
# GREEN WITH A VIEW: THE REAL RENTAL PREMIUM?

**KEY FINDINGS: This research shows that when trying to quantify the "green" premium one cannot ignore the floor of the letting, among other factors. Importantly, we still find that occupiers pay more for BREEAM-certified buildings even when one accounts for the floor of the letting in London's City Core office market. Sustainability is already a factor in determining rent levels and we expect its influence to grow as regulation and voluntary adoption of sustainability frameworks increases.**

## WHO'S PAYING?

It seems society only tries to grow sustainably whenever it is facing a crisis. We have often pushed the environment to its limits, depleted stocks faster than they can replenish, and grown at the cost of our welfare. Today's crisis hits all those notes. We have raised global temperatures by emitting greenhouse gases into the atmosphere and the resulting climate change is harming our society.

The buildings and construction sector has been quick to understand its role in this crisis and is acutely aware it is responsible for almost 40% of energy- and process-related emissions. Very few buildings currently in use have net zero emissions, so almost the entire global building stock needs improvement.

For commercial real estate, these improvements would be costly and likely borne by the investor. Meanwhile, the occupier would experience benefits: lower costs, and better productivity, employee wellbeing and engagement.[1]

So would an occupier pay more rent for a sustainable building, boosting its value and investment return?

Finding the answer has become a key area of research. The challenge has been to isolate the extra value created by sustainability. Green certification is a good proxy for this attribute, although, in practice, there is more to sustainability than the certificate. Further, offices with certification like BREEAM or LEED can also be newer, larger, and in better locations than the average stock.

Two years ago, we reviewed the literature on green premiums and found strong evidence for their existence. But good explanations of how those premiums were calculated were often lacking, and some factors known to influence rent levels were often missing. As such, we will walk through our own example to show the complexities of this type of research and the importance of model choice.

Our example is to find a green premium for rents in the London office market. We selected lettings in the London City Core submarket – a very small, central part of the City of London – to control for location. We only considered four and five star buildings (a CoStar rating system) to control for building quality. We only included new lettings (no sublets or assignments) with leases over one year with an achieved effective rent signed in 2016-2022. BREEAM certification includes all rating levels, although most of the sample were rated "Very Good" or "Excellent".

[1] World Green Building Council (2021), Beyond the Business Case: why you can't afford not to invest in a sustainable built environment


# GREEN. TOWERS. OR GREEN TOWERS?

## Green Premium

Figure 1A shows BREEAM-certified buildings had a higher median rent than those not certified. But there is an overlap in rents between the two samples. Is there a green premium? A very basic model has a statistically significant green premium of 10%.

## Tower Premium

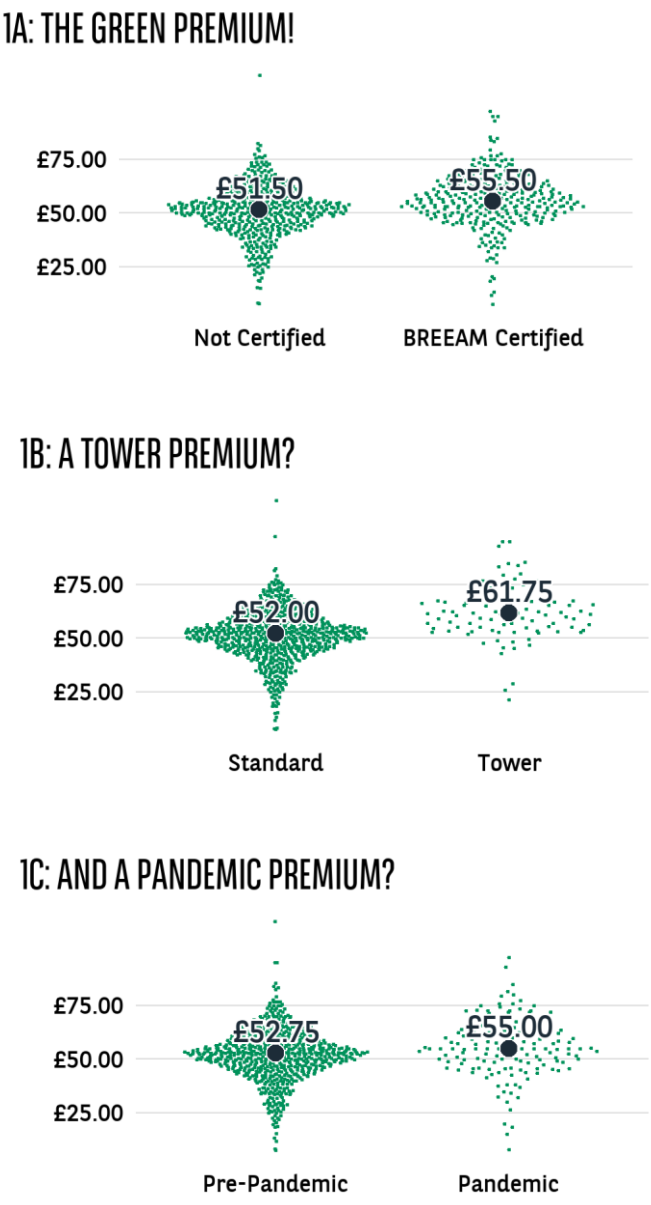
But what if we were looking for a tower premium? Figure 1B shows lettings with an average floor level above the 10th floor also have a higher rent than the rest. A model ignoring green credentials and just considering lettings' "tower" status estimates the tower premium at around £12.00 psf pa (mean, rather than median), which is statistically significant. This would make sense; letting agents often quote prime rents for mid-level floors and a higher tower rent for this submarket.

## Pandemic Premium

Given the sample of lettings includes sign dates from 2016 to 2022, we should consider the impact of the pandemic. When we split the sample into two groups – pre-pandemic (2016-2019) and pandemic (2020-2022) – we might expect pandemic rents to be lower. Instead we find a higher average since the pandemic, as shown in Figure 1C.

A pandemic premium, which, again, is statistically significant, might seem counterintuitive. But since the pandemic, poor-quality office space has struggled to let, even with lower rents. Meanwhile, since the pandemic began – and with momentum from COP26 and COP27 – there has been further demand from occupiers for new, well-located, sustainable office space. Some occupiers are also less sensitive to rent per square foot, as they are willing to take less space in support of their hybrid working strategy. This all combines to skew the sample toward higher rents.

**FIGURE 1: DISTRIBUTION OF LONDON OFFICE LEASE DEALS (2016-2022)**
City Core, new lettings over 1,000 sq ft, 4- and 5-star buildings, achieved effective rents (£ psf pa). Individual lettings in green. Median in dark blue.




Source: BNP Paribas REIM calculations, CoStar data (as at 31 December 2022)
Note: BREEAM Certified includes all levels. Tower includes lettings where the average of all let floors was above the 10th floor. Pandemic includes all lettings in 2020-2022.



## HOW YOU USE THE MODEL MATTERS MOST

Do occupiers want green offices or lofty space with great views, or has the pandemic shifted demand toward the higher-value space? Even after controlling for many variables in the sample, such as location and quality, this demonstration shows there are still complicated decisions to make to determine what remaining factors could drive rent levels.

To demonstrate these decisions, we have provided the output of an example model (Figure 2). We trained our model on the three terms discussed: BREEAM-certification, floor level and an adjustment for higher average rents since the pandemic began. Lease length and letting size were also tested but ultimately not used.

There is enough in our example model to show that when trying to quantify the "green" premium one cannot ignore the floor of the letting. Any past research on office rent premiums should be revisited to consider the floor of the letting.

There is an undertone to researching green buildings that there needs to be a premium otherwise it is hard to justify the cost of certification and the improvements needed to achieve a good rating. There is an irony to labelling a BREAAM building as "green." The certifying organisation BRE (Building Research Establishment) does not mention "green" on its website or in its documentation. Instead, it describes BREEAM as a "framework used to develop and operate efficient, warm, and affordable assets to improve comfort, health and wellbeing of occupants." In other words, it is a framework to assess if buildings are sustainable over the long term.

Getting the certificate to enjoy a one-off boost to rents or values is not, and should not be, the goal. There is more at stake than a few pounds per square foot on an office rent. This brings us back to one of our first points: there is an ongoing climate crisis. Achieving net zero by 2050 is the clear goal with an unclear strategy. Unfortunately, 76% of the world's largest investors are not targeting net zero emissions.[2] Over two-thirds are not even reducing portfolio emissions. Many say they plan to act, but at present only the minority have begun.

Whether they realise it yet or not, real estate investors have to overcome a complex challenge: lower emissions, be resilient to climate and societal change, ensure a positive social impact, and deliver a financial return. The right framework, whether a certification framework or otherwise, and research can help overcome that challenge and form a clear strategy.

The example model in this report showed how a view on a well-known market could evolve by analysing a few factors at the same time. In our search for a "green" premium and a "tower" premium we found both, and, in a sense, neither. We found sustainability and a sliding scale for floor levels drive rents, not necessarily "green" nor "tower."

Models do not have to be perfect to be informative. Further, the insights they reveal have practical uses. One could use models to assess costs and benefits, and guide asset management toward the most profitable activities and investment toward mispriced opportunities.

Sustainability is already a factor that drives rent levels and, therefore, capital values. There could be a tipping point or "systems change" in future. For example, imagine the value premium for sustainable buildings when the majority of investors start targeting net zero and realise what they need to buy.

*END*

[2] Bfinance (2022) Global Asset Owner Survey


**FIGURE 2: EXAMPLE MODEL WITH GREEN PREMIUM AND FLOOR FACTOR COMBINED**

Predicted average effective rents for London Office City Core, new lettings over 1,000 sq ft, 4- and 5-star buildings (£ psf pa)

BREEAM Certified
Not Certified
Confidence interval for BREEAM Certified
£90.00
£70.00
£50.00
Modelled rents drop for lower floors, mezzanine, ground floors, and basements
Modelled rents pick up for upper floors, those with 'tower' status
UPPER FLOORS
Fewer observations.
Less confidence, wider range of predictions
LOWER FLOORS
Many observations.
Confidence that BREEAM Certified earn a rent premium
0
10
20
30
40
50
Floor of the letting (i.e. the 10th Floor)

Source: BNP Paribas REIM calculations, CoStar (data as at 31 December 2022)



## EXTRA NOTES ON THE RENTAL MODEL

The best results used floor level as a continuous variable, not a binary "tower vs standard" designation. For example, a letting for floors 10-12 would have a floor average of 11. We explored options to normalise this variable to correct for the skew from many lettings at lower floors and few lettings at upper floors, but kept the data unchanged. The relationship between floor level and rent is distinct with a break in trend at the lower floors, especially for ground floors and basements, and another steepening of the slope for the upper floors. We felt it was best to fit a model to this natural data.

We also explored interactions between the terms, but found nothing conclusive. In the end, Figure 2 shows the predictions based on a simple example model. It acknowledges the bump in average rents since the pandemic and the gradual rise in rent for upper floors, and still confirms the existence of a premium for BREEAM certification.

All three factors are significant, but each factor has a small premium. The green premium is down to £3.00 psf pa for example. As always, we could seek a better fit or test other factors – accessibility and amenity count, for example – and their interactions. The model's overall explanatory power is low, but that is to be expected given the tightly controlled sample. Other studies with higher explanatory power (say, a high adjusted R-squared) had a broader sample – more submarkets or quality groups – and relied on the model to (successfully) do more work to explain rent levels.

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