Investor Perception of the Business Case for Sustainable Office Buildings: evidence from New Zealand

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Abstract:

Over recent years the global market for sustainable commercial property has been growing in importance, with rapid growth occurring overseas that has led to substantial changes in the property markets. The New Zealand property industry has been recently introduced to the concept of sustainability, and although still at an early stage is already noticing the accelerating uptake of sustainability in the industry. Although certain measures have been taken by the New Zealand Green Building Council and government mandates, there remains still a common assumption that there is considerable hesitation and skeptism in the market from both an investor's and a building owner's perspective.

The research presented in this paper reports on the results of an investigation into the market perception toward sustainable buildings from the investment community in New Zealand. Property developers and investors from New Zealand were surveyed about their perception of sustainable buildings in New Zealand and their actions with regards to their own commercial portfolios, as well as the impact sustainability is having upon investment decisions. This paper presents the results of research conducted into the relationship between the elements of sustainability and the market value of an office building. The paper provides an insight into the rapidly evolving area of sustainability and office buildings, with the emphasis placed on the valuation process that seeks to assess a hypothetical purchaser's perspective of this relationship.

[Note: The lead authors' doctoral thesis is focused on investigating the relationship between market value and the impact of sustainable attributes in commercial office buildings. A three-pronged approach is being used to investigate this relationship, investor surveys, valuer surveys and examination of market data. This paper provides the initial findings from the investor surveys in New Zealand.]

Introduction

The market for sustainable commercial buildings is gaining momentum in the design and construction arena, however development and investment by the private sector in these building types is limited (Reed & Wilkinson, 2005), particularly away from government pre-commitment. It seems there is limited information available detailing the financial viability of operating new or refurbished sustainable buildings and relatively little research has been conducted into the impact of sustainability on the market value of commercial buildings. To-date much of the emphasis has been placed on owner-occupied sustainable commercial buildings or tenant and government value of sustainability. However for sustainability to gain industry-wide acceptance, the majority of buildings owners and investors need to be assured of depth in the market as well as the financial certainty and viability of sustainable buildings. Clearly if the progress and uptake of sustainable buildings is to develop within the property market, it is essential the links in the relationship between market value and sustainability are identified and understood in order to progress investment in sustainable office buildings.

Currently the market for sustainable buildings in New Zealand is being encouraged through government legislation and policy, however general opinion in New Zealand is that investment by the private sector has been relatively slow to develop partly due to the lack of proof confirming the economic viability of sustainable buildings. As yet the absence of detailed market evidence, sales data and lease transactions of sustainable buildings have restricted support for the argument that sustainable buildings are feasible (Lutzkendorf and Lorenz, 2005). The lack of concrete evidence about the correlation between value and sustainability leaves the investment industry wondering and unsure of the financial benefits of sustainability (Madew, 2006). Although limited research undertaken into the valuation methodology of sustainable buildings has developed the concept of the impact of sustainability on value (Boyd, 2005; Lutzkendorf et al., 2005; Sayce et al., 2005), there is clearly an urgent need for detailed analysis in this area.

At present it appears there is limited information available about the financial viability of operating new or refurbished sustainable buildings. Overall relatively little research has been conducted into the impact of sustainability on the market value of commercial buildings. To-date much of the emphasis has been placed on owner-occupied sustainable commercial buildings, even though the majority of the buildings are owned by investors. The lead author's PhD research investigates the financial business case for sustainable buildings from an investment perspective. The emphasis is placed upon the importance of using existing valuation methodology to accurately assess the financial viability of sustainable buildings in the current marketplace. An extended study is being undertaken of buildings in Australia and New Zealand, including the perceptions of investors and valuers towards sustainability and value. This paper reports on the initial findings of the first stage of research that was undertaken in New Zealand in 2007.

Investment Drivers for Sustainable Buildings

There has been substantial research into the design and construction of new sustainable buildings and the benefits from these buildings, particularly socially and environmentally. However it has been argued there is an apparent "lack of mechanisms to align environmental and social issues with economic return" (Lutzkendorf and Lorenz, 2005, p.215). The lack of connection between sustainability and economic return affects the main stakeholders who invest in the property market, namely large financial, banking and superannuation vehicles. These are the key drivers within the property market.

In many ways it may be perceived that the case for sustainable buildings are being pushed by the demand side of the market, such as from the occupiers. Existing research tends to based the 'circle of blame' reasoning shown below in figure 1, where it may be argued that the occupiers and their demand for more sustainable space will break this circle and increase the take-up of sustainable buildings within the market.

Occupiers "We would like to have sustainable buildings but there are very few available. Constructors Investors The vicious "We can build sustainable buildings, "We would fund sustainable but the developers circle of blame buildings, but there is don't ask for them." no demand for them. Developers We would ask for sustainable buildings but the investors won't pay for them."

Figure 1. Circle of Blame

Source: Upstream, http://www.upstreamstrategies.co.uk/ 2006

Some sectors of the investment community, given the right drivers for sustainable buildings, may take it upon themselves to develop and invest in sustainable buildings. In order for this to happen, a solid business case should be developed where the financial benefits of sustainable buildings are fully understood by the investment sector in the market. Hence changing the 'circle of blame' in figure 1 to the diagram in figure 2 where the determination of the investment value of sustainable buildings by valuers enables the investors to break the circle of blame. However there is a resulting flow-on effect through the stakeholder chain from development to occupation but the identification of the market value of sustainable buildings by valuers helps to facilitate communication and understanding of the value of sustainable buildings through the stakeholder chain.

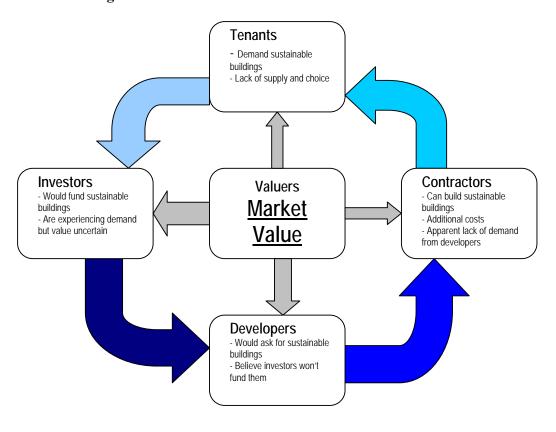


Figure 2. Communication between valuers and stakeholders

Source Modified Myers et al. (2006)

Investment elements that need to be answered for the determination of value, from an investor and developer's perspective, are based on the key drivers of investment as listed below:

- Market value
- Internal Rate of Return (IRR)
- Net Revenue
- Net Present Value
- Sale Price
- Yields

Whilst the development and construction of sustainable buildings is increasing, predominately these buildings are being developed either by owner-occupiers or by developers/investors with special agreements between the government or similar tenants. In addition, the provision of monetary or other types of government incentives are encouraging certain sectors of the property industry to develop sustainable buildings. However, the private sector is still hesitant about the viability of sustainable buildings away from the government supported leases and owner-occupiers. The government's views on the viability of sustainable buildings is inherently different to that of the private sector, where the governments in both New Zealand and Australia are trying hard to prove the financial viability of sustainable buildings through a number of publications. However it was argued in 'A Report to California's Sustainable Building Task Force' (Kats, 2003) that governments see the benefits of sustainable buildings more through social and environmental benefits with some regard to financial. On the other hand the private sector may be less likely to care about health and environmental impacts and hence might perceive lower financial benefits of

building 'green'. In addition, because of higher capital costs and hurdle rates, future financial benefits are discounted more heavily by private entities than by public ones, which in turn potentially further reduces the perceived value of future green building financial benefits for the private sector. These differences help explain the significant disparity between public and private sector adoption of green building design" (Kats, 2003, p.84).

Property or real estate is a debt investment that primarily involves an initial capital outlay in return for a fixed periodic income over a predetermined period, whereby at the end the capital outlay will be returned (Robinson, 1989). This is a similar type of investment to long-term deposits, government bonds, debentures and mortgages. The uptake of property as an investment vehicle has increased substantially in recent years as the security of property is considered higher than that of shares. Also, the 'baby boomer' generations' wealth and compulsory superannuation (in Australia) has increased the need for long-term secure investments with generally higher returns than government bonds. The escalation of the property market in recent years has heightened property as a pure investment vehicle, resulting in property investment decisions tied ultimately to the bottom line of the operating income over the period - the main emphasis is placed on the net present value of the property asset. Capital growth and an ongoing income are often the primary concerns of investment in property. However, when making decisions as to the type of investment in the property industry investors tend to use a number of methods to determine the best investment type. Most commercial investors look to valuation methodologies that determine net present value, internal rates of return, market value and yields.

Previously it has been argued that the investment market participants "have been relatively late in taking up the challenges imposed by sustainable development" (Lorenz, 2007, p.6). It was further suggested that a number of aspects require further research to accelerate the uptake of sustainable buildings in this sector. One of these areas is a financial business case and risk reduction. From a global perspective it is apparent that the investment community requires financial evidence of a business case for sustainable buildings to accelerate investment in sustainable buildings. This can be sought through the certainty of determining the value of any property investment; however the current lack of information and substantial data analysis into sustainable buildings makes investing in sustainable office buildings very risky in terms of financial reporting.

Although some developers and investors have taken the risk of investing in sustainable buildings, the financial returns are still yet to be fully transparent and this uncertainty is restraining the investment community. Likewise the valuation process is "unable to specify and price accurately all current and future influences on the value of the asset" (Adair and Hutchinson, 2005, p.254), consequently resulting in making it more difficult to identify and adjust factors to allow for the risk that could be inherent in sustainable buildings. Many of the major investment institutions are cautious of the risk and uncertainty around the investment of sustainable buildings, as the financial business case for these buildings has not been conclusively determined as yet by the valuation profession. In turn this restricts the investment in sustainable buildings.

The investment industry requires substantial financial evidence to progress forward in the investment of sustainable buildings, although this has not yet been achieved by adapting or modifying valuation methodology to better evaluate sustainable office buildings. Lorenz (2007a) supported the view that evidence on the economic advantages of sustainable property investment is needed to persuade business practices, to inform the public debate and to transform the markets for sustainable buildings. Investors need to know their return on investment, the expected income stream and what the market value or sale price of their asset is going to be. All of these factors impact upon investment decisions, and sustainable buildings need to be proven financially viable

before the investment community as a whole successfully endeavours to develop and invest in sustainable buildings.

Market Forces

Investors and developers need to know the extent to which sustainability is impacting property worth if they are to respond effectively to sustainability issues (Sayce and Ellison, 2003). This will require an analysis of how market value is determined for commercial office buildings. 'Market value' is defined by the International Valuation Standards Committee (IVSC) as "the estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion" (IVSC, 2005).

Conventional office buildings are currently appraised through conventional proven valuation approaches. To prove the financial benefits of a sustainable building are maximised, investors need to be able to compare valuation appraisals of sustainable buildings to that of conventional buildings in order to identify the financial viability and to correctly make economic investment decisions. In New Zealand, as in other countries, the property market has matured to a point where the determination of market value is by the assessment of the present worth of future income streams of the building, rather than by cost considerations (Emary, 1997). In Australia and New Zealand the discounted cash flow technique has commonly been used for determining the market value of office buildings through the analysis of cash flows of the property over a period of time (Armitage 1997). Industry valuers undertake current valuation practice by the calculation of the present value of future income streams, which in turn determines the market value of the property. Investors, owners, developers and lending institutions rely on the valuation reports produced by valuers that state the market value of the asset. The crucial nature of decisions made in the finance industry requires a standardised methodology for the determination of a property's market value.

Assessing the market value of income producing assets is commonly undertaken through two methodologies: (a) capitalisation of income approach and (b) the discounted cash flow (DCF) approach. The determination of market value, whether using the capitalisation or DCF approaches, relies heavily on the current market rents and yields of comparable properties. A valuer undertakes a range of comparative analyses of other properties when identifying market rents and yields for the subject property. Thus key determinants of market value depend greatly upon the property market climate. However the valuation community rely heavily upon comparable transacted evidence to determine the market rents and consequently identify market value. However this heavy reliance on comparable evidence has been criticised widely (Aldridge, 1989; Burton, 1992; Crosby, 1997) and the increasing shortcomings of this reliance upon comparable rents is a key issue when identifying market rent for sustainable buildings. In addition there is a lack of evidence documenting rent transactions in the New Zealand market due to the limited number of sustainable buildings. In turn this makes it inherently difficult for valuers to assess an appropriate market value for sustainable buildings. There are also a variety of potential shortcomings evident when assessing conventional buildings for a market rent that is highlighted by Whipple (1991), Crosby (1992) and Teale (1995). Thus a valuer needs to ascertain other market variables to assess whether the market evidence being used is appropriate for comparison - some of these variables include: the level and availability of stock, vacancy levels, quality, landlord or tenant market, economic determinants, market pessimism and willingness of tenants' to pay rental levels dependent upon tenant requirements.

Changing occupier requirements suggest that a focus upon sustainable space is an increasing prerequisite. The results published by Jones Lang LaSalle highlighted a significant change in market perception amongst the occupiers, whereby the majority of occupiers across Asia Pacific are

willing to pay more for sustainable space. (Jones Lang LaSalle, 2007). Lorenz (2007) concluded that the financial benefits for sustainable buildings needs to be included within the property valuation process, suggesting this could be identified through gauging the gradual changes in market participants' perceptions for favouring sustainable buildings. When investigating the financial case for sustainable buildings, market rents are only one element of the valuation equation. Thus the investor and developer's perception of sustainable buildings is equally important as they influence the market for sales and investment decisions. Therefore the initial investigation was to identify the market perceptions from the viewpoint of owners, investors and developers.

Research Methodology - Investor and Developer Market Perception in New Zealand

The market perception of sustainable buildings in New Zealand is still at its relative infancy. Although elsewhere in the world sustainable buildings have been developed for some years, particularly in the US, UK, Canada and Australia, New Zealand has not taken the opportunity of developing sustainable buildings until recently. The development of the New Zealand Green Building Council (2006) and the rating tool *Green Star NZ* (2007) for commercial offices has been an integral part of kick-starting the New Zealand property industry's development of sustainable buildings. However it appears that some developers and investors alike are questioning the value of these sustainable buildings.

Initial findings of the investor and developer surveys undertaken in New Zealand have led to a number of insights into the relationship between sustainability and office buildings, although the findings stated here are only preliminary. The surveys were undertaken between June and November 2007 and involved interviewing key property investors and developers in the New Zealand market. Participants were asked nine unstructured questions relating to their organisation or company's key investment priorities and perception of sustainable buildings.

Data Collection and Analysis

From the outset it was apparent that the survey responses conducted in New Zealand were quite varied and requires further research to bring conclusive results from this type of survey, however the general consensus for all respondents were relatively similar. Provided there is an economical business case identified for sustainable buildings, *all interviewees would actively pursue sustainable buildings for their portfolios.* However the priority of sustainable buildings as an investment vehicle varied widely in the current market. The resounding response was a need for the value case from an investors' financial point of view, using standardised market techniques for identifying the value of investment in sustainable buildings. Although a small number of respondents would invest and develop 'green' or more sustainable buildings regardless, they believed that this would be the only way forward in New Zealand.

Finding 1: Company perception of sustainability in the New Zealand property market

Question 1. What is the company/organisation's perception of sustainability with regard to buildings?

All survey respondents were aware of the sustainability issue and had some interest in how it would affect their property portfolios. A common perception of sustainability for the majority of the companies and organisations interviewed was that sustainable buildings could meet the demands of the occupier market, which has the potential to deliver a market driven return to the investor. Although many companies were hesitant about actively investing in sustainable buildings many thought that there would be longer-term consequences if sustainability was not considered when

assessing building stock. The increasing global drivers would see sustainable buildings becoming the 'Future of the international market', and is no different to any other technological advancement for the property industry, like air conditioning and increasing technology requirements. Figure 3 below presents the distribution of responses with the majority being opinion being positive in the current market, and with an even distribution of middle ground and negative views. On further discussion it was identified that optimising and reducing the use of utilities, particularly where tenants were on gross leases, provided the owner or investor with substantial savings. In addition, efforts undertaken by landlords to reduce operational expenses were recognised by tenants and consequently were reflected in better tenant retention rates. The neutral and negative responses were discussed further and it became evident that the lack of certainty, information and research on financial benefits and education and understanding were issues of concern in respondents' perception of sustainable buildings. The common perception across both positive and negative responses was the need for a proven financial return before any investor would consider either developing or investing in sustainable buildings.

Overall the perception of sustainable buildings was positive and notably more enthusiastic if sustainable buildings provided not just marketing and differentiated position of their asset. There was also the potential for increased rents and reduced operating expenses. With sustainable buildings at such a generally immature market level in New Zealand it appears it will take time and in-depth research to identify these benefits sufficiently for valuers to rely on, which in turn will be reflected in valuation practice.

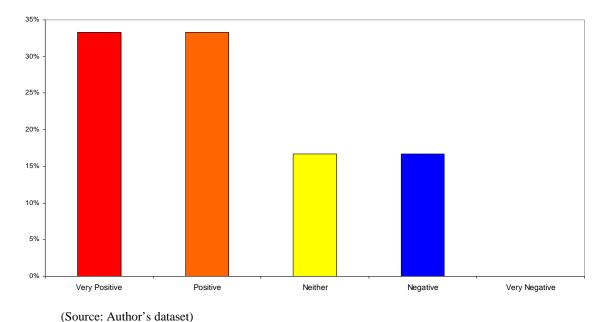


Figure 3. Investor Perception of Sustainable Buildings

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Finding 2: Investor Actions

Question 2. How is your company/organisation incorporating sustainability into the commercial property portfolio?

The overwhelming response to this question required two graphs (figures 4 and 5) to demonstrate how the companies and organisations in New Zealand were incorporating sustainability into their commercial property portfolios. However there is a considerable amount of bias in a survey of this

type whereby investors and developers want to be seen to be undertaking the right type of action, however whether they are actually doing so is a different matter. So a cluster analysis was also undertaken to gauge responses over the entire survey and identify whether their actions are matching their words.

Figure 4 identifies that all respondents are *aiming* to incorporate sustainability into their commercial property portfolios. The majority of very active companies were either developers or had sustainability as a core responsibility in their organisation. Development is being fuelled particularly in the Wellington region by government occupancy requirements. Recently government mandated for all new buildings being constructed to house government departments the buildings were required to be 4 or 5 star NZ Green Star rated buildings. This has provided a significant advantage for investors who can gain government tenants on long-term leases and will pay higher rents or contribute to the cost of sustainable initiatives. Many of the active respondents were investment companies with government tenants in their properties; they in particular were undertaking some upgrades and refurbishments to their stock. Reason being to minimise the potential vacancy at lease expiry, attract or retain the government tenant and potentially increase rentals at review. The remainder of respondents were contemplating how to implement sustainability within their portfolios, either starting with auditing of buildings or essentially planning on how to go about undertaking the implementation of sustainability into their portfolios.

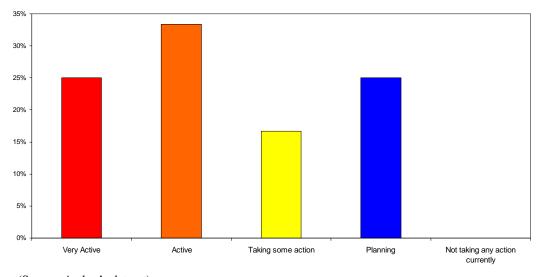


Figure 4. Investor/Developer implementation of Sustainability Initiatives

(Source: Author's dataset)

As investors often have a variety of different types of buildings within their portfolios, it was essential to understand the type of buildings that were being earmarked for sustainable upgrades or new developments. Figure 5 depicts variety of action respondents are taking. The distribution of actions was broad with many companies undertaking multiple options at the same time. The active investors having a majority split between new buildings and extensive upgrades and then long term strategic upgrading of buildings across the portfolio. This group were proactively looking at sustainability as a market differentiator and were aiming to achieve Green Star NZ design and performance ratings. The remainder of investors were looking to upgrade one or two buildings as required and assessing long term upgrade plans, also a minority were doing nothing at present. Figure 5 also confirms the different priorities of investors and developers in regards to sustainable buildings. The majority responded that the focus on existing building stock was to create sustainability asset plans to allow the incorporation of sustainability slowly into their office

buildings. In these cases major initiatives are planned for implementation with tenant movements. In addition the sustainability plans were used to demonstrate to tenants the direction for the building in upgrading the building to become more sustainable.

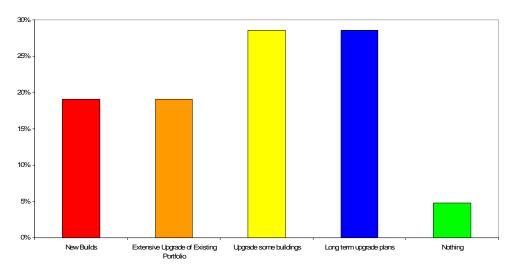


Figure 5. Current actions being taken in the portfolio

(Source: Author's dataset)

The 'drip feeding' of sustainable initiatives appeared typical across all survey participants, however this was particularly focused amongst owners who had large multi-national or government tenants with demands which were very important and initiatives that were timed with potential lease expiries. Therefore the implementation of sustainable initiatives should meet tenant demand whilst maximising returns. Initiatives being undertaken were focused upon practical decisions and achieved paybacks for both landlord and tenants. In essence by incorporating sustainable initiatives into the building, even though in a long-term plan, still enabled assets to remain competitive in the currently demanding and changing investment market. The focus of retaining their existing tenants or being able to attract better tenants was a key focus. However to go ahead with investment in sustainable buildings or by implementing initiatives it had to make economical sense for the investor where a demonstrated payback and return on investment was required.

Finding 3: Importance of Sustainability for Portfolios

Question 3. Are sustainable office buildings an important part of your portfolio? *Is investing in sustainable buildings a consideration for your portfolio?*

Larger investors, particularly those with multi-national orientation, had a very strong sense that sustainability would be very important for their portfolios reflected in a 29% belief that sustainability was very important now. A number of major investment companies commented that there was a requirement to start sustainability reporting on assets and triple bottom line accounting methods for the organisation. The majority of respondents (36%) believed that sustainability had an increasing importance; particularly as more government papers, policies and mandates come into play both nationally and internationally. With the New Zealand government having such a push for a sustainable future the potential of reporting requirements, occupancy and business operations would increasingly come under focus. However, over one third of respondents believed that sustainability wasn't of key importance right now. Nevertheless these respondents believed that

within their company or organisation the importance would increase significantly over the next 5-10 years as the market matured.

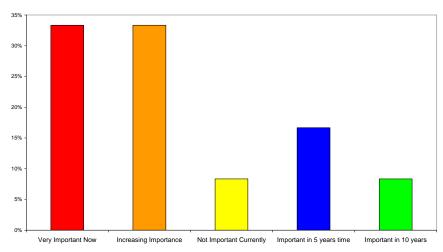


Figure 6. Importance of Sustainability for portfolios

(Source: Author's dataset)

During this question there was considerable discussion as to whether sustainability was a fashion or a fad. Particularly whether sustainability may in fact be obsolete within a few years or would become the norm. An underlying group commented that they would make attempts at upgrading their portfolios in the name of 'sustainability' however these upgrades were more part of the asset management strategy or efficiencies that could be gained and hence a financial return for the landlord. Hence as long as sustainability had a proven business case "why wouldn't we do it?" and then sustainability would become the standard for well-positioned assets. Many respondents commented that although sustainability is important now, the market will take a few years to mature and this would give them time to upgrade their existing building stock or dispose of those buildings that would expensive or impossible to improve the sustainability standard.

However some believed that lacking a business case, sustainability would just become a dream of 'wants' but when it came to the actual implementation both landlords and tenants would not pay additional for these preferences. Resulting in a segregated market where some would and some wouldn't and eventually just become irrelevant.

Although sustainable buildings are a new relatively phenomenon in New Zealand, the vast majority of respondents agreed that the importance of sustainability would escalate as the office market matured in New Zealand. "Sustainability is no different to other technological advances that have been made over the years, like air conditioning and BMCS controls" as commented by one of the respondents. Overall the move towards the increasing importance of sustainability across the portfolio was a key ongoing objective for the companies or organisations that took part in the interview.

Finding 4: Most import aspect of a Sustainable Office Building

Question 4. What aspects of a sustainable office building is the most important and why?

When identifying the most important aspects of sustainable buildings, the overwhelming response to this question was the financial business case for sustainable buildings. The development or upgrading of the building must have a sound financial return. However where the respondents saw a financial return accrued through different aspects of sustainable buildings. The overwhelming response was by far the tangible reduction of resources (33%), as the financial benefits can be demonstrated easily through financial reporting as well as to potential tenants. However, some respondents noted the importance of having gross leases or at least semi-gross leases with performance requirements for both owners and tenants to ensure financial benefits to accrue to the owner or investor. Followed closely by tenant requirements (30%), particularly in a market that is driven by a group, such as government, who occupy over 41% (Jones Lang LaSalle) of the office stock in Wellington, the requirements of these types of tenants will drive the type of building stock available. Note this is already evidenced by a number of new buildings being developed for government in the Wellington region. By providing tenant requirements developers and investors hope to receive higher rents, longer lease terms and in the future less vacancy.

An intangible component that had a high response rate (19%) was the marketing impact of having a sustainable building and the credential that implied when vying for new tenants and retaining existing tenants. Finally 15% of respondents believed that the quality of space was key to ensuring the financial return of sustainable buildings, although quality of space is a typical determinate in traditional real estate since the changing dynamics of sustainability on the quality of space has created a whole new category that could change the whole market.

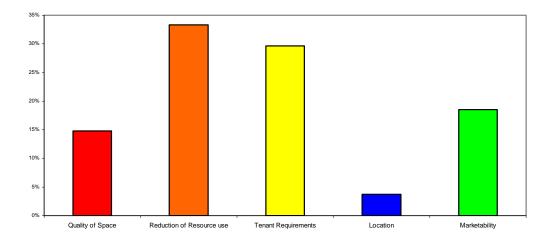


Figure 7. Important aspects of Sustainable Office Buildings

(Source: Author's dataset)

Finding 5: Design or Performance

The results of this question are shown below in figure 8 whereby 33% of respondents felt that they would prefer a design rated building, and 67% preferred a building that could demonstrate performance. This demonstrated an interesting response from different investors; those who were more development orientated opted for a design rating, whereas long-term investors focused upon the performance of the building.

The design rating perception from the majority of investors was that it would be short-lived, particularly in a New Zealand context. This is because the New Zealand Green Building Council is intending on releasing an 'In-Use / Performance' tool that would rate a building's in-use on a performance benchmark scale. However many investors reasoned that if there was no rating tool developed to monitor and report on the performance of the building then they would opt for a design rated building. Some respondents still believed that they would still prefer performance because it was tangible and reports could be shown to prospective tenants. However the majority investor respondents saw the value in having a rated building as it enhanced the credibility of the building in the current market particularly when marketing campaign especially as the New Zealand Green Building Council acted as a third party validation and provided market recognition. All agreed that until the performance-rating tool was released, this initial design rating would be useful for ensuring tenant pre-commitment.

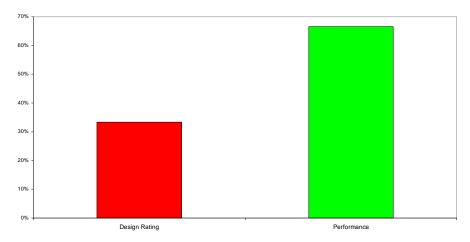


Figure 8. Design rating versus Performance

(Source: Author's dataset)

A key comment was that whether the office building was rated or not rated, there was still a need for the building or development as a whole to make financial sense. Importantly the sustainable initiatives that were implemented must represent a benefit to the owner, potentially through definite paybacks periods, performance goals, reduced operating expenses and the ability to charge a better rent whilst meeting tenant requirements. This in turn provides a viable financial basis. By committing to the tenants requirements that had beneficial results for both the tenant and landlord on a 'total occupancy cost' (TOC) basis, the implementation of sustainable initiatives within their portfolios would be a key consideration. "Simply because it (sustainability) makes financial sense" was a common phase reiterated throughout the interview by many of the respondents who are already reaping the benefits of having implemented sustainable initiatives into their building portfolios.

Finding 6: Investor Perception of Sustainability and Value

The questions asked for the determination of this finding related to both price and yields. The overwhelming majority believed that they would pay more to purchase a sustainable building, however the building would have to have an industry rating and preferably a demonstrated performance record. Shown in figure 9 the overwhelming majority perceived significant value in buildings with sustainable attributes. However only 25% believed they'd pay considerably higher for a building with sustainable attributes, when analysing this response against the type of investor it demonstrated that those with core sustainability objectives would go out of their way to have sustainable buildings within their portfolio even at a cost. One investor commented that "yes, certainly, it would be purely pragmatic driven as our expectation is that a sustainable building will command higher rents, therefore we would pay a higher purchase price". Another took the view of lower operating expenses equated to higher net revenue and therefore a higher purchase price.

Many, 58% of respondents expected that sustainable buildings would have an increase in price, however many traditional elements of assessment would be used to determine whether the building would be bought. These elements included assessing the type of tenant, lease lengths, expiries, rentals, location and the local market. This became evident when many commented that they would pay more for a sustainable building in Wellington compared to Auckland, due to the government requirements and occupation of stock and their preferences. Respondents stated that sustainable buildings would be subject to the same financial requirements as all other investments, and no special adoption of analysis techniques would be used when analysing a sustainable asset for investment. Many respondents thought to hold back and watch the market develop before investing in the market for sustainable buildings - however they would be implementing initiatives within existing stock, although not purchasing sustainable office stock at higher prices.

Finally a few respondents observed that the market in New Zealand was still too immature to determine whether a higher price or lower yield would be justified and paid for whilst still relying on current feasibility techniques. Particularly as there was a significant lack of detailed evidence and transaction for analysts to determine market rents and yields and hence make accurate judgements on property investment.

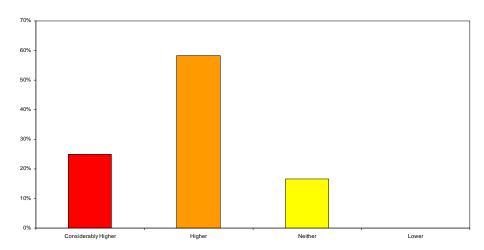


Figure 9. Sustainability and Investor Perceived Value

(Source: Author's dataset)

Finding 7: Investors and Future Sustainability Objectives

The future of sustainable buildings in investor portfolios, the seemingly unanimous response was "everywhere". However on further questioning it was found that the depth of sustainable building in a portfolio would vary. Investors (25%) that had indicated a positive opinion of sustainability and were actively pursuing sustainability for their portfolios were the investors who had the aim to have all buildings within their portfolios sustainable. Buildings that could not or would not be able to be upgraded or redeveloped into sustainable buildings would be disposed of. The vast majority of respondents 42% anticipated that in the future the majority of their portfolio would be made up of sustainable buildings, however this would be dependent upon location, tenant type and quality of space that the building provided. For example a building located south of the CBD and typically of a D-grade quality would not be worth upgrading, unless the market was ripe for a major refurbishment that would change the quality of space and reposition the building within the market. The remaining respondents (34%) expected that within the next decade there would be sustainable buildings somewhere within their portfolio, however not necessarily with industry ratings.

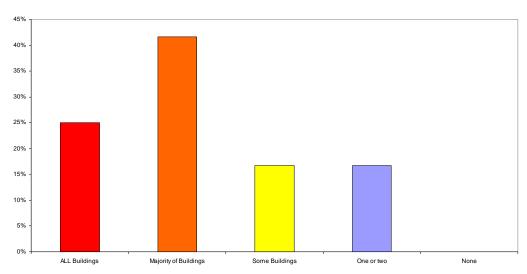


Figure 10. Future of Sustainability Objectives for Investor Portfolios

(Source: Author's dataset)

Finding 8: Real Opinions

At this point it seems necessary to highlight the bias in this type of survey. Sustainability being a very popular topic of conversation and action at present, investors do not want to be seen as dragging the chain. So it is perceived that the responses obtained in this survey particularly the direct questions on their actions and perception are inherent to a potential amount of bias. Thus a hierarchical cluster analysis was undertaken of responses to all 9 unstructured questions identifying their attitude of sustainability from a value perception. This provided a slightly different view on how investors are really embracing sustainability. By using the Ward method and displayed in a dendrogram, the cluster analysis identified three groups:

- 1. Active
- 2. Uncertain
- 3. Inactive

The Active group were only a few key investors in the New Zealand market, who were actively pursuing sustainability not only in theory but were implementing sustainability in their portfolios, 'walking the talk'. The vast majority of respondents were found to want to implement sustainability or invest in sustainable buildings however were hesitant and unsure of the market and it's direction. This group were tending to hold back and watch other players in the market lead the way and then step in when the market was more certain. This was emphasised by their objective to undertake more long term strategic planning enabling them more time to watch the market development for sustainability rather than expending finances to be apart of the market leader group. This was found throughout the comments from the investor respondents in this group. Finally there was the Inactive group, made up of only a few respondents, who although responded positively to many question on sustainability, were sceptical and doubtful of the uptake of sustainability in the market and were unlikely to undertake any kind of action for some years if at all.

Concluding comments

Overall the perception of the investor and developer markets in New Zealand was that sustainable buildings will play an important part in property portfolios in the future. Although uncertain of the value and market for sustainable buildings currently, investor and developer optimism was certainly identified. However, their uptake and investment in sustainable buildings would be accelerated if evidence for the financial case for sustainable buildings were proven.

New Zealand investors and developers seem to be embracing sustainable buildings in a different way to other worldwide property industries. The inherent traits of New Zealanders as entrepreneurs, in addition of having the benefits of watching the development of sustainable buildings elsewhere in the world over the last decade and identifying the benefits accruing to market leaders worldwide, has resulted in the optimistic mindset and increasing adoption of sustainable buildings in the local market. This response in New Zealand has been accelerated by the release of the benchmarking tool (e.g. *Green Star NZ*) being the first and only sustainable rating tool for commercial buildings in New Zealand.

Value Case - Further Research

The property sector represents the world's largest industry yet appears reluctant to adopt sustainability. However in New Zealand there seems to be a quite positive outlook currently towards sustainable buildings. Although the majority of investors still remain hesitant to invest in sustainable buildings as they lack the tools to identify the investment benefits. It has been argued there are no 'real' incentives to invest in sustainable buildings as most of the benefits accrue to the occupier rather than the investor (Lawther et al, 2005). To further discourage the investment community there are currently only "inappropriate financing models which focus predominantly upon immediate financial return, or lack of access to capital" (Lawther et al, 2005, p.58) in addition to other unsuitable cost and payback related tools.

It appears that the valuation industry has not yet fully identified the added value to sustainable buildings, and the sustainability of a building is not yet reflected within the valuation process. At times this may restrict investors from identifying the financial benefits of sustainable buildings and consequently inhibit the investment and development of such needed infrastructure. A common thread throughout the interviews undertaken so far in New Zealand is the resounding need for more information on the financial impact of sustainable buildings from an investor's point of view. The investment communities need evidential proof, analysis tools and methodologies that identify and prove the impact of sustainability on market value so as to make correct investment decisions on

sustainable buildings. In particular in more developed markets of Europe, Lorenz (2007) comments and emphasises the need and "the key role of valuation professionals and the valuation process itself in achieving a broader market penetration of sustainable (building) construction." Once value is identified within sustainable buildings, then this should result in the demonstration to all within the property industry and those also in the investment and banking industries the value of sustainability.

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