

THE CEMENT AND CONCRETE SECTOR CALLS FOR MATERIAL NEUTRALITY IN LEGISLATION

- There is huge potential in design improvements and in integration of different construction materials in the built environment to achieve energy efficiency and mitigation of CO₂ emissions.
- While all actors in the construction market need to cooperate and complement each other, policymakers have the responsibility to create a level playing field to all building materials.
- Guiding principles to a fair legal framework must include: **material neutrality, accurate and correct database, comparisons at the building level over full life cycle of the building.**
- The cement and concrete sector is ready to engage with policymakers to ensure a level playing field and reaches out to other material producers to achieve this goal.

Introduction

Buildings are responsible for 40% of energy consumption and 36% of CO₂ emissions in the EU¹. Minimising their environmental impact can ease the transition to a low-carbon economy.

When considering a minimal footprint of the built environment, the European Commission rightfully notes the huge potential hidden in design improvements that mitigate CO₂ emissions as well as the need for improvements to energy efficiency. Environmental benefits can be further enhanced by integrating different building materials, and by focusing on their durability, resilience and recyclability at the design stage.

Construction materials producers have a key responsibility here. The cement and concrete sector, for instance, strongly believes that concrete offers the highest level of "whole-life performance" and the industry continually works to provide a net positive environmental impact throughout the lifetime of its products in use in buildings. Thermal mass has traditionally been used to improve the energy efficiency of buildings and provide a stable indoor temperature. A further – previously untapped – benefit is to use the thermal storage capacity offered by the structure to provide flexibility in energy grids and boost the uptake of renewable energy and hence reduce CO₂ impact of the energy system. Heavyweight buildings can provide this flexibility by allowing for consumer energy demand to be shifted in time by using structural thermal energy storage.

In addition, concrete is durable, recyclable and resilient against fire and extreme weather conditions. Research shows that the material that builds our cities also plays an important role in reabsorbing carbon emissions. The cement and concrete sector is currently studying the recarbonation potential of concrete and it is estimated that up to 25% of the CO₂ emitted during the cement manufacturing process can be reabsorbed during the lifecycle of a building².

¹ <https://ec.europa.eu/energy/en/topics/energy-efficiency/buildings>

² [ECRA Report "Release & uptake of carbon dioxide in the life cycle of cement" \(TR-ECRA 0004/2008, August 2008\).](#)

In order to achieve the energy-efficiency and CO₂ targets set by legislators and in order to grow the construction market and its benefits to society, all actors in the construction market will need to cooperate, exchange information and complement each other.

In this context, policymakers have a responsibility to play their part in facilitating the necessary transition to a low carbon built environment. **Creating a level playing field**, where all building materials are compared and combined according to the same set of principles and rules will set the foundations towards achieving this progress.

The cement and concrete sector is ready to engage with policymakers to ensure such a level playing field and reaches out to other material producers to achieve this goal.

Suggested guiding principles for a regulatory level playing field

The following guiding principles may be useful in facilitating a fair legal framework:

Principle 1: Material neutrality

Legislation needs to be material neutral as much as it needs to be technology neutral. The legislator can prescribe targets or objectives to be reached by construction materials, or buildings and infrastructure but it needs to be done without expressing a preference for one or other building material or technology. The choice of materials needs to be left to construction professionals and their customers.

Besides not guarantying a global improved performance for a building, references to specific materials in a legislative or any official document are likely to introduce a differentiated treatment between building materials that compete on the same market. It creates a distortive environment within the single market, impede innovations and competitiveness of the construction sector. If such references are introduced in national legislation, they could even constitute a technical barrier to trade in the internal market, that would require a strong intervention of the European Commission.

Principle 2: Use of accurate and correct data, based on scientific excellence

It is an established principle of EU law that legislation should be supported and motivated by **accurate and correct data, based on scientific excellence**. This will not only allow all material producers to be treated equally and fairly, it will also create a commonality of purpose and sense of responsibility in turning around the construction market and set us all together on a path to building the sustainable houses, hospitals, schools and infrastructure of tomorrow.

Principle 3: Compare what is comparable and at the appropriate level and incorporating the appropriate timeline

Comparisons need to be done at the **BUILDING LEVEL (or at least functional unit level)**, over the **FULL LIFE CYCLE** where the performances need to be optimised. Construction works are complex systems in which the manufacturing of construction products is only a part. The technical assessment as well as the sustainable design can only be performed when the influence of all the components, their installation, performance in use and treatment at the end of life are taken into account.