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# **SUSTAINABLE PROPERTY – THE FUTURE OF THE NEW ZEALAND MARKET**

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## **ABSTRACT**

*The New Zealand property industry has recently been introduced to the concept of sustainability. Even though targeted measures have been taken by the New Zealand Green Building Council and government, there is considerable hesitation and scepticism existing in the property market from both an investor's and a building owner's perspective. This paper discusses the results of an investigation into market perception of sustainable buildings from the investment community in New Zealand. Property 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 relationship between sustainability and property investment decisions.*

## **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 sustainable buildings remains 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, with relatively little research having been conducted into the relationship between sustainability and the market value of commercial buildings. To date, much of the emphasis has been placed on owner-occupied sustainable commercial buildings or the value perspective of sustainability from a tenant's perspective (NZ MofE, 2006; USGBC, 2003; Kats et al, 2003). However in order for sustainability to gain industry-wide acceptance, it is critical that the majority of building owners and investors are 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, then 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. This is 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 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, 2006; Lutzkendorf et al., 2005; Sayce et al., 2004), there is clearly an urgent need to conduct detailed analysis in this area.

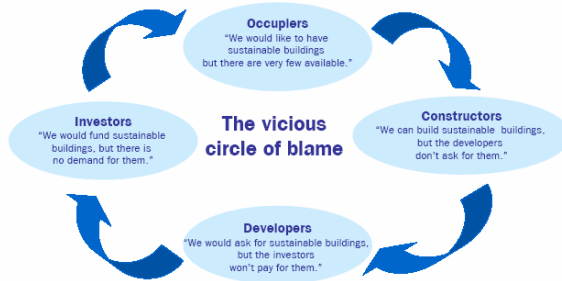
At present, there is limited information available about the financial viability of operating new or refurbished sustainable buildings. Overall, relatively little research has been conducted into the impact of sustainability on the market value of commercial buildings. To date, much of the emphasis has been placed on owner-occupied sustainable commercial buildings, even though the majority of the buildings are owned by investors (NZ MofE, 2006; USGBC, 2003; Kats et al, 2003). This study investigates the financial business case for sustainable buildings from an investment perspective, where emphasis is placed upon the importance of using existing valuation methodology to accurately assess the financial viability of sustainable buildings in the current marketplace.

## **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 from a social and environmental perspective. 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 in the property market.

In many ways, it may be argued that the case for sustainable buildings is being pushed by the demand side of the market, such as by occupiers. Existing research tends to be based on the ‘circle of blame’ reasoning shown 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 in the market.

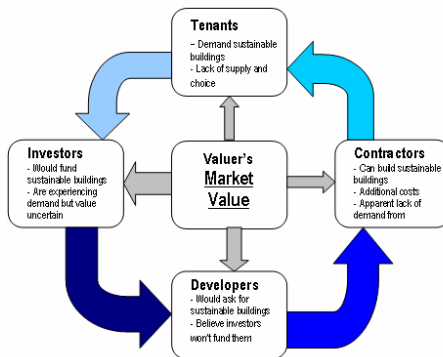
**Figure 1: Circle of blame**



(Source: Cadman, D. 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 the 'circle of blame' in Figure 1 is modified in 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, although identifying the market value of sustainable buildings by valuers helps to facilitate communication and an understanding of the value of sustainable buildings through the stakeholder chain. By empowering the investors with the knowledge and ability to actively invest in sustainable buildings, the market development for a more sustainable environment and hence the identification of the value of sustainability can be achieved.

**Figure 2: Communication between valuers and stakeholders**



Source: Modified *Circle of Blame* by Myers et al. (2006)

New Zealand is lagging behind the major markets of Australia, United Kingdom, Canada and the USA, with sustainability for the built environment only being introduced in the mainstream property market in the last two years. However, the more advanced experience of other countries has yet to shed light on the financial viability of sustainable buildings and identify the links with market value. To assess why this may be the case the following model has been adopted from McColl-Kennedy et al, *Marketing: Concepts and Strategies* (1992), which assesses the product life cycle of sustainable buildings and identifies the current stages in the life-cycle of the Australian and New Zealand property markets.

**Figure 3: New Zealand and Australia’s place in the ‘sustainable building market life cycle’**

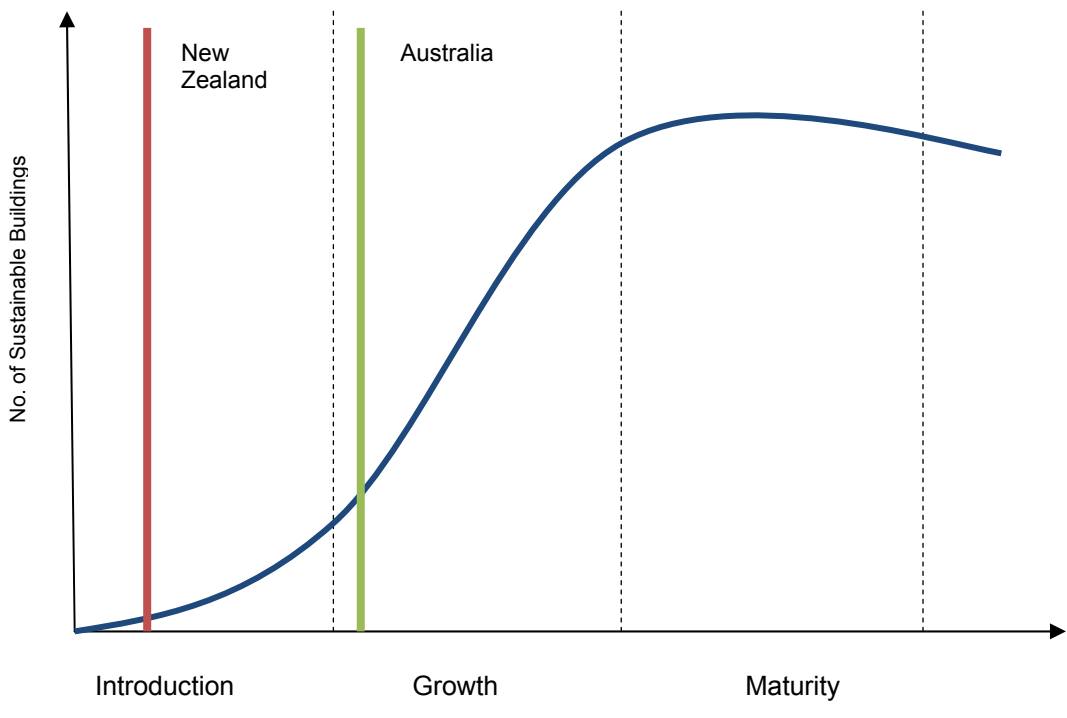


Figure 3 identifies the different stages of market development of Australia and New Zealand; Australia being somewhat more advanced than New Zealand, as the concept of sustainability in the built environment became more prevalent in the property industry early in this century. Thus it is provisionally identified that Australia is now entering a growth phase, whereby there is increased acceptance of sustainable buildings by the industry spurring more development. New Zealand is still at the elementary stages of the

introduction phase; however with close ties to Australia through the majority of investment funds and institutions, New Zealand will most likely see an accelerated advancement through the introduction phase.

Australia may be entering the growth phase, as may the other major world markets; however there is still no conclusive evidence of the financial relationship between sustainability and value. This may be because of where the markets are currently located along the product life cycle, the impact of financial benefits are not often perceived to their full extent until the maturity phase is reached. The growth phase indicates that many perceive a potential profit or value in developing sustainability in their portfolios. Once the maturity phase is reached, it is commonly attributed that there is a certain financial value linked with this phase. However for the maturity phase to be reached the property market needs to be convinced of the financial value of sustainable buildings. The purpose of study is to identify which elements in the relationship between sustainability and market value and thus have the greatest ability to impact the value. Identifying the market perception of two markets at different stages in the life cycle gives further insight into relationship elements that may influence the market value of sustainable office buildings.

Investment elements that need to be answered in order to determine value, from both an investor's and a 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; and/or
- 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 government tenants 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 to prove the financial viability of sustainable buildings through a number of publications (*Dollars and Sense of Green Buildings* and *Value Case for Sustainable Building in New Zealand*). 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 only some regard to financial benefits. 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 the 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, where at the end of the period the initial 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 to be higher than shares. Also, the 'baby boomer' generation's 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 property investors. 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). 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 clear 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 a 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 by 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), 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, so therefore 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, 2008).

Conventional office buildings are currently valued or 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 (API, 2007). 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. 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 (API, 2007). The determination of market value, whether using the capitalisation of income 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 relies 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 which was 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, where 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. A report published by Jones Lang LaSalle highlighted a substantial change in market perception amongst the occupiers, whereby the majority of occupiers across Asia Pacific were willing to pay more for sustainable space (Jones Lang LaSalle, 2007). On the other hand, 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 market perceptions from the viewpoint of investors.

## RESEARCH METHODOLOGY

The objective of the survey was to identify the mindset of the investment industry in New Zealand to construe the impact of sustainability on commercial property value. Some studies have been conducted elsewhere in the world, as sustainable building practice has been used for some years, particularly in the US, UK, Canada and Australia. Until recently, New Zealand had not taken up the opportunity to develop sustainable buildings. 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 sustainable buildings.

Initial findings of the investor surveys undertaken in New Zealand have led to a number of insights into the relationship between sustainability and office buildings. The surveys were undertaken between June and November 2007 and involved interviewing key property investors 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. The top 25 investment companies were identified as having major commercial office portfolios in the New Zealand market. Contact and interview times were made with CEOs and other high ranking employees (fund and general managers) through email, phone and in person. The response rate initially was 72%; however, on further review it was determined that a number of interviewees were inappropriate and created bias in the survey, thus they were consequently removed, leaving a final response rate of 56%. The literature and statistical analysis of the results identified a group of outliers, and when further scrutinized, it was found they made up a separate group to the majority of investors. Members of this group were not considered to be true investors in the property market, in that their interest in the building was short term rather than long term. A number of respondents interviewed were primarily developers with minimal long term investment priority; whereas the aim was to interview major investors who had a primary focus on owning and operating buildings in the longer term.

## 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 was relatively similar. Provided there is an economical business case identified for sustainable buildings, it was evident that 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

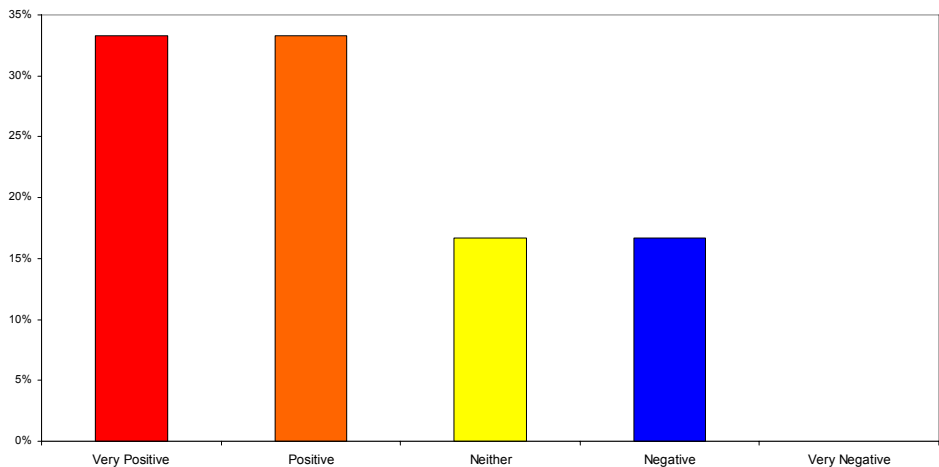
the value of investment in sustainable buildings. Although a small number of respondents would invest and develop 'green' or more sustainable buildings regardless, they believed that this would be the only way forward in New Zealand.

## **FINDING 1: COMPANY PERCEPTION OF SUSTAINABILITY IN THE NEW ZEALAND PROPERTY MARKET**

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 in turn 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 long-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, which is no different to any other technological advancement for the property industry such as air conditioning and increased levels of technology. Figure 4 presents the distribution of responses with the majority of respondents being positive about the current market, where there was an even distribution of middle ground and negative views. After 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 more than just marketing, such as a 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 then be reflected in valuation practice.

**Figure 4: Investor perception of sustainable buildings**



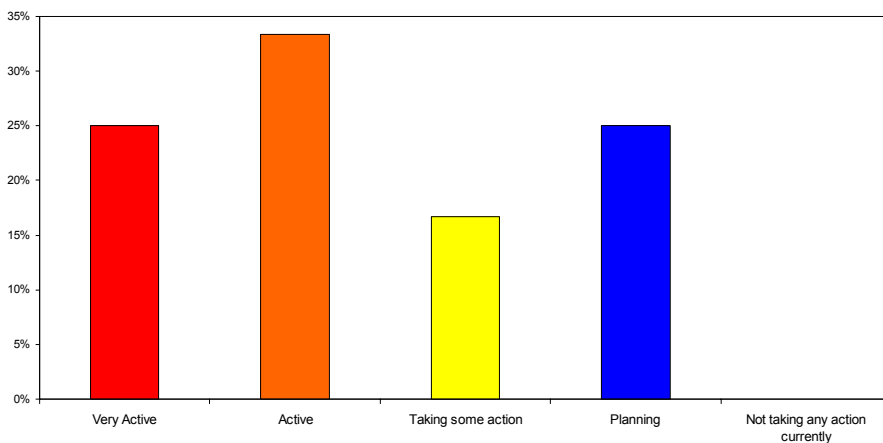
Source: Author's dataset

The response to this question is displayed in two graphs (Figures 5 and 6) in order to demonstrate how the companies and organisations in New Zealand were incorporating sustainability into their commercial property portfolios. However there may be some bias in a survey of this type whereby investors and developers want to be seen to be undertaking the right type of action, although whether they are actually undertaking this with their actions is a different matter. Therefore a cluster analysis was also undertaken to gauge responses over the entire survey and identify whether their actions are matching their words.

Figure 5 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, the government mandated for all new buildings being constructed to house government departments, where 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; in particular, they were undertaking some upgrades and refurbishments to their stock. The underlying reasons were to minimise the potential for vacancy at lease expiry, attract or retain government tenants and also potentially increase rentals at review. The remainder of respondents were contemplating how to implement sustainability within their portfolios, either starting with

an audit of buildings or essentially planning how to go about undertaking the implementation of sustainability into their portfolios.

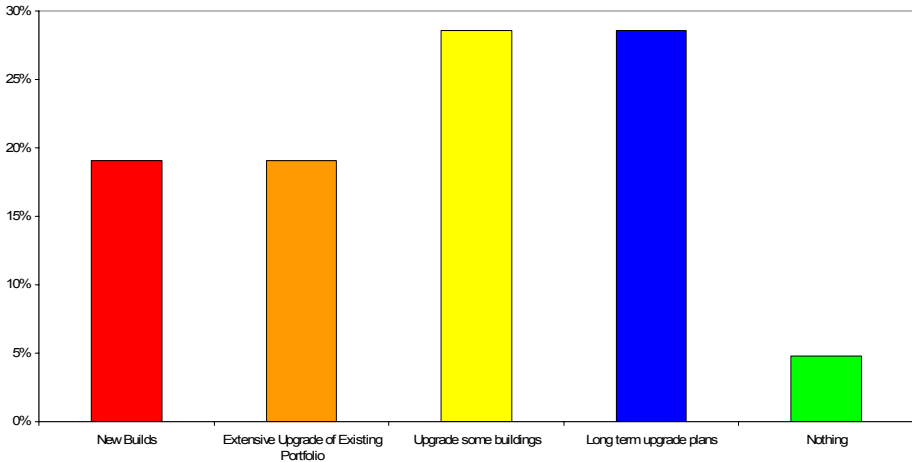
**Figure 5: Investor/developer implementation of sustainability initiatives**



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 6 displays a variety of actions that respondents are taking. The distribution of actions was relatively broad, with many companies undertaking multiple options at the same time. The active investors were divided between new buildings, extensive upgrades and also long-term strategic upgrading of buildings across the portfolio. This group were proactively looking at sustainability as a method of market differentiation and were aiming to achieve Green Star NZ design and performance ratings. The balance of the investors were looking to upgrade one or two buildings as required and also assessing long term upgrade plans, followed by a minority who were doing nothing at present. Figure 6 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 sustainable asset plans to allow for the gradual incorporation of sustainability into their office buildings. In these cases, major initiatives were planned for implementation with tenant movements. In addition, the sustainability plans were used to demonstrate to tenants the direction for the building and also upgrading the building to become more sustainable.

**Figure 6: Current actions being taken in the portfolio**



Source: Author's dataset

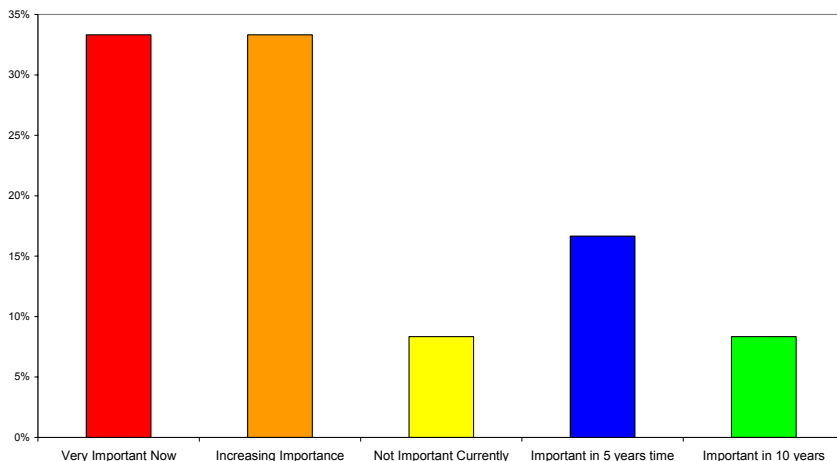
The 'drip feeding' of sustainable initiatives appeared typical across all survey participants, however this was particularly focused amongst owners who had large multi-national or government tenants with demands which were very important and initiatives that were timed with potential lease expiries. 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 landlords and tenants. In essence, by incorporating sustainable initiatives into the building, even though in a long-term plan, this 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 investing in sustainable buildings or by implementing initiatives, it must make economical sense for the investor where a demonstrated payback and return on investment was required.

## **FINDING 2: THE IMPORTANCE OF SUSTAINABILITY IN PORTFOLIOS**

Larger investors, particularly those with multi-national orientation, had a strong sense that sustainability would be very important for their portfolios; this was reflected in belief by 29% of respondents that sustainability was very important now. A number of major investment companies commented there was a requirement to start sustainability reporting on assets and triple bottom line accounting methods for the organisation. A proportion of

respondents (36%) believed that sustainability had increased in importance, particularly as more government papers, policies and mandates come into play both nationally and internationally. With the New Zealand government having a focus on 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 7: 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. Of particular importance was whether sustainability may in fact be obsolete within a few years or alternatively 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. Therefore as long as sustainability had a proven business case, then “why wouldn't we do it?” In this case, sustainability would become the standard benchmark for well-positioned assets. The questionnaire aimed to assess the level of importance that was being put into sustainability in the portfolio; this received a mixed response as shown in Figure 7. Although the majority saw sustainability as either of current importance or increasing, 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 be expensive or impossible to improve to a sustainable standard. There were also a number of respondents who declared that they would wait for market maturity, should it happen, before taking on the risk to invest sustainability in their portfolios.

However, some believed if it is 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 outlay additional funds for these preferences. This would result in a segregated market where some stakeholders would and some stakeholders wouldn't, resulting in a situation where eventually sustainability would just become irrelevant. This would be the initial stages of the creation of a two-tier market, namely conventional buildings and sustainable buildings. In the future, this could lead to a marked separation in the type of tenants and importantly also with rents and vacancies.

Although sustainable buildings are a relatively new 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 participated in the interviews.

### **FINDING 3: MOST IMPORTANT ASPECT OF A SUSTAINABLE OFFICE BUILDING**

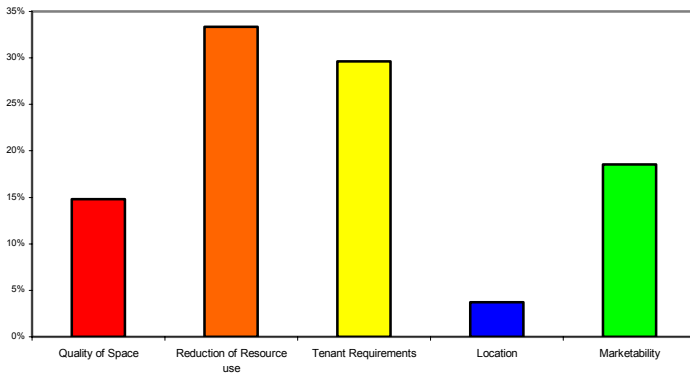
When identifying the most important aspects of sustainable buildings, the overwhelming response to this question was the financial business case for sustainable buildings. The development or upgrading of the building must have a sound financial return. However the respondents saw a financial return accrued through different aspects of sustainable buildings. The overwhelming response was by far the tangible reduction of resources (33%), since 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, 2006) of the office stock in Wellington, the requirements of these tenants will drive the type of building stock available. 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.

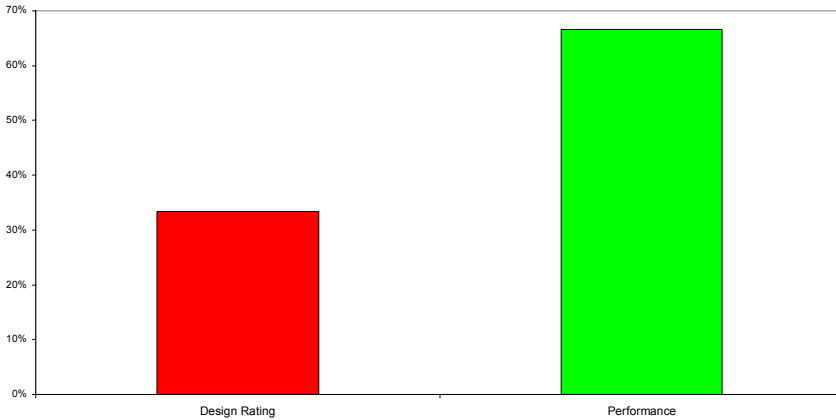
**Figure 8: Design or performance**



The results of this question are shown in Figure 9 whereby 33% of respondents felt they would prefer a design-rated building, although 67% preferred a building that could demonstrate performance. This demonstrated an interesting response from different investors, either (a) those who were more development orientated opted for a design rating or (b) 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 of 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 respondents agreed that until the performance-rating tool was released, this initial design rating would be useful for ensuring tenant pre-commitment.

**Figure 9: 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. Committing to the tenant's requirements had beneficial results for both the tenant and landlord on a 'total occupancy cost' (TOC) basis, where the implementation of sustainable initiatives within their portfolios would be a key consideration. "Simply because it (sustainability) makes financial sense" was a common phrase 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 4: INVESTOR PERCEPTION OF SUSTAINABILITY AND VALUE**

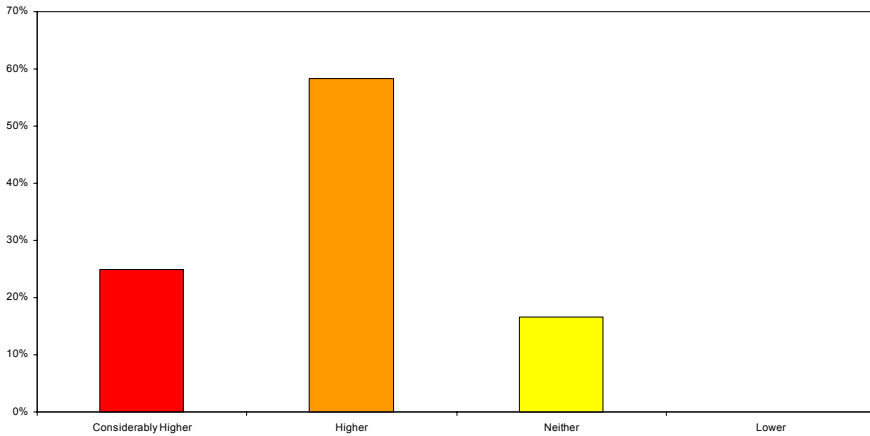
The questions asked for the determination of this finding related to both price and yields. The overwhelming majority of respondents believed they would pay more to purchase a sustainable building; however the building would have to have an industry rating and preferably a demonstrated performance record. As shown in Figure 10, the overwhelming majority of respondents perceived substantial value in buildings with sustainable attributes. However, only 25% believed they would pay considerably more for a building with sustainable attributes; after cross-tabulating this response against the type of investor, it

was demonstrated that those with core sustainability objectives would be determined to have sustainable buildings in their portfolio, even at an additional 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, and therefore we would pay a higher purchase price”. Another respondent took the view of lower operating expenses equated to higher net revenue; therefore the result is a higher purchase price.

Overall, 58% of respondents expected that a sustainable building would have an increased value; however many traditional elements of assessment would be used to decide if the building would be purchased at all. These elements include evaluating the type of tenant, lease lengths, expiries, rentals, location and the local market. This point of view became evident when many participants commented they would pay more for a sustainable building in Wellington compared to Auckland, mainly due to the government requirements and their occupation of stock, as well as their preferences. Respondents stated that sustainable buildings would be subject to the same financial requirements as all other investments, as 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 generally too immature to determine whether a higher price or lower yield would be justified, whilst still relying on existing feasibility techniques. This is because there was a significant lack of detailed evidence and transaction for analysts to determine market rents and yields, and therefore restricted making accurate judgements about property investment.

**Figure 10: Sustainability and investor perceived value**



Source: Author's dataset

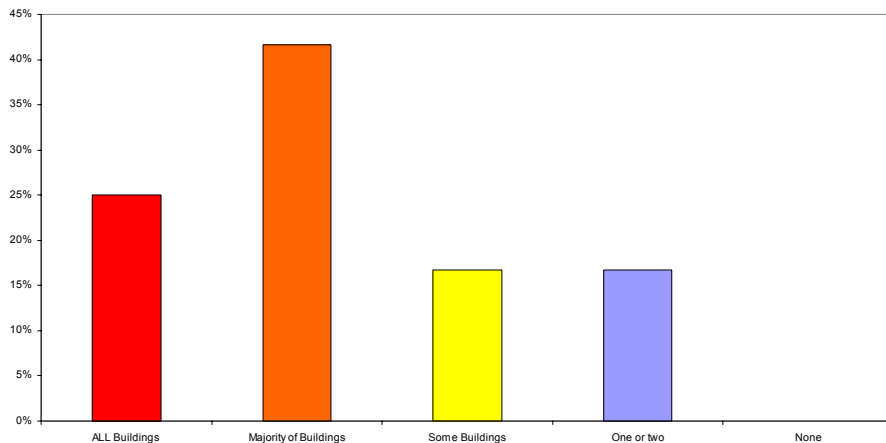
## **FINDING 5: INVESTORS AND FUTURE SUSTAINABILITY OBJECTIVES**

When questioned about the future of sustainable buildings in investor portfolios, the seemingly unanimous response was “everywhere”. However, after further questioning it was found that the depth of sustainable building in a portfolio does vary. Investors (representing 25% of the respondents) had a positive opinion of sustainability and were actively pursuing sustainability for their portfolios, as were the investors who aimed to have all buildings within their portfolios viewed as 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 depend 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 well suited for a major refurbishment that would change the quality of space and reposition the building in 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 11: Future of sustainability objectives for investor portfolios**

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Source: Author's dataset

## **FINDING 6: REAL OPINIONS**

At this point, it is appropriate to highlight the level of bias in this type of survey. Sustainability has a higher overall profile at present; consequently investors do not want to be seen as lagging behind. Therefore it is perceived that the responses obtained in this survey, particularly the direct questions on their actions and perception, may be subject possibly to some bias. Thus a hierarchical cluster analysis was undertaken of responses to all 9 unstructured questions identifying their attitude towards sustainability from a 'value' perception. This provided a slightly different view on how investors are actually embracing sustainability. By using the 'Ward' method and displayed in a dendrogram, the cluster analysis identified three groups:

1. Active (21%)
2. Uncertain (50%)
3. Inactive (29%)

The active group involved only a few key investors in the New Zealand market, namely who were actively pursuing sustainability not only in theory but were implementing sustainability in their portfolios. 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 its direction. This group were tending to hold back and watch other players in the market lead the way, although then step in when the market was more

certain. This was emphasised by their objective to undertake more long term strategic planning, in turn enabling them more time to watch the market development for sustainability rather than expending finances to become a part of the market leader group. This observation was found throughout the comments from the investor respondents in this group. Finally there was the inactive group which was made up of only a few respondents, who although responded positively to many questions about sustainability were sceptical and doubtful of the uptake of sustainability in the market. This group 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 role in property portfolios in the future. Although there is uncertainty about the value and market for sustainable buildings at present, investor optimism was clearly identified. However the level of uptake and investment in sustainable buildings would be accelerated if evidence for the financial case for sustainable buildings was proven.

New Zealand investors seem to be embracing sustainable buildings in a different way to other global property industries. The inherent traits of New Zealanders as entrepreneurs, in addition to having the benefit of observing 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 an optimistic mindset and increasing adoption of sustainable buildings in the local market. The 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.

The future for sustainable buildings in New Zealand is positive and with the envisaged increased government requirements, both nationally and internationally, the development of sustainable buildings should continue. Nevertheless, how these buildings are treated in a market sense is still yet to be fully understood, although the potential of a two-tier market is highly likely. Perhaps there will be a tier that encapsulates the sustainable buildings and then the second tier that is the rest of the building stock which is not thus far deemed sustainable. Potentially some preference will be given by larger tenants for this upper tier of sustainable stock, which will in turn create new rental benchmarks, reduced vacancy and other perceived premiums. At the same time, the remaining building stock may see a non-sustainability discount, possibly created from increased levels of vacancy, lack of tenant demand, lower rents and increased depreciation. This may be particularly evident in Wellington where government may decide only to occupy sustainable space, although that impact might be detrimental to the office stock in the Wellington area.

Some of the difficulty comes from understanding how sustainable are existing buildings? Furthermore how can these existing buildings be measured? As yet, the New Zealand Green Building Council has not brought out an existing building tool that measures

performance; it is difficult to see how existing buildings be rated or even compared to the new sustainable buildings being developed. This has significant implications for major tenants seeking to explore the opportunities offered by sustainable buildings, namely government and large multi-national corporate tenants. Investors in Wellington are concerned that because there is a lack of tools to equitably rate the sustainability level of existing buildings, it seems that already they are losing premium tenants. These are the beginnings of a separation in the market which will develop to a point in Wellington where a majority of office stock is going to require significant refurbishment to compete with the new development. For example, will investors see their assets depreciate at a higher rate, due to being a ‘non-sustainable’ building and value wiped off? This could have more long-term impacts on particular investment companies and portfolios in the future.

## VALUE CASE

As with many other industry sectors, the property sector is yet to fully embrace sustainability, although in New Zealand there seems to be a quite positive outlook at present towards sustainable buildings. However, the majority of investors still appear hesitant to invest in sustainable buildings as they lack the appropriate tools to identify the investment benefits. It has been argued there are no real proven incentives to invest in sustainable buildings as most of the benefits accrue to the occupier rather than the investor (Lawther et al., 2005), where the findings of this research appear to support this argument. 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), which is in addition to other unsuitable cost and payback related tools.

In conclusion, it appears that the valuation industry has not yet fully identified and quantified the added value related to sustainable buildings, where the level of sustainability in a building is not yet fully reflected in 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 necessary infrastructure. A common thread throughout the interviews undertaken for this study in New Zealand was the resounding need for more information about 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, which in turn will assist correct investment decisions about sustainable buildings to be made. In reference to the more developed markets of Europe, Lorenz (2007) emphasised the need and the key role of valuation professionals and the valuation process itself to achieve a broader market penetration of sustainable (building) construction. Once value is identified in sustainable buildings, then this should result in the demonstration to all within the property industry and those also in the investment and banking industries about the value of sustainability.

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