## Commercial Occupier Retrofit Guide

RetrofitGM: Accelerating the renovation of Greater Manchester Buildings

Prepared by the ESG Consultancy team at CBRE UK

## Introduction to RetrofitGM

Greater Manchester has an ambitious target to be carbon neutral by 2038.

In the interim, by 2030, the headline objective for Greater Manchester is for all non-domestic buildings to reach an average of Energy Performance Certificate rating C or Display Energy Certificate B.

The scale of the challenge is increasing year on year as emissions remain greater than the required levels that would align with a carbon neutral pathway. The biggest opportunities for achieving net zero lie in fast and deep carbon emissions reductions, particularly in relation to buildings and transport, the two sectors where emissions are highest.

Reducing the carbon emissions resulting from how we heat our buildings is a key priority for all of us and intrinsic to delivering our target of carbon neutrality by 2038. In the commercial real estate sector this will only be achieved through collaboration between landlords and occupiers.

#### What is Energy Retrofit?

The UK Green Building Council provide a framework for Net Zero Carbon buildings. Retrofitting a building for energy efficiency and decarbonisation, first requires making the building as airtight as possible focusing on the fabric e.g., insulation and glazed windows. Whilst doing this, it is important to consider any impact of solar gain and therefore excessive need for mechanical cooling. Once achieved focus can then be on the building services, making these as efficient as possible through selection and their ongoing maintenance. A timeline for removing gas from the building is key.

**UKGBC Net Zero Carbon Framework** 



Net zero carbon – operational energy

When the amount of carbon emissions associated with the building's operational energy on an annual basis is zero or negative. A net zero carbon building is highly energy efficient and powered from on-site and/or off-site renewable energy sources, with any remaining carbon balance offset."

### Benefits to occupants ...



Lower energy bills



Cheaper operating costs



Healthy working environment



Strong ESG messaging to stakeholders



ESG strategy compliance



Better employee facilities



Employee retention

## Occupy differently

This guide is for commercial occupiers wanting to understand the actions they can take to play their part in GMCA's 2038 carbon neutrality target.

#### Overview

#### 1. Occupy the best

- Best practice certification know your certifications and the benefits that they can bring.
- **Landlord engagement** a well performing building requirements maintenance and collaboration.
- Green leases well prepared clauses in leases can enable strong collaboration to maintain building performance
- Energy provision and management seek out renewable energy provision and well metered supply.

#### 2. Sustainable fit out

- Circular economy solutions design your space for the future, allowing for spaces to change and evolve as working practises change. Reduce, reuse, recycle.
- **Building systems** seek modern up to date systems with no gas.

## Best practise certifications

As a tenant, often the building fabric is predefined. Therefore, one of the best things you can do is select a high-performing sustainable property in the first place.

There are a wide range of certifications available in the market to measure and recognise the environmental, energy and health performance of assets in design and operation as well as for occupied spaces.

You may look to take space in a building with these certifications, and/or certify your own occupied space:

Certification	Detail	Ratings	Roles & Responsibilities
BREEAM SARE GLOBAL	BREEAM In Use – reflects the performance achieved by a project and its stakeholders, as measured against a set of environmental sustainability criteria.	Unclassified, Acceptable, Pass, Good, Very Good, Excellent and Outstanding	Occupier led, requires engagement with the landlord
NABERS UNITED KINGDOM	NABERS is a new entry to the UK market and is an Investment grade operational energy rating for office buildings. Unlike EPC energy ratings, NABERS UK measures and rates the actual energy use of offices, helping building owners to accurately track and communicate the energy performance of their buildings.	One to six stars for offices, six being the highest performing.	Landlord led
INTERNATIONAL WELL BUILDING INSTITUTE **	WELL is an evidence based certification divided into 10 concepts covering a range of different areas that influence physical and mental wellbeing within the built environment. This standard is applicable to new buildings or projects currently considering refurbishment.	Bronze, Silver, Gold and Platinum	Occupier led, requires engagement with the landlord
<b></b> fitwel <sup>*</sup>	The Fitwel certification standard provides tailored scorecards for existing and new buildings to optimise the health and wellbeing design and benefit provision.	One to three stars	Occupier led, requires engagement with the landlord
ACTIVE TRAVEL RAVEL SCORE	ActiveScore Certification is the accreditation for active travel provision in real estate. An ActiveScore rating communicates a building's future-proofed credentials.	Certified, Silver, Gold, Platinum, Platinum 100	Landlord led

## Landlord engagement

Seek partnerships with landlords who already have a sustainability plan or net-zero target in place. These landlords will be committed to invest in and support sustainable operations.



Check that your landlord has already made your property compliant with the Minimum Energy Efficiency Standard (MEES) regulations.

By April 1 2023, all existing and ongoing leases require an Energy Performance Certificate (EPC) rating of E to remain lawful. Where a space is not yet compliant, there may be opportunities to collaborate with landlords to ensure business continuity and compliance.

Consultation on the EPC targets for 2030 are due to be announced. It is expected that all leases (new, renewed and existing) will need to be EPC B in 2030 (and there is suggestion of an interim target of EPC C in 2027).

Any assets unlikely to meet these minimum standards will require retrofit to improve performance, potentially incurring significant capital investment and possible disruption to business operations where works are required for compliance prior to lease end.

### Green leases



#### **BBP's Toolkit**

The BBP is a collaboration of the UK's leading commercial property owners who are working together to improve the sustainability of existing commercial building stock.

The Better Buildings Partnership 2013 Green Lease Tool Kit is the most widely cited document, however this is currently being updated. Consider agreeing a green lease with your landlord.

This is a standard form lease with additional clauses included that provide for the management and improvement of the Environmental Performance of a building for the benefit of both owner and occupier(s).

It is legally binding, and provisions remain in place for the duration of the term. This can involve a commitment to:

- reduction of emissions
- indoor environmental quality
- energy efficiency
- social issues such as location to
- water management
- transport networks and workspace designs.
- waste management

Where a lease is already in place, the parties can enter into a Memorandum of Understanding (MoU) which provides a roadmap for co-operation between parties on improving the environmental performance of the property.



#### **The Chancery Lane Project**

The Chancery Lane Project (TCLP) is a collaborative initiative of international legal and industry professionals that has created new, practical <u>contractual lease clauses</u> that are freely available for use and modification to suit individual circumstances.

#### **Examples include:**

- Toryn's Clause: Green Assured Shorthold Tenancy Clauses
- Aatmay's Clause: Sustainable and Circular Economy Principles in Leasing Arrangements for Repairs and Alterations
- Rosie's Clause: Alteration/Improvement Provisions in Leases to Improve Climate/ Environmental Impact of Buildings and Better Use of Shared Space
- Viola's Clause: Renewable Energy Requirements in Supply Contracts
- Lotta's Clause: Landlord and Tenant Obligations to Provide Renewable Electricity
- Oisín's Clause: Landlord and Tenant Obligations to Create Additionality in Renewable Electricity
   Generation
- Hannah's Clause: Green Service Charge Provisions for Commercial Leases

# Energy provision and management

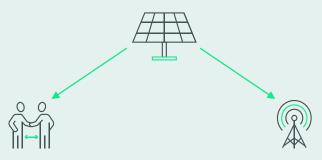


Renewable Energy Procurement Guidance - UKGBC It is important to understand how electricity is provided to the property as this can play a big factor in how sustainable it is and its cost.

- Check whether there are any solar panels and whether as a tenant you can arrange to purchase this energy. It is often cheaper than electricity from the national grid.
- If you are on a site of multi occupancy you may wish to have electricity sub meters so that you pay only for what you use. If this is not possible, ask your landlord for full transparency of total site energy use and their allocation process. This will support your own reporting and transparency.
- On large sites of multiple occupancy, it may be possible to request the landlord to do a site wide Power Purchase Agreement for renewable electricity. This can usually be secured at a rate lower than the national grid. Power Purchase Agreements are a great option to be sure the energy consumed on site is 100% coming from renewable schemes. However, this means the buyer entering in a Power Purchase Agreement must be sure to commit for a long period of time in buying the same volume of energy (10-15+ years).
- Alternatively you can look at a high quality 'Green Tariff'. In simple terms, a green tariff can be defined as "green energy" when the supplier guarantees to match all or some of the electricity demand with renewable energy, which it then feeds back into the National Grid. The principle behind the idea is, the more people who sign up to a green energy tariff, the bigger the percentage of green energy in the national supply.

#### Understand the commercial models for solar PV

**Landlord or third party invests** in the renewables installation, owns, and is responsible for maintaining the system.



**Export:** Exported renewable energy is sold to the grid.

**1. Buy energy directly** through a Power Purchase Agreement (PPA)

OR

**2**. **Pay a green premium** on your rent to use energy lower cost renewable energy onsite.



## Sustainable fit out Circular economy solutions

Once you have leased the perfect space for your business or institution it is time to think about the fit out.

- Establish whether there are any requirements that exist aligned to the certifications achieved in the building during design or refurbishment
- The Better Buildings Partnership Responsible Fit-Out Toolkit helps owners and occupiers design and deliver responsible office fit-outs that are conscious of their environmental impacts and support employee health, wellbeing and productivity

#### Do consider circular economy solutions

A Circular Economy (CE) is an alternative to a traditional linear economy (make, use and dispose) in which we:

Keep resources in use for as long as possible

- Extract the maximum value from them while in use
- Then recover and regenerate products and materials at the end of each service life.
- Design out the need for the component or material
- Utilise take back schemes and the emerging second hand materials market.
- Use reclaimed, remanufactured components
- Select products with sustainable credentials, high recyclability, high recycled content, can be leased.
- // In addition, consider design for disassembly strategies and deliver a guidance document on how to make the best use of materials used, in the future.

Cradle to Cradle Certified® is the global standard for products that are safe, circular and responsibly made. Leading brands, retailers, designers and manufacturers across the value chain rely on the Cradle-to-Cradle Certified Product Standard to ensure the impact of their products on people and planet is a positive one.



The Responsible Fit-Out Toolkit: Offices | Better Buildings Partnership



Cradle to Cradle
Design Guide
Cradle to Cradle
Product Standard

## **Building systems**



CIBSE guidance to deliver net zero carbon buildings To achieve carbon neutrality by 2038, fossil fuels must be removed from operations. This means removal of gas and a transition to heat pumps and renewable electricity.

Well zoned spaces with controls are vital:



Ensure there is a well-designed and connected Building Management System

Ensure buildings are zones to allow for efficient and effective operation of HVAC

All systems should have Energy Star or equivalent high efficiency ratings.

Ensure that all the basics are covered such as LED and occupancy controls.



Gas removal



Efficient equipment



BMS and Control

### Quick Links

#### Carbon Neutrality

**RetrofitGM** 

UKGBC Net Zero Carbon Framework

CIBSE guidance to deliver net zero

carbon buildings

Bee Net Zero | The journey to

becoming Net Zero

#### Certifications

**ActiveScore** 

**BREEAM** 

**NABERS** 

**WELL** 

<u>Fitwel</u>

<u>SKA</u>

#### Green Leases

The Chancery Lane Project

Better Building Partnership

## Electricity provision and management

Renewable Energy Procurement Guidance – UKGBC

**Energy Saving Trust** 

ofgem

#### Fit out

The Responsible Fit-Out Toolkit:
Offices | Better Buildings Partnership

Circular economy in construction

How Circular Economy Principles can

impact carbon and value

Cradle to Cradle Design Guide

Cradle to Cradle Product Standard

