

RETROFITTING TO NET ZERO

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Legal Briefings

As decarbonising the UK's building stock is a major priority for meeting climate goals, retrofitting existing properties has risen up the agenda of developers

The UK's commercial building stock currently represents 23% of its built environment carbon emissions. As the adverse impacts of climate change intensify, decarbonisation is at the forefront of everyone's agenda, particularly since the UK became the first major economy in the world to pass laws to achieve net zero carbon emissions by 2050.

To this end, the UK Green Building Council (UKGBC) has published a Net Zero Whole Life Carbon Roadmap, which outlines a common vision and industry-wide actions for achieving net zero carbon in the construction, operation, and demolition of buildings and infrastructure in the UK. To achieve these climate goals, both new builds and existing building stock must minimise both embodied carbon (carbon emitted during construction/refurbishment of a building) and operational carbon (the carbon emitted during the in-use phase of a building).

The [first article](#) in this series considered key legal provisions being used to improve the sustainability and energy efficiency of new builds. However, it is vital to appreciate approximately 80% of commercial buildings that will exist and be in use in 2050 have already been built and, as a result, decarbonising the existing building stock is a major priority.

Embodied carbon (carbon emitted during the construction of a building) means even the greenest of new buildings can be detrimental to global climate goals and the UKGBC is advocating reuse over demolition and rebuilding. Landlords/developers are, therefore, increasingly looking to retrofit existing buildings and rethink their operation to minimise not only embodied carbon but also operational carbon (the carbon emitted during the in-use phase of a building).

"Retrofitting" is the process of making changes to existing buildings, and in the context of climate goals these changes seek to reduce the energy consumption of buildings so operational carbon emissions are reduced. This usually means improvements such as the installation of renewable or low-carbon energy technologies such as solar PV or heat pumps, or measures such as insulation or smart lighting to improve energy efficiency. Retrofitting may provide a faster, leaner and greener way to reimagine buildings, however it comes with its own unique considerations for landlords which we examine below.

CONSIDERATIONS FOR LANDLORDS/DEVELOPERS ON RETROFITTING BUILDINGS:

MEES Regulations: By 2030, all commercial buildings will need to have a minimum Energy Performance Certificate (EPC) rating of EPC B and a 2021 government consultation indicated that there may be an interim milestone of EPC C by 2027. For further information on the changes to minimum energy standards, please [click here](#). In June 2022 the government changed the software used to establish the EPC rating so gas used for heating is penalised, which may result in lower ratings of existing assets when their ratings are renewed, even if no alterations have been carried out. Retrofitting improvements can assist with compliance with these changing minimum energy standards for existing assets, and therefore retrofitting must be a key consideration for an asset's lifecycle.

Fitness for purpose: A retrofit project works towards a desired outcome — the improved energy efficiency of a building. Contracts for retrofitting are therefore likely to include a number of fitness for purpose outcomes to ensure the works achieve a desired level of efficiency, carbon output and even whole-life cost. These are likely to be uninsurable, as they impose duties on a contractor that go beyond a duty to exercise reasonable skill and care in carrying out the works, in that the contractor will also be obliged to achieve an end performance result. Contractors will therefore be seeking to qualify these obligations with reference to reasonable skill and care.

Design liability matrix: Retrofitting is a balancing act of different components of a building and how they interrelate to impact on overall performance. A beneficial change to one component may cause deterioration in another. This will often require bespoke and often complicated design solutions and standard contracts will not be enough to deal with this. The provisions are likely to be negotiated; in the event that issues arise down the line, employers will want a single point of design responsibility, but a contractor may be unwilling to take on this risk if multiple third party designers have contributed to achieving the solution.

Building regulations: The Building Regulations 2010 apply to the erection, extension or material alteration of a building. Contracts for retrofitting must ensure statutory compliance.

Intellectual property: As retrofitting is relatively new and involves bespoke designs, a key commercial negotiation point to be bottomed out early is how the IP is utilised and who it is vested in (ie, does the employer want to roll it out across its portfolio of assets, how much time/resource/expertise is the contractor vesting in creating the solution).

Rights in existing leases: Landlords should carefully check the provisions of their existing leases before setting sustainability targets or undertaking retrofitting projects or new green operations in a building (and landlords may wish to re-negotiate on renewal). In particular, landlords should consider:

- **Alterations:** does the tenant have a right to do works which may counteract the impact of retrofitting (for example, works which may affect the asset rating or invalidate an EPC)?
- **Landlord rights of entry:** does the landlord have a right of entry to do works to improve environmental performance, with or without the tenant's consent? Do these rights of entry extend to measurement, monitoring and improvement of environmental performance?
- **Service charge:** can any costs relating to retrofitting or otherwise improving environmental performance be recovered from tenants under the service charge? Eg. common facilities such as recycling and waste management, or works to improve energy, waste and water efficiency in the common parts of a building?

A summary of further relevant green lease provisions which may be relevant in existing leases (or may be negotiated on renewals or in new lettings at an existing building) is provided in [[Part 1](#)] of this series.

CASE STUDIES

Marks and Spencer has been criticised in recent months after being granted planning approval for the demolition and green re-build of their 1930s Marble Arch flagship. Despite the top tier sustainability accreditations of the scheme, the decision to knock down and re-build rather than retrofit the existing store has fuelled the debate over how to decarbonise the UK's existing building stock, with the proposal called in by the government for environmental review.

British Land's 1 Triton Square was originally designed in the 1990s and has recently been transformed with retrofitting improvements including refurbishment of the pre-existing glazed façade (costing 66% less than a new equivalent) and the installation of carbon fibre wraps to strengthen existing columns to support the weight of additional floors. The project has saved an estimated 40,000 tonnes of CO₂ over a 20-year lease, compared with a typical new-build office benchmark – a 55% reduction.

THE TAKEAWAY

It is clear that the market is moving focus to reducing operational carbon of existing buildings — and bespoke drafting and negotiation can help parties achieve their desired outcomes. Developers are advised to build retrofiting into their plan for an asset lifecycle now, as given the shifting expectations and requirements in relation to the energy efficiency a failure to retrofit may impact valuation on disposal. Landlords should carefully check their existing leases before setting sustainability targets or undertaking retrofiting projects.

KEY CONTACTS

If you have any questions, or would like to know how this might affect your business, phone, or email these key contacts.



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