properly used. Currently the Board of the Holcim Foundation comprises seven personalities from the business world and technical fields, with the majority independent of Holcim.

Markus Akermann
Chairman of the Board of the Holcim Foundation and CEO of Holcim Ltd (interview on page 2)

Marc Angéli
Prof. Dr. Marc M. Angéli is Professor of Architecture and Design at the Swiss Federal Institute of Technology (ETH) in Zurich. Prof. Dr. Angéli studied architecture at the ETH and was awarded the ETH Silver Medal for his doctoral dissertation on technique and form in the theory of architecture. In 1982 he became assistant professor at the Harvard University Graduate School of Design, and from 1987 to 1994 he was associate professor at the University of Southern California. Prof. Dr. Angéli is a practicing architect and has architectural offices in Los Angeles and Zurich.

Alexander Biner
Alexander Biner is a partner at MS Management Service AG, a specialized international consultancy company, focusing on analysis of strategic, political and social developments, and issue management, based in St. Gallen (Switzerland). Mr. Biner graduated from Johns Hopkins University in Washington DC with a Master’s degree in international studies. He pursued a career in international banking before becoming a partner at MS Management Service in 1992, and also serves on a number of supervisory and advisory boards.

Urs Bieri
Deputy Chairman of the Board of the Holcim Foundation and Deputy CEO of Holcim Ltd (more on page 8)

Roland Walker
Delegate of the Board of the Holcim Foundation, Head of Corporate Communications of Holcim Ltd (more on page 8)

Claude Fussler
Claude Fussler is an expert on business and issue management in Sustainable Development and corporate social responsibility. He is also a director of the World Business Council for Sustainable Development (WBCSD) where he principally acts as special advisor to the UN Global Compact. Mr. Fussler studied chemical engineering in Lyon and worked for Dow Chemical for over 30 years on a number of international business assignments. He led the WBCSD’s preparation of the World Summit on Sustainable Development in Johannesburg, September 2002.

Hans-Rudolf Schalcher
Prof. Dr. Hans-Rudolf Schalcher is Dean of Civil, Environmental and Geomatics Engineering at the Swiss Federal Institute of Technology (ETH) in Zurich. He currently leads an interdisciplinary research project on Sustainable Development in urban environments. Prof. Dr. Schalcher worked as civil engineer from 1969 after studying at the ETH. In 1999, he became Dean of Civil, Environmental and Geomatics Engineering, and president of the Center for Integrated Planning in Construction (ZIPBau) at the ETH.
Teamwork with our Group companies is especially important

What role does the Holcim Foundation for Sustainable Construction have within the Holcim Group – especially for Group companies? Urs Bieri, Roland Walker (both members of the Board of the Holcim Foundation) and Edward Schwarz (Manager of the Holcim Foundation) explain the interplay at a roundtable discussion.

Roland Walker, Urs Bieri and Edward Schwarz at the roundtable discussion.

The Holcim Foundation for Sustainable Construction is a legally independent foundation – but the name indicates a tie to Holcim. Why would a construction materials company commit itself in this way?

Urs Bieri: The commitment we assume through the Holcim Foundation originates directly from the vision that shapes Holcim: we want to lay the foundations for society’s future. Holcim wants to position itself not as a company that wants quick returns, but one that accepts its share of responsibility – for the environment and for society as a whole.

Roland Walker: Our commitment through the Holcim Foundation is credible because we have been committed to sustainable development for years – as a member of the World Business Council for Sustainable Development among other things.

Why has Holcim considered it important for years to position itself as a sustainably operating company and to occupy this position in the industry?

Roland Walker: Cement and aggregates are commodities that are generally substitutable. So the chief ways we can set ourselves apart from our competitors are better customer service, special products, and good image and reputation. Our public relations activities get special emphasis because they are vital to the success of Holcim. If we can continue to position ourselves as a company committed to sustainability with credibility – especially in the construction field – all stakeholders will benefit.

Can you give us an example of how Holcim can benefit from this image – now even more with the association with the Holcim Foundation?

Urs Bieri: For many institutional investors the image of a company is decisive in determining whether to invest. Our commitment and our ever-growing competence in sustainable building opens many doors for dialog with authorities, organizations, and directly with the users of our products.

Roland Walker: Our engagement gives us heightened public attention. This is important because most companies in our business find it hard to generate media and public interest in their activities.

Yes, but the Holcim name is not known everywhere. The Group goes under other names in certain countries. Does the engagement lose its effect in these countries?

Edward Schwarz: In countries where Holcim operates under other names our communications are adapted to local conditions. In advertisements the local company name will be paired with the Holcim name, for example.
How much will the Group companies be involved in the activities of the Holcim Foundation?

Edward Schwarz: The teamwork between Group companies and the Holcim Foundation is vital to our mutual success. We want to strongly involve Group companies and give them a platform on which they can profile themselves. Our activities will give them a better connection to their local professional associations of architects and engineers. Here I’m thinking particularly of the Holcim Awards; the calls for entries will typically be handled by the local companies.

So the Holcim Foundation depends partially on the local companies.

Edward Schwarz: Right. Teamwork is important for both sides. We need local support to achieve our aims. The ways we present ourselves – globally and locally – must be complementary. A key role in this will be assumed by the host company of each region. They will organize the Awards ceremonies, representing the Holcim brand and the Holcim Foundation beyond the bounds of their own markets, and thus create effective public awareness.

The Holcim Foundation has lofty objectives. How do you intend to measure the achievement of targets?

Urs Bieri: There is probably no way to measure the short-term success of public image actions. But in a few years we will be able to say whether we have managed to link the name Holcim with sustainable construction.

Roland Walker: We will also be able to tell whether our commitment is convincing. Particularly with our forums and publications we want to show professionals in the industry that the Holcim Foundation and the company standing behind it is a source of competence in sustainable construction.

Edward Schwarz: The bulk of the feedback concerning our targets will probably come from our Group companies at a local level – and that’s what we need!

Local foundations of support

The benefits in local markets include differentiation from competitors and enhancing the reputation of Holcim, said Bühler: Sustainable construction attracts attention in the building and construction industry, provides access to opinion leaders, professional organizations, and technological developments of the future.

The Holcim Awards enable closer partnerships with key stakeholders, and make Holcim a sought after employer, Carlos Bühler explained. In view of hosting the regional Holcim Awards ceremony in 2005, Holcim Brazil has deepened its contacts with the University of São Paulo and developed a relationship on an academic level with a national research center for cement and concrete, as well as registering growing interests from students in the Holcim initiatives – and that’s just the beginning, said Bühler.

At the global Holcim Management Meeting in Switzerland, Holcim Brazil CEO Carlos Bühler encouraged his fellow CEOs to take an active role in embedding sustainable construction and contributing to the success of the Holcim Awards in their companies.
School of thought: Our partners are five of the world’s leading technical universities

We cannot reach our challenging objectives alone. The Holcim Foundation for Sustainable Construction is dependent upon competent support, especially in the technical field. We are enthused that five of the world’s leading technical universities have agreed to act as partners with the Holcim Foundation. Drawn from around the world, the partner universities help us to host the Holcim Forums and produce a specialized publication from each Holcim Forum; they define the evaluation criteria to be used for the Holcim Awards; and they put together the panels who judge the competition entries. As a global Technical Competence Center the ETH Zurich coordinates the collaboration among the partner universities and the Awards juries.

**Europe:**
Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland

Switzerland’s most prestigious university, the ETH Zurich was established in 1855 and is now home to more than 18,000 students, researchers and academics. The university has developed a strong international reputation based on excellent research conditions and state-of-the-art infrastructure. Engineering, sciences, architecture, mathematics, sports and military sciences are the core disciplines of the university.

The ETH has a focus on the conservation of the earth's ecosystem for future generations. The university endeavours to apply its knowledge and skills in the pursuit of new approaches to the enormous challenges facing humanity, and help lay a path for a meaningful and sustainable development of present and future civilizations.

**North America:**
Massachusetts Institute of Technology (MIT) in Boston, USA

Although the MIT has only 10,000 students, it ranks among the most important universities worldwide. With 57 Nobel Prize winners from its alumni, faculty, researchers and staff, MIT is a significant center of education and research. It is organized into five Schools – Architecture and Planning, Engineering, Humanities, Arts, and Social Sciences, Management, and Science – and the Whitaker College of Health Sciences and Technology.

Each department is run in the spirit of the founding president of MIT, William Barton Rogers, who held the conviction that education should be broad and useful and always in the service of society. Exciting current areas of research and education include neuroscience and the study of the brain and mind, systems biology, the environment and sustainable development, information sciences and technology, new media, financial technology, and entrepreneurship.
In its 82 year history, Wits has built a reputation for itself as a center for education and research of the highest quality in South Africa. The university has more than 25,000 students and a reputation for sustaining globally competitive standards of excellence in learning, teaching and research.

Wits plays a significant international role not only in the natural sciences and in architecture, but also in commerce where its business school is considered the best on the continent. Medical research at Wits enjoys a worldwide reputation, especially for its 25 million USD per year research program on HIV and AIDS.

The USP is the third largest university in Latin America, with more than 600 courses on offer to 40,000 students. The size and international reputation of the USP is particularly noteworthy, considering that it is a relatively young institution that celebrates its 70th Anniversary this year.

In addition to the main campus in São Paulo, the university maintains research centers in Bauru, Piracicaba, Pirassununga, Ribeirão, Preto, and São Carlos.

The university engages in the community surrounding each campus. The Practical Science Museum, the Estação Ciência, and 24 smaller museums attract more than one million visitors per year – about the same number as patients at the university hospitals and clinics.

Tongji University was founded in 1907 by a German physician and is among the oldest and most prestigious universities in China. It is now a comprehensive university with more than 40,000 students and degree programs in engineering, science, medicine, management, arts, law and economics with strength in architecture, civil engineering and oceanography.

The university has developed close links with industry, which provides its students with opportunities of obtaining first-hand information through interaction with the society. The name Tongji suggests cooperating by riding the same boat. The university continues to maintain strong links with other universities worldwide, with particularly strong Sino-German ties. Tongji University is also famous for its broad research program, the scope and quality of its libraries and laboratories, and the versatility of its faculty members and students.
Technological, ecological, and socio-economic challenges

The Holcim Foundation for Sustainable Construction promotes and supports initiatives and projects that identify construction-related solutions to today’s pressing technological, ecological, and socio-economic challenges, solutions that deliver architectural excellence and improved quality of life. The work of the Foundation is independent from the economic interests of the Holcim Group. The Foundation enjoys decision-making freedom concerning its activities. It works with five universities as partners, led by the Swiss Federal Institute of Technology (ETH) Zurich: the Massachusetts Institute of Technology (MIT) in Boston, Tongji University in Shanghai, the University of São Paulo, and the University of Witwatersrand (Wits) in Johannesburg. The partnership is intended to intensify the exchange of expertise and innovation in sustainable construction.

(www.holcimfoundation.org)

The Holcim Awards for Sustainable Construction promote innovation in sustainable construction through a series of regional and global competitions. Prizes at both levels will be total two million USD for each competition cycle. Five regional competitions will be launched in cooperation with 46 Group companies in the last quarter of 2004. The global Award will be open to the best of the regional Awards winners in 2006. The juries will include independent experts of international stature engaged in the sustainable development of society, building processes, construction materials, and building projects.

(www.holcimawards.org)

The Holcim Forum for Sustainable Construction calls together specialists to workshops for the discussion and promotion of construction-related solutions to the pressing challenges of sustainable development. These international experts include architects, planners, developers, scientists, and representatives from business, politics, administration, and civil society. The first Holcim Forum will be hosted by the ETH in Zurich in September 2004. The theme is “basic needs” – housing, water, education, health care, and access to goods – the essential infrastructure of civilization. Students from the partner universities will also be invited to attend, to represent the next generation and share their visions.

(www.holcimforum.org)