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Sustainable Facilities Management and Green Leasing:

The Company Strategic Approach

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Abstract

Businesses are becoming more environmentally focused, and interaction between their core processes is essential in adopting a sustainable approach. This can be further complicated in the rental market, where organisational approaches may not be compatible with the sustainable obligations of building owners.

This paper's aim is to discuss the potential of "green leasing" and sustainable facilities management (SFM) in meeting these challenges, through literature and case studies.

The paper demonstrates the differing corporate approaches through a literature search, in the context of corporate social responsibility and obligatory and voluntary motivators, and how they relate to the triple bottom line of economy, environment and society.

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1 Introduction

With the movement towards a greater emphasis on the 'green', world infrastructure and technology now has the incentive, momentum and occasionally obligation to adapt according to its associated trends. The letting industry is not exempt from this change, with a variety of motivators beginning to result in marked changes to traditional leasing. This in of itself also has had a knock on effect for facilities managers (FMs), who now see their role not just as 'caretakers' keeping their buildings to a good operational standard, but also as caretakers of the sustainable performance of a building. In terms of drivers for this change, they can be found in both obligatory motivators as well as the cultural and corporate social responsibility (CSR) aspirations of building tenants and property owners. Green leases can be considered to be an outcome of sustainability and green trends that have begun to impact on the FM team, tenant and building owner relationship.

The focus of this paper is to show how companies adopt and implement sustainable facilities management (SFM) and green leases in addressing their corporate strategic approach to sustainability. The reason for addressing SFM and green leases together is due to their encompassing and holistically inclined qualities. To an extent, green leases can be considered to be a product of a systematic SFM approach. If SFM can be considered to be responsible for the maintenance and operations of the buildings structure, including building automation and computer aided facilities management (CAFM), then green leases can be considered to be an approach that aims to positively impact on the 'human' factor in buildings. It is important at this stage however to make clear that green leases do not exclusively impact on the human element in buildings, but also the technical systems depending on their lease clauses. This paper also hopes to illuminate this variety of factors to the reader, illustrated through literature research. Case studies in the non-residential building renters market will be used, in order to provide a deeper insight into building owner and building user interaction. The main research questions to be addressed are:

In what ways do green leases, the landlord/tenant relationship and SFM impact on the company strategic approach to sustainability?

Including the following sub questions:

- 1.1 To what extent are environmental, economic, social criteria considered in green leases?
- 1.2 What are the similarities and differences between companies in Real Estate and FM sector and other industry sectors in the context of the corporate strategic approach?

An SFM model will provide an overall theoretical approach to the paper and guided the literature search. The literature search was conducted using the keywords 'green leases', 'sustainable facilities management', 'building sustainability' and 'rental properties sustainability'. Some variations on keywords were also used such as 'landlord tenant sustainability' and 'workplace tenant sustainability'. The literature was mostly focused on the period 2000 to present, in the hope of keeping the literature relevant to existing environmental regulations. Journals in property and real estate management along with FM were given particular focus, along with those on sustainable real estate and architecture. Literature and cases were chosen specifically from these searches based around links with green leases and SFM, with limited exceptions to this noted in the text. There has also been an attempt to restrict the green leases to those with binding clauses, avoiding where possible the not legally binding memorandums of understanding (MOU's). In order to appropriately outline the company strategic approach, the paper will follow a traditional case format. By this, it is meant that the paper will discuss case specific examples of SFM and green leases in corporate practise. They will be categorised into motivators, those being CSR, obligatory motivators, and voluntary motivators. The differing approaches will then be compared in the context of the triple bottom line of economy, environment and society, and finishing with concluding remarks where the research questions will be answered.

Whilst research into green leases in conjunction with SFM is a comparatively recent phenomenon, there have been some publications and discussion that have provided some clarity on this issue. Pivo (2010) in his paper on owner tenant engagement, has outlined an extensive case study based state of the art on the topic of green leases and other green owner tenant initiatives, that to some extent deals also with FM (Pivo, 2010). Also from an academic perspective, various works by Hopkinson and Langley of Cardiff University have dealt with green leasing more extensively than most, but mainly from a legislative and regulatory perspective, as opposed to case studies (Langley

& Hopkinson, 2009, Langley et al, 2008). From a more applied perspective, the Better Buildings Partnership (BBP), a collaboration of property owners working together to improve the sustainability of existing building stock, released in 2009 a widely cited document, 'Green Lease Toolkit' which provides a guide to definitions, and model green leases clauses (Bugden et al, 2013). Aside from this, the United Kingdom (UK) and Australia have seen a comparatively vibrant green leasing discussion, in part due to its compatibility with existing emissions legislation.

2 The Theoretical Approach

Defining Sustainability, Green Leases and SFM

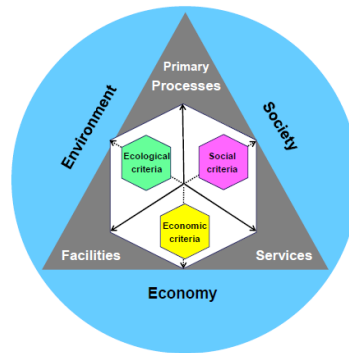
For sustainability, the Brundtland definition will be used stating that it is "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*" (Brundtland, 1987, p.15). This however, is not sufficiently tangible. Instead, surrogate measures found in environmental performance indicators focusing in part on energy efficiency (which is more easily measurable by tenants and landlords) will be used. Roaf (2005) described relevant indicators, including '*how much energy does the property use?*', '*how durable are the buildings functions?*', '*how adaptable are these functions over time?*' and '*how happy are its occupant, and how much happier can they be made?*' (Roaf, 2005, p.100). For green leases, the BBP offer one of the most cited (but not so academic) definitions. They write that "*a green lease is a standard form lease with additional clauses included which provide for the management and improvement of the Environmental Performance of a building by both owner and occupier(s). Such a document is legally binding and its provisions remain in place for the duration of the term*" (Bugden et al 2013, p.2). In terms of a more theoretical perspective, this can be found in Brooks (2008). He views green leases as an opportunity for the traditional lessor and lessee relationship to be "*recast*" in terms of roles, with this change being structured to "*create compulsion, incentive and flexibility for both parties to bring about energy conservation*" (Brook 2008, cited in Christensen & Duncan, 2010, p.3). Example clauses in a green lease could be to "*agree targets and strategies to improve the Environmental Performance of the Premises and/or the Building on a regular basis*", "*reduction in or improved efficiency of water consumption or discharge*" or to "*prevent the tenant and landlord from not adversely affecting the performance or the life cycle of any mechanical or electrical services*" (Bugden et al., 2013, pp. 14,16 and 22).

It is also important to understand what constitutes SFM. Junghans and Olsson (2014) in their article about FM as a new academic discipline, described FM as the "*the integrated management of the workplace to enhance the performance of the organisation*" (Tay and Ooi, 2001 cited in Junghans & Olsson, 2014, pp., p.71). And, with regards to dealing with non-core services or 'open facilities management', defining it as "*integrated and coordinated design, planning and management of non-core services*" (De Toni and Nonino, 2009 cited in Junghans & Olsson, 2014, pp., p.71). In terms of what differentiates SFM, Elmualim *et al* (2009) states that it evolved in parallel with the overarching influence of sustainable development, along with an increasing appreciation of the impact of climate change (Elmualim 2005, p.95). SFM could also be considered to "*include consideration not only of core business and support functions, but also relations with the local and global society as well as the climate and the eco system*" (Nielsen & Galamba, 2010, p.3). An International Facilities Management Association (IFMA) report in 2007 concluded that sustainable FM involved "*energy management* (Wood, 2006), *waste management and recycling* (Pitt, 2005), *transportation* (Piecyk and Mckinnon, 2010), *carbon footprint* (Wang et al., 2010), *environmental responsibility and community engagement* (Fraser et al., 2006), and *biodiversity* (Halliday, 2007) are the key sustainability issues being addressed in organisations" (Elmualim et al 2012, p.18).

Theoretical Model

The SFM model (Junghans, 2011) was developed to show the interrelation between primary processes and supporting the facilities and services of any kind of organisation (public, private, different kind of industry sectors etc.). At the 1st International Conference on Urban Sustainability and Resilience at the University College London (UCL) in November 2012, it was presented to show how environmental management criteria could be used to structure an SFM approach with a focus on environmental issues, like for example, focusing on energy efficiency

and reduction vs CO2 emissions (Junghans, 2011).



(Junghans, 2011, p.6)

With green buildings as a focus, the triangle expands outwards to integrate primary processes, facilities and services. These also link to some of the core themes of green leasing and SFM. The model encompasses some of the more common elements associated with sustainability, but in the context of how SFM operates in relation to building sustainability. It is also suitable for linking the discussions to socio-economic and socio-technical factors. In the outer layer, the inner elements of the model are placed in the wider context of the triple bottom line of the environment, economy and society. The model outlines how the paper will be approached in a larger context and how the primary processes, facilities and supporting services are impacted by SFM, green leases, the landlord/tenant relationship and how this is further integrated into the triple bottom line in the outer layer of the model, which will also act as key performance indicators in the analysis. In defining key topics, the definition by Keith Alexander (1992) will be used stating that “*facilities refer to the range of buildings, services and systems that support an enterprise. In the broadest sense facilities include the infrastructure, space, environment, information and support services*” (Alexander, 1992). Core processes refer to the core functions and roles of the tenants and landlords.

Looking at the Real Estate and FM sector, the main stakeholders are building owners, users and managers (Haugen, 2008). Leasing and renting can be considered to be the contractual relationship between owners and users, and between users and FM’s, whilst also being one of the main services provided. Sustainability is also becoming a core part of landlords’ primary functions. This can cause potential frictions in the owner/user relationship, which could pose problems for negotiating or implementing green leases or more costly SFM services. A landlord’s primary process is to accrue revenue from their tenants, whilst tenants hope to secure an affordable rent. This, for example, can result in making “*it difficult for the landlord to make upgrades to equipment if this has significant costs*” or even passing on the costs to the tenant through a service charge or amortisation in excess of the face rent, which could impact on the attractiveness of a tenancy (Hinnells et al., 2008, p.544). This also needs to be accounted for in the context of critical success factors (such as reduction in energy consumption, or meeting waste disposal targets) linked to a corporate sustainable approach. Many companies have already begun to implement “green leasing”, for example the Norwegian state property owner Statsbygg, and American commercial real estate owners Akridge.

3 The Company Strategic Approach

Whilst uptake of green leases is not yet a widespread, there are notable trials and examples that have taken place in recent years, with different motivators and approaches to implementation that have impact on organisations strategic approaches to both green leases and SFM.

Corporate Social Responsibility

CSR can be considered to be at the core of some company’s business identity, with some customers viewing CSR as a reason to do business with an organisation and could be considered a strategic approach in of itself. The American

organic supermarket chain 'Whole Foods', for example has ethics and sustainability at the heart of how it does business, and "*servicing customers' desire for delicious food they can feel good about*" (Johnston, 2008). For Whole Foods, CSR goes beyond just trade and branding, it also moves into employing SFM in their stores. For example, they use heat recovery systems to store waste heat from refrigerators (Ankenmann & Myers, 2011). The Australian property group Investa on the other hand, has attempted green type leases in their properties, using the strategy of appealing to CSR and brand enhancement (Pivo, 2010, p.190). Their so called 'Ecospaces' are newly refitted and refurbished office spaces, with energy management and increased employee productivity being key motivators for adoption (Pivo, 2010, pp.190-191). Whilst SFM takes the responsibility for caring for the buildings processes that support the Ecospace working environments, the tenants fulfil their sustainable obligations through, for example, choosing Energy Star certified office equipment, or organising a sustainable policy implementation plan (Investa, 2007, pp.26, 38). There is however potential that green leases can also be hindered in their uptake if they disrupt or are burdensome to a tenants primary operations, especially if tenants see little incentive to increase the sustainability of their landlords property asset (Christensen & Duncan, 2010, p.5). With Investa however, they adopted a strategy of utilising the energy saving elements of their leases combined with FM supported systems to reduce energy bills by nearly 50% per square metre per annum (Pivo, 2010, p.190). Where other incentives may struggle to make an impact on tenants to encourage adoption of a greener lease, the economic incentives through the likes of energy saving may be sufficient for businesses to choose a more sustainable approach (Christensen & Duncan, 2010, p.5).

Obligatory Motivators

There are also legislative examples of buildings now being required to adopt a more sustainable strategy in their workspaces. In the UK, the Carbon Reduction Commitment (CRC) has mandated qualifying properties to better consider their energy usage in order to meet their obligations. Green leases, potentially offer a route by which to divide this burden between landlords and their tenants as "*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*" (Langley & Hopkinson, 2009, p.3). Whilst well-resourced SFM can help meet these obligations through optimised and well maintained facilities, tenant cooperation is also important. Agreeing with tenants to carry out the likes of energy performance reviews and meeting energy targets (Bugden et al., 2013, p.19), can assist owners in ensuring that the building performs as needed. These types of green lease clauses however cannot be achieved without SFM. Accurate energy monitoring, maintenance and sustainable asset management will also assist tenants in fulfilling green type leases. This is more essential in some countries, given that the CRC for example demands the installation of meters with 'half hour' monitoring capabilities (DECC, 2012). UK property portfolio owners Land Securities offer tenants services provided by in-house environmental teams as a part of their sustainability strategy which is designed to assist with the CRC, mostly in the form of energy audits or condition appraisal. Whilst Land Securities don't offer tenants full green leases, they offer separate agreements in the form of memorandums of understanding (MOU's) (Pivo, 2010, p.185). On the other hand, European real estate managers Prudential Property Investment Managers (PRUPIM) (now M&G Real Estate), offer a different strategy with their green leases and MOU's, that can also help with CRC obligations. The tenants and external FM teams in their Atlantic Quay location agreed on a collaborative sustainable strategy. This for example, resulted in sharing single recycling facilities, and better coordination and collaboration with tenants and FM through the transition process in the hope of avoiding tertiary churn and other problems. This, saw building recycling rates increase to 70% over the previous 40%, along with cost reductions for all parties (Pivo, 2010, p.193).

Voluntary Motivators

Some organisations also set their own sustainability standards. This could be to exceed national standards, or to put the company in the position of being industry leaders. This differentiates from CSR in the sense that it is part of their corporate strategy, and less about their brand. In Norway there is the example of the state property portfolio owner Statsbygg, and their own project entitled 'green lease riders'. Statsbygg have chosen to reduce emissions further than national requirements demand (Statsbygg, 2013, p.3). As a result, they trialed the riders in five existing properties from 2011-2014 (Statsbygg, 2013, p.4). Their report implies a more behavioral approach to these leases,

encouraging tenants to be more aware of and reduce energy consumption (Statsbygg, 2013, p.4). New buildings however, are not being offered trial, because Statsbygg hope that their newer assets will already be designed for optimum energy usage (Statsbygg, 2013, p.5). Green leases can also be used to assist in helping obtain or retain a rating from an environmental assessment scheme. The two major schemes are the British 'Building Research Establishment Environmental Assessment Methodology' (BREEAM), and the USA's 'Leadership in Energy and Environmental Design' (LEED). Sharp and Rives (2009) demonstrate how model green lease clauses can help with LEED. This could be clauses demanding tenants only make alterations to their property that can be LEED certified, with potential third party qualification. There could even be clauses that stipulate the manner by which waste from alterations is handled (Sharp, 2009, p.9). A case example is the 4,460 square metre Orb office building under construction in Newport in Wales. The building has been designed in tandem with BREEAM from the design stage onwards, emphasising that "*that our buildings need to be occupied in a sustainable manner*". They will be using green leases with their tenants to assure a sustainable outlook, which even includes an environmental checklist to assess the environmental credentials of prospective tenants. One of the building's owners, the Welsh Assembly Government, hope to that this will set an example to be used in occupational leases in other buildings in their asset register (Welsh Assembly Government, 2014). There is the risk however that the cost of a certification may be passed on to the tenant as part of the lease, which could be unattractive to tenants (Sharp, 2009, p.8).

4 Analysis

In terms of how best to compare the cases in the previous chapter, this will be done in the context of the triple bottom line, mainly due to their existing influence on many companies' corporate sustainability strategies. The cases considered in this analysis will be Investa, Land Securities, PRUPIM and Statsbygg, with consideration of their overall strategic approach. With regards to economic indicators, the financial factors in green leases and SFM can be considered to be an important potential driver for adoption. Green leases have significant potential in allowing landlords and tenants to jointly invest in a building sustainability and SFM infrastructure. In the case of Investa's scheme, their tenants enjoyed significant costs savings in terms of energy bills. Energy savings accrued from these types of initiatives also impact on the type of green leases employed. With Investa, this involved spaces both adapted to work well with SFM, as well as more sustainable tenant behaviour (Investa, 2007, pp.26-28). In terms of the economic approach, this is an aspect of the triple bottom that can also be considered to be a potential source of tension between landlords and tenants. The differing economic priorities of both tenant and landlord are important factors for consideration in the strategic approach, mainly because landlords need to offer leases and conditions of engagement that are attractive to prospective tenants, whilst also securing revenue for themselves. A corporate strategic approach to SFM and green leasing from the perspective of economy has to combine the needs and expectations of the SFM team, landlord and tenant, whilst ensuring a productive and attractive financial solution. In the corporate strategic approach, value management is both a core and motivating factor.

The societal approach to green leases and SFM seems, from the case examples, to be reflected more strongly in the CSR and voluntary motivator factors. This could be customer driven like the organic supermarket Whole Foods, or the desire to be industry leaders like 'Statsbygg'. The intricacies of approach however vary significantly, with no clear benchmark strategy. In the case of Statsbygg, 'green lease riders' were approached both from an SFM and tenant perspective, but dealt with in the form of a pilot study to see how this could be adapted to their wider building assets. Assessment schemes also impact on this societal leg, with green leases and SFM being seen as having significant potential in approaching the likes of BREEAM. The balance between occupant behaviour and the weighing on SFM is at times inconsistent, although there are some emerging trends, as demonstrated by Whole Foods. From the perspective of corporate strategy, this could imply something more tenant driven, as the environmental credentials in the outcome could be potentially as attractive to tenants as it is to the landlord.

In considering the environmental leg, this indicator spreads across all of the motivators. In one context, the obligatory motivators of the likes of the policy CRC, place significant pressure on landlords and tenants to improve their environmental practices. In terms of operations, landlords like PRUPIM are offering tenants programs to assist them in fulfilling their environmental obligations which can take the form of SFM, green leases and MOU's. The

FM team assisted in installing the likes of new environmentally friendly waste disposal infrastructure, with cooperation between the landlord, tenant and FM team being crucial to helping the building adapt, in an approach that is arguably more holistic and overarching. Other motivators also impact on this leg. The energy savings resulting from some leases will inevitably decrease those buildings emissions from power consumption, and good SFM will optimise building performance during their operational lifecycle. Whilst the environment is arguably the core of a sustainable approach in terms of outcome, this paper has shown that it isn't necessarily a primary motivator. The corporate approach is varied at best, but the environmental impact is in some ways only as profound as the detail of the SFM or green lease initiatives that may come with it.

5 Discussion

There are several ways in which green leases, the landlord/tenant relationship and SFM impact on the company approach to sustainability. This can range from the will of the actors, to the approach of FM. Motivators can also be considered to be key impact factors, as this can determine the approach and direction of a company's strategic approach. A cross discipline relationship seemed to be key from the evidence presented here. SFM cannot operate without the sanctioning power of the landlord, and a sustainable approach in a rental property cannot be carried out without tenants occupying the properties. SFM can impact the sustainability of the day to day technical and maintenance fabric of a building, a tenant can impact the primary process sustainability of the property, whilst the landlord has a significant impact on the approach. This is further complicated by the cross actor variable of cost benefit analysis associated with the sustainability strategy that is chosen. There is also the uncertainty as to SFM's role, due to the differences in their responsibilities over both primary and secondary circulation space. Better cooperation between all of the actors however, may positively impact a more holistic sustainable approach.

To what extent the economic, social and environmental approaches were considered in green leases is also important. To the level to which it is demonstrated by the case examples, the triple bottom line seems to broadly cover many of the key components found in a green lease. The cases focus on ways to control value management through the likes of energy cost savings for example, improve branding for both tenant and landlord, along with complying with mandatory regulations such as the CRC, or potentially attractive voluntary assessments such as BREEAM. Although the triple bottom line can be considered broadly representative of the main considerations of a green lease, this may better reflect the recognition and influence of the triple bottom line in the industry as opposed to its broader utility. The triple bottom line could be considered to be too restrictive, mainly due its focus on outcomes as opposed to implementation. It can influence whether the likes of economy, environment or society will motivate an organisation to adopt a sustainable approach, but doesn't guide the landlord, tenant or FM team as to how to approach it, whether green leases are considered or otherwise. The SFM model (Junghans 2011, p.6) also attempts to visualise the integration of sustainability into a corporate strategy with regards to primary processes, SFM (facilities and services), and on a strategic level with regards to life cycle phases and the triple bottom line. This could also be applied to public and private organisations on a regional, national or international level. As with any narrative of this scope, the balance between these three legs have to also be weighed in the overarching context of cost benefit analysis, and the critical success factors at the core of a corporate strategic approach.

The similarities between the FM and real estate sectors to other industries are a matter that can only be partially resolved in a paper of this size. There could, for example, be potential for green type leases and SFM models to be implemented in the residential sector. Both the residential and non-residential sectors see an increasing trend towards adopting sustainable strategies. Whilst function differs, a more overarching services\tenant cooperative structure may positively impact both sectors. It is however, the difference in how buildings are used across both sectors that can prevent a cross residential\non-residential approach. Whilst primary processes on a corporate level are easier to define, this is more difficult in residential properties. This could prevent a more universal approach to a green leasing system, whilst FM may share some roles in both sectors. Landlord\tenant frictions could also be likely in residential and non-residential properties. The manufacturing industry could potentially benefit from some of the points raised in this paper. With increasing scrutiny over the environmental impact of industry, a more sustainable approach to their building operations would ease some of these concerns if better implemented.

6 Concluding Remarks

Whilst this paper addresses the company strategic process, it cannot cover all of the issues associated with green leases, SFM and the landlord/relationship. The conundrum of definition and benchmarking of green leases could warrant a study in of itself, and a better understanding of how to improve the landlord/tenant relationship would also be a subject important for future research. The road map for green leases and other environmental initiatives remains uncertain. The current low uptake (Willans LLP solicitors, 2013), combined with the recent scrapping of Australia's carbon tax (Cox, 2014), are examples of how approaches are not yet benchmarked by key players, whether from the real estate stakeholder or regulatory sectors. What is less debated is that building operations and their link with sustainability will further impact the corporate strategic approach. This may in turn result in green leases no longer being considered as separate leasing products, but rather leases generally becoming green leases through having sustainable clauses. Progression and strategy is presently uneven, but it is hoped that the paper has demonstrated that landlords, tenants and FM's can all be considered to be a part of the story of sustainability.

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