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Turning Green to Gold: The impact of green certifications on rents, prices and values

JLL SEE A BRIGHTER WAY

Executive summary

Green certifications globally are driving real estate returns worldwide, revolutionizing sustainability and environmental performance in buildings and demonstrating value to occupiers, owners and investors. In this comprehensive report, we delve into the trends and insights surrounding the performance of Green Star certified assets in New Zealand.

Our study uncovers the economic advantages associated with going green. By focusing on property value drivers and overall market competitiveness, we reveal how green certifications can boost the bottom line and differentiate your asset in the market. Both rental rates and sale prices are positively impacted, turning green assets into a smart investment choice. We highlight the immense value of buildings that achieve both Green Star certification and high NABERSNZ energy ratings. These properties not only command higher prices and rents, they also experience reduced vacancy rates. Green Star certified assets reap the benefits of sustainability, profitability, and market competitiveness.

As the real estate industry faces increasing pressure, it's crucial to stay ahead of the game. With rising reporting requirements, regulations, and global demand for green assets with strong Environmental, Social and Governance (ESG) credentials, the time to go green is now. In fact, changes to the International Valuation Standards will soon explicitly consider ESG factors in valuations.

Unlock the Value of Green

Our research reveals Green Star certification demonstrates a premium of **3.7% - 7.5%.** Further, the most significant green premiums are found in buildings that achieve the prestigious combination of a high Green Star certification and a NABERSNZ 5 Star energy rating demonstrating **9.8%** sales price premium and a **6.7%** in rental values. Our in-depth analysis shows that buildings with both certifications yield the lowest vacancy rates: **1.5%** across the entire market, including the highly coveted Auckland (1.39%) and Wellington (1.35%) markets.Properties with both Green Star and NABERSNZ certifications enjoy occupancy rates as high as **98% to 99%.**

Green Star certifications not only command a premium, but the research demonstrates the attraction for both tenants and investors seeking environmentally responsible properties. Further, the benefits to health and well-being as a result of superior indoor environment quality is gaining greater understanding in the market.

While the influence of green premiums in New Zealand may seem more modest compared to other international markets like Australia, Europe, and the United States, the potential for growth is immense. As the market matures and regulatory environments evolve to address emissions and TCFD requirements, escalating focus on the social requirements in buildings will see the value differentiation between green certified assets and non-certified assets become even more pronounced.

3.7% – 7.5%

Green Star 4 to 6

Sales premium for Green Star certified offices

6.7%

6 Star Green Star & 5+ Star NABERSNZ

Rental premium for market leading green certified offices

1.5%

Vacancy

Reduced vacancy with a Green Star certification & the lowest vacancy if both Green Star & NABERSNZ

> *"This is the first study of its kind in New Zealand. For 17 years since its inception, we've known the value in Green Star, financially, environmentally and socially. Now we can demonstrate to the market the quantum*

Andrew Eagles

CEO, New Zealand Green Building Council (NZGBC)

Embrace Sustainability for a Resilient Future

Green buildings and sustainability are essential to meet global targets and create a net-zero carbon emissions future by 2050. In New Zealand, sustainability has gained prominence among central and local governments, tenants, investors, developers, owners, and the community. It is clear, that buildings lacking emission reduction strategies and with poor sustainability credentials face higher risks in the current market and regulatory environment. On the other hand, properties that invest in sustainability, emissions reduction, and resilience present opportunities and contribute positively to the environment, society, and the economy. In comparison to other countries, the New Zealand market lags behind in terms of sustainability regulations and government direction. As a result, the growth in sustainability, green certifications, and the value relationships associated with them is not as evident. The absence of disclosure regulations makes it challenging to compare assets based on sustainability credentials. Initiatives like Australia's mandatory disclosure of a NABERS energy rating have driven transparency and competition in the market, encouraging building owners to continually improve their certifications.

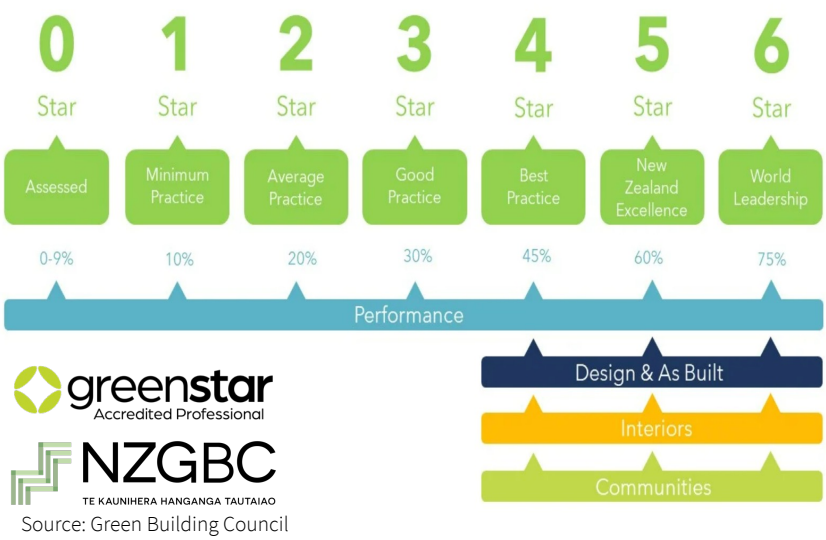
The introduction of a similar scheme in New Zealand, coupled with other regulatory drivers like emissions reporting and target achievement, has the potential to rapidly transform the market in the coming years. Countries like the UK have implemented minimum energy performance requirements that led to rent discounts and capital expenditure adjustments for underperforming assets. In the US, Building Performance Standards impose financial penalties based on energy efficiency, with substantial consequences for non-compliance. These examples demonstrate the financial impact of sustainability on the valuation and performance of buildings.

The upcoming changes in the International Valuation Standards (IVS), effective from January 2025, explicitly direct valuers to consider ESG factors in the valuation process. This major shift in standards highlights the importance of explicitly examining the role of ESG factors and their impact on property values. Green certifications like Green Star and NABERSNZ play a crucial role in demonstrating transparency and meeting the explicit ESG categories considered in valuation.

Green Star

The Green Star rating system, launched in New Zealand in 2007 by the New Zealand Green Building Council (NZGBC), assesses the sustainability performance of buildings, ensuring they meet specified standards. It evaluates buildings based on energy efficiency, water conservation, indoor environmental quality, sustainable materials, waste management, land-use, ecology, and innovation.

Figure 1



Source: Green Building Council

The Green Star tool evaluates a project's sustainability by assigning points across various key performance and environmental categories. Green Star is an internationally recognized certification system and in New Zealand is administered by the NZGBC. Primarily used in New Zealand and Australia, it has gained recognition and popularity across the globe as a benchmark for sustainable design and construction practices. It also features prominently in international sustainability benchmarking programs like GRESB and the DowJones Sustainability Index.

Frameworks vary across the various Green Star tools, each designed for different project scales:

- Green Star - Design & As Built* (soon to be Green Star Buildings NZ)
- Green Star – Performance
- Green Star – Interiors
- Home Star (professional and homeowner)
- Green Star – Communities

Current environmental categories assessed include management, indoor environment quality, materials, energy, transport, water, land use and ecology, emissions and innovation.

NABERSNZ

NABERSNZ is based on the National Australian Building Environmental Rating System (NABERS) Energy and has been adapted for the New Zealand market NABERSNZ. It is licenced by the New Zealand government's Energy Efficiency Conservation Authority (EECA) and administered on their behalf by the New Zealand Green Building Council. NABERSNZ provides a framework for assessing and rating the energy performance of office buildings in New Zealand. At present this is limited to commercial offices, current proposal suggest this will likely follow expansion of program to other asset classes.

NABERS NEW ZEALAND

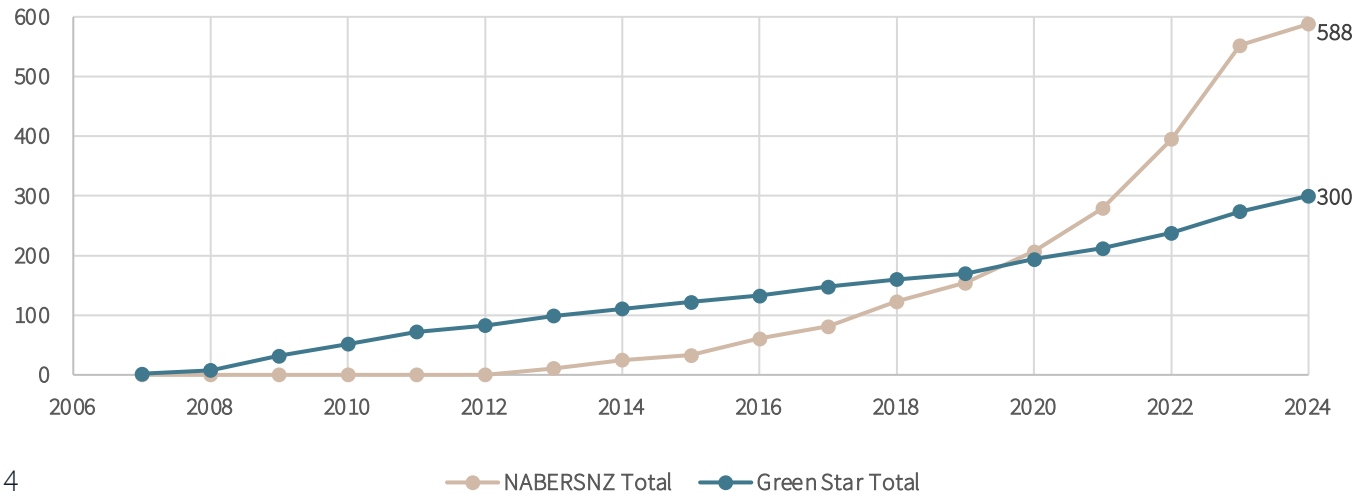
NABERSNZ star ratings (half stars can be awarded):

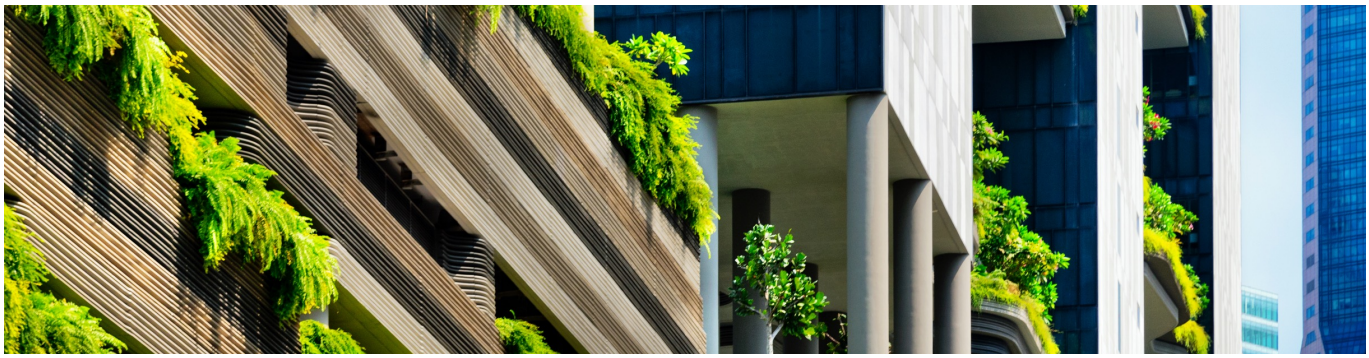
- 0 stars = very poor performance
- 1 star = poor performance
- 2 stars = below average performance
- 3 stars = good performance
- 4 stars = excellent performance
- 5 stars = market leading performance
- 6 stars = aspirational performance

Key Differences to Green Star

NABERSNZ rates a building's operational energy performance based on 12 months of an office's energy data. Green Star is most commonly used for the design and construction of a building and considers a host of environmental criteria as well as its expected energy efficiency. Green Star Performance is available for benchmarking existing building operations, and expands on NABERSNZ 's focus on energy, considering 9 performance categories such as water and waste.

Total Green Star and NABERSNZ certifications in New Zealand





Green Premium Research

The value of green buildings globally has been a topic of interest and study both in academia and industry for almost two decades. Research studies and real-world applications have demonstrated the benefits and tangible value that green or sustainable buildings bring. However, in New Zealand, there has not been any study to date that has examined the commercial office sector.

Globally, the question around the value of sustainability has been ongoing for several decades. Academic research has provided many studies from various global markets examining the value of sustainable, green or energy efficient certification.

> *"Historically green premiums were uncovered in real estate market research, the next evolution is starting to suggest discounting for poor performance and inferior environmental credentials.*
>
> **Georgia Warren-Myers**
> Head of ESG & Risk, APAC

JLL has recently published a study examining the perceived green premiums in various markets they cover finds global premiums exist in core markets examined [7] .

The research has already observed green premiums across global markets as seen below:

+7.1%
North America
Average rental premium for green certified, class A office stock across 8 major markets in US and Canada

+11.6%
London
Average rental premium for green certified office stock

+9.9%
Asia
Average rental premium for green certified, class A office stock across 9 major market in Asia

Source: JLL Research, 2023; JLL's Sustainability and Value – Lond Office Investment Report

From a finance perspective, there are emerging requirements globally around green finance, seeing initial offerings focus on providing better LVRs and interest rates for green certified properties. In the last few months, what is emerging from the finance sector are penalties for poor performing assets and failing to meet net zero carbon targets. Penalties have included higher rates, or major finance institutions choosing not to fund projects of that don't meet their sustainability requirements.

An Australian study: Building Better Returns

A prominent Australian paper 'Building Better Returns'. The study used the National Australian Built Environment Rating Scheme (NABERS) energy and Green Star environmental rating schemes and compared financial performance data from Jones Lang LaSalle and CBRE. The results demonstrated positive financial premiums for green office buildings compared to conventional buildings. This includes a 9% premium in building values for office buildings with a 5 Star NABERS energy rating, and a 12% premium in value for Green Star rated buildings .

Early Mover Advantage

Research by JLL completed in November 2023 highlighted the serious supply demand gap emerging in the market for net zero carbon ready properties. The research highlighted that highly sustainable assets with 5.5-star and 6-star NABERS ratings outperform, in terms of higher net face rents, sharper yields, and less vacancy than the wider market. Older high performing assets see greater differentials in rent.

On average CBD assets with NABERS 5.5-star + ratings

2.7% Less vacancy than the wider market

10% Higher net face rents

39 Basis points lower yields

Impact of Green Building Certification on the Cash Flows and Values of Commercial Properties

The effect of green certification on the cash flow parameters and sales prices of commercial investment properties

Cash Flow Parameter	Effect	Range	Mean
Rental Income	Increased	0.0% - 23.0%	6.3%
Occupancy	Increased	0.9% - 17.0%	6.0%
Operating Costs Yield (risks)	Inconclusive Decreased	- 14.3% - 25.8% 0.36% - 0.55% - point	- 0.4% 0.46 - point
Sales Price	Increased	0% - 43.0%	14.8%

An analysis reviewed empirical research and conducted a meta-analysis of significant research conducted on green certifications and pricing. The research found consistent premiums in sustainable properties are stimulated by benefits such as improved productivity and lower operating costs. As well as rental premiums and sales price premiums are also found in sustainable properties.

The effectiveness of minimum energy efficiency regulations in the commercial real estate market

This research examined how the introduction of Minimum Energy Efficiency Standards (MEES) in England and Wales has impacted office rental values. The research shows that the MEES policy has had a significant impact on the London office market.

Rents for low-efficiency buildings decreased leading up to the policy enactment, particularly for F-rated EPCs and plummeted as the requirements came into effect.

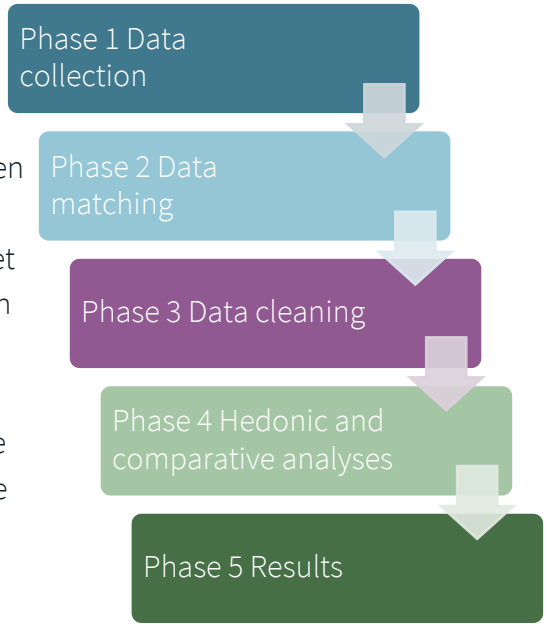
Sustainability and Value Capital Markets: Central London Offices

JLL published a comprehensive research paper focusing on the London office market, using the Hedonic pricing model to examine the effect of environmental certification on capital values, rents and yields. The research examined 'pure' investment in Central London. They were matched for age, size and location, and with both BREEAM (similar to Green Star) and Energy Performance Certificate (EPC) status. The report demonstrates that the market is increasingly attaching higher prices to more sustainable assets in anticipation of higher returns and lower risks, adding further to the business case for creating sustainable real estate assets as well as investing in them.

	BREEAM certificate	EPC (single step improvement)
Capital values	20.60%	3.70%
Yields (NIY)	24bp	N/A
Rents	11.60%	4.20%

Research Approach Overview

The purpose of this research was to examine commercial office property transactions over the last decade in key Auckland, Wellington and Christchurch markets, and ascertain whether Green Star certification generated a price differential at point of sale or lease. The research utilised two key data sources. Firstly, a dataset provided by the NZGBC comprising all certified properties for both Green Star and NABERSNZ for the three markets examined. Secondly, JLL's office rental, sales and vacancy databases. The certification information was then matched to the buildings in the JLL datasets. It should be noted as part of the process Earthquake Prone Building certificates were also matched; and there was insufficient WELL certification at building level to be included.

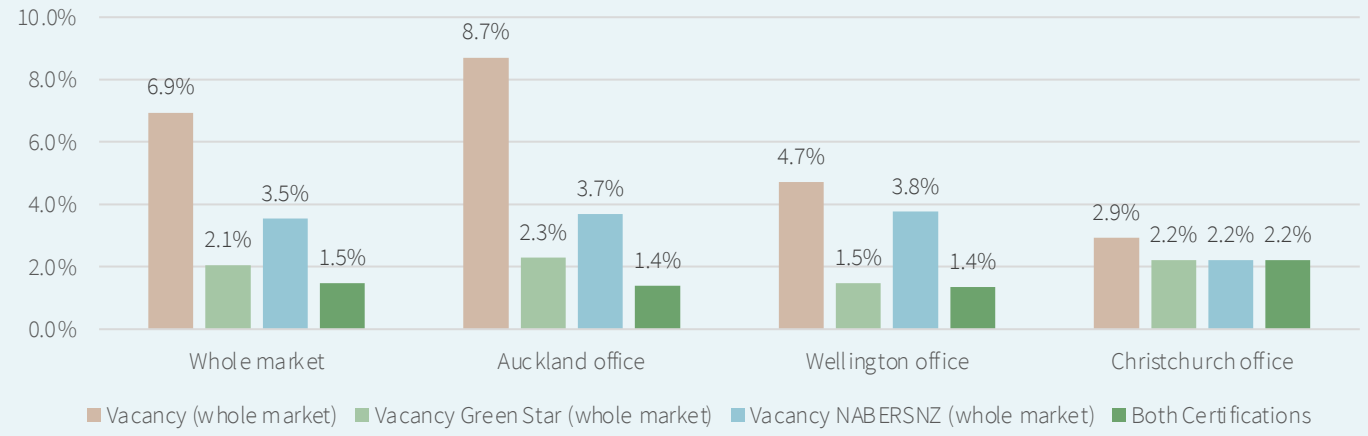


Data Matching

The sales analysis for the office market saw 9% of properties are Green Star certified and 16% NABERSNZ certified. The rental analysis had a much larger sample of transactions, with 2,333 for the office market, of which 11% had a Green Star certification and 29% a NABERSNZ certification. It should be noted that in comparison to some international studies, the number of observations in this study are considered low and do cause some limitations for the interpretation of the analysis, however it is in line with other studies in this region conducted by Newell et al. (2011, 2014) and Gabe and Rehm (2014)

Vacancy	Total market space sqm tracked	% of properties Green Star certified (connected in database)	% of properties NABERSNZ certified (connected in database)
Auckland office	846,358sqm	41% (345,889sqm)	74% (623,358sqm)
Wellington office	384,044sqm	41% (158,760 sqm)	63% (241,060sqm)
Christchurch office	159,723sqm	38% (60,245sqm)	34% (54,247sqm)
Sales			
All office	552	9% (48)	16% (87)
Rents			
All office	2333	11% (249)	29% (685)

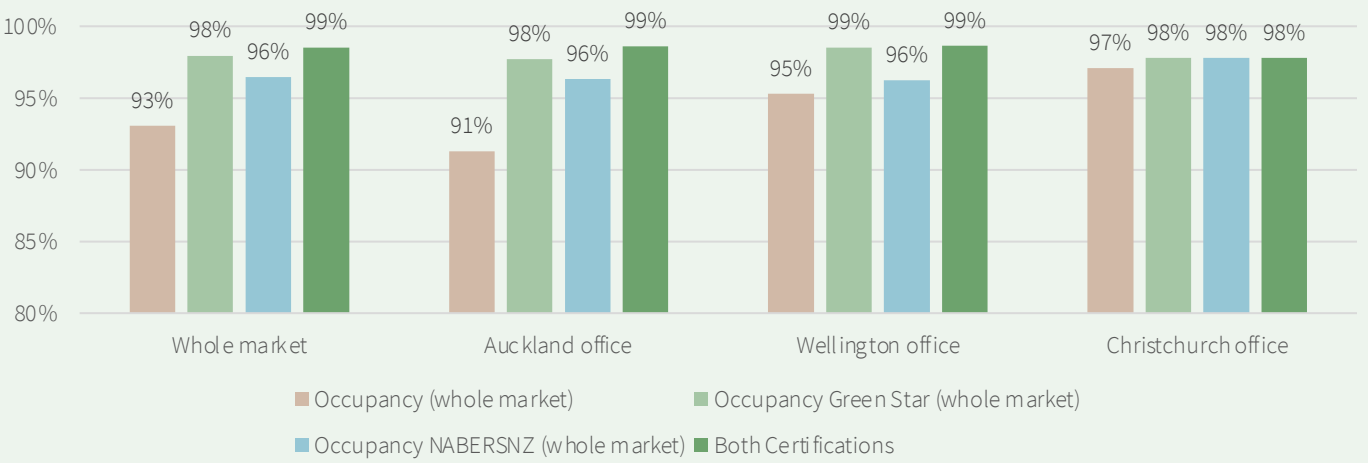
Office Vacancy Analysis



Analysis Conclusions:

- Certification of a property in the market would appear to reduce the vacancy in the asset.
- Green Star certified buildings across all markets demonstrated lower levels of vacancy compared to non-certified buildings and NABERSNZ only certified properties.
- Compared to the whole market, having both a Green Star and a NBERSNZ rating demonstrates the best outcomes, with lowest vacancy across the whole market.

Office Occupancy Analysis



Analysis Conclusions:

- The occupancy rates for the overall market and the three core markets range from 91% to 99%, indicating consistently high occupancy levels.
- Buildings with both certifications exhibit the highest occupancy rates, ranging from 98% to 99%.
- Additionally, Green Star rated buildings experience slightly higher occupancy rates compared to NABERSNZ rated buildings.

Limitations

- Buildings in this dataset are key buildings tracked by JLL research - not every building in the market
- This dataset comprises mostly premium and A-grade buildings in each market

Sales Analysis

"Green Star certified properties consistently demand a sales premium"

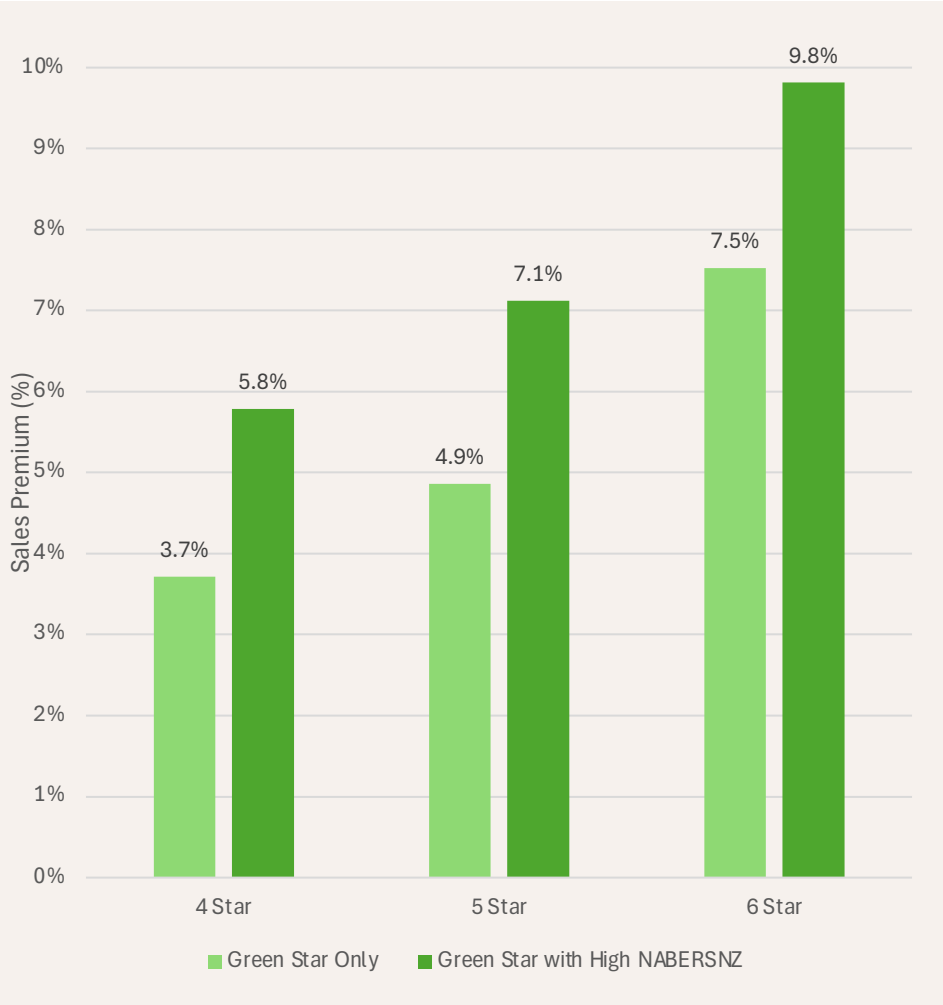
The analysis of property sales regression reveals a trend of Green Star certified properties consistently demand a sales premium. What's more, as the star rating increases, an incremental rise in this premium is also observed. Multiple models were run to thoroughly investigate the presence of Green Star and NABERSNZ certifications, along with their respective rating levels.

Figure 20

High performance 6 Green Star and 5+ star NABERSNZ certified properties command a 9.8% premium

If a property achieves a high NABERSNZ certification, it further amplifies the identified premium.

To ensure accurate findings, the regression model accounted for various factors including building size, age, CBD location, quality risk score, seismic risk, date sold, and market location.



	Auckland	Wellington	Christchurch
4 Star	3.9%	3.8%	3.8%
4 Star + High NABERSNZ	5.7%	6.0%	5.9%
5 Star	5.1%	5.0%	5.0%
5 Star + High NABERSNZ	7.1%	7.4%	7.2%
6 Star	7.9%	7.7%	7.7%
6 Star +High NABERSNZ	9.7%	10.2%	9.9%

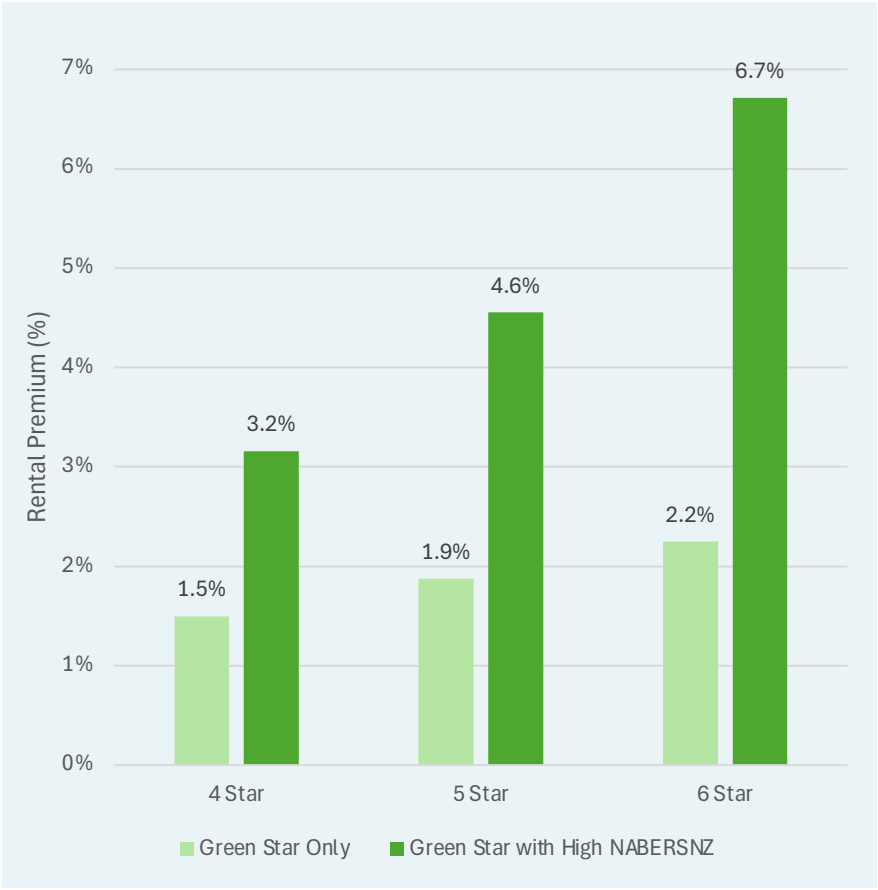
Overall, these analyses demonstrate a compelling relationship between sustainability certifications and property sales premiums, creating a fluid flow of evidence supporting the value of environmentally conscious buildings.

Rent Analysis

"Rental premium increases incrementally with higher star ratings"

The analysis of property sales regression indicates that Green Star certified properties tend to command a rental premium. Furthermore, the rental premium increases incrementally with higher star ratings. Additionally, properties with a high NABERSNZ certification further enhance the identified premium. Multiple models were run to examine the presence of NABERSNZ and Green Star certifications, as well as their rating levels. In the rental analysis it is clear green certification is in demand and reflected in priority of both design and performance of assets.

Figure 21



High performance Green Star and NABERSNZ certified properties command a 6.7% rent premium

This finding signals that quality certified assets are differentiated within the markets. It is important to acknowledge that the model used to explain these results has limitations. Specifically, the ability to control for age across the data set is limited. Therefore, it is likely that the premium identified also correlates with newer buildings. At the high end of certification bands there are limited observations which has an effect on results amplified when markets are examined individually.

	Auckland	Wellington	Christchurch
4 Star	2.2%	2.3%	2.1%
4 Star + High NABERSNZ	3.0%	4.1%	3.7%
5 Star	2.7%	2.9%	2.7%
5 Star + High NABERSNZ	4.3%	4.6%	4.1%
6 Star	3.3%	3.4%	3.2%
6 Star +High NABERSNZ	8.7%	8.0%	6.0%

To address potential confounding factors, the regression model accounted for several variables, including leased space, lease type, seismic risk, heritage, operating expense, CBD location, quality risk score, commencement date, market location, city, Green Star certification and NABERSNZ certification. There is less than 1% of the sample with 4 and 6 star certifications in the dataset, and 10% 5 star.

Office Rent | Premium rental tower in Auckland — Case study

Location: Auckland
Date range of transactions : 2020 to 2023
Quality Grade: P (the most elite, state-of-the-art office amenities in the market.

10%
Green premium for Green Star certified rents in the Auckland Office market

Green Star Rating Average	NABERSNZ Rating Average	Building Name	No.of tenants & recorded transactions	Average Net Effective Rent ($/sqm)
5	5	Green Star certified Case Study Assets	21	$ 659
N/A	4	Buildings with no Green Star certification, but many had a NABERSNZ certifications.	43	$ 601

There is a clear rental premium in the quality grade P office assets in Auckland with the Green Star certified asset commanding an average of $659 net effective rent compared to non-Green Star certified building with an average of $601 net effective rent.

% difference	10%

Office Rent | Wellington — Case study

Location: Wellington
Date range of transactions : 2020 to 2023
Quality Grade: A (built to the highest specifications in terms of functionality, design)

6%
Green premium for Green Star certified rents in the Wellington Office market

Green Star Rating Average	NABERSNZ Rating Average	Building Name	No. of tenants & recorded transactions	Average Gross Effective Rent
4.9	5.4	A-grade Assets in Wellington CBD with a Green Star certification (4 and 5 star certifications)	21	$ 689
N/A	2.5	Comparable A-grade assets in the Wellington CBD who do not have a Green Star certification, and some have a NABERSNZ certification.	14	$ 652

There is a noticeable rental premium in Wellington's quality grade A office assets. The Green Star certified buildings are achieving an average gross effective rent of $689, surpassing non-Green Star certified buildings that have an average gross effective rent of $652.

% difference	6%

NABERSNZ certifications were all high for the Green Star certified assets, whilst non-Green Star certified saw quite a spread in terms of rating range.

7. Conclusion

Green certification is a game-changer in the New Zealand market for sustainable properties. This groundbreaking study reveals that high-performance green buildings, especially those with a 6 Star Green Star certification, command a 7.5% premium in sale prices. And when combined with a NABERSNZ certification of over 5 stars, this premium jumps to 9.8% compared to non-rated assets. The market clearly recognises and values properties with credible green credentials.

But that's not all. Rental premiums have also been identified for Green Star certified assets, with even higher premiums highlighted when a Green Star certification is paired with a high (5+ star) NABERSNZ certification. Further, buildings with either a Green Star or NABERSNZ rating also enjoy reduced vacancy rates. And, if they possess both certifications, occupancy rates are even higher.

Investing in green-certified properties doesn't just make financial sense – it's a smart move to stay ahead in this rapidly evolving market.

The level of certification does matter. The study demonstrates a tangible difference with each star rating band, showcasing an uplift in rent or sale price compared to non-certified buildings at the base level. The analysis rigorously controls for factors such as location, asset quality, age, and size – commonly criticised attributes in green premium studies. Utilising the robust Hedonic Pricing method, the study offers a comprehensive assessment of green certification in the New Zealand office market. However, it's important to note that certain aspects cannot always be controlled for due to information limitations. Therefore, traditional property characteristics like building amenity and location should be considered alongside ESG objectives.

It is clear that Green Star and NABERSNZ enhance property prices and rents, reduce vacancies, and achieve higher occupancy rates by investing in sustainable practices. Embracing the power of green certification will help maximise both financial and ESG objectives in the dynamic New Zealand market.

Despite the smaller impact of green premiums in New Zealand compared to similar studies in Australia, Europe, and the United States (the exception being at the six-star level with a high NABERSNZ rating). The premiums found in this study are at a level approaching the range found in comparable studies and the findings of Leskisen et al (2020).

With increasing regulatory forces, particularly around TCFD, emissions, and net-zero carbon commitments, the demand for buildings with high green credentials is expected to intensify in the market. There is also a likelihood of implementing mandatory disclosure of energy efficiency, similar to Australia, as well as potential future schemes to drive energy efficiency and emissions reductions. The COVID-19 pandemic has further amplified concerns related to health and well-being, sharpening the focus on the social factors and benefits prevalent in Green Star certified properties. Expanding the profile of demand beyond just environmental credentials and seeing a breadth of drivers both regulatory and market for more sustainable buildings.

Starting from January 2025, the International Valuation Standards will require valuers to explicitly consider the ESG credentials of assets in their comparative analysis. They will also need to take into account any regulatory implications specifically related to ESG. While ESG and green credentials may have been implicitly considered in valuations before, it is evident that from next year, they will be more explicitly taken into consideration in the valuation process.

> *"The trend is emerging that multi-national and international corporates and investors are seeking well positioned premium assets that have the green credentials that align with their ESG strategies.*
>
> **Gavin Read**
>
> Head of Research, New Zealand

Limitations & Implications

Limitations

There are a number of limitations noted in the study. The first being the number of transactions available with the appropriate levels of detail to enable the Hedonic Pricing models to be robust. Whilst the office sales and rental transactions were enough to produce models to examine the implications of Green Star and NABERSNZ certifications, the overall numbers are much lower compared to many of the international studies, albeit similar quantum of transactions to the Australian studies.

Other limitations include the bias towards high-value properties which are more likely to be certified and the heterogeneity of assets which complicates the application of statistical analysis to individual properties.

Further, this is likely emphasised by the type of data collected and retained by JLL and the markets they operate in. Small markets may also have limitations due to an insufficient number of comparable transactions (limiting splitting out of the markets).

Implications

The analysis conducted as part of this research has identified evidence suggesting premiums for green certified properties. It is important to note, that fundamentals of a property are still a key consideration, and that a 'green premium' cannot just be considered in isolation.

In particular location and market, and broader market dynamics, often come into play in terms of how rents are agreed at times, and there are often confidential terms that may include incentives that we are not privy to in this analysis.

From a valuation perspective, as noted by Warren-Myers (2012), the 'value' of sustainability can be tested in many ways, however, from a valuation perspective where the 'Market Value' is assessed, there are additional requirements and procedures valuers must follow in the process of conducting a valuation. Whilst the findings of this research may provide insights into broader market sentiment, the valuation process requires a different form in which to assess and consider the implication of green certification on the Market Value of an asset under consideration.

This report was commissioned by the New Zealand Green Building Council.

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RISK ADVISORY

Risk Advisory helps clients understand the value and risk implication of current transition and climate risks of an asset, portfolio or loan book, and provide comprehensive scenario analysis. Clients use our analysis to understand the impact on value of strategies to upgrade and reposition assets to meet ESG targets and enhance real estate values now and in the future, as well as understand the value at risk linked with existing ESG performance as markets transition to net zero.

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