EUROPEAN READY MIXED CONCRETE ORGANIZATION – COMMENTS ON (THREE) FRENCH NOTIFIED DRAFTED REGULATIONS USING THE TRIS PROCEDURE

What there is behind the dynamic LCA?

A French Environmental Regulation (RE2020) announced by the French DHUP (Direction de l'Habitat, de l'Urbanisme et des Paysages) has been submitted to the European Commission. The Regulation introduces a new indicator: "Impact on climate change 100 years after its construction", aimed at considering a time perspective into LCA calculations.

It is the result of a unique study produced in Canada by the International Reference Center for Life Cycle of Products, Services and Systems (CIRAIG), a research group and center of expertise on sustainability and life cycle thinking. Its modeling (under many assumptions and overly complex equations) gives a benefit to the so called "deferred emissions" over time by creating equivalence between temporary storage and "non-emission" in construction. The dynamic LCA considers:

- a temporary storage period (25, 50, 100 years) for carbon in materials
- a time horizon (100, or more often 150, 200, 500 years) over which the analysis is carried out.

This new indicator presents significant risks under many aspects.

Risks considering Dynamic LCA methodology

- Considering temporary carbon storage of bio-sourced materials corresponds to shifting the burden on future generations without solving the problem. Our children will have to make even bigger efforts to cope with the temporarily stored carbon once this will be released. This is against all principles of circular economy.

- The new dynamic LCA methodology risks to minimizes the benefits of recycling and reusing construction products at the end of their life. It will therefore discourage building designers from using recyclable products, which is the opposite of the EU Commission objectives on the fight against CO_2 and waste and on promoting the circular economy.

- There is no doubt that it is possible to add a new indicator as has been done for other products (for example looking for energy performance or appliance repairability). But this has been done involving experts of the European Commission Joint Research Center (JRC) and of CEN TC350.

- The interest of permanent carbon storage in mitigating climate change is well documented, but the interest of temporary carbon storage is still under debate in the scientific community. Several studies[1] concluded that temporary carbon storage does not contribute to climate change mitigation.

[1] see e.g. Kirschbaum (2006) and Brandão et al. (2011)

Risks of unfair competition among construction materials

- The proposed methodology is in favour of bio-based materials only. For example, the interest of temporary carbon storage in wood is far from being scientifically demonstrated.

- Numerous studies show that only the preservation of a well-managed forest can significantly reduce CO_2 emissions[2] [3].Taking temporary carbon storage into account will indirectly contribute to **deforestation** at the expense of biodiversity, as owners, or architects, or construction companies could opt for wood-based construction solutions, assuming that it will necessarily be sustainable, which will not be the case.

- The **current LCAs already consider the absorption of carbon in materials**. Wood, during its growth, captures carbon so having a negative footprint at the beginning of its manufacture (approx. -700 kg CO_2 / m^3), which is then released into the atmosphere at the end of its life.

- The proposed methodology would stop any innovation in the sector: construction solutions with artificial "negative" carbon footprint do not need to do anything to improve the present manufacturing, transport, and construction processes, while construction solutions with "positive" carbon footprint will never be able to compete (except maybe by unnecessarily putting bio-sourced materials inside their existing systems) and will simply stop investing in innovation and development.

Negative impact at European level

- There is **no need to disrupt, at the European level the current LCA system**, which has everywhere scientific consensus. The "classic" LCA which, for 50 years, has been the subject of international standardization **(ISO 14067 - carbon footprint calculation, EN 15 804 - LCA building products and EN 15 978 - Building LCA).**

- As today, no EU member state regulation or international or European standard concerning carbon footprint considers the temporary storage of carbon. There is therefore an international (and notably European) consensus, reflected in ISO 14067:2018, that temporary **carbon storage should not be considered in the carbon footprint of buildings**.

ERMCO Position

For the reasons stated above, the European Ready Mixed Concrete Organization does not support any action in favour of the (three) French notified drafted Regulations.
Furthermore, ERMCO asks the European commission to extend the deadline for collecting comments to 3 months later the end of standstill date (until 15th June2021).

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Established on 1967, ERMCO is the European Ready Mixed Concrete Association representing the ready mixed concrete sector through National Associations in twenty European Countries.

[2] https://www.moreofeverything-film.com
[3] https://eustafor.eu/