Sustainable Management of Real Estate: Is It Really Sustainability?

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Abstract  This paper investigates from a management perspective exactly what building owners and managers of commercial real estate are actually doing in the guise of sustainability. This research investigates key owners of real estate portfolios in Australia and New Zealand, and examines what they perceive sustainability to mean to their commercial real estate portfolios and their level of implementation. The research uses a qualitative framework in order to gain an understanding of owners’ perceptions of sustainability. The findings reveal that owners perceive sustainability to be very important to the longevity of their portfolios. However, at present, sustainability factors are limited to resource efficiency measures in their real estate portfolios. Consequently, this research questions whether current interpretation and implementation of sustainability in commercial real estate is merely ‘changing the name’ of best practice management to ‘sustainability.’

Sustainability is no longer a new phenomenon in the real estate industry; it has become a common enough phrase. However, some wonder about the meaning of the word, as it is almost an oxymoron in the context of real estate (Lorenz, Trück, and Lutzkendorf, 2007). There has been a significant change in commercial real estate markets worldwide to move towards incorporating sustainability in real estate portfolios (DeFrancesco and Levy, 2008). Many real estate trusts and funds claim to have increasing levels of sustainability in their portfolios, corporate social responsibility reporting, certifications, and the list demonstrating their level of sustainability goes on (Newell, 2008). However, when examining sustainability in the context of the triple bottom line, are these trusts and funds actually achieving anything or is it more like green wash?

This paper examines real estate trust and funds’ management perspectives about incorporating sustainability into assets or portfolios. The paper has focused on three sectors of investigation: the perception of sustainability, its importance to real estate portfolios, and the implementation of sustainability in real estate portfolios. The research aims to highlight the disconnect between conceptual understanding of sustainability, and whether the level of implementation of sustainability is actually achieving sustainability objectives through the management of real estate. This paper considers the real estate markets of Australia and New Zealand, and the differences in their perceptions of sustainability, its implementation, and focus.
The paper is organized as follows. First there is a discussion of the background to the rationale and the methodology for the research, followed by an analysis of the results from the research. Finally, the discussion and conclusions, which highlight the implications for real estate trusts and funds and their endeavors to incorporate sustainability into real estate portfolios, completes the paper.

**Background**

The world needs a more sustainable built environment to reduce the impact of humans on the earth’s resources and on climate change. To understand sustainability in the real estate context, the holistic expectations of world sustainability need to be examined, along with how they can be manifested in real estate.

The possible definitions of sustainability vary widely and number more than 500, which leads to much confusion (Phillips, 2003) and constant redefinition (JLL, 2007a). However, the majority of definitions have developed or evolved from those such as Brundtland’s (1987), Pearce, Markandya, and Barbier’s (1989), and the World Business Council for Sustainable Development’s (WBCSD, 2006). Awareness of the need for sustainability has developed from the increasing global focus on the world’s finite resources, excessive carbon dioxide emission levels, and the threatening consequences of global warming and climate change. The need for solutions to preserve our way of life for future generations is urgent (Stern et al., 2006; Garnaut, 2008).

Sustainability is a broad, all-encompassing term, but the ability to assess the level of sustainability in a property is proving to be elusive, with more than 600 environmental, social, and economic assessment tools available (Dixon et al., 2008). This study acknowledges that there are many interpretations and many assessments of sustainability; however, for this study, the focus is on the elements of the triple bottom line, namely, environmental, social, and economic factors, and their applicability to commercial real estate. The working definition for this study is: Throughout the lifecycle of a property, being its design, construction, operation and disposal, the property consumes as few natural resources as possible, reduces the production of greenhouse gas emissions and waste, minimizes the impact on the earth while providing an enhanced environment for occupants and the greater community, and achieves life-long economic satisfaction.

The sustainability aspects in the built environment are concentrated on reducing the environmental footprint of the building, and have been identified, primarily, through: (1) reduced production of greenhouse gas emissions (particularly carbon dioxide); (2) reduced use of natural resources, in particular, water, gas and electricity; (3) reduced waste production and increased recycling; (4) enhanced building occupant health, comfort, and safety; (5) production of renewable resources; (6) collection of water for potable and non-potable uses; and (7) recycling and treatment of sewage and waste water (Kats, 2003; von Paumgarten, 2003; Lucuik, 2005; JLL, 2006, 2007a, 2007b; GBCAUS, 2007, 2008a; NZMFE, 2007).
It is commonly observed that the terms ‘green’ and ‘sustainable’ in relation to buildings are treated synonymously, and refer to the concept that such buildings use resources like energy, water, materials, and land more efficiently than buildings that are just built to code (Kats, 2003). Therefore, for the purposes of this study, green and sustainable are taken to be synonymous (Keeping, 2000). However, in commercial real estate, it is not so much that a building is sustainable or green that matters, it is more the level of sustainability claimed (Warren-Myers, 2011).

A concerning perception in the Australasian market is that sustainability is mainly focused on energy efficiency; however, the conceptual understanding of sustainability goes well beyond energy efficiency. Likewise, there are often attributes, which infer a level of sustainability but are not necessarily sustainable. Real estate could, in fact, be made to have uniform building design; however, due to location and the locational characteristics of the building, the level of sustainability will alter, as will the effects on the surrounding development and community. The focus of competitive edge or advantage has been a current theme in commercial real estate investment since the 1980s, and in recent times has changed towards increasing awareness of economic consideration and managerial attention to resource use and building capabilities (Krumm, Dewulf, and de Jonge, 1998). Since 2000 this has changed to incorporate sustainability as a way of achieving a competitive edge in commercial real estate. Initially this played a key role in new development. More recently, however, there is an increasing focus on existing stock and operational performance of buildings.

Commercial entities, like Jones Lang LaSalle and others, have presented sustainability management in the existing building stock to concentrate on resource efficiency, mainly energy, water, and waste (JLL, 2006). The economic connection and discussion on value is a key focus of many articles and papers encouraging real estate investors and owners to implement or invest in sustainability. Consequently, the information provided has identified tangible components of the building, namely through the operational aspects of the building [see Warren-Myers (2012) for further discussion on literature discussing sustainability and value]. Sustainability management in commercial real estate is still cost dominated and the competition affected by practices that are perceived to detrimentally affect value (or add cost) (Heywood and Kenley, 2008). The realm of sustainable asset management in achieving sustainability and triple bottom line objectives is still a developing field. This paper highlights the commercial real estate asset management investment perspectives and actions towards sustainability in the Australasian market.

Real estate is considered unique in that no two assets are identical. Assessing and comparing the level of sustainability in a building is impossible if there is no common ability to identify and quantify the level of sustainability (Kwong, 2004). There are a vast number of rating tools worldwide, all with differing methods of assessing sustainability in real estate (Dixon et al., 2008). The rating tools are often complicated to use and the levels of understanding are limited, making it difficult to ascertain and compare the levels of sustainability in commercial real estate (Dixon et al., 2008). However, sustainability is perceived as measurable by these ratings tools, particularly in real estate markets. The rating tools are not...
necessarily the ultimate method of identifying sustainability in real estate, although they are at present acting as a driver for discussion and measurement of sustainability in the market. These tools are likely guiding owners, trusts and funds, and other market stakeholders towards a certain definition of sustainability. Whether it is appropriate or not, the real estate industry needs to be aware that simple resource management is not necessarily achieving the objectives and criteria of sustainability nor assisting the triple bottom line even if they achieve a higher NABERS rating for example (operational energy efficiency assessment tool in Australia). Consequently, defining the actions via rating tools to enable real estate to be called sustainable is not acceptable and can mislead the market.

Primarily, sustainability has been focused on the new building market, as the major sustainability assessment tools (e.g., LEED, GREEN STAR, and BREAM) are primarily focused on the design and construction of new buildings. Had these tools involved ‘embodied energy’ in their assessments, the focus may not have alighted on the new buildings, but on the adaption of the existing building stock instead, which makes up a considerable proportion of the real estate stock. However, the assessment schemes are tools used to create a common language, promote concepts of sustainability, and improve the way in which we design and construct buildings. Primarily, they are used as part of the marketing campaign to entice buyers and tenants to the building. There is still, however, relatively little focus on the existing stock.

The recent Commercial Building Mandatory Energy Disclosure Program (CBD, 2011) includes the existing building stock; however, only on an energy-related basis at this point. The NABERS tool in Australia does have attributes with which to measure other factors such as water and waste; however, the industry’s perceptions and focus are still either on new buildings and the achievement of a GREEN STAR rating, or developing energy efficiency in both new and existing buildings (NABERS, 2011; GBCA, 2012). The sustainability issue for the existing building stock, as well as the general market, is of concern, and investment in sustainability remains uncertain.

Another factor in relation to the existing stock, which many choose to ignore, is that some of the principles on which these existing buildings were designed are actually built using good design principles, which these days would be classified as sustainability (Lopez and Browning, 2007). So, in some cases, existing buildings may comply with certain sustainability principles but are unrecognized because of the requirements of the rating systems and the lack of industry interest in the existing stock. In commercial real estate, there appears to be a strong focus on certain elements of sustainable asset management that achieves components of the triple bottom line; however, overarching achievement of the environmental, social, and economic within the asset’s management still seems to be a high reaching target. This study investigates investors’ perceptions of what sustainability means in real estate and its level of importance in the portfolio, and how they are endeavoring to incorporate sustainability principles within the asset through upgrades and management. Whether their perceptions and actions can truly be identified as achieving the triple bottom line and sustainability is questioned in this paper.
Sustainability is an important focus for property owners; however, there is limited indication of how they are achieving sustainability in real estate portfolios. The ability of owners to achieve the economic considerations for optimal sustainability allocation seems to be a key barrier in preventing broad-scale investment in sustainability in real estate (Daly, 1990). However, over time, there have been multiple reports identifying that the costs of building sustainably are the same or only marginally higher than producing a building to code (Matthiessen and Morris, 2007). In addition to other market factors that have popularized sustainable development, such as market obsolescence, prior to the beginning of the global financial crisis in 2008 a new office building in Sydney would require a GREEN STAR rating, as, if it did not have such a rating it would be considered obsolete by the market.

A key concern is the connection between sustainability and economic return, and the need for owners to justify their investment in sustainability, and whether it affects the type of sustainability in which owners are investing. There are certainly enough drivers for sustainability, from cost-benefit analyses, the limitation of risk and obsolescence, and capitalizing on tenant demand and requirements. However, considering these drivers for sustainability in buildings, is the way sustainability is being implemented and managed in buildings actually achieving the objectives of sustainability?

Methodology and Results

This research investigates the major real estate owners, namely, real estate trusts and funds, their perception of sustainability, and the investment or implementation of sustainability within real estate portfolios. The research investigated four questions: (1) What are owners’ perceptions of the importance of sustainability in the commercial real estate industry? (2) What do owners perceive as the most important aspect of sustainability in commercial real estate? (3) To what level do owners believe they are implementing sustainability in their portfolios? (4) Where do owners perceive the value in sustainability implementation?

The research questions were investigated using a combination of qualitative data collection and analytical methods. This approach was used in order to achieve an understanding of the knowledge levels, perception, and implementation of sustainability in the commercial real estate market. The study examines the behavioral attitudes of owners; consequently, this necessitated qualitative data collection using surveys (Neuman, 2007). The analysis of the qualitative data took two forms: first, content analysis and then, in order to gain greater understanding of the frequency and strength of responses and attitudes, the data were coded and quantified to allow statistical analysis.

The study examined the Australian and New Zealand commercial real estate markets. The purpose of examining two markets in the Australasian region was to allow for deeper understanding and explanation of the research, to investigate whether perceptions differed, and to produce findings that may be generalized for other markets (Miles and Huberman, 1994). The choice of the Australian and New
Zealand markets was because of their similar market dynamics in the context of the product, the client base offering in terms of occupiers and governance, and the type of investment.

Sustainability integration into the markets has emerged hand-in-hand with the development and promotion of sustainability rating tools in these markets, and, as a result, there is a time difference in the level of market maturity between the Australian and New Zealand real estate markets (Warren-Myers, 2010). This was considered as a limitation in the research; however, it has demonstrated the different perspectives in the conceptual thinking of the stakeholders in each market. The reason for not comparing one of these markets with another international example, such as the United Kingdom or the United States, is that they are considerably larger in size than Australia and New Zealand, and, importantly, the dynamics in the markets, as well as the governance, product type, and investment are very different. This may produce some restriction in the implications and generalizability of this investigation for other markets such as the U.K. and the U.S. However, this study highlights the market evolution and development phases, which would be considered to be transferable to most markets, but would require individual investigation.

The focus of the survey sample was listed real estate trusts in Australia and New Zealand that specialize in commercial office investment. There were only 11 office-only REITs in Australia and 16 multi-sector AREITs out of 58 in 2008 (BDO, 2008). Ernst and Young (2008) identified 64 AREITs with only 8 in New Zealand. Consequently, AREITs were targeted in Australia, and comprised the Australian sample, whereas in New Zealand the listed trusts were approached; however, this number was supplemented by major commercial investment companies present in the New Zealand market at the time.

The data collection used a survey instrument comprised of a semi-structured standardized open-ended interview. This paper presents the results of four key questions asked during an extended survey originally of nine questions allowing open-ended responses. The objective was to gain an understanding of the market dynamics around sustainability through owners’ perceptions of sustainability in the market, and to investigate the investment and implementation levels of sustainability in commercial real estate portfolios. The preference for interviewing owners was to ensure that the most appropriate respondent in the company, trust or fund was interviewed [e.g., the chief executive officer (CEO), general manager (GM), senior fund manager, or portfolio manager], thus primarily concentrating on the decision-makers within the organizations. It was perceived that speaking to more senior representatives would provide a more knowledgeable and reliable source of information regarding the activities being undertaken, perceptions, and future directions. A smaller sample of preferred respondents was used in this data collection to increase the understanding of the behavior, actions, and characteristics of the investor market and avoid the limitation of deceptive responses, such as from junior employees who have no input into decisions concerning investments and acquisitions (Neuman, 2007).

The sample included 30 real estate trusts, funds, and companies whose primary focus was investment in commercial real estate; there were 16 from Australia and
14 from New Zealand, from the original sample of 64 (EY, 2008) or 66 (BDO, 2008). This represents 28% of the total number of AREITs in Australia; however, on specialization (commercial office) this sample represents 59% of the AREITs.

**Perception of Sustainability**

Participants were asked about their perception of sustainability in the commercial real estate market. Their responses were analyzed using content analysis, which identified several layers of categorization. The layers were then narrowed down to three key themes and the affect extraction technique of relational analysis was used. This technique allowed the responses to be scaled and compared. The three key themes in the analysis process were: (1) time for when sustainability would be a critical issue; (2) awareness of sustainability in commercial real estate; and (3) importance of implementing sustainability in commercial real estate.

The data categorization and coding provided the basis of the themed responses to the questions and an understanding of the range of responses. However, the analysis required further breakdown and quantification. Further analysis was conducted using quantitative content analysis techniques, utilizing the relational analysis method and affect extraction approach allowing statistical analysis (Fellows and Liu, 2003; Busch et al., 2005). Relational analysis and affect extraction allows the data to be explored for relationships, which are then coded into a numerical form for statistical analysis (Busch et al., 2005). This was only applied if this level of analysis was useful in supporting the theory obtained through the thematic analysis of the surveys. The quantitative content analysis of the data allowed the data to be analyzed using statistical tests, identifying and quantifying the data, and also assessing the differences between the data sets of Australia and New Zealand.

After using content analysis, the investor enabled the use of both a qualitative and inference based analysis of the data. The qualitative responses were analyzed on a content basis and themes were categorized in response to the question.

Using the affect extraction technique, the responses were scaled to enable the average sentiments of the owners to be identified. The emotional level of the theme used a range of 1 to 5. In order to make comparisons between Australia and New Zealand, statistical analysis of the responses found an average, standard deviation, and the 95% confidence level for each country, as shown in Exhibit 1. Statistical analysis included the use of an independent sample $t$-test that assessed the differences between the themes, and whether significant differences between Australia and New Zealand were evident. The test was statistically significant.

The level of importance of sustainability perceived and rated by the individuals did not reach statistical significance. In examining the qualitative responses, it is suggested that sustainability is a conscious issue for the investors and has a level of importance in portfolio management already in both Australia and New Zealand. This coincided with the examination of the awareness differential between the countries, which was also found to be statistically significant ($p$-value $<.0001$), which demonstrates there is a significant difference between Australia and New Zealand.
and New Zealand in their awareness of sustainability. This is indicative of the relative differences in the maturity of the markets in terms of sustainability introduction and implementation, and rating tool adoption.

When examining the time theme, again it was also significantly different; however, interestingly, the respondents from the qualitative information from New Zealand indicate they have a sense that sustainability is an issue and the time is now. Yet, this finding does not match their awareness of the issue. The $t$-test indicates that the difference in awareness between Australia and New Zealand is statistically significant ($p$-value .011). Perhaps the global and local push for sustainability, as well as the global awareness of climate change and global warming leads to the requirement for immediate action, and has had an impact on this category.

Overall, owners in Australia and New Zealand are favorably disposed towards sustainability from a market perspective. Sustainability is an issue they are aware of and they know that action needs to be taken.

**Perceptions of Sustainability in the Investors’ Real Estate Portfolio**

This question investigated the perception of sustainability in real estate as a consideration for investors’ portfolios. The analysis used a frequency of response analysis, and identified that owners’ perceptions of sustainability were primarily focused on operating expenditure and energy consumption. There were other factors discussed including rating tool assessment, location, indoor environment quality, and quality of office space; however, lower emphasis was placed on these areas.

Several themes emerged as to why owners focused on certain initiatives and strategies including: (1) clear identification of the return on investment; (2) identification of the increase in net income; (3) anticipation of increasing energy and other resource costs; therefore, minimization would reduce this risk; (4) future-proofing against the possibility of carbon taxing; and (5) minimizing real estate risk and obsolescence, from a functional, technical, and market perspective.

The distribution of frequency overall is shown in Exhibit 2, which shows a number of areas respondents’ perceive as referring to sustainability in real estate. The

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**Exhibit 1 | Owner Perceptions of Sustainability in Commercial Real Estate Markets**

<table>
<thead>
<tr>
<th></th>
<th>NZ</th>
<th>AUS</th>
<th>NZ</th>
<th>AUS</th>
<th>NZ</th>
<th>AUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>3.071</td>
<td>4.250</td>
<td>3.500</td>
<td>0.563</td>
<td>3.071</td>
<td>3.938</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.829</td>
<td>0.856</td>
<td>1.286</td>
<td>0.814</td>
<td>1.269</td>
<td>0.998</td>
</tr>
<tr>
<td>95% Con. Level</td>
<td>0.434</td>
<td>0.420</td>
<td>0.674</td>
<td>0.399</td>
<td>0.665</td>
<td>0.489</td>
</tr>
<tr>
<td>$t$-test</td>
<td>0.0001</td>
<td>0.011</td>
<td>0.046</td>
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</table>
results display a strong emphasis on operational expenditure, at 49%, with 18% for both indoor environment quality and energy consumption. It is interesting to note that within the sustainability literature, there is very little discussion of ‘operational expenditure’ being a primary pillar of sustainability. There was the potential that respondents were using this term as a generalized comment; however, there was expectation that sustainability on the whole would reduce more than just the resource elements in the operating expenditure (e.g., reduced management costs, reduced maintenance etc.). This response could be more aligned with resource efficiency rather than operating expenditure, which generally incorporates a whole range of items or costs to the owners relating to the running of the building. Such costs do not necessarily align directly with sustainability concepts. However, when examined on a country basis, a different picture is revealed.

Exhibit 3 shows that there were significant differences in perceptions in relation to respondents’ understanding of sustainability in real estate; those in Australia had a 65% response in favor of operating expenditure, compared to 23% for those in New Zealand, whereas respondents in New Zealand perceived sustainability to focus on indoor environment quality (38%), compared to Australia in which this did not even rank.

It would appear from these results that respondents’ perceptions of sustainability in commercial real estate in Australia are focused on the (possible) benefits relating to cost minimization, whereas New Zealand is using sustainability as a marketing edge to attract and retain tenants. It is evident from the previous question that Australian respondents have a strong focus on sustainability, yet their perception of sustainability is manifested in operating expenditure. It could be surmised that their focus is on the minimization of resource costs, namely, energy. This view was further supported by statistically testing the responses using a chi-
square test to identify the independence of the responses. This test identifies whether the responses are completely random or whether there is a focus on a particular answer, which would identify whether the respondents are indicating a specific preference for a particular perspective of sustainability.

The result of the chi-square test revealed that Australian respondents (p-value < .0001) demonstrated a definite directional response to the question as to what their perception of sustainability manifested itself in real estate as, whereas the New Zealand owners had no definitive direction to their answers (p-value .565). This test identified a significant difference between Australian and New Zealand respondents’ answers to this question. Thus New Zealand respondents’ approach to sustainability is more holistic. However, when the qualitative data are analyzed, it is apparent that these respondents are more broad-minded in accepting the generalized discussion and ideas about sustainability, but limited testing or implementation [see later questions and Warren-Myers (2010)]. Whereas the Australia respondents were or had tested some of these initiatives and analyzed them from a monetary perspective, which indicates and leads to the identified differences in the maturity of the markets. The New Zealand commercial real estate market is identified as being more immature as a result of there being no clear preference for particular sustainable attributes in commercial real estate. This finding is not surprising, as the introduction of sustainability to the market has only recently occurred in New Zealand. However, if this study were undertaken in the future it would be interesting to see whether their views follow the Australian perception and opinion, or whether it remains relatively holistic.

Overall the respondents indicated that operating expenditure was important, which was elaborated on to include energy consumption, and, to a lesser extent, water
consumption. There is the potential for duplication in the responses here, which would mean the equating that 77% of Australian and 46% of New Zealand respondents focus and perception about sustainability in commercial real estate portfolios is around the operating expenditure minimization option. The initiatives focused on cost minimization, particularly energy costs. Respondents were also very concerned about the concept of future-proofing properties against vacancy, taxes, and obsolescence, and expressed the desire to attract tenants to the building. They believed sustainability upgrades, investment, and implementation may serve to reduce the issues relating to vacancy and obsolescence, consequently ensuring future income and reducing the risk profile of the portfolio and the individual assets.

**Sustainability Implementation Levels in Real Estate Portfolios**

To ascertain respondents’ levels of sustainability implementation, questions were asked about the level of implementation and what type of initiatives and strategies they were implementing in their portfolios. The qualitative data were analyzed using content analysis, then using the relational analysis and affect extraction techniques. The data were further analyzed using cluster analysis. Cluster analysis identified three key groups of owners and their levels of implementation: (1) none/ low levels of implementation; (2) medium levels of implementation; and (3) high to very high levels of implementation. The stratification of owners and their investment levels is shown in Exhibit 4.

The level of implementation ranged widely, from planning to undertake sustainability, to mass implementation across the portfolios. Because the spectrum was quite broad and categorization using a number of sub-themes helped to identify patterns between the investors and between the countries. The data was grouped into five categories of implementation: (1) no/limited implementation; (2) low level implementation; (3) medium level of implementation; (4) high level of implementation; and (5) very high level of implementation. This categorization has helped to ascertain the differences between the two countries’ respondents’ answers and gain an understanding as to the level of implementation happening within the industry itself.

**No/Limited Implementation**

Respondents made a range of comments from no action, having intention to implement, and minimal consideration with limited implementation of sustainability that might be a future possibility for commercial portfolios. There were comments that “sustainability will be a key focus in the future” but no indication of how they were going to implement sustainability in their property portfolios. Some respondents indicated that “an initial review of selected (appropriately) profiled assets will be undertaken in the future to ascertain existing sustainability level.” However, there was no indication of how or when the person was going to examine the sustainability levels of the property. There were no Australian responses in this category, only New Zealand respondents who were obviously not implementing sustainability initiatives in their portfolios. These
Investors rationalized their inaction by the “market isn’t ready,”4 “there is no demand,”5 and “it (sustainability) is just a fad.”6

**Low Level Implementation: Restricted to Planning and Selective Assets**

The majority of responses were from New Zealanders where their current focus was to examine existing assets for potential sustainability upgrades. However, it was noted “this will be timed with conversions or upgrades at the occurrence of a catalyst, such as lease expiry or upgrade requirement, that suggests it will be beneficial to the investment return of the asset”7 and “when assessing our strategic plans we are driven by the mutual wants and needs of the market and their opportunities and potential for upgrading particular properties where appropriate.”8 The current lack of market demand was their justification for limited implementation of sustainability. Consequently, they saw sustainability as an option only at lease expiry or if other significant requirements occurred, before they would consider adopting or implementing any sustainability strategies. The strategies are property and tenant specific. There was no indication of portfolio-wide initiatives to be implemented.
Medium Level of Implementation: Reviewing of Assets’ Operational Performance and Developing Improvement Plans to Implement Initiatives and Improve Sustainability

Responses categorized in this theme were mostly Australian with some New Zealand responses. There is a commitment to review the performance of properties and to develop and implement initiatives to improve their. The focus of this category was on operational sustainability and the efficiencies that can be obtained through low-cost initiatives and active monitoring of the properties. Respondents indicated restriction, in actions relating to the metering of energy, water, and waste information, as most of the properties did not have advanced systems in place to accurately measure these resources. The respondents required sustainability action plans for all assets, with short-term initiatives and longer-term upgrades that would align with lease expires. Respondents indicated their rationale for concentrating on resources, in particular energy efficiency, was to reduce costs and engage tenants in the sustainability initiatives to ensure cost minimization across the portfolio. Respondents from both Australia and New Zealand are really focused on cost minimization strategies, which they believe sustainability can provide, in terms of the efficiencies obtained under the umbrella statement of sustainability. This category had the most comments pertaining to their intent to “produce asset strategies in terms of operating properties, designing, and also buying or developing properties”\(^9\) that focused on the minimization of resource costs.

High Level of Implementation: Investors Auditing, Developing and Implementing Sustainability Initiatives across Property Portfolios

Respondents were implementing sustainability at a broader level, with active auditing and development of strategic short- and long-term sustainability improvement plans, which were in excess of operating expenditure or resource costs minimization plans, incorporating more holistic aspects of sustainability. Respondents demonstrated a single-mindedness on sustainability, in particular on measureable attributes, and were focused on portfolio-wide certification through measurement tools like NABERS and where possible GREEN STAR. They had strong sustainability strategies implemented portfolio-wide, with objectives like “our whole portfolio will be 3 stars NABERS by the end of 2008”\(^10\) and commitments to “4.5 stars across the portfolio by 2012.”\(^11\) They indicated that certification tools, in particular NABERS, provided baseline assessment criteria for the portfolios. They then identified commitment objectives to improve and achieve higher certifications across the portfolio in the future. This provided an active focus and the implementation of many strategies that could be transferred from property to property. To achieve further improvement, more strategic and cost intensive approaches are required, as the ‘low-hanging fruit’ has been picked to achieve current parameters.\(^12\) Long-term commitments of respondents demonstrates that active “metering and monitoring happening throughout the portfolio with continual improvements being made to ratings and identification of improvement potential”\(^13\) and the need for “coordinated approaches to integrate further improvements throughout the portfolio.”\(^14\)
Very High Level of Implementation: Portfolio-wide Commitments to Development and Investment of Only Rated Properties

The final category identified only a few respondents who really focused on being market leaders in the industry. Their approach involved whole portfolios achieving very high levels of both design and operational industry certification and significant measures to upgrade portfolios to achieve high levels of sustainability certifications. Respondents used similar strategies to the previous category, to examine “the current position of the property and create a roadmap (energy, water and waste) on how to improve the sustainability over time, the aim is to have the whole portfolio achieving a 4.5 NABERS rating by 2012.” However, the focus on sustainability is not limited to energy, water, and waste as the growing importance of indoor environment quality requires “6 monthly assessments throughout the portfolio of the indoor environment quality of our properties” to ensure that they are providing a superior level of quality to the occupiers of the property. These strategies are going beyond just cost saving strategies for the portfolio and are beginning to address a broader concept of sustainability.

There are clear differences in the clustered groups that also reflect the countries the owners’ portfolios are in. There is a cluster of New Zealand respondents in the zero to low level of sustainability implementation who are not implementing sustainability at all, in addition to a proportion who are contemplating but are yet to act. At the other end of the spectrum, there is a cluster of Australian respondents in the high to very high levels of implementation category. The dominant group, however, is the larger middle group made up of respondents in both Australia and New Zealand. This is the group that has medium levels of implementation of sustainability strategies in their portfolios and properties.

Type of Implementation Adopted

The study investigated respondents’ implementation types and strategies in regard to sustainability. Content analysis was used to analyze the responses. The frequency of responses identified different attributes they believed to have the most financial benefit, and there were recognizable differences between Australia and New Zealand. This finding was further tested using a chi-square test to identify whether a directional focus in the responses was evident. Exhibit 5 shows a considerable difference between sustainability implementation practices in real estate in Australia and New Zealand. New Zealanders demonstrated a more varied approach to sustainability implementation, whereas Australian owners were primarily focused on energy conservation.

Sustainability initiatives and strategies implemented by the majority of respondents from Australia were focused primarily on energy efficiency and, in particular, initiatives that focused on conservation and consumption (65%). The second highest rating initiatives were focused on the operational expenditure section (incorporating management, water and energy resource efficiency, and use minimization) at 18%. Then, at 6% were marketability and rating tool certification, and 5% sustainable attributes (like solar panels, fuel cells, water recycling, tanks.
etc.) brought up the sum total of the focus of Australian respondents’ sustainability implementation strategies and initiatives. It is clear Australians were focused on energy conservation and consumption as the main sustainability attribute, which was rationalized in their responses as providing the strongest demonstrated financial return. New Zealanders, on the other hand, had a relatively even distribution of operating expenditure and marketability, at 23% each, followed closely by energy conservation, sustainable attributes, and indoor environmental quality. In order to identify whether the respondents had a directional focus to their responses, chi-square tests were conducted. These tests found Australian respondents to have a statistically favored choice for energy efficiency ($p$-value < .0001), unlike New Zealand respondents who did not have statistical significance ($p$-value of .718), indicating no clear favorite choice or directional focus. The level of market evolution and the knowledge of the benefits of sustainability and its impact on the market values of properties evidenced by the strong focus of Australian owners have on those strategies. New Zealand respondents, meanwhile, do not have a clear favorite, indicating the market has not yet developed to a point where it values sustainability.

The sustainability strategy or initiative being implemented most by respondents is energy conservation. A distinct differential between Australia and New Zealand is evident, with Australian respondents favoring the direct benefits of energy efficiency and conservation, whereas New Zealand respondents demonstrated no clear direction. The respondents are clearly focused on cost reduction and tenant demand, and only implementing sustainability initiatives that would appeal to tenants. However, cost minimization is a clear favorite of Australian respondents. This finding concurs with some views on the ‘value’ question, as discussed by Bowman and Wills (2007), where value will likely be identified through savings
achieved in resource use or operational expenditure, as well as through minimization of tenant vacancy, and having the draw card to ensure tenant turnover is minimal.

Conclusion

The findings reveal that survey respondents’ ideas of sustainability are focused on cost minimization strategies. Can this truly be said to be contributing to ensuring we increase the level of sustainability in the built environment? It would appear that although it is laudable that the study participants are implementing sustainability initiatives, it is not really achieving sustainability. Management practices to identify and implement cost minimization strategies have been around for a long time in property management. So, what is really happening? Best practice property or real estate management techniques are simply being re-packaged as ‘sustainability’ initiatives and implementation schemes.

Survey respondents are aware of the increasing importance of sustainability in the built environment, and are at varying levels of implementation. However, the implementation of sustainability is limited to cost minimization strategies, focusing mostly on energy efficiency. They have identified the value in sustainability as resource cost minimization, and, consequently, are investing in initiatives focused on that aspect. However, they are not as yet able to realize the market value of these sustainability initiatives through the appraisal process of these assets, so are limited in their justification of implementing sustainable strategies. The logical correlation between building performance and value is that properties that are better maintained have, historically, achieved better market rents, values, and sale prices as the result of good management. Cost minimization concepts are not new to property management; the term ‘sustainability’ has merely been highlighted and captured in building design, construction, and management. Thus, it can be said that many of the aspects currently touted as sustainability, and implemented under the guise of sustainability, are just a part of best practice real estate management. Best practice management is expected for commercial funds and real estate investment trusts, as it is the drive for increased investment and performance. Attitudes towards management practice do vary on country basis but is also dependent on the timing of the property cycle.

Sustainability, and awareness of sustainability, has brought to attention the importance of life cycle costing (LCC) in capital budgeting processes. The elevated consciousness of LCC in asset strategies, in particular operational costs and mitigation against future risks relating to sustainability, has meant LCC and sustainability are considered to be synonymous. Sustainability has raised its profile in the industry, but this does not necessarily lead to economic sustainability, nor does it necessarily achieve the other components of sustainability. However, LCC is not a new concept. It rose to the forefront in the 1970s and 1980s when the oil crises occurred, which led to the considerable prominence of this theory in property management (Harris, 2008). LCC has, essentially, been redeveloped as a concept under a new name, sustainability, which provides increased marketing and profile for owners as a result of market perceptions towards climate change and
global warming. Respondents’ interpretation of sustainability is focused on resource cost minimization strategies, particularly energy. However, this does draw a link between the concepts of triple bottom line theory, whereby environmental factors are incorporated at the same time as economic viability is justified. Consequently, two sectors of the ‘sustainability’ definition are achieved. The extent of these environmental provisions may be viewed as elementary and inadequate in the larger scheme of the requirements for sustainability in commercial real estate, and they do not necessarily advocate increased sustainability in the commercial real estate sector.

Historical observations between ‘well run’ properties and market value may provide guidance as to the relationship between sustainability and market value. The real objectives of sustainability are to address environmental, social, and economic elements. This study, however, suggests that economic elements remain the priority for owners. Consequently, where environmental elements can be addressed in relation to economic elements, such as the minimization of energy costs, owners seem to consider these actions as addressing sustainability in their real estate portfolios. This research has found that environmental and social factors alone are relatively ignored by otherwise, unless there is some connection to economic viability. As a result, this paper questions whether owners are actually seeking sustainability or being green within their real estate portfolios, or are they just ensuring a marketing edge and economic longevity in regard to cost savings, which are linked to best practice management.

The concept of sustainability is, in essence, to develop an overall improvement in commercial real estate through environmental, social, and economic elements. However, this study demonstrates that implementation of sustainability is being limited by property owners to energy and resource efficiency measures, which are strongly focused on economic elements with limited application of the overarching objectives of sustainability. Therefore, this narrow focus on cost minimization is not a new phenomenon in the real estate market; it has just been dressed up as sustainability to gain the rewards of minimizing costs, and consequently, to enable the marketing of the properties to be seen as more socially responsible. In reality, the owners seem hesitant to step beyond the cost-saving initiatives where they cannot identify direct paybacks or quantify the marketing advantages. This means current efforts at sustainability are just best practice management, which has been and should be occurring anyway. An examination of the more holistic characteristics of the incorporation of sustainability into commercial real estate portfolios needs to be undertaken to fully implement sustainability.

Clearly, if owners are not implementing more holistic attributes and are limiting their ‘sustainability’ to cost minimization management, the ability to identify a relationship between sustainability and value is limited. Consequently, this will lead to limited investment in sustainability in the commercial real estate sector that is not directly linked to cost minimization. Even then, cost minimization has its limits, as many leases are on a net basis, and the benefits flow more directly to the tenants. Little acceptance within the appraisal professions, in Australia or New Zealand, have incorporated the benefits this style of sustainability is making to the performance and value of the asset. Although energy efficiency and its
consequential impacts, such as reduced carbon emissions, are to be commended, the overarching principles of sustainability are not being achieved. In the long term, social, environmental, and economic impacts for many connected in the management, ownership, occupation or interaction with real estate will result, and the costs in the future may be significant across the triple bottom line as a result of the lack of adequate sustainability incorporation into real estate now.

Endnotes

1 In 2012 a new group included the REITs and many other real estate investors in a sustainability-oriented self-reporting scorecard administered by a new industry led organization started by Nils Kok. It is found at www.gresb.com and stands for the Global Real Estate Sustainability Benchmark. The overall GRESB score is split into two categories: “management & policy” and “implementation & measurement.” Management and policy represents 30% of the GRESB score, whereas implementation and measurement has a weight of 70%. Thus, the overall GRESB score rewards actions more than words.

2 Respondent Q (NZ): “Sustainability will be a key focus in the future.”

3 Respondent Z (NZ): “An initial review of selected (appropriately) profiled assets will be undertaken in the future to ascertain existing sustainability level.”

4 Respondent Z (NZ): “...market isn’t ready.”

5 Respondent Q (NZ): “…there is no demand.”

6 Respondent W (NZ): “…it’s just a fad.”

7 Respondent Y (NZ): “Existing assets strategic plans for each asset will incorporate sustainability focus however this will be timed with conversions or upgrades at the occurrence of a catalyst such as lease expiry or upgrade requirement that suggests it will be beneficial to the investment return of the asset.”

8 Respondent X (NZ): “When assessing our strategic plans we are driven by the mutual wants and needs of the market and their opportunities and potential for upgrading particular buildings where appropriate.”

9 Respondent G (AUS): “Our internal committee produce asset strategies in terms of operating buildings, designing and also buying or developing buildings.”

10 Respondent J (AUS): “Our whole portfolio will be 3 stars NABERS by the end of 2008. Next year the target goes up and so on and so forth, we’ve got metering and monitoring happening throughout the portfolio with continual improvements being made to ratings and identification of improvement potential.”

11 Respondent I (AUS): “We are using NABERS/ABGR since 2002 across our portfolio and we have committed to having 4.5 stars across the portfolio by 2012, currently we are at 3.8 stars. We have implemented all the obvious low hanging fruit initiatives and now we have a coordinated approach to integrate further improvements throughout the portfolio.”

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References


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