

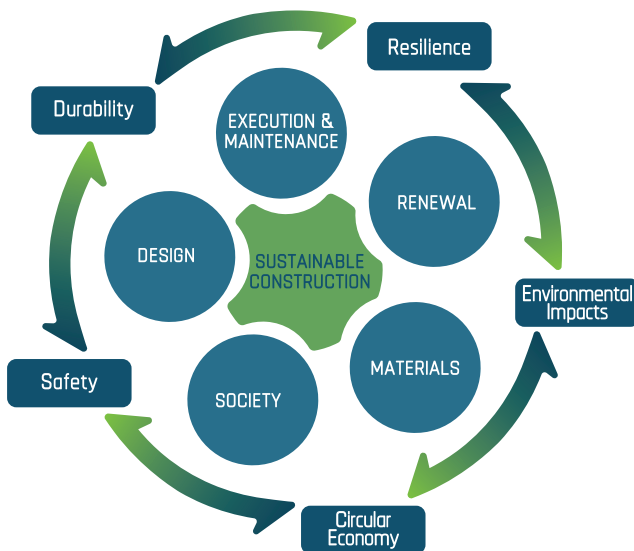
Global consensus on sustainability in the Built Environment

SUMMARY

Nothing less than a transformative and united worldwide effort from all stakeholders and in particular those of the construction sector is required for human society to be successful in sustainable development, and in the mitigation of the disastrous consequences of climate change at global and local scales.

Global population growth and rapid urbanization demand enormous construction activities and materials use. Within the next ten years, the overall global land use requirement of the built environment is expected to double. In addition, it is expected that in more developed economies infrastructure and maintenance of structures will significantly increase. Current practices for the management of construction and structures are far from sustainable. If these are not changed, the emissions from the construction sector alone will jeopardize the achievement of the objectives of the Paris agreement.

Redirecting the construction sector comprises a major challenge which necessitates strong and persistent political focus. The construction sector is organized in a decentralized way with a vast number of organizations and participants. There is little or no integrative organization between service providers or owners and clients. In addition, applied technology enhancements are incremental and international standards, codes, and guidelines that govern the design and construction of the built environment evolve too slowly to keep pace with the rapidly increasing of technological advances.



GLOBE draws the attention of societal decision makers to the need of new best practices to be implemented by all stakeholders and through all links of the value chains of the construction sector. Major facilitators for this transformative change are identified as targeted improvements of codes and regulations, financial incentives together with research and education. Suggested operational instruments for design and integrity management of buildings and infrastructure include explicit consideration of circular economy, life cycle environmental impact assessments, increased use of advanced modelling and analysis methods as well as targeted utilization of new sensing, data processing and storage technologies.



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In support of policy decision making at global and national levels the Joint Committee on Structural Safety is offering its assistance and suggests to establish a Global Task Force under the auspices of the Liaison Committee comprising experts from RILEM, IABSE, *fib*, CIB, ECCS, IASS, and joined by other relevant and committed international and national organizations that also support the GLOBE Consensus.

The subscribers of GLOBE fully appreciate that the built environment is much more than structures and infrastructures – it encompasses and involves society in general, the environment and a broad range of industries and professions. It is the intention that the GLOBE initiative shall evolve over time to account more holistically for all stakeholders of the built environment, and your contributions in support of this are sincerely invited and hoped for. Expression of support is possible through this link: GLOBE support. More information about GLOBE may be found at: <http://globe.rilem.net>.

About GLOBE – Global Consensus on Sustainability in the Built Environment

GLOBE was initiated at an interdisciplinary workshop held at Tongji University, Shanghai, China co-organized by members of the Joint Committee on Structural Safety (JCSS) and the International Joint Research Center for Engineering Reliability and Stochastic Mechanics (CERSM) at Tongji University. GLOBE has since been adopted by the JCSS and is supported by major international associations within the construction industry, including RILEM, IABSE, *fib*, CIB, ECCS and IASS.

The GLOBE working team operated under the direction of Prof. Michael Havbro Faber, Department of the Built Environment, Aalborg University, Denmark, President of the Joint Committee on Structural Safety and initiator of GLOBE, assisted by Dr. Dipl.-Ing. Wolfram Schmidt, Bundesanstalt für Materialforschung und -prüfung (BAM), Berlin, Germany.

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