

## The Built Environment Special Interest Group

### Demolish or retain buildings without heritage value?

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#### Panel

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#### Challenges

- There is no coherent national policy around embodied carbon in the built environment.
- There is no standardised approach for whole life carbon assessment.
- Little expertise exists around how to assess a LCA assessment.
- Embodied and operational carbon impacts benchmarks over different timeframes.
- All decisions are context-specific.
- Retrofit is more challenging than new-build for design and construction teams.

#### Discussion Points

- Relatively few buildings are currently deemed to have heritage value – understanding the issues around decarbonisation of non-heritage buildings is needed in order to ensure consistency of approach and to identify best practice.
- A retro-first policy-style approach - a presumption that buildings cannot be demolished unless there is a demonstrable need - would require coherent definition of acceptability thresholds. Decisions must also consider local and operational context and a more nuanced approach may be needed in practice.
- In order to help balance short term benefits of reducing carbon against long term benefits of reducing operational demand, there is an urgent need for regulation of methods for assessment of embodied carbon and lifecycle assessment. This includes standardisation of definitions and terminology, including the building standard lifespan.
- Benchmark figures (RIBA, LETI) aid decision making but more in-depth understanding is needed, particularly in quantifying the reduction in operational demand over the lifetime of a building.
- Refurbishing a building can be a much greater design challenge than new build and on-site construction challenges may be different. It is critical that everyone involved understands what you are trying to achieve and are suitably trained.
- In the long term it is worthwhile to invest time and effort in deep retrofit rather than patching up failing systems, in particular to ensure that organisational commitments to zero carbon targets are met in the longer term.
- Central government could accelerate decarbonisation through retrofit by providing financial incentives, reducing VAT on refurbishment materials and by developing the building regulations ('Part Z – regulation of embodied carbon').
- Emphasis should be placed on building more simply and with recyclable components, such that buildings become material banks and can be deconstructed and parts re-used as necessary.
- At the same time, high quality construction practices should be used to ensure carbon targets are met, operational carbon is reduced and that buildings are fit for purpose for as long as possible.
- New build is typically deemed more investable than retrofit; more visibility is needed for successful retrofit projects to demonstrate cost-effectiveness and investment potential. Prestige should be attached to reduced carbon targets.

#### Opportunities

- Development of recyclable components – use buildings as 'material banks'.
- Development of standards and harmonisation of approaches for embodied carbon and lifecycle assessment.
- Upskilling design and construction professionals to design and build better.
- Reduce/remove VAT on refurbishment materials/systems
- Improve forecasting of operational carbon footprint.

