

Sustainable construction:

Each participant of the Holcim Forum offered a brief statement of their view of sustainable construction. The statements cover the full spectrum, and together paint a colorful picture of sustainability.

By Edward Schwarz, Manager of the Holcim Foundation



Time to act

At the Forum the participants were each asked “What does sustainable construction mean to you?” Their answers cover a range as broad and diverse as the problems facing the world; the list of statements is as varied and sprawling as the civilization that covers the globe. Yet each statement is a truth and part of a larger picture. The individual statements appear at the end of each chapter of this book. We condensed and pieced together these statements to give the following picture that illustrates the challenge of achieving sustainable construction worldwide.

A multifaceted task

Sustainable development is often defined in terms of the triple bottom line, or balanced social, economic, and environmental progress. These three criteria also outline sustainable construction. Construction is one of the largest industries in the world, hence its impact on sustainability is immense. The cities and towns we have built to meet our ever-increasing needs have been inefficiently consuming the earth’s resources while failing to serve millions of people. Sustainable construction is a requirement if we want to enable humane and prolonged existence on our planet.

Achieving sustainable construction requires a multifaceted worldwide effort by all nations. Sustainable building practices must occur in every place, address a variety of problems, happen on many levels, work in various contexts, respond to many needs and restraints, be applied at every scale, and employ many disciplines. The needs, possibilities, and potential are different in each country, as are the levels of technology, education, industrialization, means, and motivation. Each country, community, and individual is called on to find the best-suited solutions, and through local action contribute to global progress.

“What does sustainable construction mean to you?” Andrew M. Scott, Professor at the Massachusetts Institute of Technology, USA, explains his view to Zurich-based journalist Marius Leutenegger.

Sweeping change

Sustainable building can be achieved worldwide. There are many places to begin, many points to attack the problems, many better ways to build our structures and cities, and more efficient ways to use, replenish, and recycle our resources. Anything goes: high-tech solutions, low-tech methods, research, development, education, industrial breakthroughs, design innovation, legislative or economic measures, widespread adoption of sound practices new or old as standard practices – the list goes on. Great potential lies in replacing detrimental practices with sound practices and multiplying the improvement over and over again in structures and towns throughout the world. Progress will be gradual and slow, but change will be effective if it is continual and widespread.

Good environments

A built environment that supports sustainable habitation incorporates good land use, urban planning, and architecture. Good land use includes the conservation of valuable natural areas – in other words, not building everywhere – preserving a healthy balance between built environments and natural environments. Good urban planning includes efficient transportation (especially mass transit) systems and efficient infrastructure systems – laid out to minimize consumption, waste, and pollution during use. Good cities, towns, and buildings are long-lasting, attractive, no larger than necessary, adaptable to other uses in the future, efficient in the use of resources (energy and materials – including recycling at the end of service life), and well-fitted to needs, surroundings, and society. Good design nurtures the entire individual – physically, socially, and spiritually. City planning in rapidly developing large countries will have a significant effect on global sustainability as populations grow.

Social responsibility

There is no long-term sustainability without short-term sustenance. Building to meet the basic needs of society is urgent in many countries. Every human deserves shelter, clean water, schooling, access to necessary goods, and access to a hospital or clinic. Many people want affordable housing – a chance to build or buy and maintain their own home. Such urgent problems in developing countries are largely neglected by affluent nations which have an abundance of empty buildings and which continue to amass wealth. At the same time, these nations, with resource- and energy-intensive buildings, cities, and lifestyles, continue to consume the earth's raw materials and energy resources at an alarming rate. When social responsibility pervades the global construction scene, humankind will care for every member with fairness. Sustainable construction must sustain all societies.

Environmental stewardship

The earth is a fragile and finite ecosystem that supports us and our built environment. The environment too often suffers at the expense of commercial enterprise or social disorder, especially in developing or unstable countries. We must protect our planet as an indefinitely habitable home by using building materials carefully, conserving material and energy resources, favoring renewable and recyclable resources, preferring less energy-intensive materials, minimizing waste, preserving undeveloped land as a natural resource, and avoiding the pollution of land, water, and air.

Economic soundness

Many sustainable practices are available today but are being ignored because they are economically less profitable than the non-sustain-

able alternatives. A great challenge lies in finding ways to make sound building practices feasible, affordable, attractive, and economically rewarding. Sustainable behavior must be profitable for business (economic incentive), affordable (strong demand), available on the market (everywhere an option), and widespread (seeking global impact). The potential for providing new employment in the building trade is valuable and exists nearly everywhere. The quality and durability of the built environment largely determines the soundness as a long-term financial investment by society.

Urgent necessity

The course we are on cannot continue indefinitely – it is not sustainable. We have been failing to meet the urgent needs of many people and populations and we are depleting or spoiling resources that future generations will need. Our planet is under pressure, and we must respond. We must know the problems, discuss them, study the issues, agree on goals and stick to our agreements, find good solutions, organize ourselves, and take concrete action worldwide. We must all know what sustainable development means and how vital it is. We must make governments, businesses, and the masses aware of the worldwide problems and make the world part of the solution. The task is great; the situation will worsen before it gets better. We may not see significant improvement within our lifetime, but we must work together to initiate change. And we must do it now.

Edward Schwarz



Robert E. Somol, Professor, University of California Los Angeles, USA

Is sustainable construction a luxury or a basic need? Is it a privilege of developed countries to be concerned about the environment? I have yet to find the answer to that question and remain sceptical of the term “sustainable construction.” But it is good that the term forces us to reconsider the future. It is very valuable to think about the world we have and the world we want to have.



Reed Kroloff, Dean, Tulane University, USA

Sustainable construction requires building methods that are easily reproducible and that do not overstress the natural and economic systems.



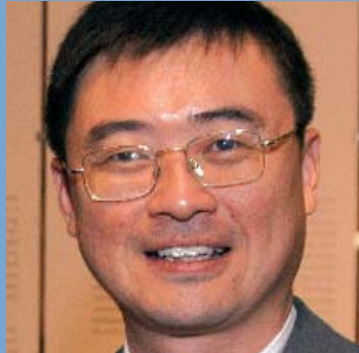
Dominic Wittmer, Student, Swiss Federal Institute of Technology (ETH Zurich), Switzerland

The discussions on the complex concept of the sustainability show that we have recognized the problems and limits. We see that things cannot continue the way they have been going.



Markus Schäfer, Architect, Switzerland

In essence, sustainability probably has to do with modesty and with what is really necessary.



Zhenyu Li, Associate Professor, Tongji University, China

Sustainable construction is a question of harmony between man and nature, rich and poor, East and West, today and tomorrow.



Ilka Ruby, Architect and Architecture Critic, Germany

We must question the notion whether open space is in fact empty. Building volumes should not be ruthlessly maximized. We should build where it is necessary – not where it is possible.



Donald Bates, Architect, Australia

For me sustainable construction is an attitude, a special way of thinking – not a specific technology. Every decision one makes as an architect has a variety of consequences. The selection of a window for example is not only a choice of a specific type to provide a view; it involves how one controls heat and air, and shows what type of relation to the outside world one seeks. Thus one must always strive to keep the whole in mind.



Sérgio Cirelli Angulo, Student, University of São Paulo, Brazil

Sustainable construction requires a well-developed relationship among the environment, the economic resources of a country, and the development of the society.



Urs Bieri, Deputy CEO of Holcim, Member of the Board of the Holcim Foundation, Switzerland

Sustainable construction requires that we conserve resources or consume the minimum.



Hana Sleiman Alamuddin, Principal, Al-Mimariya, Lebanon

Sustainable construction presupposes two facts: There is not only a here and now, but also a future, and the earth has limited resources. An unlimited time-frame plus limited resources calls for respectful solutions.



Alex Büchi, Architect, Switzerland

I hope that through sustainable construction new jobs will be created and new technologies developed – including technologies that can be applied by people with little formal education.

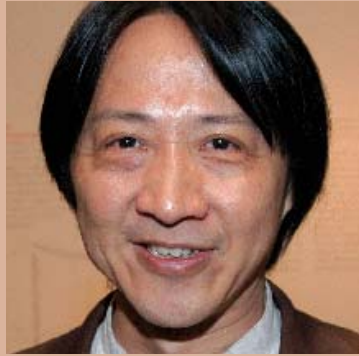


Miguel Aloysio Sattler, Professor, Federal University of Rio Grande do Sul, Brazil

We must finally recognize that our planet is under pressure, that all natural systems are under pressure. Sustainable construction demands that we adjust to the capacities of the planet and minimize our impact.



Ovo Charles Majoroh, Architect, Nigeria



Stephen Lau, Associate Professor, University of Hong Kong, China



Eduardo Leston, University of Palermo, Argentina

Build something today, enjoy it – and make sure there’s something left for future generations!

Sustainable construction demands of architects, planners, developers, and engineers a common language and a common strategy. But the various players are still pursuing differing interests.

Sustainable construction has always existed. Since early times man has tried to construct energy-saving, economical, functional, and beautiful buildings. Sustainability is an ancient value – and a never-ending process.



Bruno Nauer, CSR Project Coordinator, Holcim Group Support, Switzerland



Carlos Bühler, CEO, Holcim Brazil, Brazil



Andrew Whiteside, Architect, USA

People who develop and build something have a great responsibility. They must respect this for example even when they select materials – by choosing not to support countries in which human rights are infringed or companies that ignore environmental protection.

Sustainable construction means quality of life, economical and efficient technologies, and conservation of natural resources. Sustainability is never limited to building only, it embraces many aspects.

In building today we find processes that are clearly different than those used 10 or 20 years ago. Many of these processes are very short-lived and cannot be recognized beforehand. We must develop a sort of radar so we can identify these processes in time – and use them.



Lara Greden, Student, Massachusetts Institute of Technology, USA

In the history of building, people have mostly worked with materials that required little energy to produce. This type of sustainable construction has almost vanished today but must be promoted again.



Qing Zhu, Student, Tongji University, China

Sustainable construction is an opportunity to protect us against ourselves. We must not always believe we are superior to everything else on the earth; we must reconsider our role in nature and in the world. I am convinced: The lower we estimate our position, the better.



Patrick Verhagen, Senior Vice President, Corporate Industrial Ecology, Holcim Group Support, Switzerland

Long service life, low energy consumption, high quality of life – these are all important aspects of the sustainable construction.



Jiang Liu, Student, Tongji University, China

Sustainable construction means we must consider a building as a living entity. Everything has its natural course, its life-cycle. Architecture is a creation, but everything ultimately belongs to nature.



Carlos Alberto Ricardo, Director, ISA – Instituto Socioambiental, Brazil

Sustainable construction involves more than buildings; it is an open concept. One must find different solutions for people in different situations.



Feng Qu, Student, Tongji University, China

Every building has its own history. A city is almost like a family that is still developing. We have to protect this family.



Edward Schwarz, Manager of the Holcim Foundation, Switzerland

Sustainable construction is a requirement if we want to enable humane and prolonged existence on our planet.



Fernando Amato, Student, University of São Paulo, Brazil

Sustainable construction is a new way to bring together economic performance, environmental quality, and social responsibility. Sometimes we forget one of these three aspects, but we must always bring them all together.



Bruno Stagno, Architect, Costa Rica

In Costa Rica we have always built sustainably. Advanced technology is way too expensive for us. Hence for example we must always try to ventilate and illuminate our buildings by natural means.



Adèle Naudé Santos, Dean of the School of Architecture and Planning, Massachusetts Institute of Technology, USA

Sustainable construction has less to do with buildings and more to do with process and behavior. It must particularly inspire city planning.



Alistair Guthrie, Director, Ove Arup & Partners, UK

We must now apply to everyday projects the technologies and ideas that have been proven in the best projects – thus establishing a sustainable strategy.



Charles Arden-Clarke, Senior Programme Officer, United Nations Environment Programme, France

One must keep the entire life-cycle of a structure in mind – it begins when one extracts building materials from the earth and ends with recycling.



Heliana Comin Vargas, Professor, University of São Paulo, Brazil

We must act with care – for instance care for materials and how they are used. A building always influences the way people work and live. Thus for me sustainability is not only a technological issue, it is a social activity.



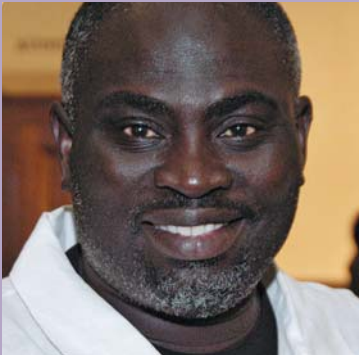
Jimena Ugarte, Architect, Costa Rica

For me sustainable construction means giving everyone the opportunity to have their own house at an affordable price!



Silvia de Schiller, Director of the Faculty of Architecture, Design and Urbanism, University of Buenos Aires, Argentina

We must learn to think differently – and to build things that people really need. To do this we must talk with people, and not leave everything up to planners and architects.



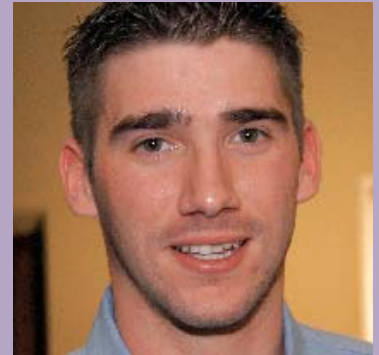
Joe Osae-Addo, Architect, Ghana

That which we have at the local level must be used as building blocks for development – “back to the basics.” It might sound idealistic, but I am convinced that everything is ultimately tied to our roots. The inspiration for change must come from within, not from the outside.



Roberto Loeb, Architect, Brazil

Building is certainly a very important aspect of sustainability, but foremost are the social aspects. People who have long been disadvantaged deserve the opportunity for a better life. This includes better food supplies, clean water, education – this is where it all begins.



Alessio Lacovig, Student, University of the Witwatersrand, South Africa

The needs of man and nature must be synchronized. This harmonization of needs will produce synergies.



Rachid Benmokhtar Benabdellah, President, Al-Akhawayn University, Morocco

We need balance – for example between nature and industry. But I observe that nature is no longer respected sufficiently and that development is driven solely by economics. This is not sustainable.



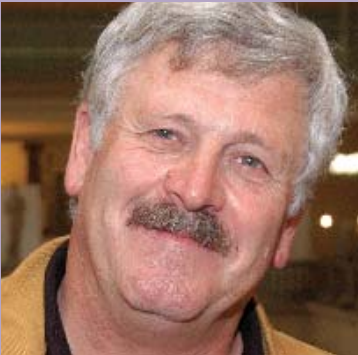
Gita Govan, Senior Lecturer, University of Cape Town, South Africa

Things are never absolute. Sustainability too must be seen in ways that differ from region to region. We must use global networks to work toward local solutions. And we should not speak too generally about sustainable construction.



Jean-Paul Jeanrenaud, Head of Business and Industry Relations, WWF-International, Switzerland

The concept of sustainable construction must make it easier for all people to choose the correct course. Presently it is much too easy for most people to choose a non-sustainable lifestyle.



Rolf Blaser, Professor and Landscape Architect, Switzerland

With all the problems we have and those that will arise, we must find an ecological way that is feasible for the entire world population – otherwise collapse threatens. Sustainability is for me one of the most important things of all. I am convinced that it always has to do with mankind as a whole.



Gaetan Siew, First Vice President, Union Internationale des Architectes, Mauritius

The Indians of the American Great Plains were nomads who left every place like they found it. They destroyed nothing, consumed nothing non-renewable. That is in fact the essential philosophy of sustainable construction.



Barbara Dubach, Vice President, Social Responsibility and SD Coordination, Holcim Group Support, Switzerland

We must not only build sustainably, we must work toward a sustainable way of life that leaves something for future generations. A sustainable lifestyle does not necessarily mean restrictions, but it does require new social, environmental, and economic approaches.



Vanessa Gomes Silva, Associate Professor, State University of Campinas, Brazil

First we must create equal opportunity for all people, then we must find the equilibrium with nature. In countries with great economic problems it is very difficult to achieve environmental protection.



Luke Chandler, Student, University of the Witwatersrand, South Africa

We must create spaces in which people like to live, spaces that people will use for many years with pleasure pride, spaces that can be adapted to changing needs. But unfortunately sustainability is not a priority in South Africa.



Anna William Mtani, Project Coordinator, Dar-Es-Salaam City Council, Tanzania

If we want to build sustainably, the crucial question is: How affordable are the materials for the poor? People must be able to maintain their buildings.



Jürgen Mayer H., Architect, Germany

If a building fails to speak to us through its design, if it fails to radiate an aura that appeals to the spirit, then sustainability is without merit.



Claude Fussler, Advisor on business innovation and sustainability, Member of the Board of the Holcim Foundation, France

The primary meaning of sustainable construction is building for poor people who have no shelter. There are billions of people who must be taken care of. The secondary meaning is building in harmony with the environment.



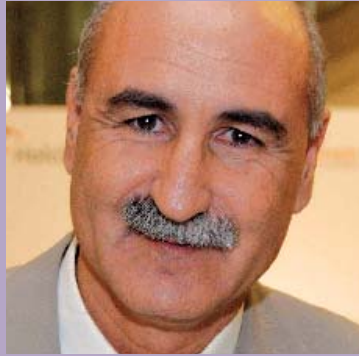
Christophe Gobin, R&D Coordinator, GTM Construction, France

For me sustainable construction means good use of resources.



Leon Krige, Student, University of the Witwatersrand, South Africa

We don't need people who can simply present a big solution to our problems; we need people who can show us where we stand and what problems we must now solve.



Saïd Mouline, Director of Architecture, Ministère délégué auprès de Premier Ministre, Morocco

In French "sustainable" is translated as "durable," or lasting. This is not a good translation because we don't need everlasting buildings for mortal man; we need structures that aid people in their development. This development occurs not only on a material plane – we also have spiritual and emotional needs, we need friendship and solidarity.



Diana Csillag, Student, University of São Paulo, Brazil

We must not create islands of excellence where everything that makes up sustainability is implemented, but rather start with ordinary everyday construction: buildings should consume fewer resources, give people an identity, and have some relation to their environment.



Kyong Park, Director, International Center for Urban Ecology, USA

Materials and resources must be used efficiently and economically – and in a way that they will serve for a long time.



Nina Maritz, Architect, Namibia

I am concerned about the deep gap between developing countries and the developed countries in relation to the definition of sustainability. Here in Europe, buildings are built containing more high-grade materials than we use in an entire year in our country. Energy-saving lights and similar individual measures are just a drop in the ocean – we should not focus on them, but must approach everything much more fundamentally.



David Kithakye, Senior Human Settlements Officer, United Nations Human Settlements Programme, Kenya

Sustainable construction is building what people really need.



Weiding Long, Professor and Head of Engineering Department, Tongji University, China

Especially in China sustainable construction means conserving energy and protecting the environment.



Xavier Costa, Elisava School of Design, Spain

Today sustainable construction is an extremely urgent postulate. Hence it is important that we come together to analyze the situation jointly and search for answers to the urgent questions. Dialog and debate aid our progress.



Hans-Rudolf Schalcher, Professor, ETH Zurich, Member of Board and Head of Technical Competence Center, Holcim Foundation, Switzerland

Sustainable construction means not just ecological building, but building to serve society.



Andrew M. Scott, Professor, Massachusetts Institute of Technology, USA

I consider it an urgent necessity that we better define the term sustainability. It is a buzzword used by many experts, but one which lacks substance. We need a critical investigation of the term and the subject matter.



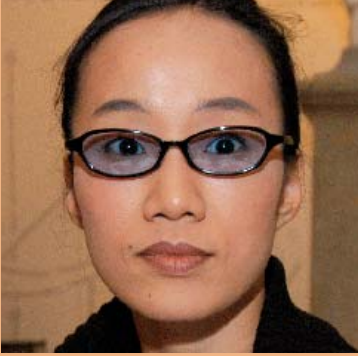
Amira Osman, Lecturer, University of South Africa, South Africa

The more we try to standardize our lifestyles, the less sustainably we behave. A sustainable existence is an existence that adapts to a spectrum of lifestyles – and a range of interactions with the environment. But I see people in Africa for example trying more and more to live like Europeans or Americans. It may sound like a utopian wish but it is essential behavior: We must accept our different ways of life.



Karl W. Meissner-Roloff, CEO, Holcim South Africa, South Africa

Buildings must be practical, durable, and of good quality. They must consume little energy and above all be adaptable.



Horomi Hosoya, Architect, Switzerland

For me sustainable construction involves not only physical aspects but perceptions.



Eve Annecke, Director, Sustainability Institute, South Africa

For me sustainable construction means creating spaces where the human spirit can make its own place for creativity.



Ljubomir Miscevic, Architect and Professor, University of Zagreb, Croatia

Sustainable construction? We need a broader context. I speak rather of sustainable construction concepts, which include for example architectural design and city planning.



Mohsen Mostafavi, Dean of the College of Architecture and Planning, Cornell University, USA

We must consider what terms we wish to link sustainability with. I advocate “ethics.” Sustainable behavior presumes ethical behavior.



Louisa Hutton, Architect, Germany

For me sustainable construction is an issue on three levels: that of the city, the building, and the individual.



Alexander Biner, Partner, MS Management Services, Member of the Board, Holcim Foundation, Switzerland

Sustainable construction is a new concept, the importance of which must be studied even more in the work of our foundation. This concept will have to mean different things in different countries – that’s why it is important to investigate it, test it, and discuss it now.



Seana Nkhahle, Student, University of the Witwatersrand, South Africa

Building demands a holistic approach. That means for example that the construction industry must consider how it can provide employment, consume less water, enhance efficiency, and support social and economic development. There is more at stake than piling stones together.



Kaarin Taipale, Senior Advisor, ICLEI – Local Governments for Sustainability, Canada

What does sustainable construction mean? My life. I cannot put it shorter.



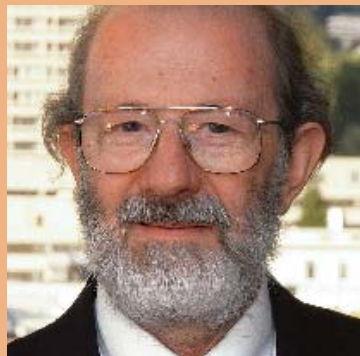
Gérard Letellier, Deputy Area Manager, Holcim, Switzerland

Sustainability is a nice word, yet hardly anyone abides by the principle. I consider it very important that we achieve something here that really does some good. The first concrete step however is always particularly difficult.



Daniel K. Irurah, Senior Lecturer, University of the Witwatersrand, South Africa

Think globally, act locally! Sustainable construction for me means applying the broader requirements to my local context. There is no single definition of sustainable construction – it is a living thing that one should contribute to daily.



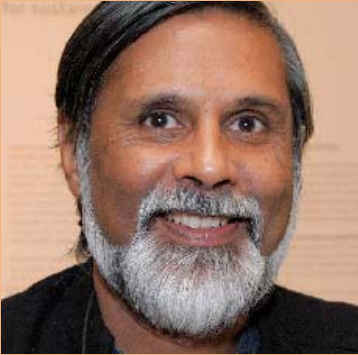
Norman Goijberg, President of Green Building Chile, Chile

Today we build similar buildings everywhere – in Manhattan, in Shanghai, in developing countries. These buildings are not adapted to their locations. Why do we need air-conditioned buildings in Chile? Unfortunately architects work in a very real world in which the market apparently does not demand any better or more sensible buildings. So the first thing we need is a rethinking within the market.



Junji Shirai, Architect, Japan

We must realize that sustainable construction means something different in each country and we must be open to a variety of solutions.



Ashok B. Lall, Architect, India

Construction is an activity imbedded in a specific time and place. Sustainable construction optimizes the use of present and future resources.



Andrew Zago, Principal, Zago Architects, USA

We know that many things today are not sustainable, but at the same time we are not sure what sustainability actually means.



Peter Sapp, Managing Director, Querkraft Architekten, Austria

Sustainable construction for me means that one must find answers for every challenge, solutions in which the architectural concept creates identity – and lasting value for the future.



Sarah Graham, Architect, USA

I use the Rio definition of 1992 and work toward a combination of ecological, economic, and social benefits.



Markus Akermann, CEO of Holcim and Chairman of the Board of the Holcim Foundation, Switzerland

Sustainable construction means energy-efficient use of building materials, aesthetics, and rational housing and infrastructure – especially in developing countries. We as producers want to know what happens with our materials and what contribution we can make to sustainability.



Roger Baud, Director, Center for Sustainability, Swiss Federal Institute of Technology (ETH Zurich), Switzerland

Consuming little resources, using long-lasting materials, minimizing environmental stress, and working cost-effectively to provide shelter for many – that is sustainable construction.



Fang Xu, Student, Tongji University, China



Marc M. Angéil, Professor, ETH Zurich, Member of Board and Technical Competence Center, Holcim Foundation, Switzerland



Paula Gómez Ortega, Director, de Proyecto Fundación Urbana, Argentina

Our most important task is to find a balance between long-term demands and present needs!

In sustainable construction, various factors must be set in relation to one another in such a way that a habitable environment is created – one that can also serve the needs of future generations.

When we consume resources, we must do it in a way that leaves something for the next generations.



Zhiqiang Wu, Professor, Tongji University, Member of the Technical Competence Center of the Holcim Foundation, China



Marclyn Gow, Lecturer, University of California Los Angeles, USA



Vanderley Moacyr John, Professor, University of São Paulo, Brazil

Sustainable construction also means we must not do too much. If we build over everything now and leave nothing for the next generation, that would not be sustainable.

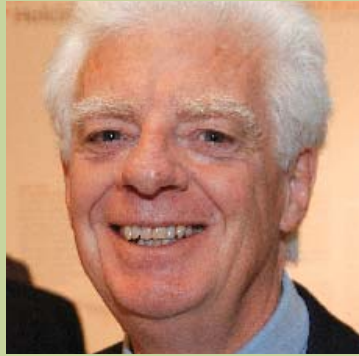
Sustainability is very urgent. For me it means we must build cities that remain adaptable over the long-term. It is not only a matter of building things that last; they must also be adaptable to serve new needs.

We will never have sustainable buildings exclusively – but we can try to approach the optimum as closely as possible. Sustainable construction is a dream that we urgently need to pursue.



Lara Braun, Student/Journalist, University of São Paulo, Brazil

I am convinced that one day the importance of sustainable construction will be clear to everyone. But quite some time will have to pass before the revolution arrives.



Terry Williamson, Associate Professor, University of Adelaide, Australia

If we want to make something lasting, we must try to anticipate future expectations – regarding the environment, economy, and society.



Peter Baccini, Professor, ETH Zurich, Member of Technical Competence Center of the Holcim Foundation, Switzerland

We must develop over several generations the quality of life in the built environment – while conserving the existing cultural attributes. The next generation must also have the opportunity to create new things. Most importantly, we must not reduce the resource capital of our planet.



John Martin Evans, Director, Research Centre Habitat and Energy, University of Buenos Aires, Argentina

We must design buildings today that will be well-suited in the future.



Wendy Meguro, Student, Massachusetts Institute of Technology, USA

Today we could be doing much more for the next generation – by being more conscious of waste production, energy consumption, and material use.



Ajay Shah, Student, Swiss Federal Institute of Technology (ETH Zurich), Switzerland

To me, sustainable construction means giving the next generation a better world, or at least one that's just as good.



Jakob Dunkl, Managing Director, Querkraft Architekten, Austria

Sustainable construction to me means building things that can last a very long time. The material must not necessarily endure, but the architectural idea. I believe that poor architecture, bereft of character, disappears as fast as it appears. Even if you used ecological materials and green roof to build another indescribable and anonymous shopping mall like those that cover the world today, it would remain worthless. The shopping mall is a form without integrity. It can never be sustainable.



Benedikt A. Vonnegut, Secretary of the Holcim Executive Committee, Holcim Group Support, Switzerland

With sustainable construction one creates spaces in which humans can live well today and in future. The manmade environment should enable interaction with the natural environment – it must contribute to the regeneration of spirit we need each day.



Andreas Ruby, Architecture Critic, Germany

We must once again see architecture as a temporal creation, not the permanent development of our environment. Present needs must not be the only determining criteria for a project; we must consider how the building will develop over the course of time. The possibility of obsolescence must be seen as part of the reality of a project from the very start.



Matt Lehar, Student, Massachusetts Institute of Technology, USA

To me something is sustainable if it can stand on its own feet – if it can theoretically continue to exist forever without consuming resources.



Benjamin Hossbach, Architect, Germany

Sustainable construction means considering the next generation.



Dirk Hebel, Architect, USA

We must address the problems, discuss them, write about them, and above all work together with industry. We can do a lot of thinking about sustainability, but if industry and clients do not support the effort, we will achieve nothing.



Maria J. Loots, Student, University of the Witwatersrand, South Africa

Sustainable building must not be a hindrance to life on the planet – including the life of animals and plants. I see that even large companies are getting involved in this concept and I find that very stimulating because it shows that not everything in this world is about money.



Roberto Lamberts, Professor of Civil Engineering, Federal University of Santa Catarina, Brazil

If every human being on earth wanted to live as the Americans do, it would bring on collapse. We must rectify non-sustainable lifestyles; we must be concerned about the earth's limits of resources and energy.



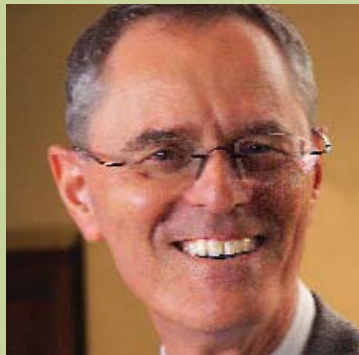
Cesar Ulisses Trevino, President of the Mexican Green Building Council, Mexico

Sustainable construction is an obligation for all professionals, to enable a good start into a future with minimal resource consumption.



Kenneth Yeang, Principal, T.R. Hamzah & Yeang International, Malaysia

Sustainable construction means integration of the natural systems with everything that we do as human beings. Whether something is sustainable cannot be proven 100 percent in our lifetime, so it is important that we work together with the young generation.



Roland Walker, Head of Holcim Corporate Communications, Delegate of the Board of the Holcim Foundation, Switzerland

Today all opportunities that contain the various building materials must be optimally coordinated and sensibly applied in buildings. We must not expect to find already now solutions to all the urgent problems in the world, but we must build up a network of all the important experts.



Leon Glicksman, Professor of Building Technology, MIT, Member of Technical Competence Center of the Holcim Foundation, USA

Sustainability means satisfying the needs of the today's world without overburdening future generations. Today we are far from this goal – we still have a long way to go.