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Attitudes and behaviours of private sector landlords towards the energy efficiency of tenanted homes

Alex Hope and Alex Booth

Abstract

The UK's housing stock generates approximately 27 per cent of the country's total annual carbon emissions. In light of the legally binding targets to reduce carbon emissions, new housing is subject to a tightening of regulations governing energy demand and efficiency resulting in a gradual improvement in carbon emissions. The question is how to achieve the deep carbon emission reductions from existing domestic properties, of which 75 per cent will still be in use in 2050. Government has sought to provide incentives to homeowners to improve the energy efficiency of their households, and mandate improvements in socially rented housing using a range of fiscal measures, most recently the 'Green Deal'. There has however been little consideration of the 18 per cent of UK households who privately rent their home, a tenure that is growing fast. The aim of this research is to investigate the factors that influence private sector landlords when considering energy efficiency improvements to their tenanted homes. The results indicate that Government policy has consistently failed to engage private sector landlords in the issue of energy efficiency and thus measures must be taken to understand the motivations of landlords in order to design effective incentives and interventions.

Keywords: Energy Efficiency; Energy Policy; Green Deal; Housing; Rented Sector

1. Introduction

Improving the energy efficiency and performance of the residential housing sector is necessary for meeting energy and climate targets. The UK has a legally binding target to reduce carbon emissions by at least 80 per cent by 2050 with an interim target of 34 per cent by 2020 against a 1990 baseline (DECC, 2011a). The housing sector contributes approximately 27 per cent of these emissions, through space and water heating, alongside demand for supplied electricity (DCLG, 2012; Kelly et al., 2012; Palmer and Cooper, 2011). It is well known that some of the largest reduction in energy demand and emissions reductions are achievable from the built environment (see for example: Clarke et al., 2008; Lomas, 2010; Wright, 2008). Despite this there are significant barriers and market failures which conspire to make improvements in energy efficiency in the residential sector difficult (IEA, 2008).

The issues are not confined to carbon mitigation. The cost of energy is an issue increasingly gaining attention as more and more households struggle to meet rising energy costs and thus adequately warm their homes. The commonly accepted definition of fuel poverty states that a household is fuel poor if it spends more than 10% of its annual income on heating and energy costs (Boardman, 1991). Approximately 4.75m (19%) of UK households are classed as fuel poor (DECC, 2012a), a figure which is rising significantly year on year. The issue of carbon reduction alongside the problems related to fuel poverty combine to result in an urgent need to address the energy performance of homes.

In the UK there are three main housing tenure types. Owner occupiers account for 65% of housing stock, whilst social renters and private renters account for 17% and 18% respectively (DCLG, 2014). The number of owner occupied homes has fallen from its 2003 peak of 70.9 per cent accompanied by a fall in the proportion of new young household owners (Meen, 2013). This trend continues as a result of unfavourable economic conditions and few expect an improvement in the near future (Meen, 2013). The 17.3 per cent social renters represents over 3.8m homes (DCLG, 2012). The big change has been the dramatic increase in the numbers of households renting privately by almost 50 per cent from 2001 to 2011 (OSCI, 2013). Privately rented homes, defined in the UK as all rented dwellings not owned by

local authorities or housing associations (Scanlon and Kochan, 2011), continue to be the only tenure type that is increasing in England rising from 2.0m to 3.84m households in the period 1999-2012 (DCLG, 2012). The suspicion is that such increases are a result of increased house prices, and restricted access to mortgages (CIH, 2013). This is the first time in 50 years that the number of people renting their homes from a private sector landlord has overtaken social renters in England (DCLG, 2014).

The energy performance of homes differs by tenure type. The energy performance of housing is measured using the Standard Assessment Procedure (SAP) system resulting in a 'SAP' rating. The idea is that the SAP rating will enable a like for like comparison of dwelling performance based on how much energy a dwelling will consume, and how much carbon dioxide will be emitted in delivering a defined level of comfort based on standard occupancy conditions (DECC, 2013a). The rating comprises of a number between 1 and 100 which place the SAP rating on an A-G scale and provides the basis for an Energy Performance Certificate (EPC) required when selling or renting a property (Kelly et al., 2012). Of the housing tenures in the UK, social housing is highest performing tenure type in energy terms with 29 per cent of housing association tenants and 20 per cent of local authority tenants living in homes rated in the highest bands (A-C); this is in contrast to private households where the average of 15 percent of homes are rated in these bands (DCLG, 2012). Privately rented homes represent the worst performing tenure type with only 8 per cent of homes obtaining a rating from A-C (DCLG, 2012). There is a clear need then to develop strategies to improve the energy efficiency performance of homes across all tenures, however to date there have been few initiatives aimed primarily at the worst performing housing stock, that within the private rented sector.

2. Literature Review

2.1 Energy Efficiency Performance

Specific literature that seeks to examine the attitudes and behaviours of private sector landlords with respect to improving the energy efficiency of their tenanted homes is scarce, however a number of previous studies have examined the sector in general allowing some analysis to be undertaken. The most expansive is the Private Landlord Survey which presents the findings of over 1000 interviews with private sector landlords and provides a good foundation on which to explore relevant issues (DCLG, 2011). The particular demographic of the sector is an interesting starting point. In contrast to the social rented sector, where one organisation owns multiple dwellings (DCLG, 2012) 78% of private landlords in the UK only own one property and as a whole individual landlords own the bulk of the private rented housing stock (Scanlon and Kochan, 2011). A similar picture is present in other countries such as Australia where 70% of the rental stock is provided by such small scale 'non-professional' landlords , and in the United States where single property landlords comprise 55% of the market (Burfurd et al., 2012). Most UK private landlords maintain their properties themselves or engage an estate agent to do so on their behalf (Burfurd et al., 2012). There are few specialist private rental maintenance firms and also few rental only development of a large enough size to have their own maintenance staff, as is common in other countries in particular the USA. The result is that the quality of management differs greatly, as does the quality of maintenance and refurbishment with both often considered substandard (Scanlon and Kochan, 2011)

Another important consideration is the motivation of individuals and families when becoming landlords. In some cases this group consists of individuals who rent their family homes as they are living elsewhere, perhaps overseas for work purposes or as the result of a family split. In others, individuals have entered the 'buy-to-let' market and purchased dwelling with the specific purpose of making a return on investment (Leyshon and French, 2009). Accordingly, the vast majority of private landlords consider themselves as a being a part-time landlord, i.e. it is not their primary source of income (DCLG, 2011). For the majority of these landlords, the rewards from refurbishment could be perceived as slim, versus the effort of having work carried out. This highlights one of the biggest hurdles that

must be overcome; individually each of these landlords has relatively little impact on carbon emissions; however as a whole they represent a large and fragmented body of individuals who collectively contribute significantly to the UK's carbon footprint.

The results of the private landlord survey (DCLG, 2011) suggest that private landlords are less engaged in sustainability issues than social landlords and homeowners. 38% of private landlords do not have an Energy Performance Certificate for their property and do not plan to get one. Of the landlords that do have one, 70% do not plan to make any changes to their property as a result (DCLG, 2011). Only 10% had made 'major changes' (over £50). In a previous study, Goodacre and Wilkinson (2002) examined the barriers to energy efficiency improvements in the sector. They assessed 78 privately rented student homes under the National Home Energy Rating (NHER) standard, an alternative measure of energy efficiency to the SAP (McNeil, 2010). Homes were subjected to varying combinations of energy efficiency measures and the changes in ratings were noted. The most revealing elements of the study are why landlords dropped out of the scheme. Initially, 180 landlords were involved in the scheme, however participation fell by 56.7%. Firstly, the financing of the scheme was relatively complex, involving the landlord re-claiming money after upfront expenditure. Secondly, the requirement to use approved contractors to carry out the works also deterred some landlords. Thirdly, the scheme requirement an up front investment in energy efficiency measures and accordingly it was difficult to persuade landlords to install higher cost measures.

Much of the literature that seeks to address the reasons as to why the private rented sector performs poorly in terms of energy efficiency cites the lack of investment in tenanted stock due to landlords and tenants 'split-incentive' (Bird and Hernández, 2012; Gillingham et al., 2012; IEA, 2007). This phenomenon, also referred to as the 'landlord-tenant disconnect' (Astmarsson et al., 2013) occurs where the property owner lacks the motivation to improve energy efficiency due to the fact they will not benefit directly from such measures (Ayush et al., 2008; Brechling and Smith, 1994; Brechling, V

et al., 1991). This disconnect, and the other challenges outlined above result in a challenge for policy makers seeking to design mechanisms with which to encourage improvements in the energy efficiency of privately rented properties.

2.2 Energy Efficiency Strategies

As with the differences in the energy performance of homes, strategies aimed at improving the performance of existing buildings also differ by tenure. Policy has been targeted at social housing in particular due to the fact that the sector houses some of the most vulnerable members of society. Accordingly the sector leads the way in terms of energy efficiency (Jenkins et al., 2011; National Housing Federation, 2012). One of the most successful social housing energy improvement strategies was the Decent Homes Standard (Morrison, 2013). Introduced in 2000, the standard aimed to improve the quality and efficiency of social housing in England (Hulme, 2012). A decent home was deemed to be one that satisfied four key requirements: a minimum statutory standard, disrepair, modernisation and thermal comfort as set out in detail by the Department for Communities and Local Government (DCLG, 2006). The standard did go some way to improving social housing conditions, however the scheme ended in 2010 and did not target the full extent of private and social homes (Dowson et al., 2012; Morrison, 2013).

Owner-occupied homes have also benefitted from similar schemes. Warm Front was designed to assist vulnerable private sector homes (owner-occupied or privately rented) in improving energy efficiency. It is reported that the scheme improved over 2 million homes but whilst occupants did gain from increased thermal comfort, few experienced any significant reduction in their energy bills (Gilbertson et al., 2006; Hong et al., 2009). This is attributed to the Jevons Paradox or ‘take back’, where recipients of energy improvements do not save on their energy costs; instead they use the potential savings to increase thermal comfort within the home at no extra cost (Bell and Lowe, 2000;

Chahal et al., 2012; Gilbertson et al., 2006; Hong et al., 2009; Jenkins et al., 2011).

This leaves the private rented sector. There have been no specific initiatives aimed solely at the private rented sector, however many of the general schemes were also open to tenants within rented properties. Tenants were able to make use of the Warm Front initiative which specified that they could request improvements in the fabric efficiency of their homes without the explicit approval of their landlord. Whilst the exact number of privately renting tenants who participated in the Warm Front scheme are hard to come by, there is some evidence suggesting the figure to be around 12 percent (Williamson, 2011). However the research conducted by Eaga (the operator of the Warm Front programme) into customer cancellations in July 2008 showed that 45% of cancellations from the private rented sector were from customers who had been told to cancel their application by their landlord (Williamson, 2011).

Despite its success, Warm Front energy efficiency improvements were limited to the low hanging fruit of improved insulation, focussing only on these small-scale improvements and failing to address hard-to-treat homes. As Jenkins, Middlemiss and Pharoah (2011, p. 5) highlight, 'the need for instigating large-scale carbon-saving refurbishments in the UK housing stock is now well established.' Indeed, it is well known that upgrading properties through sustainable retrofit can reduce energy use and carbon emissions through the deployment of more efficient appliances, upgraded fabric efficiency and the installation of building integrated energy conversion technologies, such as solar panels (Roberts, 2008; Swan et al., 2013). The warm front initiative was closed to new applicants in 2013, to be succeeded by a new breed of energy efficiency policy mechanisms.

Most recently, provisions for mandatory minimum energy performance in privately rented homes were made in the Energy Act 2011. From April 2016 a landlord may not refuse a 'reasonable request' by the tenant for energy efficiency improvements in their home; exactly what measures are considered

reasonable remains unclear. From April 2018, landlords will be legally required to ensure their properties meet minimum energy efficiency requirements (currently thought to be an EPC rating of 'E' or better) (DECC, 2011b). This legislation, accompanied by the use of a range of financing schemes, is expected by government to provide the impetus required to address the energy efficiency of the UK's privately rented homes (NAO, 2009). The operation of these financing schemes, in particular the 'Green Deal' has become the subject of some debate within industry, academia and the press with questions remaining as to their effectiveness.

2.3 Green Deal

Green Deal was made available for applications during January 2013 by former Secretary of State for Energy & Climate Change Chris Huhne. Announcing plans to develop the policy at the 2010 Liberal Democrat Autumn Conference, Huhne described Green Deal as 'the most ambitious energy-saving plan ever put forward. A once-and-for-all refit that will make every home in Britain ready for a low-carbon future.' (Huhne, 2010). The aim of Green Deal is to encourage occupants to improve the energy efficiency of their homes with no up-front cost; instead the cost of the measures installed are appended to the households energy bills (DECC, 2010). The homeowner commissions a 'Green Deal Assessment' which examines the existing performance of their property and makes recommendations for improvement. They then obtain quotes from accredited assessors and decide which (if any) energy efficiency improvements they wish to have installed with the work being carried out by a certified Green Deal installer (DECC, 2012b).

In principle Green Deal provides an innovative solution to tackling the challenge of improving the energy efficiency of existing homes, however it has got off to an unpromising start. In a recent poll 81% of the public had not even heard of Green Deal (Vaughan, 2013). In December 2013, less than a year after launch, Green Deal had only been completed in 626 homes (DECC, 2014a) little over 6% of the target of treating 10,000 homes before the end of 2013 (Meyer, 2013). In light of this

underperformance, the All Party Group for Excellence in the Built Environment examined Green Deal and were scathing in their assessment (All Party Group for Excellence in the Built Environment, 2013). The report found that Green Deal was financially unattractive, under-promoted and insensitive to the less tangible, non-financial barriers to energy efficiency improvement (All Party Group for Excellence in the Built Environment, 2013). Specific recommendations for improvement were made for Green Deal with regard to its application within social rented housing, the only comment made with regard to privately rented homes was that Green Deal was too complex to deliver substantial energy savings over and above the forthcoming 2018 legislation, owing to the aforementioned 'split-incentive'. As of mid 2014, just under 200,000 Green Deal Assessments have been undertaken, with 13% of these in privately rented homes (owner-occupied and social housing accounted for 73% and 14% respectively) (DECC, 2014b).

There has only been one previous attempt to examine in detail the perceptions of private sector landlords with regard to Green Deal. Easdon *et al* (2013) were commissioned by Rotherham Metropolitan Borough Council (MBC) and NHS Rotherham to explore the attitudes and perceptions of the Green Deal amongst private landlords in the Rotherham area. Interviews were conducted with ten stakeholders including representatives from Rotherham MBC, NHS Rotherham, Barnsley MBC, local letting agents, a Yorkshire housing provider, voluntary and community sector organisations and elected members from Rotherham. Two groups of private landlords were interviewed, ten 'general' landlords and a further ten landlords whose properties had been improved under the Carbon Emissions Savings Programme (CESP). The study found that private sector landlords expressed reservations about taking out loan finance to fund any property improvements including those relating to energy efficiency and were reluctant to engage with the initiative (Easdon et al., 2013).

One of the main features of the Green Deal is the so called 'Golden Rule', whereby the charge appended to customers' energy bills shall not exceed the *expected* saving from the measures, nor

should the payback period exceed the *expected* lifetime of the installed technologies (DECC, 2010). There are some circumstances where the Golden Rule will not be satisfied, but in which there remains a clear need for sustainable refurbishment measures to be introduced. These instances will fall into one or both of the following two categories: households living in fuel poverty, and those with 'hard-to-treat' homes.

2.4 Energy Company Obligation and Cash Back Scheme

The method of support for such homes will be the Energy Company Obligation (ECO) (DECC, 2012c). The ECO replaces previous carbon saving and fuel poverty programmes such as the Carbon Emissions Reduction Target (CERT), Community Energy Saving Programme (CESP) and Warm Zone (DECC, 2011c). The ECO places three obligations on energy companies: A Carbon Saving target, a Carbon Saving Communities target focused the 15% most deprived areas and eligible rural households, and an Affordable Warmth obligation requiring reduction in energy costs in low income households (DECC, 2012d). A brokerage mechanism allows Green Deal providers to access ECO funding from the energy companies where the golden rule cannot be satisfied (DECC, 2012e). Overall the scheme is expected to fund £1.3b worth of home improvements every year (DECC, 2011d) and should in theory go some way towards targeting problem areas that the Green Deal fails to address (Dowson et al., 2012; Jenkins et al., 2011; Willey, 2012).

Along side the Green Deal and ECO, a Green Deal cashback scheme was launched to provide a £125 million fund from which consumers can apply for reimbursement for energy efficiency improvements following a Green Deal assessment (DECC, 2013b). Eligible improvements are primarily small-scale measures, however up to £4,000 can be reclaimed for solid-wall insulation (DECC, 2013c). To date the scheme has delivered just under £10 million in improvements but will still be closed to applicants in September 2014; 84% of installed measures were new boilers, solid wall insulation accounted for 10%

(DECC, 2014a). Taken together Green Deal, ECO and the cashback scheme are expected to provide the mechanisms with which to address the issues of carbon emission reductions and fuel poverty within every all existing UK homes, privately rented or otherwise.

2.5 International Policy

In considering the policy arena around energy efficiency and private sector landlords in the UK, it is worth looking at the experience of other countries, in particular EU nations who have a similar renter demographic. Hamilton (2010) examined energy efficiency schemes for existing dwellings across 11 OECD countries producing cross-country comparisons of financing and delivery structures. The report acknowledges that the up-front cost of energy efficiency improvements are a significant barrier to investment but suggest subsidies at around one third of the cost of measures appear sufficient to arouse consumer interest; it is also noted that financing options that allow long-term are rarely popular with consumers (Hamilton, 2010). Further afield similar mechanisms to the Green Deal have been in place for some years, notably in the United States, however the rental market has been hard to reach here too (Johnson et al., 2012). In Australia, Gabriel and Watson (2010) looked at energy efficiency in the private rented sector. Commonly occurring barriers to uptake in the sector were identified, i.e. the 'split incentive', poor awareness of policy and programmes and lack of confidence in financing schemes (Gabriel and Watson, 2010). The study suggests that energy efficiency policy must be adapted to suit each specific sector of the housing market, and marketed as such, rather than relying on a 'one size fits all' approach.

Germany's approach to domestic energy efficiency improvement offers many valuable lessons for UK policy makers. Germany's private rental sector comprises around 47% of all dwellings (Kofner, 2014) and thus represents a major challenge for a country which shares the UK vision of achieving the majority of carbon savings in the built environment through the retrofit of existing buildings (Hamilton,

2010; Rosenow et al., 2013). The 'CO_2 -Building Rehabilitation Programme' (CBRP), Germany's largest sustainable retrofit programme, began in 2001 and has been hailed by many as an exemplary policy and a major success in terms of engagement and CO_2 savings achieved (Lowe, 2009; Murphy et al., 2012; Rosenow, 2013). The German Federal Bank provides grants and subsidies for sustainable retrofit measures via a development bank; in contrast to Green Deal, consumers apply for finance through high street banks (usually their regular bank) and the loan is appended to the person, rather than the property (Hamilton, 2010; Rosenow et al., 2013). As the CBRP is primarily funded by government subsidies, it is able to offer far more competitive interest rates than would be typically found on a high street loan, in 2012 the rate being offered by was 1% compared to a then market rate of 3-8% (Rosenow et al., 2013); compare this to Green Deal loans reportedly standing at 6-8% (Briggs, 2014; Lonsdale, 2014).

2.6 Summary

It is clear then that the private rented sector represents a major challenge to UK housing stock with regard to energy efficiency. The majority of data on private sector landlords' attitudes and perceptions towards sustainable retrofit is largely quantitative and fails to address the less tangible psychological and sociological factors that influence behaviour and decision making. There is a lack of current information on the attitudes and behaviours of private sector landlords with respect to improving the energy efficiency of their tenanted homes, especially in the context of delivering Green Deal. This paper will address this current gap in existing literature.

3. Methodology

The purpose of this study was to gain an understanding of the attitudes and behaviours of private sector landlords, defined here as landlords who rent out their own properties on the private market, on

improving the energy efficiency of their tenanted homes. The study primarily deals with the 'casual' landlord who represents the majority of private sector rental properties in the UK rather than letting agents and other real estate managers. Another motivation for omitting agents was, as the private landlord survey points out (DCLG, 2011), the fact that agents cannot always provide detailed information that would be personal or confidential to a landlord such as financial aspects of renting, plans for the future or qualifications and experience.

The research was carried out in early 2013 by means of an online survey of closed and open-ended questions administered using a snowball sampling approach, alongside a small number of more focussed, interviews with selected questionnaire respondents. This combined method allowed for the sample of quantitative data from the survey to be complemented by richer qualitative insight from the interviews. The fragmented nature of the private rented sector and lack of associative body meant that it proved difficult to contact individual private landlords directly; instead letting agents were approached and asked to forward it to landlords whose properties they managed. This resulted in the survey being forwarded to around 260 private sector landlords, 53 of whom completed the survey.

The survey was split into four distinct themes. First some contextual information focusing on simple questions regarding the background of the respondent as a private landlord such as the number of properties rented out and primary reason for becoming a landlord. Questions in this section mirrored those from the Private Landlord Survey (DCLG, 2011) in order to enable direct comparison and improve validity. The second section focused on respondent's environmental awareness and perceptions of the energy efficiency of their tenanted homes. The motivation for this section was to better gauge respondents qualitative understanding of energy efficiency and thus contribute to discussions as to the linkages between environmental awareness and actions taken. The third section investigated the actions of private sector landlords and required the respondent to detail actions taken with respect to improving the energy efficiency of their tenanted home(s). Questions regarding why

the respondent chose to (or not to) make improvements were included in order to gain an understanding of respondents' motives behind such decisions. The purpose of this section was to explore how the attitudes and beliefs referred to above translated into pro-environmental action in the tenanted homes.

The final section focussed on government policy, schemes and subsidies in order to establish how previous policy had engaged the private rented sector. Respondents were asked to detail any previous government strategy they had used to improve the energy efficiency of their tenanted homes. Respondents were also asked to detail their level of understanding of The Green Deal and how they intended to use it. Specific knowledge of the Energy Company Obligation was not examined for two main reasons. Firstly details of the scheme were not in the public domain during the period in which the research was designed and administered, in contrast to the Green Deal which was widely reported on following a 'soft launch' in late 2012. Secondly, access to ECO funding is primarily though the Green Deal assessment (NLA, 2013) therefore knowledge and understanding of Green Deal is arguably a more important factor in determining landlord knowledge of the options available to them for improving the energy efficiency of their properties. The survey concluded with an open-ended question asking respondents to describe what future Government schemes/subsidies could incorporate to encourage them to make energy efficiency improvements to their tenanted homes.

Based as it is on a rather small sample of private sector landlords, the study can not be said to be representative of the sector as a whole. The small sample size also limited the ability of the authors to draw conclusions based on statistical analysis of the question. The respondents lack of knowledge surrounding some of the questions could also be seen as a limiting factor, as they were unable to answer some of the questions fully, however it is this very fact highlights the assertion that knowledge on energy efficiency is generally poor.

4. Results

4.1 Background of Respondents as Private Sector Landlords

The survey revealed that 75 per cent of respondents owned less than five properties, with less than 10 per cent owning more than ten properties. Only 9 per cent of respondents considered being a landlord their full time career, this correlates directly with the findings of the private landlord survey which found 8 per cent of respondents thought the same (DCLG, 2011). Of the 9 per cent that considered being a landlord their full-time career, 80 per cent of these owned more than ten rented properties. The motivations for individuals entering the private rented sector were explored with the majority of respondents stating ‘financial investment’ as their reason for renting out property (83%). Respondents were asked what type of tenant they primarily let to, students and professionals made up 87 per cent of all responses (53 and 34 per cent respectively). Only 8 per cent of respondents claimed to let to families and only 2 per cent to sharers (individuals sharing communal space). Contextual data such as this is useful when attempting to understand landlord’s motivations when deciding whether to upgrade the energy efficiency of their tenanted stock. It also indicates the fragmentation of the private rented sector in terms of the type of individuals who rent out properties. This poses a challenge to policy makers attempting to engage with the sector.

4.2 Environmental Awareness

In order to assess the understanding amongst landlords of the of energy efficiency of their tenanted properties, respondents were asked to rate the energy efficiency of homes as either poor, average, good, very good or excellent. Only 2 per cent of respondents rated their tenanted homes as 'Excellent', with 41 per cent rating it as 'Good', 30 per cent rated energy efficiency as average and 25 per cent as very good. Only one respondent rated the efficiency of their tenanted home as ‘Poor’. Whilst

respondents were not asked to provide the SAP rating of their properties and thus the actual energy efficiency of their stock is unknown, the fact that the majority perceive the energy efficiency of their stock to be 'Good' deviates from the knowledge that the private rented sector has the lowest energy efficiency of all housing stock in the UK.

Respondents were asked to describe how much influence they believed household energy efficiency has upon the UK's carbon emissions. Figure 1 below illustrates the responses:

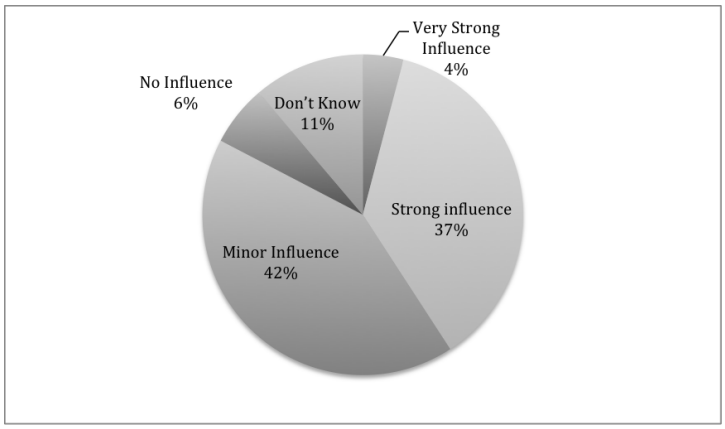

Figure 1: Perceived influence of household energy efficiency on UK Carbon emissions

There is an almost even split between respondents who believe household energy efficiency has a strong influence over the UK's carbon emissions and those who believe it has only a minor influence perhaps indicating a poor level of awareness of the issues in this area.

4.3 Action Taken

In order to better understand how landlords assessed the energy efficiency of their tenanted properties, respondents were asked whether they had obtained an Energy Performance Certificate, and if not, whether they intended to. Results indicated that 81 per cent of respondents had obtained an Energy Performance Certificate compared to 42 per cent in the 2010 private landlord survey. Whilst the

Private Landlord Survey was a larger study, and this study is not representative of the entire private rented sector, this could suggest that more landlords have been encouraged to obtain a certificate since the Private Landlord Survey was carried out in 2010. Respondents were asked to explain their rationale behind obtaining (or not obtaining) an Energy Performance Certificate as indicated in Figure 2.

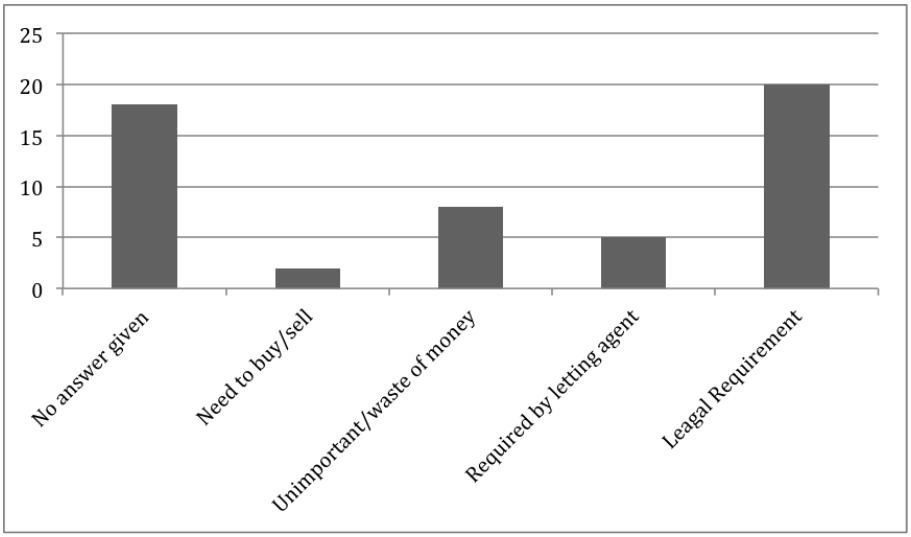

Figure 2: Reasons for obtaining an Energy Performance Certificate

It is perhaps significant that no respondents stated they acquired an Energy Performance Certificate to learn more about the energy efficiency of their tenanted homes or how they could improve it, suggesting that they only acquired simply because they had to (or chose not to).

The final set of questions in the 'Action' section focused on energy efficiency improvements respondents had made to their tenanted homes. 28 per cent of respondents had made no improvements to their tenanted houses and had no intention to in the near future. Figure 3 illustrates the level of improvement respondents had made to their tenanted homes:

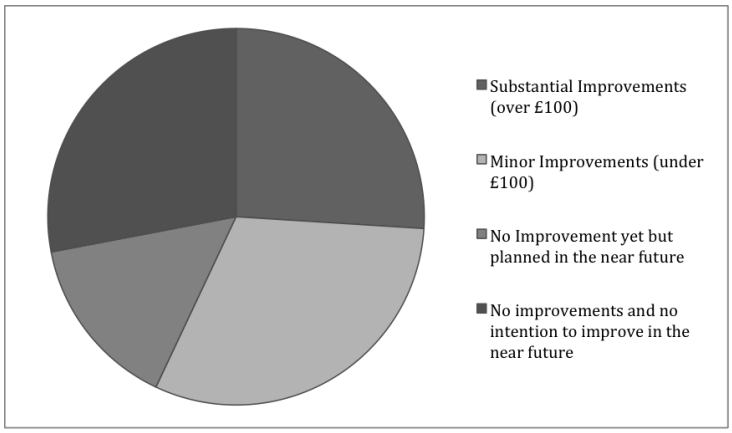

Figure 3: Improvements made to tenanted homes

The reasons for this were explored further revealing a range of issues raised as providing a deterrent for making energy efficiency improvements as shown in Table 1.

Deterrent	**Response Rate**
High upfront costs	60%
No personal benefit to making improvements	40%
Lack of information regarding how to effectively make improvements	0%
Lack of access to finance to make improvements	7%
Tenants seem perfectly happy with the energy efficiency of their home	47%
Uncertainty over actual cost savings gained from improvements	13%
Lack of Government initiatives/subsidies to encourage improvements	7%
Lack of interest in the environment and carbon emissions	7%
Other	0%

Table 1: Deterrents to energy efficiency improvements

Three major deterrents can be seen from this: high upfront costs, no personal benefit and tenants seeming satisfied with the energy efficiency of their home. No respondents claimed that a lack of information deterred them from making improvements; this is congruous with other studies that have recognised that increased environmental knowledge is not necessarily directly linked to pro-environmental behaviour, rather the drivers of such behaviour are numerous and complex. (Gadenne et al., 2011; Kollmuss and Agyeman, 2002; Lorenzoni et al., 2007). The fact that 40% of respondents stated they felt that there was no personal benefit to them from installing energy efficiency measures is illustrated by a comment by one responder who stated that with regard to

energy efficiency:

'It's just something that most landlords don't think about – the energy efficiency, even though we should, we just want the rent'.

Whilst these views are clearly not representative of all private sector landlords, they, along with the responses from the survey, illustrate an honest, perhaps apathetic attitude towards household energy efficiency that must be addressed in order to improve the energy performance of privately rented homes. There were however some respondents who did choose to improve the efficiency of their tenanted home. Table 2 details the factors that influenced people who had made such improvements.

Factors Influencing Improvements	**Response Rate**
Concerns over energy consumption and carbon emissions	23%
Increased thermal comfort for tenants	47%
Direct requests from tenants	7%
Improve the marketability of the home(s)	37%
Government policy/legislation	13%
Influenced by friends/colleagues	3%
Reduce the running costs of the home(s)	33%
Other	7%

Table 2: Drivers for energy efficiency improvements

Government policy appears to be far less influential amongst respondents than other factors such as marketability, running costs and thermal comfort. This may be explained by the low degree of formal engagement between the Government and private sector landlords on the issue of household energy efficiency. To explore this issue further, the following statement was proposed to survey respondents:

'Government strategies for improving the energy efficiency of homes fail to engage private landlords and concentrates too much on social housing and owner-occupied homes'

Respondents rated their level of agreement with this statement on a 5-point Likert scale (1 = strongly

disagree – 5 = strongly agree). The modal response was 5 (30 per cent of respondents) with the average rating being 3.9. This reinforces the proposition that Government policy is not effectively targeting the private rented sector. Indeed, Goodacre and Wilkinson (2002) noted that it was difficult to persuade landlords to install higher cost measures such as external/internal wall insulation. The results of the survey in this study substantiate that observation, with only 6% of respondents installing external/internal wall insulation.

4.4 Engagement with Government Schemes

Survey respondents were asked which Government energy efficiency or low carbon schemes they had made use of. A total of 67% of survey respondents stated they had never made use of any Government schemes to improve the energy efficiency of their tenanted homes. The only scheme that was really accessed in the private rented sector was Warm Front, with 22% of respondents stating they had made use of the scheme. 4% and 2% of respondents used the Feed-in-Tariff and Renewable Heat Incentive, respectively.

Respondents to the survey were asked to state how well they understood the Green Deal scheme. Almost half (47 per cent) of respondents had never heard of the Green Deal scheme. This represents a concerning level of unawareness amongst respondents. Overall 70% of respondents had no understanding of how the scheme works, with only 9 per cent claiming to have a good understanding of it. Further to this respondents were asked how they intend to use Green Deal. As nearly half of the respondents had not heard of Green Deal they were unable to say whether or not they intended to use it. Almost a third of respondents stated they had no intention of using Green Deal. Only 2 per cent of respondents intend to use Green Deal to make major improvements (over £100); this reinforces the concern that Green Deal may not effectively target hard to treat homes that generally incur higher expenditure, a problem highlighted in the work of Goodacre and Wilkinson (2002).

4.5 Engagement with UK Energy Policy

The final question in the survey asked respondents what would encourage them to make energy efficiency improvements to their tenanted homes. 32 per cent of respondents stated that more available grants/subsidies would encourage them to make improvements. Some respondents indicated they would prefer a tax-based incentive, one respondent suggested council tax reductions for heavily insulated homes. The desire for a mechanism that provided financial incentives was common as indicated by one respondents' comment that Government needs to:

> *"...offer a strong financial incentive (tax breaks perhaps) to improve energy efficiency, then I'd probably be interested. There would have to be a clear return on investment."*

Many respondents said schemes should be more focused towards private sector landlords, and as one respondent pointed out government bodies should *"market their proposals to landlords"* reinforcing the proposition that energy policy has consistently neglected the private rented sector (Dowson et al., 2012; Wetherill et al., 2012).

Another common theme that recurred throughout the research was that of the complex nature of the various mechanisms available to landlords seeking to improve the energy efficiency of their rental properties. Many respondents opined that *"The Green Deal is too complicated…"* with one respondent suggesting that landlords required *"Simple language. Simple schemes"* as *"Many landlords are working and do not have time to wade through paperwork to see if they qualify.* These opinions chime with Gabriel and Watson's (2010) suggestion that energy efficiency policy should be designed and marketed to suit the specific needs of specific sectors.

5. Discussion

5.1 Energy Efficiency in the Private Rented Sector

This study suggests that homes in the private rented sector represent the most difficult tenure to improve in terms of energy efficiency and sustainability. The main reason for this is that the private rented sector is disengaged with the issue of the energy efficiency of their stock. It is perhaps not hard to see why. The private rented sector is made up primarily of landlords who own few properties and do not consider being a landlord as their primary career. This is perhaps a barrier to committing to the financial cost of undertaking energy efficiency measures. Another issue is the so called 'split-incentive' the fact that it is the tenant, not the landlord, who benefits from improvements in most cases, both financially and in terms of comfort and wellbeing. Unless there is a demand for energy improvement from the tenant, in a market where tenants routinely choose properties with better energy efficiency and performance, it is difficult to imagine this situation changing. In this scenario Government fiscal incentives, or punitive legislation remains the primary incentive for private sector landlords to improve energy efficiency within their properties.

Government must engage the private rented sector in the issue of sustainability and energy efficiency if it is to meet its carbon emission reduction targets. However, one of the key obstacles that policy makers need to address is the fragmented nature of the private landlord sector itself. Policies that appeal to the landlord with a large portfolio of rented properties may not be attractive to landlords who rent out a single property. In this respect the design and marketing of energy improvement schemes needs to be addressed. It is clear from the relative levels of success in other tenure types and the poor energy performance of private rented homes that UK energy policy has consistently failed to engage with the private rented sector. Whilst we recognise that previous and existing policy may have delivered modest improvements in 'easy-to-treat' homes, improvements to 'hard-to-treat' homes that

require more extensive interventions have been less effective. This is important, as there is a strong correlation between the age and tenure type of a property and its thermal efficiency.

The issue of hard-to-treat homes is a considerable barrier to improvements in energy efficiency. The policy mechanisms designed to deal with these properties through the Energy Act exempt landlords from undertaking mandatory improvements if it would adversely affect the value of the property. It may be that a landlord could argue that internal wall insulation would reduce internal floor space and external wall insulation can be unsightly and detract from the character of a property, all of which have the potential to decrease the value of the building.

The difficulties for policy makers arising from the fragmented nature of the private rented sector are compounded by the lack of a mandatory governing/associative body for private landlords. Unlike social housing which is strongly regulated and perhaps as a result of this, is the best performing tenure type in terms of energy efficiency; the private rented sector has no associative body that Government can exploit to promote and deliver energy efficiency schemes within the entire sector. Whilst letting agents can act as a proxy for such a body, the Private Landlord Survey indicates that only 43% of private landlords use a letting agent to manage their tenanted homes. Private, subscription based bodies such as the National Landlord Association and the Residential Landlords Association exist but there is seemingly little incentive for the majority of landlords who only let out one property to become members. A mandatory, Government led associative body or database could provide the accessibility and cohesion that policy makers desperately need to engage this hard-to-reach sector with energy efficiency. As it stands, an individual landlord owning a property with an EPC rating of ‘F’ or ‘G’ could be simply unaware that their property could soon be legally uninhabitable; equally tenants in such homes could be ignorant of the rights they will soon have to demand energy efficiency improvements in their home.

The study found no apparent link between the number of properties a landlord owns and their consideration of energy efficiency. This is disappointing as it might be expected that the more properties a landlord owns, the more likely they will be able to benefit from economies of scale when retrofitting energy efficiency measures. The primary reason given by respondents for choosing not to improve the efficiency of their tenanted stock was the high up-front costs associated with doing so. In this respect this study confirms previous work that suggested cost as the primary barrier to the adoption of sustainable retrofit measures (DCLG, 2011; Kollmuss and Agyeman, 2002). A large proportion of respondents stated that another deterrent was the fact that there is no personal benefit to them. This unapologetic attitude towards energy efficiency is one of the Government's greatest challenges as it seeks to meet its aspirational carbon reduction targets within the UK housing sector. It is difficult to know how Government policy can overcome this, however it must do so fast or whilst improvements to social and owner-occupied housing increase, the private rented sector, the tenure type that is growing the fastest, will be left behind.

5.2 Green Deal

The Governments primary energy efficiency mechanism is the Green Deal. In some respects, on paper at least, the Green Deal could be the scheme that private rented housing needs to improve the energy efficiency of its homes. In theory, Green Deal should address the foremost deterrent of upfront costs, but without effective and focused implementation, its potential may never be realised. Almost half of the respondents from this study had never heard of Green Deal over 2 years since it was first announced suggesting a distinct lack of, or misguided, publicity; furthermore the public awareness of The Green Deal appears to be even worse. Whilst recent studies suggest that public interest in improving energy efficiency does exist, and the number of Green Deal assessments is rising, very few assessments lead to actual energy efficiency interventions being taken out. The disparity between the number of homes undergoing a Green Deal Assessment and those that then go on to have measures

installed through the Green Deal may be a result of using the assessment merely as a guide and then self-funding or setting about improving homes independent of any Government scheme. At the time of writing the interest rate on a Green Deal loan is greater that that on a similar scale personal loan. Overall it appears that there is at least some interest amongst private sector landlords with regard to undertaking energy efficiency improvements to their properties. The issue seems to be that Green Deal is perhaps not the best vehicle for delivery.

5.3 Lessons From International Experience

It seems clear that in designing Green Deal and the other policy mechanisms designed to promote and facilitate energy efficiency improvements, lessons from international experience have not been learnt. Whilst similar mechanisms that append the costs of energy efficiency measures to utility bills have been in place in other markets for some years (most notably the US), it appears that the most successful programmes are driven through the provision of generous state subsidies. Future UK energy efficiency policy should focus on private landlords and recognise that they operate as small businesses and thus require incentives to provide energy efficiency improvements (Scanlon and Kochan, 2011).

Whilst mandatory energy efficiency requirements are clearly a step in the right direction, the authors have concerns about how effective the policy will be at delivering substantial energy efficiency improvements in the UK's privately rented homes. As seen in the Private Landlord Survey and this study, a significant number of private landlords do not intend to obtain an Energy Performance Certificate for their tenanted homes in the near future, suggesting a lack of awareness of the mandatory requirement to do so (and the forthcoming requirement to potentially act upon its recommendations).

6. Conclusion

This study examined the attitudes and behaviours of private sector landlords towards the energy efficiency of their tenanted homes. The results of the study can be summarised as follows: First, of all housing sectors the private rented sector is the fastest growing and yet the most energy inefficient. There are perhaps many reasons for this but perhaps the primary hurdle is the fragmentation of the sector with the majority of private sector landlords owning only one property and not viewing themselves as professional landlords. This results in a disparate collection of individuals managing a wide range of properties that collectively contribute significantly to the UK's carbon footprint. Engaging with these individuals who rent their properties for a variety of reasons is undoubtedly a challenge, but one that must be overcome if improvements in energy efficiency are to be achieved. This could perhaps be achieved through mandating private sector landlords' membership of the National Landlord Association (or similar). This would create a unifying body that policy makers could engage with to increase awareness and design policy interventions if required.

Second, the primary reason given by respondents for choosing not to improve the efficiency of their tenanted stock was the high up-front costs associated with doing so. The majority of landlords simply do not view that there is any benefit from undertaking energy efficiency measures as it is the tenant, not the landlord, who pays the energy bills in most cases. Whilst tenants may 'reasonably request' that their homes undergo energy efficiency interventions such as double glazing or improved insulation there is no compulsion for landlords to do so. Should a tenant be unhappy, a landlord can simply end the tenancy and install new tenants. There is a need for greater and clearer powers for tenants to request such improvements and mechanisms to ensure that landlords follow this through without prejudice.

Third, policy measures designed to improve the energy efficiency and performance of housing have

proved ineffective in the private rented sector. Previous energy efficiency schemes such as Warm Zone have resulted in modest improvements where tenants have been able to install measures but this has been reliant on the landlords' willingness to allow interventions to take place. The current energy efficiency policy mechanism is the Green Deal, however this is aimed primarily at owner-occupiers and the awareness of, and barriers to its application in the private rented sector are great. There needs to be a policy instrument aimed specifically at the private landlord sector that incentivises, or better still mandates energy efficiency improvements to private rented properties.

Finally, The literature review identified a distinct lack of studies focusing directly on private sector landlords and energy efficiency. A qualitative assessment of private sector landlords' attitudes towards improving the energy performance of their tenanted homes, such as that presented by this research, can assist policy makers in understanding the motivations that need to be addressed when designing and communicating policy in this area. A new wide-ranging quantitative and qualitative review of the private rented sector and private sector landlords, building on previous Government review is required.

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