

Metodologie e strumenti a supporto della decarbonizzazione e della circolarità in edilizia

11 giugno 2026



Sala Auditorium, MASE
Via Capitan Bavastro 176, Roma

Benchmark Whole Life Carbon per le principali tipologie edilizie nazionali sviluppati dal progetto INDICATE LIFE

Monica Lavagna, Politecnico di Milano

Work steps



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1

Case study selection:

50 real buildings



2

Data collection:

Bill of Quantities (BoQ) from designers & stakeholders



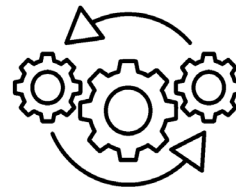
3

LCA data processing:

Standardized **assumptions** for Life Cycle modules (LCM)

Italian **Material Database** (with carbon emissions)

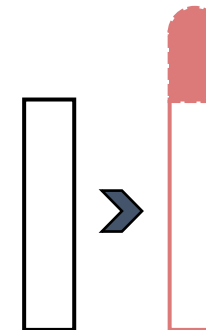
Granularity: data accounted by Tiers, materials and LCM



4

Proxy generation:

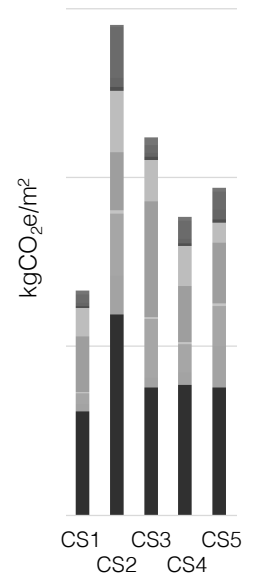
Average data for Tiers not reported by BoQ for inventory completeness



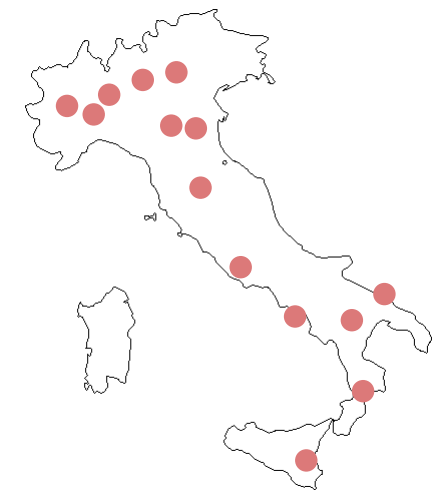
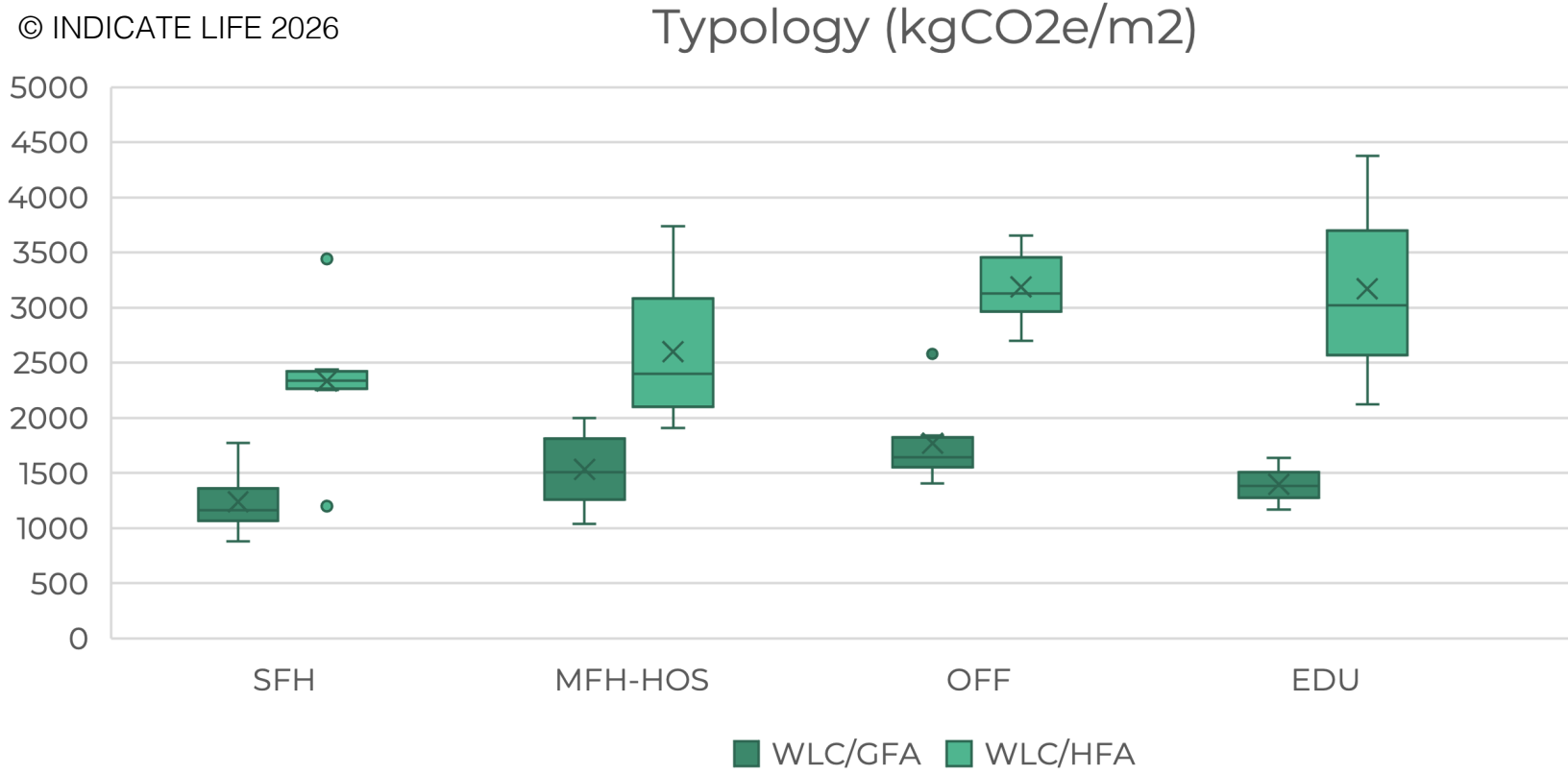
5

Benchmarks and LCA hotspot analysis:

results analysis performed for every case study



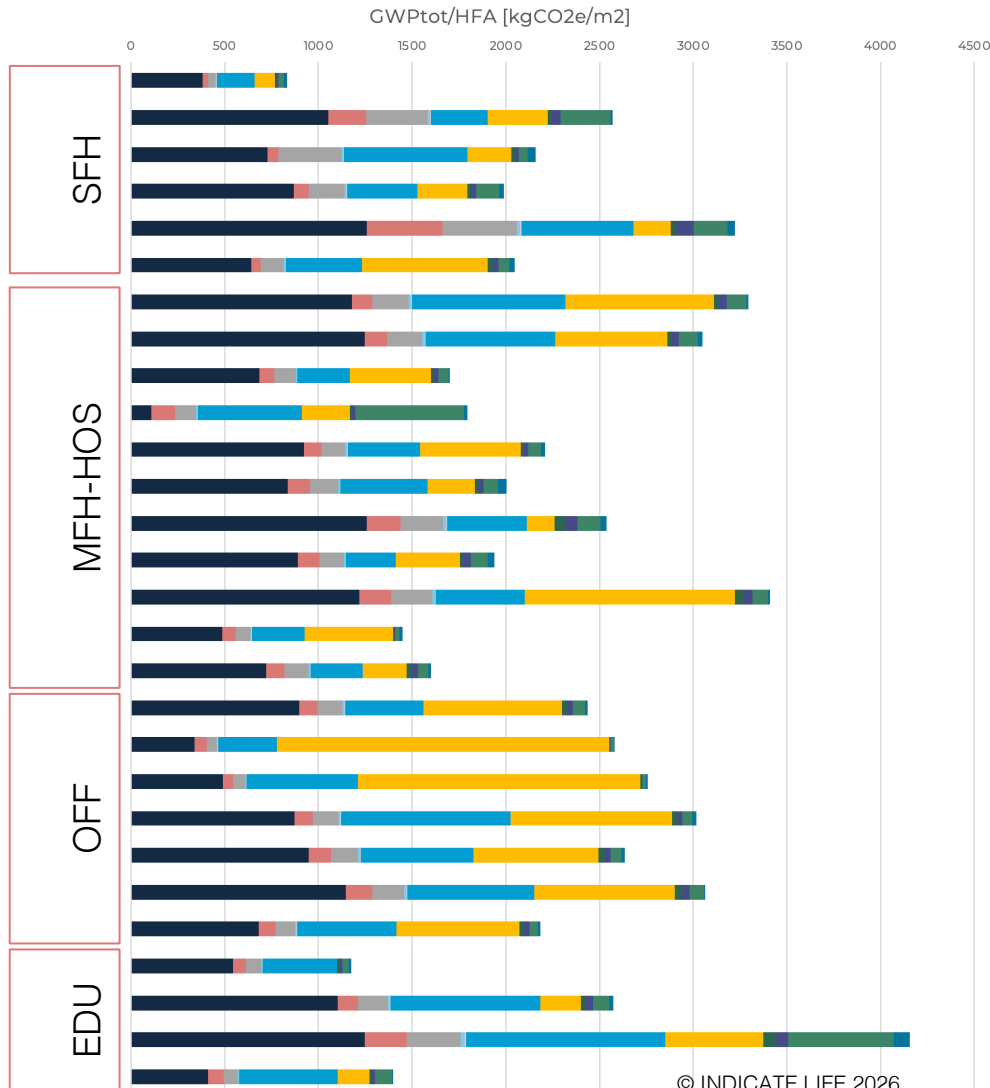
WLC benchmarks



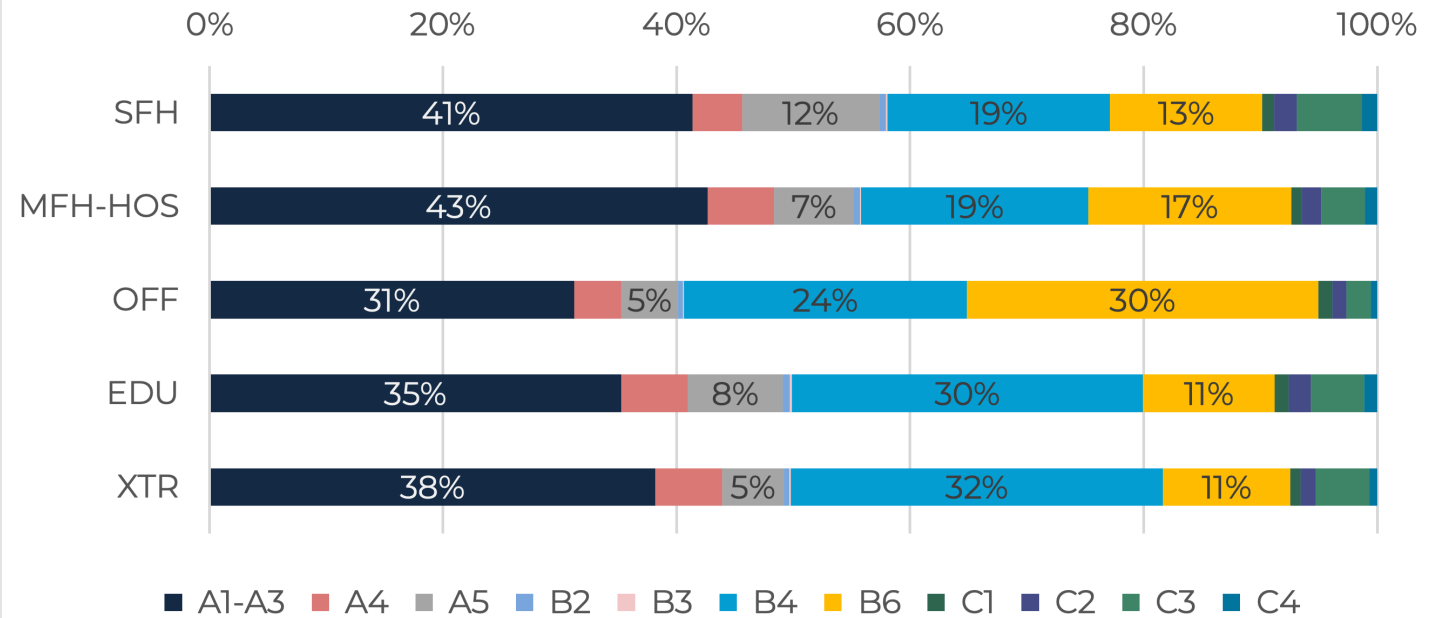
WLC per Life Cycle Modules



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LCM share (Embodied carbon/GFA)



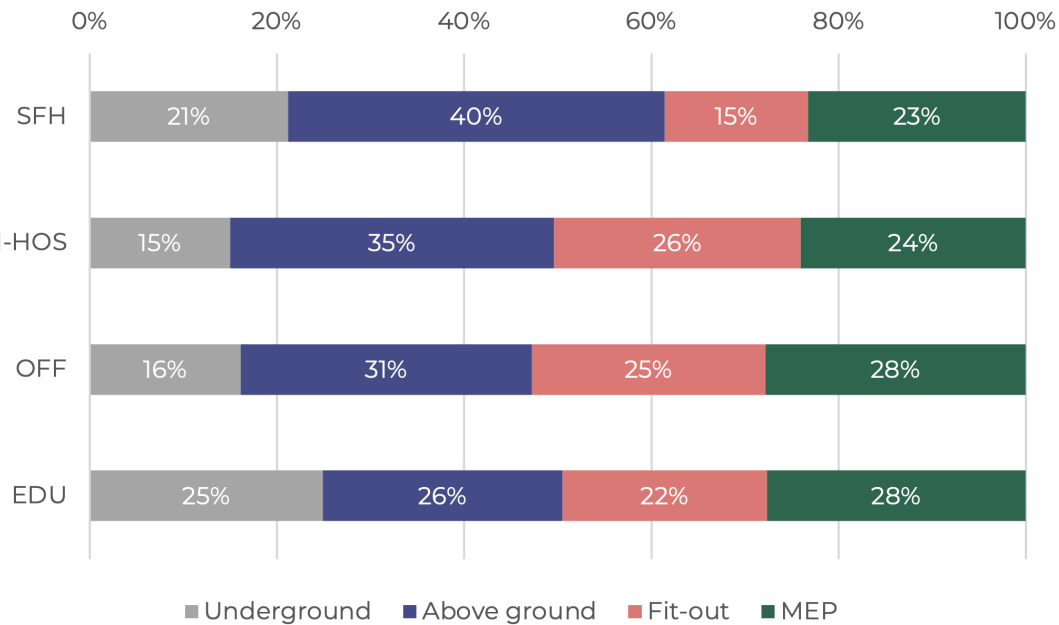
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WLC per Tier



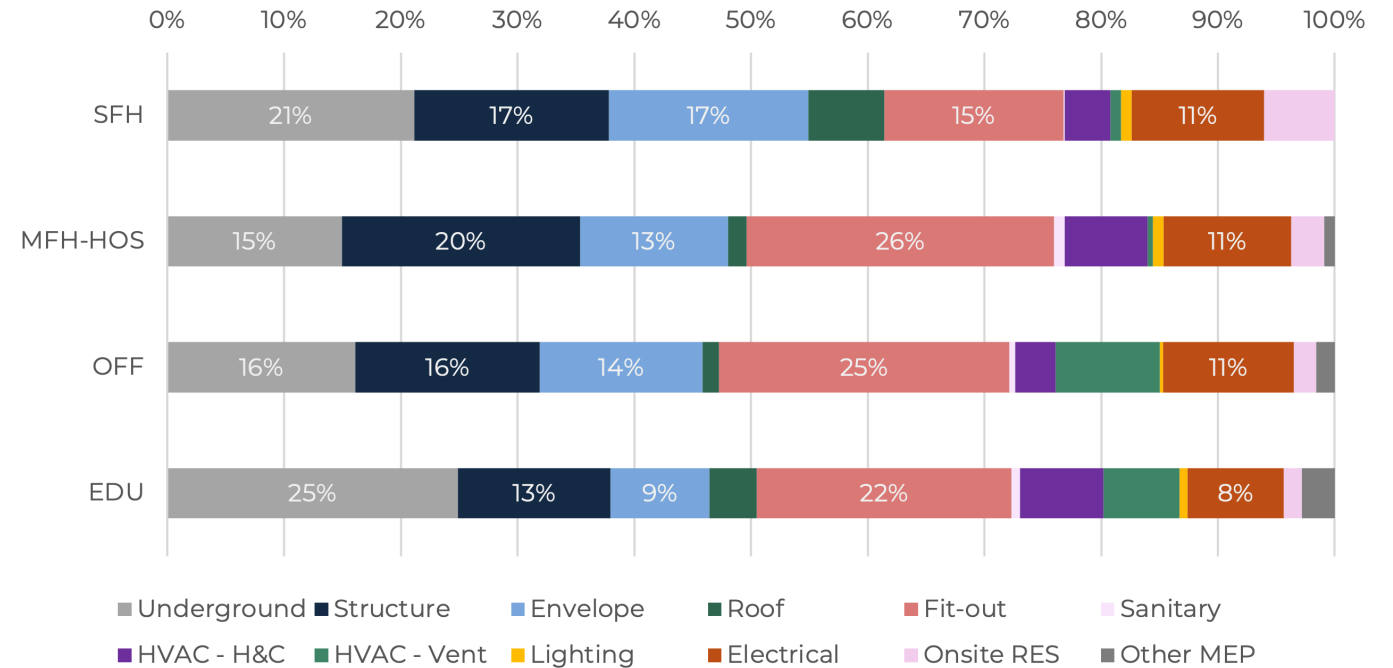
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WBS share - Embodied GHG/HFA



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Tier share - Embodied GHG/HFA



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Grazie!

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