

## The Concrete Initiative Workshop: What can we learn from new trends in the construction sector?

### Summary Report

On 6 February, The Concrete Initiative organised a workshop to debate what are the construction trends to keep an eye on in the years to come. To remain competitive, the sector needs to evolve its decision-making processes while enabling the transition to a low carbon economy.

The workshop gathered views from contractors, technical experts, academics and policymakers and invited them to share their latest developments and expectations on what are the new construction products' market conditions in which cement and concrete producers and users will operate in the years to come.

The Concrete Initiative and CEMBUREAU **President Gonçalo Salazar Leite**, welcomed participants explaining the importance of organising an event under the umbrella of the 2019 EU Industry Days. He set the scene by saying the construction sector is crucial to the for the EU economy, but has big challenges to face in contributing best to a sustainable future. He also mentioned The Concrete Initiative was founded by the belief in the need for the cooperation along the value chain to tackle sustainability.

The moderator **Karl Downey from CRH** introduced the agenda of the day and set the objective of the meeting: hearing the views from stakeholders in the value chain on digitalisation and sustainability. He also presented a slide on the McKinsey study on the low productivity of the construction sector and noted that today's event was an opportunity to gain insights on how to improve this, be it by digitalisation, collaboration or policy.

The first presentation was from contractor **Dr ir Marc Ottefé from Heijmans**. Mr Ottefé highlighted the importance of durability as criteria for sustainability for engineering projects, pointing out that a project that needs early maintenance is not sustainable.

**Lorenzo Orsenigo from ICMQ** presented Envision, a sustainability assessment scheme for infrastructure. The Concrete Sustainability Council (CSC) responsible sourcing scheme for concrete is recognised in Envision. Durability and resilience are taken into account in energy and climate category.

**Vivian Dorizas from the Buildings Performance Institute Europe (BPIE)** brought the debate at a more policy level focusing on challenges deriving from designing and implementing innovative policies for decarbonisation and renovation of buildings. She highlighted that decarbonisation in buildings should start at policy level, and policy measured should first be accepted at city level.

**Prof. Dr. Robert J. Flatt from the Institute for Building Materials at ETH Zurich** showcased examples of 3D printed concrete and its potential for aesthetic designs. He mentioned it is a sustainable option since it reduces the consumption of materials, if well designed and taking into account structural requirements. Mold printing will be key according to the BCG study on digitalisation of the construction sector. In 3D printing he sees lots of opportunities, but also limitations. Collaboration is key in large projects in order to make progress.

**Jacky Chi Ho Lau from building SMART Norge** underlined the need to provide information for BIM. Bridging the gap between BIM and information provided by the manufacturer is key. His project is currently developing a code to do that. Work is being done at EU and international level in ISO and CEN (CEN TC 42 and ISO TC 59 SC 13 (building smart digital dictionary)). He also highlighted the relevant properties for a digital data template are: harmonised standards, performance in building, EPD, supply information. Everything should be based on open standards.

**Luigi Perissich from FEDERCOSTRUZIONI** showed the strategic thinking behind the EU interoperable and integrated digital data platform that aims to help the construction sector increase its productivity and contribution to sustainability.

**Jaime Moreno from TECNALIA** presented different techniques for recycling concrete. He introduced a BIM based tool for selective demolition and other advanced technologies to improve the quality of construction and demolition waste for recycling.

**Eunan Kelly from CDE Global** presented uses of innovative recycling techniques which increase the circular economy in the construction industry. He showed a technology to separate construction and demolition waste and how the different materials are reused and given new value in the construction industry.

**Kjetil Tønning, FIEC President** highlighted the importance of the Industry4Europe Manifesto as a driver for change in the industry. He pointed out one of the papers published last year that include principles to drive digitalisation in the sector, including the need for cooperation.

In his concluding remarks, **Inigo Urresti, Deputy Head of Unit from DG GROW in European Commission**, mentioned that all the subjects discussed on the day are also priorities for the European Commission and issues that they are working on. He also called for a joint action for a long-term resource efficient future in the construction sector, with a holistic social environmental and economic approach to motivate the construction sector to achieve its sustainability goals and build a strong policy framework.