

Green Leases: an opportunity to develop a sustainable approach for Tenanted Commercial Buildings in the UK

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Abstract

Approximately 98% of the building stock in Europe comprises existing buildings. Landlords of commercial existing buildings are facing increased legislation, notably the Energy Performance of Buildings Directive. This is driving them to reduce their energy consumption whilst striving to remain in a competitive market. In its widest sense energy also applies to other resources. Office tenants and landlords are finding their energy performance is increasingly being scrutinised by customers. Both parties see benefits in reducing their energy consumption. However, the relative benefits of improved practice for tenants and landlords do not always match the responsibilities apportioned in the current commercial lease agreement.

An investigation incorporating thirty five commercial tenants operating from five buildings in two South Wales cities identified that the commercial lease was a major systemic barrier to energy efficiency in commercial buildings. This may be due to behavioural practice within a building, lack of defined obligations and responsibilities, ineffective communication and payment structures that inhibit tenants from carrying out actions to reduce their impact. Landlords also have difficulty in justifying investments in equipment or operational changes that would lead to environmental improvements.

The potential of altering the commercial lease agreement to become a tool to aid environmental improvements (rather than a barrier) was investigated. To this end clauses which could be incorporated in the commercial lease agreement were developed. These clauses provide non-technical solutions to tackle the identified barrier and lead all parties to reduce energy consumption. As a result of this investigation, the thirty five participating tenants implemented thirty three energy minimisation initiatives, plus twenty eight relating to general waste and three relating to water. This indicates the progress which can be achieved when the barriers are addressed.

Introduction

A total of 77% of the existing commercial building stock was constructed before Building Regulations covered energy conservation [1]. Given that buildings constructed in 2006 are typically 40% more energy efficient than those built in 2002 [2], it can be assumed that the majority of the building stock performs significantly under current energy efficiency standards. At the end of 2003 the existing commercial offices were valued at approximately £159bn [3]; this is a significant investment, from which the owners wish to maximise their return. Since existing building stock represents 98-99% of buildings in the UK at any one time [2], it must be accepted that these buildings will remain as energy consumers for some time to come.

The realisation that 18% of UK's carbon emissions are from non-domestic buildings [4] is leading to increased legislation aimed to reduce carbon emissions from this sector.

The European Energy Performance of Buildings Directive (EPBD) [5] has been implemented in the UK through the revised Building Regulations [6] and the Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007 [7]. The Building Regulations require any refurbishment of large buildings to also incorporate energy efficiency improvements. However, commercial buildings can go decades before major refurbishment is considered by their owners. Building certificates [7] highlight the energy efficiency of the building to prospective tenants and buyers, thereby encouraging owners to improve their building's performance.

The property sector can expect further legislation to help drive improvements. The Carbon Reduction Commitment [8] has already undergone consultation, and is expected to come into effect this year. This will apply mandatory emissions trading to large commercial and public sector organisations. Further developments of the EPBD have also been proposed – these include extending the

requirement for improved energy efficiency to all buildings being refurbished [9, 10]. Similarly, the requirement for display energy certificates could be extended to all public and private sector buildings [4]. In addition, further amendments to the building regulations are expected.

Non legislative drivers are also affecting landlords and tenants in the commercial sector. The values of customers and clients are driving companies to prove their corporate social responsibility [11] and improve their environmental performance. This is generally manifested in adoption of environmental policies and management systems, but in the future could also result in companies refusing to take up contracts in buildings with poor energy performance ratings. Already the demand from tenants for more energy-efficient buildings has been described as 'palpable' [1].

It is also possible to identify a change in investor attitudes. Investors have to look to the future, and some are identifying green buildings as a better bet for the future [12]. This is compounded by fears of 'price chipping' [13, 14] which could be associated with poor energy performance. Add to this concerns over increasing energy costs [14], and it is evident why companies like British Land PLC have already pledged to be carbon neutral by 2008/9 [15].

There has been a general trend in the reduction of lease lengths since 1998, with shorter leases of 5 years or less being favoured more than the longer leases of 15 years or more [16-19]. Differing sectors of the market have differing lease lengths, with new and higher value properties attracting longer length leases than second hand and lower value properties [19]. In the UK, the leasing process is governed by a voluntary Code of Practice, which sets out a series of recommendations to help better inform tenants. The process also benefits from a Code for Leasing Business Premises in England and Wales. Both Codes of Practice makes reference to open channels of communication between landlords and tenants at all stages of the leasing process [20, 21].

Within the leasing process, the use of a service charge is popular in recovering costs for common services, especially in multi-let buildings. Within the Service Charge Code, it states that services are to be procured "on a value for money basis", ensuring that "written quotations are obtained for the supply of services" [22]. On occasions, these services will be administered by a facilities manager, who could be external to the building for which they are procured. Typical examples of services considered within the service charge are electricity supply, waste management and maintenance costs [23].

Whilst the Service Charge Code does make reference to transparency in service charge costs, it makes no reference to consideration of aspects of sustainability. Given the changes in legislation, such issues will need to be considered when procuring services such as energy and waste management. Previous research has indicated that changes in practice by those who manage and operate buildings will be facilitated by changes in policies [24]. However, there is criticism relating to why consumers do not take advantage of the energy efficient opportunities available to them. There are a number of market barriers to the uptake of energy efficient opportunities, including technical (options may not yet be available), economic (insufficient capital investment for such opportunities) and institutional (no well-defined structure to decide upon and carry out investments) [25]. The landlord – tenant barrier relates to the fact that the organisation carrying out the improvements (e.g. the owner or manager of the building), may not be the organisation(s) who gain the benefit from the outcomes of the improvements (e.g. the tenant(s) of the building) [25].

Initial studies [26] explored opportunities to improve environmental performance in 40 commercial based small to medium sized enterprises (SMEs) in South Wales. For the purpose of participant selection, the European definition was used whereby the organisation employs 250 or less people, has a turnover of less than €40 million and is less than 25% owned by one or more companies not falling within this definition.

The study identified that over 60% of the SMEs were renting office space in multi-tenanted buildings. Furthermore, whilst many cost-effective opportunities for improving environmental performance had been identified, the implementation of these were somewhat hampered by uncertainties in responsibilities between landlord and tenant together with lack of financial incentives for either party.

Studies undertaken by Jayne [27, 28] suggested that landlords are exposed to a considerable amount of environmental risk and the associated liabilities. Scope exists to reduce this through improved letting practices. Changes are needed in the way leases are negotiated to respond to the introduction

of environmental legislation but lawyers generally do not consider environmental issues during transactions relating to sales, acquisitions or leases in the UK [29].

When a building is occupied, maintaining the environmental performance is very much dependant on the efficiency of operation and implementation of best practice. In a tenanted building, particularly a multi-tenanted building, responsibilities for maintaining performance becomes distributed between landlord, tenants, facilities management and property agents. This paper explores further:

- the opportunities to implement environmental best practice with landlords and tenants,
- the barriers to implementation
- and the methods to overcome the barriers identified.

The Study

The investigation led by the Centre for Research in the Built Environment [30] commenced with the development of a working partnership with representatives from King Sturge, the Royal Institute of Chartered Surveyors Foundation (RICS Foundation), the Environment Agency Wales and Envirowise.

Development of Cluster Groups

To encompass a broad range of tenant and building scenarios common within the UK, 5 buildings were identified within south Wales for inclusion in the study. These became the cluster groups for the investigation (refer to Table 1).

The buildings varied in terms of age, number of tenants and type of office according to BRE benchmark guides [31]. Office types can be summarised into 4 categories as follows:

Type 1: A naturally ventilated building with cellular offices. A simple building often relatively small between 100m² to 3000m² and is often formed from a converted residential property. The building typically has limited common facilities comprising one or two small domestic areas and toilet facilities.

Type 2: A naturally ventilated building ranging in size between 500m² to 4000m² with some open plan offices and some cellular offices. This building is typically formed from converted industrial buildings. There are often more common areas equipped with a variety of shared facilities including office type equipment.

Type 3: Typically an air-conditioned standard office ranging between 2000m² and 8000m². This type of building is largely purpose built with the internal design being similar to Type 2 buildings but often with a deeper floor plan with tinted windows.

Type 4: An air-conditioned prestigious office ranging from 4000m² to 20,000m². This tends to be purpose built for national or regional head office businesses. The building is constructed to high specifications often with their own catering departments, extensive storage areas, car parks and air-conditioned rooms for IT equipment.

The 35 tenant organisations participating in the study were based within one of the 5 commercial categories listed below and ranged in size, (according to the EU definition of an SME) from a micro SME (fewer than 10 employees) through to a medium- sized SME (fewer than 250 employees).

- 10% tenants from financial services (medium sized SMEs)
- 10% tenants from property sector services (medium sized SMEs)
- 10% tenants from legal services (medium sized SMEs)
- 37% tenants from community and training services (ranging from small to medium sized SMEs)
- 33% tenants from scientific services sector (ranging from micro SME to small SMEs)

Table 1 – The Five Cluster Groups Developed For The Study

	Building A	Building B	Building C	Building D	Building E
Landlord Company	Associated British Ports / Norwich Union	Danmerc Property Management (agent)	Welsh Development Agency		Aberdeen Asset Management
Property manager	Caxton Facilities Management				King Sturge
Age of Building	6 years	6 years	12 years	8 and 2 years (2 phases)	33 years
Number of Tenant Companies	3	1	5	8	18
Type of Building [31]	4	3	2	1	3

Building D was located on a scientific industrial park and as such, 7 of the tenants in this building were based within the scientific services sector. The offices rented by these tenants were also equipped with small laboratory facilities. All other tenants participating were office-based undertaking administrative duties only.

During Phase 1, preliminary meetings were held with the landlord (or property agent) and the facilities manager for each cluster group to obtain organisational details, general concerns regarding the building, leasing arrangements and refurbishment work undertaken or planned. The meetings were also used to agree an approach for recruiting tenant organisations to the project. This involved providing free environmental reviews for each tenant, with the additional purpose of identifying opportunities for environmental improvement.

Identification of Opportunities – Environmental Audits and Lease Reviews

During Phase 2, each of the participating tenant organisations was provided with an environmental review of their rented area. The review served to identify concerns, priorities and responsibilities relating to energy, water and waste within the building. Opportunities to reduce resource consumption and cost were discussed with the tenant during a meeting following the review. For Buildings A, C, D and E, the environmental review also extended into common areas within the building.

Due to the complex nature of the issues identified during the reviews and to extend the support available to the cluster groups, the partnership welcomed a representative from a law firm, Eversheds, during Phase 2. Exemplar leases for each of the buildings were reviewed with support from Eversheds. This review established the extent to which environmental issues and efficiency of operation were incorporated in the lease. From this a generic summary of opportunities relating to the lease contract for landlords was developed to cover a range of scenarios and findings encompassed in the project.

A written summary report was provided to the landlord organisation following the reviews. The report documented the findings and observations from both the environmental and lease reviews. It also provided a series of recommendations for improving environmental performance within the building divided into those which tenants could implement themselves and those that required the landlord to implement and manage.

Cluster Group Meetings and Training

During Phase 2, a series of cluster group meetings were organised for tenants within each of the buildings. The first was attended by the landlord organisation or property agent to demonstrate further support to the programme. Subsequent meetings focused on the provision of training to the tenants and the facility manager. The training sessions focused on some of the key issues identified during the environmental reviews. Responsibilities relating to energy efficiency and waste management were the key concerns of the tenants so training focused around methods that could be employed by each organisation to improve their own management within their rented area.

Questionnaires & Consultation

For the purpose of data collation, a questionnaire was developed in Phase 3. This was circulated to the 35 tenant organisations during cluster group meetings. Respondents were asked to state their reasons for participation in the project, their leasing arrangements and provide feedback on their implementation programmes together with any progress made. They were also required to rank their opinions on environmental management and the issues raised within the environmental and lease reviews. A small number of questionnaires were not completed due to tenant relocation during the study period.

Results

Tenant Reasons For Participating In The Study

Feedback from tenants during the reviews and questionnaires indicated that 25% ranked improving their own energy management as a high priority, while 19% were deterred from improvements since costs were largely under landlord control and therefore considered it as medium priority. A further 13% identified that the study offered opportunities to improve their overall environmental performance, with similar figures for development of waste management programmes and environmental policies / accreditation schemes (although this was considered a lower priority). Interestingly, 6% of the tenants viewed the study as an opportunity to improve their communication with the landlord, and considered this a high priority. A further 6% identified that it would encourage increased communication with other tenants within the same building, and rated this as a medium priority. These results are summarised in Figure 1.

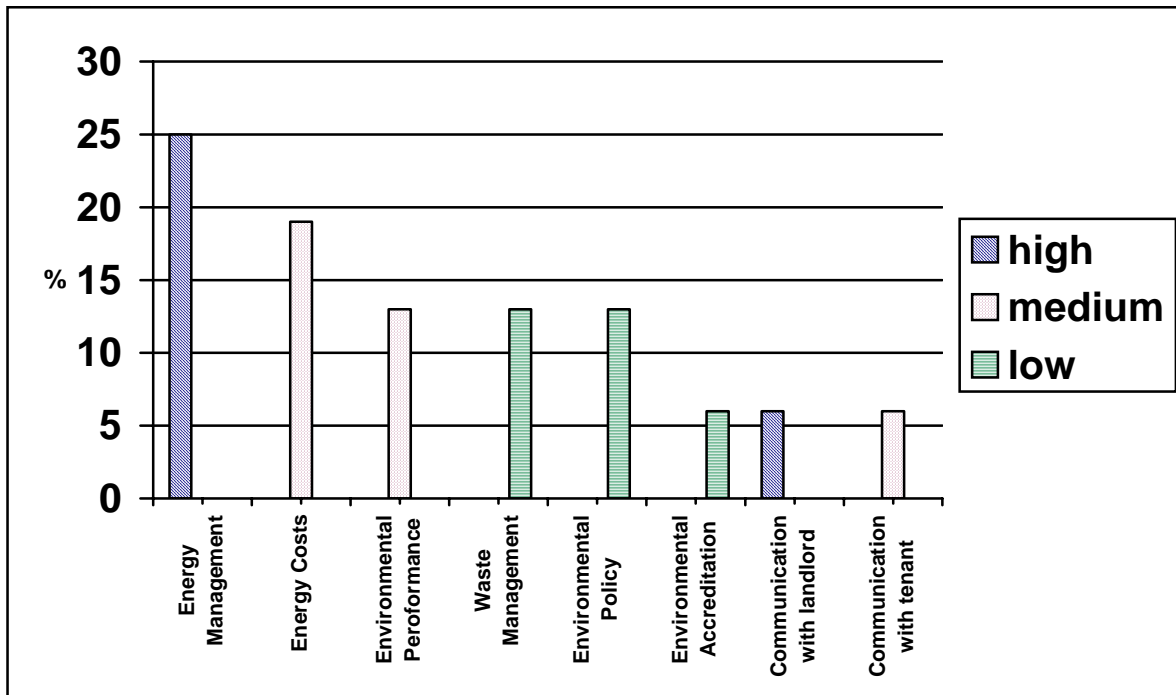


Figure 1 – Tenant Reasons for Participating In The Study

When questioned about energy, 70% of the tenants identified energy consumption as the most costly resource against waste management and water consumption. Despite this, 52% of respondents considered their energy consumption to be poor, due to a lack of formal monitoring. Interestingly, 33% considered their energy consumption to be good, but considered provision of more accurate information from the landlord to be of high priority. Only 15% had no opinion on consumption as it was considered beyond their control.

The Cluster Group Approach

Whilst most tenants at the start of the study considered they had good relationships with their landlord, the establishment of cluster groups proved to be an effective method for improving communication not only with the landlord. More importantly, the cluster groups improved communication with other tenants in the same building. Often best practice is not noticed by other tenants of the same building, thus initiatives implemented by individual tenants in a multi-tenanted building are perceived as having minimal impact.

As a result of the development of cluster groups during the survey, Buildings C, D and E initiated regular discussion groups for the tenants that continued after the study period. The property agent of Building E also established a web-site to inform existing and future tenants on building related issues, including the availability of metered information for tenants within the building.

Implementation of Opportunities Identified

In total, the 35 participating tenants implemented 33 energy minimisation initiatives, plus 28 relating to general waste and 3 relating to water. Initially only 6% had viewed their participation in the project as an opportunity to improve communication between the landlord and other tenants. However, by the end of the study, 46% had improved communication with the landlord and other tenants. This was demonstrated through the establishment of energy reduction targets, initiation of formal energy monitoring programmes and discussions of shared opportunities with other tenants through meetings. A further 18% had commenced weekly monitoring programmes and had discussed opportunities to improve efficiency within their area and the building.

During the course of the study, tenants noted an increased awareness of environmental issues and impacts of their activities. All 5 buildings had commenced awareness campaigns including the development and use of posters and bulletins. Within Buildings A, B and E, the tenants had

collectively commenced switch off campaigns ensuring that a total of 1,510 computers and monitors, 100 printers, 30 photocopiers, 16 vending machines and 1 microwave were switched off every night. Collectively, this provided an estimated power save of 187.3kW for every hour the equipment was switched off.

In Buildings A, B, C and D monitoring of overnight energy consumption was undertaken. Furthermore, suppliers were contacted and half hourly readings were made available for tenants to view and record. Buildings C, D and E established collective waste monitoring schemes between the tenants and as a result commenced recycling schemes of common wastes (e.g. paper).

The tenant in Building B had installed a Building Management System to improve energy efficiency and considered it a high priority to identify further opportunities to improve their environmental performance. Through initiation of staff training programmes, implementation of good practice, switch off campaigns and monitoring programmes within the first 6 months, the tenant recorded a reduction in their energy consumption by 20.47kWh/m² (4.2%) within their first year. Having raised staff awareness the company were actively developing further initiatives aimed at reducing consumption within the second year. They also set a target for reducing consumption by 10% within a 2 year period. Under a full maintenance and repair lease, prioritisation for implementing opportunities remained in the control of the tenant with only consent required from the landlord. Improving communication with the landlord was therefore considered low priority. Increased staff awareness through staff training programmes helped to ensure the implementation programme remained on schedule.

Key Issues Identified Through Lease Reviews

Evidence gathered during the study indicated that tenants within multi-tenanted buildings had not generally investigated opportunities to improve their environmental performance or resource consumption through opportunities within lease contracts. Feedback suggests that this is largely due to the fact that energy supply, base load consumption and control are beyond the control of their rented areas.

Of the 5 exemplar leases reviewed, reference to environmental issues and management of the building were minimal and only served to deflect liabilities from landlords rather than provide information or systems to help tenants. Existing commercial lease contracts do not reflect the use of energy efficient technologies or management within the building. Furthermore, there is no requirement for tenants to employ the use of energy efficient management or technology within their own rented areas. Feedback from tenants revealed that 24% would like lease contracts to include information regarding energy efficient facilities within the building. A further 24% could see the benefit for including information from the landlord regarding energy efficient initiatives, and other environmental initiatives, planned or implemented within the building.

Interestingly, 17% indicated that results of regular environmental and energy audits should be made available within the lease contract for viewing at lease negotiation stages but only 8% thought that their own rented area should be included. The reason for this was that benefits to the tenant would be minimal unless financial support was available either through shared capital outlay with the landlord or reflected in reductions in the service charge within the leases.

Procedures for undertaking refurbishments within rented areas are generally covered within lease contracts and require consent from landlords. However, the study identified that one of the most common problems associated with refurbishment of rented areas related to energy efficiency. Installation of partitioning walls in open plan office areas demonstrated detrimental effects in relation to heating facilities, air conditioning systems and lighting configurations. Control of efficiency therefore migrates to the tenant rather than the landlord. The study identified that 2 of the landlord companies could see the benefit for the inclusion of covenants within future lease contracts preventing alterations which adversely affect the environmental performance, of the rented area and of the entire building. To this regard, sufficient information would need to be supplied under tenant covenants for the landlord to make an informed judgement, preferably with the support of a qualified consultant.

Feedback also indicated that financial credentials of prospective tenant companies were investigated but that environmental credentials were disregarded. It could be argued that tenants who have

already adopted an accredited Environmental Management System present less liability and risk to the landlord. This could be extended to encouraging landlords to develop environmental policies for the building. Prospective tenants, and indeed sub-assignees, could be made aware of the policy and through the lease agreement, be required to adhere to the policy.

Through discussions with the landlord companies, the study identified that longer leases in excess of 15 years with no break clauses were costly to amend and as such presented a major systemic barrier to environmental improvement and energy efficiency. However, through introduction of tenant handbooks and information packs that encourage adoption of best practice, the barrier could be somewhat overcome. Government measures in the UK to reduce lease lengths substantially increase opportunities to incorporate best practice into lease agreements. However, discussions further revealed that little guidance was available for landlords and tenants at lease negotiation stages to adopt good practice. A flexible, voluntary approach would be required that provides guidance at lease negotiation stages for landlord and tenants to discuss.

Discussion

The study identified a number of key issues preventing the improvement of energy and environmental performance of tenants in multi-let buildings. This included issues such as how costs of improvements were controlled (generally, these were under the control of the landlord, and therefore not seen as applicable to the tenant), lack of formal monitoring or provision of monitoring data, lack of communication with the landlord as well as other tenants within the building, and the lack of inclusion of such information within the lease contract (other than to provide protection of landlord liabilities).

To ensure that responsibilities, liabilities, capital outlay and benefits are divided proportionally, change is required within leasing structures. Opportunities to introduce change have been identified during the study, but landlords have indicated that the approach be flexible to encourage open dialogue and must allow for voluntary adoption. Furthermore guidance was required for implementing such change. To this end, a key output from the working partnership of the study was the development of a series of model lease clauses and recommendations [32, 33] that address the key issues identified.

Development of model lease clauses and recommendations

To encourage adoption of model lease clauses by both landlord and tenant at lease negotiation stages, benefits need to be clearly highlighted and stated in guidance documents. If the lease incorporates clauses that assist with compliance of new legislation [5, 6, 7], clear benefits are achievable for the landlord. The model lease clauses developed from the study refer to the specific articles within relevant legislation for landlords to consider. As more stringent legislation is introduced, tenants are becoming increasingly aware of their environmental credentials and environmental management programmes. As such, the model lease clauses acknowledge environmental credentials of a tenant and not just financial credentials.

The study has identified that communication and flow of information needs to be three way. Landlords and tenants need to exchange information on a regular basis but tenant to tenant communication in a multi-let building is also important. A variety of model lease clauses have been designed to ensure communication is maintained and that information is readily available. These clauses include a requirement for landlords to establish an information pack or tenant handbook. Such information could include availability of metered information, planned improvement programmes, maintenance schedules and performance rating of the building. To encourage both tenant and landlord to maintain good practice, clauses require the adherence to an environmental policy for the building, which includes any sub-assignees contracted into offices areas within the building. Regular audits are recommended with reports and information being available to both new and existing tenants.

The introduction of resource reduction targets (particularly for energy) provides a common goal for both landlord and tenant. Model lease clauses have been designed to encourage setting of targets through consultations with external qualified environmental consultants, who can establish capital expenditure and pay-back periods. Regular support from an environmental consultant would also help to identify new opportunities and help maintain compliance with new legislation.

The study has revealed that financial incentives are needed to encourage adoption of good practice, particularly where installation of efficient technologies require capital outlay. Model lease and recommendations have been made to ensure that good practice by a tenant is acknowledged through the service charge.

Often tenants implement changes within the building, such as installation or removal of partitioning walls or domestic facilities. Feedback indicates that currently, neither landlord nor tenant give due regard to the environmental implications of planned changes or consult with a qualified environmental expert. Recommendations and model lease clauses have been presented to abate this problem.

The partnership has developed a series of feasible draft model lease clauses based on findings of the study which has encompassed a range of tenant scenarios common to the UK. However, since the guidance document provides a voluntary and flexible approach for landlords, model lease clauses can be selected or rejected as appropriate at lease negotiation stages. As such, the model lease clauses can be adopted and applied to tenants and landlords of both new and existing buildings.

Conclusions

The research findings and evidence suggest that challenges in the UK commercial stock exist in multi-tenanted buildings, where responsibilities to improve efficiency become shared between a number of tenants, the landlord and the facility manager / property agent. This work has highlighted that energy efficiency can be achieved when tenants and building managers work together. It also highlighted that the major systemic barrier to achieving such environmental and energy efficiency improvements was the commercial lease agreement and its lack of clauses relating to efficiency issues.

The Good Practice Guide [32, 33] provides opportunities to adopt sustainable best practice through the lease agreement. It also presents a voluntary method which empathises with differing building stock conditions and improvement programmes. Landlords and tenants are able to discuss and adopt as many or as few of the model leases clauses as are appropriate. Current investigations being conducted by CRIBE are trialling the uptake and efficacy of the Good Practice Guide.

The model lease clauses developed as a result of this study can be adopted by commercial landlords and tenants for single-let occupancy or multi let buildings thus providing a sustainable and yet common approach for the UK. This methodology could also be applied to other countries worldwide.

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