



Department for
Business, Energy
& Industrial Strategy

Evaluation of the Domestic Private Rented Sector Minimum Energy Efficiency Standard regulations

2020 Interim Process and Impact Evaluation
Report

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Executive summary

Introduction

This is the second interim report from the evaluation of the domestic private sector minimum energy efficiency standard regulations. The evaluation is being conducted for the Department for Business, Energy and Industrial Strategy by ICF, Kantar Public, EREDA Consultants and Professor Peter Kemp.

The regulations establish a minimum level of energy efficiency for privately rented property in England and Wales. Landlords of privately rented domestic properties must ensure that their properties reach at least an Energy Performance Certificate (EPC) rating of E. From April 2018 landlords were required to respond to the regulations for new, renewed and extended tenancies only. From April 2020 this has been extended to all tenancies. Exemptions are available for reasons related to the costs incurred by landlords, no relevant improvements being feasible, and other barriers outside of the landlord's control. A consultation was launched in September 2020 to focus on proposals that would strengthen the minimum standard to an EPC of Band C by 2028¹.

The evaluation aims to understand how landlords and other market actors are responding to the regulations, provide evidence on levels of compliance, and on the impacts of the regulations on energy efficiency more widely.

Awareness and understanding of the regulations

The latest survey evidence for quarter one 2020 suggests that over 90% of landlords are aware of the regulations, and over 80% say they are aware of them and also understand the details. Levels of awareness and understanding of the regulations are lower amongst individual (rather than company) landlords, those who only rent a small number of properties, and those who are not a member of a landlord body or use a letting/managing agent.

The evidence from qualitative interviews with landlords confirm that all of the basic building blocks of the regulations are understood by most landlords but that there are also still some potential gaps and grey areas. Not all landlords seem fully aware of the extensions of the regulations to cover all tenancies from April 2020 or the potential implications if they continue to rent F or G rated properties with an ongoing tenancy.

Landlord bodies (such as the National Residential Landlords Association and Rent Smart Wales) and letting and managing agents were the main sources of awareness and understanding of the regulations amongst landlords. Agents and other market actors were also often instrumental in helping landlords interpret the implications of the regulations for the individual properties they owned.

¹ Department for Business, Energy and Industrial Strategy (2020) Improving the energy performance of privately rented homes <https://www.gov.uk/government/consultations/improving-the-energy-performance-of-privately-rented-homes>

Compliance with the regulations

It has not been possible to definitively quantify the level of compliance with the regulations across the entire private rental housing stock in England and Wales at this stage in the evaluation (access to English Housing Survey data in 2022 is expected to change this). This evidence implies that compliance has not reached 100%, but the true level of compliance cannot be determined at this time. The EPC database for England and Wales, which contains information on 2.97 million properties in the private rental sector, provides indicative evidence on this. It shows that, as of April 2020, there are approximately 129,557 properties whose latest EPC suggests are non-compliant with the regulations (having taken account of properties with exemptions). The main caveats with these findings are that Landlords are not required to update their EPC after complying with the regulation, so the EPC register may overstate the level of non-compliance, and also the EPC database does not provide complete coverage of all properties in the private rental sector. Therefore, the levels of compliance amongst a potentially large number of properties in scope of the regulations are not reflected in these interim results. For example, the English Housing Survey from 2017/18 suggests there are 4.8 million private rental sector properties in England alone².

The qualitative interviews with landlords conducted this year indicate that levels of compliance may possibly increase during the latter stages of 2020. Certain landlords, particularly those with a large portfolio, said they were still in the process of responding to the regulations for some of their properties at the point they were interviewed in May-July 2020. There was little evidence from landlord interviews that the 2020 COVID-19 pandemic significantly delayed compliance.

The most important factors motivating and facilitating compliance are the potential negative consequences of non-compliance, a general compliance mindset, and pre-existing plans to upgrade properties. Instances of non-compliance, or at least deferred or delayed compliance, were associated with a lack of awareness and understanding of the extension of the regulations to all tenancies from April 2020, the cost and time implications of compliance, and possible disruption for tenants.

The main energy efficiency improvements made by landlords of properties with a previous EPC rating of F or G have been new insulation in combination with more energy efficient lighting. The most common mindset was for landlords to have made improvements necessary to achieve an E rating while minimising costs. However, the characteristics and idiosyncrasies of individual properties were also a determinant of improvements made, and some had invested in more extensive improvements either as part of a wider property upgrade and/or as 'future-proofing' against anticipated future increases in minimum standards above an E rating.

Up to April 2019, 60% of exemptions were registered on the grounds that landlords could not access third-party finance to meet the costs of making energy efficiency improvements. From April 2019, this grounds for exemption was replaced with a cap of £3,500 on the costs to landlords of making improvements. Since then the cost cap accounts for 29% of exemptions and an increasing proportion of exemptions are now being registered on other grounds (for example, 35% on the grounds that all relevant improvements have already made to the property and 27% on the grounds that consent for improvements to be made was denied).

² A consultation is underway including proposals to strengthen the data that LAs can access in relation to enforcement of these regulations. <https://www.gov.uk/government/consultations/improving-the-energy-performance-of-privately-rented-homes>

Impacts of the regulations

A quasi-experimental Difference-in-Differences approach was used to quantify the impact of the regulations on levels of energy efficiency when pre-existing trends and other factors are discounted. This was based on the analysis of EPC data for properties in England and Wales and a control group of properties in Scotland where no equivalent regulations have so far been introduced.

Overall, the analysis found that the regulations have had a statistically significant impact on the energy efficiency of private rental sector properties in England and Wales. The average impact of the regulations on the energy efficiency is estimated to be an increase of 5 SAP points (on the 1-100 SAP scale used in EPCs to measure energy efficiency).

Estimated impacts on energy efficiency are smaller for properties that were being privately rented before and after the introduction of the regulations than for properties that had a different tenure status (e.g. owner-occupied) before the regulations, but had since moved into the private rental sector. It is estimated that the regulations have had the largest impact on properties that were the least energy efficient (i.e. the lowest scoring G rated properties) prior to their introduction. Impacts on energy efficiency are smaller for properties that were already close to meeting the minimum requirement of an EPC rating of E before April 2018.

The impact on SAP ratings was also used to calculate the potential fuel cost and carbon savings. Since these figures are derived from SAP scores, they rely on SAP's assumed heating regimes and behaviours. For example, occupants of less efficient homes rarely heat them to the same level assumed in SAP, so these represent assumed impacts rather than real-world impacts. The regulations are also estimated to have resulted in an average assumed reduction in fuel costs of around £120 per year for an individual property. There are similar positive findings on the estimated impact of the regulations on CO₂ emissions. For individual properties this is an average assumed annual reduction of up to 500 kg CO₂.

There is a lack of quantitative evidence, at this stage in the evaluation, on other, wider impacts of the regulations. Nonetheless, the available qualitative and survey evidence provides examples of how some tenants have benefited from warmer homes and indicates that only around one in ten landlords are increasing rents to meet the costs of making improvements. A minority of landlords reported that they may also be choosing to sell properties as a result of the overall weight of regulatory and tax-related changes being placed on landlords, of which these regulations are small part. It is not known if this would result in those properties leaving the PRS market or being taken up by other landlords.

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1 Introduction

This is the second interim report for the evaluation of the domestic private sector minimum energy efficiency standard regulations³. It synthesises findings from research and analysis conducted for the evaluation in 2020. The evaluation is being conducted for the Department for Business, Energy and Industrial Strategy (BEIS) by a consortium of ICF, Kantar Public, EREDA Consultants and Professor Peter Kemp. This chapter provides an introduction to the regulations, the evaluation, and the structure of the rest of the report.

1.1 The regulations

1.1.1 Background

The domestic private rented sector represents a substantial part of the UK's housing market. The English Housing Survey reported that in 2017-18, 20% per cent (4.8 million) of properties were rented privately⁴. The Government is committed to a bigger, better, more secure private rented sector, as set out in the affordable housing programme and the package of measures for renters in the February 2017 Housing White Paper⁵. An essential part of this ambition is ensuring that privately rented homes are of good quality, meeting modern standards of comfort and with affordable energy bills for tenants.

Achieving this ambition requires increasing the energy efficiency performance of homes in the sector. Improving a home's energy efficiency helps the occupants keep warm, reduces their energy bills and provides better protection for their health and wellbeing. Those benefits are particularly important to households on lower incomes and in homes which are expensive to heat. Landlords may benefit from reduced long-term property maintenance costs, increased rentability, increased tenant satisfaction, reduced void periods, and increased sale value of the property. Society will also benefit through reduced carbon emissions and improved air quality.

1.1.2 Overview of the regulations

The Energy Efficiency (Private Rented Property) (England and Wales) (Amendment) Regulations 2016 establish a minimum level of energy efficiency for privately rented property in England and Wales⁶. These regulations cover both domestic and non-domestic properties. The focus of this evaluation is on domestic properties.

The domestic private rented sector minimum energy efficiency regulations target the most inefficient properties, namely those with an Energy Performance Certificate (EPC) rating of F or G. It has been estimated that that at the beginning of 2017 290,000 properties are within scope of the regulations⁷. The regulations came into effect in April 2018. They require private landlords in England and Wales with domestic properties that have an EPC rating of F or G to improve this to a rating of E or better. Initially, from April 2018, landlords were only required to

³ The 2019 Interim Report for the evaluation can be accessed here:

<https://www.gov.uk/government/publications/domestic-private-rental-sector-minimum-energy-efficiency-standards-interim-evaluation>

⁴ <https://www.gov.uk/government/statistics/english-housing-survey-2017-to-2018-headline-report>

⁵ <http://www.gov.uk/government/collections/housing-white-paper>

⁶ <https://www.legislation.gov.uk/ukdsi/2015/9780111132432/contents>

⁷ <https://www.gov.uk/government/consultations/domestic-private-rented-sector-minimum-level-of-energy-efficiency>

take action for new and renewed tenancies. From April 2020 the regulations were extended to also include existing tenancies as well.

In order to be compliant with the regulations, landlords must either make energy efficiency improvements to their property or register an exemption from the regulations. Landlords are required to register an exemption and provide supporting evidence online on the PRS Exemptions Register⁸. Landlords can currently register an exemption on the following grounds:

- **Further improvement exemption** - it is not possible to further improve the energy efficiency of the property and the property remains below an EPC E rating.
- **Third-party consent exemption** - improvements require consent from a third party, for example, the local planning authority, a superior landlord, tenant or mortgage lender, and this consent is not granted.
- **Property devaluation exemption** - making improvements would negatively affect the value of the property.
- **Wall insulation exemption** - new wall insulation is required to improve energy efficiency, but this would have a negative impact on the fabric or structure of the property (or the building of which it forms a part).
- **Temporary exemption due to recently becoming a landlord** - while the other exemptions last for five years, a temporary exemption of six months can be registered in cases where a person has become a landlord at short notice and it is not reasonable to expect them to comply with the regulations immediately.

There is also now a **cap of £3,500 per property on the amount that landlords are expected to pay** towards the cost of making energy efficiency improvements. This was introduced from April 2019 and replaced the previous 'no cost to landlord' exemption, which exempted landlords from making energy efficiency improvements if they could not access third-party finance to meet the costs of doing this. Under the new cost cap, landlords are still expected to make what energy efficiency improvements they can up to a cost of £3,500 even if these are not sufficient to raise its EPC rating to E or better.

A landlord is judged to be **non-compliant with the regulations** if they do not make energy efficiency improvements to their property or register an exemption and continue to rent it out. The regulations only apply to let properties, so if a landlord takes no action but leaves their property unlet or sells it, then they are not non-compliant. It is the landlord's responsibility to ensure they are compliant with the regulations, even if their properties are let and managed by an agent. Non-compliance can result in a fine of up to £5,000 for the landlord. Local authorities in England and Wales are responsible for enforcing compliance with the regulations. Detailed guidance on the regulations is published online⁹.

⁸ <https://prsregister.beis.gov.uk/NdsBeisUi/used-service-before>

⁹

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/794253/domestic-prs-minimum-standard-guidance.pdf

1.2 The evaluation

1.2.1 Evaluation aims

The aims of the evaluation, as set out by BEIS in the original invitation to tender, are:

- **Aim 1 - to develop the evidence base to inform policy development.** The evaluation should provide evidence to understand how the regulations are being implemented including landlord and wider stakeholder reactions to them. Evidence should be collected to understand awareness of the regulations among landlords and other stakeholders, the barriers that prevent landlords from taking action to comply, the role of other stakeholders in the process and implications for the housing market.
- **Aim 2 - to provide evidence of the impacts of the regulations.** Evidence is required to support a regulatory review of the regulations in 2021. To satisfy this aim, levels of compliance with the regulations and the impact of the regulations on energy efficiency of the private rental housing market should be assessed. The wider impacts of the regulations on landlords, tenants, and the housing market should also be assessed.

The detailed questions the evaluation is seeking to address are provided in the annexes to this report.

1.2.2 Overview of evaluation methodology

The evaluation methodology combines a process evaluation (to address Aim 1 of the evaluation) and an impact evaluation (to address Aim 2 of the evaluation). Table 1 illustrates the main planned elements of the evaluation methodology and when they are being conducted.

The process evaluation research has been conducted from the start of the evaluation in 2018 to provide ongoing evidence to inform the implementation of the regulations.

Much of the impact evaluation analysis will only be undertaken in 2023 when more quantitative data will be available to robustly assess levels of compliance and impacts. However, a scoping study was conducted in early 2020 to review the most appropriate data sources and analytical approaches for this analysis. An initial assessment of compliance and impacts has also been conducted this year, based on what data is available now, to provide early evidence for the regulatory review in 2021.

Table 1: Overview of evaluation methodology

	2018	2019	2020	2021	2022	2023	2024
Process evaluation:							
English landlord surveys	X	X	X	X	X	X	
Welsh landlord surveys	X			X			
Landlord interviews	X	X	X	X	X		
Tenant interviews			X	X	X		
Impact evaluation:							

	2018	2019	2020	2021	2022	2023	2024
Scoping study			X				
Assessment of compliance			X		X	X	
Assessment of impact on energy efficiency			X			X	
Assessment of impact on property market						X	
Synthesis and reporting:							
Interim and final reports		X	X		X		X

1.2.3 Research and analysis this report is based on

The evidence drawn on in this report comes from: an initial quantitative assessment of compliance and impacts; qualitative interviews with landlords and tenants; and recent landlord survey results. Technical annexes are published alongside this report to provide further methodological detail on the methods listed below.

Initial quantitative assessment of compliance and impacts

The evaluation aim, in the long-term, is to provide robust quantitative evidence on levels of compliance with the regulations and, linked to this, the impact of the regulations on energy efficiency, energy consumption, CO2 emissions, and the housing market more widely. A scoping study was conducted early in 2020 to assess which of these aims could start to be addressed now or only in future years, and what data sources and analytical approaches will provide the most robust basis for doing this.

The scoping study concluded that an initial assessment of compliance and the impact of the regulations on energy efficiency, CO2 emissions and the housing market was feasible now. This report provides the results of that analysis. Equally, there are certain constraints and caveats to this analysis, which are summarised here and set out in more detail in the accompanying technical report.

Assessing levels of compliance with the regulations

The assessment of compliance conducted for this report is based on two key data sources: the national database of all registered EPCs¹⁰; and the national PRS exemptions register¹¹. The available data from both sources up to 1st April 2020 was used as the basis for the analysis, aligning with the cut off for compliance under the regulations. In combination this provides a relatively straightforward means of measuring how many domestic private rental properties appear to be compliant with the regulations since their introduction.

In the analysis, any property with a current EPC rating of F or G, and for which an exemption has not been registered since the introduction of the regulations, has been classified as non-

¹⁰ <https://epc.opendatacommunities.org/>

¹¹ <https://prsregister.beis.gov.uk/NdsBeisUi/failover-landing>

compliant, and every other property with an eligible (i.e. complete) EPC is classified as compliant.

The strength of this analysis is that it is based on the two definitive sources of data directly relevant to the regulations. Compliance can only be achieved by either improving the EPC rating of a property or registering an exemption - and the national EPC database and exemptions register provide regularly updated data on this. However, the EPC database does not provide complete coverage of the private rental sector. It contains only 2.97 million PRS properties in England and Wales, whereas the English Housing Survey from 2017/18 suggests there are at least 4.8 million PRS properties in England alone. The analysis highlighted that the EPC database under-represents small-medium sized properties as well as semi-detached properties. There are also some recognised issues with the quality and consistency of EPCs themselves, for example with some EPCs for the same property suggesting unexpected changes in property features or falls in energy efficiency¹². Notwithstanding this, the EPC database and the exemptions register are the main databases against which Local Authorities check a property's compliance so provide a realistic assessment of evidenced compliance. Together they provide a much more robust basis for assessing compliance than, for example, self-reported information provided by landlords in surveys.

One limitation of this analysis is that the unit of measurement for compliance is exclusively of properties rather than landlords. The latter is not captured in the national EPC dataset. This is not an issue for assessing overall compliance across the private rental sector stock and there are some insights that can be gained into how compliance may vary across certain property types. However, it means there is no quantitative means for comparing levels of compliance between different types of landlord.

Another consideration in interpreting the results of the analysis is the possibility that some landlords have complied with the regulations by making energy efficient improvements but not then promptly had a new EPC undertaken to check or verify it had increased the rating to E or better. EPCs are valid for 10 years but landlords have the option of having a new EPC undertaken at any point sooner than this, if they wish. Such landlords will still appear, based on the national EPC database, to be non-compliant with the regulations if they have not yet updated their EPC. Conversely, it is also the case that there are some properties being rented that have never had an EPC (despite this being a longstanding legal requirement) and are therefore not accounted for in this analysis.

The limitations of the EPC register are recognised by the EPC action plan¹³ and the 2020 consultation¹⁴ relating to these regulations. The consultation proposes an introduction of fines for landlords who have not met their legal requirement to obtain an EPC.

Given the limitations listed here, the findings on the level of compliance are presented as indicative only (i.e. there do remain properties which have not complied). They should not be used as a conclusive assessment of the actual degree of compliance. In future years of the evaluation it will be possible to use findings from the English Housing Survey (EHS) as a further measure of compliance with the regulations. For now, previous results from the EHS up

¹² Hardy & Glew, 2020. An analysis of errors in the Energy Performance Certificate database. Energy Policy. Vol 129. <https://doi.org/10.1016/j.enpol.2019.03.022>

¹³ Department for Business, Energy and Industrial Strategy (2020) Energy Performance Certificates for buildings: action plan <https://www.gov.uk/government/consultations/energy-performance-certificates-in-buildings-call-for-evidence>

¹⁴ Department for Business, Energy and Industrial Strategy (2020) Improving the energy performance of privately rented homes <https://www.gov.uk/government/consultations/improving-the-energy-performance-of-privately-rented-homes>

to 2018 are drawn on in this report to illustrate pre-existing trends in EPC ratings in the private rental sector prior to the introduction of the regulations.

EPC ratings and SAP scores

Properties available to rent or buy in the UK are legally required to have an Energy Performance Certificate (EPC). An EPC provides a rating of the energy efficiency of the property on a seven-point scale from A (most efficient) to G (least efficient). These ratings are based on a 1-100 score of its energy efficiency, known as its Standard Assessment Procedure (SAP) score.

Rating:	SAP score:
A	92-100
B	81-91
C	69-80
D	55-68
E	39-54
F	21-38
G	1-20

Only accredited domestic energy assessors can issue an EPC. An EPC is valid for 10 years from when it is issued. There is a national database of all valid EPCs in England and Wales which includes the EPC rating, SAP score, and basic details about the property that was assessed.

The quantitative analysis for this report is based directly on this data. The assessment of compliance examines EPC ratings because the regulations set a minimum standard on this ratings scale. The assessment of energy efficiency primarily examines SAP scores because these provide the most precise measure of a property's energy efficiency.

Assessing the impact of the regulations on energy efficiency

This assessment is primarily based on a quasi-experimental Difference-in-Differences approach, employed to separate out and quantify the impact of the regulations on energy efficiency. It is based on data from the national EPC database for England and Wales (discussed above) and the directly equivalent EPC database for Scotland, where the PRS MEES regulations or equivalent legislation has not yet been introduced. The strength of the analysis is that it provides robust quantitative evidence on the impact of the regulations when other factors, such as pre-existing trends in energy efficiency, are discounted. These are also estimated to a high degree of statistical significance, meaning there is very low probability that the observed changes, differences and impacts could be due to chance.

The feasibility of using various different control groups in the analysis was explored in the scoping study including, for example, socially rented properties or owner-occupied properties in England and Wales. Rented and owner-occupied properties in Scotland were identified as providing the most robust basis for comparison. The analysis is based exclusively on properties that had an EPC rating of F or G prior to the introduction of the regulations in April 2018 and which also had a further EPC undertaken after this point. The same sampling criteria and analytical procedures were followed for the 'treatment group' - i.e. private rental properties in England and Wales - and the control group of properties in Scotland.

A comparison between the samples used for the Difference-in-Differences and the English Housing Survey showed that the England and Wales sample over-represents smaller properties and flats, while under-representing medium sizes houses and bungalows. Despite these differences, no property types are systematically excluded from the sample suggesting the samples provide a robust basis for assessing whether the regulations have an impact, with

the caveat that the degree of change may differ slightly from the actual impact achieved. Further detail is provided in section 4 of the quantitative impact analysis technical report.

The main caveat is that, as with the compliance analysis, it relies heavily on the national database of EPCs (for England and Wales and the Scottish version) as an accurate representation of properties' energy efficiency, when there are some known limitations to the data. It is also possible that levels of energy efficiency observed in the control group have been partially influenced by Scottish landlords taking steps in anticipation of a similar set of regulations being implemented in Scotland¹⁵, from April 2020 for renewed tenancies (now deferred until October 2020 due to Covid-19) and from March 2022 for all tenancies. If this was the case, the results presented in this report can be considered a conservative estimate of the impact of the regulations. Further discussion of this methodology and selection of counterfactual is included in the quantitative impact analysis technical report published alongside this report.

Assessing the impact of the regulations on energy costs and CO2

The analysis of these wider impacts was also based on EPC data and built directly on the findings from the quasi-experimental analysis of impacts on energy efficiency. EPCs do not directly provide robust data on the energy costs and CO2 emissions of the property concerned. However, by combining two pieces of data that all EPCs do provide (the property's SAP score and its Environmental Impact score) with formulas developed by the Building Research Establishment (BRE)¹⁶ it is possible to compute both energy costs and CO2 emissions.

As this analysis was based on data from the EPC database it has similar methodological strengths and weaknesses to the analysis of compliance and impacts on energy efficiency outlined above. The analysis also builds on established practice developed and tested by the BRE, which is widely recognised and used by governmental departments and industry bodies. Equally, and despite the robust nature of the BRE formulas used, the results of the analysis can only be treated as indicative. The findings as they relate to energy costs and CO2 emissions rely on a standard set of assumptions, including heating patterns and internal temperatures, so will not reflect the actual impact achieved in the individual properties concerned. Real-world savings are expected to be lower than the estimates presented here.

Qualitative interviews with landlords and tenants

Interviews were conducted in May-July 2020 with:

- 65 landlords renting one or more property in-scope of the regulations. The target was to interview 25 who had made energy efficiency improvements, 25 who had registered an exemption, and 15 who had taken no action in response to the regulations.
- 16 tenants who lived in a rental property in-scope of the regulations. The target was to interview eight tenants who lived in a property where the landlord had made energy efficiency improvements and eight who lived in a property where the landlord had registered an exemption.

The next two tables give an overview of the characteristics of the achieved samples of landlords and tenants interviewed. As this was a qualitative exercise, the aim was to not to precisely replicate the proportions of landlords and tenants with different characteristics in the

¹⁵ The consultation on the Scottish regulations opened on 17 June 2019 and closed on 13 September 2019. The regulations were then laid before the Scottish Executive parliament on 5 Feb 2020.

¹⁶ BRE (2014) SAP 2012 - The Government's Standard Assessment Procedure for Energy Rating of Dwellings. www.bre.co.uk/filelibrary/SAP/2012/SAP-2012_9-92.pdf

wider population, but rather to ensure key groups of potential interest were all adequately represented in each sample.

Table 2: Sample of landlords interviewed

Landlord characteristics	Interviews
Response to regulations:	
Made energy efficiency improvements	33
Registered exemption	26
Taken no action	6
Landlord type:	
Company	19
Individual	46
Properties:	
1	12
2-5	40
6+	13
Country:	
England	52
Wales	13
Area type:	
Urban	28
Semi-rural	8
Rural	20
Mix	9
Total	65

Table 3: Sample of tenants interviewed

Tenant characteristics	Interviews
Response to regulations by their landlord:	
Made energy efficiency improvements	8
Registered exemption	8
Total	16

The strength of the interview evidence is that it provides insights into the awareness, understanding, decision-making and experiences of different landlords who have complied with the regulations (either by making improvements or registering an exemption). The target numbers of interviews with landlords who had complied by making energy efficient improvements or by registering an exemption were both met or exceeded. The target numbers of interviews with tenants were also met, providing insights into their perspectives, experiences and views on the impacts of the regulations.

An ongoing challenge with the qualitative research for the evaluation has been to identify and recruit landlords who have F or G rated properties but have not taken any action in response to the regulations and are therefore apparently non-compliant. In this year of the evaluation, a new sampling approach was implemented to try to identify and recruit such landlords, using information from the national EPC database¹⁷. Despite these efforts, it was not possible to recruit and interview the target number of landlords who had not taken action in response to the regulations. Six landlords who had taken no action were recruited and interviewed against the target of 15. A further nine landlords who appeared to have taken no action in response to the regulations - based on the last registered EPC for one of their properties and the PRS exemptions register - were recruited. However, at the point when they were subsequently interviewed (between April and July 2020), these landlords said that they had either made energy efficiency improvements but only recently or not yet got a new EPC, or only recently registered an exemption for the property in question.

The technical report that accompanies this interim synthesis report provides more detail on the approaches that were taken to try to identify and recruit landlords who have taken no action in response to the regulations, and also the challenges that were found in doing this. This will inform the approaches taken in the qualitative research in later years of the evaluation.

Landlord survey results

Results from previous waves of the Landlord Panel Survey (LPS) conducted by BVA BDRC, up to the most recent in the second quarter of 2020, have been drawn on in this report. The value of the LPS is that it provides ongoing quantitative evidence on a small number of factors (levels of awareness and understanding of the regulations and indicators of intended/actual responses to them) of direct interest in the evaluation. The main caveat concerning the LPS is that it is conducted exclusively with members of the National Landlords Association (NLA)¹⁸. As such landlords who are not members of the NLA are not included in the sample and it is therefore not representative of all private rental sector landlords expected to respond to the regulations. There are also variations in the LPS sample size between each quarter in which it is conducted, and the results are not weighted to correct for any bias in the sample composition¹⁹.

The 2019 interim evaluation report provides more information on the LPS methodology, and details and findings from other landlord surveys, most notably the nationally representative 2018 English Private Landlord Survey (EPLS) commissioned by the Ministry of Housing, Communities and Local Government and the 2018-2019 Welsh Landlords Survey (WLS)

¹⁷ Full discussion of the new recruitment approach is included in the qualitative fieldwork annex.

¹⁸ In April 2020, the National Landlords Association merged with the Residential Landlords Association to form the National Residential Landlords Association (NRLA). However, this did not affect the design of the quarter two 2020 wave of the Landlord Panel Survey, which was still conducted with members of what was the NLA.

¹⁹ Weighting is not applied as the survey is not designed to be representative of the landlord population, the primary aim is provision of market insight for the panel subscribers.

conducted as part of this evaluation. Neither of these surveys have been repeated in time to inform this 2020 interim report but it is envisaged that they will in future years of the evaluation.

1.2.4 Limitations of the evidence presented

This report includes a number of caveats or warnings regarding the evidence presented. This section summarises those. It should, however, be noted that despite the caveats below, the different evidence sources presented in this report provide a consistent picture of the impact that the regulations have had, which give confidence to the overall conclusions made.

- Reliance on data from the national EPC database rather than data from the more comprehensive English Housing Survey. At the time of reporting, the data from the relevant years of the English Housing Survey are not available. However, to enable an interim assessment of the impact of the regulations to be undertaken at this stage in the evaluation, the EPC data has been used. The main caveats to be considered when interpreting the findings of the quantitative analysis based on the EPC data are:
- The EPC database does not cover all properties potentially in scope of the regulations. There are 2.97 million EPCs registered for PRS properties in England and Wales, however, there are thought to be a total of approximately 4.8 million PRS properties in England and Wales (English Housing Survey 2017/18). Analysis of the EPC data for PRS properties shows a similar profile to the English Housing Survey profile of PRS properties, therefore it is not expected that significant biases are present. Nonetheless, in recognition of this limitation, this report advises particular caution when interpreting findings regarding the overall level of compliance with the regulations. This is where any biases in the EPC database sample would have most impact on the reported findings.
- EPCs are valid for up to 10 years, therefore some properties may have been improved in response to the regulations but the landlords have not yet obtained a new EPC to demonstrate this. In the quantitative analysis this has added some uncertainty as to the scale of impact achieved by the regulations. The likely effect is that the findings from the analysis using the EPC database underestimate the impact of the regulations, as some properties which have been improved will still appear to have an EPC rating of F or G based on their current EPC in the database.
- There are some recognised concerns regarding the accuracy of EPCs. It is therefore appropriate to apply a caution around the precise estimates presented in the quantitative findings. However, EPCs are the evidence on which the regulations are enforced meaning that the evaluation is making an assessment which falls in line with the real world enforcement of the regulations.
- Use of Scottish properties as a counterfactual to assess the impact of the regulations. The analysis considered a range of possible counterfactuals, including other tenures in England and Wales. The Scottish properties were assessed as the best fit. It should however be noted that, despite minimum standards not being in place in Scotland at the time of analysis, other energy efficiency incentives are available in Scotland²⁰. This may introduce some bias to the analysis. See section 2.3.1 of the technical report for further details of counterfactual selection.
- Under-recruitment of 'no action' landlords in the qualitative interview sample. Six landlords who had taken no action in response to the regulations were ultimately

²⁰ Incentives available in Scotland include the Home Energy Efficiency Programmes for Scotland (HEEPS) <https://www.gov.scot/policies/home-energy-and-fuel-poverty/energy-saving-home-improvements/>

interviewed, against the target of 15, despite additional measures being taken in this year of the evaluation to identify and recruit this group. This means there is still comparatively limited qualitative insight into the circumstances and factors associated with non-compliance. The findings on this presented in this report should also be interpreted with caution because they are based on a small number of interviews and may not be fully representative of 'no action' landlords more widely.

1.3 Report structure

The remainder of the report is structured as follows:

- **Chapter 2** reports findings on awareness and understanding the regulations.
- **Chapter 3** reports findings on compliance with the regulations.
- **Chapter 4** reports findings on the impacts of the regulations.
- **Chapter 5** provides interim conclusions on the findings of the evaluation.

2 Awareness and understanding of the regulations

This chapter provides findings on awareness and understanding of the regulations amongst landlords in the private rental sector, in terms of:

- **Levels of general awareness and understanding**
- **Understanding of the more detailed aspects of the regulations**
- **Key sources of awareness and understanding**

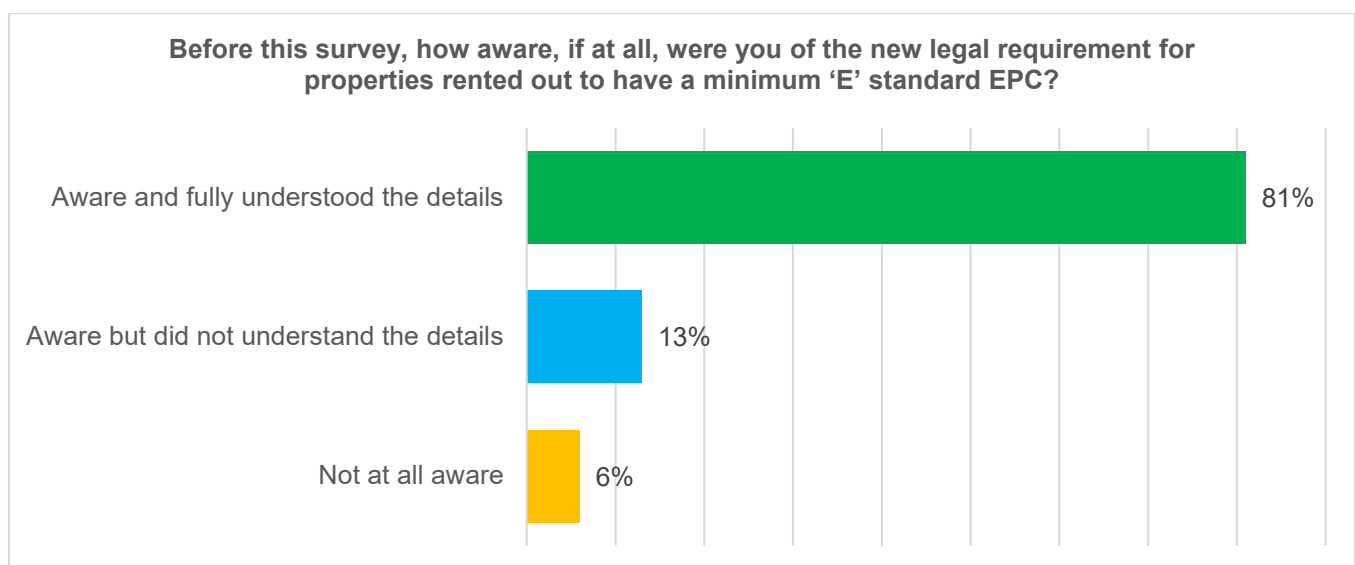
The chapter also provides some emerging findings on awareness and understanding of the regulations amongst tenants in the private rental sector.

2.1 Awareness and understanding amongst landlords

2.1.1 Levels of general awareness and understanding

Results from the Landlord Panel Survey (LPS) conducted in the second quarter of 2020 show that 94 per cent of landlords with E, F and G rated properties in the survey are aware of the regulations. Figure 2.1 also illustrates that 81% are both aware of the regulations and believe they understand the details. A smaller proportion, 12% are aware of the regulations but say they do not understand the details, and only 6% said they were not at all aware of the regulations before being asked about them in the survey.

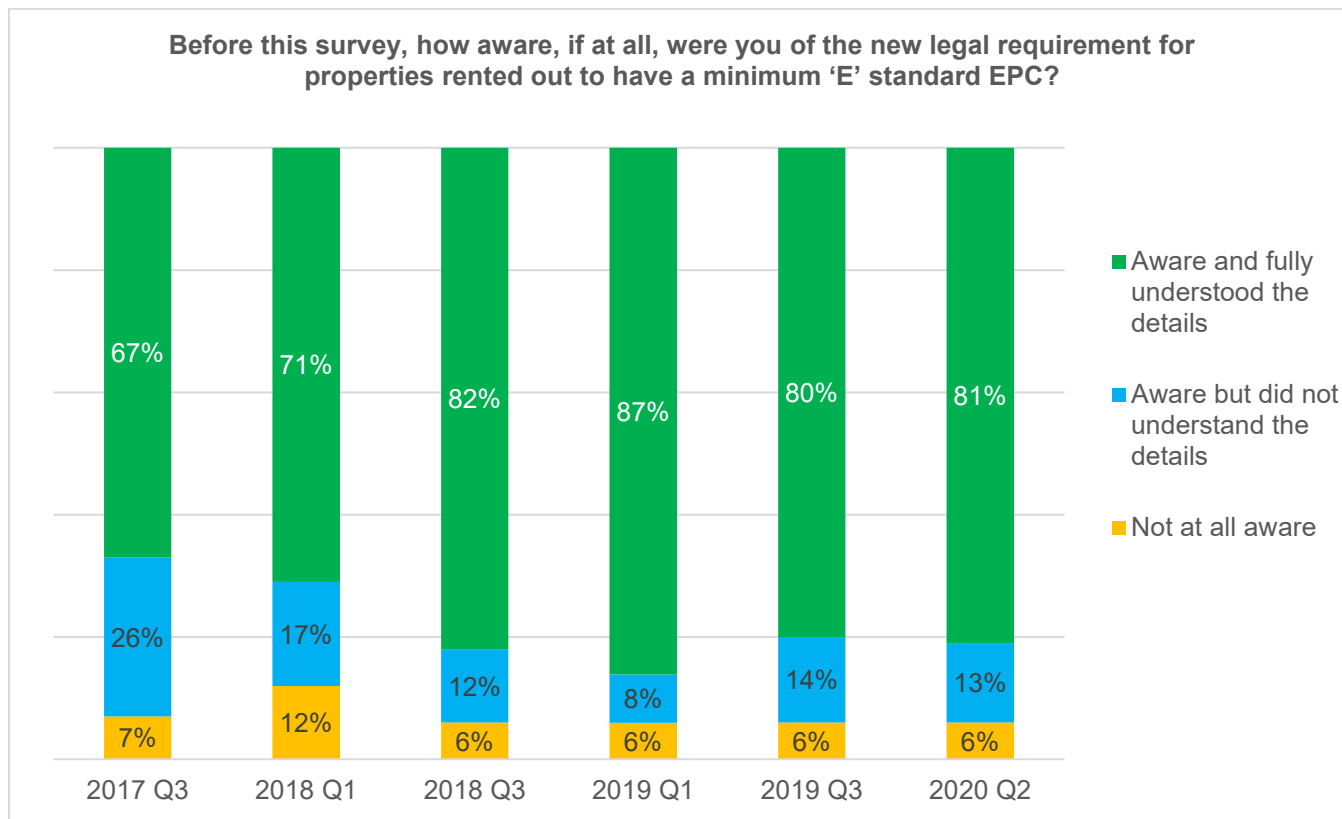
Figure 2.1: Current levels of awareness and understanding (landlords with E/F/G properties)



Base: Landlord Panel Survey 2020 Q2 n=341

Findings from the previous years and quarters in which the LPS has been conducted also indicate that levels of awareness of the regulations have been consistently high since before the introduction of the regulations in April 2018. The proportion of landlords who were aware of the regulations and believed they understand the details also increased around the time of the introduction of the regulations and has remained at a similar level since.

Figure 2.2: Levels of awareness and understanding over time (landlords with E/F/G properties)



Base: Landlord Panel Survey 2017 Q3 n=179; 2018 Q1 n=314; 2018 Q3 n=176; 2019 Q1 n=200; 2019 Q3 n=202; 2020 Q2 n=341

The only caveats to these positive findings are that the LPS results may not be representative of all landlords. The LPS is conducted with members of what was the NLA (which has now recently been merged into the NRLA). The NLA has been active in disseminating information, about regulatory, changes to its members, and it is feasible that levels of awareness and understanding of the regulations are not as high amongst landlords who were not members of the NLA or an equivalent body. Findings from other previous surveys in England and Wales confirm that the majority of landlords were aware of the regulations at the time they were introduced, albeit not as large a majority as suggested by the LPS results. In the 2018 English Private Landlord Survey, conducted with a representative sample not restricted to NLA members, 65% of landlords with E, F and G rated properties said they were aware of the regulations. In the 2018/19 Welsh Landlord Survey, this proportion was 81%. Landlords in Wales are legally required to register with Rent Smart Wales, which performs a similar dissemination role to the NLA. The differences between these samples, and associated awareness levels, is discussed in a previous evaluation report related to these regulations²¹.

²¹ <https://www.gov.uk/government/publications/domestic-private-rental-sector-minimum-energy-efficiency-standards-interim-evaluation>

Findings from the qualitative interviews also indicate that, even amongst landlords who initially say they fully understand the regulations, there are sometimes gaps in their knowledge and areas of misunderstanding when they are asked about the more detailed aspects. This is discussed further in Section 2.1.3.

2.1.2 Levels of awareness and understanding across different types of landlord

The most recent results of the LPS, other previous surveys, and qualitative interviews all indicate that levels of awareness and understanding of the regulations vary between different types of landlord. Specifically, individual landlords, landlords with a small portfolio, and landlords who don't know the EPC ratings of their properties are the least likely to be aware of and understand the regulations.

Table 2.1: Levels of awareness and understanding of regulations by landlord type

	Aware and fully understood details	Aware but did not understand details	Not at all aware
Company v individual:			
Company	89%	7%	4%
Individual	79%	13%	8%
Portfolio size:			
1 property	68%	19%	13%
2-4 properties	78%	14%	8%
5-10 properties	87%	8%	5%
11-19 properties	89%	7%	4%
20+ properties	93%	4%	3%
EPC ratings of properties in portfolio:			
Includes E/F/G rated properties	81%	13%	6%
A/B/C/D rated properties only	84%	10%	6%
Don't know EPC ratings of properties	37%	31%	32%

Base: Landlord Panel Survey 2020 Q2 n=1,305

The lower reported levels of awareness and understanding in the EPLS survey (conducted with a representative sample of all landlords) compared to the LPS (conducted with NLA members) and Welsh Landlord Survey (conducted with landlords registered with Rent Smart Wales) also indicate that landlords who are not affiliated with such professional bodies are less likely to be aware of and understand the regulations.

The qualitative interview findings reinforced this and, in addition, suggested one further differentiator of awareness and understanding: whether or not landlords use a letting/managing

agent. In the interviews, professional bodies and agents were how most landlords said they had first become aware of the regulations.

“Up to recently I’ve been advertising the houses as and when they become available in the local newspapers so because I’ve been doing it all myself I don’t hear anything but lately I’ve gone through an agent and the agents know all the new rules so they tell me.” (Individual landlord, 6+ properties, registered exemption)

Landlords who didn’t use an agency and were not affiliated with professional bodies were amongst the least aware and knowledgeable about the regulations in the sample of those interviewed.

2.1.3 Understanding of the more detailed aspects of the regulations

Because of their qualitative nature, the interviews with landlords provided more scope to prompt and explore landlords’ understanding of different aspects of the regulations. This confirmed the high levels of general awareness of the regulations and understanding reported in landlord surveys but also flagged some aspects that not all landlords were fully aware of or accurately understood.

Figure 2.3 provides an overview of how awareness and understanding varied for different aspects of the regulations.

Figure 2.3: Landlord awareness and understanding of different aspects of the regulations

Level of awareness and understanding	Aspect of regulations
HIGH	<p>Affects F and G rated properties only</p> <p>Requirement to improve to E or better</p> <p>Affected new, renewed and extended tenancies only (up to April 2020)</p> <p>Non-compliance will result in a penalty fine</p> <p>Possibility of exemptions from regulations</p>
MIXED	<p>What the different grounds for exemption are</p> <p>Affects all tenancies (from April 2020)</p>
LOW	<p>What the punishment for non-compliance is</p> <p>What evidence is required for an exemption</p> <p>What owners of listed buildings and HMOs are required to do</p>

Source: qualitative interviews with landlords

Overall, this is a similar pattern of awareness and understanding as was found in the interviews with landlords conducted previously for the evaluation in 2019. The key building blocks of the regulations – that they apply to F and G rated properties, the requirement to improve these to E or better, the possibility of exemptions, and that non-compliance would be punished – were widely understood. All were also aware that the regulations had initially applied to new, renewed and extended tenancies only up to April 2020. Exceptionally, a small number of landlords who had made energy efficiency improvements said they had not been aware there were any possibility of exemptions but otherwise awareness of this was also high.

Awareness and understanding were lower concerning details beyond these key building blocks. For example, landlords assumed the punishment from non-compliance would be a fine but very few knew how big or small this was liable to be. Landlords were generally aware of two or three possible grounds for an exemption, and only those who had ultimately registered an exemption claimed to understand the specific conditions and supporting evidence requirements for these.

These apparent gaps in knowledge are not all necessarily a cause for concern. Landlords who had made improvements without being aware of the possibility of exemptions at the time were typically comfortable with their decision, indicating they “would have done the same anyway” if they had. Not knowing the size of a possible fine did not seem to stop it acting as a deterrent to compliance, and in any case the strongest deterrent for landlords was not being able to let their properties for an extended period of time. Despite the patchy awareness and understanding around the details of exemptions, landlords who had given serious consideration to registering an exemption indicated they had been able to access sufficient information to make an informed decision on whether one of the grounds for exemption applied to them and what they needed to do to evidence this. To an extent, landlords didn’t know what they didn’t need to know, and did feel able to find out more if they needed to.

Two areas that could merit some more attention were confusion around the applicability of the regulations to listed buildings and houses in multiple occupation (HMOs), and high but not universal awareness of the extension of the regulations to all tenancies from April 2020.

As in the interviews for the evaluation in 2019, there were some landlords with a listed building or HMO in the sample. Most listed buildings and HMOs are not currently required to have an EPC and have therefore been out of scope of the regulations. However, again in the interviews for the evaluation this year there was confusion over whether, if anything, and if so what, landlords of such properties are expected to do in response to the regulations.

Most landlords were fully aware that the regulations had been extended to all tenancies from April 2020. However, a minority were not aware or uncertain of this. This included a small number who had responded to regulations for one of their properties prior to April 2020 due to a change in tenancy but were not aware of the change, and had other properties and ongoing tenancies in their portfolio that were also now potentially in scope of the regulations. In one case, the landlord was aware of the extensions to all tenancies from 2020 but confused about the implications of this, questioning whether they were now expected to evict existing tenants they had in F or G rated properties until such time as they had made improvements or registered an exemption. Another landlord understood there may be a 12 month “grace period” after April 2020 during which they could continue existing tenancies in an F or G rated property, while they looked into making improvements or registering an exemption.

To reiterate, these were isolated cases, but they are flagged here because the extension of the regulations to all tenancies is a significant change. The implications of this for compliance with the regulations are explored in Chapter 3.

2.1.4 Key sources of awareness and understanding

The landlords interviewed cited a range of sources that had contributed to their awareness and understanding of the regulations. Landlord bodies and letting/managing agents were a predominant source of awareness and understanding of the regulations, at least for the landlords who had these links. But they and other landlords also talked about other sources they had come across or actively sought out to inform their responses to the regulations.

Landlord bodies

These included what were the separate National Landlords Association (NLA) and Residential Landlords Association (RLA), the recently formed National Residential Landlords Association (NRLA), Rent Smart Wales, the Country Landowners Association, the Country Land and Business Association, and regional landlord associations. Around a third of the landlords interviewed said they were a member of one or more of these organisations, and it was through them that they had typically first become aware of the regulations.

“They [the NLA] provide us with all the updates on any legislation or compliance requirements, so it was through them that we heard these requirements were needed.” (Company landlord, 6+ properties registered exemption)

Landlords with an affiliation to such organisations were positive about their proactiveness in making them aware of the regulations, and the accessibility of the information they provided.

“I do find that the bodies and associations have specific and meaningful information for us landlords, provided in a timely manner.” (Individual landlord, 2-5 properties, made improvements)

This was generally seen as more “landlord friendly” than official information on the regulations provided on gov.uk, and more trustworthy than stories and articles about the regulations in the mainstream media. Equally, few landlords had based their response to the regulations solely on the information provided by such organisations. Learning about the regulations from them had typically been the starting-point for landlords to make an initial judgement on how to respond and seek out further information or advice to confirm this from some of the other sources discussed below.

Letting and managing agents

Over a half of the landlords interviewed said they used a letting or managing agent in some capacity but how they used them, and linked to that the contribution of the agent to their awareness and understanding of the regulations, was varied.

The most common model was for the landlord to use an agent to advertise their properties when there was a change in tenancy, and to be responsible for rent collection and day-to-day tenancy management. Such landlords talked about receiving both general and/or more targeted information from their agent with regard to the regulations. General information was in the form of emails and letters to make landlords aware of the introduction of the regulations initially in 2018 for new, renewed and extended tenancies, and latterly the extension of the regulations to all tenancies in 2020.

“I had an email from the letting agent I use, when anything like this crops up they email their landlords to make them aware of stuff, and the email said: as from 1 April 2018 there is a new legislation regarding minimum-standard EPC ratings, et cetera. And then they’ve gone on about existing tenancies. Any property currently with an EPC rating of F or G must be brought up to an E rating by April 2020.” (Individual landlord, 1 property, made improvements)

Targeted information was direct contact between the agent and landlord concerning an individual property - to communicate that it needed to be improved or exempted in order for them to be able to re-let or continue to let a property on their books. Other landlords had only an episodic relationship with agents, using them exclusively to advertise a property when an existing tenancy was coming to an end. In these instances often the first time they had become

aware of the regulations was when the agent told them they would need to ensure the property had an EPC rating of E or better in order for them to advertise and re-let it for the landlord.

Landlords were overall appreciative of agents making them aware of the regulations, and crucially their ability to translate the regulations into specific advice about how they could and should respond to them for specific properties in their portfolio.

“Agents give information that’s targeted to an individual landlord. If they are aware of a property that could be troublesome they reach out and say, ‘you know, this is the legislation, this is what we can do to bring up the EPC to acceptable standards.’” (Individual landlord, 2-5 properties, registered exemption)

Compared to the interviews conducted for the evaluation last year, there were more reports this year of agents directly advocating or recommending a course of action to landlords, as opposed to simply informing them of the regulations, possibly reflecting the greater knowledge and experience agents feel they have of the regulations.

“The agent said ‘Jolly good, you will just need to get an EPC on it and if it’s not an E, you are going to have to whack some new heaters in’. So I said ‘alright then’ and that’s what we did.” (Individual landlord, 1 property, made improvements)

As the quote above suggests, landlords had often acted directly on this kind of advice from their agent.

The only caveat to this is there was less evidence of agents proactively contacting landlords to make them aware of the extension of the regulations to all tenancies from April 2020, and communicating the need for them to make energy efficiency improvements to properties with an ongoing tenancy. The key trigger for agents to raise the regulations with landlords still appeared to be when a property needed to be advertised to secure a new tenant.

Other market actors

EPC assessors, surveyors, builders and other people “in the trade” were cited by landlords as a further source of understanding of the regulations, although in most cases this was only after they had first become aware of the regulations from another source. Their role had more been in giving landlords advice about exactly how they could respond to the regulations for a specific property. This advice was largely trusted and directly acted on the landlords concerned.

The media and word of mouth

Individual landlords who didn’t have an agent and weren’t a member of a landlord body often first learnt of the regulations in the news or by talking to another landlord in their social circle.

“I was talking to somebody over Christmas, another landlord and he said ‘what are you doing about it?’ and I said, ‘Well I didn’t know anything about it...then I googled some landlords’ websites.’” (Individual landlord, 2-5 properties, registered exemption)

Gov.uk

Most of the landlords interviewed had come across the guidance and information about the regulations online on gov.uk. This was accepted as being “clear” and “trustworthy”. Those who registered an exemption also praised the usability of the PRS exemptions register interface. The only caveats were difficulties landlords found in jumping from the necessarily generalised information on gov.uk to what the regulations meant for the specific properties they owned.

“The government or official sources don’t take on board how it relates to individual landlords. When you actually look into the detail and say, ‘Oh, how does that apply to his particular property?’. That’s where it gets a bit tricky and complicated.” (Company landlord, 6+ properties, made improvements)

There was a preference amongst landlords - especially less experienced individual landlords - to be able to speak to an agent or other market actor who could interpret the implications of the regulations for a property or properties in their portfolio.

Local authorities

Local authorities were rarely cited by landlords as a source of awareness and understanding of the regulations but in the interviews this year there were also a few positive examples where this does appear to be happening. In particular, some landlords with tenants who were claiming Housing Benefit or Universal Credit or a property that was in a local conservation area said that, because of this, they already had some dealings with the local authority concerned and had subsequently received information or advice from them about the regulations.

2.2 Awareness and understanding amongst tenants

Tenants aren’t required or expected to respond to the regulations. Nonetheless their awareness and understanding of the regulations is of potential interest because this may influence landlord decision-making and demand for properties in the private rental sector. For example, if tenants are aware of the regulations and start to perceive an EPC rating of E as a minimum standard or watermark then this could reinforce compliance by landlords with the regulations. One of the grounds for an exemption under the regulations is also that the tenant does not consent to energy efficiency improvements being made.

Awareness and understanding of the regulations was low amongst the tenants interviewed this year for the evaluation – despite all living in a property where the landlord had apparently either made energy efficiency improvements or registered an exemption. They had a broad understanding of what EPCs are, and a notion that private landlords have some responsibilities in connection with these, but often little beyond that.

“I know that energy rating, you know you have to have a certain level, but I know little more than that. I suppose is it an E or does it have to be a C? I am not sure of the differences between these levels.” (Tenant, landlord made improvements)

Even amongst those who did recall improvements being made to the property they rented, most said they had not been aware that these were associated with either energy efficiency or a change in landlords’ legal obligations. The tenants interviewed were also generally unaware of what the EPC rating of the property they lived in was, either at the point they moved in or now. Most had some recollection of having been shown or given a copy of the EPC by the landlord or letting agent but did not remember the rating.

Q: *“Were you aware then of what your energy performance certificate was for your place when you moved in?”* A: *“No. It might have been there in a pile of paperwork but it’s not something that I looked at.” (Tenant, landlord registered exemption)*

This appeared to partly reflect the low priority they gave to the energy efficiency of the property at the time they had been looking for somewhere to rent. Location, how much the rent was, and the size and general condition of the property had been their overriding considerations. In

addition, none recalled seeing any stories in the media or received any information, beyond a copy of the EPC, in connection with the energy efficiency of their property or the regulations.

The potential role of tenants' awareness, understanding and attitudes in landlord decision-making is discussed further in Section 3.2.3.

3 Compliance with the regulations

This chapter provides findings on:

- **Levels of compliance with the regulations**
- **Factors mediating compliance**
- **The different forms compliance has taken**

3.1 Levels of compliance

The findings in this section are primarily based on a quantitative assessment of data in the EPC database for England and Wales and the PRS exemptions register up to 1st April 2020.

3.1.1 Overall levels of compliance

It has not been possible to definitively quantify the level of compliance in the PRS housing stock at this stage in the evaluation. Nonetheless, the EPC database is the most up to date current source of evidence and it shows that, as of April 2020, there are approximately 129,557 properties in England and Wales whose latest EPC suggests are non-compliant with the regulations (having taken account of properties with exemptions).

Given the limitations of the EPC database this should be treated as an indicative picture only. For example, the EPC database contains only 2.97 million PRS properties in England and Wales, whereas the English Housing Survey from 2017/18 suggests there are at least 4.8 million²² PRS in England alone²³. Landlords may also have made necessary energy efficiency improvements in response to the regulations but not got an updated EPC, and therefore still appear in the EPC database to be non-compliant. The process of recruiting landlords for qualitative interviews for the evaluation confirmed that many properties with an existing EPC rating of F or G in the EPC database had recently had improvements undertaken that were very likely to have brought into line with the regulations. EPCs used in this analysis range from being several months old to 10 years old, and the data did show that the rate of evidenced compliance was higher among the most recent EPCs, however, it still did not reach 100%.

Despite the limitations of the EPC database, it provides a useful data source for understanding compliance. In particular it provides insight into the types of properties which do, or don't, currently hold an F or G rated EPC without an associated exemption. The remainder of the chapter presents analysis using the EPC data in order to present this insight.

Table 3.1 details the calculations undertaken to estimate the number of 'non-compliant' properties in the EPC database. There are 2,973,610 private rental properties with a current EPC, and of these 132,841 have a current EPC rating of F or G. Exemptions have also been registered for 7,855 domestic properties²⁴. If the number of exempted properties is simply

²² The BEIS impact assessments for the regulations assumed that 10% of the PRS properties are not required to have an EPC, this includes Houses of Multiple Occupation and listed properties. These properties are counted in the EHS but are not required to comply with the minimum standard regulations.

²³ A comparison of the properties included in each dataset is included in the impact analysis technical annex.

²⁴ The total number of registered exemptions up to 1st April 2020 is higher than this at 8,366 but some of these are for the same property. 7,855 is the number of properties for which a current exemption has been registered.

subtracted from the number of F and G rated properties in the EPC database it implies there are 124,986 non-compliant properties as of April 2020²⁵ (for clarity, this does not account for any properties that have complied but not updated their EPC).

Table 3.1: Lower estimate of non-compliance

	Count
All properties in the private rental sector with a current EPC	2,973,610
Properties with a current EPC rating of F or G	132,841
Properties that exemptions have been registered for	7,855
Estimated non-compliant properties	124,986

Source: EPC database; PRS exemptions register

However, in the analysis it was not possible to match the addresses for all of the 7,855 registered exemptions to the addresses for properties with a current EPC rating of F or G in the EPC database. A small number of exempted properties now have a current EPC rating of better than F or G but that still left 4,152 exemptions that could not be matched with any property address in the EPC database. Table 3.2 illustrates this.

Table 3.2: Current EPCs matched to registered exemptions

Current EPC rating	No registered exemption	Registered exemption
A	632	-
B	119,667	1
C	886,111	17
D	1,265,199	117
E	564,289	284
F	97,674	2,193
G	31,883	1,091
Unmatched	-	4,152
Total	2,965,455	7,855

Source: EPC database; PRS exemptions register

The high number of properties that couldn't be matched is very likely to be due to differences in the address formats used in the EPC database and the PRS exemptions register and resultant

²⁵ It is not possible to identify properties in the EPC register which have a tenancy type which is not covered by the regulations, however these properties are expected to be very small in number. Only those with the following tenancies are covered by the regulations: an assured tenancy, a regulated tenancy, a domestic agricultural tenancy. The exclusions made within the impact assessments for the regulations are that 10% of the PRS are not required to have an EPC and are therefore not eligible. For the purpose of this evaluation the use of the EPC database ensures these properties are also excluded from the analysis.

limits to the matching methodology rather than, for example, a wholesale shift of these exempted properties out of the private rental sector. It is also a reasonable assumption that most of the unmatched exemptions will have been for properties that have a current F or G rating.

Nonetheless, Table 3.3 provides a further estimate of non-compliance just based on the number of registered exemptions that could be matched to properties with a current F or G rating in the EPC database. This implies a total of 129,557 non-compliant properties as of April 2020. For the purpose of this report, this second estimate is presented as the headline finding as it is the more conservative. Reliance on the figure presented further above (124,986 properties) potentially introduces further uncertainty regarding the validity of exemptions for properties that could not be matched to an EPC.

Table 3.3: Higher estimate of non-compliance

	Count
All properties in the private rental sector with a current EPC	2,973,610
Properties with a current EPC rating of F or G	132,841
Properties with a current EPC rating of F or G and a registered exemption matched to same address	3,284
Estimated non-compliant properties	129,557

Source: EPC database; PRS exemptions register

3.1.2 Compliance across different property types

Despite the limitations of the EPC dataset, it does allow an assessment of how compliance varies by property type. Table 3.4 below shows the distribution of current EPC ratings by property type (with exempted properties removed from the analysis).

Table 3.4: Distribution of current EPC ratings by property type (excluding exempted properties)

Property type	Built form	A/B	C	D	E	F	G
Bungalow	Detached	0%	8%	40%	40%	8%	3%
	Enclosed End-Terrace	0%	22%	39%	35%	2%	1%
	Enclosed Mid-Terrace	0%	37%	37%	22%	5%	0%
	End-Terrace	0%	16%	39%	38%	5%	0%
	Mid-Terrace	1%	15%	44%	34%	5%	1%
	Semi-Detached	0%	14%	48%	31%	4%	2%
	TOTAL		0%	11%	43%	36%	6%
Flat	Detached	4%	35%	37%	20%	3%	1%
	Enclosed End-Terrace	8%	44%	32%	14%	2%	1%

Property type	Built form	A/B	C	D	E	F	G
	Enclosed Mid-Terrace	18%	50%	22%	8%	1%	0%
	End-Terrace	3%	37%	38%	18%	2%	1%
	Mid-Terrace	7%	43%	34%	13%	2%	1%
	Semi-Detached	3%	36%	40%	18%	2%	1%
	TOTAL	6%	40%	36%	16%	2%	1%
House	Detached	1%	15%	37%	35%	8%	3%
	Enclosed End-Terrace	0%	21%	45%	31%	3%	0%
	Enclosed Mid-Terrace	0%	9%	52%	35%	2%	1%
	End-Terrace	0%	18%	48%	30%	3%	1%
	Mid-Terrace	0%	21%	56%	20%	2%	0%
	Semi-Detached	0%	17%	50%	28%	4%	1%
	TOTAL	0%	19%	51%	25%	3%	1%
Maisonette	Detached	2%	26%	40%	28%	4%	1%
	Enclosed End-Terrace	0%	33%	39%	23%	3%	1%
	Enclosed Mid-Terrace	4%	42%	33%	18%	1%	1%
	End-Terrace	0%	24%	46%	25%	3%	1%
	Mid-Terrace	1%	32%	45%	19%	2%	1%
	Semi-Detached	0%	27%	47%	23%	2%	1%
	TOTAL	1%	29%	45%	22%	2%	1%

Source: EPC database

The most notable feature of the results above is the similarity in EPC ratings across different property types rather than obvious differences. Houses and flats account for the vast majority of properties in the private rental sector and both have a similar proportion that have a current EPC rating of F or G (4% and 3% respectively). Bungalows could superficially be a cause for concern, given 8% are F or G rated, but they account for less than 5% of the private rental sector.

This is consistent with the qualitative evidence from interviews with landlords for the evaluation. Landlords did talk about some properties being harder or easier to make energy efficiency improvements but this was generally on the basis of their age, pre-existing design features and individual characteristics (which are partly addressed by the grounds for exemptions from the regulations) rather than property type. It is hoped that role of these other factors in levels of compliance can be examined quantitatively in later stages of the evaluation.

3.2 Factors mediating compliance

The research for the evaluation in 2019 identified three main reasons why landlords were complying with the regulations: the desire to avoid the potential negative consequences of non-compliance, a general compliance mindset, and pre-existing plans to upgrade their property. Factors such as potential benefits for the environment and/or tenants, and potential increases in property value were not notable influences on landlord decision-making. Instances of apparent non-compliance were primarily associated with a lack of awareness or understanding of the regulations.

The research for the evaluation this year in 2020 reinforces the role of these factors but suggests the influence of some has evolved over time. There are also additional factors that appear to be mediating landlord decision-making now too, most notably the time and cost implications of responding to the regulations for some landlords and concerns about potential disruption to tenants. These changes are primarily associated with the extension of the regulations to all tenancies from April 2020.

3.2.1 Factors motivating/facilitating compliance

The potential negative consequences of non-compliance

All of the landlords interviewed had a clear understanding that they could not legally advertise and rent out a property to a new tenant if they had not either, improved its energy efficiency or registered an exemption first, and were strongly motivated to comply on this basis.

“If our property didn't get an exemption or if it was below an E, you are not allowed to rent it out. So not complying had fairly damning implications, which is why we did comply.” (Company landlord, 6+ properties, registered exemption)

Understanding of the potential consequences of continuing to rent a non-compliant property where there is an existing tenancy since the extension of the regulations to all types of tenancy in April 2020 was also high not quite so universal – see Section 3.2.2.

A general compliance mindset

As in the interviews for the evaluation conducted in 2019, there were some landlords who described a relatively simple and straightforward decision-making process. Once they became aware of the regulations their immediate instinct was to comply and, as long as they hadn't encountered any significant practical or financial barriers, this is what they had done.

“If it's legislation we just get on with it, you know, there's not a debate about it, if it's got to be done, it's got to be done.” (Individual landlord, 2-5 properties, made improvements)

“There's no point in spending hours of my time researching and asking questions. If it was a legal requirement, it was a legal requirement, and I conform to all the rules which come out.” (Individual landlord, 1 property, made improvements)

These were generally individual rather than company landlords, and said they adopted a similar mindset towards other safety and building regulations affecting them as a landlord.

Pre-existing plans to upgrade their property

Landlords talked about an ongoing cycle of maintaining and/or improving the properties they rented over time, although the scale and intention of this varied. For some this was about

undertaking repair works and replacing older heating systems, lighting and household appliances in order to meet tenants' basic requirements and minimise ad hoc maintenance costs. Others said they would invest in more extensive upgrades to a property with the explicit intention of advertising and renting it out to new tenants for a higher rent than previously.

"We always keep trying to keep the properties in a reasonable fit and repair, and we always give them a going over between tenants." (Company landlord, 6+ properties, made improvements)

"We wanted to invest some money in the flats and basically improve them and then rent them out at a higher rent. So the regulations sort of coincided with that strategy being in place. We arranged for quite a big refurbishment to take place and obviously one of the things was to make sure that they had an adequate EPC." (Individual landlord, 2-5 properties, made improvements)

Several landlords said they had added in or incorporated improvements to increase the energy efficiency of a property as part of more general upgrades they had planned. Landlords said they budgeted for making these kind of episodic property upgrades irrespective of the regulations, and as long as the costs of incorporating the required energy efficiency improvements were not judged too expensive, they were made.

Potential benefits for the environment and/or tenants

Several individual landlords said they wanted to do the best for the environment and the wellbeing of their tenants, and there are some instances in which these sentiments appeared to have been a contributory factor in compliance with the regulations. However, as in the interviews for the evaluation in 2019, there was limited evidence of this being a direct driver of compliance. Landlords have had the option of acting on these sentiments prior to the regulations, which some had, and if the costs or practical difficulties of making further significant energy efficiency improvements now in response to regulations was judged too great, they had either done the minimum improvements required or sought an exemption.

Property value and resale potential

The interviews for the evaluation in 2019 found landlords were sceptical about the idea that making energy efficiency improvements in the response to the regulations would directly increase the value of their property. This was again the case amongst landlords interviewed in 2020 but some did perceive related potential benefits. Specifically, they expected it to be "easier" and "quicker" to sell one of their properties if they had improved its EPC rating to an E or better. Whereas other landlords were dismissive of the importance of EPC ratings to prospective rental tenants. There was a perception that prospective home buyers – and most pertinently mortgage lenders – now expect them to meet a certain level.

"Certain lenders would say 'It's an F rating, we are not interested'." (Company landlord, 2-5 properties, made improvements)

This was not a direct driver of whether or not landlords complied with the regulations but did appear to have been a contributory factor in some cases. It had also influenced some to comply by making energy efficient improvements rather than by registering an exemption.

"I'd rather have it in a band E than have an exemption on it because it's easier to resell." (Individual landlord, 2-5 properties, made improvements)

3.2.2 Factors potentially contributing to non-compliance

Gaps in awareness and understanding of the regulations

The findings in Chapter 2 highlight the high levels of general awareness and understanding of the regulations amongst landlords, and this has undoubtedly been an important factor in the high levels of compliance to date. Almost all the landlords interviewed for the evaluation this year said they had been aware in advance before the regulations were first introduced for new, renewed, and extended tenancies in April 2018 and before they were extended to all tenancies in April 2020.

The only exceptions to this were a small number of landlords who had not been aware of the extension of the regulations this year or were unsure about what the potential consequences are of continuing to rent properties with an ongoing tenancy while they respond to the regulations. This had contributed to some examples of non-compliance – or at least delayed or deferred compliance – depending on how this is interpreted.

In a small number of cases, landlords either hadn't been aware of the extension of the regulations to all tenancies or were aware but unsure whether they could continue to rent out a property with an ongoing tenancy without any immediate risk of punishment.

“I knew we were going to have problems doing a re-let unless we got them up to standard but no-one told me that the rules had changed this year to include existing tenants.” (Individual landlord, 1 property, no action)

“I’ll be honest, I haven’t registered an exemption and it hasn’t got a rating yet. I’m still working on it and think that’s okay.” (Individual landlord, 2-5 properties, no action)

There appeared to be an assumption that as long as they could demonstrate they were “making efforts” or “in the process of” responding to the regulations for affected properties in their portfolio, this would be sufficient to avoid punishment if they were challenged about it. A possible contributory factor in this was also the perception landlords had of the likelihood of being challenged by their local authority. Most said they were not aware of active enforcement activities being undertaken by local authorities. However, there were some positive examples this year where a local authority was reported to have proactively contacted a landlord and reinforced compliance with the regulations.

“We actually had a call from the council to say ‘Oh you’ve just let a property to somebody and the EPC is a fail’ and we went ‘Oh, whoops’ and we very rapidly got the work done on it. It was a one off.” (Company landlord, 6+ properties, made improvements)

Some landlords with a listed building or HMO also expressed confusion over whether, and if so how, they are required to respond to the regulations for these properties. However, this did not appear to have led to any direct instances of non-compliance. Either the landlords had sought confirmation from their local authority that their property was not required to have an EPC, or they had (possibly unnecessarily) registered an exemption from the regulations. There are no defined grounds for an exemption for listed buildings or HMO, but these landlords said they simply selected the grounds for exemption that seemed most appropriate (e.g. no further improvements to energy efficiency can be made or consent not granted by the planning authority).

The time and cost implications of responding to the regulations

In 2019 research for the evaluation, landlords were generally responding to the regulations for individual properties when the existing tenancy was coming to an end. They also had a relatively straightforward grounds for registering a 'no cost to landlord' exemption if they could not access third-party finance to meet the upfront costs of making improvements. Now in 2020 the regulations have been extended to all tenancies and the 'no cost to landlord' exemption has been replaced with a £3,500 cost cap.

This has changed the dynamic for certain landlords and means that the time and cost implications were now a factor affecting compliance. In particular, some landlords with large portfolios admitted they had not yet improved or exempted all of their F and G rated properties. All had been aware of the extension of the regulations to all tenancies from April 2020 in advance and had either made improvements or registered an exemption for some of their affected properties already. However, they said the time and cost involved were such that they had not completed this process at the point they were interviewed in May-July 2020.

"It does require an intense amount of work for us as the landlord. There are two we are still working on." (Individual landlord, 6+ properties, no action)

"You can't do all the work that is required even if you spent the minimum amount which I think is £3,500. If you spent that on them, you know you multiply that by fifty or sixty... it's a question of cost." (Company landlord, 6+ properties, no action)

These landlords said they intended to exempt or improve their remaining F and G properties later in 2020, or alternatively to sell them if they could not find grounds for registering exemptions and were not able or willing to meet the costs of making improvements.

Potential disruption for tenants

This did not feature as a factor in landlord decision-making in the interviews in 2019 but it did in some cases this year, linked to the extension of the regulations to cover all tenancies from April 2020. Several landlords had made improvements to properties with a sitting tenant living there but a small number cited the potential disruption to the tenant as a difficulty or reason why they had not so far made improvements in response to the regulations.

"If your tenants are happy, you know, you don't want to start messing around. There would be massive disruption. The tenants would have to be put up in alternative accommodation." (Company landlord, 2-5 properties, no action)

"She keeps telling me that she's about to leave. When she does we can go into the house, rip down the ceilings and put proper insulation in. We can't do that when someone's living in it." (Individual landlord, 1 property, no action)

In the above examples, the landlords had reached the conclusion that quite extensive work would be required to increase the EPC rating to E or better. Either they had registered an exemption or said they still planned to make improvements as soon as there was a change in tenancy.

Reported communication between landlords and tenants concerning the regulations was very varied. In the tenant interviews, a minority said they had been closely consulted by their landlord about potential improvements and one had cooperated with the landlord to enable them to register an exemption on the grounds that they did not consent to improvements being made. Tenants were positive about being consulted in the instances where this happened but

more often, landlords had apparently decided to make improvements or register an exemption without seeking to involve the tenant in the decision-making process.

“It was just something that they decided needed doing so they just got on with it.” (Tenant, landlord made improvements)

Several of the tenants interviewed were not aware of why improvements had been made to the property they were living in or that an exemption had been registered.

3.2.3 The potential role of tenants in landlord decision-making in future

The findings above indicate that tenants do not so far appear to have much of an active role in whether or not landlords decide to comply to the regulations. Section 2.2 also highlighted low current levels of awareness of the regulations amongst tenants, partly linked to the low importance they attach to energy efficiency when deciding what property to rent.

However, across most of the tenants interviewed, it was apparent that energy efficiency (in terms of how warm the property was, and to a lesser extent their energy bills) had become more of a conscious concern once they were living in the property than it had been at the point they were deciding to move in. At least one of the tenants said they would like to know more about the regulations once they had been explained to them by the interviewer in the interview.

“I would be interested to hear about them. I mean I do understand the EPC chart but I am not aware of the regulations that you just mentioned. It would be great to know that if the rating is where I think it is, that the landlord will have to be doing something about it.” (Tenant, landlord registered exemption)

This tenant, and some others, said they were currently wary of raising any issues with the property they were renting with the landlord. They felt they had little power as a tenant and feared the landlord giving them notice if they were seen to be a “difficult” tenant.

“The fear is that if you ask for too much then, you know, they no longer want you in their property.” (Tenant, landlord made improvements)

In this context, the regulations were viewed positively, as a legal requirement with the backing of the Government, that they could potentially cite in broaching these kinds of issues with their landlord in future.

Another tenant, who had also been unaware of the regulations until being interviewed, said they would “definitely” pay closer attention to the EPC of properties the next time they were looking for a place to rent now they knew there was a legal requirement for these to be a certain level.

This suggests that an increased awareness and understanding of the regulations amongst tenants could potentially further help to increase compliance. However, there were only a handful of the tenants amongst those interviewed who expressed these sentiments. Others indicated that energy efficiency would always be low down on their list of priorities while they were renting – although they did envisage it being more of a consideration if they were looking to buy a house. One or two also suggested the regulations could have potentially negative unintended consequences for tenants in the future. These are discussed in Section 4.3.

3.3 The different forms compliance has taken

The EPC database and exemptions register data provide quantitative evidence on what types of energy efficiency improvements have been made and what grounds for exemption have been most widely used to date. The qualitative interview evidence provides some insight into what factors have influenced this.

3.3.1 Energy efficiency improvements

Table 3.5 shows the main performance features that have changed between the previous and current EPC for properties which had a previous EPC rating of F or G. Since it is not possible to determine which measures were installed specifically because of the regulations, this table includes all changes by F and G properties with two EPCs, not just those with a second EPC after the regulations came into force in 2018.²⁶ It indicates that changes were concentrated on improved insulation, although this was frequently in combination with more efficient lighting or other changes.

Table 3.5: Change in energy performance features between previous and current EPC for PRS properties with a previous EPC rating of F or G

Change in performance feature	Frequency	Percent
fabric insulation and low-E lighting	36,960	50%
fabric insulation	8,123	11%
fabric insulation, main heating upgrade and low-E lighting	17,803	24%
low-E lighting	3,929	5%
fabric insulation and main heating upgrade	3,222	4%
heating upgrade & low-E lighting	2,221	3%
main heating upgrade	1,587	2%

Notes: fabric insulation includes: loft insulation, wall insulation, floor insulation and window upgrades; heat upgrades include: new condensing boilers (standard and combi).

Source: EPC database

The qualitative interview sample included landlords who said they had made one or other, or a combination, of these different improvements in response to the regulations. There is no unambiguous pattern or single explanation for why they made the improvements they did, but a combination of factors which varied landlord-to-landlord and property-to-property. The main factors were landlords' mindset in making improvements, the potential costs of different energy efficiency improvements, and the characteristics and idiosyncrasies of individual properties. Exceptionally, tenant preferences were also a factor too.

The most common model or mindset was for landlords to make what improvements were necessary to increase the EPC rating of their property up to an E with the minimum financial outlay. This was often directly informed by the recommendations and guideline costs for what improvements were necessary to achieve an E rating in their most recent EPC. In a minority of cases this had been as modest as installing new LED lighting and draught excluders on doors.

²⁶ An assessment of the impact of the regulations is presented in section 4.

In other cases, depending on the individual property and pre-existing EPC rating, it included more extensive improvements (e.g. roof insulation or new gas central heating) to achieve an E rating.

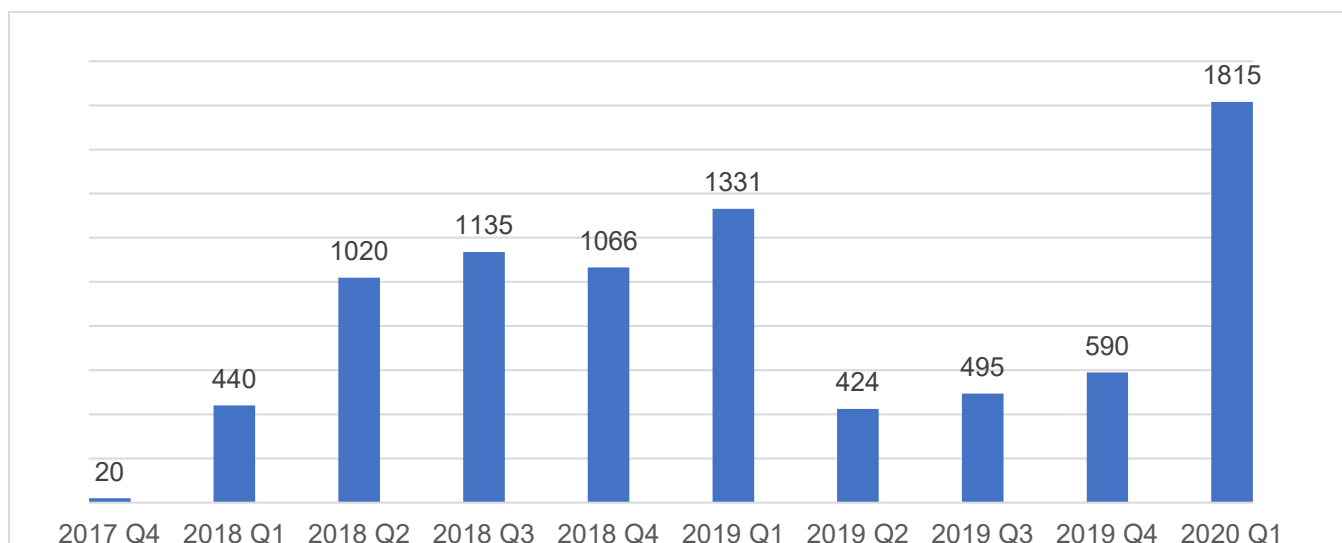
Some landlords with older and/or 'character' properties also said they had sought to minimise the extent of the improvements in order to preserve the character and appeal of the property. Double glazing and external wall insulation were often cited as improvements they had sought to avoid for this reason. Tenants living in such properties also generally had similar views to the landlord on this, confirming that they did not want the character of the property to be significantly changed by any improvements made. As a whole, and irrespective of landlords' mindset or budget, internal wall insulation was frequently cited as an improvement of last resort because of its implications for reducing the floorspace of the property.

There were also landlords who said they had made more extensive improvements to improve the EPC rating of their property to better than just an E rating. There were two main mindsets or drivers for doing this: the expectation that future legislation would ratchet up from a minimum standard of E to D; and an explicit desire to upgrade their property and increase their rental income from it. In the interviews for the evaluation last year a minority of landlords said they expected minimum standards moving up to a D rating in the future. In the interviews this year this expectation was more widespread and had influenced some landlords to consciously make a decision to pay a little more and get their properties up to better than just an E. Other landlords had made energy efficiency improvements which increased the EPC rating to better than E as part of extensive upgrades to properties, with the intent of being able to market them for a higher rent.

3.3.2 Exemptions

Figure 3.2 shows a significant spike in the number of exemptions registered in the first quarter of 2020, leading up to the extension of the regulations to all tenancies. This aligns with the high levels of awareness most landlords said they had of the extension of the regulations in the qualitative interviews and indicates many complied by registering an exemption in the three months running up this.

Figure 3.2: Numbers of exemptions registered over time

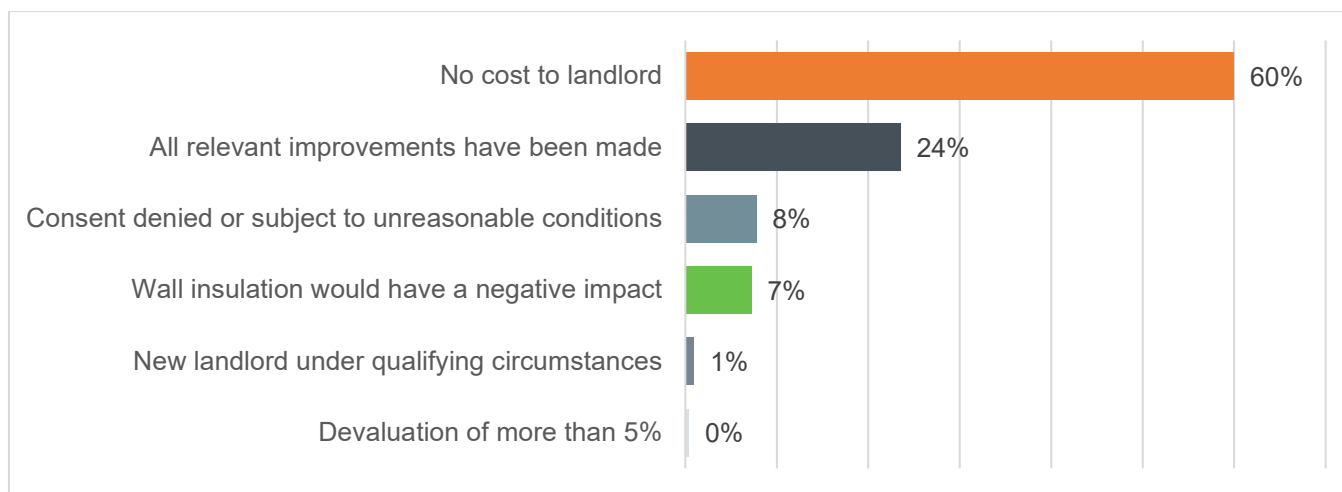


Source: PRS exemptions register data

Figure 3.2 also shows a drop in the number of exemptions registered between the first and second quarters of 2019. This may be partly explained by the replacement of the previous ‘no cost to landlord’ grounds for exemption with the £3,500 cap on costs to landlords from 1st April 2019.

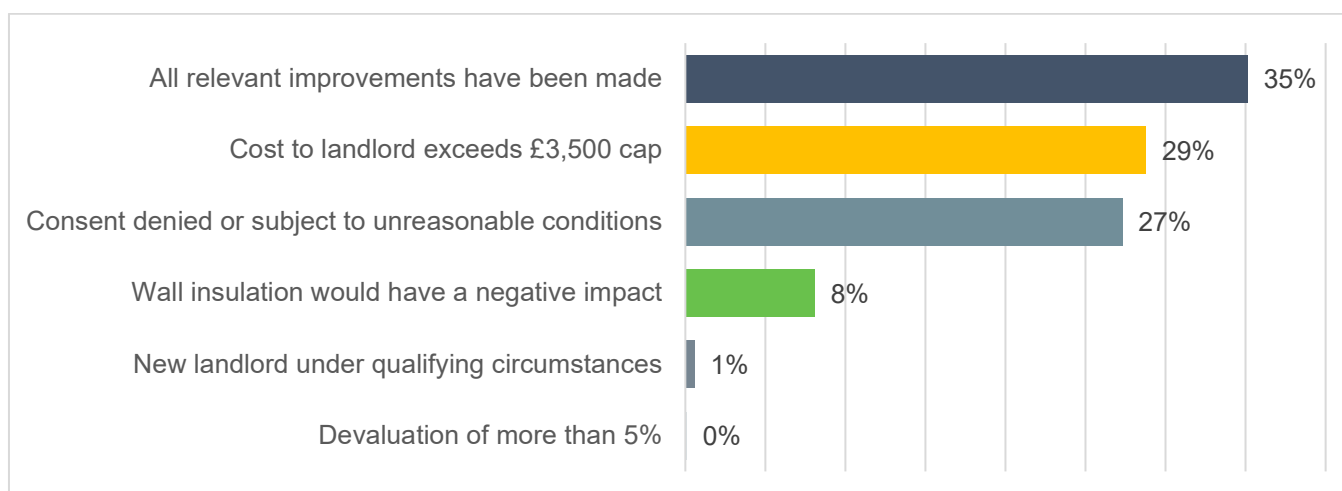
The following two graphs illustrate the different grounds for exemptions registered before and after this change²⁷. The ‘no cost to landlord’ grounds for exemption accounted for the majority (60%) of all exemptions when it was in place, whereas the new cost cap grounds for exemption has accounted for just under a third (29%). Other grounds for exemptions, most notably ‘all relevant improvements made’ and ‘third party consent unavailable’, now represent a higher proportion of registered exemptions than previously.

Figure 3.3: Registered exemptions 2017 Q4 to 2019 Q1



Source: PRS exemptions register data, 5,012 exemptions registered in this period.

Figure 3.4: Registered exemptions 2019 Q2 to 2020 Q1



Source: PRS exemptions register data, 3,324 exemptions registered in this period.

²⁷ See section 1.1.2 of this report for definitions of each exemption and a summary of the exemptions process.

Based on the interviews with landlords for the evaluation, the most important determinants of which grounds for exemption they had registered were:

- **Cost.** Most of the landlords interviewed for the evaluation this year had made decisions about how to respond to the regulations after the introduction of the cost cap, and awareness of this new grounds for exemption was high but not universal. Landlords appeared to accept the principle that they would be expected to meet the costs of any energy efficiency improvements up to a certain point and none, for example, were explicitly critical of the current £3,500 level of the cap. However, the previous ‘no cost to landlord’ exemption had provided a means by which landlords could comply with the regulations without incurring any costs. The other more long-standing grounds for exemption also do not directly require any financial outlay by the landlord. This is the main reason why a lower proportion of landlords have registered an exemption under the new cost cap.
- **Time and effort.** Landlords talked about the time and effort they thought might be required to register exemptions on different grounds.

“The reason I chose to get the exemption I did, well it was just the one that I could do without having to jump through loads of hoops to explain it.” (Individual landlord, 2-5 properties, registered exemption)

Again, this appeared to partly count against the cost cap grounds for exemption. To qualify for this, landlords are required to make what energy efficiency improvements they could within a defined £3,500 budget and provide evidence they have done this. The ‘wall insulation’ and ‘devaluation’ grounds for exemption were also perceived by some landlords as being potentially burdensome because of the need to secure written evidence from an independent expert. Other grounds for exemption imply some investment of time and effort by the landlord – e.g. getting written confirmation from a tenant or planning authority that they do not consent to improvements being made – but this was expected to be more straightforward. One landlord also said they noted that all that was required to register an exemption on ‘all relevant improvements made’ grounds was to select this option on the exemptions register and upload their current EPC.

“I would imagine most people are going for that one because it’s the easy one.” (Company landlord, 6+ properties, made improvements)

- **Potential disruption to tenants.** The extension of the regulations to all tenancies from April 2020 has meant that landlords are required to respond to regulations for properties that have a sitting tenant, rather than just between tenancies. Landlords identified potential disruption to such tenants as a disincentive to making energy efficiency improvements, and this appears to have been reflected in the increasing proportion of exemptions being registered under the ‘no consent’ grounds for exemption.

Landlords’ experiences of registering an exemption were polarised - in the sense that there were aspects of the process they were consistently positive about but others they thought could be improved. What landlords liked was the ease and usability of the exemptions register itself.

“It looked very tedious when I looked at it initially, but it wasn’t that difficult.” (Individual landlord, 2-5 properties, registered exemption)

“It was remarkably easy.” (Company landlord, 6+ properties, registered exemption)

The main thing landlords thought could be improved was the clearer and more definitive confirmation that their exemption had been accepted or approved. Landlords are sent an email to confirm that their exemption has been registered but, as in the interviews for the evaluation conducted last year, most did not think this had given them sufficient certainty that their grounds for exemption and supporting evidence had been reviewed and deemed sufficient.

“The bit that I did find very disconcerting was that I got something back saying, ‘you have submitted it’, but nothing to say, ‘we agree’ or anything like that... That just felt like they could come back at any minute and say, ‘sorry that’s not good enough’.” (Individual landlord, 1 property, registered exemption)

This had caused anxiety amongst landlords and led many to question the rigour with which the regulations are being monitored and enforced. The same findings were reported in the interim evaluation report for the evaluation last year in 2019.

Looking further ahead, some landlords also suggested it would be valuable if they can be provided with a reminder in advance of when their exemption is due to expire, typically after 5 years²⁸.

²⁸ Details of exemption validity periods are available at <https://www.gov.uk/guidance/domestic-private-rented-property-minimum-energy-efficiency-standard-landlord-guidance#registering-an-exemption>

4 Impacts of the regulations

This chapter provides findings on:

- **Impacts on energy efficiency**
- **Impacts on energy costs and CO2**
- **Other impacts of the regulations**

4.1 Impacts on the energy efficiency

The introductory chapter in this report explained that the initial assessment on the impact of the regulations on energy efficiency has focused on changes in SAP scores rather than just EPC ratings, because SAP scores provide a much more precise measure of energy efficiency. The higher the SAP score, the higher the energy efficiency of a property.

This initial assessment of impacts on energy efficiency has also been designed to separate out and measure the impact of the regulations when pre-existing trends in the private rental sector and other factors are excluded. The analysis relies exclusively on a sample of properties where a pre and post-regulatory EPC is available, this allows a measure of the change related to the regulations and overcomes the uncertainty where properties are not required to update their EPC for 10 years. The sample includes all PRS properties in England and Wales that had an EPC rating of F or G prior to the regulations and had a further EPC undertaken after their introduction in April 2018. Properties with a registered exemption were excluded for the purposes of the analysis as the exemption means no change in energy efficiency is likely to have taken place in that property. A control group of all properties in Scotland²⁹ that also had an EPC rating of F or G prior to April 2018 and had a further EPC undertake after this point provides the basis for the quasi-experimental approach employed³⁰.

4.1.1 Overall impacts on energy efficiency

Overall, the analysis found that the regulations have had a statistically significant impact on the energy efficiency of private rental sector properties in England and Wales. The impact of the regulations on the energy efficiency of PRS properties is estimated to be an increase of about 5 SAP points (on the 1-100 SAP scale).

The estimated impact varies between 2 SAP points for 'established' PRS properties and 9 SAP points for 'recent' PRS properties. Established PRS properties are those that were privately rented both before and after the introduction of the regulations in April 2018. Recent PRS properties are those that were privately rented after April 2018 but had a different tenure status before (e.g. owner occupied or socially rented).

It was also found that the impact of the regulations on energy efficiency has been greatest on properties with the worst prior energy efficiency and SAP scores. Amongst properties with a

²⁹ It was not possible to limit the analysis to just PRS properties in Scotland as the sample within the EPC database was too small. However, the use of all properties in Scotland did satisfy the assumptions necessary for the difference-in-difference methodology.

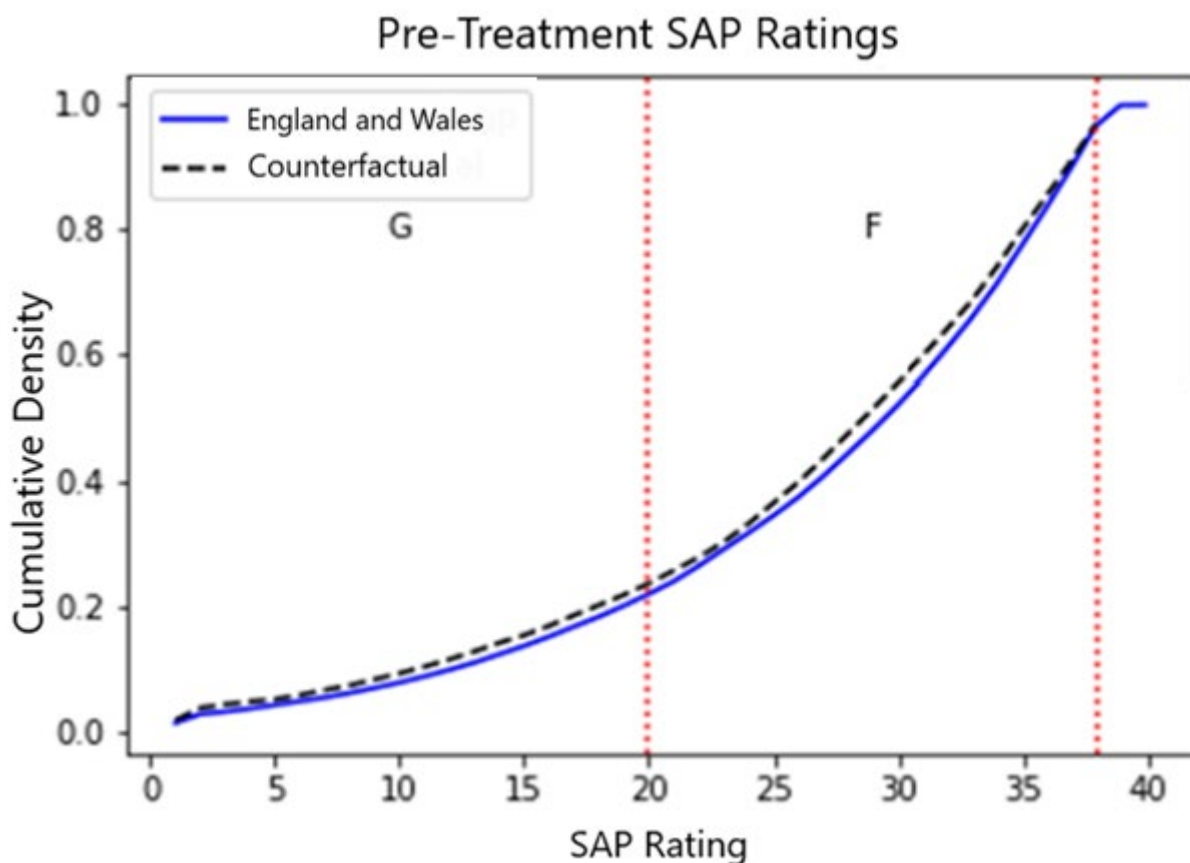
³⁰ The Quantitative Impact Analysis technical report, published alongside this report, includes further details of the control group

previous EPC rating of F or G, those in the worst 20th percentile recorded an increase of 9 SAP points, compared to no change amongst properties in the 80th percentile. In other words, the worst properties saw the highest increase in energy efficiency. This is consistent with the qualitative findings reported in the previous chapter indicating that most landlords had made just the improvements necessary to improve the existing EPC rating of their property up to an E rating with the minimum financial outlay.

Further evidence on the impacts of the regulations on energy efficiency is provided by looking at change in the distribution of SAP scores between before and after the regulations. A comparison was made between English and Welsh PRS properties with an F or G rating prior to April 2018 (the treated group) and Scottish properties meeting the same criteria (the control or counterfactual group in this comparison).

Figure 4.1 shows the distribution of SAP scores in these two groups prior to April 2018 and illustrates how closely matched they are. As a reminder, a SAP score of 1-20 equates to an EPC rating of G and 21-38 equates to an EPC rating of F.

Figure 4.1: The distribution of SAP scores across F and G rated properties before April 2018³¹



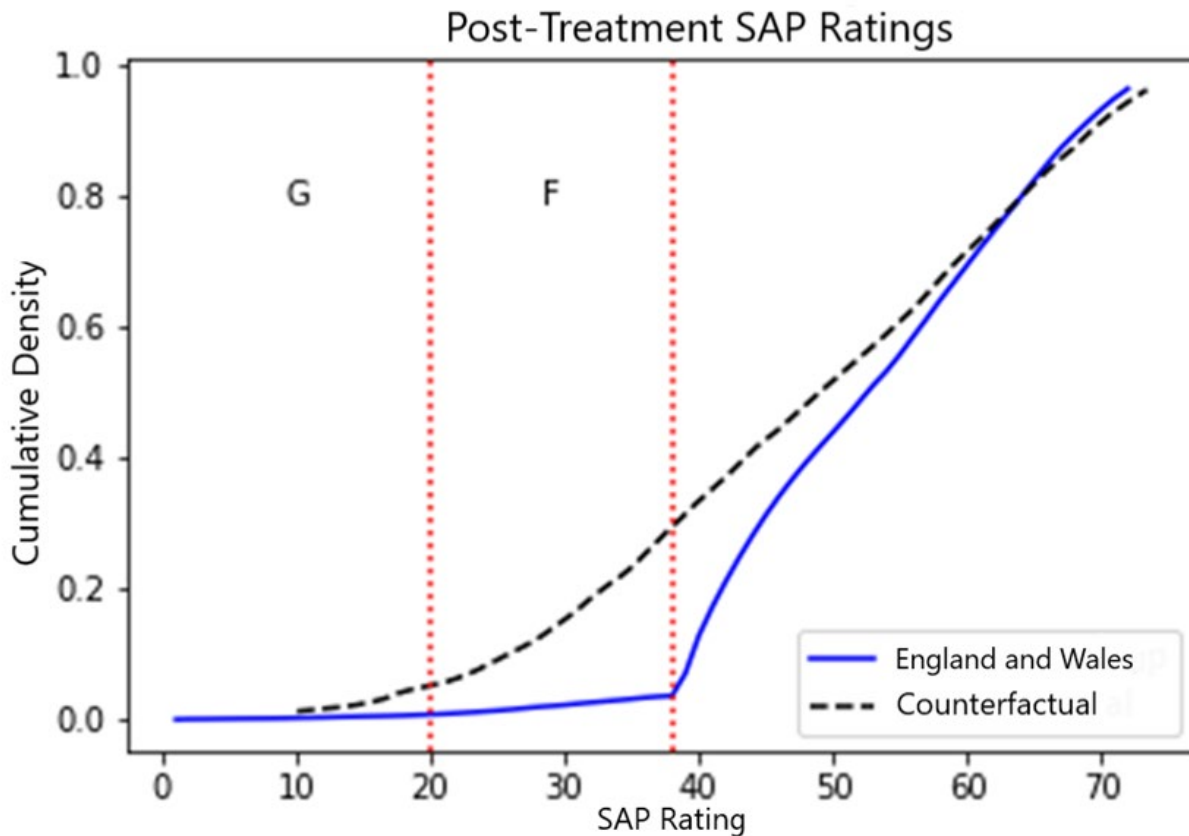
Source: EPC database England and Wales; EPC database Scotland

Figure 4.2 shows the distribution of SAP scores that these same properties have in their current EPC undertaken after April 2018. There is an obvious different here in the share of

³¹ For any given SAP score, the cumulative density describes the percentage of properties with a lower or equal SAP score.

English and Welsh properties that now have a SAP score of above 39 (the cut-off point for achieving an EPC rating of E) compared to the equivalent properties in Scotland.

Figure 4.2: The distribution of SAP scores across properties previously rated F or G after April 2018



Source: EPC database England and Wales; EPC database Scotland

4.1.2 Impacts on energy efficiency by property type

EPCs contain some information about the characteristics of the property, as well as providing an overall rating and more specific SAP score of energy efficiency. Using this information, it was possible to look at how the impact of the regulations on energy efficiency may vary by property type. The main points are as follows:

- Houses recorded a larger increase in SAP rating than flats (11.5 points versus 0.3 points), a reflection of the fact that flats generally have better SAP ratings to start with
- Properties on the gas grid recorded a larger increase in SAP rating than properties off the gas grid (8.3 points versus 4.9 points). Similarly, properties where the main fuel was gas recorded a larger increase in SAP rating than properties using electricity (6.6 points versus 4.2 points)
- Large properties recorded a larger increase in SAP rating (9.2 points) than either medium properties (8.2 points) or small properties (1.2 points)³²

³² Large, medium and small properties were defined based on the size of the residential unit measured in squared meters, with each group containing exactly one third of the total number of units.

-
- Properties with solid walls recorded a larger increase in SAP rating than properties with cavity walls (7.9 points versus 5.6 points)
 - Properties with a traditional method of construction³³ recorded a larger increase in SAP rating than properties with a non-traditional method (7.1 points versus 6.1 points)

Analysis of property types is limited by the data available in the EPCs, which of course excludes potentially important characteristics such as the type of landlord (e.g. categorised by portfolio size).

4.2 Impacts on energy costs and CO2 emissions

As described in the introductory chapter to this report (and in more detail in the accompanying technical annex) it has been possible to compute the impacts of the regulations on energy costs and CO2 emissions using EPC data, findings from the quasi-experimental analysis of impacts on energy efficiency, and industry-recognised formulas developed by the BRE. The results are not based on observed levels of actual energy costs or CO2 emissions, and are therefore indicative only³⁴. This method has two implications for interpretation of findings:

- The analysis relies on converting SAP ratings into energy and fuel costs and therefore rely on assumed heating regimes and temperature, meaning the findings represent assumed impacts rather than real-world impacts³⁵. They are therefore likely to over-estimate the impact of the regulations if compared to the policy impact assessments.
- The findings presented here are presented in 2012 prices, using SAP's 3-year average fuel costs and carbon values. Caution should be taken when comparing to the impact assessments for the regulations, which use 2013 prices and the Interdepartmental Analysts' Group (IAG) fuel costs and carbon values, in accordance with the Green Book.

As a result of these factors, the findings in this section are referred to as 'assumed savings', i.e. they are the savings that would be achieved if the PRS properties were heated and occupied as the SAP model assumes.

Nonetheless, the results presented here are broadly in line with the projected impacts of the regulations prior to their introduction, which lends weight to their credibility and the robustness of the analytical approach.

4.2.1 Impacts on energy costs

The analysis indicates that the regulations have resulted in an average assumed reduction in energy costs of about £120 per year for properties that were previously rated F or G. Reductions are greater in the case of recent rental properties compared to established private rental properties.

³³ These include the 'non-traditional houses' built up to 1980 and those built based on the Modern Methods of Constructions (MMC) as defined in the BRE RdSAP Manual 5.

http://www.bre.co.uk/filelibrary/accreditation/rdsap9_91/BRE_RdSAP_Manual_5_-_Identifying_basic_constructions_v8_0.pdf

³⁴ The saving projections included in the original impact assessments for the regulations rely on outputs from the National Housing Model. Further information is available at <https://www.cse.org.uk/projects/view/1233>

³⁵ <https://www.bregroup.com/sap/standard-assessment-procedure-sap-2012/>

Table 4.1: Estimated impact of the regulations on energy costs

	Average assumed annual reduction in energy costs £
All Private Rental Properties	£124
Recent Private Rental Properties	£243
Established Private Rental Properties	£72

The impact of the regulations on energy costs has also been computed for properties that had different levels of energy efficiency (measured through the SAP score in their EPC) prior to the regulations. The results in Table 4.2 show that these are particularly high for the properties in the lower percentiles of the distribution of properties used in the analysis, i.e. with the lowest previous SAP scores. For example, assumed annual savings above £400 can be attributed to the regulations for properties in the lowest SAP score percentile.

Table 4.2: Estimated impact of the regulations on energy costs by previous SAP score

Starting SAP score of properties used in the sample (percentiles)	Average assumed annual reduction in energy costs £		
	All Private Rental Properties	Recent Private Rental Properties	Established Private Rental Properties
10th percentile (lowest SAP scores)	449	535	356
20th percentile	267	364	182
30th percentile	174	299	96
40th percentile	122	258	21
60th percentile	49	146	-91 ³⁶
80th percentile (highest SAP scores)	0	47	-117

4.2.2 Impacts on CO2 emissions

The analysis indicates that the regulations resulted in an average assumed annual reduction of about 500 kg CO₂ per year across all private rental properties that had an EPC rating of F or G prior to the regulations. As with the energy efficiency and energy costs results, this impact was greatest for properties that entered the private rental sector in the timeframe of the introduction of the regulations - classed as 'recent' private rental sector properties - as illustrated in Table 4.3. The parallel trend assumption applied in the analysis was not met in the case of

³⁶ These findings suggest that costs have increased for the more efficient properties in the DiD sample (those with a higher G rating). This is likely an erroneous finding resulting from the measurement errors within the EPC process already noted. The increase in cost results from a decrease in SAP scores of 3.7 and 4.7 points.

established private rental properties, suggesting that the pre-post comparisons made within this group may not reliably indicate change as a result of the regulations, but they are included here for completeness.

Table 4.3: Estimated impact of the regulations on CO2 emissions

	Average assumed annual reduction in kg CO2 emissions
All Private Rental Properties	501
Recent Private Rental Properties	987
Established Private Rental Properties	-6

4.3 Other impacts

4.3.1 Impacts on tenants

One of the aims of the regulations is to benefit tenants in the private rental sector, in terms of their energy bills and how warm and comfortable they are in the properties they live in.

The indicative evidence on the impacts of the regulations on fuel costs presented earlier in this chapter strongly suggests that the regulations have had a positive impact on the first of these. Some of the tenants interviewed also said they thought their energy bills may be lower since improvements had been made, although none could put a figure on this, and overall it did not appear to be very important in their feelings about continuing to live in the property they were currently renting.

There is no wider evidence from surveys of tenants to draw on in further quantitatively assessing the impacts of the regulations on fuel bills, or the warmth and comfort of where they live. However, the small number of qualitative interviews have been conducted with tenants in properties where the landlords had apparently made energy efficiency improvements in provide some indicative examples of positive impacts for tenants. Landlords also talked about what they thought the impact of energy efficiency improvements they had made were on their tenants.

Firstly, some tenants reported their property was warmer and as a result of the improvements made. These were cases where either a new heating system had been installed or new double-glazed windows. One tenant in particular, who was undergoing treatment for a serious medical condition at the time of the landlord made improvements, said this had made a significant difference to their quality of life.

“Had I not got that new boiler, I don’t think I would have been able to stay in the house, just because, you know, from what I was going through, with the treatment, I really don’t think I would have been able to hack it.” (Tenant, landlord made improvements)

Most landlords also perceived that improvements they have made in response to the regulations have benefited their tenants and had the knock-on positive impact of tenancies being sustained for longer. As indicated in Chapter 3, this is despite such benefits not having been an overriding motivation for most landlords to respond to the regulations. There was, in more than one case, an element of surprise when landlords reported these benefits.

“I double glazed the whole lot and whacked heating in all of them, just to follow the regulations, but I will say that we used to have a higher turnover of tenants when they were freezing, so now they are better. You wouldn’t believe it, the last year we haven’t had anybody leave.”
(Individual landlord, 6+ properties, made improvements)

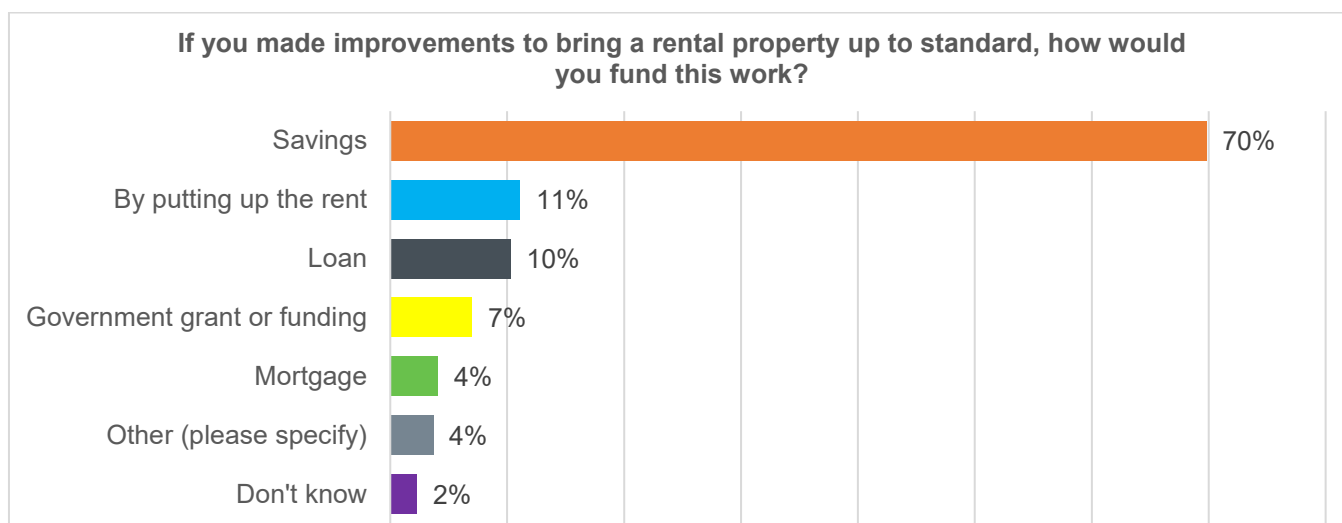
In the longer term, some interviewees suggested ways in which the regulations could potentially have unintended negative consequences for tenants too. Specifically, one or two tenants said they thought they had only been able to afford to rent their current property because it had relatively poor heating and/or insulation. This was a compromise they had been willing to make. Their concern was that by requiring landlords to make energy efficiency improvements it would push rent levels up and remove these “cold but affordable” properties as an option for tenants with a limited income in future.

However, actual evidence of the impact of the regulations on rent levels is currently limited. One of the tenants interviewed said their rent had been increased by the landlord following improvements made, and in this case the tenant felt that was acceptable due to the extent of the improvements made and intended to continue renting the property. A couple of other tenants in properties where improvements had been made were anticipating that their landlord would increase rent levels in the near future as a consequence, but others did not. This is consistent with the qualitative evidence from landlords – see Section 4.3.2. The other main concern was that increasing numbers of landlords will sell properties they rent as an alternative responding to the regulations, meaning a smaller and potentially more expensive rental market for prospective tenants. Again, quantitative evidence on the extent to which the regulations are having this kind of impact is currently lacking, but some indicative findings from the landlord interviews are provided in Section 4.3.3.

4.3.2 Impacts on landlord finances

Figure 4.1 shows the majority (70%) landlords say they expect to pay for energy efficiency improvements made in response to regulations with savings, while a minority (11%) say they expect to do so by putting up rents. These results are from the most recently conducted Landlord Panel Survey, in the second quarter of 2020, and consistent with the findings of other previous surveys of landlords in England and Wales reported in the 2019 evaluation report.

Figure 4.1: How landlords currently expect to pay for energy efficiency improvements (landlords with E/F/G properties)



Source: Landlord Panel Survey 2020 Q2 n=294

The interviews with landlords for the evaluation largely echo the survey results, although there was also evidence of the potential financial challenges some may now be experiencing in responding to the regulations.

As discussed in Chapter 3, some landlords (especially those with a number of F or G rated properties that have come into scope of the regulations since the extension to all tenancies from April 2020) cited the potential costs of making energy efficiency improvements as a factor in why they had not yet complied for all their affected properties. Either this was described as a short-term “cashflow issue” or they said they were unable or unwilling to meet the costs of making energy efficiency improvements completely.

A minority of the landlords interviewed said they had increased the rent on properties where they had made energy efficiency improvements. However, this was typically in cases where they had undertaken such improvements as part of a wider upgrade of the property in question. There still appears to be widespread belief amongst landlords that prospective tenants are not interested in the EPC rating of a property when they make decisions about whether they want to rent it or not (and the tenant interviews do tend to support this). Most landlords also didn’t appear to believe that energy efficiency improvements would translate directly into an increase in the value of their property but did at least believe it would make them easier and quicker to sell if they chose to go down that route.

4.3.3 Impacts on the wider housing market

The regulations could potentially impact the size and composition of the private rental sector but there is currently a lack of robust quantitative data necessary to assess this.

Previous surveys of landlords, included in the 2019 interim evaluation report, indicated that a small minority of landlords would sell or stop letting properties in response to the regulations³⁷. Among English Landlords, 3% say they would not carry out any works to comply with the regulation and either sell or not re-let the property, with 11% of Welsh landlords reporting the same. A similar amount (3% English and 9% of Welsh Landlords) say they would carry out works to comply and then sell the property.

Despite the survey results suggesting a minority of landlords were considering selling or not re-letting their properties, interviews for the evaluation in 2020 also found only a minority of landlords either had done this or were contemplating it. Furthermore, as in the interviews last year, those who had or planned to sell a property affected by the regulations generally framed this within the context of wider legislation changes over the last 5-10 years which they believed had made being a landlord less financially viable.

“I will be selling some because the investment required in trying to achieve E or better is such that it’s not worth my while doing it. The private rented sector...its over-regulated now. With all the regulations, not just the EPC regulations, it’s making it increasingly difficult to do what we have been doing for hundreds of years.” (Individual landlord, 6+ properties, made improvements)

The regulations therefore appear to be more a contributory factor in why some private landlords and properties may leave the sector rather an overwhelming driver in their own right. Further research is needed to understand if non-compliant properties sold by landlords are

³⁷ The 2019 Interim Report for the evaluation can be accessed here: <https://www.gov.uk/government/publications/domestic-private-rental-sector-minimum-energy-efficiency-standards-interim-evaluation>

purchased by other landlords who are willing to make the improvements, or whether they are sold out of the PRS market.

5 Interim conclusions

This chapter provides interim conclusions from the evaluation. These are structured around the three headline evaluation questions set by BEIS:

- **To what extent are landlords complying with the regulations?**
- **To what extent have the regulations achieved their aims?**
- **Have the regulations had wider impacts on the private rental market?**

The following sections summarise what can be concluded for each of the questions at this stage in the evaluation, how confident it is reasonable to be in these interim conclusions, and how the evaluation questions will be addressed further in later years of the evaluation.

5.1 To what extent are landlords complying with the regulations?

It has not been possible to definitively quantify the level of compliance with the regulations across the entire private rental housing stock in England and Wales at this stage in the evaluation. Nonetheless, the EPC database for England and Wales, which contains information on 2.97 million properties in the private rental sector, provides indicative evidence on this. It shows that, as of April 2020, there are approximately 129,557 properties whose latest EPC suggests are non-compliant with the regulations (having taken account of properties with exemptions). While it is possible that some of these properties have been updated to comply with the regulations, but have not updated their EPC, the evidence does imply that compliance has not reached 100%. The true level of compliance cannot, however, be determined at this point in time.

The main caveat to these findings is that the national EPC database of 2.97 million private rental properties does not encompass the entire universe of the sector in England and Wales. Based on data from the more comprehensive EHS, the private rental sector contains over 4.8 million properties in England alone. The implications of this are that there are properties potentially in-scope of the regulations, but which are not represented in the interim results presented here based on the EPC database. Levels of compliance amongst these other properties could be quite different and potentially lower than those captured in the EPC database and include properties that have never had an EPC undertaken, either before or after the introduction of the regulations.

A comparison of the characteristics of the EPC database sample and the larger EHS sample has been undertaken for the evaluation (see the accompanying technical report) and found they are broadly comparable, in terms of basic characteristics such as property type. Equally there may be other differentiating characteristics influencing compliance not captured in the information currently available about each sample.

However, the results of the analysis of compliance using the EPC database also potentially under-estimate levels of compliance in this sample. The evaluation has confirmed that there are landlords who make energy efficiency improvements in response to the regulations but do

not then subsequently gain an updated EPC. Based on their last previous EPC, these will incorrectly appear in the EPC database to be non-compliant with the regulations.

At this stage in the evaluation it is only possible to identify the ways in which the analysis of compliance using the EPC database could lead to potentially over- or under-estimates of the real levels of compliance. There is not yet an evidential basis for concluding where the overall balance lies, in terms of over- or under-estimation.

Another feature (but not necessarily a weakness) of the assessment of compliance undertaken for this interim evaluation is that it measures compliance in terms of properties rather than landlords. This is mandated by the use of the national EPC database and the fact that EPCs do not record details of the landlord. In contrast, the qualitative research for the evaluation has focused on understanding the factors mediating compliance across different types of landlord. This does not lead to any contradictions in the findings but does suggest more could be done in future years of the evaluation to better understand the linkages between the two.

For example, the idea of there just being bad and good landlords (who either do not comply or comply for all of their properties) already looks from the qualitative evidence to be too simplistic. Some of the landlords interviewed indicated responding to the regulations differently for different properties in their portfolio. More could potentially be done in the future interviews for the evaluation to drill down into exactly why this is. There is also potentially more that can be done with the available EPC data to further explore levels of compliance between properties with different characteristics. The analysis for this interim evaluation has only looked at this in terms of property type (e.g. housings versus flats) and not found any notable differences in level of compliance. There is scope in the available EPC data to also look at a small number of other property characteristics, including age and location.

What the evidence from landlord interviews and recent surveys does provide is consistent evidence on the main factors motivating and facilitating landlords to comply. In the research last year and this year, compliance has been underpinned by high levels of general awareness and understanding of the regulations and driven by landlords' desire to avoid potential negative consequences of non-compliance, a general compliance mindset, and pre-existing plans to upgrade their properties.

Evidence on the determining factors and circumstances surrounding non-compliance is more limited, due to ongoing challenges in actually finding and interviewing landlords who have taken no action in response to the regulations. Nonetheless, the interviews this year suggest two scenarios in which non-compliance – or at least deferred or delayed compliance – is happening.

Individual landlords with small portfolios who are not members of a national landlord's body and do not using a letting or managing agent are the least likely to be aware of the regulations, and in particular their extension to apply to all tenancies from April 2020. There were cases where this simple lack of awareness had led to non-compliance. At the other end of the spectrum were individual and company landlords with large portfolios who, at the point they were interviewed in May-July 2020, said they were still in the process of responding to the regulations for some of their properties. They cited the time and cost implications of having to do this for a number of properties at the same time as a key challenge. This was mainly linked to the extension of the regulations to apply to all tenancies from April 2020.

Most landlords were aware of the extension of the regulation to all tenancies but there was also often confusion over what the consequences of continuing to rent F or G rated properties with an ongoing tenancy would now be. Would they have to evict the tenants? Was there a

‘grace period’ during which they could respond to the regulations while continuing an ongoing tenancy? Landlords didn’t all know the answers to these questions, but a common assumption was that they would be given some leeway if they could demonstrate they were in the process of responding to the regulations when challenged.

In policy terms this suggests a need to further support landlord awareness and understanding of the regulations as they apply now, to all tenancies rather than just new, renewed, and extended ones. For the evaluation, there is an ongoing need, at least until the extension of the regulations has bedded in, to continue to monitor levels of awareness and understanding amongst landlords.

5.2 To what extent have the regulations achieved their aims?

The interim evaluation concludes that the regulations have already had a positive and statistically significant impact on the energy efficiency of private rental sector properties. The impact of the regulations on the energy efficiency is estimated to be an increase of 5.4 SAP points (on the 1-100 SAP scale used in EPCs to measure energy efficiency).

This is based on the results of quasi-experimental Difference-in-Differences analysis, used to separate out and quantify the specific impact of the regulations on energy efficiency when other factors are discounted. In the simplest terms, the energy efficiency of properties that had an EPC rating of F or G prior to the introduction of the regulations in England and Wales has increased more than equivalent properties in Scotland where no equivalent regulations have yet been introduced, and this difference can be directly attributed to the regulations with a high degree of statistical certainty. While there are some different energy policies in place in Scotland, there were no significant policy or market changes in England and Wales - as opposed to in Scotland - in the timeframe of the introduction of the regulations that could explain the observed differences.

Estimated impacts on energy efficiency are smaller for properties that were being privately rented before and after the introduction of the regulations than for properties that had a different tenure status (e.g. owner-occupied) before the regulations but had since moved into the private rental sector. It is also estimated that the regulations have had the largest impact on properties that were the least energy efficient prior to their introduction. Impacts on energy efficiency are smaller for properties that were already close to meeting the minimum requirement of an EPC rating of E before April 2018.

When converting the SAP score impacts into fuel and carbon impacts, the regulations are also estimated to have resulted in an average assumed annual reduction in fuel costs of about £120 for an individual property. There are similar positive findings on the estimated impact of the regulations on CO₂ emissions. For individual properties this is an average assumed annual reduction of up to 500 kg CO₂. The real-world impacts are expected to be lower than this as a result of occupant’s real world occupancy and heating regimes differing to those used in the modelled savings.

There are the same caveats to these results as apply to the initial assessment of compliance for this report. The assessment has been confined to examining private rental properties related to those that have a current EPC, and this has been reduced further for the purposes of the analysis to properties that also had a previous EPC prior to the regulations. Nonetheless, within these constraints, the analysis is based on robust sample sizes for the ‘treatment group’

of affected properties in England and Wales and the ‘control group’ of equivalent Scottish properties.

The assessment of the impact on energy efficiency of the regulations going forward cannot rely on the use of Scottish properties as control group, due to the fact that they become affected by similar regulations from October 2020. As a consequence, the evaluation is likely to have to rely on a comparison with owner-occupied properties in England and Wales rated F or G prior to the regulations or private rentals rated E or above prior to the regulations. Either choice is problematic for the DiD approach as, at least in the sample available for this study, the assumption of parallel trends does not hold. There are also concerns in relation to the fact that impact of the changes in the algorithm mentioned above vary depending in the average SAP rate of a property.

5.3 Have the regulations had wider impacts on the private rental market?

This is where the existing evaluation findings are limited, although it has always been the intention that the impacts of the regulations on the wider housing market will be quantitatively assessed by the evaluation when more data is available in 2023.

The indicative qualitative and survey evidence at this stage indicates that landlords believe that the regulations may influence them towards selling properties. However, this was most often bundled up into a more longstanding and broader narrative about the negative impacts of recent government legislation on the costs and benefits of being a landlord in the private rental sector. It is not known whether properties sold by landlords would leave the PRS market or be taken up by other landlords.

The scoping study for the evaluation this year explored different options for quantitatively assessing the wider impacts of the regulations going forward. A number of data sources have been assessed and of these, data held by the Land Registry and property rental website providers appear the most directly suitable.

In terms of analytical approaches, the two preferred options are: hedonic regression in order to assess the impact of prices; and a duration model in the case of the time spent by properties on the rental market. Hedonic regression is an established econometric approach for analysing the impact of factors affecting the price of domestic properties and has previously been used to assess the role of energy efficiency on prices and turnover in the private rental sector³⁸.

The impact of the regulations on the sales price can be assessed by address matching the Land Registry to the EPC dataset. This option is motivated by the fact that the Land Registry dataset, unlike data owned by property rental websites, reflects the whole market, not only the properties advertised in a specific website. The impact of the regulations on the rental price and the time required to rent a residential unit can be analysed only by using data owned by property rental websites. In the scoping study, the datasets for two of the largest UK providers were reviewed, and one was found an adequate option for assessing the impact of the regulations on the rental price and the time required to rent a residential unit.

³⁸ <https://www.gov.uk/government/publications/house-prices-private-sector-rents-and-energy-efficiency-levels>



This publication is available from: www.gov.uk/government/publications/domestic-private-rental-sector-minimum-energy-efficiency-standards-interim-evaluation-2020

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