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Published Version

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Janda, K. B., Bright, S., Patrick, J., Wilkinson, S. and Dixon, T. J. (2016) The evolution of green leases: towards inter-organizational environmental governance. *Building Research and Information*, 44 (5-6). pp. 660-674. ISSN 1466-4321 doi: <https://doi.org/10.1080/09613218.2016.1142811> Available at <https://centaur.reading.ac.uk/57421/>

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To link to this article DOI: <http://dx.doi.org/10.1080/09613218.2016.1142811>

Publisher: Taylor & Francis

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To cite this article: Kathryn B. Janda, Susan Bright, Julia Patrick, Sara Wilkinson & Timothy J. Dixon (2016): The evolution of green leases: towards inter-organizational environmental governance, Building Research & Information, DOI: [10.1080/09613218.2016.1142811](https://doi.org/10.1080/09613218.2016.1142811)

To link to this article: <http://dx.doi.org/10.1080/09613218.2016.1142811>



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Published online: 01 Mar 2016.



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RESEARCH PAPER

The evolution of green leases: towards inter-organizational environmental governance

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Improving the environmental performance of non-domestic buildings is a complex and ‘wicked’ problem due to conflicting interests and incentives. This is particularly challenging in tenanted spaces, where landlord and tenant interactions are regulated through leases that traditionally ignore environmental considerations. ‘Green leasing’ is conceptualized as a form of ‘middle-out’ inter-organizational environmental governance that operates between organizations, alongside other drivers. This paper investigates how leases are evolving to become ‘greener’ in the UK and Australia, providing evidence from five varied sources on: (1) UK office and retail leases, (2) UK retail sector energy management, (3) a major UK retailer case study; (4) office leasing in Sydney, and (5) expert interviews on Australian retail leases. With some exceptions, the evidence reveals an increasing trend towards green leases in prime offices in both countries, but not in retail or sub-prime offices. Generally introduced by landlords, adopted green leases contain a variety of ambitions and levels of enforcement. As an evolving form of private–private environmental governance, green leases form a valuable framework for further tenant–landlord cooperation within properties and across portfolios. This increased cohesion could create new opportunities for polycentric governance, particularly at the interface of cities and the property industry.

Keywords: energy performance, governance, green leases, landlord, management strategies, non-domestic buildings, offices, retail, tenants

Introduction

It has been well understood for some decades that energy use in existing buildings is a major source of greenhouse gas (GHG) emissions, and that there is significant potential for energy savings in retrofitting existing buildings (Levine et al., 2007; Ürge-Vorsatz et al., 2012). Reductions in emissions on the scale required to stabilize the global climate cannot be achieved without major change in the patterns of energy use across the entire building stock. Although

change at this scale requires modifications in both technologies and organizational practices, research is dominated by technological approaches (Lutzenhiser, 1993, 2014; Schweber & Leiringer, 2012), and towards disciplines and activities that continue this trajectory (Sovacool, 2014). Where social science research does exist, it is skewed towards households (Deline, 2015; Dixon, Deline, McComas, Chambliss, & Hoffmann, 2015; Janda, 2014; Moezzi & Janda, 2014; Taylor & Janda, 2015). Approximately 18% of UK

GHG emissions come from energy use in non-domestic buildings (CSE & ECI, 2012). By one estimate, this rises to 34% if both operational and ‘capital’ GHG emissions (direct and indirect emissions from construction works, services, materials, transport and products) are included (Green Construction Board, 2013). Yet, research in non-domestic buildings accounts for less than 10% of the end-use energy demand research portfolio in the UK (Hannon, Rhodes, & Skea, 2013; LCICG, 2012). Broadening the understanding of the socio-technical processes and constraints that affect the dynamics of change in non-domestic buildings is of critical national and global importance.

To bolster research in this area, in 2014 the UK Engineering and Physical Sciences Research Council (EPSRC) funded six new projects on energy management in non-domestic buildings. This paper, and part of the research included in it, is largely funded by one of these projects. The project is called WICKED (Working with Infrastructure, Creation of Knowledge, and Energy strategy Development) and is designed to learn from real-world situations, focusing on energy strategy development in the retail sector. The acronym WICKED draws on Rittel and Webber’s (1973) conceptualization of complex problems that defy simplistic or straightforward planning responses as ‘wicked’, or tricky. Improving the building stock needs to address both the technical challenges involved in upgrading the physical infrastructure and also the social challenges of organizational decision-making (Biggart & Lutzenhiser, 2007). Where space is rented, the further challenge is that these strategies need to work within, rather than against or merely alongside, established systems of professional and social practices (Levitt, Heinisz, Scott, & Settle, 2010; Scott, Levitt, & Orr, 2011).

This paper focuses on the governance of rented space in the non-domestic sector, which is a significant and ‘wicked’ problem. Of particular interest in this area is the ‘split incentive’ problem between tenants and landlords, where differing property interests and obligations mean that neither party may have sufficient incentive to invest in energy-efficiency upgrades or engage in better energy management. Case studies across both residential and non-residential contexts in Organisation for Economic Co-operation and Development (OECD) countries concluded that split incentives affect up to 90% of the energy used in many major markets (Prindle *et al.*, 2007).

Leases serve a regulatory role in the governance of both domestic and non-domestic rented space, and may contribute to the split incentive problem. Once the content is agreed between the parties, the lease terms constitute the legal basis for resolution of any dispute and operate as a kind of ‘local law’ binding on them. In this respect the lease is a form of inter-organizational governance for landlords and tenants, fleshing out their relationship

and setting practical norms for a specified length of time. In non-domestic settings, the content and style of the landlord–tenant relationship is heavily determined by institutional letting practices, which adopt standardized structural patterns of leasing and lease wording. These lease terms affect what changes can be made to the premises (*e.g.*, improvements) and set out the obligations that parties owe to one another (*e.g.*, in multi-unit properties the landlord’s duty to provide maintenance and other services, and the tenant’s obligation to pay a service charge towards the landlord’s costs). Good environmental governance may require collaboration between landlords and tenants, but standard leasing practices do not provide for, and may even inhibit rather than promote, joint action. In particular, leases do not ordinarily permit tenants to make structural alterations (*e.g.*, energy upgrades) to the premises or entitle landlords to recover the costs of improvements to the tenant’s property (*e.g.*, to install energy upgrades). Leases seldom require the parties to share energy data with one another, which can inhibit energy management practices.

Recent developments in ‘green leases’ and, more broadly, ‘green leasing’ seek to enable landlords and tenants to meet environmental targets by changing their organizational practices – through the mechanism of the lease – to work more cooperatively. ‘Green leases’ are built on ‘green’ clauses within the lease which are designed to account for energy efficiency and other sustainability goals. Green leasing (also referred to as ‘best practice’ or ‘performance’ leasing) refers to the environmental processes, engagement and practices adopted by landlords and tenants in relation to the building. Together, these greener practices reflect a change not only to the *wording* of the formal lease document but also to the *relationship* between the landlord and the tenant. Whereas traditional leasehold relationships are frequently characterized as adversarial, distant and distrustful, some greener leasing practices attempt to foster better communication between the parties. Interest in green leases and leasing is growing, and articles on them have been published in a number of countries in the last decade, including the UK (Bright & Dixie, 2014; Hinnells *et al.*, 2008; Langley & Hopkinson, 2009), Australia (Roussac & Bright, 2012; Woodford, 2007), Sweden (Lind, Bonde, & Zalejska-Jonsson, 2014), Singapore (Chua, 2014), the US (Kaplow, 2009; Oberle & Sloboda, 2010), Canada (Sayce, Sundberg, Parnell, & Cowling, 2009), and 20 countries across Europe (Duquesne, 2011).

This paper uses five case studies to investigate the evolving role of ‘green leases’ in the environmental governance of tenanted non-domestic property in the UK and Australia. The two countries were selected primarily on the accessibility of evidence: green leases were first adopted in Australia and the property markets in both countries support Better Buildings Partnership

(BBP) organizations. These groups promote collaborative efforts across the industry to enhance sustainability, including, but not limited to, green leases. As other papers in this special issue attest (Eisenberg, 2016; Rosenow, Fawcett, Eyre, & Oikonomou, 2016; van der Heijden, 2015 and forthcoming), most building regulations are blind to the differences between owner-occupied buildings and tenanted non-domestic property: they are usually written from the ‘top-down’ by governments seeking to affect the entire building stock. As this paper will discuss, green leases are a relatively new form of environmental governance negotiated from the ‘middle-out’ (Janda & Parag, 2013; Parag & Janda, 2014) between landlords and tenants at the property level.

The paper begins with a literature review that seeks insight into the role of inter-organizational negotiations at the property level. A methods section discusses the rationale for using a contextual case study approach, drawing on expertise from industry associations in the UK and Australia, previous research and new qualitative research. The next section provides a context for five case studies, considering general property markets, policy context and leasing practices in the UK and Australia. The case studies illustrate whether and how ‘green leases’ in the office and retail sectors are becoming more commonplace, as well as the typical forms these leases take. Further discussion and analysis of these findings show that although uptake is growing in both countries, green leases are more commonly adopted in office properties than in retail, and this uptake has been more comprehensively quantified in the Australia than in the UK. As a tool for inter-organizational environmental governance, green leases are mainly implemented by large powerful landlords, with a few exceptions where they are driven by powerful tenants. The concluding section draws together wider implications for opportunities and challenges of green leasing as a tool for the environmental governance of non-domestic buildings and proposes directions for further research.

Context: corporations, inter-organizational governance and property

This section reviews the literature for framing the role of green leases as tools for non-domestic building governance. The literature on corporate environmental governance (CEG) and voluntary environmental programmes (VEPs) provides some guidance, but it also has some gaps. To address more fully the role of leases in tenanted property, the CEG and VEP concepts are augmented with perspectives on ‘middle-out’ change (Janda & Parag, 2013; Parag & Janda, 2014), ‘building communities’ (Axon, Bright, Dixon, Janda, & Kolokotroni, 2012), and strategic property management (Edwards & Ellison, 2004).

Corporate environmental governance (CEG) and voluntary environmental programmes (VEPs)

There is a broad literature on corporate social responsibility that addresses various aspects of corporate social, economic and environmental impacts (McWilliams, 2015). Focusing on environmental impacts, specifically, a body of scholarship identifies various factors involved in corporate governance of environmental problems. This work normally focuses on initiatives within firms or across firms of like-kind (e.g., Borck & Coglianese, 2009; Gouldson & Sullivan, 2014; Howard-Grenville, Nash, & Coglianese, 2008; Prakash & Potoski, 2006). This literature shows that an organization’s willingness to engage in ‘beyond compliance’ environmental programmes is shaped by both external conditions (regulation, economic and social) and a range of internal, interacting factors, including management style, organizational culture and organizational structure. In their review of the VEP literature, Borck and Coglianese (2009) note three types of businesses are likely to participate in VEPs: (1) larger businesses, as they have greater resources to participate and may benefit most from recognition, (2) businesses with internal cultures supportive of environmentally friendly behaviour, and (3) businesses that face (or are likely to face) stricter government regulations.

Insofar as green leasing can be considered as a particular form of VEP, this literature provides useful insights into types of external and internal drivers for CEG. However, this literature does not address inter-organizational governance or property-level issues.

Inter-organizational governance: middle-out change

Inter-organizational activities, particularly between dissimilar groups (e.g., landlords and tenants), are often conceptualized as a space where ‘intermediaries’ serve an important role (Fischer & Guy, 2009; Moss, 2009; Moss, Medd, Guy, & Marvin, 2009). Janda and Parag (2013) and Parag and Janda (2014) augment this literature with new perspectives on ‘middle actors’, including designers, building professionals and commercial real estate (property) companies. Middle actors have their own agency and capacity to foster innovation from the ‘middle out’ rather than merely reacting to policy push from the top down or market pull from the bottom up. A middle-out approach recognizes the influence of these actors *upstream* (e.g., to policy-makers), *downstream* (e.g., to customers and clients), and *sideways* (e.g., to other middle actors).

The sideways element of a middle-out approach resonates with Vandenberg’s (2005) attention to private–private contracts, which he views as an important contribution to the regulatory state. He uses the language of ‘second-order regulatory agreements’ to

capture the idea that private–private agreements respond to ‘first-order’ government regulatory requirements (*e.g.*, standards, taxes and incentives), but also form a new, durable and important form of governance.

This paper conceptualizes landlords and tenants as middle actors in the property market who are able to exert influence sideways through private–private contracts, such as leases.

The role of property

Neither the general CEG literature nor the middle-out perspective consider the role of property, which is critical to both leases and leasing practices. Axon *et al.* (2012) outline an interdisciplinary ‘building communities’ approach to reducing energy use in tenanted property. This approach highlights the importance of three levels: (1) the general policy context, (2) the role of organizations, and (3) the level of the building itself, including the particular characteristics of both the premises and the stakeholders. These authors call for more research on the role of leases and their practical efficacy in effecting change. The current paper contributes to this challenge.

Edwards and Ellison’s (2004) research on corporate property management suggests that organizations have varying perspectives on the importance of physical property relative to their core business. For some corporates, the building is integral to their core business strategy; for others, it is merely a container in which work happens. For landlords and investors, for example, the building *is* the business. Scholarship focused on the property industry (*e.g.*, Dixon, Ennis-Reynolds, Roberts, & Sims, 2009; Newell, 2008) identifies corporate social responsibility or responsible property investment (UNEP FI, 2011) as a major driver for these organizations. Tenants, however, may only see the value of physical property as an operational asset, not as a physical asset. These different perspectives are at the heart of the tenant–landlord divide. This paper considers whether green leasing can help overcome this split incentive.

Methods

Evidencing change in leasing practices is difficult and complex. The property market is global, but tenanted buildings are located and operated in particular physical, social and political contexts, all of which can affect leasing practices. Each tenanted unit has its own lease, and multi-tenanted buildings have multiple leases. Leases expire at the end of a fixed term, which may be in one year or 99 years. Leases are treated as commercially confidential, and in the UK public records of the contents of agreed leases are not electronically accessible or searchable. Additionally, there is

no internationally standardized method of classifying leases as ‘green’.

To address this complex and difficult to access topic, the paper uses a case study approach (Yin, 2009) to draw on a range of empirical evidence and situates these cases within broader market and policy contexts. Using case studies enables international and sectoral comparison and facilitates a mix of methods, units of analysis and case conceptions to capture the complexity inherent in the development of greener leasing practices. As subsystems of practice may influence leasing practices, five diverse cases and methods across countries (UK and Australia), sectors (office and retail), and organizations (landlords and tenants) facilitates further analysis of the landscape of leasing practices. By working across countries and cases, the aim is to triangulate new research within a broader context of existing work to generate additional insights.

Table 1 summarizes the five case studies used, representing both office and retail sectors in Australia and the UK. More detailed information on the methods used in each study is included in subsequent sections. The broader context in which these cases are situated is considered below.

Case context

This section briefly reviews the complex and evolving policy context, property markets and leasing practices in the UK and Australia. The majority of non-domestic property in these countries is rented: 56% in the UK (Property Industry Alliance, 2014) and 70% in Australia (T. Crabb, Head of Research Savills, personal communication, 2015).

The UK context: property market and regulatory environment

The UK commercial property market is worth £683 billion, with London accounting for about 35% of this market (Property Industry Alliance, 2014). The Central London office market is a particularly important sector, with a slight majority of Grade A quality (offices of best quality specification, floor plate efficiency and image; 55% or 307 000 m²) and with Grade B/C accounting for just 45% (DTZ/Jones Lang LaSalle, 2014, p. 8). Indeed, investment in central London’s commercial property market reached £20.5 billion in 2014, marginally below the last investment peak in 2007 when £20.6 billion was traded (PropertyWire, 2015). Additional important markets include Birmingham, Manchester, Leeds, Bristol, Edinburgh, Cardiff and Glasgow (Bilfinger GVA, 2015).

UK building regulations set out specified energy efficiency requirements for new commercial buildings as

Table 1 Case studies on green leases

Country	Case number	Description	Sources
UK	1	Document analysis of leases for 17 'BREEAM' (Building Research Establishment Environmental Assessment Methodology)-rated office buildings and nine (mostly BREEAM-rated) retail premises.	Bright and Dixie (2014)
	2	Twenty interviews of retail property participants; document analysis of company reports and model lease clauses.	Ongoing WICKED research project
	3	Marks and Spencer (M&S) green lease and memorandum of understanding (MoU) experience to date (MoUs in 65 existing stores; green leases in 80 new stores). Methods: document analysis, interviews with M&S staff.	Janda et al. (2015)
Australia	4	Document analysis of leases for 500 plus office buildings in Sydney Central Business District.	Dawson et al. (2014)
	5	Interviews with Sydney Better Buildings Partnership (BBP) and personal communication with Australian property lawyer(s) on office and retail leasing practices.	Ongoing WICKED research project

well as renovations (DECC, 2014). In compliance with the European Union's Energy Efficiency Directive (EP&C, 2012), the UK has a national energy efficiency target to reduce energy consumption by 18% in 2020 relative to the 2007 business-as-usual projection, and a target of 1.5% annual reduction between 2014 and 2020 (DECC, 2014). The Carbon Reduction Commitment (CRC) Energy Efficiency Scheme requires companies that consume over 6000 MWh of electricity to report and buy allowances for their CO₂ emissions (DECC, 2015a). In addition, under the new Energy Saving Opportunities Scheme (ESOS), large organizations are required to carry out an energy audit every four years, measuring and reporting energy use across energy used in buildings, industrial processes and transport (DECC, 2015b). Energy Performance Certificates (EPCs) rate properties based on age, size and fabric of the building and are required when buildings are constructed, let or sold (e.g., DECC, 2014). Display Energy Certificates (DECs) rate properties based on operational energy consumption and are currently required only in public buildings (DECC, 2014). From April 2018 minimum energy efficiency standards (MEES) are being introduced, making it unlawful to let properties that fail to achieve a prescribed MEES, set at EPC rating E (DECC, 2015c). Of these regulations, only MEES recognizes the importance of tenanted commercial property.

In parallel, the voluntary sustainability rating system 'BREEAM' (Building Research Establishment Environmental Assessment Methodology) provides a common standard to enable the assessment and comparison of the environmental impact of buildings. It has been used to certify over 260 000 building assessments across more than 50 countries (BRE, 2014). Under BREEAM 2011, credits were available for green leases, which incentivized owners seeking the highest

rating to negotiate green leases with occupiers. Online commentaries suggest this was 'unpopular', partly because tenants did not want to accept additional obligations, and BREEAM 2014 has removed the green lease credits (Parker, 2014).

The Australian context: property market and regulatory environment

The main property investment market in Australia is worth about AU\$280 billion (£130 billion) (Higgins, 2013). Sydney central business district (CBD), with 4.9 million m² of total stock, is the largest office market in Australia. Sydney is the primary location for the head offices of most Australian companies; it is also the most sought-after location, highlighted by strong prime property rents and yields. The market is currently comprised of 53% prime space (Premium and A Grade) and 47% secondary grade space (B–D Grades). Other major property markets in Australia include Melbourne, Brisbane and Perth.

The Building Code of Australia Part J sets minimum standards in respect of energy efficiency requirements for new commercial buildings and for refurbishments over a certain level of work (ABCB, 2010). However, unlike the UK, where minimum energy standards were introduced in the early 1980s, energy efficiency only became part of the Australian Building Code in 2006. Subsequently, a much lower proportion of the existing stock has minimum standards of energy efficiency. There is an intention to increase minimum energy standards over time and they were revised upwards in 2010 (ABCB, 2010).

Alongside the mandatory minimum standards, the Australian commercial office and retail property market is characterized by the National Australian

Built Environment Rating (NABERS) system, which has tools for energy and water ratings. In 2010 The Building Energy Efficiency Disclosure Act established the Commercial Building Disclosure Program, which requires energy efficiency information to be provided when commercial office space of 2000 m² or more is offered for sale or lease (Australian Government, 2015). These standards are performance ratings (similar DECAs in the UK) and are made public in the form of Building Energy Efficiency Certificates (BEECs). The goal is to improve the energy efficiency of Australia's office stock, and also to inform buyers and tenants. The rationale is that buyers and tenants can easily ascertain the level of energy efficiency and many will choose buildings with better standards that align with their leasing practices and/or corporate social responsibility policy. The voluntary Green Star environmental rating tool also sets energy standards that increase in line with the different star ratings. In comparison with the UK (discussed above), Australia has less aggressive CO₂ reduction targets. Whereas European Union countries plan to reduce GHG emissions between 2020 and 2030 by approximately 2.8% per annum, the World Resources Institute estimates that Australia lags behind with a planned 1.8% per annum reduction rate (Gerholdt & Ge, 2015).

Green lease context: UK and Australia

In Australia, the Australian commonwealth and state governments have provided important early leadership for green leases. Under the Energy Efficiency in Government Operations (EEGO), policy standards have been set since 2006 for all new government leases of more than 2000 m² through the use of a 'Green Lease Schedule' (GLS) (Woodford, 2007).

In addition, in both the UK and Australia, industry leadership has been crucial to the emergence of greener leasing. The UK Better Buildings Partnership (BBP) and the Sydney BBP were established (in 2007 and 2011 respectively) to work collaboratively with leading landlords 'to develop solutions to improve the sustainability of existing commercial building stock and achieve substantial CO₂ savings' (UK BBP, 2015a). UK BBP members include 'the UK's leading commercial property owners' (UK BBP, 2015a); Sydney BBP members include 'a number of Sydney's leading commercial and public sector landlords' (Sydney BBP, 2015). Both BBPs developed toolkits providing a menu of 'green clauses' (Sydney BBP, 2013; UK BBP, 2013a) that parties can elect to include in leases and that provide a framework 'for sustainable operations and collaboration throughout the life of commercial leases right from the on-set' (Sydney BBP, 2013)

In addition to green leases, the UK BBP has also promoted memoranda of understanding (MoUs) (UK

BBP, 2013a, p. 2). MoUs are separate written agreements that capture the intentions between negotiating parties and can be used in conjunction with binding agreements (such as leases). In leasing, MoUs provide a flexible mechanism for enabling collaboration for buildings already let, as they are not legally binding, can be entered into at any stage of the lease and can be updated without amending the lease. By contrast, in Australia, MoUs have not been widely used due to the costs of negotiation and non-binding nature.

Beyond the UK and Sydney BBPs and their members, the Global Real Estate Sustainability Benchmark (GRESB), established in 2009, is an industry-driven assessment that reports annually on the sustainability performance of real estate portfolios around the world (GRESB, 2015). The GRESB survey includes a section on stakeholder and tenant engagement, part of which focuses on the use of green leases and MoUs (Shire & Quispel, 2013).

Case studies: evidence of green leases and leasing

Within the broader context of the markets outlined above, this section discusses a diverse set of case studies in the UK and Australia. In the UK, Case 1 presents a small-scale review of leases in 'green' UK office and retail buildings; Case 2 presents initial findings from the ongoing WICKED research project theme on 'green leasing' practices in the UK retail sector; and Case 3 highlights in more detail the 'green lease' practices of one of the WICKED project participants, a leading UK retailer. In Australia, Case 4 describes a large-scale study carried out by the Sydney BBP into Sydney's commercial office leasing market; and Case 5 provides a brief qualitative assessment of the use of green leases in Australia's retail market.

Case 1: UK office and retail

Using a qualitative document analysis approach, Bright and Dixie (2014) examined the content of 26 UK commercial leases (17 office and nine retail) in detail to develop a categorization of 'green clauses'. The sampling aimed for a mix of locations, landlords and tenants, but most of the leases involved BREEAM-rated properties and were available on the public land register (compulsory for leases more than seven years). Some additional leases were selected by identifying parties with public green commitments (including green lease policies). Sampling was also restricted to leases registered in 2008 or later as green leasing has only emerged since then. This sample group was acknowledged as unrepresentative and was selected in order to increase the chance of identifying green leases within such a relatively small sample.

Bright and Dixie (2014, p. 10) define ‘green clauses’ as those that are ‘designed to facilitate the property being used in a resource efficient manner and which [...] take] account of energy efficiency and other sustainability goals and measures’. The authors grouped clauses into 10 categories, such as: producing a sustainability statement or environmental plan; sharing data about energy, water or waste consumption; permitting the landlord to conduct maintenance and other services in an environmentally sensitive manner; and enabling one or both parties (usually the landlord) to make resource efficiency improvements.

In this dataset, despite being deliberately skewed toward green buildings, the authors found that about 40% of the sample (11 leases, five office and six retail) had no discernible green clauses.

Fifteen leases (12 office and three retail) contained one or more green clauses, and these varied significantly in their content, scope and legal commitment. Within the green leases, data-sharing was the most common clause (80%), followed by a clause requiring environmental considerations to be factored into alterations and/or repairs (10/15 leases), and those allowing service provision to take account of environmental considerations (10/15 leases).

Based on their analysis of these leases, Bright and Dixie (2014, p. 19) conclude that the ‘flip-side of our findings is that long-term leases are still being entered into for green buildings which pay no attention to environmental issues’, and there is ‘unlikely to be significant penetration of green lease principles outside green buildings’.

Case 2: WICKED retail research

The WICKED research project investigates energy management strategies in the UK retail sector. In this context, one research theme explores the role of leases and other organizational practices. To date, the researchers have conducted interviews with 20 representatives from 17 different organizations: four property owners (landlords), four retail tenants, four letting and property management companies, four law firms, and one industry organization (the UK BBP). Interviews are supplemented by document analysis of company strategy reports, green lease clauses in company templates and model green lease clauses promoted by industry partnerships (e.g., UK BBP, 2013a).

A number of key findings are emerging. First, interview responses suggest that the uptake of green leasing arrangements in the retail sector remains low, whilst green lease clauses appear more common in the office sector. Green leasing is more likely to be adopted by larger companies (in particular, the BBP members) with public environmental commitments and/or

concern over exposure to environmental regulation, and typically for prime properties. Lawyers for organizations outside this select group of large landlords may have heard of green leases but seldom see green clauses in contracts.

Where green leases are adopted, agreed clauses are typically either (1) quite broad, non-prescriptive and/or non-binding (e.g., provisions that state a general commitment to cooperate to improve environmental performance); or (2) driven by specific regulatory requirements (e.g., clauses dealing with the costs of CRC compliance or the production of EPCs). MEES, BREEAM and GRESB have all been highlighted as drivers for reviewing lease clauses and green lease discussions.

Despite the global interest in green leases in some circles, an interviewee expressed a commonly held view: that leases largely ‘sit in a cupboard for the length of the tenancy’, except for ‘key intervention points’ such as alterations or upgrades, when parties (or more probably asset managers) will refer to the formal lease wording (Interview #12).

Although lease clauses, including green ones, appear to have little relevance to day-to-day operations, early adopters point to potential benefits of the process of negotiating green clauses as a platform for discussion between landlords and tenants. The material goal of green leasing is tenant and landlord cooperation around energy and environmental management; a green lease is a piece of paper that symbolizes and supports this effort.

Case 3: WICKED retail research with M&S

Drawing on early evidence from the WICKED research project, a case study of Marks and Spencer (M&S) – a UK-based retailer with an international chain of clothing and food shops – illustrates the leadership role that M&S, the UK BBP and the UK BBP landlords are playing in the roll out of green leases in the UK retail sector. The case study is based on (1) interviews of key M&S staff (over the phone and via e-mail, including the head of Property Plan A, Plan A project managers and an M&S property lawyer); and (2) analysis of public documents and internal M&S documents (e.g., strategy documents and standard lease clauses).

In 2012 M&S announced an ‘environmental leasehold policy’ – to introduce green clauses through MoUs for existing stores and to include green clauses in new leases – a commitment now incorporated into M&S Plan A 2020 (M&S, 2015, p. 21). The M&S story suggests that strong leadership and concern about climate change are important drivers for the environmental plans that fed into this leasing policy (Vernon, 2007). Plan A, launched in January 2007, sets out

100 commitments to help M&S become ‘the world’s most sustainable retailer’ (M&S, 2015) and is an important part of its brand. The leasing policy emerged from a convergence of drivers: that leases should not undermine Plan A; a desire to control the lease drafting process to create more standardization across the M&S portfolio; an opportunity to save costs through enabling building improvements; and the promotion of green leases by the UK BBP.

Working together, M&S and UK BBP launched an initiative to introduce green MoUs for 70 M&S stores already under lease with BBP landlords (UK BBP, 2013b). This ‘buy in’ from BBP landlords has meant that the scope of the M&S MoU clauses (broadly based on the BBP green lease toolkit (UK BBP, 2013a)) is broader and more ambitious than the green clauses being used in new M&S leases. Green MoUs with UK BBP landlords have now been introduced for 65 existing stores.

By contrast, for new leases M&S has to negotiate with a much greater diversity of landlords. M&S has developed a standard set of green clauses, informed by the BBP ‘Green lease toolkit’ (UK BBP, 2013a), with overall a more limited scope than the MoUs. The green clauses include a general commitment to carry out lease obligations with a view to promoting environmental good practice, an agreement to cooperate and use reasonable endeavours to agree and comply with an energy management plan, and an agreement to maintain and share data. Between January 2013 and December 2014 M&S entered around 80 new leases. Early indications are that most of these, other than lease renewals, include green clauses.

Prior to the development of the standard MoU and green lease clauses, M&S reported that ‘darker green’ clauses (*e.g.*, allowing increases in service charges related to upgrades) were resisted by landlords. Also, the existence of green clauses has provided a framework and incentive for M&S’s Plan A project manager to engage with landlords, meeting with them to discuss priorities for cooperation ‘under the guise of green leases’ (Plan A project manager, 12 January 2015).

M&S’s experience suggests that the ‘light green’ clauses based on the BBP toolkit have proved largely uncontroversial in negotiations, possibly because of the role of BBP in influencing standard industry practice and also M&S’s position in the market, where its brand and size add value to landlords’ premises. This shows the sideways impact of a large powerful tenant as a ‘middle actor’ in the property market.

Case 4: Sydney office leasing

In December 2014, the Sydney BBP published the ‘BBP Leasing Index,’ covering office leasing in Sydney’s CBD

(Dawson, Bailey, & Thomas, 2014). This index shows clear evidence of green lease transformation in this market. Whereas in 2009 only 15% all leases signed in Sydney CBD had green clauses, by 2013 over 60% of all leases included green clauses.

The BBP analysed leases from the public register in New South Wales (Thomas & Dawson, 2014), using the Sydney BBP’s Model Lease Clauses to define ‘green’ terms (Sydney BBP, 2013). Of the 7000 commercial office leases in Sydney CBD, approximately 500 were sampled randomly depending on size of tenancy (small, medium and large) and building quality (non-prime and prime grades), with a target sample size of 100 for each segment. Leases were analysed for the presence of one of 22 model lease clauses and a grading system calculated a ‘model lease score’. Gradings were based on ‘clause breadth’ (the number out of the 22 possible) and ‘strength’ (how binding the clause is, depending on whether dispute resolution process would be triggered by breach). Numerical grades were awarded and averaged to a total model lease score (Thomas & Dawson, 2014).

There was a quadrupling of some form of green leasing between 2008 and 2014, and 27% of the BBP model lease clauses appeared in standard commercial office leases. In prime buildings, over 80% of leases have best-practice leasing in 2013/14, and include 44% of the model lease clauses. Clauses relating to cooperation, management and recycling, waste and consumption were most frequently included. Nearly one-quarter of leases included a clause relating to securing or maintaining an NABERS rating. The next most common clauses relate to information sharing, environmental sustainability (a high-level commitment clause) and waste reduction.

Despite this growth in the numbers of green clauses used, clause strength still lags, indicating that parties agree to collaborative frameworks but hesitate to risk dispute resolution.

This study highlights the importance of landlord and intermediary leadership in green leasing, following the initial government-as-tenant introduction of the GLS. It shows the sideways impact that major landlords have had on standard leasing practices, particularly in prime buildings. Together with the Sydney BBP, major Australian landlords have successfully diffused a new form of governance of the landlord–tenant relationship and environmental practices into the Sydney office market.

Case 5: Australian retail market

Despite the evident adoption of green leases in office properties, qualitative assessments suggest that green leasing is unusual in Australian retail markets. The

Sydney BBP is initiating conversations with retailers but reports that there has been no significant greening of retail leases to date. Although further study is needed, it appears this may be partly due to the strong consumer orientation of state retail legislation and the fact that the retail sector is so highly price sensitive and cost conscious (Professor W. D. Duncan, personal communication, 4 December 2014). Further, in most Australian jurisdictions the cost of capital improvements is not permitted to be passed on to retail tenants as outgoings, although large retail shops are generally excluded from this (Duncan & Christensen, 2014).

Synthesis and discussion

Across the policy and property contexts of the UK and Australia and the five cases presented, this section synthesizes and discusses with reference to the literature (1) what a green lease is and does; (2) who tends to use green leases; and (3) where green leases are present and absent in the market.

What a 'green lease' is and does: potential versus reality

Although there are various sets of green model clauses, there is still no international standard definition of what a 'green lease' *should* be or do. How many clauses and of what kind does a lease need to contain to qualify as 'green'? The Sydney BBP (Case 4) reviewed a large number of green leases and constructed a strong case for green lease market transformation, but even in this study a 'green lease' can contain anything from a single 'light green' clause (e.g., a very general duty to cooperate on environmental matters) to a number of more ambitious 'dark green' clauses (e.g., setting specific environmental rating targets).

A comparison of the UK and Sydney BBP precedent model clauses, as well as green clauses used in Cases 1 and 3, suggests certain core green clauses, typically less ambitious, are promoted through the model clauses and commonly found in agreed leases. These include a general commitment to improve the environmental performance of properties and commitments to cooperate, in particular to share data about environmental performance. The model clauses also all contain similar provisions restricting tenant's rights to make alterations that adversely affect environmental performance, and various provisions to enable the production of energy performance certificates and other ratings (BREEAM in the UK, NABERS and Green Star in Australia). At the same time, the models also contain a number of important differences. In particular, only the Sydney BBP model clauses include the more ambitious provision – arguably key for

addressing the 'split incentive' issue – for the landlord to make environmental improvements and recover the cost through service charges. Such ambitious clauses are very rare in the UK, and also meet with firm resistance in Australia although they are successfully negotiated in some leases (Roussac & Bright, 2012). In relation to rent review, the UK BBP requires tenant works to be disregarded but allows landlord works to be taken into account, whilst the Sydney BBP allows NABERS ratings achieved by either party to be taken into account.

In both Australia and the UK, the case studies also show that lease clauses operate at different levels of enforceability. Although lease clauses are, *prima facie*, binding, some lease clauses are intentionally expressed not to be legally binding. For example, Case 1 found that most (but not all) clauses agreeing to agree an environmental plan were 'good faith' obligations and not legally binding. MoUs are likewise non-binding as a matter of law, although in Case 1 there was, exceptionally, reference to a legally binding MoU that would also bind successors. Case 4 shows that binding clauses with 'teeth' – that attach clear remedial consequences to breach – are relatively unusual, and this was also true of leases in Case 1.

Even if binding, many 'green' clauses may be difficult to enforce. Duties to exercise 'reasonable endeavours' and to 'cooperate', lack specificity and it will be hard to prove breach. Additionally, it is unclear whether a promise to 'cooperate' or exercise 'reasonable endeavours' is enforceable as a matter of English contract law.

Interviewees in the WICKED research project (Case 2) commented that parties are unlikely to seek legal enforcement. Indeed, it is not unusual for lease clauses not to be enforced. For example, at the termination of the lease, a Schedule of Dilapidation in the UK, or Make Good in Australia, will be drawn up by the landlord's surveyor, who identifies all repairs that should have been attended to by the tenant(s). Although there is an opportunity to enforce the lease terms, in practice enforcement is dependent on other variables and tenants may be able to walk away without undertaking many of the items agreed to in the lease (Rowling, 2012).

The case studies show 'green leases' in practice to contain a wide variety of ambitions and levels of enforcement. Despite the potential strength of private–private contracts (Vandenbergh, 2005) and the existing role of leases as a 'local law' between two parties, the relatively low level of ambition and enforceability of agreed green leases suggests they may have more symbolic value than measurable material impact. As a tool for inter-organizational governance, green leases as currently configured have much in common with VEPs, whose impacts are also difficult to quantify (Borck &

Coglianesi, 2009). However, interviews with early adopters of green leases (Cases 2 and 3) suggest they facilitate useful conversations about cooperation between tenant and landlord on environmental matters.

Who adopts and uses green leases?

The organizations adopting green leases in the UK and Australia are mainly the same type that are likely to participate in other forms of VEPs: large powerful organizations with sustainability goals, in markets that are facing regulation (Borck & Coglianesi, 2009). Corporate responsibility also acts as a major driver for these organizations (Dixon *et al.*, 2009; Newell, 2008).

More specifically, across the UK and Australia, green leases are generally led by the landlord. Almost invariably the landlord's lawyer supplies the draft lease for negotiation. This means that it is usually the landlord's environmental management style that will lead the use of green leases.

There are some exceptions: the Australian government has been an important leader through the required use of the GLS when an Australian government office lease is signed. Case 3 shows M&S as a retail tenant implementing green leasing. What unites these exceptions is the strong market strength of these tenants and their institutional policy commitment to environmental good practices and social responsibility.

The case studies uphold the idea of landlords as middle actors (Janda & Parag, 2013; Parag & Janda, 2014), capable of exerting influence on others. They play this role both sideways (*e.g.*, landlords learning from other landlords, through the mechanism of the BBPs) and downstream (imposing new leasing practices on tenants). In the UK, data from the case studies suggest that only M&S seems to be playing a 'middle actor' role as a private tenant, particularly in the retail sector. In the UK, the impetus for green leases clearly comes from middle actors in industry (mostly landlords) rather than from the top down. The Australian government requires green leases in its rented offices; the UK government does not.

From a 'middle-out' perspective, the 'sideways' and 'downstream' implications of these findings are that green leases may not be an ideal indicator of 'tenant engagement' (*e.g.*, as articulated in and measured by GRESB (GRESB, 2015; Shire & Quispel, 2013). Engagement should be a two-way process, with the tenant and landlord working together. However, if landlords are the more powerful shapers of the 'local law' set by the lease, the nature of the power structure may suggest 'cooptation' (the formalized inclusion of challengers into the authority system that they are challenging (Coy, 2013)) rather than a more equitable

consensus-driven process of 'cooperation' and engagement.

Where are green leases present and absent?

Although green leases are applicable in concept to any rented property, large or small, their diffusion across the market is uneven. The case studies in both the UK and Australia show that green leasing is more prevalent in offices than in the retail sector. Within the office market, the trend seems concentrated in particular geographic locations (*e.g.*, CBDs of major cities). Most of the activity (and research to date) is concentrated in London and Sydney, yet there are important property markets in both the UK and Australia outside these cities. Case 4 also marks a difference in green lease uptake between prime properties (about 80%, representing about half the CBD in Sydney) and sub-prime properties (60% uptake, representing the rest of the tenanted space). Given the evidence available, wider uptake in non-prime properties or amongst smaller landlords and tenants seems unlikely. A 'green lease' might be thought of in the context of letting a modern building designed to high environmental standards, but arguably the need for green leases is even stronger for buildings in the secondary and tertiary markets that have poor environmental credentials.

The case study data to date cannot say why green leases are more widely adopted in the office market than in the retail market. This uneven uptake, however, suggests that the relationship between property and organizational decisions is complex and worthy of study, as Axon *et al.* (2012) and Edwards and Ellison (2004) suggest.

Conclusions and implications for governance

This paper has argued that green leasing can be conceptualized as a new form of 'middle-out' energy and environmental governance at the property level. It has described the evolution of greener leasing practices drawing on case studies across different countries and sectors. It has highlighted evidence of the uptake of green lease clauses, drivers for this uptake, their content and potential implications for inter-organizational governance. With the exception of the Australian government GLS, there is no government-directed use of green leases. Most green leases or MoUs therefore are 'voluntary' in the sense that the green clauses are additional to the terms ordinarily used within leases and, more generally, go beyond environmental compliance. However, they *could* be legally enforceable, which most other VEPs are not. Top-down regulation provides a backdrop to green leases, but the role of landlords and industry groups, particularly the

BBPs, have been important ‘middle-out’ influencers. Early adopters of green leases are a mixed group of large organizations, mainly landlord led but with some notable tenant exceptions.

From a larger governance perspective, it is unlikely that green leases are well suited to top-down government-led initiatives such as building regulations or tax incentives (Qian, Fan, & Chan, forthcoming; Zhang et al., forthcoming). Green leases could be made mandatory, but the fact that lease wording is tailored to particular contexts would mean that any mandated clauses would necessarily be broad. Furthermore, monitoring compliance would be difficult given that in the UK, for example, the Land Registry only requires registration of leases that are more than seven years long, so the government itself does not have a complete record of who is leasing what or how these leases are worded. While green leases may be difficult for the regulatory state to embrace, they are an ideal tool for non-state actors, particularly organizations with multiple properties. They can be made mandatory within a portfolio, such as the Australian government requiring them for their rented offices and M&S requiring them for their rented stores. Insofar as ‘governance’ is not the same as ‘government’ (Janda & Kwak, 2011), these requirements *are* mandatory, but imposed by one organization upon another rather than by the state across its domain. Considering green leases as a new form of private–private environmental governance could lead to new ways of applying ideas about polycentric governance (Ostrom, 2010) to shared spaces as well as to shared resources.

Polycentric governance is often associated with the management of shared environmental resources in a contiguous space, such as a metropolitan area, a fishery or a forest. This paper has suggested that green leases currently manifest mainly in large multi-site organizations that own or rent spatially distributed spaces, what Axon et al. (2012) call ‘fleet’ landlords and tenants. How would or do green leases operate as a form of environmental management in a contiguous area, such as a city?

The Tokyo Metropolitan Government and C40 Cities recently surveyed 12 different kinds of energy efficiency initiatives, including green leases, in 16 cities across nine countries (Takagi et al., 2015). This report found programmes promoting green leases in 15 of the 16 studied cities (Takagi et al., 2015, p. 21). Of the 15 cities promoting green leases, however, two-thirds of the programmes (10 cities) were designated as ‘partner-led’, a category the authors use ‘only when no city-led or higher-tier government-led programmes were found’ (p 21). Across a matrix of 12 different types of policy elements, the promotion of green leases was the only category where partner-led programmes figured prominently

in the analysis.¹ At the city level, these findings support this paper’s conclusions that leasing is a mechanism currently led by private entities rather than public ones. As Dixon, Britnell, and Watson (2014) suggest in their study of urban retrofit practices, the commercial property sector may be ‘city blind’, seeing opportunities for property retrofits in a portfolio that extends across cities rather than fitting neatly within their footprint. Such widely distributed activities challenge the utility of green leases as a policy mechanism for city, regional and national governments. If the geographical level of the policy fits the organizational structure of the industry, however, green leases may be a fitting tool. For example, green leases may be particularly useful in places like Singapore and Tokyo, where strong governments coincide with highly concentrated commercial property activities (Chua, 2014; Nishida & Hua, 2011, forthcoming).

As currently implemented, green leasing is a tool used by businesses, generally with minimal government involvement at the city, regional or national level. In their review of VEPs, Borck and Coglianese (2009) present a typology of three different kinds of VEPs – unilateral, bilateral and public voluntary – depending on the number of participating businesses and on the degree of governmental involvement. Unilateral programmes are led by businesses or industry associations; bilateral programmes are negotiated between government and specific businesses; and governments use public voluntary programmes to recognize achievements beyond mandatory standards. In this typology, green leases are unilateral VEPs in the UK, but they could be characterized as a bilateral VEP in Australia. Governments in other countries could certainly follow Australia’s lead and create bilateral programmes, using their own purchasing power to promote the practice. This action would likely only have positive impacts in commercial property markets where government tenancy plays a significant role.

From a legal perspective, leases are at the heart of governance of tenanted space, but from an operational and practical perspective they are less central. The people who manage and occupy space may never see the lease or even have access to it (Roussac & Bright, 2012). The evidence to date in the UK and Australia suggests that green leases may provide a ‘necessary but not sufficient’ function in tenanted commercial property. Even without ‘teeth’, green leases encourage inter-organizational negotiations in relation to energy and environmental management. These developments have not flowed directly from top-down governance, VEPs or regulatory measures that are largely (with the exception of MEES in the UK) blind to the joint use of tenanted space. Green leases therefore add a new tool to the box of regulatory and governance tools that ‘operate concurrently or in overlapping ways’ (Morgan & Yeung, 2007, p. 4) to address the

‘wicked’ problem of improving the tenanted building stock.

The further study of green leases and leasing could be enhanced by the development of a tiered rating of green leases that develops more nuanced processes and thresholds for environmental ambitions, outcomes and enforceability (e.g., light green, mid-green, dark green), much like BREEAM and NABERS have for green buildings. As much of the green lease work to date is landlord led, genuine forms of tenant engagement and even tenant leadership is another topic for further study. The market may already be moving in this direction. The UK BBP put ‘occupier engagement’ on its list of priorities (UK BBP, 2015b). The Sydney BBP goes even further, conceptualizing the tenant–landlord relationship as a kind of love match that can lead to happiness (Blundell, 2013). Finally, further quantitative and qualitative research through the WICKED research project should generate firmer insights into the role of green leases across the retail sector as well as their impact on energy management practices of tenants and landlords.

Acknowledgements

The authors would like to acknowledge the contributions of Ben Thomas and Esther Bailey of the Sydney Better Buildings Partnership (BBP) to an earlier version of this paper. They also thank the editor, guest editors and reviewers for their comments and suggestions. This paper is a revision and expansion of a conference paper: Bright et al. (2015). Portions of the research for and preparation of this paper was supported by the UK Engineering and Physical Sciences Research Council under the WICKED research project, grant number EP/L024357/1. An anonymized summary of interview data from the WICKED project will be made available through ORA, the Oxford University Research Archive (<http://ora.ox.ac.uk>) on completion of the project.

Disclosure statement

No potential conflict of interest was reported by the authors.

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Endnote

¹For example, only two other policy categories noted the existence of partner-led programmes. Reporting and benchmarking was partner-led in only one city; green building and energy rating was partner-led in two cities. Green lease programmes were partner-led in 10 cities.