Executive summary
The contribution of construction to the total global embodied Green House Gas (GHG) emissions amounts to around 20%. Three-quarters of these emissions originate from concrete and steel alone, due to their large production volumes. Hence, immediate actions must be taken to reduce these emissions. Therefore, within the framework of the COP27, the Joint Committee on the GLOBE Consensus has launched a first policy advice document on the Decarbonisation of Construction. Decarbonisation of construction goes far beyond renewable energy transition and carbon capture technologies. The dramatic role of embodied GHGs in construction must be considered and the different players and parties of the construction sector must work closer together to drastically reduce these. Within the next 30-50 years, the global demand for housing and infrastructure poses a substantial challenge to the global community. This development will be driven especially by the Global South, where the majority of new construction will occur. Immediate action is needed to implement the best knowledge and technologies we already have today. A paradigm shift in construction to adopt better practices must be implemented at global scale.

Using less and lower embodied carbon materials must be appreciated as fundamental way towards the decarbonisation of the construction sector. Yet, key obstacles today are lack of organisation in the construction sector and inadequate regulatory frameworks, codes and standards. All actions identified by GLOBE can be implemented already now with the support of the international, high level expert network of the associations that constitute GLOBE. This network contributes with knowledge that bridges structural design and material sciences. Moreover, GLOBE has the impact and regional outreach required to help facilitate the global implementation, through its global network of associations and experts engaged in codes and standards writing.

On the Joint Committee on the GLOBE Consensus
The Joint Committee on the GLOBE Consensus (GLOBE) is a committee dedicated to reducing Green House Gas emissions from construction. GLOBE has been brought to life by the Liaison Committee of the six associations CIB – the International Council for Research and Innovation in Building and Construction, ECCS – the European Convention for Constructional Steel Work, fib - the International Federation for Structural Concrete, IABSE – the International Association for Bridge and Structural Engineering, IASS - International Association for Shell and Spatial Structures and RILEM – the International Union of Laboratories and Experts in Construction Materials, Systems and Structures. These six associations have been active in the development of technical guidelines, standards, innovation, research and education in construction at international level for more than 50 years. They represent more than 150 nation states and 5000+ experts. Hence, the backbone of GLOBE is the knowledge represented by the associations with respect to the entire value chain of construction. This includes materials engineers, structural engineers, safety and resilience engineers, consulting engineers, contractors, owners and operators, experts in standards and codes, as well as policymakers.

Further information and contact