



Declaration

Construction in the circular economy: Towards circular materials, products and buildings

The European construction sector plays a fundamental role in building and maintaining our homes as well as other buildings, such as schools and offices, and thus is important in providing the comfort and well-being of the European population. It is made up of 3.4 million enterprises, generating about 9 % of EU gross domestic product and providing 18 million direct jobs. At the same time, the industry also produces construction and demolition waste (CDW) which accounts for 25 - 30 % of all waste created in the EU, making it one of the most important waste streams.

CDW consists of many materials including concrete, clay, gypsum, wood, glass, metals and plastics. Many of these can be recycled – to be used as ‘secondary raw materials’ – or reused. However, the current market for recycled/reused materials and products is far from strong, even though an increased market uptake is a key objective of the European Commission’s [Circular Economy Action Plan](#) which aims to make the EU economy a circular one.

Several challenges currently prevent a greater uptake of secondary raw materials and reused products. These include a reluctance to use recycled materials or reused products because of uncertainty about their quality and consistency (i.e. performance levels). One of the main challenges is that the [Construction Products Regulation](#) (CPR), which is the main legislation for construction products, does not allow for a legally-binding performance declaration for the majority of products (CE marking). Furthermore, problems exist due to the additional cost of assessing the quality of limited amounts of materials (small demolition sites), the lack of continuous supply of recycled materials or reused products because the demand is not connected to the offer and transport costs as the material/product sources and manufacturers are not always close to each other.

What are European institutions and industry doing to support the uptake of recycled/reused materials?

In the past few years, the EU has put a stronger focus on the sustainability of buildings through a number of activities. Revisions of the CPR and the [Energy Performance of Buildings Directive](#) have provided further elements of details aiming to improve implementation. In addition, the European Commission has developed the voluntary reporting framework [Level\(s\)](#) aiming to improve the sustainability of buildings through a common understanding of how to assess their sustainability, including indicators such as resource efficiency and circular material life cycles. It has also dedicated a thematic group of the Construction 2020 initiative to the topic of “Sustainable use of natural resources”, which among others developed the EU [Construction and Demolition Waste Protocol](#) providing non-binding guidelines to increase confidence in the CDW management

process and trust in the quality of recycled/reused materials from CDW streams. Another important role is played by European Commission funded research projects, e.g. focusing on [material passports](#).

How can we make circular economy a reality in the construction sector?

Putting circular thinking at the heart of the construction sector and enabling it to play a much more central role in the circular economy requires **a comprehensive strategy** taking into account opportunities, challenges as well as developing goals with regard to circularity and building upon greater coherence of existing policy objectives and initiatives.

To arrive at this comprehensive strategy, an expert platform within the future construction initiative (currently “Construction 2020”) should be established upon the following guiding principles:

- Multi-stakeholder participation by policy-makers, industry representatives and civil society organisations, to frame reflection and discussion within a wider circular economy setting;
- Build upon existing activities and best-practices, e.g. focusing on circular economy and sustainable buildings, to strengthen and repeat what works well and to improve where it is needed;
- Deepen policy objectives and mechanisms addressing sustainable building design including circularity aspects;
- Continue to build a common sustainability approach for construction, identifying and addressing ‘sustainability focal points’ and elaborately taking into consideration that materials and buildings are diverse and thus need mechanisms adapted to their specificities;
- Prioritise liability and performance related challenges as well as technical specifications of recycled materials and reused products;
- Better understand how to support business opportunities and improve B2B communications so that there is stronger market uptake of recycled materials and reused products;
- Develop a dissemination and exploitation strategy from the beginning to reach out to national, regional and local levels to better ensure changes on the ground.

Keeping in mind these guiding principles, the expert platform should deal with the following questions:

1. What is the situation regarding circularity in the construction sector?

- What are the known sustainability issues preventing circularity in the construction sector?
- What existing policy objectives or voluntary initiatives address circular economy in the construction sector?
- How can these policy objectives or voluntary initiatives be made more effective?
- Where are the gaps not covered yet?

2. What is the role of products and buildings (life cycle thinking)?

- Does circularity require that we take a different approach towards the assessment of dangerous substances?
- Should the CPR treat reused and virgin products in the same way?

- How can a harmonised and coherent, yet flexible (according to material) approach for products be developed?
- Do we need to rethink how we design buildings (adaptability of spaces, design for circularity, dismantlability, reassembling etc.)?
- How can we better include circular economy aspects in refurbishments?
- What is the role of building owners in addressing sustainable buildings (demand side)?

3. What are the obstacles to a circular construction sector?

- What policy objectives and tools can reduce or eliminate the reluctance to use recycled materials or products in building design and construction?
- Is there a need to clarify liability issues in order to increase uptake of recycled materials and reused products?
- Do we need new business models regarding demolition as well as buildings constructed from recycled materials/products?
- How to drive change in the mind-set from linear to circular?
- Are there different obstacles according to national legislation, practice, etc.?

4. What measures could support circularity?

- What role can building design play in supporting the uptake of recycled materials or reused products?
- How can building design reduce the production of CDW from the start of a project, guiding building construction, refurbishment and demolition activities?
- Should reused products be placed on the market under the requirements of the CPR?
- Would it be beneficial if the CPR specifically addressed the challenges relating to recycled materials?
- What market mechanisms could provide incentives for increasing recycling and reuse rates?
- Do we need regulatory (mandatory), voluntary (incentives) measures or a combination of both to strive towards circularity in the sector?
- How can demolition activities be supported to increase recycling and reuse of materials/products?
- How can links in the construction value chain be strengthened to better support circularity?