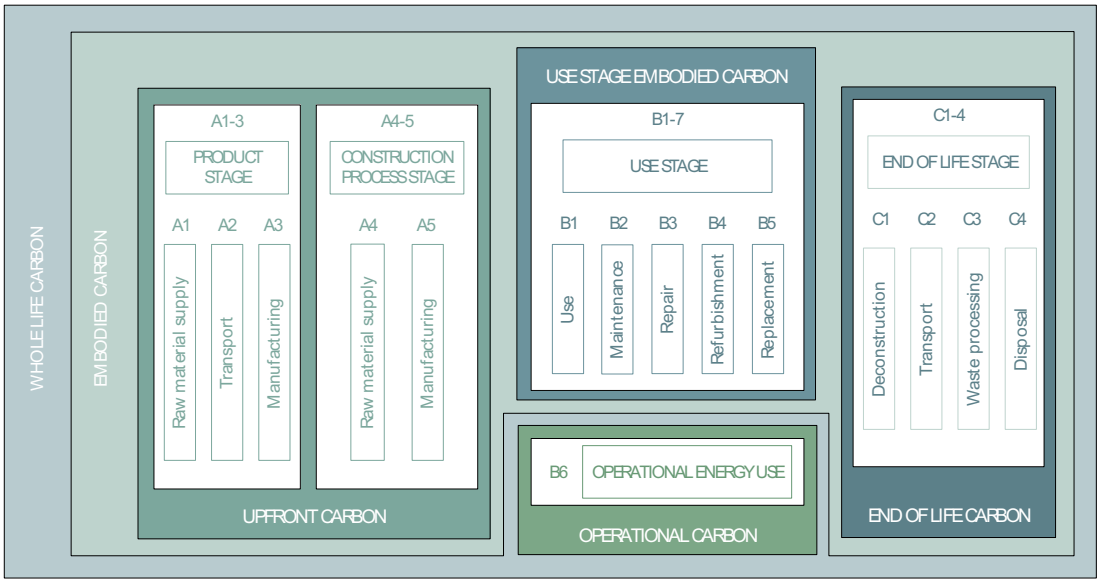
Quantifying reduction of Embodied Energy during construction

*Associated with the **ReCONSILE** research project*

Purpose: In ReVALUE project, we showed how much the construction processes in refurbishment project could be optimized. We showcased productivity improvements of 30-40% which lead to faster completion time, increased earnings, and reduced variability and waste in the production system. WP4.A in the ReCONSILE project will continue this work and add to the knowledge an applicability by quantification of these improvement in terms of reduced Embodied Energy (A4 & A5). This project will identify relationship, model these and show the sustainable effect on efficient construction projects.



Main activities:

1) Literature study on quantification of efficient construction processes in terms of EE and Carbon footprint.
2) Theoretical modelling of relationship between waste, DW, NVAW and EE/CO2
3) Empirical verification through a case-based approach
4) Integrating this knowledge into LCA tool

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Theory: ☒☐☐ **Experimental work:** ☒☐☐ **Sustainability:** ☒☒☒
Suitable project type(s): **Research & Development:** ☒ **Master thesis**