



Centre for Research in the Built Environment

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Centre for Research in the Built Environment

The Centre for Research in the Built Environment (CRiBE) is located within the Welsh School of Architecture, Cardiff University. CRiBE has pioneered research and established an international reputation in the fields of environmental design advice, energy efficiency of buildings and urban sustainable development.

CRiBE comprises an established multi-disciplinary group of environmental design specialists including architects, engineers, planners and social and environmental scientists. This brings a uniquely holistic inter-disciplinary approach to effective and sustainable design, construction and operation of the built environment.

CRiBE plays a major role in informing the future of building design, and also in defining and developing the whole area of urban sustainability.

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- » Building contractors
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- » Developers
- » Estate managers
- » Fuel industry
- » Housing managers
- » Local authorities
- » Building operators

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CRiBE has an established record of industrial collaboration, serving both national and international organisations, including:

- » Baglan Energy Park
- » Cardiff City Council
- » DETR
- » Hanover Trade Fair
- » Millennium Dome
- » National Botanic Garden for Wales
- » National Assembly for Wales
- » Newcastle City Council, Australia
- » United Development Company, Qatar
- » Ove Arup and Partners
- » Wales Millennium Centre



GREENING THE COMMERCIAL PROPERTY SECTOR: A GUIDE FOR DEVELOPING AND IMPLEMENTING BEST PRACTICE THROUGH THE UK LEASING PROCESS.

GOOD PRACTICE GUIDE ©

Project team & acknowledgements

This guidance document augments recommendations provided in "Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements" published by CRiBE in 2007 (Langley et al) [I] [2]. The work undertaken to develop this new guidance document has been funded by the Welsh Assembly Government and kindly supported and managed in partnership with the British Council for Offices, Eversheds and RICS. CRiBE is grateful to the following members of the team for their kind support and advice.

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Greening the Commercial Property Sector: A guide for developing and implementing best practice through the UK leasing structure

Angela Langley and Lara Hopkinson

Centre for Research in the Built Environment

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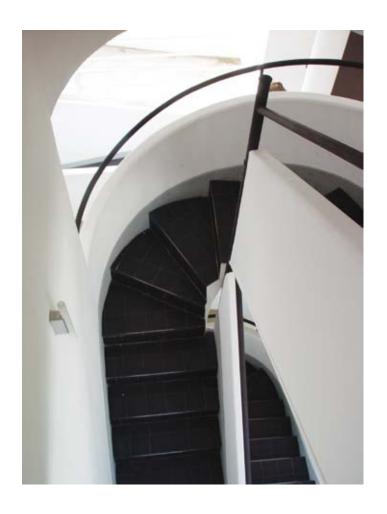
EXECUTIVE SUMMARY

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Commercial buildings are significant consumers of energy and can have a significant impact on the environment if not managed in an efficient way. More stringent legislation in the UK combined with the introduction of Government schemes such as Carbon Reduction Commitment and Energy Performance Certification, is increasing the pressure on both occupiers and landlords to address these issues.

Incorporating good environmental management at lease negotiation stages can ensure a fair yet sustainable approach is met for both parties, providing bottom-line business benefits whilst mutually mitigating environmental impact. In 2007, Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements, (Parts I & 2) [I] [2] was published based on 7 years pioneering research undertaken in the Centre for Research in the Built Environment by Langley et al [3]. Working with commercial landlords and tenants alongside project partners Eversheds, the Environment Agency Wales, RICS Foundation and King Sturge, recommendations were developed and summarised in the publication. Consultations and trials undertaken throughout 2007 and 2008 in Newport south Wales identified that the method provided an innovative approach for commercial landlords and tenants but due to the complexity of varying commercial structures currently within the UK, further specific guidance was required regarding methods to implement the recommendations. This document provides further advice that is linked to the 2007 publication but also builds upon this by referring to other work underway in the UK. Furthermore, studies on similar work underway in Australia, USA, Canada and New Zealand have been identified and also summarised in this guide. Whilst some lessons can be learnt from the methods adopted overseas, it is clear that the complexity of the UK commercial market requires more flexibility to encompass a range of commercial structures and building types.

Before embarking on shared obligations between landlord and tenant however, landlords should be aware of potential opportunities to improve existing environmental performance within their building. Once identified, responsibilities and obligations for addressing these issues can then be discussed and agreed with tenants. Advice is therefore offered in this guidance document to assist with the identification of opportunities and methods that can be employed to address them.





FOREWORD

Commercial property is estimated to contribute around a fifth of the country's carbon emissions and it is estimated that by 2050, approximately 60% will be arising within our existing building stock.[4]

There are numerous reasons why commercial landlords and tenants should consider their responsibilities to improve their environmental performance, particularly in relation to energy consumption. Some of these reasons are provided below, and whilst the list is not exhaustive, they provide bottom-line business reasons, that aim to reduce carbon emissions from the built environment and improve environmental performance.

- » A second Energy Performance of Buildings Directive (EPBD) is being proposed under consultation and will extend the scope of the current Directive. It aims to further promote more cost-effective improvements in the energy performance of buildings and will also require regulation of information-based instruments. It is anticipated that the amended version will be adopted in 2010 and whilst the objectives and main principles of the current EPBD remain the same, this second draft will encompass new provisions to include both new and large existing buildings that undergo major renovation or refurbishment.
- » The introduction of new policies and legislation will inevitably follow in the UK and will drive owners of commercial buildings and tenants to adopt fiscal and economic measures to reduce carbon emissions and to further improve environmental performance. To ensure compliance by both parties will require more stringent management methods including metering and monitoring which can be incorporated and managed through the leasing structure. [5]
- » The EPBD led to the requirement for Energy Performance Certificates (EPCs). These certificates are based on the energy efficiency of a building and are required when buildings are sold, let or renovated. EPCs give the equivalent of a 'fridge rating' for buildings to indicate their energy efficiency and level of carbon emissions. Ratings are based on the performance potential of the building and its services. The aim is to offer information to possible tenants or purchasers of the building so that they can factor energy performance into their decision making about occupation or investment. On sale or letting, a free copy of the EPC should be provided along with other written information. This might be a single EPC, where the whole building is being let, but might have to be tailored where the building is being part let especially where that part of the building has separate heating, lighting or ventilation systems.
- » Carbon Reduction Commitment (CRC), which was announced in the 2007 Energy White Paper, is set to come into force in 2010. The CRC is a mandatory emissions trading scheme, targeting emissions from around 5,000 large organisations including supermarket chains, hotel chains, office-based corporations, government departments and large local authorities. It is planned to cover all organisations whose electricity consumption through half hourly meters is greater than 6,000MWh/yr equivalent to an annual electricity bill of more than £500,000. Note that this is an equivalent; electricity, gas, fuel and oil (other than transport fuels) are all covered. As with any trading scheme the aim is that those achieving energy savings will have excess allowances to sell to those whose operations are struggling to remain within their allowances.

This Good Practice Guide aims to encourage owners and occupiers to consider the adoption of a more sustainable approach, providing shared benefits, through the commercial lease structure. Adoption of a more formalised method for sharing obligations will facilitate communication routes for data collation and as such aid the environmental improvement of the building and corporate image.

Greening the Commercial Property Sector: A guide for developing and implementing best practice through the UK leasing process.

Good Practice Guide ©

1.0 Introduction

When the landlord of a building and a prospective tenant embark on the development of a commercial lease agreement, certain clauses can be included, withdrawn or amended by agreement of both parties. Adoption of best environmental practice into the commercial lease agreement can provide a number of business benefits whilst assisting parties to meet their obligations for reducing resource consumption and improving the environmental performance and energy efficiency of the building. This could then potentially

- » Provide bottom-line business benefits for both parties
- » Improve corporate image
- » Encompass aspects of relevant environmental legislation and UK Building Regulations

However, variations in leasing arrangements within the UK and differing business priorities may prove difficult for encompassing green clauses into lease contracts across the board. Guidance provided in this document therefore covers a variety of options that can be discussed and agreed between landlord and tenant according to business priorities and starting point.

This guide has been developed following trials undertaken in Newport in 2007 using the Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements publications [1] [2]. Recommendations provided build upon issues and feedback received during the trials and it also encompasses work undertaken by others in the UK since these trials and work undertaken outside of the UK. It is therefore recommended that this document is read in conjunction with Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements (Parts 1 & 2)

I.I What is a green lease?

A green lease can be considered a formal, sustainable method for commercial landlords and tenants to adopt mutual obligations aimed at improving environmental performance and energy efficiency whilst minimising adverse impacts on the environment. Obligations within a green lease can cover aspects of the supply, maintenance and operation of a building as well as considering softer aspects such as social and ethical issues [6]

Whilst adoption of green leases in the commercial sector is a relatively new concept, substantial work is already underway within the UK to help landlords and tenants adopt an appropriate method that can provide

mutual benefits. Whatever method is adopted however, it must prove to be rewarding to both parties and offer flexibility to allow progressive implementation. It must also acknowledge any existing best practice schemes in operation and encompass opportunities to improve further without compromising beneficial use of the building by the occupant.

Figure I below illustrates the current traditional leasing process whereby both landlord and tenant have individual objectives to achieve whilst meeting the obligations of the existing lease agreement. In this diagram both landlord and tenant have defined Corporate Social Responsibility objectives (ie that is their own defined business contributions towards sustainability). However in a rented commercial building, CSR objectives set by the landlord and tenant may have a different focus and business priorities as such could counteract one another's efforts.

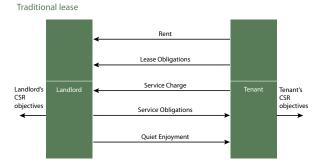


Figure 1: Traditional lease

Figure 2 below illustrates how lease obligations become a two-way process between landlord and tenant with shared costs and Corporate Social Responsibility become streamlined to provide a collaborative approach for the building.

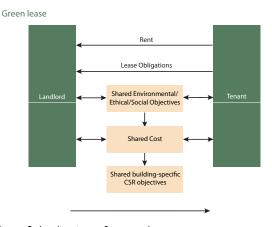


Figure 2: Implications of a green lease Source: M. Barlow, Burges Salmon (2007)



I.2 Green Leases in the UK

Academic research on the topic of green leases within the commercial sector commenced at Cardiff University in 2000. [3] . This work, which is summarised in greater detail in Incorporating Environmental Best practice into Commercial Tenant Lease Agreements Part 2 [2] identified that the commercial lease agreement as a systemic barrier to environmental improvements in the commercial sector. Working on a practical level with commercial landlords, tenants and property management agents, a series of recommendations and model lease clauses were published in the form of a Good Practice Guide, which was trialled in south Wales by CRiBE over a two year period. Further details regarding the trials are provided in Section 4.1

The Good Practice Guide Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements, 2007 [I] was developed by CRiBE in partnership with Eversheds, the Environment Agency Wales, RICS Foundation and King Sturge. The document provides detailed practical based guidance on environmental issues which could be discussed and included in the lease negotiation stage. Trials of the guidance document undertaken by CRiBE between 2007 and 2008 with a number of public and private sector landlords suggested that the complexity of existing commercial lease processes together with existing commercial structures complicated the implementation of a green lease. Furthermore, the lack of targets, clarity and meaningful measures mystifies the concept further. As such, flexible approaches would need to be presented in guidance documents and processes should be introduced that enable adoption of best practice whilst facilitating the meeting of mutual objectives.

Where appropriate, this document refers and builds on the recommendations provided in the 2007 publications but it also draws on more recent work this is being undertaken in other areas.

I.3 Green Leases Overseas

The introduction of green leases into the commercial sector has been ongoing for some time with the Australian Government leading by example through their green lease schedules. Other countries have also identified and adopted methods for developing green leases.



Australia

The Australian Department of the Environment and Water Resources together with the Australian Government Sector

(AGS) first developed green lease schedules in 2006.

The Australian green lease is a self contained generic document forming a legally enforceable management framework [7] which has recently been expanded to provide a voluntary approach for the private sector and as such now offers a series of 8 Green Lease Schedules which can be used with both gross and net leases. A net lease is used when the occupier is responsible for all operational costs of the building including utilities, waste with the landlord being only responsible for the roof and walls. In contrast, in the context of a gross lease, the landlord charges for maintenance which can also include but not always, utilities and third party contractors.

The schedules provide legally based objectives that focus on energy efficiency in accordance with the Australian Building Greenhouse Rating (ABGR) and they also provide a tool to aid achievement of set Governmental targets. For all new buildings over 2000m2 with a lease expected to last longer than a 2 year period, the Australian Energy Efficiency in Governments Operations (EEGO) policy strategy requires that the Green Lease Schedule should be included to form part of the lease, where feasible. (source: http://www.lcca.co.uk/server.php?show=ConWebDoc.95)

Several buildings in Australia have been tenanted with green leases and recent studies have shown a minimum return on investment of 14% for green buildings with an increase of 10% on market value, as well as a 5-10% increase in rent. A web-site is available for the details of the "60L" building at http://www.60lgreenbuilding.com. Also details of the green lease objectives for 60L are available [8] at the following web-site. http://businessoutlook.com.au/site/archives/Green%20building%20-%20%20barriers%20and%20drivers.pdf



USA

The Building Owners and Management Association (BOMA) [9] believe that Green Leases should be available to fit existing

buildings and should not be reliant on the rating of a building. BOMA also recommend that when developing leases, the following should be considered:

- Building owner and tenant should establish financial obligations for investments in energy efficient technologies. This should allow the building owner to pass through energy efficiency improvements as operating costs as long as the improvements result in lower costs for the tenant.
- Specify the standard to which the building is being operated. This could include LEED, Green Globes or another building rating system. LEED (Leadership in Energy and Environmental Design) has been developed by the US Green Building Council which now is used within 50 States

and over 30 countries. Buildings that have been certified to LEED standards are more efficient than standard buildings and provide healthier work and living environments. Green Globes, based in the BREEAM system in Canada, is an on-line environmental assessment tool, and is used by large developers and management companies. The tools encompass Design of New Buildings/ significant refurbishment; management and operation of existing buildings; Building Emergency Management, Building Intelligence and fit-out.

- 3. Outline the building's waste management and recycling together with obligations for segregation.
- Any maintenance that the tenant undertakes should be done in accordance to green building practice. Contractors of the tenant should also be made to comply through contractor rules and regulations.
- Specifying janitorial/ cleaning services and the materials used as well as times of services provided.
- 6. At leases termination, tenants should be encouraged to recycle or re-use their equipment, fixtures and fittings and furnishings.

The California Sustainability Alliance have developed a Green Lease Toolkit [10] to assist landlords and tenants. The toolkit provides:

- I. A model green policy statement.
- 2. Lease profile and options matrix to help the tenant identify the green objectives most appropriate to their building type.
- 3. A green lease provision database.
- A document which helps tenants to assess differing properties against a set of criteria which includes;
 - a. A request for information on the building including energy management and cost;
 - b. Energy efficiency requirements;
 - c. Water efficiency requirements;
 - d. Waste management policy and
 - e. Alternative transport options

The Governor's Green Government Council of Pennsylvania has a Model Green Office Leasing Specification [II]; however, this is more closely related to the design of the building than its operation once occupied. The document contains specifications for the following items:

- » Design requirements
- » Mechanical system criteria
- » Electrical system criteria
- » Interior construction and finishes
- » Landscaping

It has been identified that by greening 810m square foot of leased Class A & B office space the following benefits would be realised in one year:

- » 45% of California office building waste would be eliminated,
- » Consumption of water would be reduced by 36%,
- » Consumption of energy would be cut by 27%,
- » greenhouse gas emissions would drop by 25%.



Canada

The Real Property Association in Canada REALPAC [12] have defined the green lease as being a legal document that encourages

significant reduction in consumption by both owner and occupier of both renewable and non-renewable resources whilst establishing a more sustainable operating regime for the building. Through developing a Green Office Lease based on the existing National Standard Office Lease, a precedent commercial office lease was established and adopted by major landlord organisations. This lease can be used in its current state by both landlord and tenant in large and small organisations.[13] . The green lease includes provisions relating to:

- » Environmentally preferable products
- » Water conservation measures
- » Energy efficiency standards
- » Indoor air quality standards
- » Ventilation requirements
- » Type of office equipment
- » HVAC specifications
- » Lighting requirements
- » Allowable cooling, heating & humidity
- » Construction specs (core, shell & interior)
- » Tenant amenities (e.g., bike racks, showers)

The Public Works and Government Services Canada has developed a green lease which includes:

- » Management of wastewater
- » Indoor air quality
- » Recycling
- » Energy efficient lighting fixtures
- » Green house gas reduction

The use of green leases in Canada has been introduced primarily to minimise resource consumption, particularly since North Americans are the highest per capita users of fresh water in the world. Some government tenants and as many as 500 companies associated with Fortune have adopted green lease principles and recent collateral benefits identified that landlords are reducing their indirect carbon dioxide emissions because less current is being drawn from the grid. Further information can be found at http://carl23.designersi.com/m 37.asp



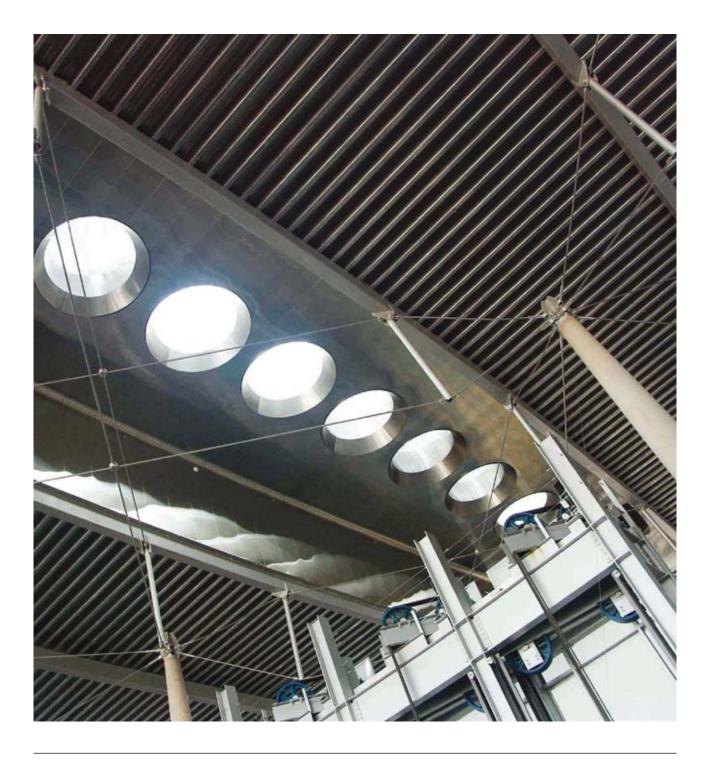
New Zealand

The New Zealand Ministry for the Environment [14] is currently restructuring the leasing process so that it includes the following:

- » The agreement for lease and the lease
- » An environmentally sustainable design schedule
- » An agreed as-built environmental rating for the base building and fit-out (e.g. Green Star NZ – 4 stars and above represent "Best practice whilst 5 star represents a building of "New Zealand Excellence)
- » An obligation on the lessor to separately meter

- the energy and water consumption of each lessee
- An established mechanism to appoint a consultant to monitor consumption and sustainability outcomes
- » A fair and reasonable calculation formula for failing to comply with the lease obligations
- » Specific obligations on both lessor and lessee

There is a tenant driven desire within New Zealand for any refurbishment undertaken on existing buildings or any new builds for them to have a green label. A key reason identified for promoting a green building is that in New Zealand it has greatly increased marketability to potential tenants.



2.0 THE EXISTING UK LEASE STRUCTURE

2.I Overview

This section provides information about how the commercial lease process operates and whilst processes are familiar to property professionals, often environmental managers or facility managers within organisations do not have direct responsibility for or are not involved in leasing of premises but may be a key point of contact for implementing best practice within the management and operation of the building.

A lease is the method used by organisations providing them with the right to use assets. [15]. The majority of the UK commercial rental stock is covered by operating leases, since the lessor retains the risks and rewards associated with ownership. A 1996 report entitled 'Accounting for leases: a new approach' recommended the creation of new standards to remove this distinction, therefore requiring lessees to recognise rights and obligations arising from lease contracts within their balance sheets. [16]. In a multi-let building, the landlord is more involved with the running either directly or through a third party asset management organisation and re-coups the cost for operation through a service charge. In a single-let building, which is less complex, a Full Repair and Insurance (FRI) operates where the tenant is responsible for operational costs. Therefore in the UK, the type of lease will influence the way both landlord and tenant work together. This document therefore focuses on the multi-let lease arrangement as this provides the greater challenges for environmental improvement.

Generically, the legal structure of a UK lease is very flexible. It is a document that has to reflect the views of both parties entering into it, depending upon their commercial structure, which then becomes the acceptable lease. Whilst the UK lease structure can accommodate change easily, the commercial structure could form an inflexible barrier to change since the process is designed to protect the landlord's investment value.

Over the last decade, market pressures have forced the introduction of more flexibility in the leasing system. The most problematic lease term identified by occupiers is the lease length [17]. In general in the UK, the trend has been towards the shortening of standard market lease lengths [18]; over the past 15 years, the standard lease length has changed from 20-25 years down to 5-10 years [19]. This flexibility is also associated with a redistribution of risk between the lessee and the lessor. Whilst the commercial structure remains a barrier to change currently, adoption of low-cost or no cost environmental best practice becomes easier to incorporate with shorter lease lengths. There are many other benefits

associated with the adoption of shorter lease lengths that can be realised for both parties, including:

- » Tenant attraction and retention
- » Flexibility to refurbish and redevelop (both parties)
- » Ability to generate higher rents for occupiers who value flexibility
- » Ease of exit from premises [19]

However, shorter lease lengths do not lend themselves to larger capital expenditure for improved technologies or facilities since neither party will achieve payback during the required timeframe.

2.2 Identified barriers in the leasing structure.

Undeniably, the global recession is having a significant impact on the commercial property sector and as such, there are short term concerns which are currently displacing the longer term considerations that green leases seek to address. Consequently, awareness of green leases is slow to develop. This problem of awareness is exacerbated by the lack of commonly accepted metrics for judging the environmental performance of buildings in the UK. Even with EPCs filling some of this gap, time is needed to build awareness and they will need to be seen much more as a product of consortia and co-operative behaviour on the part of both landlord and tenant.

At the moment, however, this is not always the case. Landlords may see themselves having to incur capital expenditure only to watch the tenant accrue benefit in terms of energy savings. The payback period for certain structure investment to improve energy performance may be longer than the term of the lease, making tenants reluctant to fund capital expenditure – e.g. through the service charges. Time will be needed for a market to develop in green leases and this will have to be driven by a consciousness that over time energy and other environmental costs will form a greater proportion of business overheads.

"...Many people are not familiar with the environmental standards/issues and therefore would feel that they do not know what they are signing up to. Cost will always be an issue. If the developments can be economically justified, people will be much more accepting." DLA Piper

This may be particularly true when dealing not with new but with existing buildings into which improvements are being incorporated. There is no reason why this cannot work well for both landlord and tenant but the negotiations might seem daunting, especially where buildings are particularly old or are in multiple occupation.

From a legal perspective the leasing structure is not considered a barrier but the commercial structure is. There is no reason why a green lease cannot be made to work but obligations on parties will often be mutual and

failure to meet standards may not best be dealt with as a breach. This partly explains why Australia has opted for a model of schedules to the lease as the mechanism for introducing the provisions. This can then allow for other enforcement mechanisms and dispute resolution structures to be incorporated as time passes and standards change.



3.0 DRIVERS FOR CHANGE

Considering leases in a "green" light is being driven by a number of factors including European and domestic law, as well as USA and Australia law and market practice. Some of the key drivers identified are presented in the following sections.

3.1 Policy

3.1.1 Overview of UK Policy

The UK Sustainable Development Strategy (Securing the Future) sets out the five key guiding principles that the Government wishes to encourage and work towards. These include living within environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; using sound science responsibly; and, promoting good governance. The strategy also sets out the priority areas for the UK, which includes climate change and energy [20]. The use of green lease methodologies will be able to directly assist in meeting the aims set out in the strategy relating to energy efficiency.

The 2007 Energy White Paper (Meeting the Energy Challenge) highlights the need to encourage more energy savings through the provision of improved information, incentives and regulation. Achieving this will in turn aid the removal of barriers to the uptake of cost-effective energy efficiency measures. [21]. The Energy Efficiency Action Plan (2007) further adds that energy savings are not generally considered core business activities and are not high on business agendas. Other barriers, such as hidden costs, lack of motivation and split incentives between landlord and tenant all are additional barriers to achievements. [22] Provision of clear guidance on how green lease methodologies can be mutually beneficial, incentives for all parties can be realised.

3.1.2 Policy in Wales

In Wales, the Government of Wales Act 2006 [23] highlights the Welsh Assembly Government commitment to ensure sustainable development is a key consideration in the exercising of their functions. Several key commitments have been set in the One Wales agenda, further highlighting this commitment. These include:

- » Encouraging and stimulating enterprise and encouraging companies to grow and invest
- » Adoption of an all-Wales strategy to economic development
- » The development of a green jobs strategy
- » Committing to targets on carbon neutrality of public buildings.

The Welsh Assembly Government understands that they must be at the forefront in the campaign to reduce climate change, and must be seen to be leading by example. Sustainable development is further driven by a join-up Government with a focus on the long-term horizons. [24]

In the recently developed "Green Job for Wales" strategy [25], the Assembly further highlights how it intends to support the further development of a greener agenda, through the provision of a coordinated and coherent infrastructure for businesses in Wales, including the provision of advice and support in order to be more resource efficient and therefore more able to cope with the impacts of resource scarcity and climate change.

The green lease agenda (although new and not currently highlighted in any policy documents) is considered as a key driver by the Welsh Assembly Government in further driving sustainable development through the built environment. [26] There is commitment to implement the agenda within its own building stock, beginning at a 'light' green level, but with the intent to show demonstrable progression towards 'darker' green leases in the future.

3.2 Statutory Requirements

3.2.1 The Carbon Reduction Commitment

In the UK, the Carbon Reduction Commitment (CRC), which was announced in the 2007 Energy White Paper, is set to come into force in 2010. It will apply to organisations within the public and private sector who are large consumers of energy. An organisation will need to have at least one meter on half-hourly readings with the supplier with a consumption of more than 6,000 megawatt-hours between 1st January 2008 and 31st December 2008 to register. It is anticipated that as much as 1.2 million tonnes of carbon will be saved each year by the year 2020 [27] Organisations falling within the thresholds of the Commitment will be sent a registration pack from the Environment Agency in 2009 and it is proposed that by April 2011, selling of carbon allowances will commence. Emissions data will be held in a league table. The scheme will rely initially on self certification of monitoring and reporting together with emissions data. This will have to also be verified through an independent risk-based audit process. Further information on the Carbon Reduction Commitment can also be found at http://www.decc.gov.uk/en/content/cms/what_we_ do/lc_uk/crc/crc.aspx

3.2.2 Energy Performance Certificates (EPCs)

The Energy Performance Building Directive (EPBD) led to the requirement for Energy Performance Certificates (EPCs). These certificates are based on

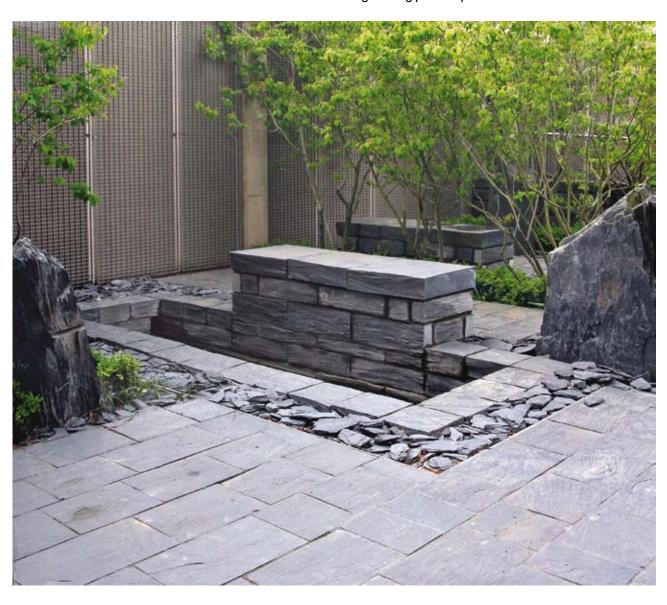
the energy efficiency of a building and are required when buildings are sold, let or renovated. EPCs give the equivalent of a 'fridge rating' for buildings to indicate their energy efficiency and level of carbon emissions. Ratings are based on the performance potential of the building and its services. This provides information to possible tenants or purchasers of the building so that they can factor in energy performance into their decision making about occupation or investment. On sale or letting, a free copy of the EPC should be provided along with other written information. This might be a single EPC, where the whole building is being let, but might have to be tailored where the building is being part let especially where that part of the building has separate heating, lighting or ventilation systems. Implementation dates for the EPBD were as follows:

- a. for buildings over 10,000m2, when built, sold or rented 6 April 2008
- b. for buildings over 2,500m2, when built, sold or rented 1 July 2008
- c. all remaining buildings when built, sold or rented I October 2008

In rented commercial premises, the building owner is responsible for obtaining an EPC and this will need certificates for the whole of its portfolio. The EPC for each building can be selective as to which tenants are included in a multi let building but it will not reflect the true performance of the building and may be requested by prospective tenants. Furthermore, the owner will need to pay the fee for the certification process for each demised area included therefore it is more cost—effective for the entire building to be considered. As such, there will be an increased desire from the owner for efficiency and best practice to be employed within tenant rented areas. Developing shared best practice obligations and agreements at negotiation stages will therefore help to minimise risk to both parties.

3.2.3 Sustainability

The UK Government's drive for sustainability – to use less water, heat, turn off lights etc and the need to address the regulation of a building's operation, use, maintenance and management with a view to minimising the harmful effects on the environment- is resulting in increasing weight being placed upon environmental considerations.



4.0 RECOMMENDED ROUTES FOR CHANGE

It is appreciated that due to current varying commercial structures, together with differing types and ages and uses of buildings, it is not possible for one shoe to fit all. As such, this guide offers a variety of options for change that can be considered and allows for owners and occupiers to identify and negotiate a suitable starting point where realistic objectives, goals and benefits can be realised with minimal disruption to management and use of the building.

"Whether management is provided in-house or by an agent or contractor, best practice requires both owner and manager to recognise a duty of care to occupiers..." V.Chase, Wragge & Co. LLP

4.1 The need for flexibility

Between 2007 and 2008, Part I of the Good Practice Guide [I] was trialled with a number of public and private sector landlords and tenants based in Newport south Wales. The different scenarios and staring points identified during the trials suggested that one route did not suit all. Case studies developed from the work can be found in Appendix A. Feedback from a questionnaire survey undertaken as part of this work indicated that the recommendations provided within the Guide were realistic and not controversial. However, further guidance would be required with respect to methods for adopting these recommendations.

"...one might be better to foster (rather than to compel) co-operation between landlord and a tenant. It is likely to yield more positive results..."

Occupiers who value flexibility within their lease (especially relating to lease terms) may be prepared to pay more for rental where leases are shorter than the standard 'norm' [19]

4.2 Pre-Contract issues to consider

4.2.1 The Landlord's perspective

Prior to negotiating a green lease with tenants, owners should be completely aware of the existing conditions and environmental performance of the building together with an understanding of the potential to

- » improve environmental and energy performance
- » minimise risk to themselves and prospective tenants
- » minimise impact on the environment

Appendix B provides a brief checklist for owners and landlords to undertake a preliminary assessment of their building prior to engaging with tenants for developing shared obligations. However, procurement of external expertise to undertake a preliminary assessment of the premises prior to letting will provide a formalised audit with greater influence on potential clients at lease negotiation. By way of an information

pack, (refer to Section A I.I, I.2, I.4 of Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements [I] prospective tenants can review the formal audit together with actual and planned environmental management activities and improvement schedules.

Hammersons have developed a Sustainability Guide for their tenants. Whilst this has been published for the retail sector, many of the principles contained within it can be easily applied to other sectors. Further information is available at the following link: http://media.corporate-ir.net/media_files/irol/13/133289/pdfs/TenantsSustainabilityGuide.pdf

As mentioned in Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements (pg 5, I.4) [I], it is recommended that that landlord should formulate an Environmental Policy, which could include a skeleton policy for the tenant, to be provided at lease negotiation stages. Appendix C provides brief guidance notes on how to develop an Environmental Policy.

4.2.2 The tenant's perspective

It may make good sense for the tenant to undertake some due diligence on the building or land prior to entering into the lease, which can encompass and be formally linked to the landlord/ building owner's environmental audit of performance, as mentioned in 4.2.1. In addition to reviewing the history of the site, including earlier contaminative uses, the fabric of the building itself, including issues such as the presence of asbestos, the tenant might include the efficiency of environmental goods and services provided by the landlord. Much of this work can be done quickly and easily by desktop survey followed by a physical inspection. As Energy Performance Certificates come into play, this type of information will be readily available to the tenant and as the Carbon Reduction Commitment begins to bite, questions concerning energy efficiency may assume even greater significance.

4.3 Identify opportunities, priorities and potential responsibilities

Debates and developments relating to the issue of climate change are increasingly encompassing the

environmental impact of poorly managed buildings. Unless clauses within a green lease allow for a good degree of flexibility that will encompass unforeseen changes in early years, it may be better in the first instance, to adopt a voluntary and flexible agreement through a "green management plan".

Effective communication between landlord and tenant is vital when implementing mitigation measures or undertaking refurbishment of any kind within the building. Developing agreed environmental management plans outside of the commercial lease can prove to be very effective particularly for a single let occupancy where responsibilities and realistic objectives and targets can be set between landlord and tenant. However, a multi-let building may prove to require more formal routes for setting responsibilities, objectives and targets since partial failure may be realised where occupiers have differing business priorities and resources.

Maintaining momentum of a strategic environmental management plan is vital and as such requires a considerable amount of commitment from both management and staff. Once commitment has been secured, an understanding of current performance, priorities, problems, opportunities and potential barriers needs to be established. See also Section 6.5 of this guidance document for further sources of information.

"...Action is needed now and not some months down the line... we feel there is a danger that the people who can act locally to influence building issues will be disconnected from the lease. In an attempt to address both of these issues, at Land Securities we are introducing site-specific Environmental Management Plans. These don't form part of our own certified EMS but are more of a contract between us, as Landlords, and the group of tenants occupying a building. The Plan contains obligations on both parties. For example, we commit to providing timely meter readings but require our occupiers to promote waste recycling. These commitments will vary from building to building. So far, the reaction from our occupiers has been very positive but it is too early to see the results." Dave Farebrother, Environmental Director Land Securities Group PLC

4.4 Memorandum of Understanding (MoU)

The Memorandum of Understanding presents a starting point for both landlord and tenant at the more informal end of the spectrum. The MoU provides a formal mechanism for both parties to discuss issues that will be included in the lease agreement and in this context it does not have to be legally binding. Subsequent

methods introduced between landlord and tenant gradually become more legally binding until the final stage of formal lease agreement, where obligations for green management become binding. Much work has focused on the development of "green MoUs" since this methodology introduces concepts of green leases without enforcing issues on either party.

The Better Buildings Partnership has published a guidance document which complements and builds on the previously published Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements document [I] by relating best practice and green lease principles that can be incorporated into a Memorandum of Understanding (MoU). [28]. In essence, the framework for the agreement remains flexible thus allowing a faster route for change within the commercial property sector, without having to wait for new leases or lease renewal. However, it recommends that the MoU is legally binding wherever possible to reduce the risk of partial failure where there are shared environmental and energy obligations. It also suggests that the MoU could be time limited without necessarily covering the entire term of the lease to increase flexibility.

The guidance sets out 6 key principles for commencing the development of green leases through MoUs. The principles are as follows:

- » That a landlord and respective tenants should develop and agree on an understanding regarding green lease issues
- » The agreement should incorporate and be based on a series of best practice recommendations that provide sufficient flexibility to encompass ongoing initiatives, budgets and variations in building sizes
- Wherever possible, the agreement should be legally binding
- » The agreement need not cover the entire length of the lease period
- » To ensure continuity, the agreement should be transferable
- » Strive to adopt green clauses over time into the formal lease agreement

The best practice recommendations outlined in the guidance document commonly refer to the need for owners and occupiers to share information collated and data monitored relating to resource consumption and waste generation, whilst respecting confidentiality concerns of parties involved. The best practice recommendations are based around a series of headings which include the following:

» Energy consumption and efficiency. There should be co-operation to reduce consumption through development of joint targets and the undertaking of energy audits with recognition given for changing in circumstances and tenure. Furthermore, replacement and alterations to equipment should give due regard to sustainability and efficiency and avoid like for like replacements.

- » Waste management. A joint strategy should be developed that includes recycling targets, awareness raising campaigns, sustainable procurement and legislative compliance for both multi-and single let premises with suitable facilities provided for waste segregation. Periodic reviews should be undertaken to ascertain progress and minimise the risk of problems.
- » Water consumption. Water saving devices should be installed wherever possible, including grey water and rainwater harvesting schemes.
- » Day to day management. Communication channels should be established through development of a Committee that encompasses all personnel relating to the building management, including suppliers and cleaners wherever possible. As also mentioned in "Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements" Section A I.I & I.2 [I], owners are recommended to provide an information pack to tenants to aid the sharing of information and to encourage sharing of initiatives between tenants in a multi-tenanted building.
- » Service charging. As also recommended in "Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements" Section A 3.1, 6.1 & 15.1 [1], tenants should be made aware of the shared aspects of the service charge with respect to energy consumption and any costs relating to green issues. Good practice undertaken by tenants should be rewarded through the service charge.
- » Refurbishments. As also recommended in "Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements" Section A 9.1 & 9.2 [I], any work that could adversely affect performance of the building should not be undertaken without necessary consultations. Consideration should be applied to installation of renewable technology wherever possible.
- » Transport. Consideration should be given by all parties to encourage sustainable methods of transport through development of Travel Plans and provision of facilities.

Work has also been undertaken by the BBP group to establish a model Memorandum of Understanding that incorporates environmental best practice, as mentioned above, within the agreement.

Further information regarding the Better Buildings Partnership and their work can be found on the following link: http://www.lcca.co.uk/server.php?show=nav.00500a

» British Land has introduced a three-year MoU rather than include green clauses into a lease to allow ease of update in order to set new targets. British Land is happy for the MoU to be legally binding, but would not want their tenant's inability to meet targets set in this to constitute a breach of contract [29].

4.5 Management Agreements

A Management Agreement is a formal binding contract whereby one party will be obliged to undertake the management of a property owned by the other. This could be a managing agent whose business is managing portfolios or individual buildings on behalf of investors. It is also likely to be used to set the basis for the management of a building occupied by more than one tenant.

The Working Group established to update the Code for Commercial Leases, facilitated by the Royal Institution of Chartered Surveyors has developed a Green Lease Sub-Working Group to develop and recommend approaches for including green management within Management Agreements. Whilst further work is underway, to date recommendations from the Working Group suggest the following of a Management Agreement:

- With regard to energy related issues, meter readings should be available either to the tenant on request or the tenant should employ the use of smart meters in order that data can be shared with the landlord. The Display Energy Certificate should also be kept up to date and that both parties should work towards low-cost consumption reduction.
- » For waste management, both parties should agree to joint or shared strategies and facilities for minimising waste and for recycling. Parties should work with suppliers and contractors to ensure that packaging and delivery to the site is minimised.
- » Water consumption should be metered and information shared and that both parties should work towards employing conservation techniques and management without excessive costs
- » To maintain efficient building management and operation, a building committee should be established where initiatives between owners and occupiers can be discussed and shared.
- For the purpose of the Service Charge, all green initiatives should be reported within the documents together with an outline of costs and the environmental benefits for undertaking initiatives. Consideration should be given wherever appropriate to the use of site renewables and Combined Heat and Power if acceptable to tenants. Also where equipment is to be replaced, to ensure consideration is given to efficiency and performance and end of use recyclability.

Further guidance on developing commercial leases has been documented by Edward Bannister and published through RICS Books. In essence the guidance provides consolidated information and advice for lawyers and surveyors that encompass the Code for Leasing Business Premises in England and Wales 2007, the Service Charge (a link for further details on the Service Charge Code can be found in Section 6.6) and other such guidance documents. It also recommends methodologies for negotiating lease terms and conditions, identifies solutions to a number of legal issues, whilst incorporating two sections on energy efficiency & certification and green leases.

Commercial Leases 2009 – a Surveyors Guide (ISBN 9781842194324) http://www.tsoshop.co.uk/bookstore. asp?Action=Book&ProductId=9781842194324

4.6 Developing Heads of Terms

The Heads of Terms is in essence, the final document that is agreed between owner and occupier prior to drafting of a legally-binding document by the lawyer. As such, the Heads of Terms should try to reflect as many material agreed obligations and responsibilities of each of the parties. Whilst the Heads of Terms themselves may not be legally binding, it can contain specific "green clauses" that are to be incorporated into the documents that will become legally binding.

In drafting up the Heads of Terms, there are a number of issues that can be discussed and formally agreed. Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements [1] was one of the first published guidance documents within the UK that set examples of the issues that could be discussed and included in Heads of Terms and leasing agreements. The recommendations are set in 2 sections, the first covers topics to be included in negotiations and the 2nd section covers obligations that should be considered when managing an ongoing tenancy agreement.

Since this publication, the Working Group facilitated by the Royal Institution of Chartered Surveyors, as mentioned in 4.5, has developed a Green Lease Sub-Working Group. The group is currently coordinating a series of recommendations that could potentially sit as an Addendum to the Code of Practice for Commercial Leases in England and Wales 2007 or as a stand-alone guidance document, which will lead to the development of a model Heads of Terms Agreement that incorporates green issues and clauses.

Hammerson has introduced a light green clause within their standard lease Heads of Terms. Further information can be found on: http://www.hammerson.co.uk/phoenix.zhtml?c=133289&p=resp-ri-green-lease

4.7 Green leases

Whilst shorter lease lengths provide increased opportunities to introduce green clauses, say at rent reviews or new agreements, the longevity of the lease may discourage the adoption of larger capital expenditure schemes, most certainly on the part of the occupier.

4.7.1 Light green and dark green leases

Common references being discussed are the development of either "light green" or "dark green" leases with variations in shades of green in between [30]. At the lower end of the scale distinctions for a light green lease could include setting of obligations for parties without targets or legal status to adopt management practices that give regard to the environment and the impact of individual activities. The landlord will wish to protect the operational rating of the building but anything more burdensome than a target standard might prove unappealing to a tenant. Incentives through the reduction in services charges might prove one way forward. It may be that the effective working of services charges in buildings in multiple occupation will require careful energy metering and monitoring (which itself comes at a cost).

"Where a "green" approach is to be pursued, the landlord could be considered to be acting reasonably if any costs of additional expenditure is within a certain percentage (say 5%) of a market competitive quote. Any increased costs of certain extraordinary items of expenditure to be incurred should reasonably be split between the landlord and the tenants with the landlord's burden of costs been proportional to the increase in value of their reversion" DLA Piper

Moving up the scale to a mid green may involve the establishment and agreement of certain targets. This may also require development of an environmental or energy action plan to set responsibilities for monitoring purposes, measuring achievements against targets and setting realistic deadlines for parties. This procedure may require additional costs to seek professional advice and support for the setting of targets and establishing priorities. However, agreements need not include legal enforcement should achievement of targets not be met. An example of a mid green term might be one in which the tenant covenants to comply with environmental management policies of the landlord in relation to matters of resource consumption within the building.

At the dark green end, obligations and targets are more formalised through Heads of Terms that would result in legal binding agreements where breach or non-

achievement could result in either financial penalties with a requirement for a dispute resolution process. Here we might see the formal incorporation of targets into rent review mechanisms. The tenant's activity might be much more strictly controlled especially where this might jeopardise the environmental performance of the building.

"Clients seem to feel that starting a new green lease from scratch is rather radical...but they are open to amending existing standard form leases. Discussions have taken place around either amendments to specific clauses in existing leases or dealing with the arrangements through the building regulations outside of the lease...I have been amending on a clause by clause basis rather than a complete redraft" DLA Piper.

"To a certain extent, therefore, the ultimate "greenness" of a lease very much depends on the parties' awareness (or lack of) environmental issues at the heads of terms/negotiation stage" DLA Piper

Arguably, the onerous statutory duties and obligations placed on landlords, for example through Carbon Reduction Commitment (see section 3.2.1) may seem a relaxation for tenant lease obligations within the lease agreement, and questions may be raised as to why obligations are required within the lease at all, save compliance with statutory requirements. However, in multiple occupation, performance will inevitably vary between tenants depending on the size of the area occupied and the nature of their activities. Efforts undertaken by one tenant may be falsely measured through little or no effort shown by others within the same building. As such, the landlord and tenant may wish to enforce shared obligations to ensure performance is maintained between occupants, and whilst a MoU and Management Agreement can be set (see Sections 4.4 and 4.5), a green lease provides a formal mechanism for ensuring good practice is maintained by all parties and not based on "good will" by some.

"It is also important to mention that poor performance within any particular tenancy will have the capacity to influence comfort and performance in other tenancies in a multi-tenant building. The underlying notion is that what one tenant does or does not do, could ultimately impact other tenants in the same building" S.M Brooks, 2008

4.7.2 Model lease clauses

To supplement the model MoU being developed by the Better Buildings Partnership, as mentioned in 4.4, work has also been undertaken by the Partnership to present generic model clauses that could be inserted into a lease. The draft guidance on the model clauses suggests areas within a lease that could encompass certain "green" clauses. These are presented under the headings of:

- » Co-operation Obligation
- » The Environmental Management Plan
- » Development of a Building Management Committee
- » Data Sharing and Metering
- » Flexibility
- » Restrictions on tenant alterations and Landlord's works
- » Dilapidations
- » Rent review
- » Dispute Resolution

Further information regarding the Better Buildings Partnership and their work can be found on the following link: http://www.lcca.co.uk/server.php?show=nav.00500a

The clauses set by the Better Buildings Partnership provide model lease clauses that are set more generically giving a lighter green approach. However, for those willing to agree and accept more detailed and perhaps slightly more stringent "darker green" clauses within their contracts, the following provides exemplar clauses that could be considered alongside those provided by the Better Buildings Partnership. The clauses below are not a definitive set of clauses, but are merely concepts or ideas which can be included in an agreement between landlord and tenant. They might well go further than is generally commercially acceptable

Corporate Obligation:

» Darker green: The Landlord will provide to the Tenant an Environmental Information Pack before the entering into of this Lease and update it annually within I month of the end of the Service Charge Year.

The Environmental Information Pack, as mentioned in Incorporating Environmental Best Practice into Commercial Lease Agreements, Part I Section I.I & I.2, is a more formalised method for communicating energy and environmental management undertaken or planned within the building, including provision of any environmental reports or audits. When discussing terms of the lease contract, the landlord should inform the tenant by way of the Information Pack of the availability of metering

- and monitoring data. It should also inform the tenant of any targets or initiatives underway within the building that the tenant must consider and use reasonable endeavours to comply with.
- » Mid green: The Landlord to provide in the lease that the cost of such a pack (optional) is recoverable under the Service Charge

Environmental Audits

As mentioned in Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements, Part I, Section I.5, it is recommended that the Landlord should undertake or procure to undertake an Environmental Audit. Clauses can be added as follows:

- Dark Green: The Landlord is to undertake or commission an Environmental Audit [this needs to be defined] in relation to the Building [including all let or occupied areas] at intervals of no less than [annually or 5 yearly] and provide to the Tenant a copy of the Environmental Audit Report and the Landlord's intentions for implementation of any recommendations of the Environmental Audit to the Tenant as soon as reasonably practicable after receipt of the Environmental Audit by the Landlord.
- » Darkest Green: This clause can go on to obligate the Landlord to implement the recommendations of the Environmental Audit.
- » Mid Green: The Landlord to have discretion to obtain such an Environmental Audit if it thinks it reasonably necessary and/or simply provide that the cost of such audit is recoverable under the Service Charge
- » Mid Green: a Tenant's Covenant could be included for the Tenant to carry out its own Environmental Audit in relation to its own Premises.

For any of the above, drafting could also suggest consultation on the conclusions of any reports produced and an agreed procedure set as to what steps if any are to be taken to implement is recommendations.

Sharing of information and data and Metering

The trials mentioned in Section I of this document and detailed Section B of Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements Part 2 (page 9 "Communication Issues") highlighted the need for tenants to work together in multi-let buildings to ensure maximum efforts were realised and to encourage adoption of best practice by all parties. Working as "clusters" of tenants proved to be far more effective in communicating and addressing initiatives and concerns. The Better Buildings Partnership provides some clauses with regard to the sharing of information between Landlord and Tenant but the following Tenant covenant could be considered in addition to those to facilitate the development of tenant cluster groups in multi-let buildings.

- » The Tenant is at his own cost, required to capture and supply to the Landlord all information reasonably obtainable in relation to the consumption of resources (energy, water) at the Premises at intervals of [no less than[monthly/ quarterly/annually] throughout the Term] and the Tenant is to permit the Landlord to disclose this information to other Tenant of the Building or otherwise as the Landlord thinks fit
- » If the Landlord so requires the Tenant shall operate any computerized data system supplied by the Landlord [at the Tenant's cost] for the collection of data as to the Tenant's consumption of electricity and/or water at the Premises and the Landlord shall be entitled to enter upon the Premises to carry out such repairs, make such connections, make any necessary replacements and lay such cables as are necessary for the operation and maintenance of the computerised data system [PROVIDED THAT any such system will not materially affect the operation of the Tenant's own computer systems]

The Environmental Management Plan

In Section 4.3, Environmental Management Plans are presented as a means for identifying and addressing opportunities to improve environmental performance and incorporate best practice. The Plan should include a description of potential environmental risks and the methods by which the risk can be controlled and potential environmental impacts minimised. Issues to be included in the Plan could be wide ranging but likely to cover the following key topics and should be a framework within which all levels of employees should operate.

Energy efficiency
Transport
Waste Management
Storage and disposal issues
Water Management
Current legislation and Best Management
Practice.

The Environmental Management Plan should be reviewed on a regular basis and should set targets, responsibilities, timescales and methods for monitoring and recording. As such, a possible clause could be considered where a Landlord has an Environmental Management Plan in place:

Dark Green: The Tenant is to comply with all proper and reasonable requirements imposed by the Landlord in relation to the implementation of the Environmental Management Plan so as to achieve the stated aims of the Environmental Management Plan. The Landlord will not [unreasonably] impose requirements under this clause which materially restrict the rights of

the Tenant under this Lease [and/or which are unreasonably onerous].

Waste Management in England and Wales is now being further regulated under the new Waste Controls (England and Wales) Regulations 2009, which are due to come into force in October. These will in effect, revoke certain aspects of existing legislation, and will apply now to all that produce, import, carry (or transport), keep or store, treat, dispose of waste or operate as waste brokers or dealers. Incorporation of best practice into lease clauses will minimise risk and liabilities to all parties. Further details with regard to this issue are presented in Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements Part 2, Section B (page 9 "Communication Issues"). To include waste management more specifically in lease contracts the following could be included:

The Tenant is to comply with [the Waste Requirements] and all other proper and reasonable requirements of the Landlord in relation to the disposal of Waste originating from the Premises and deposited by the Tenant in the communal facilities provided by the Landlord.

Further details with regard to the requirements of the new waste regulations can be found on the link http://www.netregs.gov.uk. However, suffice to say that the waste Requirements should include:

- » The practical procedural requirements and arrangements for disposal of waste from the Premises.
- » The collection of data and recording of the waste deposited.
- » The segregation, sorting or separation of waste by the Tenant and its deposition in the appropriate receptacle/container.
- » Security and confidentiality issues

Alterations

Supplementing the Better Buildings Partnership clauses, the clauses could be more specific to include Tenant covenants which aim to maximise efficiency and minimise waste as follows:

The Tenant is not to carry out any alterations or additions to any Premises Plant or Conduits forming part of the Premises [without the prior written consent of the Landlord] [such consent not to be unreasonably withheld or delayed] unless such where such alterations or additions include, where appropriate, Water Conservation Devices and Energy Conservation Devices [which shall have a beneficial effect on any EPC for the Premises or the Building].

Clearly the phrase Water Conservation Device needs to be defined but can include although not exhaustive-

- » installation of flow restrictor valves, spray taps or tap aerators
- » rain water harvesting devices
- » grey water devices for flushing
- » installation of passive infra red sensors on urine or flushing
- » point of use source heaters under sinks for hot water.

Energy Conservation Devices can include, and again not exhaustive,

- » Centralised controls for heating, lighting and cooling,
- » Seven day timer switches for vending machines and water cooling systems
- » Changing TI2 fluorescent tubes to T8 (or even better to T5)
- » Installing occupancy sensors/passive infrared sensors in rooms that are not occupied frequently including corridors and toilets.
- » Installing photo cells that can detect natural light levels to regulate lighting in the office zone
- » Amending lighting configurations to prevent lighting of regularly unoccupied areas.
- » Variable speed drives to allow comfort control
- » Zoning of air conditioning systems to allow variable comfort.

Clearly there can be general definitions of what Conservation Devices are appropriate and most up to date and possibly cost effective at the time the Tenant proposes to carry out its alterations. Furthermore, regarding the Building's Common Parts, the Landlord could also undertake similar obligations and provide details of actions and initiatives implemented as part of the Information Pack provided to Tenants.

In summary, it is clear from the work undertaken to date that a "one size fits all" approach is not appropriate for the UK at this time. Guidance and templates can and have been developed but the practical difficulties that have been encountered reflect the fact that the UK is just embarking on a transition and far deeper commitments are required other than documentary formalities and frameworks. It will require cultural and behavioural change not just within employees and shareholder groups but with the public and Government bodies for positive investment values and cost benefits to be realised. Section 5 provides summaries of where generic rewards and benefits can be realised if green management within the leasing structure is adopted.

5.0 GENERIC REWARDS & BENEFITS

The Green Value collaborative project undertaken in North America in 2005 [31] concluded that "green buildings can achieve greater value than their conventional equivalents...the green building industry and others may be failing to get the message across that the main beneficiaries are occupants".

"... a lot of attention has been focused on energy savings. However, these are usually less than 1% of business operating costs. By comparison, total annual real estate expenses are usually around 10% of such costs whilst staff costs can be as high as 85%. This means that the biggest return on investment should arise when green buildings improve business productivity. Instances were found of green features improving productivity, but neitherowners, developers, appraisers, nor the green building sector, fully value or communicate this advantage."

"Experience from the Australian Green Lease Schedule is that the costs associated with refurbishment and retrofitting can provide economic benefits for both parties." [2, 5]

5.1 As a commercial property investor

Portfolios of investors are often large spanning regions or countries and whilst green lease principles can easily be incorporated and adopted with new tenancy agreements, the UK building stock comprises 98% existing buildings. As such, an investor is faced with greater risks relating to performance and with the introduction of the Energy Performance Certificates (as mentioned in 3.2.2), EPCs are a statutory requirement at the point of sale and letting. Where tenants occupying an existing building have maintained good practice through either of the methods outlined in Section 4, there is a greater chance of better returns on investment.

Recent surveys undertaken by GVA Grimley have identified that in terms of sustainability the largest impact will be within the office sector and that investors are increasingly considering the use of green leases although there is a noted requirement for an increased awareness before owners and occupiers actually adopt them [32].

However, any investor considering the acquisition of commercial property will wish to undertake due diligence in relation to the risks involved in the transaction. Because of the caveat emptor rule the vendor owes no duty of care in relation to the state of the premises unless specific representations have been given in the course of contractual negotiations. It is a task for the purchaser, then, to make enquiries and ask appropriate questions, seeking contractual assurance where necessary. This can be a time consuming task, especially where there are a number of properties in a portfolio sale. The incorporation into green leases of benchmarked standards greatly assists in providing investors with some assurance on a range of issues of increasing importance when considering investment decisions.

Furthermore, as mentioned in Section 1 in Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements [1] provision of a tenant information pack to all tenants (that includes energy and environmental management of the building, performance ratings, environmental policy and copies of audits/reports), can aid the data collation for investors and ease the sale of the premises.

5.2 As an occupier

Feedback from individuals within the British Council of Offices Occupier Group suggests that occupiers are becoming increasingly aware of the issue of green leases and there is a notable increase in the willingness to accept change. However, at present the difficulty lies in the comparisons that will need to be made between buildings from an occupier's perspective.

Through Management Agreements and the adoption of a legally binding green lease certain benefits ought to accrue to an occupier including:

- » An assurance from the landlord that facilities and services included under the agreement will encompass environmental issues that consider efficiency;
- » A clear division of responsibility for the existing state of the premises both in terms of its environmental risks and questions of maintenance and monitoring of environmental performance;
- » Sharing of obligations to ensure the efficient running of the building through the work of the management committee;
- » Potential rent rebate where the landlord fails to meet obligations in relation to matters such as energy efficiency;
- » Effective mechanisms for dispute resolution.



The survey undertaken as part of the Property Industry Alliance/ Corenet UK Occupier Satisfaction Index [33] identified that sustainability issues were very important to almost I quarter of respondents but over 80% thought that over the forthcoming year, the issues would become increasingly important to occupiers. A key driver for an increase in sustainable building provision will be occupier demand.

5.3 As a landlord

Void spaces in multi let-buildings present an array of financial problems for landlords. Increased occupant satisfaction can lead to better tenant retention, improved productivity and thus decreased void periods within the building [34]

The adoption of green leases can form an important foundation of the landlord's corporate social responsibility programme and might likewise attract tenants sharing the same values, that is those who see the green lease as an important part of its estate and human resources strategies. Depending on the wording and structure of the lease, there is always a danger that the landlord may bear responsibility for the activity of the tenant, so attracting like minded tenants may be valuable in its own right.

The landlord can provide transparent information to incoming tenants on the state of the premises and running costs in a service charge information making the marketing of commercial property easier in difficult markets.

6.0 OTHER RELEVANT SOURCES OF INFORMATION

6.1 The Landlord's Energy Statement (LES-TER) and the Tenant's Energy Review (TER)

The British Property Federation has undertaken the LES-TER project to develop a tool that enables landlords to assess and measure the energy consumption in areas within a building that is controlled by them and not by the tenant. It also provides a method for disseminating this information to tenants within the building and for allowing comparisons between energy consumptions of similar buildings. Further information about this tool can be found on www.les-ter.org/page/home.. A further project (The Tenant's Energy Review) has developed a method for tenants to also measure their energy performance along with carbon dioxide emissions for benchmarking purposes. Further details can be found on https://www.les-ter.org/page/ter

6.2 IPD Environment Code

The IPD Code is a new method for measuring the environmental performance of commercial based buildings. It is a comparable method for assessing environmental performance of commercial buildings irrespective of location and type of building.

The benefits for using the code are numerous simply because the Code can be effectively used as a tool that can reduce the environmental impacts of a building through aiding compliance with relevant environmental regulations and reducing risk and liabilities for both parties. An increased understanding of the impact of operations and management of the building on the environment will also enable comparative assessments to be made against other buildings and organisations implementing the code. The Code also promotes an awareness within the sector for procurement and environmental specifications relating to new and existing buildings.

The Code requires a variety of both quantitative and qualitative data input from a number of sources such as energy, water and waste.

Further information about his method can be downloaded from http://www.ipdoccupiers.com/
Default.aspx?TabId=1632

6.3 Energy Performance Certificates (EPCs)

A detailed description of EPCs is provided in Section 3.2.2. When selling or letting a commercial building, a free copy of the EPC should be provided along with other written information. This might be a single EPC, where the whole building is being let,

but might have to be tailored where the building is being part let especially where that part of the building has separate heating, lighting or ventilation systems. Further information regarding EPCs can be found in the Communities and Local Government guidance documents published in 2008 [35] and [36] http://www.diag.org.uk/media/55198/nondwellingsguidance.pdf

6.4 Commercial Leases

Further guidance on developing commercial leases has been documented by Edward Bannister and published through RICS Books. In essence the guidance provides consolidated information and advice for lawyers and surveyors that encompass the Code for Leasing Business Premises in England and Wales 2007, the Service Charge and other such guidance documents. It also recommends methodologies for negotiating lease terms and conditions, identifies solutions to a number of legal issues, whilst incorporating two sections on energy efficiency & certification and green leases.

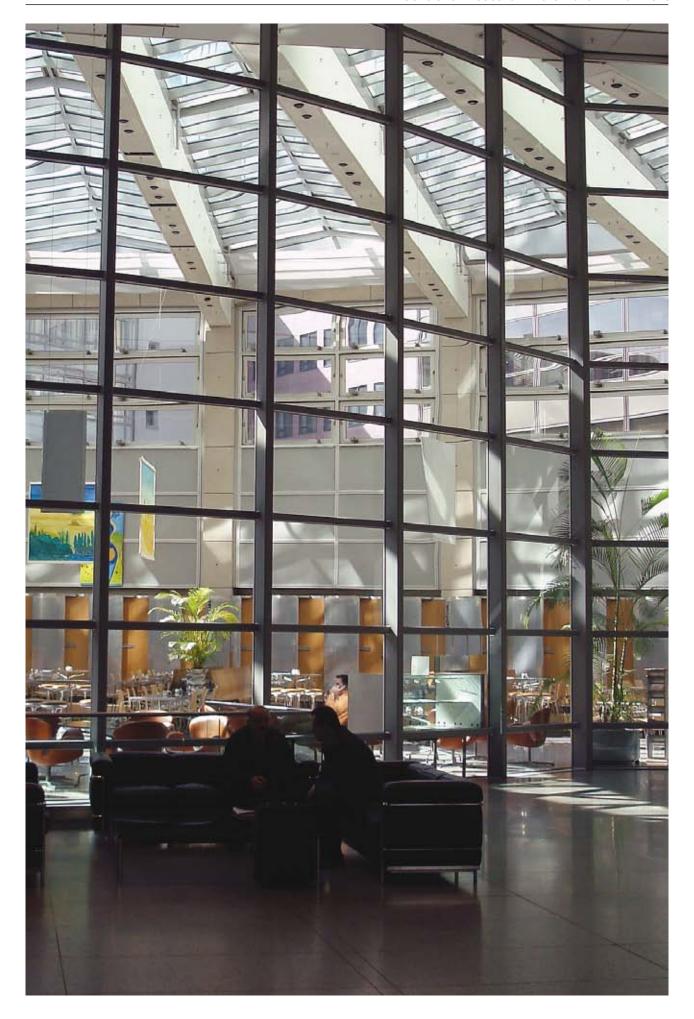
Commercial Leases 2009 – a Surveyors Guide (ISBN 9781842194324) http://www.tsoshop.co.uk/bookstore.asp?Action=Book&ProductId=9781842194324

6.5 Environmental Management Plans

The Institute of Environmental Management and Assessment has published a Good Practice Guide for the establishing of Environmental Management Plans entitled Practitioner – Best Practice Series Volume 12 December 2008. This can be ordered through the following link: http://www.iema.net/shop/product_info.php?cPath=27_29&products_id=9472

6.6 The Service Charge Code

The Service Charge Code came into force in April 2007 and it provides guidance that encourages and promotes the adoption of best practice for the arrangement of service charges within the Commercial sector. Further details with regard to this can be found on the web-site http://www.servicechargecode.co.uk



APPENDIX A:

Case studies from trial



CNC Property Fund Management Case Study

About Us

CNC Property Fund Management (CNC PFM) is a nationwide property management and investment with extensive company an commercial and industrial portfolio. own. CNC lease and manage Clarence House in Newport. This is a multi-storey office building, which was purpose built in 1976 as a head quarters for a national company. It is currently leased to 18 tenants giving over 10 floors. approximate area of 100,000 ft² (9290 m²) for the total building.



Given the age of Clarence House. refurbishment much is now underway to improve the energy efficiency of the building. However, realise that we occupant participation is essential to maintain the efficiency of Clarence House. This is particularly challenging in a building where individual monitoring (and therefore charging) of energy is extremely difficult, although work is underway to aid metering in the future.





In order to continue our efforts for reducing our environmental impact, we joined the "Sustainable Environmental Improvements in the Commercial Sector" (SEnvICS) project managed by Cardiff University early in 2007. As participants to the project, we received a free building survey of Clarence House, which identified opportunities to improve both energy efficiency and waste management within the building. Working with some of our new and existing tenants we have put in place initiatives several including installation of PIR detector lighting in communal areas and low traffic areas.







In addition we have reviewed all new M&E installations and during the recent refurbishment of the 3rd floor for the Welsh Assembly Government took the opportunity to introduce a highly energy efficient low level condensing, 2-pipe air conditioning system, which we plan to extend to 3 other floors within the year.

With further support from Cardiff University, we are investigating and commencing a number of further initiatives to enhance our efforts, including:

- •A campaign to encourage further participation from our existing tenants into our improvement schemes through facilitated training events, due to commence mid March.
- •Development of "green leases" for new tenants in the refurbished areas of the building. This is to equate the additional responsibilities set within the lease with the benefits received from our improved facilities.
- •The addition of a "Green" page to the Clarence House Website, allowing tenants to monitor energy efficiency targets and ongoing





initiatives.

•Development of a tenant information pack, which will include our Environmental Policy together with relevant information for the tenant to assist with adoption of best practice.









Newport & Gwent Enterprise – Case Study

About us

Newport and Gwent **Enterprise** (NGE) offer a mix of multi-tenanted office and industrial units in two areas of Newport. NGE is a small to medium sized organisation providing advice, support and guidance to new business start-ups, which continues in their early years. This includes a landlord service clients to our through the provision and of management quality accommodation at a price that early stage businesses can afford.



We joined the "Sustainable Environmental Improvements in the Commercial Sector" (SEnvICS) project run by the Centre for Research in the Built Environment (CRiBE) at Cardiff University early As participants of the in 2007. project we received free building surveys of two of our commercial properties at Devon Place and Orion Suite. Currently, we have a total of 24 tenants who occupy Orion Suite and 20 tenant organisations who occupy Devon Place. The surveys served to help us identify opportunities where environmental



impact of the buildings could be reduced, providing shared benefits to both us as landlords and to our tenants. Resulting implementation have included programmes installating light sensors. **Future** plans range from low cost measures (e.g. changing the cleaning practice of urinals to facilitate lower water usage), to more expensive capital investments (e.g. modification of luminaires to accept T5 fluorescent tubes). Savings of £150 per quarter have already been achieved.

As a landlord organisation, we realise that occupant participation is essential to ensure efficient operation and management is maintained within the building on a day to day basis, particularly in a multi-let building. For this reason,









we have worked with the project team at CRiBE to investigate further opportunities where we can encourage our tenants to participate without requiring excessive time commitment. This has, to date, been undertaken in two ways:

- Presentation by CRiBE at an organised tenant meeting to introduce the benefits achievable through environmental management. This proved to be very successful and facilitated:
- increased awareness of environmental issues for all attendees
- networking between our tenants who would not normally meet
- the establishment of beneficial practices between tenants to reduce waste and costs.
- 2. Investigating the introduction of selected clauses within our tenant lease agreements, which operate on a monthly basis. With support from CRiBE, together with guidance provided in their published Good Practice Guide ("Incorporating Environmental")



Best Practice into Commercial Tenant Lease Agreements") we aim to provide green leases to our new tenants, particularly at Phoenix Business Park. Our new commercial premises in Newport, has been iointly developed with the Welsh Assembly Government, with European Grant Funding. The premises have been designed BREEAM Very Standards which we aim to maintain by working with our tenants.

We are also developing an information pack that provides prospective and new tenants with a copy of our environmental policy together with guidance on best environmental practice.









fwdlaw Case Study

About Us

fwdlaw was established in 2003 and provides a variety of legal services including business services conveyancing, employment, family, personal injury, wills and probate. Landlord and Business Services are also an important part of the business service and our organisation rents out part of their premises. As such, fwdlaw has first hand experience of the difficulties facing commercial landlords from varying perspectives.

Our commitment to environmental improvement

Consideration of our impact on the environment is high on our business agenda and it does make good bottom-line business sense. We recently to have demonstrated government agencies that our commitment to environmental issues is sound and have successfully assisted one of our clients in the bidding for former government land for commercial development.



As business we have а also endeavoured to improve our own environmental credentials through our achievements with the Green Dragon Environmental Management System scheme. Building on this, we have strengthened our efforts through our participation in the Cardiff University SEnvICS project, which has provided support, training and advice to us covering a range of including an innovative issues. approach to leasing our premises and advising our clients.

With the continued support from the project team at CRiBE in Cardiff







Downloadable from www.greenleases-uk.com



University, fwdlaw is now investigating opportunities for the incorporation of "green" clauses into new commercial lease agreements on behalf of our clients. We feel that the energy performance of a building is important, particularly in light of more stringent legislation now in force together with the introduction of Energy Performance Certificates later in the year. As such, our efforts at present are focused mainly on setting obligations in place in the lease contract for the monitoring of reduction energy and consumption. We believe this to be sound advice to commercial landlords - the ability to monitor and work with tenants to achieve better energy conservation will lead in time higher returns from energy efficient property portfolios - good for the environment = good for business.



fwdlawassociates
Solicitors
Investor in People:
Green Dragon Environmental Award
2007
Lexcel Quality Award 2007
12/13 Clifton Road
Newport
NP20 4EW









Welsh Assembly Government: WISP Building – Case Study

The Welsh Assembly Government has a significant commitment to sustainability in the built environment. This is evident through our requirement for BREEAM excellent ratings on our new buildings.

WISP (Welsh Investment Strategic Partnership) is a joint venture with the private sector tasked with developing grade 'A' spec office buildings in areas where there is a reluctance to develop by the private sector due to the development costs exceeding the value of the completed building.

with In tandem the **BREEAM** requirement, we are also aware that our buildings need to be occupied in a sustainable manner. When we were introduced to the SEnvICS project, we considered the Orb in Newport, a 48,000 sq ft office, as an ideal opportunity for implementing our desire to improve the energy and environmental management of our buildings. This has included the development of a checklist that we could use to assess the environmental credentials of prospective tenants. This would help to ensure that our BREEAM Excellent buildings maintain a high level of energy performance.



The introduction of green leases for new provides a tenants also proactive the Welsh approach for Assembly Government to lead by example. With support from Cardiff University, the marketing material for the Orb (currently under construction) includes elements relating to green leasing structures. The Orb is a pioneering project which will influence occupational leases on our subsequent buildings.







Downloadable from www.greenleases-uk.com

APPENDIX B

Owner/Landlord Preliminary Environmental Assessment of the Building

The following list is by no means exhaustive but it provides sufficient ideas to undertake a preliminary self assessment for a building and its site. It is recommended, however, that external professional support is sought to undertake a full assessment prior to lease agreements to minimise liabilities for both parties.

General	Description	Comment & action required
Building (Fabric, age, floor area etc)		
Windows (single glazed, double glazed, solar film)		
Tenant capacity		
Current occupancy and new tenants		
Current void spaces/ void spaces forthcoming		
Additional facilities available (eg: car parks, catering/ restaurant areas, warehouse storage)		
BREEAM rating/ energy rating		
Building location (eg: access to public transport, brownfield, shared facilities with neighbouring premises)		
Refurbishment (undertaken and planned)		
Use of recycled furnishings and materials (office furniture, carpets etc)		
Current use of landlord third party contractors (eg: property agent, cleaners, security, waste collection)		
Current utility suppliers (water, gas, electricity, other)		
Utility meter locations & accessibility for tenants (or availability of metered information for tenants)		
Current availability of information exchange areas for tenants (notice boards, common rooms, newsletters, building web-site etc)		
Ventilation (passive, air-conditioned)		
Tenant handbook/ information pack		
Contractor handbook/ information pack		
Current Heating/ cooling systems & controls		
BMS? Efficiency of operation		
Pumps, drives and fans (efficiency/maintenance)		

General	Description	Comment & action required
Energy efficient lighting installed? (PIR detectors, energy efficient tubes, etc)		
No. toilets/ domestic facilities		
Water conservation devices and schemes installed? (spray top taps, flow restrictor valves, dual flush, rainwater harvesting, grey water recycling)		
Drainage plans (availability, CCTV checks on drains etc)		
General Environmental		
Current environmental credentials (eg: ISO14001)		
Environmental reviews, audits, reports undertaken previously (availability)		
Environmental/ energy policy		
Environmental/ energy Statement		
Tenant handbook/ information pack - does it include environmental and energy information for tenant?		
Waste		
Current waste volumes and types from landlord (if any)		
Landlord waste storage areas provided for tenants (size, suitability for segregation, accessibility, security, compliance with statutory requirements for storage)		
Current landlord waste segregation facilities (paper, cans, cardboard, plastics, hazardous, toner cartridges etc)		
Communication routes for waste segregation (newsletters, bulletins, labelling of bins)		
Waste reduction targets?		
Current cost for waste disposal		
Monitoring procedures in place?		
Neighbours		
Any shared facilities (storage, parking, waste facilities, security etc)		
Problems/ concerns (noise, litter, vandalism, pests etc)		

APPENDIX C

Developing a Typical Corporate Energy and Environmental Policy

With increasing demands for businesses and organisations to publish their environmental and energy performance, particularly since the introduction of Energy Performance Certificates and Display Energy Certificates, effective methods to monitor and manage such issues are paramount. In a multi-let building, monitoring and managing can become a complex arrangement between landlord and tenant. Developing and implementing an Energy and Environmental Policy provides an administrative framework for setting objectives, targets and goals; for reviewing progress and for improving procedures.

As recommended in Incorporating Environmental Best Practice into Commercial Tenant Lease Agreements – Part I [I], the landlord should produce and provide tenants with a handbook or information pack which incorporates environmental and energy related information for the building which could include an Energy and Environmental Policy. An effective Energy and Environmental Policy requires commitment and endorsement from senior management levels from both parties. The following provides guidance on the development of an Energy and Environmental Policy.

Before developing a successful policy there must be a systematic approach to formalised improvement, which needs to be reviewed on a regular basis to ensure continuous improvement, as illustrated below. This systematic approach will need to be encompassed into the policy statement.

Generally there are two types of policy documents that need to be produced. The first is the document that will be published for public use which will include a Statement from the landlord and will be contained within the information pack. The second will be the one developed for management purposes between landlord and tenant.

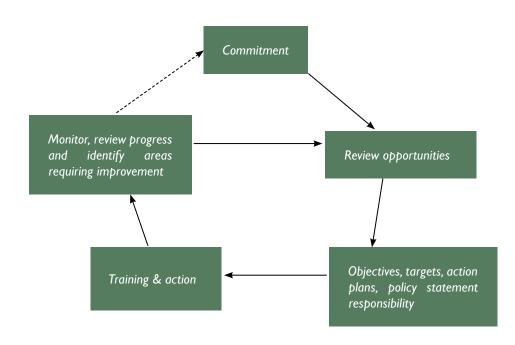
The Statement should commence with a clear statement of the main aims and objectives of the policy. This can then be followed with a number of bullet points outlining the commitment, which could include for example a commitment to reducing resource consumption, increase efficiency of operation, reduce operational costs and minimise environmental impact. The statement might then include a series of achievements that have been noted under the previous year(s), for example, emissions of CO2 have decreased by x%. This document needs to be signed and dated by a person in a position of seniority or Board member.

The policy developed between landlord and tenant may contain the goals targets and objectives for short, medium or long term and will set out a formal strategic action plan. The action plan could include for example, responsibilities, resources, deadlines and timescales, procedures for monitoring and measuring progress including any review meetings and communication channels.

As part of the recommended environmental audit (as mentioned in Section 4.2.I) the Policy documents will also need to be reviewed, updated accordingly and recirculated to all parties involved.

Further details of how to develop effective policies can be found from the following sources:

http://www.environmentalpolicy.org.uk/ http://www.carbontrust.co.uk/Publications/publicationdetail. htm?productid=CTV022&metaNoCache=I



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Notes

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URL: http://www.cf.ac.uk/archi/cribe.php

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