

Expert Workshop:

Public Procurement and Innovation for Low-Carbon Infrastructure

23 June 2017, Brussels

Venue:

European Climate Foundation

Rue de la Science, 23

1040 Brussels

Belgium

Background

The Paris Agreement under the United Nations Framework Convention on Climate Change has set the ambition for global actions to reduce greenhouse gases. As signatories of the Paris Agreement, European governments must start showing the way through a better alignment of their policies with the climate imperative. This also means leading by example in their everyday actions and investments.

The purchasing power of the public purse has the potential to support Europe's low-carbon industrial development. Today, public procurement of infrastructure in Europe accounts for approximately 22% of the construction sector output, and continuous growth is expected in most infrastructure areas for the coming years. Given the substantial relevance of cement and concrete for infrastructure projects combined with the significant emissions of the sector¹, public procurement constitutes a high-impact policy arena for achieving deep decarbonisation and more circular practices in these sectors, and hence for creating lead markets in Europe for low-carbon cement and concrete products, as well as for other low-carbon building materials. Although it features as an important element of the European Commission's Single Market Strategy, public procurement is currently underused as a policy instrument to drive low-carbon innovation.

The International Institute for Sustainable Development (IISD) and the Industrial Innovation for Competitiveness initiative (i24c) are investigating the extent to which (and how) public procurement can drive markets for low-carbon solutions and innovation in Europe, focusing on infrastructure. Our aim is to collect further evidence on strategies and effective public purchasing related instruments that facilitate infrastructure development with low-carbon and more circular building materials.

¹ The cement sector's global emissions account today for approximately 5% of anthropogenic CO₂ emissions - source CEMBUREAU (2013). The role of cement in the 2050 low carbon economy:
<http://lowcarboneyconomy.cembureau.eu/uploads/Modules/MCMedias/1380546575335/cembureau---full-report.pdf>

Our research

Since January 2017, we have been conducting desk research and 15 in-depth semi-structured interviews with industry, national and local procurement agencies and innovation brokers, and participated in several roundtable events.

All interviews conclude that there is clear potential for public procurement to change the practice of the infrastructure and construction value chain towards low-carbon, and proven examples of how to do so. They also underline that there is no silver bullet. Innovation can be triggered at various stages of the procurement cycle, as illustrated by the figure below. Depending on the project, certain stages of the procurement cycle will be more suitable and more powerful to drive innovation and circularity in the building materials sector than others.

Procurement Cycle

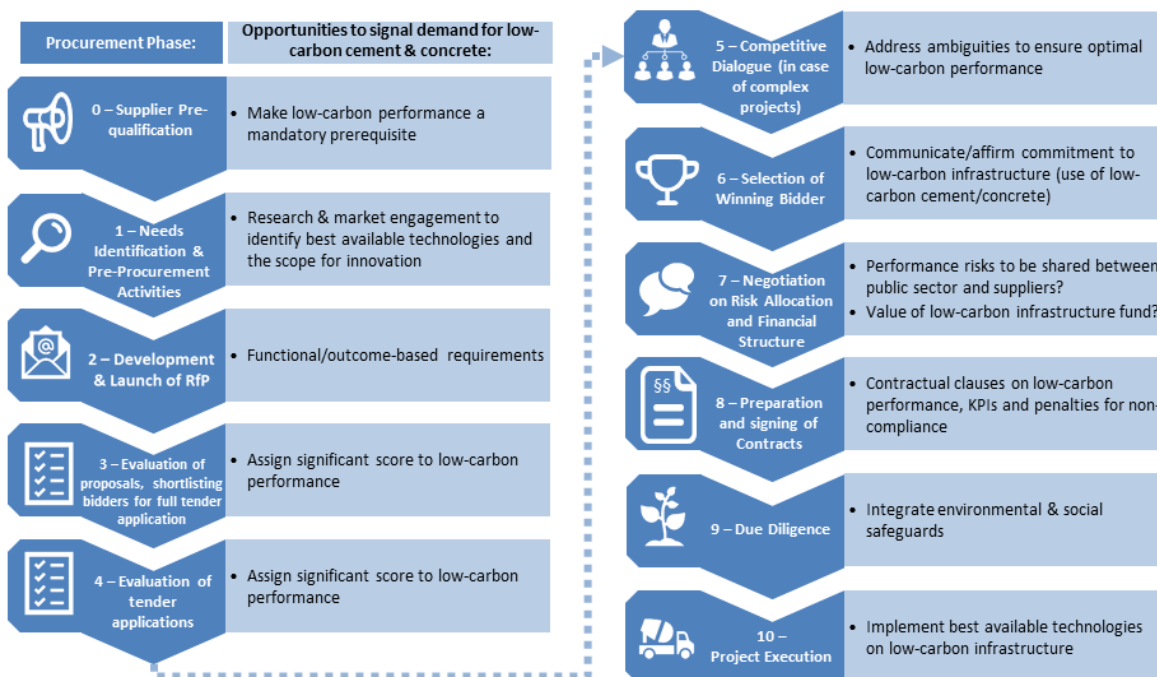


Figure 1: procurement cycle (IISD, 2017)

During the workshop, we will discuss the procurement cycle in detail and present those steps that are the most important for positioning public procurement as an innovation and low-carbon lever.

Objectives and expected outcome of the workshop

With this expert workshop, we aim to establish effective measures that link public procurement and low-carbon development in the construction industry. We seek to validate our findings and gather further input on strategic recommendations from all relevant stakeholders (industry, public procurers, policy makers, investors, experts).

Building on the participants' expertise and their diverse perspectives, the workshop will provide room to elaborate on new pathways for public procurement for prioritizing low-carbon cement while ensuring sustainability of final infrastructure assets. We will collectively develop strategic recommendations for policy makers and procurers on how to identify and reward low-carbon solutions, and hence scale long-term demand, R&D and investments for low-carbon infrastructure.

Expected outcomes:

- Validation of our findings and policy recommendations
- Dialogue on the use of functional/performance-based specifications
- Dialogue on the effectiveness on current EU policies on procurement and innovation
- Concise inputs for instruments and strategies to be applied in public procurement
- Insights about industry needs to accelerate the market introduction of low-carbon material innovations and the role of public authorities, innovation brokers and investors
- Prospects for standardised approaches and/or product standards in public infrastructure projects (without inhibiting innovation and recognizing variety in raw material availability)
- Facilitation of communication and transparency between public sector and the cement and the construction industry
- Dialogue on Risk sharing and financing

Agenda

This workshop is meant as an exchange among all participants, invited in their personal capacity, and held under Chatham House rule.

10:15-10:30	Welcome and Tour de Table
10:30-10:45	Overview and main findings from IISD-i24c project
10:45-11:45	<p>What is the role procurement and innovation to drive low-carbon infrastructure?</p> <p>Short interventions: Farid Yaker (UNEP) / Richard Baron (OECD) / Matija Matokovic (EC - DG GROW)</p> <p>Moderation: Julia Reinaud (i24c)</p> <ul style="list-style-type: none"> • What is the role of public procurement in driving innovation for low-carbon building materials? • What are the leverage points in the procurement process to drive innovation? • What are the challenges and opportunities for the cement industry in the procurement process? • What are the challenges and opportunities for procurement agencies to drive the low-carbon transition in infrastructure?
11:45-12:30	<p>Innovation in low-carbon building materials</p> <p>Short interventions: Cédric de Meeûs (LafargeHolcim) / Karl Downey (CEMBUREAU)</p> <p>Moderation: Julia Reinaud (i24c)</p> <ul style="list-style-type: none"> • What are the current incentives for innovation towards low-carbon cement? How can they be strengthened? • What are the issues with standards and how can they be overcome?
12:30-13:15	Lunch
13:15– 14:15	<p>Procurement and innovation</p> <p>Short interventions: Harald Versteeg (RWS) / Ayse Er (City of Amsterdam) / Mervyn Jones (Circular procurement expert)</p> <p>Moderation: Oshani Perera (IISD)</p> <ul style="list-style-type: none"> • What are the tools and best practices for evaluating tenders from an innovation and sustainability perspective? • What are the tools and best practices for engaging with the market within the current EU legal framework?

	<ul style="list-style-type: none"> • What support schemes exist/can be developed to support public procurement agencies to shift towards more strategic procurement?
14:15-15:00	<p>Risk sharing and finance</p> <p>Short interventions: Doris Scheffler (ZENIT) / Sam Nelson (former Managing Director, Advisory Services, Commodities and Energy, Thomson Reuters)</p> <p>Moderation: Oshani Perera (IISD)</p> <ul style="list-style-type: none"> • To what extent do the EU policies on innovation and procurement address risk sharing (for industry, for procurers, for financiers)? What are lessons learned to date? • What are the alternative business models for risk sharing? • What is the role of innovation funds?
15:00-15:30	<p>Next steps</p> <p>(IISD & i24c)</p>

About IISD & its expertise on public procurement and infrastructure finance

IISD is observer to the OECD Leading Practitioners on Public Procurement Working Group, Member of the G20/B20 Finance and Inclusive Growth Task Force, the G20 Sherpa's advisory group on infrastructure, the Global Environment Facility Technical Advisory Group on Green Infrastructure and Green Finance, and the GGKP Green Growth and the Law Research Committee. IISD's is currently undertaking similar research to advise the Government of Canada on public procurement strategies for low-carbon infrastructure. It is also working with the government of the Western Cape Province in South Africa on performance-based procurement to implement their Green Economy Strategy.

About i24c

i24c, the Industrial Innovation for Competitiveness initiative, is ECF's platform dedicated to developing and promoting an industrial strategy that secures European industry's competitive advantage through innovation. i24c was launched in June 2015 as an initiative powered by the European Climate Foundation. The initiative communicates an evidence based narrative to inform the critical debate on industrial policy. The approach of i24c is twofold; It focuses on the extent to which Europe and member states can define industrial strategies that would turn help Europe into an 'Entrepreneurial Union' capable of leading the world and stimulating purposeful innovation to meet "grand challenges. It undertakes holistic value chain analyses to identify innovation and competitiveness potentials along the complete value chain.

i24c's work is guided by a High-Level Group of leading policymakers, industrialists and thought-leaders. The purpose and the main activities the High-Level Group is to act as ambassadors of i24c's work, and as a platform to test and check the work of the initiative. This takes mostly in the form of the i24c High Level Group meetings that are taking place three times a year.

What is low-carbon infrastructure?

- Assets that are designed, built and operated in a manner that reduces carbon emissions
- Assets that incorporate building materials that have lower embodied carbon

What is low-carbon cement?

- Cements with low clinker content based on using supplementary cementitious materials (e.g., fly ash, slag, pozzolana, limestone)
 - Innovative materials, material compositions or process innovation that reduce the embodied carbon content (e.g., mechanical treatment, lower temperature requirements, utilization of recycled materials)
 - High-performance cements with positive carbon impact in subsequent life-cycle stages (e.g., lower amounts of cement for same performance of concrete, carbon absorption properties, improved recyclability)
-