

Carbon reduction: implications for redevelopment

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It is estimated that the built environment is currently responsible for 39% of global energy related carbon emissions: 28% from operational emissions (i.e. heating, cooling and power) and the remaining 11% from embodied carbon emissions (from the construction of the building). As the population of the world approaches 10 billion, the global building stock is expected to double in size.

For years, the focus has been on producing more efficient buildings that reduce operational emissions. Now, we are seeing coordinated action to tackle embodied carbon, with the World Green Building Council promoting a bold new vision:

- by 2030, all new builds, infrastructure and renovations will have at least 40% less embodied carbon, and all new buildings should be net zero operational carbon, and
- by 2050, new buildings, infrastructure and renovations will have net zero embodied carbon and all buildings, including existing buildings, must be zero operational carbon.

Closer to home, to help meet embodied carbon benchmarks, there is increasing pressure for London's large scale projects to prioritise retaining existing buildings over demolition. For example, under updated planning guidance published by London Mayor, Sadiq Khan in March 2022, as part of the London Plan: "Retention should be seen as the starting point," and "Retaining existing built structures for reuse and retrofit, in part or as a whole, should be prioritised before considering substantial demolition, as this is typically the lowest-carbon option."

Where refitting is not possible, Parliament's Environmental Audit Committee has recommended more effective use of low-carbon building materials, including recycled steel and timber or using second-hand materials such as brick, metal, wood and even broken concrete.

While there is a degree of political consensus on the issue, this position is perhaps supported more strongly by the Labour Party and that may accelerate the impact on planning applications in London. Having for the first time taken control of Westminster City Council in the May 2022 elections, the new administration is introducing a Net-Zero Test for every major decision, which will assess social, economic and environmental impacts to help make more informed choices and improve outcomes.

At the same time, M&S's plans to demolish and redevelop their flagship store in Oxford Street have been caught up in the process. Initially approved in principle by Westminster Council and the GLA, the plans were then put on hold by Communities Secretary Michael Gove following a report published into the potential carbon footprint of bulldozing the building. This revealed the scheme carried an embodied carbon cost of almost 40,000 tonnes - the equivalent of driving a typical car 99,000,000 miles, further than the distance to the Sun. The report's author Simon Sturgis called the plan "absolutely crazy", believing a better idea would be to refit and renovate the existing shop. In June Mr Gove decided to 'call-in' the application for scrutiny by a public inquiry and for him to take the decision himself.

The Government's net zero targets and the policies to achieve them mean that changes will inevitably be forced on those who operate in the development sector. As is so common with planning, it's an evolving picture.