

Sustainable consumption of construction materials

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- Due to a high consumption of energy and non-renewable materials, building activities are often highlighted as a main contributor to environmental degradation accounting for 11% of global 'upfront' CO2 emissions. While efforts have focused on reducing consumption in the design and operation of buildings, an often-overlooked issue is how practices around sustainability are enacted by contractors during project execution.
- The project addresses how small contracting companies in Denmark negotiate and enact sustainability in material choices. This is relevant as smaller firms face unique challenges: tight margins, fragmented work settings, dependence on client preferences, and entrenched practices.
- Building on Inhabited Institutionalism and Critical Realism, and complemented by Practice Theory and notions of orders of worth, the project explores how institutional rationales are inhabited in ephemeral construction settings.



Work package 1 explores the main ways in which macro-structural factors and institutionalized patterns of interaction influence how contractors consume construction materials.

We focus in particular on issues of macro-structural legitimacy challenges and sustainability discourse in the construction field.

Work package 2 is a micro-situated analysis of how sustainability is negotiated in project delivery situations (planning meetings, material negotiations).

The key focus is to identify how current consumption practices are configured and how more sustainable alternatives are enacted.

Work package 3 deals with pathways for change, including typologies and scenarios of how sustainable materials may gain legitimacy and uptake among small contractors.

The aim is to synthesize and validate the findings from the other work packages, communicate findings to key stakeholders in the sector, and to lay a foundation for future research and innovation projects.