



### 05. New Horizons

#### Circular Procurement in the Construction Industry

Ir. Di Wu

*PhD researcher*

*Department of Management in the Built Environment*

Procurement in the construction industry is the process in which real estate owners or developers put their ambitions about building projects on the market, in order to select partners and purchase materials and products. This process acts as a bridge between the supply and demand sides in the construction supply chain. In the context of circular transition in the construction industry, transforming the traditional procurement process to a circular one is an urgent issue. This could increase demand for circular services and products and accelerate the overall circular transition in construction.

But what is Circular Procurement?

*“Circular procurement is the procurement process of circular solutions. It relates to how an organization anchors its circular ambitions in business processes, puts them on the market, and implements interactions with the market and supply chain partners internally and externally.”*  
- Platform CB’23, 2021

##### *The seven phases of circular procurement*

Activities in circular construction procurement can be divided into seven phases:

First, the *planning* phase is to explicitly set ambitions and circular strategies and make decisions about the projects before launching into the procurement procedures. Secondly, the *criteria*

*specification* phase includes making specific implementation plans and criteria. Thirdly, the *tendering and selection* phase is putting circular ambitions on the market and selecting partners to collaborate with. Fourth is the *contracting* phase, where contracts are signed with selected partners with reflections on circular ambitions. Fifth and sixth, the *designing* and *realization* phases are where clients and other partners will make plans and realize the construction projects together after making agreements. Finally, the performance of the procurement process will be assessed during the *evaluation* phase to see whether circular ambitions are realized.

##### *The critical components of circular procurement*

The first critical component of Circular Procurement is *Selection Criteria*. Integrating circular economy goals within procurement will change the management and components of the process. More circularity- and sustainability-related criteria would need to be integrated in the process, like the detachability and reusability of materials, and their embodied energy.

Secondly, the *Contracting Methods* also need to become more innovative. One of the current examples is Rapid Circular Contracting, in which clients and partners work together to plan and design projects after the award. This is different



## Circularity for Educators

from traditional procurement, where designs are made by contractors or architects before the award.

Third, *Measurement Tools for Circular Performance* are needed. These would be critical to evaluate the circular performance of projects and materials. Examples of these measurement tools include Building Circularity Index (BCI), Environmental Performance Calculation (MPG), Municipal Practice Guideline (GPR), and Circular Practice Guideline (CPR).

Lastly, *(New Stakeholders and New Roles for Existing Stakeholders)* new stakeholders would become involved in the process, whilst roles for existing ones will change. For instance, demolishers could become de-constructors, and new companies will be formed for reselling the reclaimed materials.

*What can we do to achieve Circular Procurement in the construction industry?*

The complex character of construction project delivery and production makes it more challenging to integrate circular strategies. In current European public procurement rules, price is often rewarded over sustainability. Therefore, innovative procurement strategies are critical for stimulating the demand for sustainable and circular products and services to accelerate circular transition in the construction sector.