


GREEN LEASE TOOLKIT



GREEN BUILDING COUNCIL SA



S A P O A

The background features a light green gradient. In the lower half, there are several white, stylized silhouettes of skyscrapers and buildings of varying heights and architectural styles, including one with a prominent spire and another with a rounded top and a circular element.

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FOREWORD

Synchronising DESIGN WITH OPERATION



“We are happy to have played a role in bringing a practical mechanism to the South African industry which begins to satisfy these needs.”

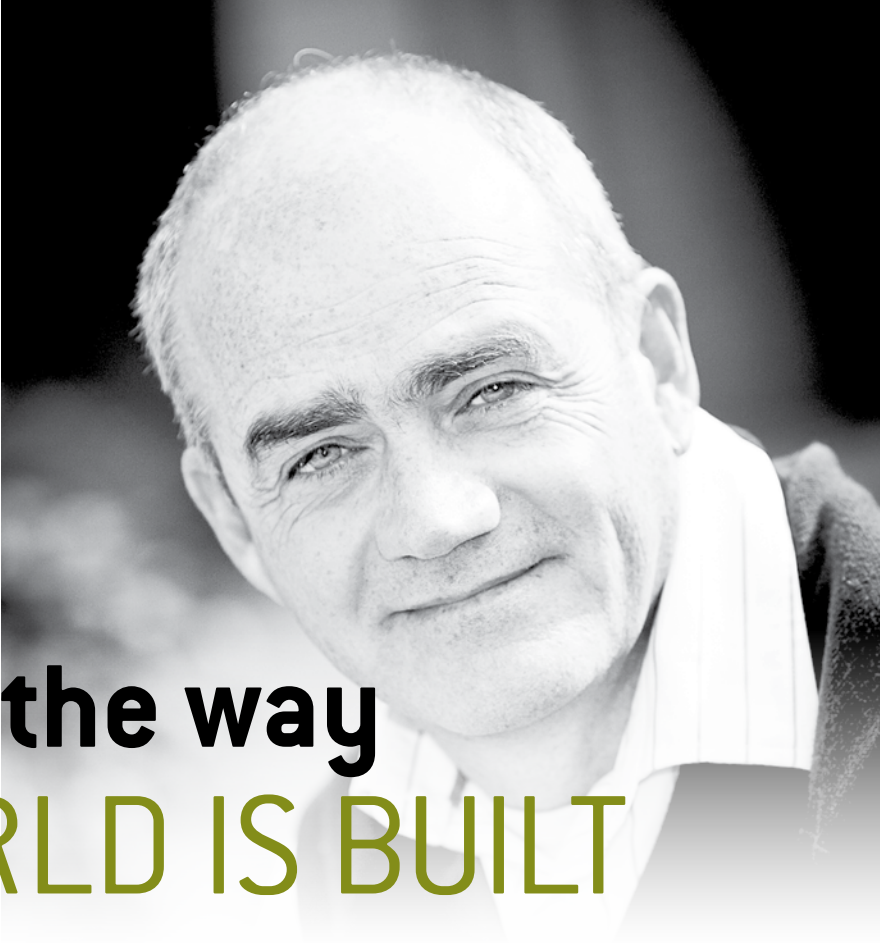
South African property owners have persistently waited and asked for resources to help them take advantage of the purported operational benefits of well-designed and well-built buildings. There has also been a call for guidance on how to better operate more conventional building stock.

We are happy to have played a role in bringing a practical mechanism to the South African industry which begins to satisfy these needs. With buildings providing up to 40% of greenhouse gas abatement potential, it is imperative that we synchronise the design and construction of new buildings, with the efficient and responsible operation of both these buildings and our existing building supply.

This Green Lease Toolkit is a positive step toward the efficient operation of our buildings and will unlock the shared benefits of collaborative decision-making in the built environment.

A handwritten signature in black ink, appearing to be 'NG' followed by a flourish.

Neil Gopal
CEO
SAPOA



Changing the way THE WORLD IS BUILT

The South African built environment has undergone, and continues to undergo, a great deal of change and the Green Building Council of South Africa is proud to be at the forefront of that change. Significant progress has been made in ensuring that our buildings – for home, work or play – are designed and constructed in environmentally sustainable and resource efficient ways, yet comparatively less has been done around the operation of these buildings.

The Green Lease Toolkit offers a platform to address and reshape the way we operate our buildings.

Brian Wilkinson
CEO
GBCSA

“The Green Lease Toolkit offers a platform to address and reshape the way we operate our buildings.”

GREEN BUILDING COUNCIL OF SOUTH AFRICA (GBCSA)

The GBCSA is an independent, non-profit company that was formed to lead the transformation of the South African property industry to environmental sustainability.

We aim to ensure that all buildings are designed, built and operated in an environmentally sustainable way allowing South Africans to live and work in healthy, efficient and productive environments.

The GBCSA is one of 90 members of the World GBC alongside Australia, the United States and the United Kingdom.

Buildings are one of the main contributors to climate change. A number of international reports state that buildings represent the single largest opportunity for greenhouse gas abatement, outstripping the energy, transport and industry sectors combined.

Designing, building and operating in a green manner is an opportunity to use resources efficiently and address climate change while creating healthier and more productive environments for people to live and work in.



SOUTH AFRICAN PROPERTY OWNERS ASSOCIATION (SAPOA)

SAPOA is committed to protecting the interests of the commercial and industrial property sectors, in terms of ownership, management and development.

Its objectives are based on the principles of the free enterprise system as the only workable economic system and the inalienability of property ownership, not only for its members but also for the future of South Africa, and its competitiveness in the world arena.

SAPOA's aims and objectives include:

- ▶ Maintaining a unique organisation which encourages its members to share their expertise through active participation in the association
- ▶ Fostering key relationships whilst maintaining government acceptability
- ▶ Maintaining a non-political bias whilst participating in governmental legislative structures
- ▶ Contributing through excellence in educational programmes and setting quality standards
- ▶ Providing an efficient forum for responding to change
- ▶ Providing a source of information useful not only to our members but also to government at various levels and the industry as a whole, through a significant involvement in the collection and dissemination of property data and statistics.

SAPOA will continue to encourage the concept of private property ownership and development.



PREFACE

The management and operation of new and existing building stock has been identified as a key area for the sustainable building industry to focus on. In recognising this, the GBCSA and SAPOA have developed this Green Lease Toolkit to give the South African property industry the tools to begin to address the sustainable management and operation of buildings.

THIS GREEN LEASE TOOLKIT:

- ▶ **Is suitable for the South African leasing environment and sensitive to common market characteristics, but on a par with international green leasing principles.**
- ▶ **Uses robust methodologies established through thorough market analysis and understanding.**
- ▶ **Is applicable across all building sectors, but accounts for the appropriate leasing structures per sector in South Africa.**

The GBCSA and SAPOA have developed the Green Lease Toolkit to be useful and relevant to the South African property industry in preparing lease documents that take both green building design and operational principles into account.

The Toolkit does not simply provide guidelines; it is a practical resource which includes schedules and checklists that are transferable into lease documents. The aim of the Toolkit is to make green leases more accessible, understandable and acceptable to tenants, building owners, building managers and their representatives.

GLOSSARY OF TERMS

AC Air Conditioning
HVAC Heating, Ventilation and Air Conditioning
BMS Building Management System
CFL Compact Fluorescent Light
CO2 Carbon Dioxide
FM Facilities Management
FSC Forest Stewardship Council

GBCSA Green Building Council of South Africa
SAPOA South African Property Owners' Association
IPD Investment Property Databank
LED Light Emitting Diode
MOA Memorandum of Agreement
VOC Volatile Organic Compound
TVOC Total Volatile Organic Compound



COLLABORATION

**Collaboration requires an authentic meeting of minds;
an interconnectedness of shared costs and benefits.**

“ To harness the true benefits of a green lease – landlord and tenant have to agree to work jointly to create a platform of mutual value. Rewards, gains and incentives need to be equitably distributed to find that intersect of mutual benefit. ”



Throughout the Green Lease Toolkit this symbol will represent the benefits of a collaborative relationship between Landlord and Tenant.



THIS TOOLKIT



is intended to provide a



• f r a m e w o r k •

A N D

+
methodologies
for negotiating the
shared benefit

A N D

shared responsibility
of green buildings

BETWEEN



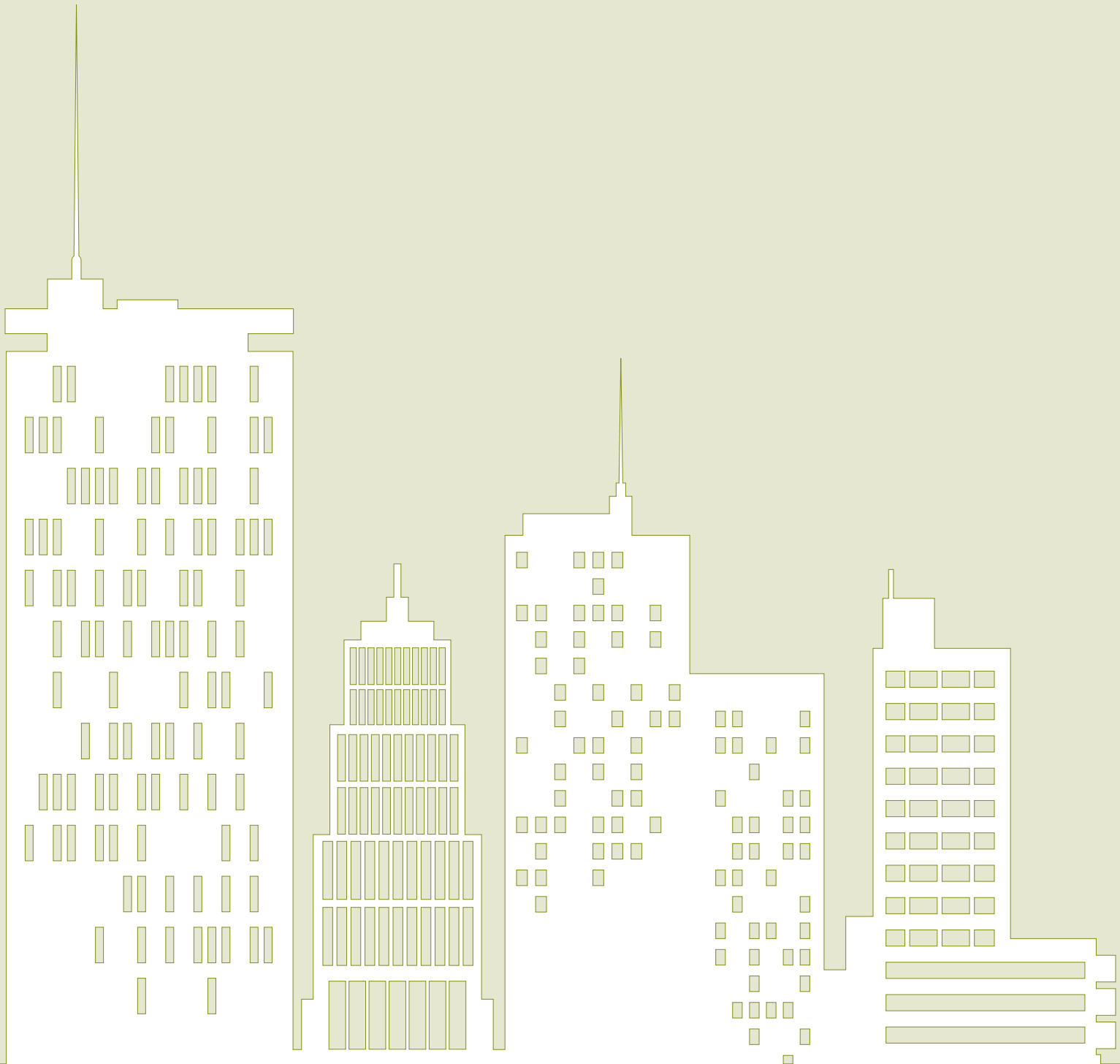
tenants & landlords



TABLE OF CONTENTS

1. INTRODUCTION	12
1.1 What is the goal of a green lease?	18
1.2 Who is this toolkit for?	19
1.3 Leasing scenarios.....	20
1.4 What is a green lease?	20
1.5 Impact of a green lease.....	22
2. GREEN LEASE PRINCIPLES	24
2.1 Process.....	25
2.2 What are the benefits of green leases?	27
2.3 Types of green leases	33
2.4 Auditing hard leases	34
3. IMPLEMENTATION	36
3.1 Explicit consensus.....	38
3.2 New leases.....	39
3.3 Existing leases	41
4. BEST PRACTICE CHECKLISTS	42
4.1 Landlord’s commitments	44
4.2 Tenant’s commitments: Fit-out design	47
4.3 Tenant’s commitments: Space management.....	49
MEMORANDUM OF AGREEMENT	51
1. Memorandum of Agreement (“MOA”)	51
2. Data sharing	51
3. Building Management Committee	52
4. Agreement upon budgets.....	53
5. Co-operation on Schedule 1 measures.....	53
6. Managing agents	53
7. New owners and occupiers.....	54
8. Renewal of this Memorandum of Agreement	54
9. General.....	54
SCHEDULE 1. Building performance commitments	55
SCHEDULE 2. Tenant guideline: Fit-out design	58
SCHEDULE 3. Tenant guideline: management.....	60

INTRODUCTION



The commercial property industry has shifted fundamentally since the emergence of the green building movement and the development of green building certification such as Green Star SA. A new balance of costs and benefits has been introduced to the property market, with landlords and tenants still navigating their way through this new territory.

Key questions have arisen over the value of “going green”:

What, if any, are the utility cost savings?



Does it lead to an increase in productivity?



Are there any positive effects on asset value?



Are the reputational benefits tangible and of value?



These potential benefits can be shared between tenant and landlord; they are not exclusive to either. Research shows that green buildings have large reputational, operational and long-term financial benefits for both landlords and tenants, but often in different ways.

‘Green Lease’ is a general term that describes a document for negotiating green building attributes between the owner and the tenant of a building. It does not necessarily refer only to a lease agreement but could also represent:

- ▶ **A service level agreement (SLA)**
- ▶ **Memorandum of Agreement (MOA)**
- ▶ **Lease annexures**
- ▶ **Special lease terms and conditions**
- ▶ **Building/property/facility management guidelines or rules**

Green leases are an emerging vehicle for both tenants and building owners to unpack this shared benefit and future-proof their respective involvement in the property industry.



24 RICHEFOND CIRCLE, UMHLANGA RIDGE:
4 Star Green Star SA - Office v1 Design & As Built

GREEN BUILDINGS AND CERTIFICATION

Before exploring the range of Green Lease options, it is important to look at the green building certification framework developed by the Green Building Council of South Africa (GBCSA). The GBCSA was founded in 2007 and adopted the Australian Green Star certification system for South Africa. There are a wide range of certification systems on the global stage, with LEED (USA) and BREEAM (UK) widely regarded alongside Green Star. Green Star SA has been amended to reflect local standards and conditions by a series of technical working groups (TWGs). Green Star SA rating tools have been developed for the following building types:

Which building typologies are catered for under the current suite of Green Star SA tools?

- ▶ **Offices**
- ▶ **Retail centres**
- ▶ **Multi-unit residential developments**
- ▶ **Public & education buildings**

The GBCSA is scoping the development of tools for existing buildings, commercial interiors and communities (at a precinct scale).

The GBCSA is also developing a rating tool for existing building performance via an Energy & Water Benchmarking tool. Similar in function to the Energy Star tool in the USA and the NABERS tool in Australia, this tool will allow property owners to establish how the annual performance of their building compares to the industry norm for a similar building in the same location.

“To achieve this, landlords and tenants must invest in, and operate buildings along sustainable principles.”



PROGRESSING GREEN BUILDING DEVELOPMENT

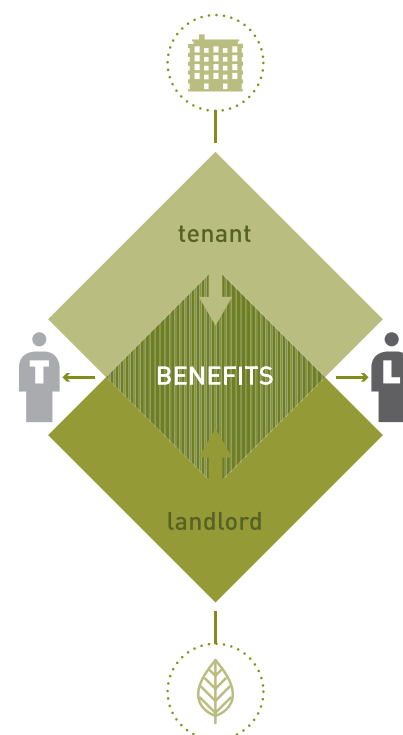
Despite the successes achieved by green building certification, there are still some fundamental barriers to the broad roll-out of green buildings across the industry, including:

- ▶ **Differing benefits to landlords and tenants**
- ▶ **Addressing existing building stock**
- ▶ **The mechanics of lease agreements**

Ultimately, functional green buildings must achieve operational performance that improves both indoor environmental quality and reduces the negative impact on the environment. To achieve this, landlords and tenants must invest in, and operate buildings along sustainable principles.

The biggest hurdle to green development is the gap between long-term operational savings and the up-front cost of “greening” a building. Typically, landlords are responsible for the investment in the building’s “potential”, while the tenants are responsible for the operating costs – creating the following challenges:

- ▶ **The landlord’s return on investment for efficient equipment can only materialise with increased rental and lower initial yields, rather than realised savings during the lifecycle of the equipment**
- ▶ **The tenant gains from an improved indoor environmental quality and potential utility cost savings; while the landlord isn’t able to share these direct benefits**



“ Each party stands to gain if the other acts, but loses if they act and the other doesn't. The challenge is in negotiating an agreement where both parties act for green buildings to achieve an optimal equilibrium - a 'win-win'. ”



AURECON CENTURY CITY CAMPUS, CENTURY CITY:

5 Star Green Star SA - Office v1 Design



There is little incentive for landlords to invest in better buildings if tenants are going to yield all the benefit. Primary benefits to landlords are the long-term asset value of green buildings but these can only be realised with well-informed tenants.

Both parties have a reputational stake in owning or occupying green buildings but the timing of decision-making is difficult to resolve in reality.

Green buildings present a textbook example of economic game theory. Each party stands to gain if the other acts, but loses if they act and the other doesn't. The challenge is in negotiating an agreement where both parties act for green buildings to achieve an optimal equilibrium – a 'win-win'. An informed tenant may be willing to pay a higher base rental if the costs and efficiencies of occupation are improved, so that the joint gain needed to stimulate investment into green development, can be achieved.



REGULATORY FRAMEWORK

VODAFONE SITE SOLUTION INNOVATION CENTRE, MIDRAND:
6 Star Green Star SA – Office v1 Design

Another important consideration is the availability of regulatory framework within which green leases will function. Fully binding green leases will need a framework of standards or legislation in order to enforce operational performance.

The major catalyst for the introduction of green leases in Australia was the federal government's decision not to occupy any building that did not achieve a 4.5 star NABERS rating. NABERS is the operational rating system for carbon emissions in Australia. South Africa is in the process of developing a similar system. More recent legislation relating to mandatory disclosure, has further strengthened the Australian regulatory framework and has had a positive impact on green leasing. The carbon emissions legislation in the UK has played a similar role in framing green leases.

In South Africa, SANS 10400 part XA and the voluntary standard SANS204 make up the regulatory framework relevant to energy efficiency in buildings.

These were promulgated in November 2011 and apply only to new and refurbishment projects. At this point, it does not mandate operational energy use, but it may form the basis of future mandatory operational regulation.

There is potential for Green Star SA to play a regulatory role if it becomes a requirement for government buildings in the future. Nevertheless, many government building tenders and Public Private Partnerships (PPP) projects have started specifying Green Star SA certification as a requirement.

The absence of regulation governing the operational energy use of buildings means that performance-driven green leases with penalties ("hard" green leases) are unlikely to be widely adopted in the short term. For this reason, this guide provides a range of alternative solutions from mutual disclosure of performance through to mandatory performance.

1.1 WHAT IS THE GOAL OF A GREEN LEASE?



NEDBANK PHASE II, SANDTON:

4 Star Green Star SA - Office v1 Design & As Built

The fundamental concept that underpins a green lease is that of mutual understanding. While the details may vary from one agreement to another, the primary purpose of a green lease is:

- ▶ **To improve the operational performance of green buildings**
- ▶ **To deliver to landlords and tenants an equitable share of the incremental value provided by green buildings**

A Green Lease seeks to achieve these goals by securing long-term operational performance through a transparent, mutually beneficial agreement between tenants and landlords that governs:

- ▶ **The base building and fit-out quality in buildings**
- ▶ **The contractual requirements of facilities managers**
- ▶ **The behaviour of tenants from an environmental perspective**
- ▶ **Regulation of governing bodies (through continuing education)**

What are the governing principles on which a green lease should be based?

1.2

WHO IS THIS TOOLKIT FOR?

LANDLORDS AND DEVELOPERS

This Toolkit is a resource for property owners to help them develop green leases for their portfolios. It is intended to provide both a broad background to green buildings and the respective benefits, as well as a sample Memorandum of Agreement that can be used in actual green leases.

It provides information on the requirements that landlords should have of their facilities managers and the elements of tenant behaviour that have an effect on the operational performance of a building.

It also expands on the background and long-term benefits of owning green buildings. Equipped with more information, developers could be more receptive to considering the environmental impact of the design and construction of their buildings. They will also be better positioned to evaluate the shared benefits (for example, slightly higher rents and lower operating costs) as well as the long-term payback and re-fit considerations.

TENANTS

The Toolkit informs tenants of what to take into account when considering leasing green office space and the benefits of improved indoor environmental quality. It identifies some best practice guidelines for business operations and underscores the role of tenants in delivering optimal operational green buildings.

It includes a sample Memorandum of Agreement to optimise the benefit of leasing green office space.

LETTING AGENTS

For letting agents the Toolkit gives a thorough understanding of the green building market and the areas of shared benefit for both landlords and tenants. As the intermediaries between landlords and tenants, letting agents can use the Toolkit to help with negotiations between tenants looking for green offices and landlords hoping to develop green space.

INVESTORS AND ANALYSTS

The correlation between green buildings and market performance has been demonstrated globally. Green leases are one of the keys to achieving optimal market performance in the construction and provision of sustainable buildings. This Toolkit is a valuable guide for investor decisions with respect to leasing characteristics of property funds.

GOVERNMENT

In most markets with established green building industries, governments have taken a lead in demanding green space for tenancies as well as pioneering new ground with government-owned buildings. This guide is intended to provide government with a framework to guide their selection of future buildings as well as any policy decisions with respect to green buildings.

It is anticipated that this Toolkit will facilitate the development of a sound regulatory framework for future green building development.

1.3 LEASING SCENARIOS

The Green Lease Toolkit covers a range of leasing scenarios:

	New Buildings	Existing Buildings and Refurbishments
New Leases	✓	✓
Lease Renewals	✗	✓
Re-development or Relocation	✗	✓

1.4 WHAT IS A GREEN LEASE?

A green lease is an adaptation of a traditional lease. It is primarily a set of legally binding rights and obligations - a contract. The parties both agree that the landlord will provide the temporary use and enjoyment of the premises in return for the payment of rent by the tenant.

It must contain the essential terms of a contract and, in particular:

- ▶ **There must be consensus on the essential elements of the contract**
- ▶ **Both parties must have the capacity to enter into the contract**
- ▶ **Performance of the contract must be physically possible**
- ▶ **It must include any legal formalities such as the length of the lease and lease termination requirements**

As with all leases, a green lease contains provisions to deal with matters where either party fails to perform on

its responsibilities or where occupation and possession become impossible because of an external factor. So there are provisions for breach, for damage and destruction and for alternative dispute resolution.

One of the major benefits of a green lease is that it offers an opportunity for the relationship between tenants and building owners to be transparent in their respective goals of providing and occupying a sustainable building. It is in the commercial interests of both parties to maintain their part of the deal, as the overall performance of the building is reliant on both parties meeting their commitments.

One of the most significant parts of a green lease is the fact that it lists the responsibilities of the parties, including:

- ▶ **Each party's responsibilities for certain actions or interventions**
- ▶ **Each party's financial obligations**



NEDBANK RIDGEVIEW, UMHLANGA RIDGE:
4 Star Green Star SA - Office v1 Design

A green lease is structured in a similar way to a traditional lease. The main difference is the assignment of responsibilities and financial obligations related to occupying and owning a green building - obligations that don't exist in a conventional building.

The responsibilities to do, and to pay, are often split. Typically, the tenant carries the responsibility to pay and the landlord the responsibility to do. This division is defined by the type of lease agreement and it is essential to carefully unpack these responsibilities to create the 'win-win' situation needed for the creation of green spaces.

It's important to establish a clear line between the landlord's and the tenant's responsibilities.

Beyond the core lease clauses, a green lease can also include a range of supporting documentation, policies or guidelines. Any supporting documents must be referenced directly in the lease clauses.

These documents could include:

- ▶ **Environmental Management Plans**
- ▶ **Fit-out design guidelines**
- ▶ **Procurement procedures**
- ▶ **Sectional title, house or centre management rules**
- ▶ **Waste disposal guidelines**
- ▶ **Preferential parking rules**
- ▶ **Metering and monitoring protocols**

An example of measuring and reporting performance is to install water meters to track the consumption of water, and the associated costs, to encourage changed behaviour and usage patterns. Similarly, to detect operational problems when electricity consumption is abnormally high.



1.5 IMPACT OF A GREEN LEASE

There are four key areas of behaviour that green leases will impact on:

- ▶ **Building owner investment decisions (base building design)**
- ▶ **Building facilities management contracts**
- ▶ **Tenant investment decisions (fit-out design)**
- ▶ **Tenant behaviour**

These will be addressed through a series of best practice guidelines and an example of a Memorandum of Agreement.

SUMMARY

A green lease is an adaptation of a traditional lease that offers an opportunity for the relationship between tenants and building owners, to be transparent in their respective goals of providing and occupying a sustainable building.

Green leases are an emerging vehicle for both tenants and building owners to unpack the shared benefit of sustainable buildings.

The fundamental concept that underpins a green lease is that of mutual understanding.

To date, Green Star SA Rating tools have been developed for the following building types:

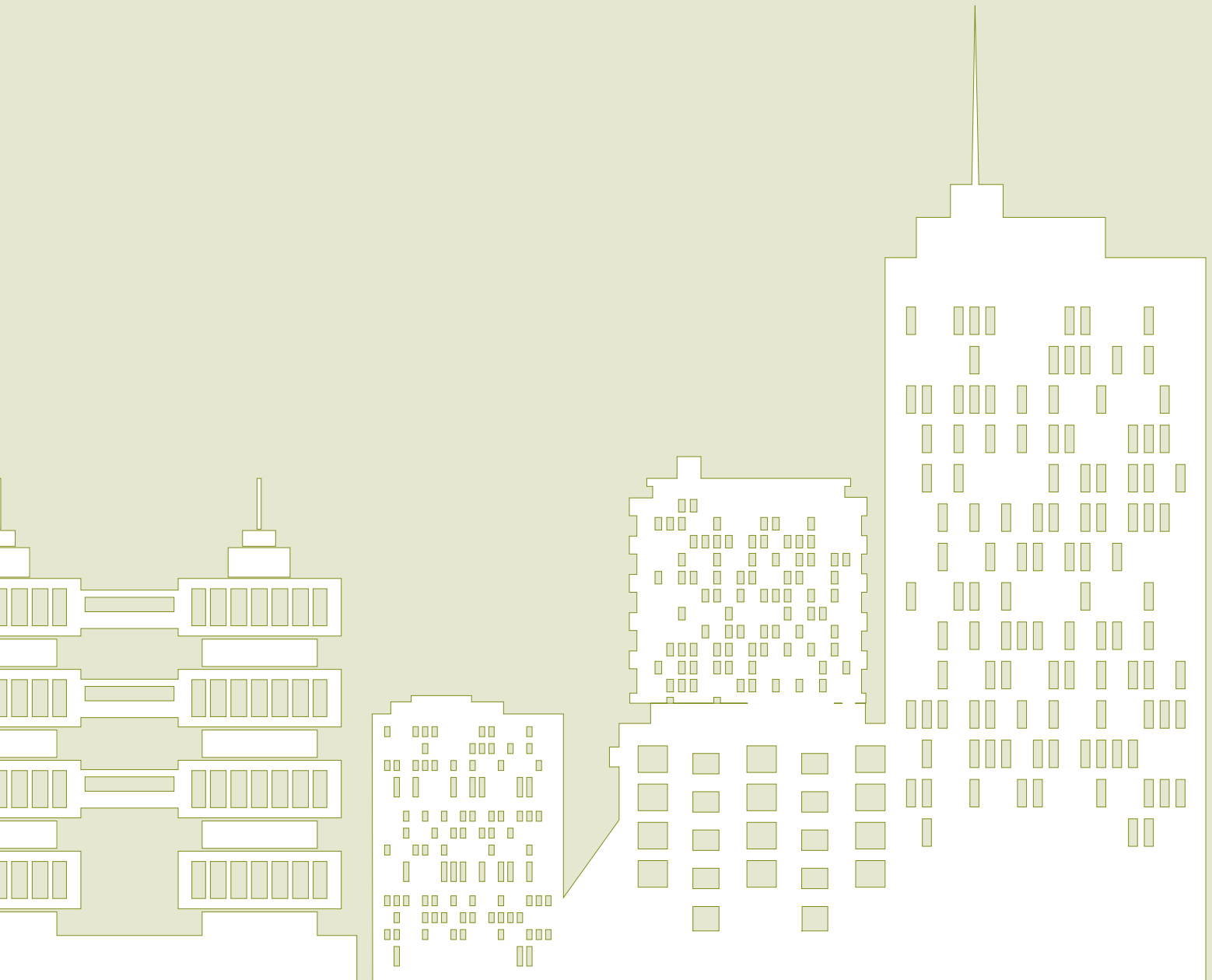
- ▶ **Offices**
- ▶ **Retail centres**
- ▶ **Multi-unit residential developments**
- ▶ **Public & education buildings**

Additionally, the GBCSA is in the scoping stage of tool development for: existing buildings, commercial interiors and communities.

The Green Lease Toolkit has been developed for:

- ▶ **Landlords and developers:**
 - Seeking to build reputational value, increase portfolio asset values and to conform to corporate reporting
- ▶ **Tenants:**
 - Seeking green space for productivity, operational cost savings, corporate reporting and reputational reasons
- ▶ **Letting agents:**
 - Who require a sound basis on which to secure tenants for green assets, or office space for green tenants
- ▶ **Investors:**
 - Who seek contractual frameworks upon which additional investment in green assets may be based on
- ▶ **Analysts:**
 - Who require criteria on which to inform investment advice and analysis
- ▶ **Government:**
 - To inform current and future leasing guidelines and building regulations

GREEN LEASE PRINCIPLES



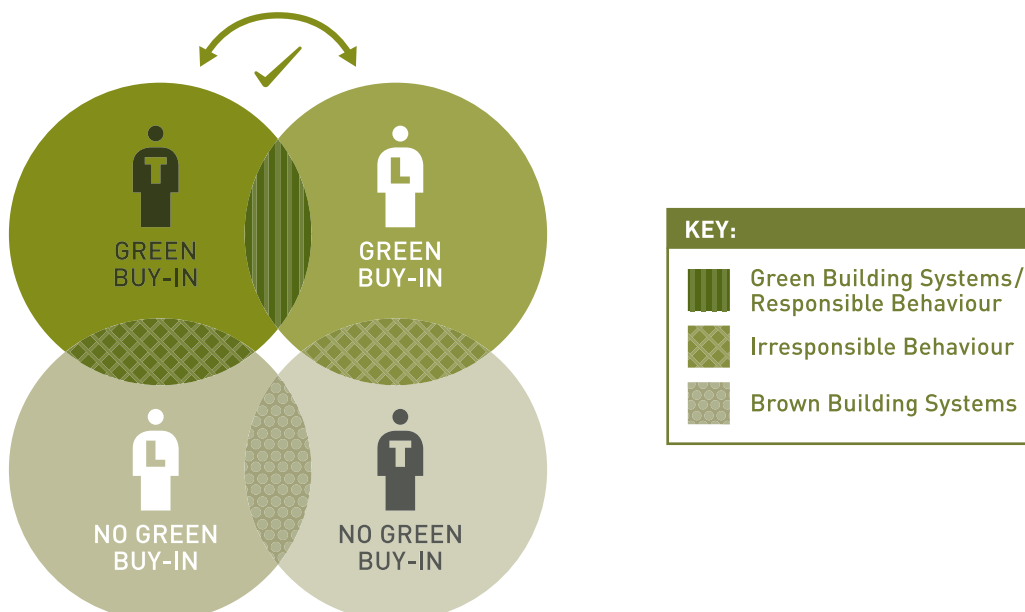
2.1 PROCESS

Perhaps the most important principle in moving towards a green lease is the negotiation of the shared benefit of owning and occupying operationally green buildings. Consensus and mutual understanding of the benefits of green buildings are critically important in securing green lease agreements.

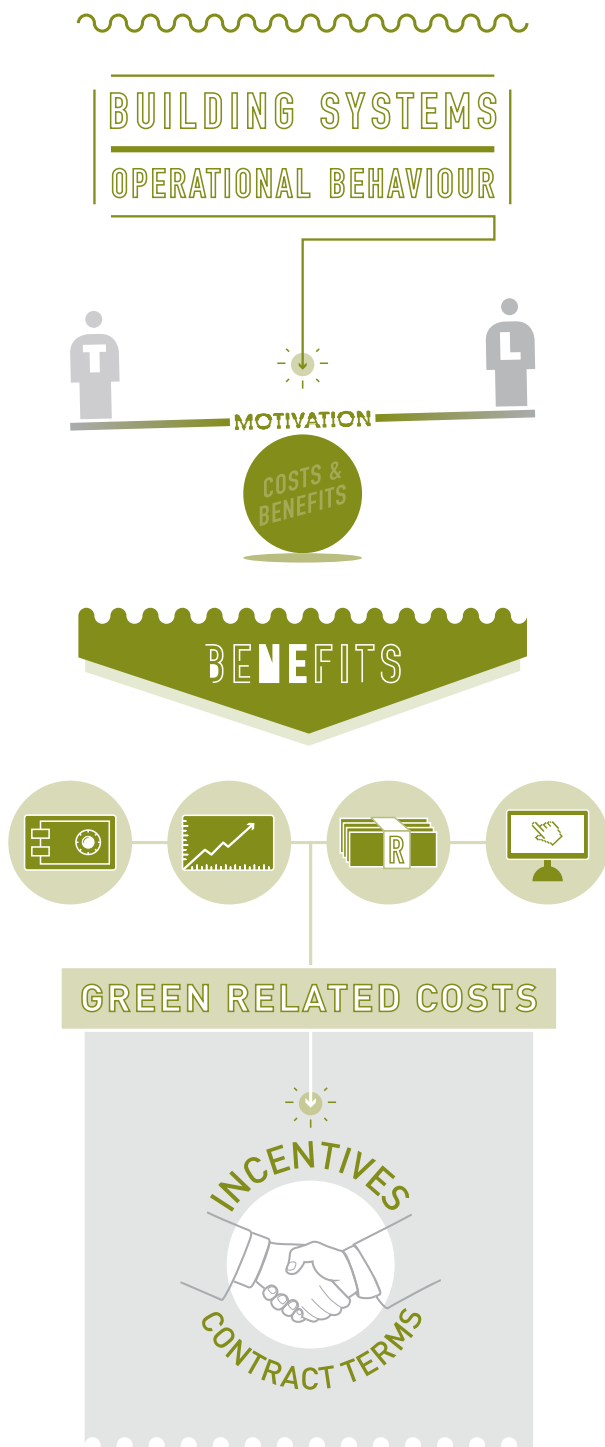
There are three key facts that must be understood by both the landlord and the tenant:

1. **There are benefits to the landlord in owning green buildings but these benefits are linked to the behaviour of tenants.**
2. **There are benefits to the tenant in occupying a green building but these benefits rely on systems provided by the landlord.**
3. **Neither the landlord nor the tenant will realise the benefits from either owning or occupying a green building if they do not understand, and act for, the shared benefit.**

This diagram illustrates how the benefits for tenants and landlords are linked when both, neither or either of the parties understands:



“A clear differentiation must be made between landlord benefits and the benefits that will be derived by tenants.”



It is only when both the building systems and the operational behaviour are aligned that both parties get the optimal outcome.

This provides a framework for:

- ▶ **Understanding the balance of motivation for the tenant and landlord (which will vary on a case-by-case basis)**
- ▶ **Understanding the costs and benefits to each party:**
 - Benefits:
 - + Asset value
 - + Productivity
 - + Operational cost savings
 - + Marketing
 - Costs:
 - + Higher initial construction/ implementation or capital costs
 - + Higher rental
- ▶ **Understanding the existence of split incentives: who implements, who pays and who benefits (this will depend on the prevailing lease type)**
- ▶ **Agreeing on contractual terms to the benefit of all parties**

The first step in discussions must therefore be to understand the balance of motivation for each party. A clear differentiation must be made between landlord benefits and the benefits that will be derived by tenants.

This understanding of the shared, but different, benefits will set the scene for negotiations over the specific lease clauses applicable to the building type and specific parties.

2.2

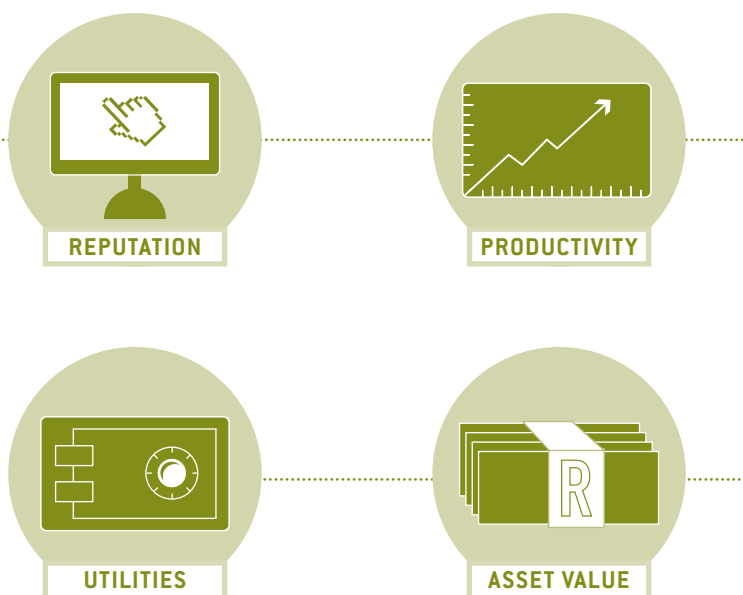
WHAT ARE THE BENEFITS OF GREEN LEASES?

The primary benefit of green leases is in owning and occupying operationally efficient and sustainable buildings.

Some of these benefits will be primarily for tenants, others primarily for landlords and some shared. However, all are interlinked and rely on both parties - and their agents and contractors and employees - acting for their shared benefit. There is also the key benefit of reduced environmental impact.

Green leases are a mechanism for regulating the delivery of this shared value, but it is important to note that the value is in the physical outcome of better buildings, rather than in the language of the lease itself.

The following benefits will now be explored in detail:





REPUTATION

One of the primary drivers of modern green building certifications (of both the asset and its operational performance) is the marketing and reputational benefit for owners and tenants of owning or occupying green buildings. Many companies and organisations use green buildings to demonstrate their corporate commitment to sustainability and as a measure of their regard for the people who

work for them. For example, Nedbank South Africa and Growthpoint Properties have made green a core reputational value and this is reflected in them occupying several Green Star SA certified buildings. Internationally, companies such as Toyota, 3M, Interface, HOK Architects, Lend Lease and Grocon have all built similar green reputations.



PRODUCTIVITY AND STAFF RETENTION

Green buildings have been shown to improve staff retention. Staff turnover is a significant cost to companies and providing cutting-edge work environments is a key retention strategy. Healthier workplaces are also an attraction to tenants as healthy staff are less likely to leave the company and take sick leave.

Productivity is a critical consideration as salaries and wages are the largest cost for most tenants. Buildings

with a focus on indoor environmental quality (IEQ) have been shown to have a positive impact on the health and productivity of building occupants.

The key elements of IEQ are:

- ▶ **Air quality (fresh air provision and removal of pollutants)**
- ▶ **Natural light**
- ▶ **Thermal comfort**

“*Productivity is a critical consideration as salaries and wages are the largest cost for most tenants.*”



PRODUCTIVITY AND STAFF RETENTION

(continued)

In her key-note address at the 2011 Annual GBCSA Convention & Exhibition, Professor Vivian Loftness (Carnegie Mellon University, School of Architecture) quoted research from a wide range of sources on the benefits of natural light and fresh air for building occupants including:

- ▶ **An 11% improvement on triple-multiplication tasks for controlled task-lighting (400 lux fixed and 300 lux variable) compared to a fixed 700 lux ambient lighting level.**¹
- ▶ **A 6.8% reduction in risk of exposure to colds for workers with indoor CO₂ less than 100ppm above outdoor levels, compared to those with levels greater the 100ppm above outdoor levels.**²
- ▶ **Reduction in hospital stays of between 26% and 41% for patients in bright, sunlit rooms compared to dull rooms.**³
- ▶ **Reduction in sick leave, hospital stay length and medical services for building occupants in naturally ventilated offices compared to air-conditioned offices.**⁴
- ▶ **Reduction in post-operative stays for patients with views of natural scenes compared to blank walls.**⁵

Other research on indoor environmental quality and productivity:

- ▶ **University of San Diego, Sustainability CBRE: Green Buildings and Productivity by Lisa Collichio**
- ▶ **Research publications by United States Green Building Council - www.usgbc.org**

“**11%
IMPROVEMENT
ON TRIPLE-
MULTIPLICATION
TASKS FOR
CONTROLLED
TASK-LIGHTING...**”

¹ Nishihara, N., Nishikawa, M., Haneda, M., and Tanabe, S. (2006) *Productivity with Task and ambient lighting system evaluated by fatigue and task performance*, Proceedings of Healthy Buildings 2006, Lisbon, Portugal. ² Myatt, TA, SL Johnston, Z Zuo, M Wand, T Keadze, S Rudnick and DK Milton (2004) *Detection of Airborne Rhinovirus and Its Relation to Outdoor Air Supply in Office Environments*. *American Journal of Respiratory and Critical Care Medicine*, v169. ³ Choi, Joonho. (2005). *Study of the Relationship between Indoor daylight Environments and Patient Average Length of Stay (ALOS) in Healthcare Facilities*, Unpublished master's thesis, Department of Architecture, Texas A&M University. College Station, TX. ⁴ Preziosi P, S. Czerniichow, P. Gehanno, and S. Hercberg (2004) *Workplace air-conditioning and health services attendance among French middle-aged women: a prospective cohort study*. *International Journal of Epidemiology*. ⁵ Ulrich, R. (1984) *View Through a Window May Influence Recovery From Surgery*. *Science*, 224(4647)

“Asset sales price for green buildings was 16% higher than that for non-green buildings.”



ASSET VALUE

The impact of green buildings on asset performance has been the topic of much recent research and investigation. Two key reports which provide data from the American and Australian markets are:

- ▶ *Doing Well by Doing Good (2009)* a paper by the Royal Institute of Chartered Surveyors (RICS), authored by Piet Eichholtz and Nils Kok of Maastricht University and John Quigley of Berkeley University.
- ▶ *Building Better Returns (2011)* an industry paper by the Australian Property Institute (API).

THE CRITICAL FINDINGS OF THESE PAPERS, RELATING TO ASSET VALUE, RENTAL PREMIUMS AND VACANCY RATES ARE:

Valuations in Australia

- ▶ Operational energy ratings (NABERS) resulted in value premiums for office buildings. A 5 star NABERS energy rating delivered a 9% premium and a 3 – 4.5 star NABERS energy ratings delivered a 2 – 3% premium.
- ▶ Green premiums are market dependent, ranging from 8% in the Sydney suburban office to 21% in the government-tenant dominated Canberra office market for buildings with a 5 star NABERS rating.
- ▶ Asset value discounts were also evident for poorly performing buildings (less than 3 star NABERS ratings) for the Sydney CBD (10% discount in value) and Canberra (13% discount in value).
- ▶ The Green Star rating showed a green premium in asset value of 12%.

Rental premiums - Australia:

- ▶ Green rental premiums of 5% were yielded for the Green Star rating.
- ▶ Rental discounts were evident in the poor NABERS energy ratings in Sydney CBD (9% discount in rents) and Canberra (6% discount in rents).
- ▶ 5 star NABERS energy rating in the Sydney CBD office market showed green rental premiums of 3% and discounts in rents of 9% in the lowest NABERS energy rating.

Rental Premiums and Asset Value - USA:

- ▶ Rental premiums of 3% were seen for Energy Star certified buildings.
- ▶ Rental premiums adjusted for increased occupancy of 6% were seen for Energy Star certified buildings.
- ▶ Asset sales price for green buildings was 16% higher than that for non-green buildings.

THESE FACTORS INDICATE A CLEAR FINANCIAL BENEFIT FOR INVESTING IN GREEN BUILDINGS THAT HAVE EXCELLENT OPERATIONAL ENERGY PERFORMANCE.



OPERATIONAL COSTS

Reduced operational costs have a material impact on the bottom line of tenants and landlords (depending on the lease structure). Given the Eskom energy price increases approved by NERSA, this is set to become an increasingly important factor in South Africa. Combined with Eskom's Demand-Side Management (DSM) programme, the drive to become resource-efficient is becoming more financially viable.

The beneficiary of the operational cost savings will depend on whether the parties are working under a net or

gross lease. But regardless of the leasing structure, the market is likely to respond more favourably to buildings that mitigate the operational costs for both tenants and landlords.

In cases where the landlord has provided efficiency systems but, tenants fail to use the building efficiently, the operational costs are likely to be high and will thus be to the tenant's financial detriment. It is therefore important for the landlord to put good operational systems in place and for the tenant to fully understand how to use these systems.

Green buildings are also more resilient in the face of degraded infrastructure. Buildings that use resources efficiently can run for longer on back-up systems in the event of power or water failures; something that is not uncommon in South Africa.

“ IT IS THEREFORE IMPORTANT FOR THE LANDLORD TO PUT GOOD OPERATIONAL SYSTEMS IN PLACE AND FOR THE TENANT TO FULLY UNDERSTAND HOW TO USE THESE SYSTEMS. ”



REDUCED EXPOSURE TO REGULATORY CHANGES

In South Africa, the Treasury have indicated their preference for a carbon tax and the new building regulations include energy efficiency requirements.

Some international precedents for this include:

- ▶ **Energy Performance Certificates in the UK**
- ▶ **Mandatory disclosure in Australia**
- ▶ **Carbon taxation in Australia**

As basic resources become increasingly scarce, it is not difficult to imagine a world where access to water is also regulated along with other environmental impacts.

Occupying and/or owning green buildings provide a buffer against these potential future regulatory changes.

“*As basic resources become increasingly scarce, it is not difficult to imagine a world where access to water is also regulated...*”

MEETING CORPORATE REPORTING REQUIREMENTS

Another benefit of owning or occupying green buildings for listed companies is the role they play in meeting the reporting requirements for the JSE Socially Responsible Investment (SRI) Index and the King III Corporate Governance Guidelines for integrated reporting.

The JSE SRI was introduced to identify listed companies that embrace the triple bottom line and allows for a broad assessment of company policies and practices against local and global standards.

2.3

TYPES OF GREEN LEASES

This Toolkit uses four levels of intensity for green leases. These provide an introduction to green leasing for tenants or landlords who are relatively new to sustainability and for those in current leasing agreements. It also aims to provide a framework for leasing in a regulatory environment that mandates building performance (such as the Australian federal government's requirement for NABERS ratings).

The content of the varying green leasing types relate to the broad categories of sustainability, but the lease requirements and penalties will vary with each successive level.



1 MEMORANDUM OF AGREEMENT

The memorandum of agreement (MOA) is the first level of formalising the move towards green buildings. With an existing lease, where it is not appropriate to renegotiate all the material terms, an MOA is the simplest way to bring sustainability into the contractual discussion.

The elements of an MOA should include:

- ▶ **Commitment from both parties to improved environmental performance**
- ▶ **Agreement on the parameters against which environmental performance will be measured**
- ▶ **Undertaking to monitor environmental performance against existing benchmarks**
- ▶ **Undertaking to develop management plans for energy, water and waste**

A contractually-binding MOA appended to an existing lease could include the provision of new sustainability clauses upon renewal of the lease. The MOA should include a timeframe for moving towards a formal green leasing agreement.

The content of the MOA and the content of the already existing lease agreement should not be in conflict.

A sample MOA is provided on page 51 of this document.

2 MUTUAL DISCLOSURE

The most accessible formal green leasing schedule is a mutual disclosure of environmental performance between the tenant and the landlord. This should build

on the contents of the MOA but also require the tenants and landlord to participate in the monitoring and reporting of environmental initiatives.

3 MUTUAL PERFORMANCE

Where improvements in operational performance are of specific importance to either party, the mutual disclosure lease can be augmented with targets for improvement for both the tenants and the landlord. It sets standards to which each party must perform.

Targets should be set using the baseline established through the monitoring and reporting of building performance. Where no building performance information exists, targets should be framed using specific improvement benchmarks.

4 MUTUAL PERFORMANCE WITH PENALTIES ('HARD' GREEN LEASE)

When there are external regulatory pressures, penalties may be applied in the event of failing to meet targets. One example of this, is the requirement for Australian Commonwealth tenants to occupy buildings with a 4.5 star NABERS rating. Failure to maintain the NABERS rating can result in significant penalties for both landlords and tenants.

Under these circumstances, both parties must understand the details of the framework for assessment

and their respective responsibilities in achieving the desired level of performance. It is critical for the auditing process to be agreed in detail before finalising a 'hard' green lease.

Caution should be exercised when introducing penalty provisions into either the MOA or lease agreement as such penalty provisions will be tested against prevailing South African legislation such as the Conventional Penalties Act 15 of 1962.

2.4 AUDITING HARD LEASES

At this stage, there is no external framework against which to assess 'hard' green leases. However, in the event of 'hard' leases being implemented, the following factors must be resolved:

- ▶ **The details and choice of regulatory framework under which performance must be achieved**
- ▶ **Third party auditors, arbitrators or attorneys who can settle disputes**
- ▶ **Forums for disclosure to maintain confidentiality**
- ▶ **Dispute resolution and mediation**
- ▶ **Relevant and enforceable penalties, which relate to the impacts of non-compliance against the external framework**

SUMMARY

The primary principle in moving toward a green lease is the negotiation of the shared benefit of owning and occupying operationally green buildings.

Three key elements must be understood by both the landlord and the tenant in negotiating shared benefits:

- ▶ **There are benefits to the landlord in owning green buildings, but these benefits are linked to the behaviour of tenants**
- ▶ **There are benefits to the tenant in occupying a green building, but these benefits rely on systems provided by the landlord**
- ▶ **Neither the landlord nor the tenant will realise the benefits from either owning or occupying a green building if they do not understand, and act for, the shared benefit**

The benefits that may accrue from the implementation of a green lease are categorised under the following:

- ▶ **Reputation**
- ▶ **Staff retention and productivity**
- ▶ **Asset value**
- ▶ **Operational cost savings**
- ▶ **Reduced exposure to regulatory changes**
- ▶ **Meeting corporate reporting requirements**

The four levels of green lease, identified by this Green Lease Toolkit, are:

- ▶ **Memorandum of Agreement (MOA) for existing leases**
- ▶ **Mutual Disclosure Green Lease**
- ▶ **Mutual Performance Green Lease**
- ▶ **Mutual Performance Green Lease with Penalties**

As the South African leasing environment matures, the uptake of more stringent green lease types will increase. However, no external framework against which to assess 'hard' green leases (Mutual Performance Green Leases – with or without penalties) currently exists. This will prevail as the principle of green leasing spreads and the demand is established.

IMPLEMENTATION



“A common goal is needed as a starting place for the journey.”

While the issues around environmentally friendly buildings may appear to be new, these issues are no different from any other aspect of building specification.

For example, a SAPOA C grade building, a SAPOA A grade building and a custom-built corporate head office each serves the same basic purpose – it provides a place for people to work. However, in each case the basic specification and the price of occupation are significantly different. There is also a marked difference in the proportionate cost-sharing between tenant and landlord. There is a tendency for the tenant to put more of their own capital into the project as the specification requirements become more sophisticated.

Just as the provisions of the currently standard lease have evolved over time, to take account of experience and to incorporate lessons learnt, it seems inevitable that the same process will apply to green lease provisions and these too will become integral to the standard lease.

A common goal is needed as a starting place for the journey.

3.1 EXPLICIT CONSENSUS

For any move toward formally recognising green issues in a lease there needs to be consensus between the parties on the minimum joint expectations and of the performance of the building. For a successful transaction, there must be an explicit agreement between the contracting parties as to the minimum requirements they will accept for green issues.

Explicit consensus is necessary to avoid a situation where one or other party does not commit to the minimums expected by the other party, resulting in the building performance not meeting mutual expectations. This could potentially have significant reputational consequences if the failure was to become public knowledge.

The green lease provisions should be a framework for achieving mutual goals, not a barrier to agreement.

The framework should spell out the expectations of the parties if the landlord aspires to a 6 star rating and the tenant is content with a 3 star performance the relationship is doomed. If the landlord is content to limit energy consumption and measure just this, but the tenant requires a formal rating there, again, is a material gap which will prevent any sensible agreement.

If there is common ground on what is to be achieved, how it is to be measured and on the broad affordability, then it would be appropriate to move to a formal contract. But landlords and tenants need to recognise that some opportunities should not be pursued if there is a disconnection in aspirations with regard to green issues.



3.2 NEW LEASES

There are two main scenarios where a new lease would be required:

1. **A new tenant to an existing building – a standard lease.**
2. **For a building to be developed for the needs of a specific tenant (including a redevelopment, relocation or an upgrade) – a tenant specific development lease. This could include re-development of existing premises such as expansions and/or reconfigurations.**

IMPLEMENTING DEVELOPMENT LEASES

While a standard lease can be revamped by adding clauses and annexures to deal with the green parameters, where the parties are contracting from the outset, it is sensible to develop an integrated contract document. But even in this case, as the subject is new, it is prudent to have a number of supplementary annexures that provide guidance on matters such as:

1. **A declaration of the intention of the parties and the agreed goals for the activities which fall under the umbrella of 'green'**
 2. **How to conduct a tenant fit-out in a manner that complements green objectives**
 3. **Methodologies and mechanisms for tracking sustainability metrics over time**
 4. **Dispute resolution protocols**
 5. **Remedies for non-compliance – in a 'hard' green lease these would be punitive in nature and would include the right to cancel for non-performance**
-



“Green issues are, in principle, no different to the multitude of other parameters and specifications debated and agreed on in leases.”

The negotiation should define how much capital the landlord is willing to commit to the green infrastructure and indicate the additional rental required for the capital cost incurred. It should also specify how any budget overruns would be dealt with.

An unambiguous agreement is needed, that stipulates which party is responsible for maintenance, repair and replacement (both the cost of the activity and doing the physical work). Green issues are, in principle, no different to the multitude of other parameters and specifications debated and agreed on in leases. Certain elements would be in the base build and included in the base rental, other elements may be regarded as tenant requirements and the funding and repayment would be negotiated between the parties.

In instances where a tenant allowance is not adequate to meet their requirements, they are required to partially fund their own installations. Similarly, the tenant's green aspirations may exceed the landlord's willingness

to fund these. If this happens, the tenant can elect to pay for the additional features. How this is dealt with at lease termination, needs to be clearly specified, and is no different to any other leasehold improvement. It is standard practice in South African leases that the tenant can leave the improvements behind without recompense or else remove and make good.

IMPLEMENTING STANDARD LEASES

All of the considerations for a development lease apply to a lease for a new tenant in an existing space, except that there will not be a design specification annexure with tenant input.

Accordingly, it is particularly important to establish that the building fabric is capable of providing the degree of 'greenness' required by the tenant or that it can be refurbished at an acceptable cost.



3.3 EXISTING LEASES

While either party can initiate discussions around how to 'go green', it seems likely that the landlord will use a Memorandum of Agreement (MOA) to begin the process of educating tenants (particularly smaller companies).

In essence, the MOA provides for a statement of intentions. It will not create legally binding obligations although it will create a moral obligation for compliance.

The MOA confirms that there is a common objective to collaborate to improve the internal and external environmental performance of the building. It requires the parties to share information relating to the building and premises.

As well as committing to share information, the MOA could set undertakings in the major areas of:

- ▶ **Energy**
- ▶ **Waste**
- ▶ **Water**
- ▶ **Plant and equipment replacement**
- ▶ **Alterations to premises**
- ▶ **Cleaning and hygiene**

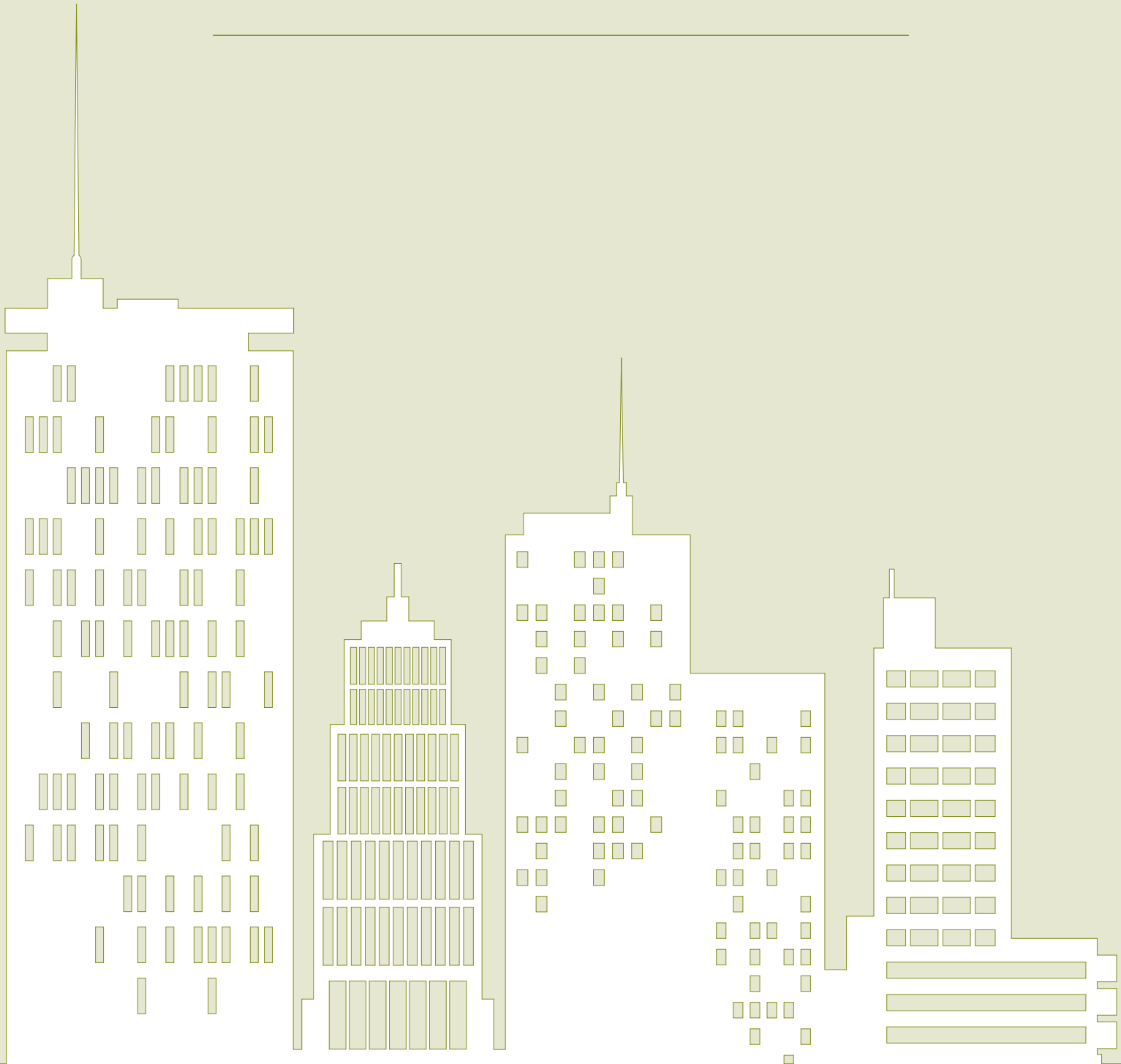
What other issues can the MOA address?

The MOA may contain explicit green provisions, that on renewal, may be incorporated into a new lease.

The MOA creates a gateway for landlords and tenants to come to grips with what it practically means to provide and operate an environmentally friendly set of premises.

The lease that incorporates the green provisions from the MOA should be used as the new standard lease for future tenants.

BEST PRACTICE CHECKLIST



These checklists are a quick reference of what to look for in a green building if you're a tenant, or what to require of a tenant if you're a landlord.

Broadly speaking, the following factors are covered under the clauses in a green lease:

- ▶ **Resource efficiency (energy, water and waste)**
- ▶ **Indoor environmental quality (thermal comfort, natural light and air quality)**
- ▶ **Monitoring and disclosure of performance**
- ▶ **Building certifications**

What factors are covered under the clauses of a green lease?

The obligations on the landlord typically cover the building attributes and contracting of facilities management. From an operational perspective, landlords often need to respond to common areas and the metering, monitoring and disclosure of building energy, water and waste performance.

The obligations on the tenant typically apply to fit-out design and to occupant's behaviour. Tenant behaviour that impacts on building performance includes internal thermal loads and occupancy densities, occupancy times and the metering, monitoring and disclosure of energy, water and waste from each tenancy.



4.1

LANDLORD'S COMMITMENTS

BUILDING CERTIFICATION

Green Star SA:

- ▶ Green Star SA Design Rating
- ▶ Green Star SA As-Built Rating
- ▶ Green Star SA Performance Rating or equivalent (currently under GBCSA scoping)

COMFORTABLE INDOOR ENVIRONMENT THAT PROMOTES HEALTH AND PRODUCTIVITY

Heating, Ventilation and Air Conditioning (HVAC) System:

- ▶ Fresh air provision
- ▶ CO₂ monitoring
- ▶ Radiant heating or cooling capability
- ▶ Regular indoor air quality testing
- ▶ Individual comfort control
- ▶ Tenant exhaust riser for photocopying rooms

Facilities Management (FM) and maintenance contracts:

- ▶ Noting acceptable paints, adhesives, sealants and carpets for use in the building
- ▶ Demonstrating HVAC filter maintenance and cleaning
- ▶ Live monitoring of space conditions with FM response requirements

LIGHTING

- ▶ Demonstrated lighting levels below 400 lux
- ▶ Access to external views and daylight with glare control
- ▶ Natural lighting levels across the floor plate when conditions are appropriate

- ▶ High frequency ballasts
- ▶ Motion and daylight sensors
- ▶ Energy efficient fixtures

ENERGY USE

- ▶ Energy management guarantee from the building owner and manager
- ▶ External operational commitment (future operational tool)
- ▶ Metering, monitoring and reporting of tenant energy use
- ▶ Metering, monitoring and reporting of base building energy use
- ▶ Establishment of performance targets for both tenancy and base building
- ▶ Real-time disclosure of performance against targets
- ▶ Contracts and reporting mechanisms for regular maintenance and tuning of building systems

TRANSPORT OPTIONS

- ▶ Access to public transport
- ▶ Secure bicycle storage
- ▶ Shower, changing and locker facilities
- ▶ Preferential parking for electric or hybrid vehicles and motorbikes

POTABLE WATER

- ▶ Water management guarantee from the building owner and manager
- ▶ External operational commitment (future benchmarking tool)
- ▶ Rain water harvesting and grey water re-use
- ▶ Metering, monitoring and reporting of tenant water use
- ▶ Metering, monitoring and reporting of base building water use
- ▶ Establishment of performance targets for both tenancy and base building
- ▶ Real-time disclosure of performance against targets
- ▶ Contracts and reporting mechanisms for leak detection with regular maintenance and tuning of building systems

RECYCLING FACILITIES

- ▶ Recycling storage facilities for paper, glass, metal and plastic
- ▶ Systems for recycling e-waste (fluorescent lights, toner cartridges, batteries, mobile phones)
- ▶ Monitoring and reporting of waste volumes by type
- ▶ Energy recovery from waste systems
- ▶ Waste management plan for the building

CLEANING SERVICES

Cleaning service contracts which:

- ▶ Require the use of solvent and hydrocarbon-free cleaning products
- ▶ Specify compliance with waste management and energy efficiency policies

BUILDING MANAGEMENT

- ▶ Provision of a building users' guide to tenants
 - ▶ Environmental management plan for the building
-

4.2

TENANT'S COMMITMENTS: FIT-OUT DESIGN

CERTIFICATIONS

- ▶ Green Star SA Interiors tool (currently under GBCSA scoping)
- ▶ GBCSA Energy & Water Benchmarking tool

ENERGY USE

- ▶ Lighting system type:
 - Energy efficient fluorescent with electronic ballasts
 - Direct-indirect lighting
 - Task lighting
- ▶ Special purpose lighting (CFL and LED)
- ▶ Lighting controls:
 - Zoning
 - Daylight linking
 - Occupancy sensing
- ▶ A guarantee to not exceed a reasonable or mutually-agreed upon amount of peak energy or maximum monthly energy use

FLOORS, WALLS, CEILINGS, WORKSTATIONS, FURNITURE AND JOINERY

- ▶ Retain existing finishes, minimise new fit-out items
- ▶ Use recycled materials, FSC certified timber and modular systems
- ▶ Select environmentally responsible materials
- ▶ Use composite timber products with low formaldehyde content
- ▶ Use low Volatile Organic Compound (VOC)-emission adhesives, sealants, paints and carpets

APPLIANCES, FITTINGS AND FIXTURES

- ▶ Use energy- and water-efficient appliances
- ▶ Water-efficient fittings and fixtures (on taps, toilets, urinals and showers)
- ▶ Use appliances with automatic turn-off switches

SUPPLEMENTARY AIR-CONDITIONING

- ▶ Avoid supplementary air-conditioning where possible
- ▶ Where in use, supplementary air-conditioning is designed for optimal thermal comfort, air quality and energy efficiency

INDOOR PLANTS

- ▶ Indoor plants for each work setting
- ▶ Indoor plants with low/no water requirements

WASTE MANAGEMENT

- ▶ Office waste separation (paper, glass, metal, plastic, food and general)
 - ▶ Fit-out construction waste: demolition waste (at an agreed percentage) to be diverted from landfill
 - ▶ Contractors and sub-contractors to adhere to a waste management plan
-

4.3

TENANT'S COMMITMENTS: SPACE MANAGEMENT

POLICIES AND PROCEDURES

- ▶ Sustainability policy including:
 - Targets for energy, water and waste performance
 - Indoor environmental quality requirements
 - Mechanisms for building awareness, accountability and participation
 - Education and training strategy for building users
- ▶ Environmental management plan - describing the environmental procedures for the space
- ▶ Waste management plan - describing the waste management commitments and strategies
- ▶ Procurement plan - describing the purchasing requirements

PROCUREMENT AND EQUIPMENT SELECTIONS

- ▶ Equipment with energy certification (Energy Star or equivalent) for:
 - Computers, laptops and monitors
 - Copiers
 - Scanners
 - Servers
 - Audio-visual equipment
- ▶ Video-conferencing facilities
- ▶ Paperless faxing
- ▶ Office paper to have high recycled content
- ▶ Refilled or recycled toner cartridges for printers and copiers

TENANT EDUCATION

- ▶ A simple building users' guide provided by the design team will help tenants use the environmental features installed in the building, showing them how they can contribute towards environmental sustainability in their decisions such as car-pooling to work, recycling their waste products and efficiently using dual-flush toilets

SERVICES MANAGEMENT

- ▶ Regular checks of lighting and HVAC controls
- ▶ Regular cleaning to avoid dust build-up on lights and AC systems
- ▶ Seasonal AC settings for energy efficiency and comfort
- ▶ Occupancy and temperature controls on supplementary AC systems

WASTE MANAGEMENT

- ▶ Waste reduction strategies:
 - Double-sided printing default
 - Paper re-use
 - Purchasing procedures
- ▶ Secure document destruction processes linked to recycling efforts, not landfill
- ▶ Recyclables separated in accordance with the building waste management plan
- ▶ Management tools in place to engage staff with recycling and waste minimisation

TRANSPORT

- ▶ Reduction in parking provision / demand
- ▶ Management tools to reduce travel:
 - Flexible work arrangements
 - Video-conferencing
 - Office pool cars
 - Taxi agreements for staff meeting attendance
- ▶ Public transport facilitation (via guides or provision of shuttle services)

CLEANING AND MAINTENANCE

- ▶ Cleaning contracts require the use of solvent- and hydrocarbon-free cleaning products
- ▶ Cleaning contracts require compliance with the building sustainability policy and waste, energy and environmental management plans
- ▶ Cleaning contracts note any specific sustainable products or initiatives and relevant maintenance procedures
- ▶ Office plants are kept free of herbicides, fungicides, insecticides or pesticides
- ▶ VOC-based cleaning products must contain low concentrations of VOCs (volatile organic compounds) of less than 10% benzene, toluene, xylene and / or trichloroethane

MEMORANDUM OF AGREEMENT

1. MEMORANDUM OF AGREEMENT (“MOA”)

- 1.1 The Landlord currently owns the Building [to be defined] or sectional titled portion thereof and the Tenant currently occupies the Premises [to be defined] under the Lease.
- 1.2 The Parties agree to work together collaboratively to reduce the adverse environmental impact of the Building, the Premises and any services thereof.
- 1.3 The purpose of this MOA is to provide an agreed framework for the pursuit of this common goal. For ease of reference, this common goal is referred to as “improving the environmental performance”.
- 1.4 The Parties agree to consider each of the possible interventions and actions set out below and in Schedules 1, 2 and 3. Using the Building Management Committee (described below) they will develop agreed objectives and will implement measures to achieve these objectives in an agreed time frame.
- 1.5 The Landlord will encourage any other occupiers in the Building to enter an MOA in the same terms as this MOA in order to improve the overall environmental performance of the Building.
- 1.6 This MOA is not legally binding (save where expressly stated to be so). However, the Parties agree to work together in good faith (but without legal obligation) for the lease term and from the date of this MOA to implement measures to achieve the aims and objectives which are set out in Schedules 1, 2 and 3.

2. DATA SHARING

- 2.1 Being able to measure performance is an important part of understanding what can be improved and ensuring that progress is being made toward improving environmental performance. Accordingly, the Parties agree to share with each other all data and relevant information they have in relation to the Building and the Premises (in as much detail as is available to them) in respect of:
 - **Electricity consumption**
 - **Water consumption**
 - **Waste generation, management and recycling**
 - **Maintenance of plant and equipment used in connection with the above**

- 2.2 Such data and relevant information will be provided [quarterly] [monthly] as a minimum in a form or methodology which the Parties agree upon as being appropriate for the purpose.
- 2.3 All such information will be provided in a form which allows meaningful and useful analysis.
- 2.4 An industry accepted methodology, agreed by the Parties, will be used to ensure consistency of data, such methodologies include but are not limited to:
- **IPD Environment Code**
 - **Global Reporting Initiative**
 - **GBCSA Operational Performance Tools**

3. BUILDING MANAGEMENT COMMITTEE

- 3.1 The Parties will set up a Building Management Committee which will meet [annually] [quarterly] [on an ad hoc basis].
- 3.2 The Building Management Committee will comprise representatives of the Landlord, the Tenant, any managing agent employed by the Landlord or Tenant and other persons involved from time to time in the operation or management of the Building and the Premises as the Parties deem appropriate.
- 3.3 The Building Management Committee will:
- a. Review:**
- + The data and other information shared by the Parties under paragraphs 2.1-2.4
 - + The environmental performance of the Building generally
 - + Any changes to the Building, the Premises or its operation which may affect the environmental performance of the Building or the Premises in the future
 - + Any forthcoming changes in law or practice which may be relevant to the environmental performance of the Building and the Premises.
- b. Seek to agree an environmental management plan for the [Building] [Premises] or [review the Landlord's environmental management plan for the Building] and agree upon annual targets for:**
- + The reduction of energy consumption, carbon emissions, water use and waste at the Building and the Premises
 - + The increase, where possible, in the use of plant and equipment, servicing the Building and the Premises, which is based on renewable technologies, renewable energy, recycling of waste, recycled water and captured rainwater
 - + Other measures that are practical to adopt in order to improve the environmental performance of the Building and the Premises and the operation thereof.

c. Produce an annual statement, which:

- + Contains a summary of the energy and water use and the waste generated by the Building and the Premises
- + Sets out the targets agreed pursuant to (b) above
- + Sets out progress towards achieving the targets agreed for previous years and identifies any other achievements (for example, reductions in fossil fuel consumption).

3.4 The Parties will provide each other with the names of the person(s) within their organisations and in any managing agents' organisations who should be contacted on issues relating to the environmental performance of the Building, Premises or Operation.

4. AGREEMENT UPON BUDGETS

4.1 Improving the environmental performance of the Building / Premises will require initial expenditure. Part of the deliberations of the Management Committee will be to set budgets against each of the agreed actions and interventions. It will also give consideration to any measurable life cycle cost savings which will accrue. It will consider to which party the benefits accrue.

4.2 The parties will agree a budget allocation.

5. CO-OPERATION ON SCHEDULE 1 MEASURES

5.1 The Parties will work together to consider and seek to implement, if appropriate, measures to implement the aims and objectives which the Management Committee has agreed to pursue (those of the aims and objectives, set out in Schedule 1, against which a tick has been placed).

5.2 The Parties will co-operate with each other in complying with the requirements of any Carbon Reduction Commitment scheme to which either of them may be subject and which affects the Building and/or the Premises.

6. MANAGING AGENTS

6.1 The Parties will require their respective managing agents or facilities manager, if appointed, to implement the principles and objectives set out in this MOA.

7. NEW OWNERS AND OCCUPIERS

- 7.1 If the Landlord disposes of its interest in the Building, the Landlord will encourage the new owner to enter into a similar MOA with the Tenant and with other occupiers of the Building.
- 7.2 If the Tenant cancels the lease or sublets the Premises, the Tenant will encourage any new occupier of the Premises to enter into a similar MOA with the Landlord.

8. RENEWAL OF THE LEASE

- 8.1 At the end of the the lease and concurrent MOA (referred to in paragraph 1.6), the Parties will review the progress which has been made in improving the environmental performance of the Building and the Premises and, unless there is good reason to the contrary, the Parties will renew this MOA for a further period of [twelve] months or such other period as is agreed between them at the time, understanding that the aforementioned period will run concurrently with the lease period stated in the Lease as referred to in 1.1 above.
- 8.2 Should the lease be due for renewal or re-negotiation, the Parties agree to incorporate the MOA conditions into the lease, formalising a binding undertaking to improve the environmental performance as part of the Lease agreement.

9. GENERAL

- 9.1 It is acknowledged that this MOA is not supplemental or collateral to the lease and is not to be taken into account when construing the provisions of the Lease and that the provisions of the Lease shall prevail over anything in this MOA.
 - 9.2 Each Party agrees that information provided to the other pursuant to paragraph 2 of this MOA shall be used only for the purposes of implementing this MOA and for no other purpose whatsoever and that they shall keep all such information confidential and will not disclose it to any other person (save their agents, consultants or contractors who need to have such information for the purposes of this MOA other than if required to do so by law or with the written consent of the other Party.)
-

SCHEDULE 1: BUILDING PERFORMANCE COMMITMENTS

1. BUDGET AGREEMENT

- 1.1 In accordance with paragraph 4.2 of the MOA, all funding and repayment agreements for the following initiatives to be agreed as part of the deliberations of the Management Committee.

2. BUILDING CERTIFICATION AND AUDITING

- 2.1 Where practical and commercially possible, the base building refurbishment is to achieve a Green Star SA Design rating.
- 2.2 Where eligible, the tenancy is to achieve a Green Star SA Interiors rating (not yet under development, but equivalent tool in Australia).
- 2.3 Where practical and commercially possible, the whole building will seek to achieve an appropriate Green Star Operation rating (under development).
- 2.4 Under the mandate of the building management committee (paragraph 3 above), [the Landlord] agrees to appoint a suitably qualified person to undertake an audit or assessment of the environmental performance of the Building and the Premises and to advise upon a strategy for implementing the aims and objectives set out in this MOA.

3. COMFORTABLE INDOOR ENVIRONMENT THAT PROMOTES HEALTH AND PRODUCTIVITY

- 3.1 Where existing equipment has capacity, fresh air provision is to be increased to occupied areas.
- 3.2 Where existing equipment has capacity, CO₂ monitoring is to be installed in high density areas to maintain air quality.
- 3.3 Where compatible with existing equipment, radiant heating or cooling capability is to be provided to occupied areas.
- 3.4 Regular indoor air quality testing is to be undertaken by the building owner for review by the tenant.
- 3.5 Where compatible with existing equipment, individual comfort control is to be provided to building users.
- 3.6 Dedicated exhaust is to be provided for copy rooms.

- 3.7 FM and Maintenance contracts to be amended to include:
- **Requirement for replacement paints, adhesives, sealants and carpets for use in the building to be low VOC.**
 - **Requirement for regular HVAC filter maintenance and cleaning is to be included in FM contracts (if absent).**
 - **Live monitoring of space conditions to be installed via the BMS (if present) with alarms for poor thermal comfort to trigger FM action.**
- 3.8 Landlord to provide artificial lighting review and refurbishment to:
- **Deliver lighting levels below 400 lux**
 - **Provide high frequency ballasts.**
- 3.9 Tenant to provide:
- **Where possible, occupant access to external views and daylight to be optimised.**
 - **Glare control blinds to be fitted to facades adjacent to occupied areas.**

4. ENERGY USE

- 4.1 Each of the Parties agrees to energy consumption targets and the real-time disclosure of performance against the targets.
- 4.2 Each of the Parties agrees to achieve certification under an appropriate Green Star SA operational rating tool.
- 4.3 Separate metering facilities for individual utilities for the Premises and the common parts and for other occupiers and special uses.
- 4.4 Each of the Parties agrees to disclosure of energy performance and targets in real-time where such capacity exists.
- 4.5 Where appropriate, the use of smart or automatic metering technology in the Building and/or the Premises.
- 4.6 Where appropriate participate in local and/or communal schemes for energy generation or provision.

5. TRANSPORT OPTIONS

- 5.1 Agreement to develop a green travel plan: taking into account public transport, lift sharing, alternative fuel vehicles and cycling.
- 5.2 Landlord is to provide secure bicycle storage of building for both tenants and visitors.
- 5.3 Landlord is to provide showers, changing rooms and locker facilities.
- 5.4 Both Parties to agree preferential parking for electric vehicles and motorbikes.

- 5.5 The Parties to co-operate in the establishment of shuttle links, where practicable, to any local transportation hubs.

6. POTABLE WATER

- 6.1 Each of the Parties agrees to water consumption targets and the real-time disclosure of performance against the targets.
- 6.2 Each of the Parties agrees to co-operate to obtain certification under a future Green Star SA operational rating tool.
- 6.3 The Landlord shall install high efficiency fixtures, fittings, appliances and control technologies in the Building and the Premises.
- 6.4 The Landlord undertakes to enter into contracts for leak detection with regular maintenance and tuning of building systems.
- 6.5 Each of the Parties agrees to support, where possible, the use of treated and recycled water, captured rain water and grey water, where potable water is not a necessity.

7. RECYCLING FACILITIES

- 7.1 Under the mandate of the building management committee (paragraph 3 above), both parties are to develop a waste management plan for the building, including implementation responsibilities.
- 7.2 The Landlord agrees to set aside adequate space and facilities for the storage of recycling (paper, glass, metal and plastic).
- 7.3 Systems for recycling e-waste are to be provided by the Landlord (fluorescent lights, toner cartridges, batteries, mobile phones)
- 7.4 Both parties agree to the monitoring and reporting of waste volumes by type.
- 7.5 Each Party agrees that on refurbishment and fit-out it shall require contractors to work to an environmental management plan and recycle 80% of construction waste.

8. CLEANING SERVICES

- 8.1 The parties agree to require cleaning service contracts to comply with the Environmental Management, Waste Management and Procurement Plans for the Building or Premises.
- 8.2 The parties agree to require cleaning service contracts to make use of solvent-free, low TVOC and hydrocarbon-free cleaning products.

- 8.3 The parties agree to require cleaning service contracts to note any specific 'green' products or initiatives and relevant maintenance procedures
- 8.4 Each Party is to require that indoor plants are kept free of herbicides, fungicides, insecticides or pesticides.

9. BUILDING MANAGEMENT

- 9.1 The Management Committee shall, as part of its mandate, procure the provision of the following documentation:
- **Provision of a building users' guide to tenants**
 - **Environmental management plan for the building**
 - **Waste management plan for the building**
-

SCHEDULE 2: TENANT GUIDELINE: FIT-OUT DESIGN

1. BUDGET AGREEMENT

- 1.1 In accordance with paragraph 4.2 of the MOA, all funding and repayment agreements for the following initiatives to be agreed as part of the deliberations of the Management Committee.

2. LIGHTING

- 2.1 The Tenant undertakes that it shall comply with the following specifications in respect of any work it commissions on the premises:
- **Lighting system type:**
 - + Efficient fluorescent with electronic ballasts
 - + Direct-indirect lighting
 - + Task lighting
 - + Special purpose lighting (CFL and LED)
 - **Lighting controls:**
 - + Zoning
 - + Daylight linking
 - + Occupancy sensing

3. FLOORS, WALLS, CEILINGS, WORKSTATIONS, FURNITURE AND JOINERY

3.1 The Tenant undertakes that it shall comply with the following specifications in respect of any work it commissions on the premises:

- **Retain existing finishes, minimise new fit-out items**
- **Use recycled materials, FSC certified timber and modular systems**
- **Select “eco-preferred” materials (e.g. linoleum instead of vinyl)**
- **Use composite timber products with low formaldehyde content**
- **Use low-emission adhesives, sealants, paints and carpets**

4. APPLIANCES, FITTINGS AND FIXTURES

4.1 The Tenant undertakes that it shall comply with the following specifications in respect of any work it commissions on the premises:

- **Use energy and water efficient appliances**
- **Water efficient fittings and fixtures (taps, toilets, urinals, showers)**
- **Avoid hot water boilers (use kettles with automatic-off switches)**

5. SUPPLEMENTARY AIR CONDITIONING (AC)

5.1 The Tenant undertakes that it shall comply with the following specifications in respect of any work it commissions on the premises:

- **Avoid supplementary AC where possible**
- **Where not possible, supplementary AC design for optimal thermal comfort, air quality and energy efficiency**

6. INDOOR PLANTS

6.1 The Tenant undertakes that it shall comply with the following specifications in respect of any work it commissions on the premises:

- **Indoor plants for each work setting**
- **Indoor plants with low water requirements**

7. WASTE MANAGEMENT

7.1 The Tenant undertakes that it shall comply with the following specifications in respect of any work it commissions on the premises:

- **Office waste separation (paper, glass, metal, plastic, food and general)**
-

SCHEDULE 3: TENANT GUIDELINE – MANAGEMENT

1. POLICIES AND PROCEDURES

1.1 The Tenant undertakes that it shall comply with the following specifications in respect of any work it commissions on the premises:

- **Sustainability policy including:**
 - + Targets for energy, waste and waste performance
 - + Indoor environmental quality requirements
 - + Mechanisms for building awareness, accountability and participation
- **Environmental management plan - describing the environmental procedures for the office**
- **Waste management plan - describing the waste management commitments and strategies**
- **Procurement plan - describing the purchasing procedures**

2. PROCUREMENT AND EQUIPMENT SELECTIONS

2.1 The Tenant undertakes that it shall comply with the following specifications in respect of any work it commissions on the premises:

- **Equipment with energy certification (Energy Star or equivalent) for:**
 - + Computers, laptops and monitors
 - + Copiers
 - + Scanners
 - + Servers
 - + Audio-visual equipment
- **Video-conferencing facilities**
- **Paperless faxing**
- **Office paper to have high recycled content (>60%)**
- **Refilled or recycled toner cartridges for printers and copiers**

3. SERVICES MANAGEMENT

3.1 The Tenant undertakes that it shall comply with the following specifications in respect of any work it commissions on the premises:

- **Regular checks of lighting and HVAC controls**
- **Regular cleaning to avoid dust build-up on lights and air conditioning (AC) systems**
- **Seasonal AC settings for energy efficiency and comfort**
- **Occupancy and temperature controls on supplementary AC systems**

4. WASTE MANAGEMENT

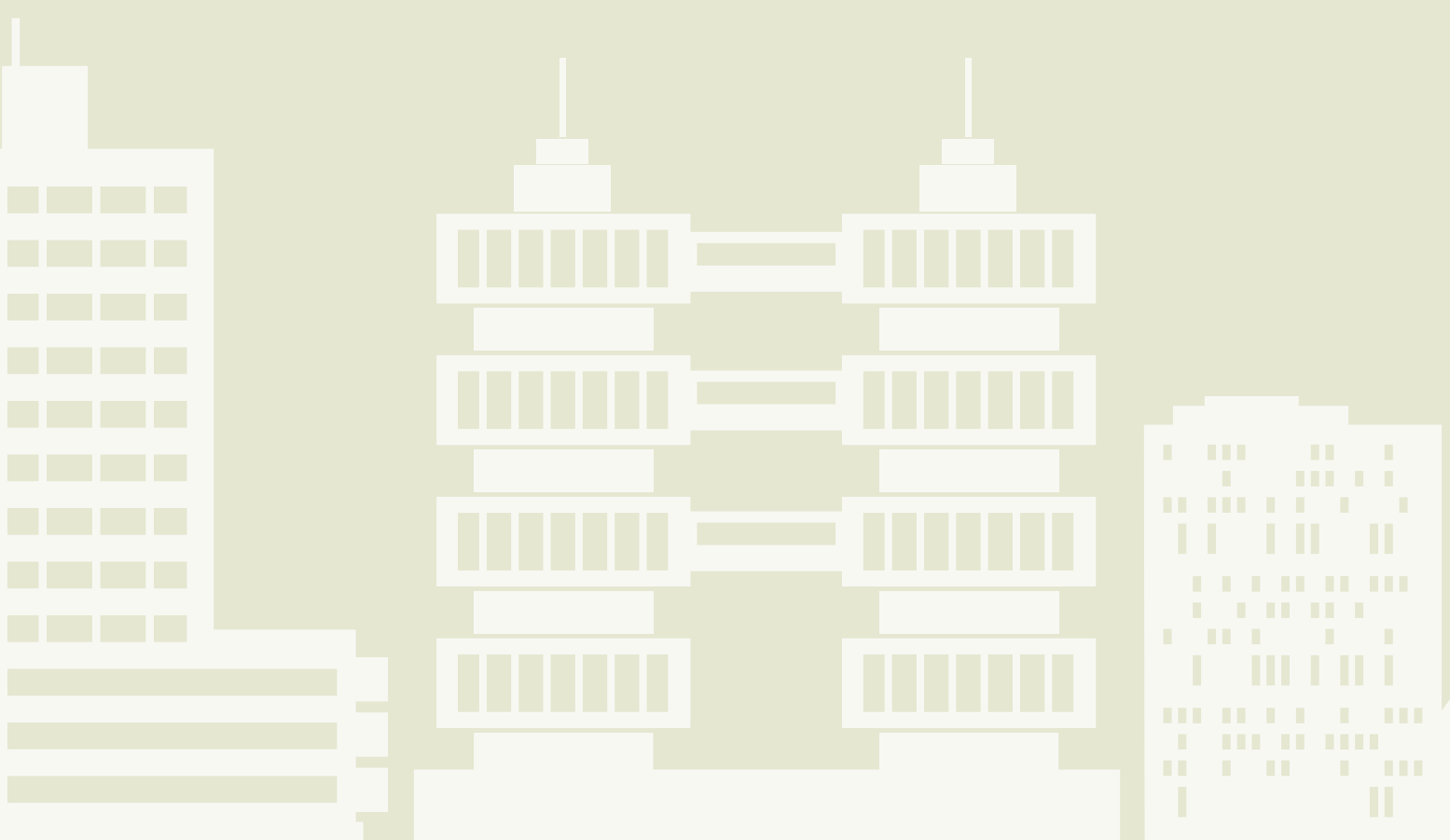
4.1 The Tenant undertakes that it shall comply with the following specifications in respect of any work it commissions on the premises:

- **Waste reduction strategies:**
 - + Double-sided printing default
 - + Paper re-use
 - + Purchasing procedures
- **Secure document destruction processes linked to recycling efforts, not landfill**
- **Recyclables separated in accordance with the building Waste Management Plan**
- **Management tools in place to engage staff with recycling and waste minimisation**

5. TRANSPORT

5.1 The Tenant undertakes that it shall comply with the following specifications in respect of any work it commissions:

- **Reduction in parking requirements**
 - **Management tools to reduce travel:**
 - + Flexible work arrangements
 - + Video-conferencing
 - + Office pool cars
 - + Taxi agreements for staff meeting attendance
 - **Public transport facilitation (guides or shuttle services)**
-





3.5%^{*}

↓ LOWER ↓
VACANCY
RATES
IN GREEN
BUILDINGS

13%^{*}

↑ HIGHER ↑
RENTAL
RATES
IN GREEN
BUILDINGS

2.8^{*}

↓ FEWER ↓
SICK DAYS
PER YEAR
IN GREEN
BUILDINGS

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*Do Green Buildings Make Dollars and Sense? · 2009 USD-BMC / CBRE Study