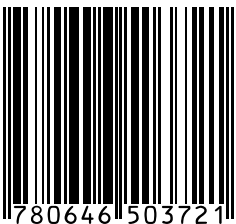


Proceedings of the 2008 World Sustainable Building Conference

Volume 2

ISBN 978-0-646-50372-1



9 780646 50372 1

WORLD
sb
08
MELBOURNE

World SB08 Melbourne
Melbourne Convention Centre
21–25 September 2008
www.sb08melbourne.com

Editors: Greg Foliente, Thomas Luetzkendorf,
Peter Newton and Phillip Paevere



Sustainability
victoria

Victoria
The Place To Be



iisBE



< Back

• Home

• Contents

1

• Authors Index

• Program Index

> Forward

CHANGING THE CULTURE OF COMMERCIAL BUILDINGS IN AUSTRALIA: THE ROLE OF GREEN LEASES

Craig Roussac¹
Caitlin McGee²
Geoff Milne²

¹ Investa Property Group; croussac@investa.com.au

² Institute for Sustainable Futures, University of Technology, Sydney, Australia; caitlin.mcgee@uts.edu.au,
geoffrey.milne@uts.edu.au

Keywords: commercial, building, green lease, education, culture, tenancy

Summary

Innovative new 'green' commercial building developments are emerging across Australian cities. This is a positive change. However, to advance the overall sustainability of Australia's commercial buildings sector two key issues need to be addressed. The first is the importance of focusing on the sustainability of the whole building - the base building and the tenancies. The second is the importance of focusing on existing buildings, as new buildings are a small proportion of the total building stock.

In addressing these issues, tenants hold the key. Their decisions and actions have significant potential to enhance or undermine the sustainability performance of commercial buildings, both new and existing. The potential to create change through tenant decisions and actions is significant given the emergence of corporate sustainability as a key business driver. However, this will require a culture change in the way leases are negotiated. One way of facilitating this process is through the use of 'green' leases.

A green lease is different from a standard lease in that it incorporates ecologically sustainable development (ESD) principles to reduce the building's environmental impacts. This paper focuses on the way green leases for office tenants can be used to create culture change within tenant operations and offices, as well as influencing building managers and building owners. It looks in detail at the *Green Lease Guide* developed by Investa for use with tenants of commercial properties.

1. Introduction

1.1 The Importance of Commercial Buildings

Commercial buildings have a significant environmental impact. The Australian Greenhouse Office (AGO, 1999) estimated in 1990 that commercial buildings were responsible for about 32 million tonnes (Mt) of greenhouse gas emissions. Emissions are currently increasing at about 3 to 4% per annum, which means they are approximately ten percent of Australia's total greenhouse emissions. Commercial buildings also account for about ten percent of urban water consumption (NABERS, 2006).

There is much attention now being paid to new 'green' commercial buildings to reduce this impact. More and more new buildings are being constructed to meet five and even six star Green Star (and up to 5 star NABERS ratings). However, new buildings only make up a small percentage of the commercial building stock. Urgent action is needed to improve the environmental performance of the existing stock if we are going to achieve the necessary reductions in resource use and greenhouse gas emissions. In many cases, the benefits from the operational energy reductions achieved with new developments will not even compensate for the embodied energy involved in their construction, as illustrated below.

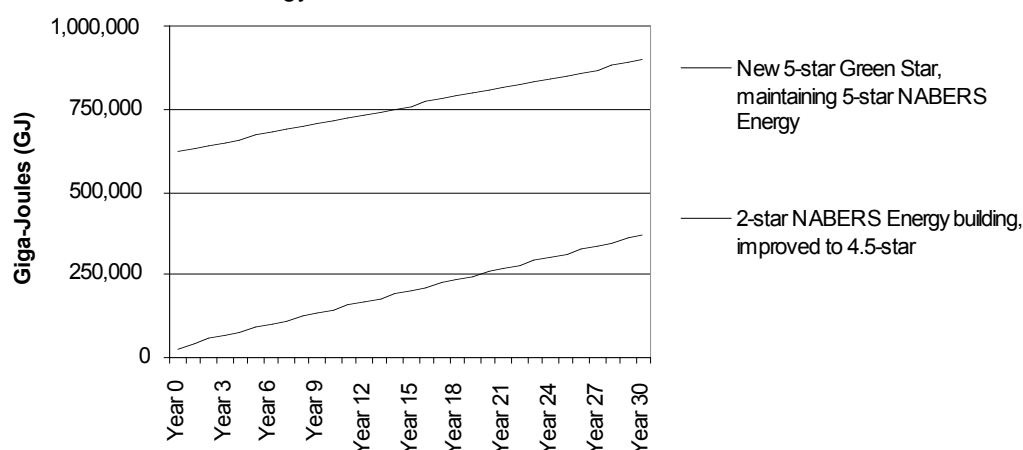


Figure 1 Lifetime energy comparison of new and upgraded buildings

Figure 1 illustrates this point with two alternative options for a hypothetical 25,000 m² building on a site in Sydney, Australia. In the first option, an existing building is upgraded from a 2 to 4.5 Star NABERS Energy rating, in a manner consistent with that which has been undertaken in a number of buildings in Investa's portfolio (Investa, 2007b). An alternative option would be to demolish then construct a new building that meets a 5 Star National Australian Built Environment Rating Scheme (NABERS) rating. Embodied energy is calculated at 25 GJ/m², a fairly typical figure. Over 30 years, the new 'green' building will have used more than twice as much energy as the upgraded existing building would have (Roussac, 2006).

A typical commercial office 'base building' is merely a skeleton which an interior designer uses to create an office. Occupants relate most closely to the light, colour and amenity of their fitouts, not the base building, and the tools they are given to perform work, such as their workstations, tables, meeting spaces, partitions and offices.

For a building to be 'green' it must have a green interior, not just a green base. An interior designer (who understands factors that affect indoor environmental quality) working in close collaboration with the occupants should be able to create a 'green' office tenancy in almost any building that meets relevant Australian Standards. This is even more clearly the case if the base building owner commits to vigilant maintenance of base building services such as heating, ventilation and air conditioning systems.

It's a common misconception that to be 'green' a building has to use contemporary design and state-of-the-art technology. In fact, some of the best performing buildings are older buildings where the building manager has taken measures to optimise performance and has supported tenants to do the same. Some green outcomes are better achieved through improved building management practice, while others might require capital expenditure on either the base building or tenant fitout.

Fitouts and refurbishments are responsible for the consumption of a large amount of resources. Investa estimates that the average life of a typical office fitout in its portfolio is just over ten years. Treloar et al. (1999) estimated that the total life cycle energy consumption of fixtures, fittings and furniture at a churn rate of 5.6 fitouts over 40 years (i.e. a life of just over seven years) was close to, if not more than the operational energy use for the case study building. Clearly, fitouts also need to be designed with the environment in mind.

1.2 The Role of Tenants

Tenants therefore have a vital role to play in improving the sustainability of the commercial building stock. However, they often do not have the same drivers to go green as do building owners who have a building life-cycle perspective. To achieve significant advances requires a cultural change and often an increase in expertise and resources. As with many issues, there is often a gap between espoused values and observed actions. This can be for a variety of reasons.

Many tenants may be interested in committing to a greener building. However, it is often unclear how to incorporate 'green' commitments and requirements into a lease. The perceived degree of uncertainty around the success and cost of green measures is also a deterrent. Other tenants may be unaware of the benefits of occupying a greener building. Consequently, tenants often fail to take up green measures even though it would in fact be in their business interest to do so. Unless tenants are aware of the benefits, what to specify and how to implement green commitments, they will usually opt to occupy a building with a conventional lease, especially if there are additional upfront costs associated with a green lease.

One example of the business benefits to tenants is that for each one star improvement in a tenancy NABERS Energy rating, tenants will save about \$3.70 per square metre in annual energy costs.

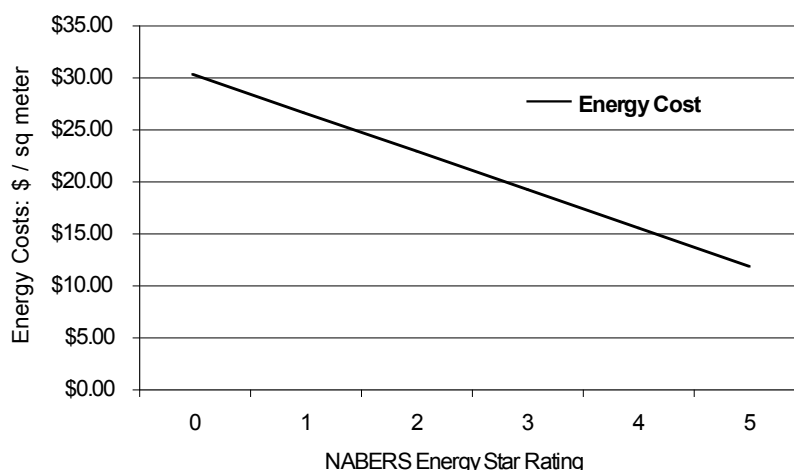


Figure 2 Relationship between ABGR rating and energy costs

As another example, about 60% of tenants' energy costs are for lighting. Tenants can have a very direct impact on this by asking for efficient lighting systems and making sure they are used efficiently.

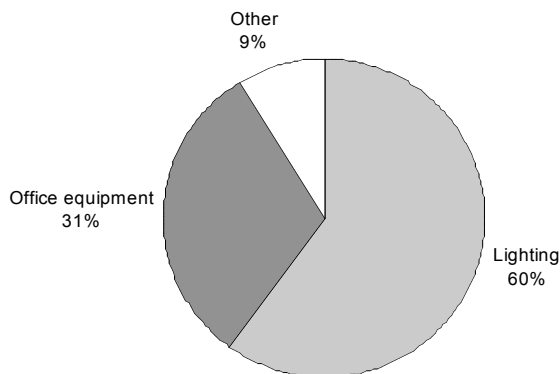


Figure 3 Energy costs in a typical commercial tenancy

The *Green Lease Guide* attempts to address these barriers by demonstrating the benefits of green commitments and providing practical information about implementation.

2. Green Leases

2.1 What is a Green Lease

A 'green lease' is different from a standard lease because it incorporates ecologically sustainable development (ESD) principles to reduce the building's environmental impacts. The green property market is still immature, resulting in uncertainty in the marketplace about what 'sustainability' or 'going green' means, what are the most appropriate 'green' measures that might be adopted in a building and the costs of implementation. People are familiar with what to expect from a standard building lease, but both parties may not know what to expect from a green lease.

Incorporating new requirements into a green lease requires knowledge and cooperation. A balance needs to be struck between cooperative and prescriptive approaches to negotiating environmental outcomes. Some Australian governments have implemented prescriptive type green lease requirements by specifying minimum NABERS ratings for properties they lease.

Leases can be issue specific, such as a minimum NABERS water rating, or a comprehensive package of measures as outlined in the *Green Lease Guide*.

The important considerations of a green lease for a tenant include:

- What do they want – what does 'green' mean and what are the targets
- What is the starting point – use measurement and rating tools to establish the baseline
- How to achieve the desired outcomes – obligations of tenant and landlord
- Who gets the benefits
- What has been achieved – auditing progress
- How to resolve disputes – who decides who is responsible for not achieving a target.

2.2 Green Rating and Evaluation Tools

A range of tools and aids exist to help in assessing and improving the environmental performance of existing buildings for tenants. In Australia these include:

- NABERS Energy rates a building's *actual* yearly greenhouse emissions. Almost a third of the national Australian office market (by net lettable area) has been rated using NABERS. Ratings can be obtained for the base building, an individual tenancy and the building as a whole.
- NABERS Water compares actual energy and water use to benchmarks. Indoor Environment and Waste rating tools have also recently been released.
- Green Star Office Design for office refurbishments, Office Interiors for new fitouts and a suite of associated tools for other development types.
- Ecospecifier also provides information of environmentally preferred products and materials.
- Good Environmental Choice Australia has an eco-labelling scheme for a range of products.

There are also a range of efficiency star rating labelling schemes for energy and water to assist in selecting efficient appliances, fixtures and fittings.

2.3 Benefits of a Green Lease

A Green Lease has a number of significant potential benefits for tenants:

- *Enhanced reputation*
 - Organisations are increasingly expected by shareholders and the community at large to demonstrate corporate social responsibility—‘doing the right thing’ in respect to the environment, employees and the community.
- *Attract and retain talented employees*
 - The importance of attracting and retaining talented employees is increasing in the face of a predicted decline in Australia’s workforce (Colliers International, 2006)
- *Enhance employee well-being and productivity*
 - Research indicates a link between a good indoor environment in offices and improved employee well-being.
- *Enhance and protect organisational knowledge*
 - Workplace design influences the way staff share and develop knowledge.
- *Reduced liability*
 - It is an employer’s duty of care to ensure a safe and risk free working environment.
- *Increased profitability*
 - All of these benefits can create significant cost savings for an organisation. In addition, there are direct cost savings such as lower electricity bills. Other building costs that tenants may not directly pay for (waste management, water use, air conditioning, etc.) are lower in a green building and a case can be made for passing these on.

3. The Green Lease Guide

3.1 Background

Tenants often see ‘green’ as synonymous with ‘new’. This is not good for the environment, because it’s crucial that we preserve and enhance as much of the built environment as possible, and it’s not good for tenants – because in general, it’s wrong.

Following the environmentally sensitive fitout of its Sydney head office, Investa sought to educate the market about the benefits of incorporating environmental considerations (many of which have well-being and productivity spin-offs) for tenants. It was found that tenants often lack the resources and expertise to deliver the environmental initiatives they would like to see integrated into their tenancies.

Investa has a variety of precedent leases (i.e. base leases that are developed to reflect the agreement specifics) for use in different markets and to reflect the terms agreed between landlord and tenant. All Investa precedent leases have a set of clauses that establish environmental objectives and an attached schedule which specifically sets out the commitments made by each party.

Despite the lease presenting commitments in a very cooperative form, in most cases tenants would not commit to specific actions in the schedule for a variety of reasons, including:

- environmental features being low on the negotiation priority list;
- an unwillingness to add non-traditional commitments to the deal;
- other landlords not negotiating Green Lease provisions; and
- failure to recognise benefits of high quality building management and fitout design.

The Guide was a response to these challenges. Among its objectives were the following, to:

- showcase best practice and help tenants avoid costly design mistakes (both for them and the landlord – if their fitout ultimately leads them to fall out of love with the building).
- help strategic decision makers articulate their design requirements, and hold project teams accountable.
- fuel demand for quality building management.
- take the focus beyond energy to address a broad range of environmental factors.

The Green Lease Guide is introduced as early as possible in a lease negotiation, ideally when the tenant is evaluating a series of accommodation options. Its target audience is strategic decision makers within

companies – it's not a 'technical' document.

The Guide has been designed to:

- step tenants through all the environmental issues they'll face in undertaking a fitout;
- give tenants guidance on options, their costs and benefits;
- represent a quantum leap in Green Lease thinking and explain the role of the landlord;
- provide information and images that can be used for related educational initiatives; and
- contribute to a significant and measurable reduction in environmental impacts from commercial office tenants.

3.2 The Guide's Structure

The Guide comprises three main sections, each containing a number of topics. Each of the topics has an associated checklist to guide good practice and is given a rating from one to three stars for money savings, employee well-being, and reputation and corporate image.

Every one of the commitment options presented in the Guide is replicated in a succinct schedule that appends to the lease. The schedule serves as a summary of all the commitments made by each party and, because it does not contain any legal clauses, it is suitable for attachment to any standard commercial lease. In addition to making it accessible to any organisation that wants to use it, it provides the added benefit of allowing the lease clauses and green commitments to be negotiated independently of each other.

3.3 Green Lease Certificates

A recent improvement has been the development of a Green Lease Certificate to support the green leasing process. The Certificate expresses the level of commitment both the tenant and landlord have agreed to. It has been attractively designed so tenants will be inclined to display it. Its purpose is to give tenants recognition for their Green Lease commitments. It can also be used by Asset Managers and Facilities Managers as a marketing tool to promote their buildings and management attributes.

The Green Lease Certification process works as follows:

- Once the tenant has signed the Green Lease and it has been returned to the Asset Manager, a certificate template is marked up to reflect the commitments made under the lease.
- The certificate is then signed and presented to the tenant for display.
- The Certificate is reviewed and amended (as appropriate) on each anniversary of the lease.

4. Case Study: 50 Ann Street, Brisbane, Australia

Commercial lease negotiations between landlords and tenants in Australia typically focus on rent, the timing and mechanisms for rent reviews, lease term and incentives like rent free periods and fitout contributions. In short, the negotiations focus on financial aspects that impact both parties directly. Financial considerations that impact one party only are generally not addressed in the lease negotiations. This means that the negotiations will consider the cost of operating the base building (because this is passed either directly or indirectly to the tenant), but not the cost of operating the tenancy which is a matter for the tenant alone.

One of Investa's most significant recent negotiations was the renewal of 25,382m² for 13 years with the Queensland State Government at the building known as "State Law" at 50 Ann St, Brisbane. The negotiation was unusual in that both parties took a 'total occupancy cost' approach to exploring opportunities to overcome split incentives. Split incentives arise when a party invests capital without a means of generating a return on its investment, because the revenues/ savings accrue directly to another party. For example, a landlord may invest in energy efficient lighting, but the tenant captures the resultant energy cost savings.

A broad ranging review of the building was undertaken to identify a variety of environmental efficiency initiatives, both within the base building and also the tenancy areas. The result was a series of recommendations including a comprehensive tenancy lighting upgrade. The majority of these were proposed as part of the lease offer, including a landlord 'incentive' specifically allowing for the upgrade of lighting and installation of occupancy based controls at the landlord's expense. The projected savings were then able to be factored into the lease analysis by the tenant.

One important factor that gave the tenant confidence to budget for the projected savings was the offer of a guarantee. The guarantee included an undertaking by the landlord to take the tenancy NABERS Energy rating from an unofficial rating of 2.5-stars to 4.0-stars, or perhaps even 4.5 depending on the participation of staff. In doing so, the tenant would save more than \$150,000pa in energy costs, principally through the upgrading of light fittings and installation of a managed lighting control system (MLS).

To give confidence that the forecast savings would be achieved, Investa guaranteed that if the tenant's energy consumption exceeded the guaranteed maximum amount, they would be reimbursed for the additional energy expense and the amount of Green Power required to offset the additional greenhouse

emissions would be procured on their behalf. This offer was subsequently made available to all tenants and is now referred to as the Investa Greenhouse Guarantee, incorporating the following features:

- If the tenancy performance is better than the guarantee, the tenant keeps the savings.
- If the bills are higher than guaranteed, the tenant is reimbursed for the difference.
- If the environmental impact is greater than guaranteed, it will be offset with Green Power™.

For most tenants, the guaranteed outcomes are delivered without any capital outlay or increase in operating expenditure, with the cost of energy-saving equipment and systems financed through ongoing energy savings. The Investa Greenhouse Guarantee has been designed to make the transition to energy efficient tenancies as painless, cost-effective and risk-free as possible.

The lighting upgrade project was complemented by various other energy and water saving initiatives that in the past three years have delivered year-on-year emission reductions and water savings of more than 30 percent for the building as a whole.

- Tenant energy & maintenance savings of \$185,000pa.
- Tenant ABGR to increase from 2.5 Stars to 4.0 Stars.
- Tenant greenhouse emissions reduced by 1,206 tonnes pa (equivalent to taking 270 cars off the road).
- Various base-building ESD initiatives.
- Building valuation increased from \$75m to \$87m (\$10m due to market cap rate compression, \$2m due to the lease).

Investa's sustainability platform and willingness to commit to a series of base building environmental efficiency initiatives were major factors in the tenant's decision to negotiate exclusively with Investa and directly contributed to the \$2 million valuation uplift for the property.

5. Conclusions

There is clearly a place for new flagship new green commercial office buildings. However, they are not the sole answer to addressing the impact of buildings on the environment. New green commercial buildings can only truly lay claim to the "green" mantle if they are green on the inside, as well as the outside. A green base building must be supported by a green office fitout to deliver its full potential. Furthermore, much can be done to significantly reduce the impact of existing buildings, and in many cases this may be more effective than new construction.

What is needed is a way to transform the culture of building owners and tenants towards a greater appreciation of the value of green buildings. This will reduce the environmental impact of Australia's building stock, help tenants achieve the optimal outcome from their workspace and, as a consequence, help landlords maximise the value of their commercial office assets. Green leases provide a way to facilitate that process.

References

AGO. 1999, *Australian Commercial Building Sector Greenhouse Gas Emissions 1990–2010*, Australian Greenhouse Office

Colliers International. 2006, *Lifblood: Sustaining the vitality of Australian businesses*

Investa. 2007a, *Green Lease Guide for Commercial Office Tenants*, Investa Property Group
www.investa.com.au/Sustainability

Investa. 2007b, Sustainability Report 2007, Investa Property Group,
<http://www.investasustainability.com.au/reports/2007/sustainability/Appendices/Ratings.aspx>. Accessed 14/04/2008

NABERS. 2006, www.nabers.com.au/page.aspx?cid=532&site=2 Accessed 10/04/2008

Roussac, C. 2006, *Existing Buildings, the Greenest Buildings*. Property Australia, Dec '06 / Jan '07: 84 – 85.

Treloar, G. McCoubrie, A. Love, P. Iyer-Raniga, U. 1999, Embodied energy analysis of fixtures, fittings and furniture in office buildings, *Facilities* Volume 17, Number 11, pp. 403-409