

This special thematic issue of the *Journal of Corporate Real Estate* considers the overlap between commercial buildings, sustainability and occupation and some ways we might make them more sustainable. We have some understanding of what we mean by sustainability. Our reference point is grounded in the 1987 Brundtland definition of sustainable development, which seeks “to meet the present needs of society without irreversible damage to the environment, thereby, compromising the ability of future generations to meet their own needs” (WCED, 1987). A sustainable approach acknowledges the relationship between the environment, society and the economy; however, getting that balance right presents significant challenges.

In the built environment, the philosophical argument is that unless our commercial building stock connects with the wider environment and engages with economic and social issues, it cannot succeed in the context of sustainability. In this way, the concept of sustainability is recognised as being of critical importance to commercial property, and likewise, commercial property to sustainability, but how can this be translated in a more meaningful way? How can we comprehend and translate the requirements of commercial property to the achievement of sustainability? Clearly the stakeholders, and there are many of them, at various stages of a building lifecycle can have a significant influence on sustainability. This is the crux of the four papers in this special edition, which cover different aspects experienced universally but from the Australian, the UK and the US perspective.

Nicola Livingstone and Jessica Ferm’s paper, “Occupier responses to sustainable real estate: what’s next?” examines the relationship between sustainable buildings and occupiers, before proposing avenues for future research relating to the impact of sustainability on corporate real estate strategy. The paper reviews over 90 relevant publications related to sustainability, real estate market responses and corporate real estate, focussing on the role and response of occupiers. The approach concentrates on occupier strategies, specifically considering influences, such as corporate social responsibility, landlord tenant relationships, the changing occupier role and Cadman’s well-known “circle of blame” concept.

They found that literature has increasingly begun to reflect nuances in occupier responses to sustainable, prime, office real estate, with some conflicting findings as to the importance of sustainability. Location remains the dominant consideration in decision-making for occupiers, but in some cases sustainability is key to corporate social responsibility (CSR) and a sought after “value-add”. They conclude more effective use of sustainable buildings requires improved communications between landlord and tenant. Through collating key literature in this topical research area, the paper provides a critical review of occupier responses to sustainable real estate, and, therefore, a fuller understanding of emerging market practices. Additionally, it suggests future research directions.

Burhan Amarah and Craig Langston from Bond University, Australia, take a broader view of sustainability and stakeholders. They sought to develop a model for producing an objective, holistic assessment of organisational decision-making to measure the procurement success of built facilities from the perspective of six stakeholder groups (company, staff, customers, community, government and the



environment). The research was based on a grounded theory with sequenced, interdependent steps. The first step involved reviewing the literature, while step two comprised a detailed case study of practice. The third step identified stakeholder models previously published and validated to build a conceptual framework using a six-star rating scheme. Step four sought advice from an expert panel to validate the framework.

They concluded that the developed stakeholder satisfaction model can assess the sustainable procurement of built infrastructure, such as a high-performance green buildings, using a familiar six-star rating system. The overall rating allows comparison and ranking of performance across a range of portfolio assets, though some modification is required for non-built assets. This research builds knowledge through the model, grounded in practice, that combines the economic, social and environmental performance of organisational decision-making from a stakeholder satisfaction perspective. They note there are metrics that could be used to assess each stakeholder group, but the ones chosen here are drawn from existing tools developed and validated by third parties.

Raufdeen Rameezdeen, Jian Zuo and Jack Stevens from the University of Adelaide investigated the practices, drivers and barriers influencing the implementation of green leases in South Australia. Despite some research on legal aspects of green leases, few studies examined these aspects from a landlord and tenant perspective. Little empirical evidence shows how green leases work in a real-life setting. Rameezdeen *et al.* used semi-structured interviews with landlord and tenant representatives who have extensive green lease experience to examine the issues. Interviewees were selected via purposive sampling by identifying buildings which use green leases.

The study found that vagueness exists with regards to the contractual interface of the green lease with reference to the remedy for non-compliance of performance. Some landlords were hesitant about the risks involved with dispute resolution. Government involvement, economic and environment benefits were the major drivers while lack of awareness and transaction costs were the major barriers. This study examines dark green leases in South Australia and concludes that there are implications for the South Australian Government's continued involvement and the promotion of lighter shades of green leases to overcome operational issues and barriers. Overall, this paper adds to the body of knowledge on green lease implementation from an operational perspective and indicates issues others should be cognizant of.

Billie Brotman explores the Impact of Corporate Tax Policy on Sustainable Retrofits in the USA to ascertain whether energy retrofits should be governed by public policy intervention or encouraged through tax relief. The premise is existing office space, with an economic life of 25 to 40 years, may operate inefficiently compared to newer buildings for years. Designing a market-based incentive system that encourages periodic remodelling to lower the energy use and the carbon emissions has social benefits. Brotman adopts an owner/user case study to test financial feasibility of the hypothesis. A regression model includes variables important to owners/users. Tax credits and energy deductions, lending rates and likely electricity and natural gas changes are independent variables used to forecast the dependent variable new non-residential private construction spending. The study finds that the investment tax credit, coupled with lending, has a positive impact on new non-residential private construction spending. The value of the benefits would encourage low-cost system upgrades but not

total building energy retrofit. Further interest rates and the debt-service coverage ratio have to be low for existing building energy retrofits to be stimulated.

The paper includes a template for businesses to ascertain the economic feasibility of proposed energy upgrades, through the comparison of marginal costs associated with an upgrade to the present value of the financial benefits likely to accrue. Whilst other studies looked at revenue enhancements and lower vacancy rates possibly associated with a green office compared to a non-green office building, they did not focus on the owner/user paradigm and reported financial benefits accruing to owners who lease the office building.

Clearly the built environment has a crucial role in the pursuit of sustainability globally. In recent years, there has been extensive enquiry into built assets from the standpoint of resource consumption, construction and operational emissions. Evidence is emerging across a range of areas affecting sustainability and commercial buildings in respect of added value, improved performance, tenant perceptions and experiences and how sustainability is perceived to influence an organisation's reputation. Commercial buildings and sustainability have a wide embrace from the design, the construction and end of life phase; however, many conclude that the occupation and the economic and physical management phase have the largest impact by far.

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