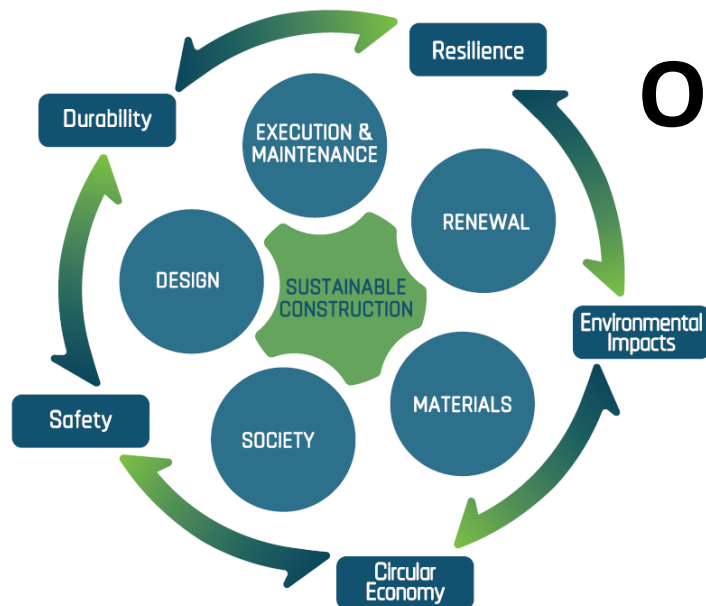


The GLOBE Consensus – On Sustainability in the Built Environment



Michael Havbro Faber
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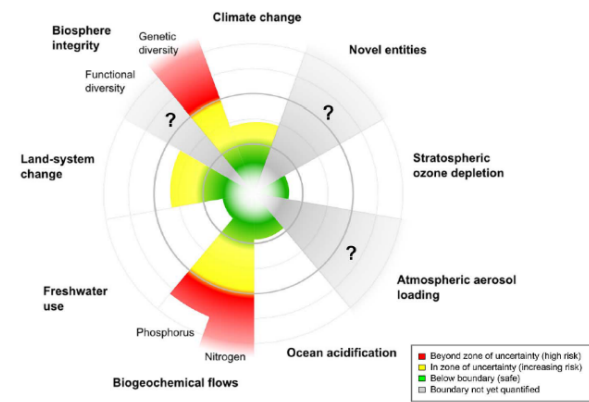
Topics addressed

- **Setting the scene – sustainability in the built environment**
- **The GLOBE Consensus (extract)**
 - **The initiation**
 - **Facilitators**
 - **Actions**
- **Next steps**

Setting the Scene

Pressing boundaries for societal developments:

At local and global scales it is increasingly appreciated that societal developments are approaching the limits of the capacities of the ecological systems and the Earth life support system



Planetary boundaries, Steffen *et al.* 2015 [\[1\]](#)



Setting the Scene

The Built Environment - an industry of scale

- 500 cities with more than 1 million inhabitants
- 6 billion buildings
- 13 million km of roads
- 1 million km of railways
- 50,000 airports
- 45,000 dams
- 340,000 wind turbines
- 6,500 offshore oil and gas production platforms
- 440 nuclear reactors
- More than 1 million construction companies



Setting the Scene

Why the construction sector is unique – and problematic

- Organized in a decentralized way with a vast number of organizations and participants.
- Little or no integrative organization between service providers or owners and clients.
- Focus on budgets and efficient delivery of services has created an environment where applied technology enhancements are incremental.
- Limited attention is given to material consumption.
- Standards, codes, and guidelines that govern the design and construction of the built environment evolve too slowly to keep pace with rapidly increasing technological advances, as well as dramatically changing societal needs.

Setting the Scene



**As it stands with present best
practice technology –**

***sustainable developments
necessitate that we build as
little as possible***

GLOBE Consensus

The history of GLOBE



The GLOBE Consensus was initiated at an international workshop on Sustainability of the Built Environment held at Tongji University on May 31- June 1, 2019. The workshop was organized in a collaboration between the Joint Committee on Structural Safety (JCSS) and the International Joint Research Center for Engineering Reliability and Stochastic Mechanics (JCERSM).



GLOBE Consensus

The history of GLOBE

In november 2019 the Liaison Committee mandated the JCSS to establish a special task force to revise/adapt the consensus document from the Tongji workshop such that it could represent the opinion of the expertice represented by the associations behind the Liaison Committe (RILEM/IABSE/fib/CIB/ECCS/IASS).

Since January 2020 the special task force had several meetings and by the end of July a consensus on the GLOBE Consensus was reached and thereafter formally supported by the associations.

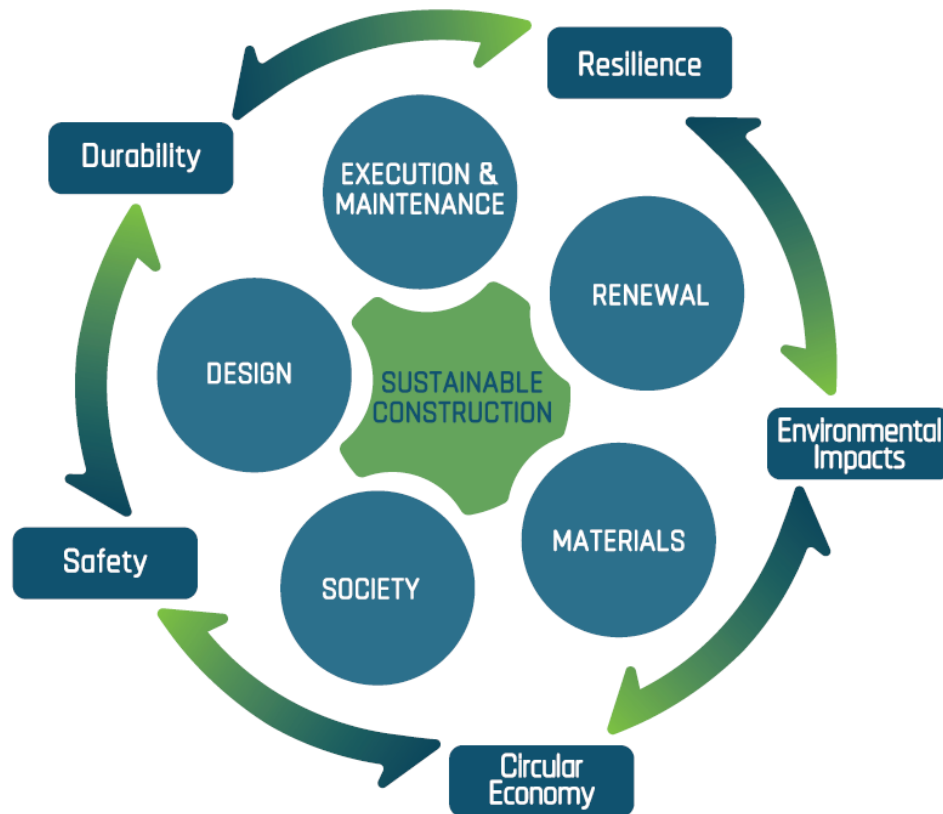
GLOBE Consensus



The members of the special task force

Prof. Dr. Mark Alexander
Prof. Dr. Carmen Andrade Perdrix
Dr. Michael Behm
Prof. Dr. ir. Robby Caspeelee
Dr. Pedro Castro
Prof. Jian-Bing Chen
Prof. Lu Dagang
Mrs. Véronique Dehan
Prof. Dr. Bruce Ellingwood
Prof. José Manuel Gállego Estévez
Prof. Michael Havbro Faber
Prof. Dongping Fang
Prof. Paolo Gardoni
Prof. Dr. Ravindra Gettu
Prof. Dr. Guillaume Habert
Prof. Dr. Petr Hajek
Prof. Dr. Terje Haukaas
Prof. Dr. Vanderley M. John
Prof. Dr. Jochen Köhler

Prof. Dr. Jie LI, Professor
Prof. Marc A. Maes
Dr. Jose C. Matos
Prof. Mauricio Sánchez-Silva
Prof. Dr. Alan O'Connor
Dr. David Fernández-Ordóñez
Dr. Rafael Astudillo Pastor
Prof. Yongbo Peng
Prof. Giovanni Plizzari
Prof. Dr. John Provis
Dr. Nicolas Roussel
Dr. Beatriz Mateo Sanz
Dr. Dipl.-Ing Wolfram Schmidt
Prof. Dr. Karen Scrivener
Prof. Dr. Raphael Steenbergen
Dr. Chep Uytiepo
Prof.ir. A.C.W.M. Ton Vrouwenvelder
ir. Johan Vyncke
Mr. Don Ward



The Challenge

Nothing less than a transformative and united worldwide effort from all stakeholders 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.

GLOBE Consensus



Contents

- **Objective and main messages of GLOBE**
- **The sustainability challenge for the built environment**
- **A new paradigm for governance of the built environment**
- **Necessary facilitators for new infrastructure development and management paradigms**
- **Actions to facilitate sustainable structures**
- **Call for immediate action**



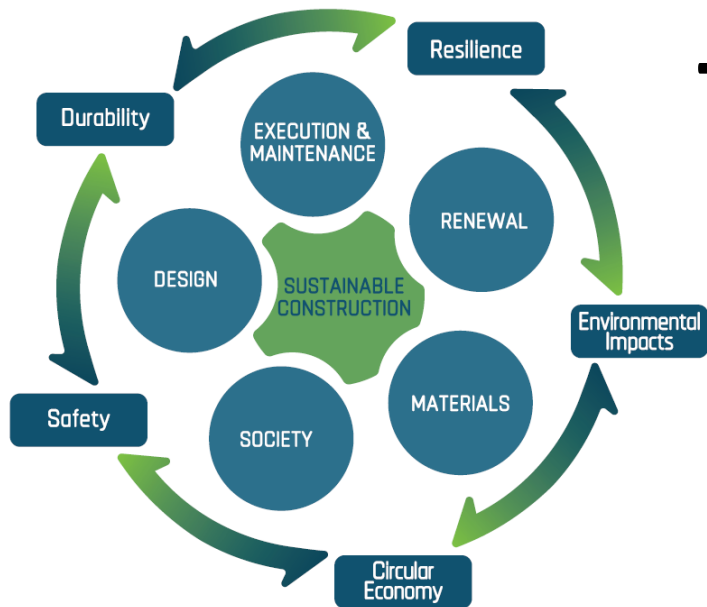
Next Steps

Call for immediate action

The GLOBE network of international (RILEM, IABSE, fib, CIB, ECCS, IASS) and national associations, industry partners and experts is offering its assistance to all stakeholders of the built environment at both supra-national and national scales.

If you would like to be a part of - or to support GLOBE please check out the GLOBE homepage.

<http://globe.rilem.net>



Thanks for Your Attention

<http://globe.rilem.net>

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