

# Complete Guide to BREEAM & Sustainable Development for Commercial Properties



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# 1. Introduction to Sustainable Development

Sustainable development is a buzz phrase at the moment, with the government keen to push environmentally friendly options and eco-building in the business sector. As such, there are a number of schemes and compulsory regulations in place, governing what should be included in all new builds.

Essentially, sustainable development is intended to promote the construction of new properties, whilst protecting the environment and future generations too. According to experts, commercial properties are responsible for some 50% of the UK's total CO2 output and in line with EU regulations, the government has been charged with reducing this volume.

It's not just CO2 emissions where businesses are contributing heavily either. Britain's commercial industries are also consuming 50% of water and creating 33% of the total landfill waste. It's for these reasons there's mounting pressure on UK businesses to think more along the lines of sustainability, when designing and developing new builds.

## What is sustainable development?

“Sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.”

Of course, the quote can lead to varying interpretations of sustainable development. However, no matter how you choose to interpret this, the core message remains the same. That is, development will need to be aware of its environmental, social and economic impact.

Development is often driven by one compelling need – to build domestic and commercial property to meet demand. In the past, this has often been achieved without the consideration of the wider impact. That’s exactly why we’re now witnessing our mistakes of the past – with a heavy reliance on fossil fuels, resulting in climate change.

Sustainable development is designed with this in mind.

- **Is sustainable development all about the environment?**

This is certainly one of the core principles of sustainable development – to improve the environment and limit the effects of climate change. However, it’s not the entire agenda.

Instead, the focus of sustainable development is intended for a broader spectrum. Not only is the environment a key issue, but so is the importance of creating a strong and healthy society. There is huge diversity in this regards, as to create this society you’ll need to meet the needs of all people.



- Is sustainable development only focused on the future?

In a word, no. Why? Because sustainable development is not just focused on the future, but also the present. Whilst there will be a change to how we all live and go about our daily lives, this doesn't necessarily mean quality of life will be hampered.

Instead, there are some excellent benefits that'll have an immediate impact:



**Savings:** Sustainable development often results in the implementation of eco-friendly energy sources (namely renewable power), offering energy efficiency and in turn, cheaper bills.



**Health & Transport:** These are intrinsically linked, because rather than driving or using public transport, you could instead promote cycling and walking. These have clear health benefits, whilst helping to save money and reducing CO2 emissions concurrently.

## What factors contribute to sustainable development?

The manner in which sustainable development is approached by businesses will vary across the board. Whatever else you take from this guide, it's important to understand your actions will have a greater effect on everyone. From initial planning, all the way through to building, sustainable development takes the approach whereby better processes will improve daily life.

There are a number of factors that'll contribute to sustainable development though, so take a look at some of the ways you can help the environment when developing new builds or refurbishing your commercial property.



There are a number of factors that'll contribute to sustainable development and among others, include:



- **Energy**

In this category, sustainable development focuses on energy efficiency, searching for alternatives for generating power. These solutions will improve the efficiency of your commercial building and reduce CO2 emissions at the same time.



- **Health & Well-being**

Improvements to health and well-being will have benefits to the comfort and safety of the building's occupants. In essence, the quality of life would be improved upon, creating a healthy environment both internally and externally.



- **Pollution**

This is one of the major factors when you consider sustainable development and being environmentally friendly. This includes the prevention and control of pollution, in order to limit harmful emissions released into the atmosphere. Pollution can take the form of light, noise, flooding and air pollutants such as CO2.



- **Transport**

Transport is one of the biggest contributors to the UK's CO2 emissions, so sustainable development should include improvements to public transport and the promotion of walking and cycling. The BREEAM scheme in particular suggests including bicycle storage for new developments to promote cycling.



- **Waste**

Sustainable management means reducing wastage and restricting the amount of waste entering landfills. There will also be plans in the future to further reduce waste, when constructing new or refurbishing old commercial properties.



- **Water**

As you would expect, this category is focused on using sustainable water in buildings across the UK. Ideally, you would have plans in place to reduce potable water consumption throughout the lifetime of the premises.



## 2.

# Guide to BREEAM Compliance

All this talk of sustainable development brings us onto the main point of this guide – the BREEAM scheme. BREEAM is a leading sustainability programme, tackling the planning, infrastructure and development of new builds and those being refurbished.

There's no denying, this is a huge worldwide scheme and businesses in the UK have been jumping on board. There are now over 500,000 BREEAM certified developments around the globe, with 2,214,200 buildings registered since the inception of the scheme in 1990.

### **Benefits of the BREEAM sustainability initiative**

The idea of the BREEAM scheme is to build on the sustainability issues discussed in chapter one. However, there are a range of excellent benefits for complying with the standards set out in BREEAM.



- **Cost effective proposals**

One of the major incentives for considering BREEAM is the cost effective nature of proposals outlined under the scheme. In fact, the programme in itself is designed to bring sustainable value to your commercial developments. Of course, this helps all those involved, from the investors and developers, through to design and construction teams. Whilst there will be a capital cost associated with sustainable integration, it's in fact cost effective when compared to the overall savings.



- **A reduction in operational costs**

According to research, those wishing to comply with BREEAM standards typically spend up to 2% more on their developments. Experts suggest this expenditure is reclaimed in just two to five years and after this period, the commercial property is able to continue reducing costs.



- **Limiting investor and developer risk**

The problems highlighted from climate change present a number of challenges for commercial buildings and their owners/investors. In fact, one of these is the risk of devaluation, if the property hasn't been suitably prepared for the future. In particular, new schemes such as the Minimum Energy Efficiency Standards will require rented accommodation and commercial buildings to be of a certain energy performance. By not meeting these requirements, properties could become 'stranded assets'.



- **Increasing the property's attractiveness**

For those renting out commercial space, this is of course a great incentive for considering the BREEAM initiative. By adapting a development to meet the minimum standards outlined in BREEAM, your commercial property will become more attractive to potential companies looking to rent an office. On top of this, property's meeting BREEAM standards achieved a 21% premium on transaction prices and an 18% premium on rent.



- **Developing a productive workplace**

As has been discussed in the previous chapter, the health benefits of sustainable developments are clear. Compliance with BREEAM will help to create workspaces that have good indoor air quality, daylighting levels and increased comfort. The health benefits are backed up by research suggesting productivity levels are boosted between 8-11%, because of improved indoor air quality.



## How can I comply with BREEAM regulations?

With BREEAM it's not just a case of following the crowd and integrating the same sustainability improvements in every commercial development. Instead, the scheme enables designers to be innovative and come up with excellent designs to inspire and create incredible commercial buildings.

Once your commercial property has been adapted to boost sustainability, the property will then undergo an assessment. These assessments are completed by licensed assessors and the commercial space will be rated one of the following: pass, good, very good, excellent and outstanding.

The assessment itself incorporates a number of categories as outlined previously in this guide, measuring aspects such as the low impact design, carbon emissions reduction and adaptation to climate change.

When wishing to comply with BREEAM regulations and receiving accreditation for your efforts, you'll likely fall into one of two categories; new builds and refurbishments.

- **New developments**

For new developments, there's the BREEAM New Construction scheme. This will assess a number of aspects for each property wishing to gain accreditation under the programme.

All manner of newly constructed buildings are eligible for assessment by BREEAM, including public, private, commercial and residential properties. Specifications outlined for accreditation by BREEAM include the following:

- Considering costs from a life-cycle perspective
- Reducing operational costs
- Enhancing the economic and social value, whilst minimising environmental impacts
- Creating better living and working environments
- Driving improvement in sustainable building approaches and technologies
- Contributing to corporate social responsibility, business reporting and sustainable business leadership.

With the BREEAM assessment, the focus starts with the initial planning and conception, all the way through to the construction's completion. Evidence is required to show the environmental friendliness of the build.

- **Fit-out and refurbishment**

Aside from the new construction scheme, there's also the fit-out and refurbishment side to BREEAM. Of course, this is an option for existing buildings going through a revamp to meet environmentally friendly targets and wanting to meet sustainability criteria.

This scheme will differ slightly to the one outlined above, mainly because business and property owners will need to assess the current make-up of the building and determine changes accordingly. Improvements will need to be made to properties with the poorest efficiency standards, in order to meet targets.

The good news is, a whole range of buildings are eligible to make changes for BREEAM compliance, including heritage properties.

There are a number of reasons to undergo this development to improve sustainability when fitting out or refurbishing a property and this includes:

- Bringing sustainable value to an existing asset
- Enhancing market demand and attracting tenants and occupiers
- Making existing buildings fit for the future
- Contributing to corporate social responsibility, business reporting and sustainable business leadership
- Creating better living and working environments for people
- Giving independent third party certification of a building's sustainability.

As you can see, it's not just new builds that have the opportunity to take on sustainability improvements and no matter your residential or commercial property, BREEAM offers an excellent option for all.

## Understanding cycle storage compliance for BREEAM

Transportation is one of the major players when it comes to BREEAM accreditation and assessors will be looking at what your property has brought to the table in regards to alternative transport. For eco-friendly purposes, this will likely take the shape of secure cycle shelters or cycle storage areas, which in turn encourage employees to cycle to work rather than drive.

In fact, for this reason cycle facilities will be included when assessors provide an overall score for the BREEAM rating. In total, 9 credits are available for the transport section, with two attributed to cycle storage compliance.

What does this mean in regards to full BREEAM accreditation? Well actually, you can add some percentage weighting to your accreditation quickly and easily by investing in cycle storage meeting BREEAM certification. Overall, the correct bike storage facilities will contribute to 1.77% of your total BREEAM score.

Not every cycle facility will meet BREEAM standards though, so ensure your chosen cycle storage solution is compliant before purchase. Remember, this could make all the difference between achieving a basic pass or good rating.

Please note, at [The Bike Storage Company](#) all our cycle storage products are BREEAM compliant\*. Therefore, you can get the best advice and ensure to be following correct regulations with each of our products. \*Certain products require optional extras to qualify.



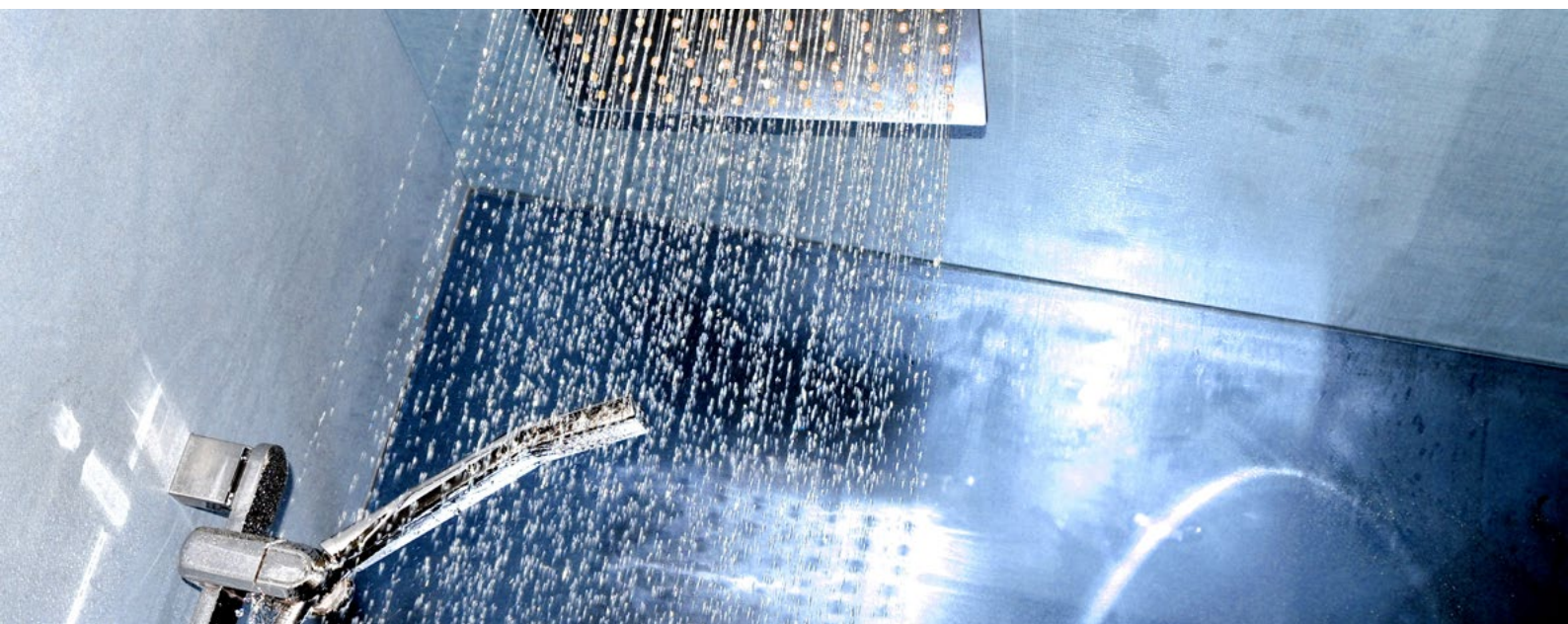
Some of the criteria included within the cycle storage BREEAM compliance, include:

- Sufficient secure cycle storage spaces for the number of people in the building, or use of the property. See the official BREEAM website for a full breakdown per occupant.
- The storage must be protected from weather
- Bikes can be secured in their individual spaces. For BREEAM compliance, both the frame and wheels must be able to be secured to the rack, floor or wall.
- The rack or shelter will be fixed to a permanent structure
- There should be enough space between each space to allow for bike access and storage
- The storage can be viewed or overlooked from an occupied building
- Controlled lighting is available. You can find full details on the BREEAM hea 01 Visual Comfort criteria [here](#).
- The storage is located within 100 meters of the property.

You'll receive one credit by installing cycle storage to meet BREEAM regulations. An additional credit is also on offer by introducing at least two of the following criteria:

- Showers (one for every 10 bike storage spaces)
- Changing facilities and lockers
- Clothes drying facilities.

Remember, it's worth double checking that the cycle storage of choice will meet BREEAM compliance. For advice on BREEAM compliance or to find out more information on secure cycle shelters, contact The Bike Storage Company on 0800 246 1723 or by emailing [hello@thebikestoragecompany.co.uk](mailto:hello@thebikestoragecompany.co.uk)





### 3. Sustainable Development for Commercial New Builds

All new constructions in the UK are governed by Building Regulations, which map out what developments need to comply with. Included in Building Regulations is sustainability, such as energy and water efficiency.

These are legal regulations and part of the government's commitment to reducing carbon emissions countrywide. In fact, the government is focusing on ensuring all new commercial buildings are zero carbon by 2019 – a tough ask, but something the BREEAM scheme is helping with.

There can be some serious consequences for not meeting Building Regulations too. Upon the development being complete, an assessment will be performed and certificate issued. Failure to meet the standards could result in an enforcement notice, fine up to £5,000 and a further £50 added on for each day of continued default.

# Four essentials for sustainable commercial properties

If you're looking to add sustainability to your commercial property in the future, whether it's for Building Regulations or compliance with the BREEAM initiative, there are a number of opportunities at your disposal.

Take a look at four of the best ways you can improve your sustainable development in the commercial landscape.



## 1. Become eco-friendly by going green

Green, eco friendly living has become huge, especially over the last decade. There are now so many options available for domestic and commercial properties, that in essence it seems foolish to ignore green living. What's more, in recent years the cost of implementing green tech has gone down, so it's a very effective way of increasing sustainability.

Of course, it's also worth reiterating that by April 2018, commercial landlords will need to meet certain energy efficiency measures. Any buildings falling under the Energy Performance Certificate (EPC) rating of E, will need to be refurbished.

So, how can you go about implementing a green theme throughout commercial space? Well, there are a number of excellent products and technologies available to use, including solar power, heat pumps and energy efficient lighting. Aspects such as insulation will also have an impact on the EPC rating, so make sure yours is in line.





## 2. Reuse, as opposed to constructing new developments

Rather than developing a new commercial building and in effect starting from scratch, why not instead look to refurbishing an old brownfield site? There are a number of great benefits associated with venturing down this path, and in truth your plans will come into fruition much quicker by redeveloping a building. With the refurbishment scheme offered by BREEAM, it makes sense to give this consideration.

What's more, the good news is some of the supposed difficulties encountered in the past when developing an old site are no longer issues. This would have included better controlling the indoor environment and upgrading IT infrastructure. Thanks to a number of technological advances, the cost of doing this has dropped significantly.

There's another benefit too, in that current buildings could be high in demand with existing transportation projects underway across the UK. For example, properties nearby to the HS2 railway project or Varsity Line between Cambridge and Oxford could be high in demand.



## 3. Take advantage of cycling's resurgence

There's little doubt about it, in the last couple of years cycling has witnessed a huge growth around the UK. More people seem to be commuting to work by bike, so why not take advantage of this trend, boost your sustainability and have another string for your bow when it comes to BREEAM compliance.

In this regard, offering suitable cycle storage that meets the specification outlined in BREEAM would be a good starting point. It's worthwhile investing in this, with cycling offering a way to reduce CO2 emissions. Installing secure bikes shelters will only increase safety and comfort of the building's occupants.

Unfortunately, on many occasions, this would be one of the features that fits the 'nice to have' bracket and ultimately, gets left to the wayside when development commences. However, this would be a short-sighted decision to exclude bike storage in your sustainability plans. Not having a designated shelter, showers for washing or even lockers for storing clothes, could be a turn off for potential employees.



#### 4. Meet the demands for futuristic designs

There has been significant growth in the telecommunications and media industries, particularly in London. What's more, there seems to be a compelling demand for futuristic office designs that are somewhat different from the norm.

These collaborative breakout spaces, as they've become known, have seen an upward trend over the last few years and when developing fresh office space, it's important to bear this in mind. Why have these designs garnered popularity? Mainly through competition among businesses to attract graduates with their relaxing working environment.

Although this may not entirely fall under the sustainability category when it comes to environmental benefits, it does have an affect on the attractiveness of your building in relation to other properties.

Key points in regards to these 'new' type offices would include fewer desks, the use of Wi-Fi and Cloud computing, plus the ability to reconfigure the office as and when necessary.

Dr Nigel Oseland, consultant to the Guide and MD of Workplace Unlimited, says: "Offices of the future need to be flexible and adaptable to accommodate a variety of activities and people. They not only need to provide good space for collaboration and creativity but also facilitate the often over-looked need for concentration and confidentiality. Offices need to be suitable for a diverse range of occupants: people of all ages, cultures and personality types."





## Useful links & external sources for sustainable development

Throughout this guide, we have looked to provide information on sustainable development and some of the schemes associated with this phrase – mainly the BREEAM initiative.

As such, for further reading and more information, we have selected a number of useful links and references for your perusal.

- BREEAM Cycle Storage Compliance: [http://www.breeam.com/communitiesmanual/content/03\\_step03/10\\_tm\\_05\\_cycling\\_facilities.htm](http://www.breeam.com/communitiesmanual/content/03_step03/10_tm_05_cycling_facilities.htm)
- BREEAM New Build Compliance: <http://www.stromatech.com/new-build-compliance-assessments/breeam/>
- BREEAM Sustainability Scheme Overview: <http://www.breeam.com/index.jsp>
- Building Regulations: <http://www.planningportal.gov.uk/buildingregulations/>
- Environmental Impact of Sustainable Development: <http://www.brighthub.com/environment/science-environmental/articles/88398.aspx>
- Future of Sustainability: [http://cmsdata.iucn.org/downloads/iucn\\_future\\_of\\_sustainability.pdf](http://cmsdata.iucn.org/downloads/iucn_future_of_sustainability.pdf)
- Green Deal Scheme: <https://www.gov.uk/green-deal-energy-saving-measures/overview>
- Green Grants & Funding: <http://www.greenwisebusiness.co.uk/resources/green-grants-and-funding-16.aspx>
- Guardian Sustainable Development Page: <http://www.theguardian.com/environment/sustainable-development>
- How Does Sustainable Development Work? <http://www.environmentalleader.com/2011/02/14/how-does-sustainable-development-work-part-i/>
- Social Impact of Sustainable Development: [http://strategicdevelopmentpartners.com/sdp\\_laboratory/thought\\_leadership/the\\_social\\_impact\\_of\\_sustainable\\_development](http://strategicdevelopmentpartners.com/sdp_laboratory/thought_leadership/the_social_impact_of_sustainable_development)
- Sustainability & Commercial Real Estate: <http://www2.deloitte.com/content/dam/Deloitte/us/Documents/financial-services/us-fsi-breakthrough-for-sustainability-in-real-estate-051414.pdf>
- Sustainable Development at Kings Cross: <https://www.kingscross.co.uk/sustainable-building-design>
- Sustainable Development for New Builds: <http://www.nortonrosefulbright.com/knowledge/publications/33077/sustainable-development-the-life-cycle-of-a-commercial-building>
- UK & EU Energy Initiatives & Legislative: [https://www.energyinst.org/\\_uploads/documents/DSI20.pdf](https://www.energyinst.org/_uploads/documents/DSI20.pdf)
- What is BREEAM? <http://www.greenbooklive.com/search/scheme.jsp?id=8>
- What is Sustainable Development? <https://www.iisd.org/sd/>



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