

The next frontier for green building certifications

Key Highlights

Sustainability attributes have long proved to be accretive to rents and capital value, but the most prized green building features are constantly changing. As markets shift to value building performance, what's in store for today's most popular certification frameworks?

- Green certifications are the go-to method for most stakeholders to assess a building's sustainability credentials. In many markets, they are becoming a standard feature of top-quality space.
- These frameworks play a key role in providing a holistic building assessment, but as priorities shift towards carbon reduction, it is crucial to understand what these certifications actually represent.
- In most markets, there is gap for a certification that can effectively validate and verify energy and emissions performance and progress is underway to close this gap.

There are many different ways to demonstrate sustainability in commercial real estate, but the most common form has been through third-party building certifications schemes, like the U.S.-developed LEED and UK-led BREEAM. Yet, as the transition to net zero reshapes how we define high-quality assets, how must these leading certifications evolve?

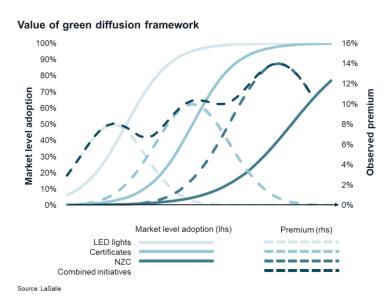
This transition presents many challenges as well as opportunities not just to buildings and their owners, but to the certification frameworks we rely on to gauge sustainability. As decarbonization becomes the goal, occupiers, owners and investors alike are reassessing their sustainability-related priorities, and many are placing material carbon reduction measures at the top of the list. While the built environment accounts for around 40% of global emissions, <u>27% directly comes from building operations</u>, creating an acute urgency to tackle a building's energy and emissions *performance*. Yet, the most prevalent green building certifications across most markets today are typically focused on design and construction and do not necessarily reflect improved energy use or emissions during operation.

From differentiator to market standard

While the industry in most countries seeks ways to reconcile this performance gap, top-quality markets are also revealing a shift of their own. Multiple studies have looked to quantify the statistically significant

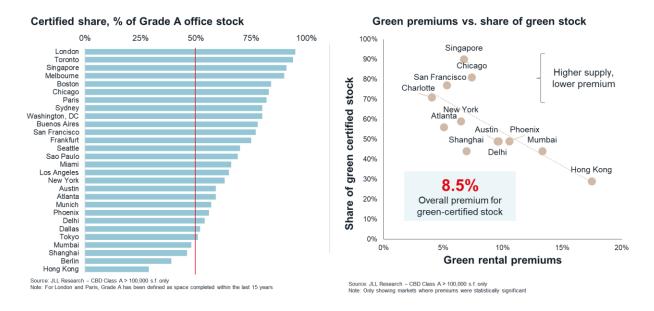
price and/or rental premium for sustainable buildings, or the 'green premium', often measured by the presence of a green certification. Across global markets, JLL Research has found evidence of rental premiums <u>ranging from 7.1% to 11.6%</u> for green certified office assets. Although estimates across these studies vary, they reveal that sustainable attributes are generally always accretive to building rents and values, as assessed by LaSalle's research, <u>The Value of Green</u>.

A key consideration though is that green premiums are influenced by time as well as the adoption rate of the green technology or element in question. As described by LaSalle, the demonstrable value of sustainable attributes tends to be low at first due to limited awareness, but rises as demand grows and eventually declines as those features become standard and expected in core assets, leading to risk of a 'brown discount', or a decline in value due to a lack of such elements. As a result, the



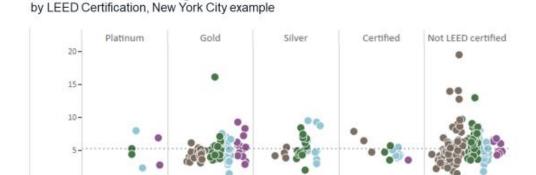
premium for a specific building in a given market will fluctuate over time, swayed by various factors such as technology adoption, regulation and occupier requirements. For example, LED lighting, which became commercially available in the early 2000s, initially led to a premium for buildings that adopted the technology. As it became standard, however, the premium decreased until LEDs were no longer a differentiator. Green certifications have become the measure for sustainability in real estate, but as more buildings align with the requirements set out by these frameworks, premiums are set to follow a similar downward path – unless these certification frameworks successfully evolve to capture the next frontier in sustainability and real estate.

In fact, this downward shift may already be happening in some markets as green certifications are quickly becoming a standard feature of top-quality assets. JLL Research <u>continuously monitors</u> adoption rates of green certifications across prime office markets and their associated green premiums. For most office markets in our study, green certified buildings make up over 50% of the Class A stock. Our research reveals an inverse linear trend between the adoption of green certifications and the associated rental premium. In other words, where markets are more saturated with green certified buildings, the green premiums these buildings achieve tend to be lower. This indicates that, for building owners, green certifications are becoming more of a requirement and less of a differentiator for their core assets.



The shift to building performance

In the CRE industry, the pursuit of certifications has typically been landlord-led, but when it comes to company-wide carbon targets an increasing number of corporate occupiers are making ambitious – and public – commitments to net zero emissions. The new frontier of sustainability in real estate is now increasingly being pushed by tenants who are looking to ensure their operations in their selected sites are aligned with their own commitments.



1970 - 2000

<1940 1940

Study includes Class A office buildings, 100k sf + Market covered: New York City Source: NYC OpenData, JLL Research

Emissions Intensity (kgCO2/sf)

When it comes to emissions, green building certifications are typically not an adequate measure as they are often design and construction based, and where operations are taken into account, energy use is just one component of the many other criteria they assess, e.g., water and waste. It is because of these nuances that, as the chart above demonstrates, there is no real trend and no downwards emissions slope as the level of certification increases across one of the most prevalent certification systems in our industry today.

"A key challenge is not necessarily the misalignment between many leading certification schemes and building performance, but rather the market's misconception of what these credentials actually represent. Often, a building with a collection of certifications is assumed to be NZC when, in reality, they can be very separate things."

Kirsty Draper, JLL's Head of Sustainability, UK.

The "badge collection" approach of accumulating sustainability certifications is no longer effective. CRE professionals should strive to better understand and communicate the actual benefit of certain schemes, while also emphasizing the importance of measures related to energy and emissions performance.

As corporate occupiers seek material progress on their carbon reduction goals, they too will have to look beyond certifications to ensure measures that target building performance are accounted for.

Our <u>recent research</u> addressed how leading tenants are already concentrating on key elements of a low carbon building: energy efficiency, electrification (or the removal of onsite fossil fuel systems) and clean energy procurement. For new builds, they are prioritizing construction with a lower embodied carbon footprint. While tenants are getting smarter around a building's associated emissions, more clarity around where buildings need to be in terms of their decarbonization pathway is also coming to the market through tools such as the following:

- The EU's CRREM (Carbon Risk Real Estate Monitor) is the leading global standard for operational decarbonization in the built environment. It is <u>in the process</u> of finalizing its pathways for North America demonstrating the tool's growing global reach and importance.
- Science Based Targets (SBT) is in the process of completing its <u>Buildings Science-Based Target-Setting Guidance and Tool</u>, which establishes global pathways for buildings' embodied carbon emissions and integrates CRREM into its in-use operational emissions pathways.
- NABERS (National Australian Built Environment Rating System), which involves annual assessments to measure the ongoing performance of buildings rather than the initial design, is now in New Zealand, India, Hong Kong, Indonesia and the UK.
- In June 2024, the U.S. Department of Energy launched its <u>National Definition of a Zero Emissions</u> <u>Building</u>. Similarly, the UK is developing an industry-led <u>Net Zero Carbon Building Standard</u>, following similar standards set by France and Sweden. These definitions address the industry's demand for a consistent and measurable framework for zero emissions buildings.
- There has also been a rapidly increasing regulatory focus on setting <u>building performance</u> <u>standards</u> across U.S. cities, Europe and other jurisdictions worldwide.

As this increased clarity comes to market - and as local governments directly target these metrics – how we perceive and measure value associated with sustainability in the built environment must also evolve. Calculations for green premiums are inherently backward-looking as they require historical data. As data

related to building performance becomes more widely reported and available, green premium analyses are expected to increase in focus and expand to include energy and emissions performance.

Building performance – and specifically, metrics around energy efficiency and emissions – are set to become the next frontier in achieving higher returns for sustainable investments.

Already, investors are showing a shift in priorities. JLL's recent <u>UK investor survey</u>, for example, showed a shift from certifications towards energy, emissions and Net Zero Carbon (NZC) alignment as top considerations in investment decision-making. This shift leaves a gap for certifications that validate actual energy performance, such as NABERS - but investors should not wait for the data or certification frameworks to evolve and scale.

Forward-looking investors must anticipate signs of increased pricing, and with so much necessary momentum around decarbonization, sustainable attributes that deliver material emissions reductions, such as improvements in energy efficiency and electrification paired with clean energy procurement, present a promising path to higher returns.

How are existing certifications evolving?

The evolution of how we determine and prioritize sustainable attributes in the built environment will depend on our most pressing concerns. Building certifications will always have a role to play, but as tenants better understand the energy and emissions profile of buildings, third-party certifiers must be agile and proactive.

As part of a market-leading initiative, JLL recently partnered with the International Living Future Institute (ILFI) to develop a <u>new certification program</u>, announced just last month, for decarbonizing existing buildings without major capital projects. This is an evolution of ILFI's Zero Carbon Certification introduced in 2018 – a performance-based certification that measures both embodied and operational carbon – but now geared towards existing buildings. This new initiative extends one of the industry's most rigorous certification programs to apply to existing assets and, in doing so, accelerates credible decarbonization efforts in our sector.

Other major certification frameworks have already indicated that they have no intention of staying behind. The U.S. Green Building Council (USGBC) and the UK's Building Research Establishment (BRE), the organizations behind LEED and BREEAM, have both stated plans to enhance their offerings in order to more accurately represent emissions performance:

• In September 2023, the USGBC introduced a draft version of its <u>LEEDv5</u> for Operations and Maintenance rating system that focuses on setting existing buildings on a decarbonization path, while addressing equity, health, ecosystems and resilience. It closed the comment period in May 2024 and plans to open for registration in early 2025.

• Likewise, BRE is working to finalize its <u>BREEAM V7</u> certification scheme which will focus on whole life carbon and net zero alignment. This scheme will apply for new construction, in-use, refurbishment and fit-out schemes and is set to be released later in 2024.

While Australia-led NABERS is already ahead of the curve in targeting operational carbon in commercial buildings, it is also making strides to release an <u>Embodied Carbon rating tool</u>. This tool will enable new buildings and major refurbishments to measure, verify, and compare their embodied carbon footprint – the emissions associated with materials - with similar buildings. Embodied carbon has historically been a blind spot in the real estate industry but this action from NABERS is an example of the growing trend to address these emissions.

With the question of *how* to finance sustainable, low carbon buildings and retrofits remaining top of mind, BRE, the USGBC and the Green Building Council of Australia (GBCA) recently announced an industry-first alliance that will promote sustainable finance mechanisms for the built environment through the use of certification schemes. A critical component of this alliance will be to demonstrate how systems like BREEAM, LEED and the GBCA's Green Star support ESG reporting and ensure compliance with multiple classification frameworks, such as the EU and UK green taxonomies, and how they can be used to put buildings on science-based decarbonization pathways. The alliance has the <u>support</u> of key partners including GRESB, the Climate Bonds Initiative (CBI) and the Carbon Risk Real Estate Monitor (CRREM), critical players that investors, banks and issuers rely on to confirm the sustainability credentials of their portfolios and debt instruments and to confirm net zero alignment. This initiative will enable these certification schemes to help drive the <u>\$35 trillion in investments</u> needed by 2030 to meet global net zero transition goals.

There are many ways in which certifications are and will continue to be an important feature of sustainable real estate. This is especially true in markets lacking transparency where third-party certifiers become the sole means of effectively evaluating green building practices. Moreover, the realm of ESG encompasses a wide range of elements, from social issues to physical risk, and efforts to deal with them are often siloed. Building certifications can uniquely serve to deliver a holistic assessment of a building's complete sustainability profile, tackling energy and emissions as well as circularity, health, equity, biodiversity and resilience.

In a world that needs radical transformation, certification frameworks must evolve, adapt, and anticipate change to ensure they're not just part of the solution but play a key role in unlocking sustainable real estate's full potential.



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