

Consumer protection in the green heating and insulation sector

Call for information: findings report

31 May 2023

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Executive summary: protecting people in the move to greener, energy efficient homes

Overview of our findings

1. Home heating accounts for just under one fifth (17%) of UK carbon emissions. Switching to 'green' home heating products (such as heat pumps, solar products and biomass boilers) and insulating our homes will therefore be critical to help achieve UK government's commitment to reach Net Zero by 2050. These products will help people heat their homes in environmentally sustainable and more energy efficient ways. In the context of significant cost-of-living pressures and high energy bills, green heating and insulation products can also be an appealing option as they can help to reduce the amount of energy used in the home.
2. Take-up of these products is on the rise and the sector is expected to grow significantly. While estimates vary, around 25 million UK households currently use fossil fuels, mostly for heating. They will need to switch to green heating and/or make their homes more energy efficient to help meet Net Zero. Across the UK, governments have introduced policies to encourage take-up, including grant and funding schemes.
3. Without consumer confidence in this developing sector, there is a risk that people are put off from buying green heating and insulation products, and that progress toward Net Zero is slowed. Moreover, consumer engagement is needed to drive effective competition between businesses in the sector, which is a spur to greater innovation and better consumer outcomes. It is therefore critical that people buying green heating and insulation products can trust businesses to treat them fairly and know they are protected from harmful business practices. Businesses selling these products also need to be clear about, and supported to comply with, their obligations under consumer protection law, with enforcement action taken where they do not comply. This will also help drive consumer trust and confidence.
4. In September 2022 the CMA launched a call for information looking at consumer protection in the UK green heating and insulation sector. We gathered insights directly from hundreds of consumers through questionnaires, as well as from businesses and trade bodies. We also engaged with numerous stakeholders including consumer representative groups and other enforcers, to inform our review.

5. This work closely aligns with the CMA's strategic priorities to ensure that:
 - (a) people can be confident they are getting great choices and fair deals – by protecting people from harmful practices; and
 - (b) the UK economy can grow productively and sustainably – including by helping to accelerate the transition to a Net Zero economy.
6. We focused on three key themes and sought to identify any existing problems, as well as problems that could arise as the sector develops. While we found evidence of benefits to consumers, we have also identified concerns in each of these broad themes:
 - (a) **Theme one: people's experience of buying green heating and insulation products** – we found difficulties for people at various stages, particularly early on when it can be hard to find the right information to inform important decisions and to identify trustworthy businesses.
 - (b) **Theme two: business practices in the sector** – we identified concerns that some businesses are making misleading claims about products and some are engaging in greenwashing (ie false or overstated claims about the product's environmental credentials), as well as concerns about limited transparency of price information.
 - (c) **Theme three: the landscape of standards bodies overseeing quality and consumer protection standards for member businesses** – we found that the landscape is complex and can be confusing for people to navigate, which can mean that they miss out on the benefits. For example, people can struggle to understand how much weight to put on a business's membership of a standards body. Additionally, some aspects – such as the levels and robustness of standards, monitoring processes, complaints management and financial protections – need to be strengthened to safeguard consumers more effectively. We also identified emerging gaps in protection for 'able to pay' consumers (who self-fund their purchase and are not eligible for government funding).
7. It is critical that these concerns are tackled early on before they become embedded. To do so, we are taking several actions ourselves. We have:
 - (a) published a short guide to help people thinking about buying green heating and insulation products. The guide sets out key considerations and people's main rights and protections under consumer protection law;

- (b) developed a set of good practice principles for standards bodies, to help raise the level of protections for people buying a product from a member business; and
 - (c) set out in this report what we think businesses can do to help ensure they are on the right side of the law and treat people fairly. The CMA will also be undertaking further work on misleading claims in the sector, including greenwashing.
8. We have also set out several key actions for the sector – particularly businesses and standards bodies – and for governments across the UK, to help ensure that people are treated fairly and protected. We will continue to engage with these bodies to help take these actions forward.
9. Below we summarise our findings in each theme and set out our proposals for addressing our concerns in more detail. This report concludes the first phase of our work. We will be continuing to consider issues, particularly relating to claims businesses make about green heating and insulation products, as part of our next steps.

Consumer experience: risk that people are put off from buying green heating and insulation early on

10. Green heating and insulation products typically involve high upfront costs – eg the average price of solar panels ranges from £6,000 to £11,000, plus installation costs. Products can also be technical and complex, and in the case of newer products such as heat pumps, unfamiliar to most people. As a result, people are likely to feel uncertain when they shop for green heating and insulation products and so are more vulnerable to being misled or exploited by businesses.
11. Making people's experience of buying green heating and insulation products (sometimes called the consumer journey) as simple and straightforward as possible, is crucial for developing consumer confidence and supporting take-up of these products and the development of the sector. People must be able to make informed decisions about which products are right for them and have easy access to clear, accurate and digestible information and advice at key stages.
12. We received almost 700 responses to our questionnaire from people who had bought or thought about buying green heating and insulation products over a two-year period. While not a statistically representative sample, these responses, alongside existing research, evidence, and stakeholder input, have been key to informing our understanding of the consumer journey.

13. We did find some evidence of positive consumer experiences. However, buying these products can be a complicated process. Lack of familiarity and understanding of the products is a key barrier. Additionally, people can face multiple difficulties during the consumer journey, especially at the early but important decision-making stages (before buying and when contracting with a business) and they may drop out at various points. This will reduce product take-up and slow progress to meeting Net Zero.
14. Information gaps and asymmetries pose particular challenges early on:
 - (a) It is difficult to find reliable, trusted and independent information and advice – consumer respondents consistently highlighted that it was hard to find the information they needed to make decisions, a finding which was supported by other evidence (eg consumer surveys). People often did not know where to start, typically going online and then struggling to assess the credibility of the information they found.
 - (b) Available information is complex and hard to understand – if people do find accurate information, it is often overwhelming and difficult to assess. This might reflect the technical nature of the product and/or lack of familiarity with the product.
 - (c) There are often limitations in the information from businesses – for some people, the challenges of finding credible information/advice led them to rely on businesses. While businesses can provide valuable insights, we found that information provided by businesses was not always up to scratch (as set out in the following section) and note that businesses are not necessarily incentivised to provide impartial advice to consumers.
15. In the face of these difficulties, there is a significant risk that people either are put off from buying green heating and insulation products or end up making poor decisions if they do go ahead. Not only will this undermine consumer confidence and take-up of these products, with impacts on achieving Net Zero, but it can also lead to consumer harm.
16. We did not find substantive differences in the consumer experience between UK nations. However, we note that environmental, housing and some energy policy matters are devolved and there are some different considerations in each nation. For example, the approach taken by governments to provide centralised information and support to consumers is at different stages with some – particularly Scotland – further ahead than others.
17. Some groups are likely to face additional challenges which might further limit their ability to access or make informed decisions about green heating and insulation products. It is essential that such groups receive any additional

support they may need and are not left behind in the move to more energy efficient homes. For example:

- (a) People who are 'digitally disadvantaged' (around 1 in 20 UK adults) can struggle to access information, as much of it is online.
 - (b) Information presented to disabled consumers may not be sufficiently accessible and the installation process might not account for their needs (such as the impact of disruption to energy supply).
18. Although we focused on the early challenges people face, given the need to build consumer confidence in the sector, we also found some issues later in the consumer journey. Linked to the information gaps, it can be difficult to find credible, trusted installer businesses – which limits people's ability to shop around to get the best deal (34% of consumer respondents who bought a product had not shopped around). It can also be difficult to navigate the complaints handling and redress process if things go wrong. We considered both issues further as part of our assessment of the standards landscape, summarised below.

Business practices: not all businesses are behaving fairly, making it difficult for people to make informed decisions

19. Although we did not carry out a full sector-wide review, we assessed a range of material to understand business practices – including a sample of over 1,000 business websites, marketing materials and evidence from businesses, trade bodies and key stakeholders.
20. We found evidence of some practices which are beneficial to consumers and enable a positive experience. For example, a number of businesses have dedicated customer support and aftercare services.
21. However, we found that some businesses are engaged in concerning practices which may mislead consumers into making poor decisions or hinder good decision-making. Consumers' ability to make informed decisions is critical to help ensure they get the best deal and for effective competition in the sector.

Key concern: misleading claims about product benefits

22. We found that businesses in this sector – particularly those offering heat pumps or solar products – commonly make claims about their products' cost saving, environmental and/or energy efficiency benefits. For example, claims that people can 'save up to X% on energy bills.'

23. Claims that are truthful and accurate are unlikely to be problematic. However, many of the claims we looked at raised concerns:
- (a) If they are not transparent or backed up by evidence – claims that are not or cannot be substantiated by evidence, make it hard for people to make informed decisions and could be misleading.
 - (b) Use of ‘up to’ claims for product cost saving and energy/environmental benefits – the performance of green heating and insulation products depends on several factors, including property type and product design. Where claims are not representative of the real-world effects consumers are likely to experience, they can stop people making informed decisions and risk misleading them.

Key concern: ‘greenwashing’ and misleading messaging about hydrogen-capable boilers

24. Hydrogen is an environmentally friendly alternative to natural gas. UK government is considering whether hydrogen could be used in the gas network to heat our homes. This could potentially start by using a 20% hydrogen blend from 2025 at the earliest, with a decision due to be made on blending later this year. There is no difference technically between a standard gas boiler and one marketed as a ‘hydrogen-blend’ boiler – both can operate safely with a 20% hydrogen blend.
25. In this context, we are concerned that claims and messaging about hydrogen-capable boilers used by several businesses may constitute greenwashing and mislead consumers into thinking that these products are more environmentally friendly or ‘greener’ than they are. We found evidence for example of several large businesses:
- (a) explicitly marketing boilers as ‘hydrogen-blend’ or ‘hydrogen-ready’ – which may give the incorrect impression that use of hydrogen is imminent and that specific environmental benefits can only be obtained from these boilers and not standard gas boilers;
 - (b) providing incomplete or inaccurate information about hydrogen use, making it harder for consumers to make an informed decision.

Key concern: limited and inconsistent provision of upfront pricing information

26. Price information is often key to a consumer’s decision about whether to buy a product. While the exact price of green heating and insulation products varies depending on each property, we are concerned that we found little evidence

of businesses providing upfront or 'headline' price information about the cost of products. Of a sample of 100 business websites, over 80% did not provide any upfront price information. Therefore, people are often required to contact businesses if they want basic price information to understand whether a product is within their budget.

27. Businesses which do present headline prices take different approaches to what information is included, making it difficult for people to compare prices. We also found that some businesses exclude key information – such as likely ongoing/running costs.
28. While we acknowledge that it can be difficult for businesses to provide comprehensive information upfront as exact costs will vary for each property, consumers should be made aware of any potential ongoing costs for a product so they can make informed decisions. As a business becomes more familiar with a property and the consumer's needs, it should be easier for them to provide more accurate information.
29. We also found evidence of some businesses engaging in other potentially misleading actions, though to a lesser degree – including making claims about access to government funding schemes without being clear on eligibility criteria or providing outdated information about these schemes.
30. It is crucial that people can trust businesses in this sector to provide accurate, transparent and clear information to help make decisions. Unless claims are honest and pricing is transparent, people will not have the confidence necessary to switch to green heating solutions, undermining the move to Net Zero. Businesses making misleading claims, including forms of greenwashing, are likely to be in breach of consumer protection law.
31. We also identified some possible future risks for consumers related to aftercare protections and bundling – although we did not find evidence of widespread concerns at this stage. Aftercare protections like warranties and servicing plans can provide valuable safeguards for people after product installation, but there is a risk that some businesses exploit consumers' confusion about these services. Some bundled products/services are starting to be offered which can help to simplify the buying process but also bring risks linked to poor transparency about all or parts of the bundle.
32. Businesses must ensure they understand and comply with their consumer protection law obligations, to ensure these possible issues do not become embedded and lead to consumer harm in the sector.

Standards landscape: offers important protections – but can be confusing, with varied levels of standard and risk of future gaps

33. A range of organisations in the sector set quality and consumer protection standards, certify or accredit businesses as meeting those standards and monitor compliance with those standards (we refer to these as ‘standards bodies’). There are several such bodies including the Microgeneration Certification Scheme (MCS), TrustMark and two sector-specific consumer codes. Businesses carrying out work under UK government schemes are often required to be a member of a standards body.
34. People have rights and protections under consumer protection law. Standards bodies play a key role in providing further protections and safeguards for people, such as ensuring that businesses are competent to carry out the work, treat consumers fairly and provide mechanisms for people to seek redress if things go wrong. This can be particularly valuable given the fragmented and developing nature of the green heating and insulation sector. These safeguards are key to building people’s trust and giving them confidence to buy these products.
35. However, we found that the standards landscape is overly complex. The myriad of different bodies and schemes is difficult for people to navigate and businesses may be members of multiple bodies, adding to the complexity. People also have low awareness of standards bodies which can create confusion about the protections that are available, how to take advantage of these and how much weight to put on a business’s membership.
36. We also identified several key concerns which risk undermining the effectiveness of protections from the standards landscape, in particular:
 - (a) The level and robustness of standards vary, raising the risk of inconsistent protection and poor outcomes for consumers – for example, the approach taken to monitoring compliance of member businesses varies in terms of the frequency, coverage and nature of inspections. Some bodies also appear to focus more on monitoring technical aspects of the installation rather than consumer protection.
 - (b) The complaints process is generally confusing, with no clear and simple route for people to raise complaints. It can be unclear who to complain to depending on the nature of the problem, which is not easy for a consumer to diagnose, particularly if it relates to technical or product design issues. As a result, a complaint could end up going to the wrong body for review which also adds steps and subsequent delays to the process. The lack of

a mechanism to manage and oversee the complaints process can further add to the difficulty of navigating the process for consumers.

- (c) Some post-installation financial protections, such as insurance-backed guarantees, have a limited scope and contain caveats and exclusions that consumers may not expect (eg only covering quality of work issues).
- 37. As the green heating and insulation sector grows, 'able to pay' consumers (ie people who fully self-fund their purchase, rather than using government funding) are at risk of having lesser protections. This is because the businesses they use are not obligated to belong to a standards body.
- 38. Sector-led developments are emerging that may help to address this risk, which we welcome – for example some standards bodies are introducing schemes specifically for businesses providing products to able to pay consumers. However, we remain concerned that this group will have less protection overall and in particular, will have fewer options for pursuing complaints and accessing alternative dispute resolution (ADR).
- 39. It is critical that people are protected and particularly if something goes wrong. ADR is very important in this sector, where low consumer understanding of products may mean that consumers struggle to challenge a business in court. Unresolved problems can have a significant impact – eg a household may no longer have heating if they encounter an issue.

Tackling the issues: improving people's experience, better business practices and raising sector standards

- 40. We have set out a number of key actions to address our concerns. They will require action from a range of bodies to take forward – including governments across the UK, businesses and trade bodies and standards bodies – among others. The CMA and other consumer protection law enforcers will also need to play a key role and we are taking several actions ourselves. In particular, the CMA will be carrying out further work looking at potentially misleading claims, including greenwashing, by businesses. As part of this we will consider whether further action, such as enforcement, is needed.
- 41. We consider that the following steps are needed. These actions will help ensure that people are protected and treated fairly and that businesses are complying with consumer protection law in this sector.

Supporting people to make informed decisions

- The CMA has produced a guide for people looking to buy green heating and insulation products, covering the key stages of the journey and summarising their main consumer rights as reflected in consumer protection law.
- Additionally, we welcome ongoing efforts by governments to provide greater centralised information and advice services for consumers. We note these are at differing stages and strongly urge governments across the UK to prioritise their work to put in place accessible, trustworthy information sources and support to ensure people can confidently make informed decisions about green heating and insulation products.
- Particular consideration will be needed to ensure that some groups (eg disabled consumers) are not excluded. We support UK government's plans to rollout non-digital services to support potentially vulnerable groups – including a dedicated phonenumber. We encourage them to ensure these additional services are provided alongside a 'core' information service, so that such groups are not left behind.

Improving business practices through clarity and enforcement of legal obligations

- Businesses of all sizes across the sector need to ensure that they are familiar and comply with their consumer protection law obligations. We have set out in this report what we think they can do to help ensure that they are on the right side of the law and treat people fairly across several areas, including presenting product and pricing information. We strongly encourage businesses to review their practices in the light of this report.
- The CMA will be undertaking further work on potentially misleading claims, including those involving greenwashing. As part of this, we intend to develop guidance to help businesses understand and comply with their existing obligations under consumer protection law. We will also consider whether further action, such as enforcement, is necessary.

Setting out good practice and filling gaps in the framework to raise standards

- We have developed five good practice principles for standards bodies to help improve the level of protections. We call on standards bodies to review their practices against our principles and, where necessary, make changes to meet them. We set [these principles out in a separate document](#) and summarise them here:

1. **Effective promotion:** Standards bodies to actively promote their activities to help ensure consumers understand their scope and purpose and the benefits of using a member business.
 2. **Robust vetting and monitoring:** Standards bodies to conduct robust compliance checks on applicants and, on an ongoing basis, their members, to ensure they meet (and continue to meet) requirements.
 3. **Smooth dispute resolution:** Standards bodies to actively oversee and assist consumer complaints and dispute resolution to make the process as straightforward as possible and to help parties reach a resolution in a timely manner.
 4. **Effective use of sanctions:** Standards bodies to ensure that any potential non-compliance is investigated and dealt with as effectively, impartially and quickly as possible. Where appropriate, a sanction decision will be communicated to consumers.
 5. **Strong financial protections:** Standard bodies to ensure that consumer deposits and guarantees are effectively protected and the terms of these protections are made clear to consumers.
- We also call on UK government to consider:
 - making it mandatory for businesses to belong to an approved ADR scheme across the sector to help ensure people can uphold their right to redress, regardless of whether they have bought a product through a government grant or funding scheme.
 - whether further, holistic changes in the areas of concern we have identified may be needed across the standards landscape to simplify and improve protections, informed by the CMA and others' work in this area.
42. We will continue to engage closely with stakeholders to share our findings and take action to help tackle the issues we have identified, including through UK government's Energy Efficiency Taskforce. We will also carry out further work in this sector, particularly focusing on misleading claims.
 43. Given that the sector is likely to become more important over time, we will continue to observe developments as it grows. If we identify further or additional issues, we will consider intervening – taking into account the full suite of our powers as the UK's principal competition and consumer authority.

1. Introduction

Background

CMA's mission and powers

- 1.1 The CMA is the UK's principal competition and consumer protection authority. We help people, businesses and the UK economy by promoting competitive markets and tackling unfair behaviour.
- 1.2 We have a range of powers to tackle business practices and market conditions that present challenges for people and lead to poor consumer outcomes. This includes powers to enforce consumer protection law to protect consumers from unfair treatment by businesses and to provide information and advice to people and businesses about their rights and obligations under consumer protection law.
- 1.3 The CMA has a number of strategic priorities, as set out in our Annual Plan. Our areas of focus for 2023-24 include:¹
 - ensuring that people can be confident they are getting great choices and fair deals, including by protecting people from harmful practices; and
 - supporting the UK economy to grow productively and sustainably, including by helping to accelerate the transition to Net Zero. We have created a Sustainability Taskforce which is leading our work in this area by bringing together colleagues from across the CMA, while also drawing on external expertise.

Overview

- 1.4 We have carried out a call for information looking at consumer protection in the green heating and insulation sector.² This sector is increasingly important to people, businesses and the wider UK economy in the context of:
 - The rising cost-of-living: green heating and insulation products can help reduce the amount of energy needed to heat and power our homes.³ As a result of high energy prices and inflationary pressures, take-up of such products is increasing as people seek to bring down their energy bills.⁴

¹ CMA (2023) [CMA Annual Plan 2023-24](#).

² As derived from our general review function under section 5 of the Enterprise Act 2002.

³ For example, solar panels can generate power independently, insulation can reduce the amount of energy lost from a property and heat pumps are more energy efficient than some traditional heating sources.

⁴ Rated People (2023) [Home Improvement Trends Report 2023](#).

- Achieving Net Zero: heating our homes accounts for around 17% of the UK's carbon emissions.⁵ While estimates vary, around 25 million UK households currently use fossil fuels, mostly for heating.⁶ Reducing emissions by making our homes more energy efficient and by using renewable 'green' technologies for heat and power will therefore be key to achieving UK government's pledge to reach Net Zero by 2050.^{7,8}
- 1.5 Without consumer confidence in this developing sector, there is a risk that people are put off from buying green heating and insulation products and that progress toward Net Zero is slowed. It is therefore essential that people can trust businesses in the sector to treat them fairly, that they can make informed decisions about buying and installing products and have confidence that they are protected. Consumer engagement is also needed to drive effective competition in the sector, to spur better innovation and better consumer outcomes.
 - 1.6 Our initial intelligence gathering identified areas of potential concern and indicated that people are experiencing challenges in this sector. For example, in 2022 there were just under 3,000 cases in England and Wales reported to Citizens Advice relating to green heating and insulation products. These encompassed a range of issues such as misrepresentation by businesses, substandard services and breaches of contract.⁹
 - 1.7 We have taken an open, fact-finding approach to understand how consumers are treated, identify any harmful business practices and assess whether protections can be strengthened, to inform what actions we think are needed to ensure good consumer outcomes in this important sector. We also considered problems that could arise as the sector grows and how these could be addressed early on before they become embedded.
 - 1.8 We focused on three key themes:
 - **Theme one: Consumer experience** – looking at people's main motivations for buying green heating and insulation products for their home, their overall experience and the challenges they can face.

⁵ UK Committee on Climate Change (2022) [Progress in reducing emissions 2022](#).

⁶ Source: BEIS (2021) [Heat and Buildings Strategy](#). We note that estimates vary about the scale of property retrofits required to reduce carbon emissions from home heating. For example, other data sources indicate that nearly 19 million homes across the UK have EPC ratings of D or worse and need some energy efficiency upgrade. Source: Environmental Audit Committee (2021) [Energy Efficiency of Existing Homes](#).

⁷ [Scottish Government](#) has committed to achieving Net Zero in Scotland by 2045 and Northern Ireland has pledged to reduce carbon emissions by 82% by 2050 (from 1990 levels).

⁸ Chris Skidmore MP (2023) [Mission Zero - Independent Review of Net Zero](#).

⁹ Data provided by Citizens Advice: analysis of energy efficiency issues reported to the consumer service in 2022.

- **Theme two: Business practices** – assessing whether businesses provide transparent and meaningful information for consumers to make informed decisions, how they promote their products/services and how well they understand and comply with their consumer protection law obligations.
- **Theme three: Standards landscape** – exploring the effectiveness of protections provided by standards bodies (eg certification schemes and consumer codes) which set and/or monitor quality and consumer protection standards for businesses in the sector.

Scope

Products

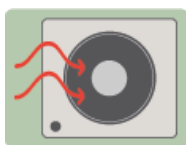
- 1.9 We looked at products which provide low carbon energy and/or improve home energy efficiency and are particularly relevant to delivering Net Zero. Some, like home insulation, have been widely available for many years, whereas others, like heat pumps, are newer products that are less familiar to UK consumers. We included developing products in scope to help identify any potential and emerging issues associated with these, to help ensure that these are addressed early on as the sector grows. This is in line with one of the CMA's medium-term areas of focus – to act in emergent markets for sustainable products.¹⁰
- 1.10 Figure 1.1 sets out the products we considered.

¹⁰ CMA (2023) [CMA Annual Plan 2023-24](#).

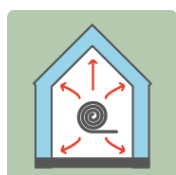
Figure 1.1: Products in scope



Biomass boiler - works in a similar way to a standard gas boiler but uses a renewable material such as wood pellets as fuel.



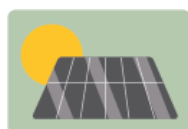
Heat pumps - draw heat from a low temperature source and raise it to a higher temperature to heat homes. There are two main types: air source (heat drawn from the outside air) and ground source (heat drawn from pipes buried in the ground). Air source heat pumps tend to be more suitable for people's homes.



Home insulation - helps to reduce heat loss in homes and can be applied to different areas in a property such as in the roof, loft, the cavity between walls, on the exterior of solid walls and/or underfloor.



'Hydrogen-capable' boiler - a boiler which can use hydrogen as a fuel source. All boilers available to buy today can technically operate with a blend of 20% hydrogen and 80% natural gas. We discuss this in more detail in chapter four.



Solar products - use energy from the sun to generate electricity or to heat water. Photovoltaic panels create electricity. Thermal (or water heating) systems warm water for storage in a hot water cylinder.

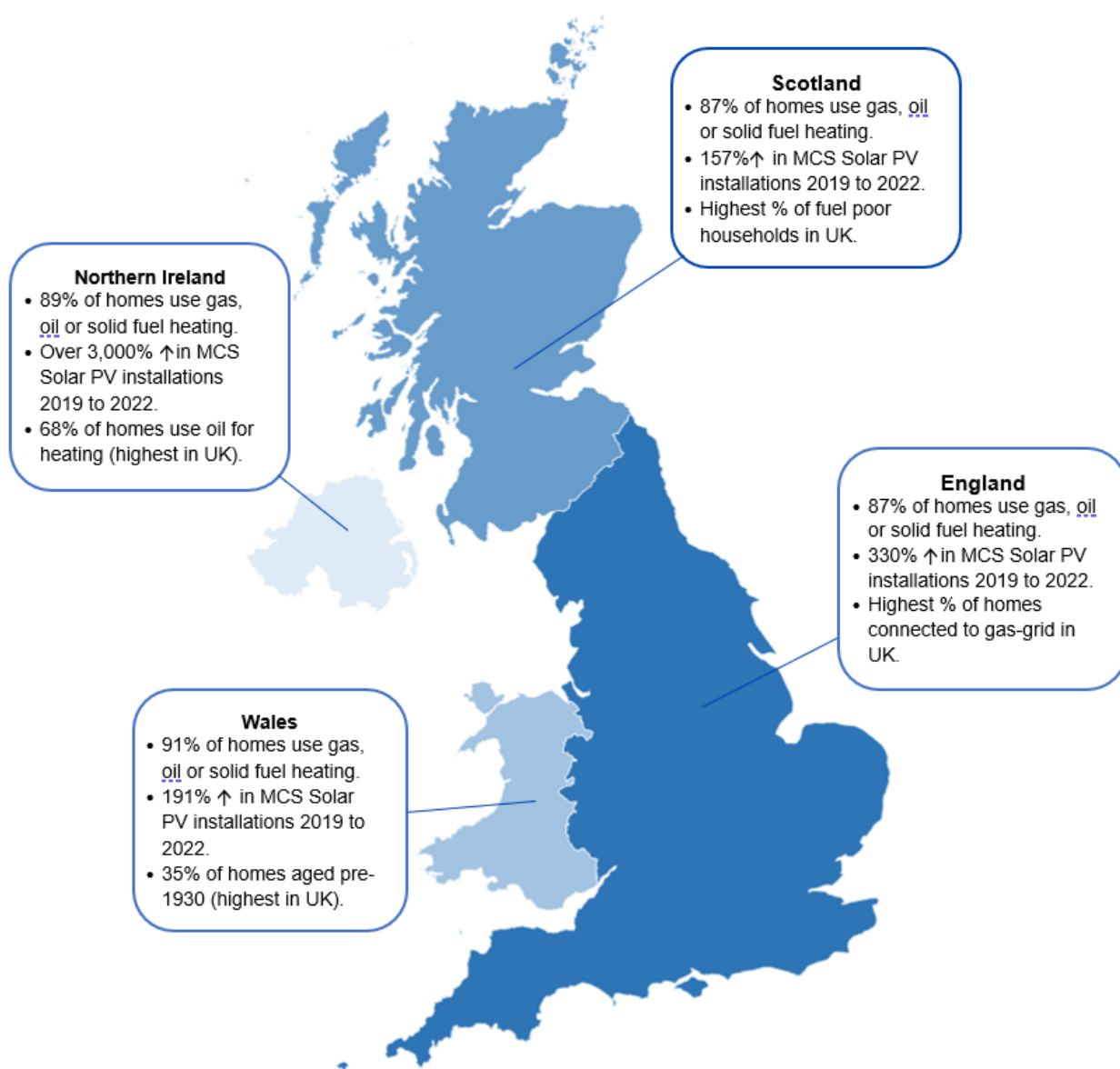
- 1.11 Green heating and insulation products can be expensive. For example, installing insulation can cost several thousand pounds (depending on where in the home it is installed) and an air source heat pump can be upwards of £8,000. The average price of solar panels ranges from £6,000 to £11,000.

Geography

- 1.12 Our review has been UK-wide. We have considered differences in policy and Net Zero strategies to encourage the take-up of green heating and insulation products between nations. We consider the policy context across the UK in paragraphs 2.17 and 2.18. Figure 1.2 sets out some of the key differences between the UK nations, using take-up of solar panels as a comparative example.¹¹

¹¹ Sources include 2021 census information and the Scottish Government's [Heat in Buildings Strategy](#), the MCS Datawarehouse, [the Northern Ireland House Condition Survey 2016](#), [the Scottish House Condition Survey 2019](#),

Figure 1.2: Examples of home heating differences across the UK



Our approach

1.13 We gathered and assessed evidence from a range of sources as part of our review. In particular, we:

- Used online questionnaires targeted at consumers, businesses and other stakeholders to inform our lines of enquiry in each of the three themes.¹² These were open from 27 September to 1 November 2022. We received almost 800 responses in total (698 from consumers who had bought or

subnational estimates of domestic properties not on the gas grid Great Britain 2015 – 2021 and [Council Tax: Stock of properties: Summary Tables 1993 to 2021](#).

¹² Respondents were self-selecting and therefore our results are not statistically representative of the consumer / business population. Nonetheless the questionnaire responses provide important insights, particularly into the nature and range of the issues that consumers may face in this sector.

considered buying products in the last two years, 45 from businesses – Small-Medium Enterprises (SMEs) and large businesses – and 50 from other key stakeholders). Appendix A sets out a list of stakeholders we received responses from.

- Held bilateral discussions with key stakeholders including businesses, standards bodies and consumer representative organisations, as well as roundtables to test our emerging findings. We also engaged with governments across the UK and other consumer protection and enforcement bodies, including via the Consumer Protection Partnership.¹³
- Reached out to equivalent bodies in the International Consumer Protection and Enforcement Network to understand issues facing consumers in other jurisdictions. We received responses from several countries including Australia, New Zealand and the United States.
- Carried out desk research and reviewed existing evidence, work and reports from other organisations, including consumer research.
- Reviewed a random sample of business websites, online advertising and other publicly available information and issued written questions to several standards bodies.

This report

Who is this report aimed at?

1.14 Our report is primarily aimed at:

- businesses of all sizes that market, sell and/or install green heating and insulation products in the UK and their representative trade bodies; and
- standards bodies that operate in this sector.

1.15 Where relevant, we have also provided steers to governments to inform ongoing policy development and help ensure consumers are sufficiently protected across the UK.

¹³ The Consumer Protection Partnership (CPP) is a network of organisations that operate in the consumer protection landscape with the goal of identifying, prioritising and coordinating action to address the issues causing greatest harm to consumers. CPP members include the Advertising and Standards Authority, Chartered Trading Standards Institute, Citizens Advice and Citizens Advice Scotland, Consumer Council for Northern Ireland, Trading Standards and Trading Standards Scotland, sector regulators and UK government.

- 1.16 The report will also be of interest to organisations that represent consumers and/or have a consumer protection role, as well as consumers who are thinking about or have bought green heating and insulation products.

Report purpose

- 1.17 When we launched our call for information, we committed to publish a report of our findings. The purpose of this report therefore is to summarise our findings and ‘shine a light’ on the consumer protection issues we have identified to key stakeholders – particularly standards bodies, governments and other consumer enforcement bodies – who can play a role in tackling them. We also want to support businesses in the green heating and insulation sector to comply with their obligations by further raising awareness of consumer protection law. The accompanying consumer guide provides advice to consumers on their legal rights and protections.
- 1.18 We also set out the steps that we expect to take next, following the call for information.
- 1.19 The report sets out our views on the practices we have seen as part of the call for information. Whether there has been a breach of consumer protection law by a particular business will depend upon the circumstances of the case. This report is not a substitute for independent legal advice.

Report structure

- 1.20 The structure of this report is as follows:
- Chapter two provides background on the green heating and insulation sector including the types of business which sell these products and the legal and policy context.
 - Chapter three sets out our findings on the consumer experience of buying green heating and insulation products and the difficulties people can face, including particular challenges experienced by some groups. (Theme one).
 - Chapter four details our assessment of business practices in the sector including those we think could be misleading and harmful to consumers. (Theme two).
 - Chapter five considers the role of standards bodies in the sector and what is needed to ensure consumers are adequately protected and supported. (Theme three).
 - Chapter six sets out our conclusions and next steps.

2. Overview of the green heating and insulation sector

Sector background

Size and types of businesses

- 2.1 The UK green heating and insulation sector is large. For example, the solar panel market was worth £1.3 billion in 2022-23 and the heat pump market was worth approximately £209 million in 2022.^{14,15}
- 2.2 The sector is fragmented with businesses of varying size engaging with consumers. There are currently over 3,000 businesses certified or registered with a standards body for green heating products and over 500 for insulation.¹⁶ The number of certified businesses has increased in recent years.¹⁷
- 2.3 The majority of businesses which sell and/or install green heating and insulation products are SMEs, many of which are micro-businesses or sole traders.¹⁸ This includes plumbing and electrician businesses which have adapted to install these products.¹⁹ There are approximately 130,000 qualified gas engineers, 83,000 heating and electrical installers and over 150,000 energy efficiency retrofit workers in the UK.²⁰
- 2.4 While the sector is predominantly comprised of SMEs, large businesses – including household appliance manufacturers and energy suppliers – have started to expand their offerings to produce and/or sell green heating and insulation products.²¹ Several large businesses we spoke to told us that they had seen a significant rise in demand for these products, which had prompted them to increase their activity in the sector.

¹⁴ IBIS World (2023) [Solar Panel Installation in the UK](#).

¹⁵ Based on Building Services Research and Information Association (BSRIA) analysis of air source and ground source heat pump manufacturer sales figures. BSRIA estimate the market to have been worth €240 million in 2022; a 0.87 conversion rate to sterling has been applied.

¹⁶ Data on registered installers taken from MCS database for green heating and solar products and from TrustMark for insulation (as of 6 April 2023).

¹⁷ Membership of the two consumer codes in the sector rose by 26% between 2019 and 2021. Source: CMA analysis of RECC and HIES's membership numbers in annual reports 2019-2021.

¹⁸ Sources: RECC 2021 Annual Report; HIES 2021 Annual Report.; bilateral discussions with stakeholders.

¹⁹ BEIS (2021) [Heat and Buildings Strategy](#).

²⁰ Environment and Climate Change Committee [evidence session 9 November 2022](#); Green Alliance Policy Insight (2022) [Closing the UK's green skills gap](#); CITB (2021) [Building skills for net zero](#); Mace Market Intelligence report carried out for BEIS (2021); IBIS World industry statistics 2022.

²¹ For example, in October 2022 British Gas announced its intention to deploy heat pumps nationwide and to train 3,500 installers over the next decade. Source: Centrica [British Gas offering heat pump installations for £4999](#) (accessed 09 March 2023). Octopus Energy has also recently acquired a heat pump manufacturing business and expanded its green heating training facilities in Slough. Source: BBC News [Craigavon heat pump deal to create 100 jobs](#) (accessed 29 March 2023); Built Environment Networking [Octopus Energy expands hub](#) (accessed 29 March 2023).

- 2.5 We use the term ‘businesses’ throughout this report to refer to all entities which produce, sell and/or install green heating and insulation products to consumers.

Anticipated sector growth

- 2.6 The sector is anticipated to grow as more people switch to green heating and insulation products. For example, the UK Committee on Climate Change projects that an additional 200,000 technicians will be required by the late 2020s to deliver the number of green heating and insulation installations needed to make sufficient progress towards achieving Net Zero.²²
- 2.7 UK government has announced several policies to stimulate the rollout of green heating and insulation products. This includes plans to increase the number of qualified installers to deliver its aim of deploying 600,000 heat pumps per year by 2028.²³ We set out further detail on the policy landscape in paragraphs 2.17 and 2.18.
- 2.8 There are several broad challenges facing this developing sector. As noted by others, such as the Environment and Climate Change Committee, these include manufacturing capacity, supply chain delays and workforce development.²⁴ While this is important context for our work, we have not considered these issues given our focus on consumer protection.

Installation activity

- 2.9 There is no comprehensive dataset on UK green heating and insulation product installations. Much of the data relates to products installed through government funding schemes and large aspects of activity which is self-funded by consumers is unrecorded or recorded in different places.
- 2.10 Evidence suggests that there has been a recent rise in demand with an estimated 10% to 20% increase in solar panel, insulation and heat pump installations in 2022.²⁵ Many of the businesses and stakeholders we spoke to said they had seen an increase in the number of consumers seeking to install solar products in particular, as reflected in Table 2.1 and our consumer questionnaire responses.

²² UK Committee on Climate Change (2022) [Sixth Carbon Budget](#).

²³ DESNZ (2023) [Heat Training Grant](#); BEIS (2021) [Heat and Buildings Strategy](#); HM Government (2023) [Powering Up Britain - The Net Zero Growth Plan](#).

²⁴ [The Boiler Upgrade Scheme is failing to deliver, says Lords committee - Committees - UK Parliament](#).

²⁵ IBIS World (2023) [Solar Panel Installation in the UK](#); Federation of Master Builders [Surge in solar panels installations across the UK](#) (accessed 21 April 2023); Rated People (2023) [Home Improvement Trends Report 2023](#).

2.11 Table 2.1 shows the number of installations in 2021 and 2022 of some green heating and insulation products carried out by businesses registered with two key standards bodies. We note that given the limitations on available data, actual activity may be higher.

Table 2.1: Product installations in 2021 and 2022 recorded on MCS and TrustMark databases

Product	Number of installations per year ²⁶	
	2021	2022
Solar panels	46,286	111,512
Solar thermal	7,931	571
Insulation products	169,773	91,726
Air source heat pumps	24,705	28,142
Ground source heat pumps	2,265	2,406
Biomass boilers	294	447

Legal and policy context

Consumer protection legislative framework and enforcement

2.12 All businesses operating in the UK must comply with consumer protection law. The main legislation relevant to our work is:

- The Consumer Protection from Unfair Trading Regulations 2008 (CPRs) which apply to commercial practices before, during and after a contract is made. The CPRs contain a general prohibition of unfair commercial practices and specific prohibitions of misleading and aggressive commercial practices. Broadly, if a business gives consumers the information and opportunities they need to make free and informed choices, it is more likely to find itself on the right side of the law.
- The Consumer Contracts (Information, Cancellation and Additional Charges) Regulations (CCRs) 2013 outline cancellation and information requirements depending on the nature of the contract concluded with the consumer (on or off premises/at a distance, eg online).

²⁶ Except for insulation products all data is taken from the MCS Installation Database for 2021 and 2022. Insulation activity has been derived from information provided by TrustMark.

- The Consumer Rights Act 2015 requires that businesses carry out services with reasonable care and skill and protects consumers from unfair contract terms and notices.
- 2.13 As well as the CMA, there are a number of other bodies which enforce consumer protection law to ensure businesses act appropriately and treat consumers fairly. This includes national and local Trading Standards and energy sector regulators (Ofgem for Great Britain, the Utility Regulator for Northern Ireland). The Advertising Standards Authority (ASA) regulates advertising including in relation to consumer protection.
- 2.14 When enacted, the Digital Markets, Competition and Consumer Bill will recreate the legal effect of the CPRs with the core objective of protecting consumers from unfair commercial practices. It also proposes greater powers for the CMA including the power to impose fines on businesses that break the law or order them to compensate affected consumers.²⁷
- 2.15 There are numerous bodies which set and oversee quality and consumer protection standards for businesses in the sector. We consider these sector-specific requirements in detail in chapter five.

Regulatory framework

- 2.16 The green heating and insulation sector is not regulated. However, Ofgem and the Northern Ireland Utility Regulator regulate the energy suppliers that operate in the sector. Ofgem has also played a role in the design and delivery of some government funding schemes in the sector.

Policy landscape across the UK

- 2.17 Environmental, housing and some aspects of energy policy matters are devolved so there is variation in approach between nations. Governments across the UK have made commitments and introduced policies to help encourage consumer take-up of green heating and insulation products, including:²⁸
- The Energy Efficiency Taskforce, established in March 2023, will consider how ‘building public understanding, awareness of support, and uptake of

²⁷ The Digital Markets, Competition and Consumer Bill will also update the CMA’s powers and duties in respect of promoting competition within digital markets and when investigating and enforcing competition law.

²⁸ BEIS (2021) [Heat and Buildings Strategy](#); HM Government (2023) [Powering Up Britain - The Net Zero Growth Plan](#); Ofgem, [Smart Export Guarantee](#) (accessed 06 April 2023); HM Government (2022) [Powering Up Britain: Energy Security Plan](#); Ministry for Housing, Communities and Local Government (2019) [The Future Homes Standard](#); Scottish Government (2021) [Heat in Buildings Strategy](#); Welsh Government (2022) [Improving home energy efficiency to support a just transition and a greener Wales](#); Department for the Economy (2021) [The path to Net Zero energy](#).

clean heat technologies such as heat pumps' can help reduce heat demand by 15% by 2030.

- The UK Heat and Buildings Strategy aims to phase out the installation of new and replacement natural gas boilers by 2035.
- The Future Homes Standard requires all new homes built in England by 2025 to produce 75% to 80% less carbon emissions than properties constructed under previous rules. Homes must comply with higher energy efficiency performance targets and a minimum insulation standard.
- The Scottish Government will introduce regulations in 2025 requiring all homes to have an Energy Performance Certificate rating of C or above by 2033. It has also pledged to phase out the installation of natural gas boilers by 2030.
- In 2022 the Welsh Government updated its energy efficiency standards for newly built homes which must produce 37% less emissions.
- The Northern Ireland Energy Strategy aims to deliver energy savings of 25% from buildings and industry by 2030 and to support trials and pilots of greener forms of home heating.

2.18 UK government has introduced grant and funding schemes to support people to buy green heating and insulation products, for example:

- The Boiler Upgrade Scheme – part of a wider package of measures designed to deliver UK government's ambition of around 600,000 heat pump installations a year by 2028 across England and Wales. This allows eligible householders to receive a grant of £5,000 towards an air source heat pump and £6,000 for a ground source heat pump installation.
- The Smart Export Guarantee – pays consumers in Great Britain for any surplus electricity produced by solar panels.
- The Great British Insulation Scheme – £1 billion of funding until 2026 to help people install energy efficiency upgrades, including loft and cavity wall insulation.

2.19 Such schemes are also available in the devolved nations for different groups of consumers, with differences in approach by each nation. Table 2.2 sets out some of these schemes. Note we use the term 'government funding' throughout this report to refer to all types of financial support schemes that are available, including subsidies, grants and loans.

Table 2.2: Governments' funding schemes across the UK for green heating and insulation products

<i>Scheme²⁹</i>	<i>Nation</i>	<i>Targeted at</i>	<i>Funding model</i>	<i>Products available (in scope)</i>
Energy Company Obligation 4	England, Scotland and Wales	Homeowners/private tenants in properties with poor energy efficiency and receiving benefits; social housing with EPC D-G	Energy companies fund	Insulation Heat pumps Biomass boilers Solar panels
Home Upgrade Grant	England	Low-income households not connected to the gas grid	Grant	Insulation Heat pumps Biomass boilers Solar products
Home Energy Scotland	Scotland	Homeowners and home builders	Grant and/or interest-free loan	Insulation Heat pumps Biomass boilers Solar products
Warmer Homes Scotland	Scotland	Individuals in receipt of certain benefits and/or who are vulnerable living in properties with poor energy efficiency	Grant	Insulation Heat pumps
Landlord Loan	Scotland	Registered private landlords	Loan	Insulation Heat pumps Biomass boilers Solar panels
Warm Homes Nest	Wales	Homeowners and private tenants in properties with poor energy efficiency and receiving benefits	Grant	Insulation
Optimised Retrofit Programme	Wales	Social landlords	Grant	Insulation Heat pumps Solar products
Sustainable Energy Programme	Northern Ireland	Vulnerable consumers on low-income	Grant	Insulation Heat pumps Solar products
Affordable Warmth	Northern Ireland	Homeowners and private tenants on low-income	Grant	Insulation

²⁹ Ofgem [Eco4 Guidance](#) (accessed 16 April 2023); DESNZ [Home Upgrade Grant: successful local authorities](#) (accessed 14 April 2023); Home Energy Scotland [Find Funding, Grants and Loans](#) (accessed 14 April 2023); Nest Wales [Nest Wales](#) (accessed 15 April 2023); Northern Ireland Utility Regulator (2022) Framework Document for the Northern Ireland Sustainable Energy Programme 2023-25; Northern Ireland Housing Executive [Affordable Warmth Scheme](#) (accessed 16 April 2023).

3. People's experience of buying green heating and insulation products

- While we found evidence of people being happy with their product and that the consumer journey varies depending on a range of factors, we have identified several difficulties that people can face. The journey can be complex and there are multiple points where people may disengage, particularly at the important early decision-making stages (before buying and when contracting).
- Our key issues of concern are:
 - People want to adopt green technologies and insulation for financial and environmental reasons, but they are unclear on the process, which they find disruptive and confusing.
 - Consumers want reliable, independent advice on products, funding and installers but instead are faced with information gaps and asymmetries.
- Other difficulties include substandard installations and issues finding trusted installer businesses.
- Some groups, like the digitally disadvantaged, tenants and disabled consumers can face additional challenges. It is essential that these groups are supported and not left behind in the move to more energy efficient homes.
- We have produced a guide to help people make key decisions at each stage of the consumer journey when buying green heating and insulation products and which sets out their main consumer rights and protections in this sector.
- Additionally, we strongly encourage governments across the UK to continue developing centralised independent information and advice for consumers, with consideration of the additional/different needs of some groups.

Introduction

- 3.1 As highlighted in chapter two, over time more people will be buying green heating and insulation products as they try to heat their homes in a more energy efficient and environmentally sustainable way. These products can also help people reduce their energy use, which is front of mind for many given the rising cost-of-living and high energy bills.
- 3.2 Building people's confidence in the sector and businesses will be key to enabling the transition to Net Zero. Engaged, confident consumers also put competitive pressure on businesses, which ultimately helps lead to good outcomes for consumers and businesses alike. It is therefore vital that people have easy access to clear, accurate and digestible information to

make informed decisions and have a positive experience of buying green heating and insulation products that are right for them.

3.3 For people to feel confident when buying these products, they must also be treated fairly by businesses and protected from harm – we consider this further in chapters four and five respectively.

3.4 The chapter is structured as follows:

- Overview of the consumer journey, including key drivers for buying or considering green heating and insulation products.
- Key difficulties that people can face along the journey.
- Additional challenges for some groups of consumers.
- Our conclusions to improve the consumer experience.

What does the consumer journey look like?

3.5 This section sets out the primary drivers for people buying green heating and insulation products. We provide an overview of the consumer journey before considering the key barriers to a positive experience that people can face.

Key drivers for buying or considering green heating and insulation products

3.6 While motivations vary, responses to our questionnaire suggested that consumers are primarily driven by financial and environmental considerations when buying green heating and insulation products.³⁰

3.7 The primary motivation for consumer respondents was a desire ‘to save money on heating bills’ (157 out of 472 – 33%), followed by ‘wanting to mitigate harm to the environment by reducing carbon emissions’ (124 out of 472 – 26%).³¹ Other key reasons people selected included ‘replacing or upgrading an existing heating or insulation product’ (70 out of 472 -15%) and wanting to benefit from a grant or discount (45 out of 472 – 10%).

‘We wanted to be environmentally friendly and thought it would save money long term.’

Consumer, bought biomass boiler, England

³⁰ We note that the importance placed on cost savings may reflect pressures on household budgets associated with the rising cost-of-living.

³¹ This includes respondents who bought and considered buying insulation and green heating products. The respondents were given a list of non-mutually exclusive options to select from.

- 3.8 Our consumer respondents were not representative of UK consumers. They could also be considered ‘early adopters’ with potentially different motivations to mass adopters, given the sector is still developing.
- 3.9 However, our findings are supported by external research, for example:
- The March 2023 (BEIS) Public Attitudes Tracker found that the most important considerations in changing a heating system were to save money on heating bills and wanting to switch to a more environmentally friendly system (57% and 37% respectively).³²
 - Research commissioned by MCS found that making savings on energy bills and reducing their carbon footprint were important factors to 90% and 85% of consumers respectively who bought a green heating product.³³
- 3.10 We also found that consumer respondents’ motivations varied depending on the product. Consumers who bought/considered insulation and solar panels were more driven by financial considerations, whereas wanting to mitigate environmental harm was the most common motivation for those buying/considering heat pumps. Income also played a factor – households with a higher income were more likely to cite environmental concerns as their primary motivation, whereas lower income households were more likely to cite wanting to reduce bills as their primary motivation.

Overview of the consumer journey

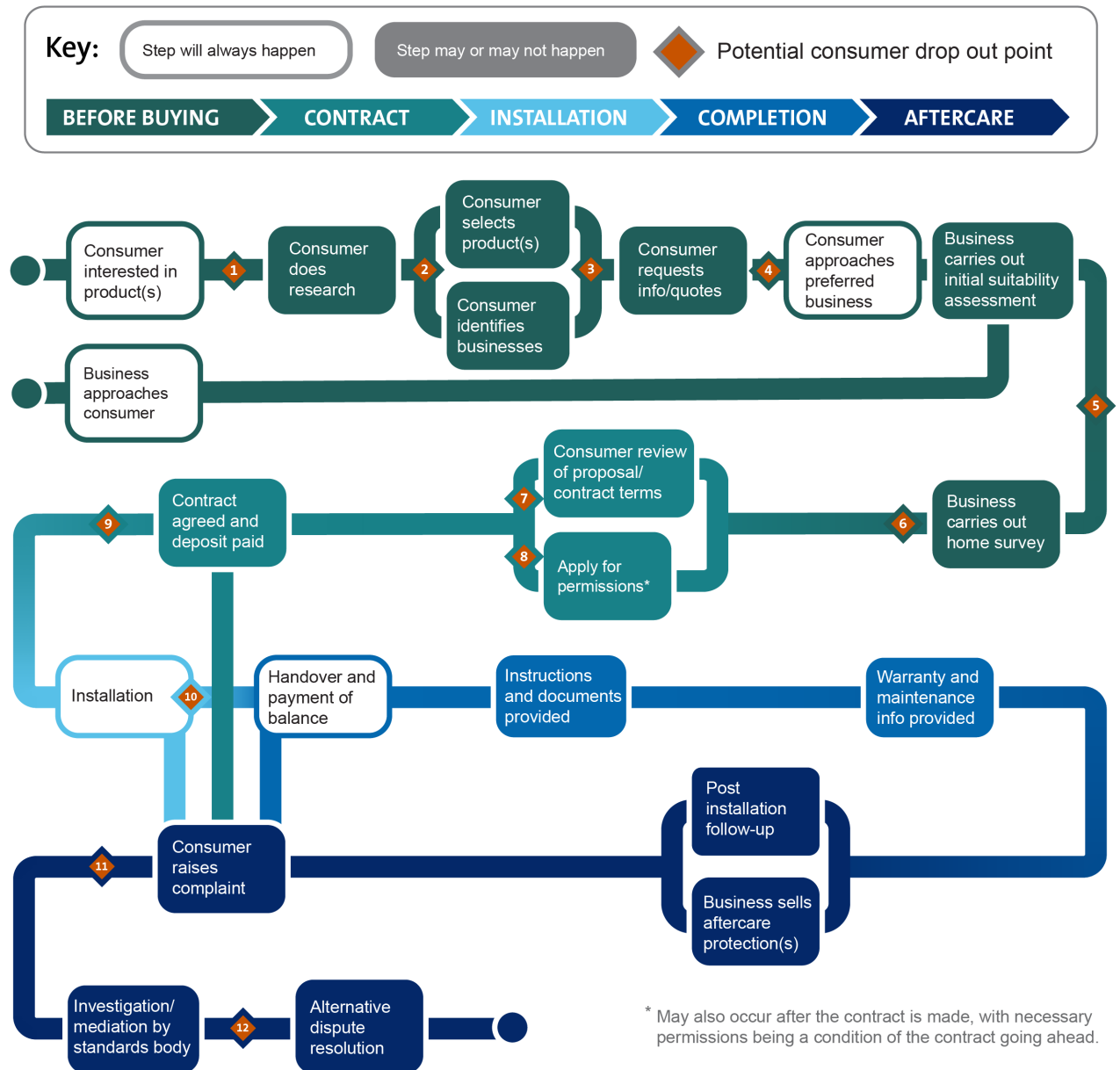
- 3.11 To understand people’s experience of buying green heating and insulation products, we mapped out the consumer journey. It is important to note that this is the journey that we have developed based on our findings, rather than the ‘ideal’ consumer journey. We drew on existing research, questionnaire responses and engagement with key stakeholders.³⁴
- 3.12 Figure 3.1 presents the key stages of the consumer journey, from becoming aware of green heating and insulation products through to what happens if something goes wrong. It includes points where consumers may drop out.

³² BEIS (2023) [Public Attitudes Tracker: Heat and Energy in the Home Winter 2022 UK](#).

³³ For example, see MCS (2022) [Consumer research in the microgeneration sector](#) and Citizens Advice (2016) [Driving installation of energy efficiency measures- customer research findings](#).

³⁴ Nesta (2021) [Decarbonising homes: Consumer attitudes towards energy efficiency and green heating in the UK](#); Energy Systems Catapult (2022) [Measuring the consumer response to the energy crisis](#).

Figure 3.1: Consumer journey with potential 'drop out' points



Potential consumer drop out points

- | | |
|--|---|
| <p>◆ 1 May disengage: complex, unfamiliar products</p> <p>◆ 2 Info hard to find or too confusing</p> <p>◆ 3 Cost too high; ineligible for grants/funding; can't find trusted local business</p> <p>◆ 4 No response or product/quote unsuitable</p> <p>◆ 5 Product unsuitable; additional work/expenditure required</p> <p>◆ 6 Product unsuitable or projected performance too low; additional expenditure required</p> | <p>◆ 7 Problems with proposed installation plan/contract</p> <p>◆ 8 Permission not given</p> <p>◆ 9 Disagree with terms and conditions; terms change after contract signed; delays</p> <p>◆ 10 Lengthy process; business can't be reached; alternative business found</p> <p>◆ 11 Business fails to address problem; unclear how to escalate complaint</p> <p>◆ 12 Lengthy process; alternative business found to fix problem</p> |
|--|---|

3.13 We note the following:

- Experiences differ depending on factors such as the specific product, location or funding route, and if installation is part of wider home improvement work. Therefore, not all steps apply to everyone - for example, 'able to pay' consumers will not need to follow the requirements of government funding schemes.
- Green heating and insulation products are complex and may be installed as part of a system eg solar panels with batteries. This can add to the stages of the journey and may increase points where people 'drop out'.
- Buying circumstances affect the journey. The experience of consumers who plan to buy and install products is quite different to those who have little choice and are making a 'distress' purchase (eg to replace a broken boiler). Consumers in the latter case may be more likely to skip steps, particularly the initial research stage.

3.14 As noted in chapter two, environmental, housing and some aspects of energy policy matters are devolved which means that people can have different experiences of buying green heating and insulation in different parts of the UK, as summarised in the box below.

3.15 While we recognise that each consumer journey will be different, it is a useful tool to set out the key aspects of the consumer experience and to identify stages at which the risk of harm may be greatest.

- **Different approaches to providing information and advice to consumers.**
 - In England, advice is available via the [UK government website](#) and five regional Net Zero Info Hubs. UK government has announced plans to develop and expand a centralised consumer advice and information service.³⁵ This includes the home retrofit phonenumber service, launched in March 2023, which provides consumers in England with home energy advice and plans for an enhanced website, a digital eligibility checker for government funding and a series of pilots for in-person advice across the Net Zero Info Hubs.³⁶
 - In Wales, the [Welsh Government website](#) refers consumers to the Warm Homes [Nest](#) scheme which provide advice and support on energy efficiency and funding to qualifying 'vulnerable' households.
 - In Scotland, [Home Energy Scotland](#) is a holistic service that operates a network of regional advice centres to deliver information and advice to households on energy efficiency, funding and renewable home energy products.
 - In Northern Ireland, plans are underway for a 'One Stop Shop' to provide impartial information, advice and support for energy decarbonisation matters including on energy efficiency and green heating products.³⁷
- **How government funding is accessed varies.** In England and Wales, the installer business is generally required to apply on the consumer's behalf, whereas in Scotland it is the consumer's responsibility.
- **Planning systems and building regulations** are different and impact the consumer journey. For example, for homes in areas with a high concentration of listed buildings or conservation zones, additional steps may be needed.³⁸

Key difficulties that people can face

- 3.16 As highlighted earlier, it is critical that people can make informed decisions when buying green heating and insulation products. We found some evidence of positive experiences in our consumer questionnaire responses,

³⁵ UK government (2023) [Powering Up Britain - The Net Zero Growth Plan](#) and [Powering Up Britain: Energy Security Plan](#).

³⁶ DESNZ has recently announced funding for several pilots of consumer advice and information services as part of wider investment in green finance projects. DESNZ [Mortgage rate cut for energy efficient homes under government-backed trials](#) (accessed 22 May 2023).

³⁷ We note that the Northern Ireland Department for the Economy is consulting on the implementation of a 'One Stop Shop' advice and support service for consumers for energy. The consultation closed on 31 January 2023.

³⁸ [British Listed Buildings website](#) (accessed March 2023).

for example people being happy with their products. However, we have identified several difficulties that people can face along the consumer journey. Unless these are addressed early on, to ensure that consumers can get the support they need to be confident when buying these products, product take-up will be reduced and progress to meeting Net Zero will be slowed.

- 3.17 It is important to recognise that the upfront cost of green heating and insulation products has consistently been highlighted as a key difficulty people face.³⁹ We have not considered pricing other than the presentation of price information, which we discuss in chapter four, as it goes beyond the scope of our work which has focused on consumer protection.⁴⁰ However, we note that governments have provided, and are continuing to provide, funding to help support the early take-up of these products.⁴¹
- 3.18 Some stakeholders have expressed concerns about the potential for unscrupulous businesses to engage in scams in this sector and particular risks being faced by some groups of consumers.⁴² We consider the experience of different groups later in this chapter and look at business practices in chapter four. As noted in chapter two, national and local trading standards authorities play a key role in enforcing consumer protection law and lead on enforcement against rogue or scam businesses. We therefore have not considered this in detail.
- 3.19 As indicated in Figure 3.2, people can face difficulties at the early, but important, stages before they buy that form part of their decision-making. These difficulties can put them off from proceeding or undertaking further research. We consider these early difficulties in further detail, before looking at challenges that arise later in the journey.

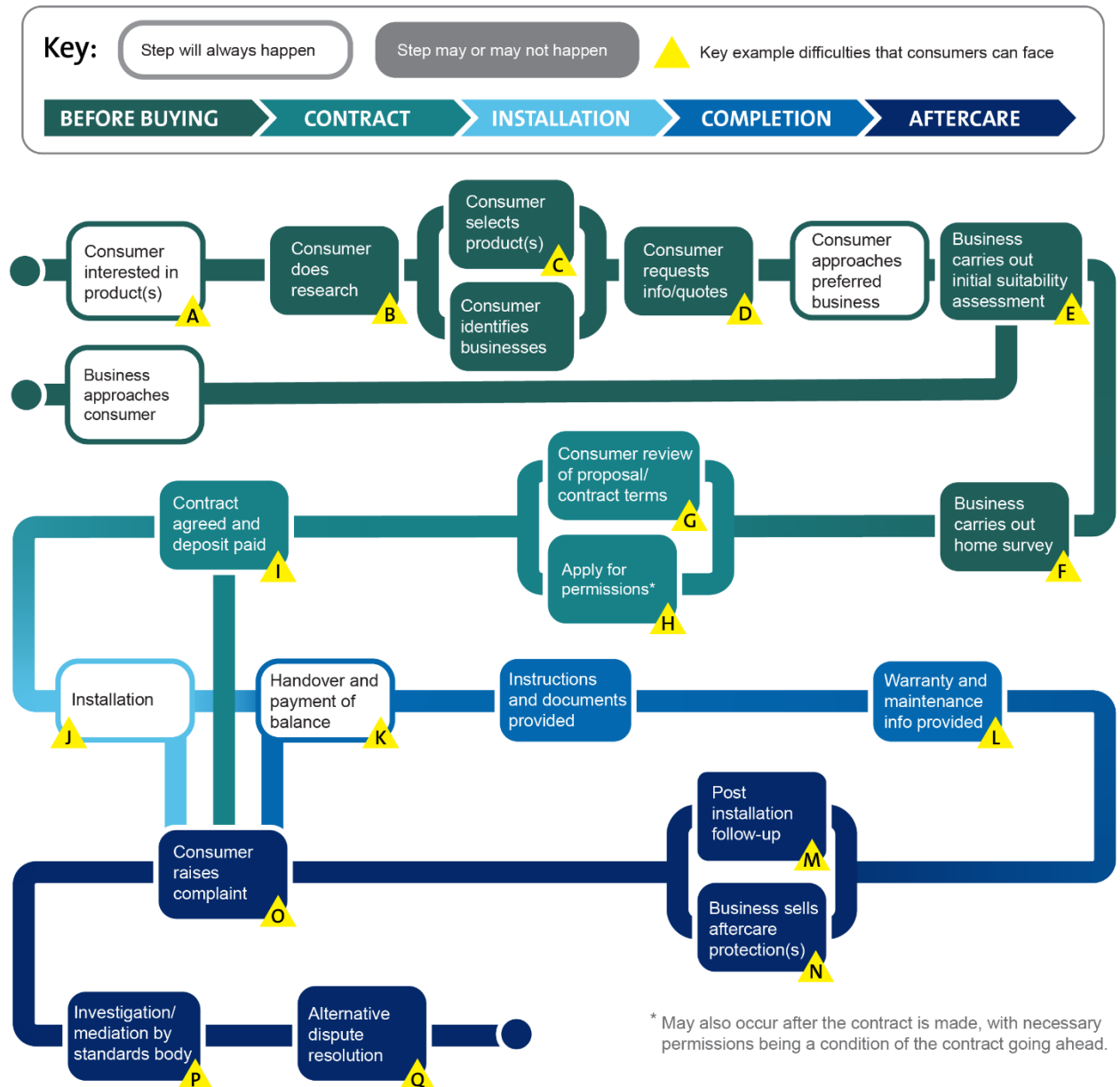
³⁹ Nesta (2021) [Decarbonising homes: Consumer attitudes towards energy efficiency and green heating in the UK](#) page 7 which found that 52% of 5,022 strongly agreed that upfront costs would be too expensive and Which? (2021) [Supporting consumers in the transition to net zero](#) where 56% of over 3,000 respondents said the cost of low carbon heating systems is a barrier.

⁴⁰ That is, we have not considered price levels and/or how products and services are funded and charged for.

⁴¹ Eg the [Boiler Upgrade Scheme](#) available in England and Wales. Chapter two sets out some more examples.

⁴² Citizens Advice (2021) [Home Truths The challenge and experience of making home energy improvements](#).

Figure 3.2: Difficulties consumers can face in their journey



Key example difficulties that consumers can face

- ▲ **A** Low awareness of products; technically complex and unfamiliar; too expensive.
- ▲ **B** Hard to find right information or identify trustworthy businesses; hard to assess claims/product suitability; additional challenges for some groups, eg digitally disadvantaged.
- ▲ **C** Difficult to find approved businesses; difficult to compare options due to inconsistent and limited upfront price information.
- ▲ **D** Difficult to get quotes from businesses; difficult to understand and comparing key information eg quotes, performance/saving estimates.
- ▲ **E** Mis/overselling of benefits and product performance; reliance on business for advice; businesses may not register assessment with standards body.

- F** Complex information that business may not adequately explain; mis/overselling of benefits and product performance; hidden costs; risk of incorrect product design.
- G** Documentation may not be provided; difficult to understand quotes.
- H** Unaware of required permits/notifications; unclear who applies for grants or permits; delays in securing approval.
- I** Potential variance to initial quote; contract terms not explained by business.
- J** Delays; substandard installation, poor service/quality.
- K** Operation of product not explained; instructions not provided; delay in providing important documentation.
- L** Poor or no information on who needs to activate warranties and how; no information on how to validate.
- M** Unclear what warranties cover and responsibilities of installer, designer, manufacturer, subcontractors and consumers; unclear who to call if there is a problem.
- N** Hidden/unexpected costs; potential pressure selling.
- O** Confusion about the complaints process; business may refuse to help or provide unsatisfactory remedy.
- P** Confusion about how to escalate complaint; difficult, complex and lengthy process; self-funded consumers that use an uncertified business have limited options.
- Q** Self-funded consumers not guaranteed access to ADR.

Unfamiliarity with products can put people off at the start

3.20 A range of evidence indicates that one of the biggest difficulties for consumers is how to first engage with green heating and insulation products, linked to a general lack of familiarity and understanding. As a result, people are likely to feel uncertain when they shop for green heating and insulation products. Given the emerging nature of the sector, this is perhaps not surprising, but it will be critical to address this to facilitate greater consumer take-up.⁴³ For example:

- Which? found that 28% of respondents to its online survey identified not knowing where to start as something that would put them off. A quarter identified not knowing what the options are and what they involve and 22% said they did not know how to make the right choice for their household.⁴⁴

⁴³ MCS (2022) [Consumer research in the microgeneration sector](#) which found that consumers can feel guarded about investing in low carbon heating due to unfamiliarity with the products (page 5) and Citizens Advice (2016). [Driving installation of energy efficiency measures- customer research findings](#).

⁴⁴ Which? (2021) [Supporting consumers in the transition to net zero](#).

- The March 2023 BEIS Public Attitudes Tracker found that 27% of respondents identified not knowing enough about the heating system as a barrier to take-up.⁴⁵
- An online survey by Nesta found that 32% of respondents strongly agreed that there was not enough clear evidence about which energy efficiency measures were right for them and 30% did not know where to start looking into such measures.⁴⁶

3.21 Consumer and stakeholder responses to our questionnaire also highlighted this issue.

‘Searched online but found it really difficult to compare products and be sure that I was getting the right product. It is still a very niche product/market and I didn’t want to get it wrong so I have decided to replace my old gas boiler with another where I can be sure of what I’m buying.’

Consumer, considered hydrogen-ready boiler, England

‘People don’t know where to start, where to get the right information and how to access the right tradespeople... even the most educated, circumspect consumer is finding it hard to navigate this market.’

Stakeholder respondent

3.22 People’s lack of familiarity can also lead them to purchase products that may not work well for their property. This is particularly a risk when combined with the limited ability to access product information (which we consider below).

‘As many (most) of the products involved are either novel or infrequently purchased, most consumers will have no real basis for either assessing their need for or selecting a best value supplier to meet that need.’

Stakeholder respondent

⁴⁵ BEIS (2023) [Public Attitudes Tracker: Heat and Energy in the Home Winter 2022 UK](#).

⁴⁶ Nesta (2021) [Decarbonising homes: Consumer attitudes towards energy efficiency and green heating in the UK](#) see page 7.

Difficulties early in the journey: information gaps and asymmetries

- 3.23 As highlighted above, people are unfamiliar with green heating and insulation products and can lack confidence about which products are right for them and what to buy. It is therefore critical that people can access reliable and independent information and advice to inform their decision. However, we have identified key information gaps and asymmetries that can hinder people looking to buy these products.

Difficulty finding and accessing reliable, trusted and independent advice

- 3.24 We found that people can struggle to find information and advice sources easily. Although some consumers proactively source information, typically online, this can be difficult and it is not always clear if the information is trustworthy. Several consumer and stakeholder respondents noted this.

‘Generally, feel that there is a lack of impartial and factual information...the information is sometimes wrong or polarized making it hard to make a good decision as a consumer.’

Consumer, considered heat pump, England

‘Consumers can feel overwhelmed by all the data when researching a product.... A lot of consumers don’t know where to start...and website research can lead to information overload, sometimes information conflicting each other.’

Stakeholder respondent

- 3.25 External research and stakeholders also support this finding. For example, Which? submitted that consumers felt they lacked ‘access to the support they need to make informed decisions’. In its research, 23% of respondents stated that not knowing where to get trusted independent advice on the choice of green heating had put them off.⁴⁷
- 3.26 We note that several stakeholders submitted that there are good sources of advice available but finding them is often the challenge.

⁴⁷ Which? (2021) [Supporting consumers in the transition to net zero](#). MCS (2022) [Consumer research in the microgeneration sector](#) also found similar.

‘There is plenty of information available on a wide range of products, services and approaches but it can be hard for consumers to navigate ... consumers can struggle to access clear, tailored information and advice.’

Stakeholder respondent

- 3.27 There is evidence that the challenge of locating reliable, trusted independent advice can lead to a reliance on information provided by businesses.⁴⁸ Some stakeholder respondents highlighted that businesses may not be best placed to offer independent advice, although we note that some consumer respondents indicated that they were happy with the service and information received from businesses.

‘Most consumers...rely on the advice of tradespeople when deciding...what heating system to install.... most tradespeople are not equipped to deliver expert advice on green heating or insulation products or services.’

Stakeholder respondent

‘Most advice comes directly from an installer who may have an interest in a sale or a particular product, rather than ensuring the consumer is making the best choice for them. If a business is promoting their own technology over others, the consumer could be stuck with the wrong solution for their property.’

Stakeholder respondent

Complexity of information about products and process

- 3.28 Our review suggests that even if people can find accurate information, it is often overwhelming and difficult to understand. For example, some consumer respondents told us that information about controlling a heat pump made the product seem overly complex, while others were confused by information regarding how shading and roof configuration can affect the output of solar products. If consumers are unable to make use of available

⁴⁸ Noted by some stakeholder respondents and existing research eg the [BEIS \(2023\) Public Attitudes Tracker Winter 2022](#) found that when asked who they would trust to provide advice about which heating system to install, 41% said tradespeople and 34% identified low carbon heating specialists. MCS (2022) [Consumer research in the microgeneration sector](#) identified that 61% of respondents would use their electrician or plumber as a source of information when first looking into having renewable energy, 57% said current boiler installer, boiler/service engineer and 58% friends and family.

information, this can hinder their ability to make good decisions and to use their product effectively.

- 3.29 Existing research supports our findings that consumers can struggle to understand information on green heating and insulation products due to a lack of familiarity with, and the technical complexity of, the products.⁴⁹ This can also mean that informal advice sources, like friends and family, are less of an option.⁵⁰

'It's a technical subject and often hard for customers to understand.'

Business respondent

'The average consumer may find it very difficult to understand the technical data/benefits ... consequently they are more likely to rely on what is being said rather than what they are reading..... This represents a risk ... for a large number of consumers...spending money on items which do not provide the benefits.'

Stakeholder respondent

- 3.30 Additionally, some consumer respondents told us that they received minimal information from the installer business. This did little to address their lack of understanding about the process and what they were agreeing to.⁵¹ Consumer respondents also identified a desire for more practical information about products, eg on how to use them and/or troubleshooting.

'More up-front information/discussion about controls would have been helpful.'

Consumer, bought heat pump, England

- 3.31 However, this was not the case for all consumer respondents or across all products – some said that they were happy with the information received.⁵²

⁴⁹ For example, Changeworks (2020) [Consumer protection in the domestic energy efficiency and renewable retrofit market Final Report](#). Qualitative research including 10 stakeholder interviews, see page 38.

⁵⁰ Only 104 out of 698 (15%) consumer respondents indicated that they had found out about green heating and insulation products through word of mouth or the recommendation of a relative, friend or acquaintance.

⁵¹ 68 out of 491 (14%) of consumer respondents who bought a product said that they had not received a contract and 33 out of 124 consumers (27%) who bought insulation told us they didn't receive a contract.

⁵² Eg 238 out of 341 (70%) consumer respondents who bought a heat pump or solar product said that they had received a contract.

'Received very comprehensive information from company.'

Consumer, bought solar, England

'In a qualitative research project with participants who had invested in these products, people told us that they would have liked more information on: expected return on investment, basic troubleshooting and more technical information on how products work.'

Stakeholder respondent, consumer advisory body

Challenges people can face later in the journey

- 3.32 We consider the upfront challenges in the consumer journey to be the most concerning, given the importance of ensuring people feel confident and able to make informed decisions when buying green heating and insulation products. However, evidence suggests that people can also face difficulties at later points in the journey, particularly when trying to find suitable installer businesses and challenges around the installation process itself.

Hard to find reliable, trusted installers

- 3.33 Consumer respondents highlighted the difficulties in identifying trusted installer businesses, particularly respondents who had bought/considered a heat pump. This is supported by other evidence, including research carried out by Citizens Advice and Nesta.⁵³ We note that these challenges are linked to the information gaps and asymmetries discussed in the previous section. There is some evidence that difficulties in identifying a trusted business can vary by location (which may reflect differences in the availability of installers, as well as information gaps).⁵⁴
- 3.34 These difficulties mean that people can struggle to shop around for different installer businesses, and therefore may not get the best deal or may drop out of the process altogether. A third (167 out of 491 – 34%) of consumer respondents who bought a product did not shop around. There was little variation by product type or factors such as household income or location.

⁵³Citizens Advice (2016) [Driving installation of energy efficiency measures- customer research findings](#); Nesta (2021) [Decarbonising homes: Consumer attitudes towards energy efficiency and green heating in the UK](#) found that 32% surveyed strongly agreed that it is difficult to find the right tradespeople to complete the installation.

⁵⁴ For example, MCS registered businesses vary by location. As of the end of January 2023 30% were in the Southeast and Southwest of England, whereas 4% were registered in the Northeast. While some businesses will operate nationwide, or across several regions, this highlights there may be variable access to installers in different parts of the country.

‘Was unable to find any other company at that time.’

Consumer, bought heat pump, England

Installation challenges: disruption and poor installation

- 3.35 The level of disruption experienced during installation will vary by product and because of property-specific factors such as condition, age and location. Evidence, including from consumer questionnaire responses and external research, suggests that there can be significant disruption from the installation of green heating and insulation products which may act as a barrier to their adoption.⁵⁵

‘The amount of work required to make the house suitable for an air source heat pump was too expensive and too disruptive.’

Consumer, considered heat pump, England

- 3.36 Although most (315 out of 491 – 64%) consumer respondents had not experienced issues with their product, some highlighted problems with poor installation and inadequate system design. Poor installation was also raised by several stakeholders as a concern in this sector.

Unclear where to go if things go wrong post-installation (complaints handling and redress)

- 3.37 People can also face post-installation challenges in addressing problems and snags.⁵⁶ A number of consumer respondents told us they had encountered significant challenges with customer support, complaints handling and redress. In particular, it was difficult to identify which organisation was responsible for rectifying an issue and the process was often lengthy.

⁵⁵ MCS (2022) [Consumer research in the microgeneration sector](#) found that three in ten (29%) of those surveyed thought that installing renewable systems would be too disruptive, based on a sample of 2,000 adults responsible for their home energy system, see page 33. See also Citizens Advice (2016) [Driving installation of energy efficiency measures- customer research findings](#).

⁵⁶ Changeworks (March 2020) [Consumer protection in the domestic energy efficiency and renewable retrofit market Final Report](#).

- 3.38 It is important that consumers are supported if things go wrong and that they can easily understand and navigate complaints processes. We consider complaints and redress in further detail in chapter five.

‘Ongoing customer support seems to be very much an unimportant part of the field.... One is given to conclude it's about getting the new customer's money and moving on rather than becoming a partner with them.’

Consumer, bought heat pump, Wales

Additional challenges for some consumer groups

- 3.39 A number of stakeholders suggested that all consumers engaging with green heating and insulation products might be considered ‘vulnerable’, given issues relating to information asymmetry and unfamiliarity with the products.

‘Any customer can be classed as vulnerable if they are not provided with the correct advice and guidance to determine whether their installation is suitable for their property.’

Stakeholder respondent

- 3.40 However, some groups are likely to face additional challenges which may limit their ability to access and make informed decisions about green heating and insulation products. Some consumers may be vulnerable due to their economic, social, and/or individual circumstances.⁵⁷ Consideration must be given to the needs of these groups so that they can be supported to engage meaningfully with the sector early on.
- 3.41 Although vulnerabilities are not mutually exclusive and often intersect, we highlight below some of the issues that may be experienced by these groups.

Digitally disadvantaged

- 3.42 Much of the information about green heating and insulation products is available online. This was reflected in our consumer responses as 411 out of 698 respondents (59%) said this was the primary way they accessed information about products.
- 3.43 Consumers who are ‘digitally disadvantaged’ may therefore struggle to identify available options and to make well-informed decisions about these

⁵⁷ CMA (2019) [Consumer vulnerability: challenges and potential solutions](#).

products. Citizens Advice has estimated that around 1 in 20 UK adults do not use the internet and over 11 million people lack essential digital skills.⁵⁸

- 3.44 It will be critical to ensure that online information is accessible and easy to understand, and that consumers who need to can access high-quality non-digital services, to ensure they do not get 'left behind' in the move to decarbonise home heating. We therefore welcome UK government's intention to test different ways of providing in-person advice for digitally disadvantaged consumers regarding products in this sector.⁵⁹

Tenants

- 3.45 There are approximately 10.5 million rented properties in the UK.⁶⁰ Tenants potentially stand to gain significantly from green heating and insulation products as they can help to reduce heating bills and these households tend to have lower incomes than owner-occupiers.⁶¹ However, decisions to install these products are typically made by the property owner (whether that be a private landlord, local authority, or housing association).
- 3.46 Tenants will be directly impacted by the installation and use of green heating and insulation products, however their engagement with the process is determined by the property owner. This might lead to issues such as:
- Difficulty understanding how to operate the product/troubleshoot issues, including how to maintain the product to ensure it works effectively.⁶²
 - Feeling the effects if something goes wrong but having limited ability to complain and seek redress against the business, which is likely to be dependent on the landlord's ability/appetite to pursue action.
- 3.47 It is important that landlords make tenants aware of the buying and installation process. Some stakeholders we spoke to noted that targeted advice for landlords could be beneficial. The CMA is currently carrying out [a research project into tenant and landlord experiences in the rented accommodation sector](#) and is considering issues relating to energy

⁵⁸ Citizens Advice (2022) [Access denied: Digital disadvantage and exclusion in the energy market](#).

⁵⁹ HM Government (2023) [Powering Up Britain - The Net Zero Growth Plan](#).

⁶⁰ Data taken from the [Office for National Statistics comparison of England and Wales dwellings 2011 to 2021](#), [Northern Ireland Housing Statistics 2021-22](#) and [Annual Housing Statistics Scotland 2012-22](#).

⁶¹ The Office for National Statistics estimates that the gross average annual income for owner-occupied households was 71% higher than rented households in 2021-22. Source: [The Effects of Taxes and Benefits on Household Income UK 2021/22 - Reference Tables](#).

⁶² Consumer Focus Scotland (2012) 21st century heating in rural homes: Social landlords and tenants' experience of renewable heat. Survey carried out with 39 local authorities and interviews/focus groups held with tenants – see page 25.

efficiency, such as the provision of EPC certificates and what information is useful for tenants and landlords.

Other at-risk groups

3.48 Other at-risk groups we have identified include:

- **Rural households:** rural homes are more likely to have poor energy efficiency and rely on traditional fuel sources like oil, coal, and liquid petroleum gas (particularly off-grid properties).⁶³ This, in addition to other challenges like access to enabling infrastructure, can make it harder to find and install suitable green heating and insulation products.
- **Disabled consumers:** the [Research Institute for Disabled Consumers \(RIDC\)](#) has highlighted a range of issues experienced by disabled consumers when considering green heating and insulation products, including information being presented in a way that does not meet their needs and inadequate consideration of how they might be affected by product installation eg electrical supply disruption might prevent the use of critical medical equipment.
- **Low-income households:** can face a 'double disadvantage'. They are more likely to live in poorly-insulated properties which use more energy, have higher carbon emissions and lose heat faster.⁶⁴ Therefore, as well as having to meet the high upfront costs of green heating and insulation products, it is disproportionately harder and more costly for these consumers to make their properties energy efficient.^{65,66} We note schemes are in place to support low-income households to adopt green heating and energy efficiency measures (see also chapter two).⁶⁷

3.49 These groups can find that they have limited choice of green heating and insulation products, as well as being more likely to incur higher costs. Targeted advice and support may therefore be required for these groups to ensure they can easily access the green heating and insulation products which are most suitable for their needs.

⁶³ Rural Services Network (2022) [Rural cost of living report](#); Liquid Gas UK (2021) Off-gas grid survey overview; Energy Systems Catapult (2020) [Public awareness of and attitudes to low-carbon heating technologies: An evidence review with primary focus on consumers in Scotland](#).

⁶⁴ Chris Skidmore MP (2023) [Mission Zero: Independent Review of Net Zero](#).

⁶⁵ National Consumer Federation (2023) [Retrofit priorities - Net Zero: UK Homes](#).

⁶⁶ Chris Skidmore MP (2023) [Mission Zero: Independent Review of Net Zero](#).

⁶⁷ For example, the ECO4 and Home Upgrade Grant schemes.

Conclusion: improving people's experience

- 3.50 It is vital that consumers can make informed choices at each stage of buying green heating and insulation products. There is a need for clear, simple, comprehensive information and advice to help them do this.
- 3.51 We are concerned about the difficulties consumers are facing in the journey, particularly in relation to information asymmetries and gaps, and the risk that these undermine trust and confidence in the sector. If consumers are unable to make informed decisions, they risk ending up with a bad deal.
- 3.52 As the sector is developing, respondents to our questionnaires and to others' research are likely, as early adopters, to have been motivated and proactive in searching for information. We are concerned that consumers in future may lack the necessary support and/or be put off from buying these products.
- 3.53 In this context, we have produced a consumer guide alongside this report, to help people to consider the key issues and better understand their main rights and protections when buying green heating and insulation products.
- 3.54 As well as taking action ourselves, we recognise and welcome efforts by governments across the UK to provide greater centralised information and advice services for consumers. We note these are at differing stages of development and would strongly urge governments to prioritise their work to put in place accessible, trustworthy information sources and support to ensure people are able to make informed, confident decisions about green heating and insulation products. In particular, people need to have independent and accessible information so they can better understand what products might be right for them, how they work and how to find trusted installer businesses. We consider this latter point further in chapter five.
- 3.55 We also note that UK government is piloting services to support potentially vulnerable groups, going beyond online-only services.⁶⁸ This is important to ensure that these consumer groups are not left behind or at greater risk of being unfairly treated in the move to green heating and insulation products.
- 3.56 We will continue to engage with governments across the UK to help inform the development of these services, drawing on our findings as set out in this chapter.

⁶⁸ [The Powering Up Britain Strategy](#) (2023) outlines several measures including pilots of in-person advice provision in England's Net Zero hubs and development of a phonenumber that will enable consumers to check their eligibility for various government funding schemes.

4. Business practices

- We looked at a range of evidence to understand business practices, including over 1,000 businesses websites. While we identified some good practices, we found several practices of concern, in particular:
 - The basis of claims about the benefits of green heating and insulation products is not always presented to the consumer. Claims that are not, or cannot be, substantiated make it hard for consumers to make informed decisions and could be misleading.
 - Greenwashing claims (ie false or overstated claims about the product's environmental credentials) by some large businesses about 'hydrogen-blend' or 'hydrogen-ready' boilers which could mislead consumers into thinking that these products have specific environmental benefits not offered by other boiler products.
 - Upfront price information is limited, inconsistent and sometimes excludes key information eg the cost of necessary enabling products.
- We also identified possible emerging risks which could arise if businesses do not communicate clearly and transparently with consumers about aftercare protections and bundled products/services.
- It is critical that businesses understand and comply with their consumer protection law obligations. We have set out what we think businesses can do to make it more likely that they stay on the right side of the law and treat consumers fairly.
- We will also undertake further work on potential misleading claims, including greenwashing. We intend to develop guidance to help businesses comply with their legal obligations, as well as considering if further action is needed.

Introduction

- 4.1 It is critical that businesses comply with their consumer protection law obligations, treat consumers fairly and support them to make informed decisions by providing clear, prominent and transparent information. If consumers do not trust businesses and are not protected from harm, it will undermine consumer confidence to make the switch to green heating and insulation products, which is key to helping the UK achieve Net Zero. Confident, engaged consumers also help to facilitate effective competition.
- 4.2 However, as set out in chapter three, people are likely to feel uncertain and unfamiliar when shopping for these products, and so be more vulnerable to being misled or exploited by businesses.

- 4.3 This chapter outlines our assessment of how businesses in the green heating and insulation sector engage with consumers. We have focused particularly on how businesses promote their products and the information they provide. We have assessed a random sample of businesses, of varying size, which produce, sell and install green heating and insulation products in the UK. We have not undertaken a full compliance review of the sector.
- 4.4 The chapter is structured as follows:
- Recap of businesses in the sector and the legal framework.
 - Overview of business practices we have identified which we think are beneficial to consumers.
 - Practices of concern which we think could be harmful to consumers and may breach consumer protection law.
 - Our conclusions and summary of actions to address our concerns.

Background

Businesses in the sector

- 4.5 As we explain in chapter two, the green heating and insulation sector is made up mostly of SMEs. However, the composition is changing with some large businesses, including energy suppliers, expanding their offerings to sell and install these products. The sector is also set to grow, linked to governments' actions to encourage consumer take-up of products and incentivise new entrants to the sector.
- 4.6 In this changing context, it is particularly important that all businesses are clear on, and complying with, their obligations under consumer protection law.

Overview of the legal framework

- 4.7 Chapter two provides an overview of the consumer protection legal framework and enforcement landscape. The key aspects which have informed our assessment of business practices are:
- **The Consumer Protection from Unfair Trading Regulations 2008 (CPRs)**⁶⁹ contain specific prohibitions against misleading actions (Regulation 5) and misleading omissions (Regulation 6).

⁶⁹ [The Consumer Protection from Unfair Trading Regulations 2008](#).

Presenting false or (potentially) deceptive information about a product may be a misleading action if it results in the average consumer taking (or being likely to take) a different transactional decision.⁷⁰

Omitting or hiding material information, or presenting it in an unclear, unintelligible, ambiguous or untimely way, may be a misleading omission too. This is if it results in the average consumer taking (or being likely to take) a different transactional decision.

The CPRs also contain a 'catch-all' general prohibition against practices which go against the requirements of professional diligence.⁷¹ If, as a result, the average consumer's ability to make an informed decision is appreciably impaired (or is likely to be) and therefore they take a different transactional decision, then such practice will be prohibited (Regulation 3).⁷²

- The CMA's **Green Claims Code** sets out guiding principles for businesses when making claims about the environmental credentials of their products and services, including:⁷³
 - **Principle A: Claims must be truthful and accurate:** they must not exaggerate positive environmental benefits, nor give a deceptive impression through their wording, logos, and any omitted information.
 - **Principle B: Claims must be clear and unambiguous:** they must be transparent and straightforward and presented in a way that the average consumer is likely to understand.
 - **Principle C: Claims must not omit or hide information:** important qualifying information should be sufficiently close to a claim for consumers to see it and take account of it before they make decisions.
 - **Principle F: Claims must be substantiated:** businesses must hold robust, credible, reliable, and up to date evidence. Claims are less likely to be misleading if consumers can access supporting evidence.

⁷⁰ Even if the claim is factually correct.

⁷¹ That is 'the standard of special skill and care which a trader may reasonably be expected to exercise towards consumers which is commensurate with either: (a) honest market practice in the trader's field of activity, or (b) the general principle of good faith in the trader's field of activity' (Regulation 2).

⁷² The CPRs also contain a prohibition against aggressive practices (Regulation 7) and a list of 'banned practices' which are always unfair (Schedule 1).

⁷³ CMA (2021) [Environmental claims on goods and services](#).

- **The Code of Non-broadcast Advertising and Direct Promotional Marketing (CAP)** requires businesses to substantiate their claims and ensure that qualifications are presented clearly in their advertising.^{74,75}

Overview of business practices

- 4.8 Although we have not carried out a full review of the sector, we have assessed a large range of material to understand business practices – including a sample of over 1,000 business websites, marketing materials, a small number of contracts and evidence from stakeholders including businesses, trade bodies and consumer representative bodies.
- 4.9 We found evidence of practices by some businesses which we think are beneficial for consumers and which we encourage the sector to continue, eg:
- Detailed information provided in various formats at the pre-sale, design, installation and handover phases of a transaction (although, as set out below and in chapter three, we have identified issues with some information provision).⁷⁶
 - Comprehensive property assessments to inform product and installation design and to provide consumers with a projection of the product performance benefits they might achieve, along with a detailed estimate. We understand that this is a complex process given multiple factors affect the output of green heating and insulation products and welcome ongoing sector-led work to refine calculation methods.⁷⁷
 - Dedicated aftersales services and customer support to help consumers operate their products eg with troubleshooting videos and follow-up calls.
- 4.10 From the sample of contractual material we looked at, we did not have strong concerns about the contractual agreements or widespread use of unfair contract terms across the sector.⁷⁸
- 4.11 We have prioritised an assessment of business practices which appear most harmful and have the potential to affect many consumers. We are aware of

⁷⁴ ASA [The CAP](#). The Code of Broadcast Advertising has similar requirements relating to TV and radio advertisements. While we have focused on online advertising by businesses, we know that some green heating and insulation businesses also use these mediums to advertise their products.

⁷⁵ Standards bodies also require members to verify any claims they make and ensure that these are based on reputable sources of information, in line with the CPRs. See chapter five for more detail on standards bodies.

⁷⁶ Just under 20% of consumer respondents told us that they had received detailed information from businesses.

⁷⁷ For example, [MCS has recently consulted on](#) changes to how its members estimate heat pump performance which will provide consumers with a both a high and low performance estimate.

⁷⁸ While we looked at a small sample of contracts, this included model terms and conditions that the two CTSI-approved consumer codes (see chapter five) in the sector provide for their members. We understand that many businesses use these when contracting with consumers.

issues with specific products which are being addressed by the sector and therefore have not considered these further.⁷⁹

Practices of concern

4.12 We have identified several practices of concern, particularly:

- misleading claims about product benefits;
- greenwashing messaging (ie false or overstated claims about the product's environmental credentials) about hydrogen use in boilers; and
- shortcomings with the provision of upfront price information.

Potentially misleading claims about product benefits

4.13 Businesses often make claims about the benefits of their products and services which can be highly influential on a consumer's decision-making.⁸⁰ If businesses use false or deceptive claims, it could lead to a consumer making a decision which is not in their best interests. More broadly, these practices also undermine consumer confidence and could deter people from engaging with green heating and insulation products.

4.14 We looked at the websites of businesses that sell and/or install heat pumps, solar products and insulation to understand the type of claims consumers are likely to encounter online.⁸¹

Types of claim

4.15 We have identified three broad types of claim made by businesses:

- **Cost savings:** claims a consumer can save 'X%' on their home energy bills and/or reduce the amount they spend by '£000s per year.'
- **Environmental benefits:** claims the product will help to reduce carbon emissions and/or contribute to overall carbon savings.

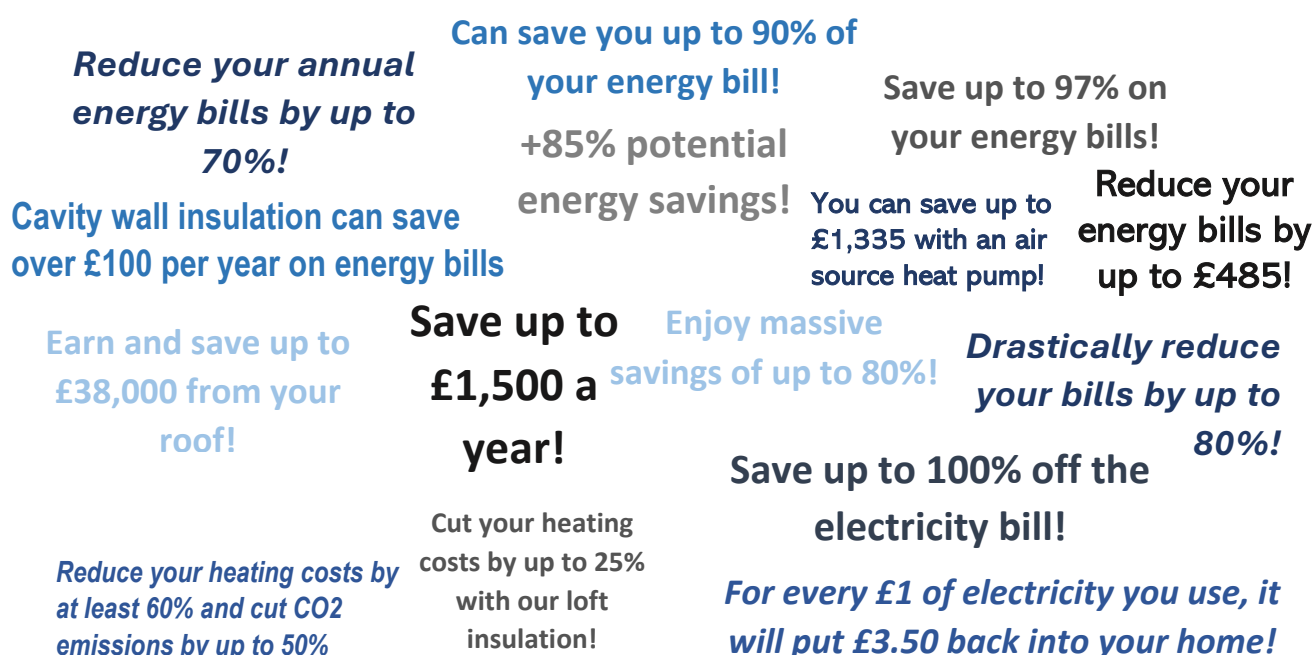
⁷⁹ We are aware of problems with spray foam insulation which can cause rot to form on roof timbers if misapplied. Lenders have been unwilling to offer finance on properties which have spray foam, forcing consumers to remove it at a cost, in order to re-mortgage or sell their home. We welcome the recent introduction of an inspection protocol by the industry for surveyors to assess the quality of spray foam installation.

⁸⁰ Ganz and Grimes (2018) How claim specificity can improve claim credibility in green advertising: measures that can boost outcomes from environmental product claims, *Journal of Advertising Research* 58 (4) pp 476-486.

⁸¹ We included businesses which install these products as they were most commonly bought or considered by consumer questionnaire respondents. This helped focus our analysis and the size of our business sample.

- **Energy efficiency:** claims the product is more efficient than traditional heating products and implying, or stating, that it will help to reduce costs.⁸²

Figure 4.1: Examples of potentially misleading claims made by businesses in our sample



Source: CMA analysis of a random sample of 1,100 business websites.

- 4.16 We also looked at claims businesses make in their online adverts by searching the Meta Ad Library, reviewing sponsored Google results, and collecting intelligence about promoted adverts directed at consumers on social media. We looked at over 100 adverts and found many included cost saving and/or environmental benefit claims, often linked to a business's website which displayed similar messaging.
- 4.17 While we found such claims were made by businesses offering all product types, they tended to be more prominent, and potentially more harmful, for solar products and heat pumps.

Concern: unclear basis for claims and lack of transparency

- 4.18 We found that businesses do not always explain the basis of claims and/or provide evidence that these claims can be substantiated (eg underpinning assumptions or calculations). Of the 1,100 businesses in our sample, just

⁸² We also found many claims about energy efficiency of products which did not imply or state any associated cost savings. We did not focus on these claims because we considered them to be less likely to influence a consumer's decision-making. However, points raised in this chapter will also apply to such claims.

under one fifth did not substantiate the claims made on their webpage.⁸³ We found similar examples in the adverts we reviewed.

- 4.19 Without being able to easily see and understand the basis of a claim it is difficult for a consumer to assess in what conditions the claimed benefit(s) can be achieved. This is particularly important in this sector as multiple factors affect the performance of green heating and insulation products, including property type, location, seasonality, energy prices and consumer behaviour.⁸⁴ These factors often interact to influence the overall performance of a product.
- 4.20 We would be particularly concerned if a business cannot back up their claims because the evidence does not support what they are saying. If businesses do not, or cannot, substantiate their claims, it makes it hard for consumers to make informed decisions and could be misleading. There is also a risk that businesses exaggerate or overstate the potential benefits by not clearly displaying the basis for their claims.

Concern: 'Up to' claims may not be accurate or representative

- 4.21 Product benefit claims in the sector are often prefaced with an 'up to' condition eg 'save up to X% on energy bills'. Evidence indicates that consumers tend to interpret 'up to' as meaning that the maximum level of advertised benefit will be achieved in a significant proportion of, if not most, circumstances.⁸⁵ Even if that is not the case, these kinds of claim make it difficult for consumers to assess the benefits they could achieve from a product and to make informed choices.
- 4.22 Use of 'up to' can be particularly problematic for green heating and insulation products as their performance can vary significantly depending on a range of factors. If businesses use 'up to' claims to advertise the maximum cost saving or performance for a product which is only, or mostly, achievable in very specific conditions, which may not be representative of most consumers' circumstances or real-world conditions, this could be misleading.

⁸³ We also found that in some cases claims are inconsistent across a business's website ie the homepage might proffer bill savings of up to 50% and elsewhere on the site an up to 70% saving. This is likely to be confusing for consumers and presents further challenges in understanding the benefits that might be achieved.

⁸⁴ Energy Savings Trust [In depth guide to heat pumps](#) (accessed 25 Feb 2023).

⁸⁵ Federal Trade Commission (2012) [Effects of a Bristol Windows Advertisement with an Up To Savings Claim on Consumer Take-Away and Beliefs](#); Gutenberg and Quinn (2016) [Further Empirical Investigation into 'Up To' Advertising Claims: The 'As Low As' Claim](#); ASA (2018) [Ruling on EcoZone Ltd](#); ASA (2022) [Ruling on Motorway Online Ltd](#); ASA (2022) [Ruling on Evergreens \(UK\) Ltd](#).

- 4.23 Stakeholders also highlighted concerns about product benefit claims in this sector, as did several consumer and business questionnaire respondents.

‘Many claims made by companies offering so called green products are exaggerated and often downright misleading.’

Consumer, considered heat pump, Wales

‘Efficiency claims... all very misleading and confuses the public.’

Installer business, England

Staying on the right side of the law

- 4.24 Claims that are truthful and accurate are unlikely to raise concerns. It is important that businesses provide clear, prominent and transparent supporting information to substantiate their claims so people can easily assess these. This will enable people to make informed, meaningful decisions and avoid them potentially being misled into buying a product that is not right for them.
- 4.25 **Businesses which stick to the following principles when making claims on their websites, adverts, or other consumer-facing material about the potential cost, environmental and/or efficiency benefits of green heating and insulation products are more likely to stay on the right side of the law:**
- **Businesses must be able to substantiate their claims with evidence which is relevant to, and representative of, the claim’s target consumer audience and their circumstances. For example, if a business makes a claim about potential cost savings in a home setting, the evidence should not relate to commercial premises. Businesses must have such evidence before making any claim.**
 - **The basis for the claim and any key calculation assumptions such as property type, energy price and usage should be clearly presented near to the claim.**
 - **Claims should be based on ‘real-world’ conditions, ie those that a reasonable proportion of consumers can expect to achieve. Avoid making claims based on very specific or limited circumstances.**

- **Businesses should take all practical steps to ensure that the basis of a claim is clearly displayed regardless of which medium is used (for example websites, social media advertisements or leaflets). Claims should be consistent across a business’s consumer-facing material.**
- **We strongly discourage businesses from using ‘up to’ in their claims as this caveat has the potential to be particularly misleading for green heating and insulation products.**
- **Where possible we suggest that businesses draw on their own customer and product data to inform the basis of their claims.**

Greenwashing and misleading messaging about hydrogen-capable boilers

4.26 We are also concerned about messaging used by several large businesses regarding boilers which can run on a blend of hydrogen with natural gas. We consider that these claims could constitute greenwashing by deceptively, or inaccurately, purporting the environmental credentials of these products which may influence a consumer’s decision-making.

Background: potential use of hydrogen for home heating in the UK



4.27 UK government is currently considering whether hydrogen could be used in the gas network to heat our homes.⁸⁶ As set out in Figure 4.2, hydrogen has the potential to be a more environmentally friendly option than natural gas.⁸⁷ Trials have been undertaken using a blend of 20% hydrogen with 80% natural gas. We note that several parliamentary inquiries have raised questions about the viability of using hydrogen for heating at scale.⁸⁸

⁸⁶UK government’s (2021) [Hydrogen Strategy](#) set out how using hydrogen could help reduce carbon emissions across various sectors including its potential use as a domestic fuel source.

⁸⁷ Using natural gas to heat our homes accounts for 85% of emissions equating to around 47.8 metric tonnes of carbon dioxide annually. Source: DESNZ [Provisional UK greenhouse gas emissions national statistics 2022](#).

⁸⁸ Environment and Climate Change Committee (2023) [Inquiry into the Government’s Boiler Upgrade Scheme](#); Business, Energy and Industrial Strategy Committee (2022) [Decarbonising heat in homes](#); Science and Technology Committee (2022) [The role of hydrogen in achieving Net Zero](#).

Figure 4.2: Summary of key differences between natural gas and hydrogen

<p>Natural gas</p> 	<ul style="list-style-type: none">• Main fuel used in the gas network.• Releases carbon dioxide when burnt.• Significant contributor to carbon emissions.
<p>Hydrogen</p> 	<ul style="list-style-type: none">• Alternative fuel source which could be used in the gas network to heat homes.• Does not release carbon dioxide when burnt.• Potential method to reduce carbon emissions to help achieve Net Zero.

4.28 UK government has committed to the following timeline for decisions relating to hydrogen use:⁸⁹

- The earliest a 20% hydrogen blend could be deployed in the gas network is 2025, subject to a positive UK government decision in 2023.
- UK government is currently considering the role of 100% hydrogen for heating and will make strategic decisions in 2026 on the role of hydrogen in decarbonising heat, including whether to proceed with delivering a town pilot before the end of the decade.

4.29 The potential role of hydrogen as a domestic fuel source, both in the short and long-term, is therefore uncertain and will be determined by UK government's assessment of its feasibility and value for money at these decision points.

4.30 A standard gas boiler and a boiler marketed as hydrogen-capable are technically identical – they have the same components. Since the early 1990s all gas boilers have been tested with 23% hydrogen before being sold in the UK and recent trials have concluded that existing boilers operate safely with a 20% hydrogen blend without modification.⁹⁰

⁸⁹ BEIS (2022) [Hydrogen Strategy Updates to the Market: December 2022 and July 2022](#); BEIS (2022) [Proposals for hydrogen transport and storage business models](#); HM Government (2023) [Powering Up Britain - The Net Zero Growth Plan](#).

⁹⁰ Health and Safety Executive (2015) [Injecting hydrogen into the gas network – a literature search](#); Schiro et.al (2020) Modelling and analyzing the impact of hydrogen enriched natural gas on domestic gas boilers in a decarbonization perspective, Carbon Resources Conversion; Gas for Energy (2013) Admissible hydrogen concentrations in natural gas systems; Heating and Hotwater Industry Council Technical Bulletins 157 and 159.

4.31 Hydrogen is often described as a ‘green’ gas because when it is used as a fuel source, for example in a boiler or an engine, it does not release carbon emissions. However, the overall carbon impact of hydrogen depends on how it is produced – some methods use fossil fuels and therefore contribute to carbon emissions.⁹¹ The approach to hydrogen production in the UK is under consideration.⁹²

4.32 In this context, we have four areas of concern about businesses marketing boilers as ‘hydrogen-blend’ or ‘hydrogen-ready’ constituting greenwashing:

- Use of labels and messaging which could mislead consumers.
- Providing inaccurate or incomplete information about hydrogen rollout.
- Inconsistent, incorrect descriptions of boilers’ ability to use hydrogen.
- Unclear benefits of voluntary certification.

Concern: labels and messaging which could greenwash

4.33 We have found evidence of several large businesses marketing their boilers’ ability to function with hydrogen by using labels prominently displayed next to product details on their webpages. In some cases, this includes explicit statements that the boiler can operate with a 20% hydrogen blend as one of its key features.

Figure 4.3: Illustrative example of boiler product details on website



4.34 We are concerned that this could give the impression that these products will run on a hydrogen blend immediately or in the near future, and that they have a specific environmental benefit compared to a standard gas boiler.

⁹¹ Alastair Lewis (2021) [Optimising air quality co-benefits in a hydrogen economy: a case for hydrogen-specific standards for NOx emissions.](#)

⁹² BEIS (2021) [Heat and Buildings Strategy.](#)

Given the uncertainty about hydrogen use at scale for home heating, as set out above, it is likely that a boiler bought today or in the near future will run predominantly or entirely on natural gas for at least a significant proportion, if not all, of its lifetime, and continue to contribute to carbon emissions.

- 4.35 By exaggerating the potential positive environmental impact of these products, these marketing practices could therefore amount to greenwashing and mislead consumers.
- 4.36 Further, these practices could lead consumers to believe that these boilers have a special feature which enable them to run with hydrogen, which is not the case. Several businesses told us that their boilers are technically identical to previous products, except they are now marketed as ‘hydrogen-blend’.

Concern: incomplete and inaccurate contextual information

- 4.37 We also found that some businesses are providing incomplete and/or inaccurate information about hydrogen use which makes it hard for consumers to make informed decisions. The issues include:
- Not being clear or upfront about the uncertainty of hydrogen deployment.
 - Inaccurately describing hydrogen rollout in definitive terms, ie that it will be introduced and later expanded from 20% to 100%.
 - Not displaying important information about hydrogen rollout in sufficient proximity to product marketing.
 - Erroneously stating that water is the only by-product of hydrogen production and/or describing hydrogen as a zero carbon fuel source.
- 4.38 We are concerned that these practices could mislead consumers by greenwashing – suggesting that hydrogen-capable boilers are more environmentally friendly than they are. Consumers could also be misled into buying a boiler marketed as hydrogen-blend if they think that their gas boiler will cease to operate if hydrogen is introduced into the gas network, on the basis that they are future-proofing their home heating system.

Concern: inconsistent and incorrect terms cause confusion

- 4.39 We have identified four terms that are commonly used to describe how different boilers can operate with hydrogen, as set out in Table 4.1.

Table 4.1: Terms to describe how boilers operate with hydrogen

<i>Term</i>	<i>Definition</i>
Standard boiler	Not marketed in any specific way in terms of its environmental impact or ability to run on hydrogen (available to buy)
'Hydrogen-blend' boiler	Technically identical to a standard boiler, but marketed as being capable of running on a blend of up to 20% hydrogen (available to buy)
'Hydrogen-ready' boiler	Capable of taking up to 20% hydrogen blend immediately with a potential to run on 100% hydrogen following alteration by an engineer in the future (not yet available to buy but being trialled)
'Hydrogen' boiler	Capable of running on 100% hydrogen 'out of the box' (not available to buy: in prototype development only)

- 4.40 At present only standard gas boilers and boilers marketed as 'hydrogen-blend' are available to buy. However, we have seen evidence of businesses using this range of terms to describe their current boiler products.
- 4.41 Use of incorrect descriptions is likely to be confusing for consumers and may increase the risk of consumers thinking these products will run on hydrogen immediately or in the near future. It is unreasonable to expect consumers to be able to differentiate between these descriptions, particularly given the shortcomings in contextual information provided by some businesses about hydrogen rollout.
- 4.42 We note and welcome recent proposals from UK government for a standardised definition of a 'hydrogen-ready' boiler, to be used across the sector from 2026. This will help provide certainty for consumers in the event these products are introduced.⁹³

Concern: presentation of voluntary certifications

- 4.43 We found that a small number of businesses are adopting a voluntary certification that their boilers can operate with a 20% hydrogen blend. The certification is sometimes promoted as a key product benefit or feature on their website.
- 4.44 However, the scope and basis of the certification is not always made clear to the consumer, making it difficult to assess what additional benefits it provides over the current legal requirement to test with 23% hydrogen before being sold (see paragraph 4.30). The use of such certificates risks misleading consumers into thinking that boilers bearing a particular mark offer specific environmental benefits over and above those available from standard gas boilers.

⁹³ DESNZ (2022) [Improving boiler standards and efficiency consultation](#).

4.45 **Given the potential for greenwashing and the risks to consumers, we expect businesses that market the ability of boiler products to operate with hydrogen will want to treat consumers fairly and stay within the law. They are more likely to do that where they meet the following expectations:**

- **In line with our Green Claims Code, businesses should not use labels or statements which give a deceptive impression of the environmental credentials of their products.**
- **If a business emphasises features of a product in its marketing activities, it should make clear if the product is technically identical to previous models to avoid giving the impression that it has enhanced functionality.**
- **Businesses have to give consumers the information they need to make informed choices. Contextual information relating to their products should be honest, accurate, and transparent. Businesses should not be selective about what is disclosed and should include important caveats, uncertainties and risks that consumers need to know.**
- **Businesses should ensure they accurately describe boilers which are available to buy now, regarding their ability to run with hydrogen.**
- **Businesses should make clear in their consumer-facing material what additional benefits, over and above existing legal requirements, voluntary certification confers on their products and why this is relevant for consumers.**

Other potentially misleading actions

4.46 We also found evidence of some businesses engaging in other potentially misleading actions, though to a lesser degree:

- **Claims about access to government funding:** some businesses advertise government funding to consumers without referencing eligibility criteria and/or provide information which is outdated. We are also aware of egregious practices where businesses falsely advertise funding which is not available, to generate sales leads.

Other enforcement entities – including the ASA and Trading Standards Scotland – have identified similar concerns and taken action against businesses regarding such practices.⁹⁴

We expect businesses to provide consumers with transparent and accurate information about the availability of government funding and any eligibility criteria. Businesses should avoid messages which may lead consumers to think they can access funding automatically or unconditionally.

- **Potentially misleading use of standards body logos:** Some businesses are certified with a standards body for only some of the green heating and insulation products that they sell. For example, a business might sell solar panels (for which it is certified) and batteries (not certified).

However, this is not always made clear eg because the standards body's logo is displayed across the business's website. This could lead consumers to assume the business is certified for all its products which could pose problems if an issue arose with the non-certified product.⁹⁵

Using a logo in connection with an unauthorised product or service could also amount to a 'banned practice' which is automatically unfair under Schedule 1 of the CPRs. This is also likely to breach the standards body's own requirements.⁹⁶

It is important that consumers are not left in any doubt about which activities and services a business is certified for. Businesses should make clear what certifications they hold and what specific products these apply to.

Limited and inconsistent provision of upfront price information

- 4.47 As well as looking at how businesses promote their products, we considered key information that businesses provide to consumers. We identified concerns with the upfront price information businesses provide (by this, we mean 'headline prices' eg on a business's website, online material etc).

⁹⁴ ASA (2023) [Prism Marketing Group Ltd](#); Trading Standards Scotland's [Energy Marketing Scams](#) work investigated a wide range of business practices including claims included in advertisements and misleading sales.

⁹⁵ In the example given, a consumer may be unable to access dispute resolution for a complaint relating to battery installation, nor be guaranteed that the standard of workmanship complies with accepted industry best-practice.

⁹⁶ For example, MCS guidance advises that 'The [logo] should only be used in connection with your certified installation services. It shouldn't be used to create the impression that other services have been certified by MCS if this is not the case.' Source: [MCS Brand Guidelines](#) (accessed 29 March 2023).

- 4.48 We did not consider information included in detailed quotes which businesses often provide after a property assessment (and will therefore vary depending on the assessment). We also did not consider how products are priced, which generally falls outside the scope of consumer protection law.

Concern: limited upfront pricing

- 4.49 We assessed headline price information on over 100 business websites. Over 80% of the websites did not provide upfront prices and many require a consumer to contact them directly to receive an initial estimate.
- 4.50 This lack of upfront price information can present challenges for consumers, making it difficult to identify and compare product options. It could also deter some people from buying products if they do not have an indication of the headline price.

‘I couldn’t find any information at all on ...the prices o[f] a basic solar system on any companies website. It was all confusing and a dark art.’

Consumer, considered solar panels, England

- 4.51 Consumers should be provided with clear and transparent upfront price information so that they can make informed decisions about product affordability and what might be best for them. Where it is necessary to qualify basic price information – eg stating that the price is subject to additional costs or factors – that information should be clear and accurate.

Concern: inconsistent and potentially deceptive price information

- 4.52 We found that businesses which do present upfront prices take different approaches to displaying the overall price. For example, some businesses incorporate the value of government funding and others show the total price, or a range, as illustrated in Figure 4.4.

Figure 4.4: Illustrative example of different approaches to providing upfront price information

‘You can get one of our heat pumps from £3,000 (including the government grant)’	vs.	‘The price of a heat pump installation starts from £8,000 - £12,000’
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- 4.53 This inconsistency could make it difficult for consumers to compare options and may cause confusion and uncertainty, particularly for some specific consumer groups.⁹⁷ Further, the inclusion of the value of government funding may obscure the total cost of the product/services.
- 4.54 The CPRs preclude misleading or deceptive pricing practices which could influence a consumer's transactional decision. Even if price information is accurate, it could be considered unfair if its overall appearance is likely to deceive the average consumer.

Concern: missing price information

- 4.55 We also found that businesses can exclude key information in their headline prices, in particular:

- Not making clear that other work, property improvements and/or products may be required to facilitate installation and to enable the main product to work most effectively. For example, scaffolding might be needed to install solar products and larger radiators and a new water tank can improve the efficiency of a heat pump.

Failing to reference or include the cost of these product enablers in upfront price information can be problematic. Although they are 'optional', as the product will work without them, they can be necessary in many cases for the product to work effectively. For example, research by Nesta found that 95% of heat pump owners required additional supporting equipment when their product was installed.⁹⁸

- Not referencing ongoing costs – an indication of likely ongoing costs, including running costs and those associated with maintenance and servicing, is important for consumers to make informed decisions. While it is unlikely that businesses can provide comprehensive information about this in upfront material, consumers should at least be made aware of the potential ongoing cost implications of a product. This was also reflected in consumer questionnaire responses.

'The recommendation...is that the heat pump should have an annual service which costs...This would...have ruled out the purchase.'

Consumer, bought heat pump, England

⁹⁷ Research Institute for Disabled Consumers (2022) [How Accessible is Consumer Information on Renewable Home Energy and Heating Solutions?](#), see pages 6 and 7. Results based on surveys returned by 681 consumers, workshops and mystery shopping exercises.

⁹⁸ Nesta (2023) [Heat Pumps A User Survey](#). Sample of 2,549 consumers who had a heat pump installed in their property at least six months before completing the survey.

'I wanted ...better information on the ongoing running costs of the ASHP.'
Consumer, bought heat pump, England

Staying on the right side of the law

- 4.56 We recognise that it can be challenging for businesses to provide accurate upfront prices given that specifications, and the exact cost, of green heating and insulation products are dependent on a range of factors including property type, location, and configuration.
- 4.57 **However, it is important that businesses provide as much upfront price information as possible to enable consumers to assess and compare options. This should provide a reasonable illustration as to what the consumer might expect to pay including an indication of additional and/or ongoing costs.**
- 4.58 **Businesses are more likely to stay within the law where they ensure that upfront price information is:**
- **Accurate, transparent and clearly displayed on their webpages and other materials.**
 - **Inclusive of VAT (where applicable), compulsory fees and charges.**
 - **Explicit about whether it includes the value of government funding and, if so, what the eligibility criteria are.**
 - **Unambiguous – with any qualifications or important caveats relating to the price made clear.**
 - **Reflective of additional works, property improvements or products necessary to the main purchase that the average consumer is likely to require. These should be clearly and explicitly referenced alongside the upfront price.⁹⁹**
- 4.59 **Businesses should also clearly explain that a more detailed estimate will be provided at a later stage in the purchasing process and the types of costs likely to be included.**

⁹⁹ CTSI (2018) [Guidance for Traders on Pricing Practices](#).

Other areas of concern

- 4.60 While the key concerns we identified relate to misleading / greenwashing claims and limited upfront price information, we have identified other practices in this sector which may be harmful and could breach the professional diligence requirement of the CPRs.

Issues with post-installation protections

- 4.61 Businesses provide an array of protections after product installation including:
- A warranty assuring the product's quality, durability and safety for a specified time.
 - A guarantee for the quality of workmanship.
 - Service and maintenance plans.
- 4.62 These can provide valuable safeguards for consumers should they experience a problem following installation. However, evidence suggests that consumers are not always clear about what they mean in practice, what is required to validate them and/or how to make a claim if needed.¹⁰⁰
- 4.63 Consumers are given a large amount of paperwork at the point of product handover and so there is a risk of 'information overload' and important messages about aftercare being missed or forgotten.
- 4.64 We are also concerned that businesses could exploit consumers by offering service and maintenance plans beyond what is needed following installation. It is important that consumers are given time to decide if they want to buy these services. They should also be able to shop around for the best option (the price of an annual service can vary considerably between providers).¹⁰¹
- 4.65 **Businesses are more likely to stay within the law where they clearly explain to a consumer at the point of product handover:**
- **What protections are being provided – including what is optional and what can be bought from other providers.**
 - **What issues, faults or problems the protections cover.**

¹⁰⁰ For example [research by BEIS in 2022](#) highlighted that some consumers fail to register product warranties due to a lack of awareness about the benefits of such a protection.

¹⁰¹ We found significant disparities in price from a small sample of businesses that offer annual servicing of air source heat pumps and solar panels.

- **Any actions the business will take to validate the protections and those the consumer will have to do. Eg whether the business validates a manufacturer warranty on the consumer's behalf.**
- **What the consumer needs to do to maintain the protections, including, if relevant, arranging an annual service and if this must be carried out by a business with specific certifications or an affiliation with the product manufacturer.**
- **Any documentation the consumer needs to retain.**

4.66 **This should be considered an integral part of the installation process and the business should not finish a job without ensuring this information is given to, and understood by, the consumer.**

Contracts

4.67 As set out in paragraph 4.10, we found limited concerns about contract terms based on the small sample of materials we reviewed. However, we have been made aware that sometimes consumers are not provided with a contract and that businesses do not always explain important terms and conditions. In a few cases we also found contract terms which appeared in breach of consumer protection law requirements on cancellation rights.

4.68 **It is important that businesses provide a written contract, clearly identify which document(s) constitute the contract and that the terms and conditions are fair. Failing to provide a written contract may amount to a breach of the professional diligence requirement contained in the CPRs.¹⁰² Businesses should discuss key details with consumers, give them the opportunity to ask questions and ensure that they understand the contract before signing.**

Possible future risk: bundling of products and services

4.69 As set out in chapter three, buying green heating and insulation products can be a complicated and costly process. As in other sectors, over time businesses may start to offer bundles where a product(s) and service are provided in a single package.¹⁰³ For example, a business may install a heat pump and insulation and provide an energy tariff as a single product. Although this is not currently common practice, we have seen this starting to

¹⁰² In addition, provision to a consumer of a copy of the contract, or certain information in respect of the contract on a durable medium, are legal requirements under the CCRs in respect of contracts concluded off premises or at a distance.

¹⁰³ Eg mobile and broadband.

happen, and some businesses suggested that they are interested in offering bundles.¹⁰⁴

4.70 Bundles can benefit consumers by simplifying decision-making and providing price certainty which can help to build people's confidence when buying products. However, they can also present potential risks, including:

- Making it hard for people to compare options and shop around to know if they are getting the best deal, especially if there is poor transparency (eg the cost of individual aspects of the bundle are not made clear).
- Difficulty for people to switch contracts and a risk of being 'locked in' – eg if businesses do not provide clear information about how consumers can cancel or change the agreement. The use of lease arrangements can similarly lock consumers into a lengthy agreement which can be problematic if they include onerous and restrictive conditions and/or make it difficult to leave.

4.71 **Businesses should ensure that selling bundled products/services is done in a fair, clear and transparent way and complies with relevant legislation. Consumers should be left in no doubt about the cost of individual aspects of a bundle, ownership rights of the product (eg if leased or owned) and how they can switch or cancel the contract.**

Conclusion: improving business practices

4.72 Businesses selling green heating and insulation products need to be clear about, and supported to comply with, their obligations under consumer protection law and ensure they treat consumers fairly. The responsibility for doing so ultimately lies with individual businesses, though government, industry bodies and enforcers have an important role to play in facilitating and enforcing compliance. This will also help drive consumer trust and confidence in the sector.

4.73 We have identified several concerning business practices in the sector:

- Potentially misleading claims about product benefits.
- Greenwashing messaging about hydrogen use in boilers.
- Shortcomings with upfront price information.

¹⁰⁴ For example as offered by [e.on energy](#).

- 4.74 We have also identified some other emerging issues relating to aftercare protections and future risks associated with bundling.
- 4.75 We strongly urge businesses in this sector to ensure that they access relevant and up-to-date education materials to make sure they are compliant with consumer protection law. There is a range of existing resources to help businesses familiarise themselves with, and understand, their legal obligations.¹⁰⁵
- 4.76 In addition, to help address the issues we have identified, we:
- Have set out throughout this chapter principles and practices for businesses that would make it more likely they stay on the right side of the law in the areas of concern. Businesses should review and adapt their practices accordingly to help ensure they comply with their consumer protection law obligations.
 - Will carry out further work focusing on misleading claims in this sector – considering both product benefit claims and greenwashing claims relating to ‘hydrogen-blend’ or ‘hydrogen-ready’ boilers, as two key areas of concern we have identified. As part of this we intend to develop guidance to help businesses understand and comply with their consumer protection law obligations. We will also consider whether further action, such as enforcement, is necessary.

¹⁰⁵ Including resources we have produced and those developed by CTSI eg: CTSI [Business in Focus Business Companion](#); Office of Fair Trading [Consumer protection from unfair trading - guidance](#); CMA [Consumer protection guidance](#).

5. The standards landscape

- Standards bodies play an important role in the green heating and insulation sector. They help increase consumer trust by setting quality and consumer protection standards for businesses.
- However, we have found that the standards landscape is not working as effectively as it could:
 - The standards landscape is complex and confusing, with low consumer awareness.
 - The level of protections vary in some important areas, such as compliance monitoring, leading to a risk of poor outcomes for consumers.
 - Complaints management processes are unclear and confusing, with no simple route for people to raise complaints if they have a problem.
 - Limitations of some post-installation financial protections provided by standards bodies where a business ceases to trade.
- We also identified some emerging risks as the sector grows, in particular able to pay consumers may have fewer protections than those who buy products using government funding schemes. For example, they may not have access to Alternative Dispute Resolution if a problem arises.
- We have developed a set of good practice principles for standards bodies to help ensure they provide consistently high standards of consumer protection. Standards bodies should review their current practices against each of the five principles. We will continue to engage with standards bodies to help take forward and embed the principles.
- We also call on UK government to consider making it mandatory for businesses to belong to an approved ADR scheme and whether further holistic changes to the landscape are needed to address the concerns we have identified.

Introduction

- 5.1 Standards bodies play a key role in protecting consumers and increasing trust in the sector.¹⁰⁶ They provide reassurance that a business will do a good quality job, treat consumers fairly and put things right if there are problems.

¹⁰⁶ Organisations that set and/or monitor quality and consumer protection standards for businesses in the sector.

- 5.2 This chapter outlines our assessment of the standards landscape and its effectiveness in protecting consumers buying green heating and insulation products. We have considered information provided to us by key standards bodies through questionnaire responses, bilateral calls and written follow-up questions, as well as information received from other stakeholders, published reports and our own research and analysis.
- 5.3 The chapter is structured as follows:
- An overview of the standards landscape including the main standards bodies in the sector.
 - Benefits of standards bodies.
 - Key areas of concern we have identified, which risk undermining the effectiveness of the standards landscape.
 - Emerging risks - gaps in protection for 'able to pay' consumers.
 - Our conclusions to help strengthen the landscape, including good practice principles for standards bodies.

Overview of the standards landscape

- 5.4 There are a range of organisations that set quality and consumer protection standards, certify or accredit businesses against those standards and monitor compliance by businesses in the green heating and insulation sector (we refer to these collectively as 'standards bodies'). Most of these standards bodies operate across the UK. Some operate solely in the green heating and insulation sector, others operate more widely and their standards are relevant to businesses in this sector. Figure 5.1 presents an overview of the standards landscape and Appendix B provides further detail on key standards bodies.
- 5.5 Some standards bodies primarily focus on the technical competence of member businesses to carry out their work, others on consumer protection and some cover both:
- Bodies that create and maintain quality standards for products and installation practices including the Microgeneration Certification Scheme

(MCS) for green heating products and the British Standards Institution (BSI) for the installation of insulation products.^{107,108}

We note that MCS is due to consult on proposals to simplify its scheme, including how it delivers consumer protection.¹⁰⁹

- Certification bodies assess businesses' conformity with these quality standards and are accredited by the UK Accreditation Service (UKAS) to carry out this function. Several certification bodies are also authorised by UK government to act as 'Competent Person Schemes' (CPSs) in England and Wales. CPSs allow registered businesses to self-certify their work as compliant with Building Regulations.¹¹⁰
- Bodies that set standards for consumer protection:
 - Two CTSI-approved consumer codes – the Renewable Energy Consumer Code (RECC) and the Home Insulation and Energy Systems Quality Assured Contractors Scheme (HIES) – set rules for member businesses selling green heating products about how to engage with consumers and aim to strengthen consumer protection.¹¹¹ MCS-certified businesses are required to belong to one of these codes.
 - TrustMark is a UK government endorsed scheme. It has a Code of Conduct and Customer Charter setting out quality and consumer protection standards for member businesses who carry out work in and around peoples' homes. TrustMark licences other standards bodies in the sector (including certification bodies and consumer codes) to deliver its scheme and to certify that businesses meet its requirements.

5.6 There are also numerous 'trusted trader' schemes that operate across multiple sectors, including the green heating and insulation sector. We have not focused on these schemes as we have prioritised the standards bodies that are particularly relevant to this sector.

¹⁰⁷ MCS works with industry to create and maintain technical competency standards that allow for the certification of green heating products, installers and their installations.

¹⁰⁸ BSI publishes Publicly Available Specification (PAS) 2035/2030 standards for retrofitting dwellings for improved energy efficiency through the use of insulation and other energy efficiency measures. There are also a number of bodies that approve insulation product systems following a testing, assessment and approval process.

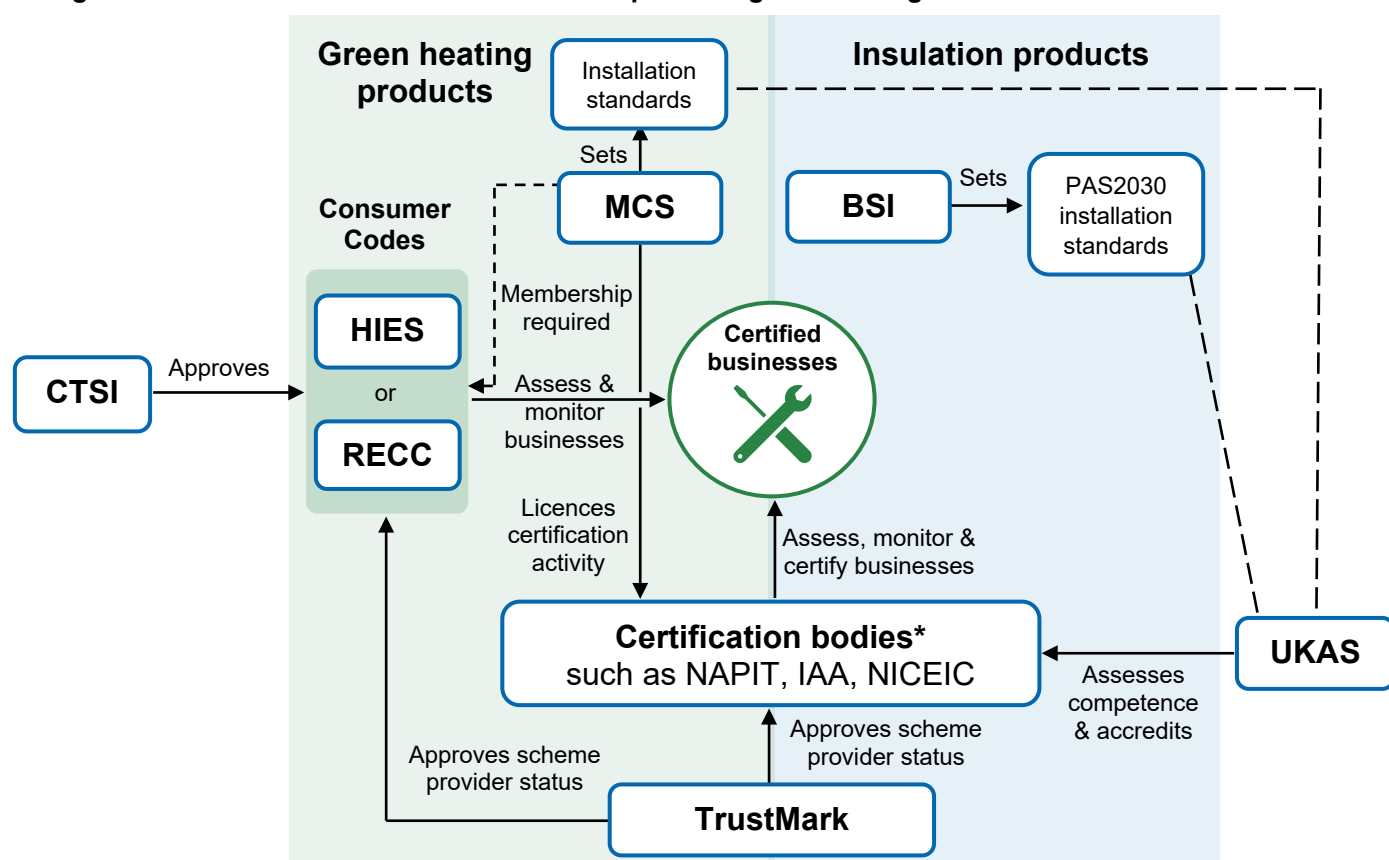
¹⁰⁹ MCS (2022) [Consumer protection in small-scale renewables, research report and findings from MCS](#).

¹¹⁰ Scottish Government also operates [approved Certifiers of Construction schemes](#) allowing self-certification of certain aspects of construction forming part of a building warrant application as complying with building regulations.

¹¹¹ CTSI is a membership body for Trading Standards professionals and provides services to support and advise businesses and consumers. This includes the Consumer Codes Approval Scheme (CCAS). CCAS approved businesses have high standards of customer service and offer protections for consumers beyond consumer protection law obligations.

- 5.7 Where a business belongs to a standards body, it must comply with their rules in addition to relevant legislation such as consumer protection law and Building Regulations. In particular, consumer protection law gives people certain rights and protections from unfair business practices and contract terms and poor quality work (see also chapters two and four).
- 5.8 Businesses do not have to be a member of a standards body to sell green heating and insulation products, though they may choose to. Membership is often a requirement for businesses deploying products under government funding schemes, for example:
- A business must be MCS-certified (or equivalent) under the Boiler Upgrade Scheme covering England and Wales, the Smart Export Guarantee scheme in Great Britain and the Home Energy Scotland Grant/Loan scheme to install a green heating product.
 - The Energy Company Obligation (ECO) energy efficiency scheme in Great Britain, and the Home Energy Scotland Grant/Loan scheme for installing certain insulation products requires businesses to be registered with TrustMark.

Figure 5.1: Overview of the standards landscape in the green heating and insulation sector











*Note: Many certification bodies may also be authorised to act as Competent Person Schemes.
Source: CMA analysis.

Benefits of standards bodies

- 5.9 Standards bodies help consumers identify reliable, trustworthy businesses. Using a business that is a member of a standards body should mean that consumers can be confident the business is qualified to do the work to a high standard, will treat them fairly and provide protection if anything goes wrong.
- 5.10 People have rights and protections under consumer protection law. In particular, consumer protection law places obligations on businesses to provide people with the key information they need to make informed decisions, to use fair sales practices and contract terms, to have an effective way of dealing with complaints and to carry out work with reasonable care and skill. Standards bodies offer additional safeguards to consumers which can include:
- Ensuring member businesses are reputable and sound, technically competent and treat their customers fairly, through vetting and ongoing monitoring against standards.
 - Enabling consumers to seek redress if their installation does not comply with relevant standards, by requiring member businesses to provide a guarantee of the quality of workmanship for a specified period.
 - Safeguarding consumers' deposits and their workmanship guarantee if a member business stops trading, by requiring members to offer insurance-backed financial protections.
 - Ensuring a complaint can be escalated if it is not resolved by the member business, by providing access to Alternative Dispute Resolution (ADR).
- 5.11 Figure 5.2 shows a simplified comparison of the features of some of the standards bodies that operate in the green heating and insulation sector, based on information available as of 23 May 2023. Some standards bodies use third parties to carry out compliance checks and cover a wider range of products than those within the scope of our project. We discuss below (at paragraphs 5.22 to 5.74) variation in practice between standards bodies, for example the scope and regularity of checks on members, the terms and coverage of financial protections and processes for mediation and accessing ADR.

Figure 5.2: Benefits and features of key standards bodies

Quick guide to the main standards bodies				
Who are they?	 <p>TrustMark (TM) is a UK government-endorsed quality scheme for work carried out in or around the home</p>	 <p>MCS is an independent standards body that certifies green heating products, installers and installations to a set standard</p>	 <p>HIES is a consumer code operating in the green heating sector; approved by Trading Standards</p>	 <p>RECC is a consumer code operating in the green heating sector; approved by Trading Standards</p>
Which green heating and/or insulation products do they cover?				
What checks are carried out on members?	<ul style="list-style-type: none"> ✓ Business health ✓ Sales practices ✓ Competence (inc. via installation visits) 	<ul style="list-style-type: none"> ✓ Business health ✓ Sales practices ✓ Competence (inc. via installation visits) 	<ul style="list-style-type: none"> ✓ Business health ✓ Sales practices (inc. via mystery shopping and customer surveys) ✓ Competence (qualifications only) 	<ul style="list-style-type: none"> ✓ Business health ✓ Sales practices (inc. via mystery shopping and customer surveys) ✓ Competence (qualifications only)
What if something goes wrong and the member doesn't fix it?	<ul style="list-style-type: none"> ✓ Mediation by a TM scheme provider ✓ Free access to independent ADR 	<ul style="list-style-type: none"> ✓ Free mediation by HIES or RECC ✓ Access to independent ADR 	<ul style="list-style-type: none"> ✓ Free in-house mediation ✓ Free access to independent ADR 	<ul style="list-style-type: none"> ✓ Free in-house mediation ✓ Access to independent ADR (£120, repayable if case won)
What if the member stops trading?	<ul style="list-style-type: none"> ✓ Deposit protection (work > £500+VAT) ✓ Workmanship guarantee protection (min 2 yrs) 	<ul style="list-style-type: none"> ✓ Deposit protection ✓ Workmanship guarantee protection (min 2 yrs) 	<ul style="list-style-type: none"> ✓ Deposits protected up to 25% of contract value (max £5,000) ✓ Workmanship guarantee protection (min 2 yrs) 	<ul style="list-style-type: none"> ✓ Deposits protected up to 25% of contract value (max £7,500) ✓ Workmanship guarantee protection (min 2 yrs)
What else does the body offer?	<ul style="list-style-type: none"> ✓ Safeguards for vulnerable consumers ✓ Optional wider payment protection (£6 charge) 	<ul style="list-style-type: none"> ✓ Safeguards for vulnerable consumers 	<ul style="list-style-type: none"> ✓ Safeguards for vulnerable consumers (inc. staff training) ✓ Members' staff must be trained in consumer protection 	<ul style="list-style-type: none"> ✓ Safeguards for vulnerable consumers (inc. staff training) ✓ Members' staff must be trained in consumer protection

Areas of concern: effectiveness of the standards landscape is at risk

- 5.12 Our assessment has found examples of good practice by standards bodies. For example, some provide detailed training and education materials for their member businesses about their obligations under consumer protection law, including how to address the needs of vulnerable consumers.
- 5.13 However, we have also identified several areas of concern. In particular, our assessment has found there are a number of areas where requirements vary between standards bodies. This variability in the level of protection creates the risk of inconsistency and insufficient levels of protection for consumers, depending on which standards body a business belongs to. We have identified the following four broad areas of concern which we cover in more detail below:
- The standards landscape is complex and confusing, with low consumer awareness.

- The level of protections from standards bodies varies in some areas, particularly compliance monitoring and communicating sanction decisions, leading to a risk of poor outcomes for consumers.
- Complaints management processes are unclear and confusing, with no simple route for people to raise complaints, making it hard for consumers to know how or to whom they should complain.
- Limitations of post-installation financial protections, such as insurance-backed guarantees (IBGs), if a business ceases to trade.

The standards landscape is overly complex and confusing

- 5.14 We found that the standards landscape is complex and fragmented and as a result is not working as effectively as it could for consumers.

Difficult for consumers to navigate the standards landscape

- 5.15 There are numerous standards bodies with different aims and remits which makes the landscape hard to understand and can be confusing for consumers.¹¹² Many stakeholders commented on the complexity of the standards landscape. This issue also came out of our consumer questionnaire responses and is supported by other research.¹¹³
- 5.16 The complexity of the standards landscape is compounded as businesses are often members of multiple standards bodies, depending on the products they sell and/or whether they install products under a government scheme. This can make it difficult for consumers to differentiate between standards bodies, understand the protections they afford and how much weight to put on a business's membership, which can mean that they miss out on the benefits.
- 5.17 Further, some standards bodies, and therefore protections, cover only green heating products or insulation. This adds another layer of complexity, for example, if a consumer purchases insulation before installing a heat pump.

¹¹² The 2016 [Each Home Counts](#) independent review of consumer advice, protection, standards and enforcement for home energy efficiency and renewable energy measures in the UK concluded that 'the myriad schemes, brands, certification bodies and organisations operating across the energy efficiency and renewable energy sector give a confusing, even bewildering picture for the consumer'.

¹¹³ For example, Citizens Advice (2021) [The net zero protections puzzle. Helping people piece together home energy improvements](#); MCS (2022) [Consumer research in the microgeneration sector](#).

Low consumer awareness of standards bodies

- 5.18 Consumer research shows that people generally have a poor understanding of standards bodies, who they are and what they do and might only become aware of them if things go wrong. For example, 85% of respondents to an [MCS commissioned consumer survey](#) said they had never heard of MCS and 67% had never heard of TrustMark.¹¹⁴
- 5.19 A lack of understanding and clarity about different standards bodies can make it hard for consumers to choose a trusted business, particularly if they are not aware that standards bodies offer additional safeguards. As set out in chapter three, the hassle of finding a reputable, qualified business can put some people off from buying products. Alternatively, lack of understanding might lead some people to choose not to go with a business that is a member of a standards body and lose out on valuable additional protections as a result.

Negative impacts on the consumer experience due to a fragmented landscape

- 5.20 The fragmented nature of the standards landscape negatively impacts the consumer experience in other ways. For example, information about product installations is recorded by standards bodies on separate databases, such as the TrustMark Data Warehouse and the MCS Installation Database (MID).¹¹⁵ This information is also held by Competent Person Schemes/Local Authority Building Control teams for Building Regulations notification purposes.¹¹⁶
- 5.21 Subject to competition law and data protection considerations, better sharing of aggregated, anonymised data between standards bodies about green heating and insulation product installations would help to enhance the consumer experience. It would allow standards bodies to draw on a larger dataset to inform improvements to their schemes. If made public, it would also allow consumers to access a comprehensive source of information about product installations in their property.¹¹⁷

¹¹⁴ MCS (2022) [Consumer research in the microgeneration sector](#).

¹¹⁵ Any work completed by a TrustMark registered business on a property under government funding schemes has to be lodged on the Data Warehouse. For the period January 2020 to June 2022 half a million properties with retrofit measures were lodged in the Data Warehouse and 1 million measures were installed in those properties.

¹¹⁶ The MCS MID is a central online database that holds the information of every MCS certified green heating installation in the UK since October 2008.

¹¹⁷ For example, UK government is currently considering proposals for TrustMark's Data Warehouse to support sector-led initiatives for consumers to access a 'log book' about energy efficiency improvements made to their property. TrustMark and MCS have expressed a willingness to facilitate improved data sharing, for example through a data sharing agreement.

Varied levels of compliance monitoring

- 5.22 Standards bodies typically set minimum requirements for monitoring to ensure member businesses are compliant with relevant competency and quality standards. This approach allows flexibility in the level of monitoring depending on the risks presented by a particular member.
- 5.23 We agree with a proportionate risk-based approach, linked to the potential harm the activities of a member business pose to consumers. But it is important that the minimum requirements are set at a sufficiently robust level and that standards bodies do not simply default to these.¹¹⁸ If standards bodies' monitoring is not sufficiently robust, they risk providing lower levels of protection to consumers (see paragraph 5.27).

Onsite inspections of installations

- 5.24 We found considerable variation in the approach taken by standards bodies to onsite inspections of member business installations, eg relating to:
- the minimum frequency and number of inspections - some standards bodies adjust inspections of a business's installations to reflect the risk posed by a member business, but others do not; and
 - the stage of the installation at which the onsite inspection takes place.¹¹⁹
- 5.25 Some stakeholders raised concerns that the minimum frequency and number of onsite inspections required by some standards bodies was too low and not always sufficiently driven by risk assessment, and about the way in which a member business's installations were chosen for inspection.
- 5.26 We also found that the level and type of information used to inform monitoring varies. Some bodies have more prescriptive requirements for collecting information from member businesses than others, and some standards bodies do not always collect customer feedback as part of monitoring practices. This is a potential missed opportunity to collect important feedback to inform a holistic assessment of business activities.¹²⁰

¹¹⁸ We recognise that the level of monitoring carried out by a standards body will likely have an impact on resourcing and costs. We have not assessed these factors in detail.

¹¹⁹ For example, PAS 2031 is risk-based and requires a percentage of a PAS 2030 certified business's installations of insulation products to be physically inspected each year (divided between pre, mid, and post onsite inspections), with the exact percentage (ranging from 3 - 10%) determined by the risk rating. MCS requires that certified installers undergo, at a minimum, one onsite property inspection per year of each type of green heating product deployed.

¹²⁰ For example, under the Boiler Upgrade Scheme, customer feedback is collected after the installation.

5.27 We note that MCS has recognised that there are weaknesses in its compliance monitoring regime and is planning to change how certification bodies carry out compliance checks. In particular, it plans more regular assessments and to focus more on assessing the quality of installations onsite and less on back-office systems and paperwork, which we welcome.¹²¹

Adequacy of monitoring practices

5.28 A number of stakeholders raised concerns that the processes used by some standards bodies to monitor member businesses are less robust than others. As well as creating potential inconsistencies in outcomes, there is a risk that less scrupulous businesses could gravitate towards a standards body with the least robust monitoring regime.

5.29 In particular, some stakeholders had concerns about the capacity and expertise of some standards bodies to carry out effective monitoring in relation to a member's compliance with:

- Technical competence standards: some stakeholders noted that there are challenges in recruiting assessors with the required experience and knowledge.
- Consumer protection obligations: concerns were raised that some standards bodies may be overly focused on the technical aspects of product design and installation without sufficient or equivalent consideration of consumer protection. Stakeholders noted that it was important that consumer protection was not overlooked.

Differences in publishing sanction decisions

5.30 Most standards bodies have a range of sanctions that they can impose on non-compliant members. However, we found there is considerable variation in their approach to communicating sanction decisions to consumers. We found that the overall level of communication is low, though standards bodies take different approaches.

5.31 For example, there are different approaches taken where a member business is expelled:

¹²¹ MCS (2022) [Consumer protection in small-scale renewables, research report and findings from MCS](#).

- One standards body told us that it always publishes the names of businesses whose membership has been terminated.
 - Some standards bodies said they only name businesses in limited circumstances at a specific stage of the sanctions process.
 - Other standards bodies said that they do not make public the names of member businesses who have been expelled.
- 5.32 Unless there are exceptional reasons not to do so, such as public interest concerns, we think it is important that standards bodies always make public that a member business has been expelled, suspended or subject to other disciplinary proceedings. This will help to ensure that consumers can make an informed decision before choosing to engage with a business, as well as helping to deter other businesses from poor practices.¹²²

Unclear and confusing complaints processes

- 5.33 Standards bodies require member businesses to deal with consumer complaints quickly and effectively. If the installing business fails to rectify the issue and/or the consumer is not satisfied, standards bodies will investigate the complaint and recommend a resolution.
- 5.34 Having procedures in place to investigate and provide remedy for complaints offers valuable protections to consumers. However, we found that the processes in the green heating and insulation sector are unclear and confusing.

Differing responsibilities leads to confusion and inconsistent consumer outcomes

- 5.35 Many stakeholders told us that consumers often have trouble when trying to escalate a complaint because they struggle to identify the appropriate organisation to contact. Consumers sometimes find themselves being ‘passed from pillar to post.’¹²³
- 5.36 If the installing business fails to rectify the issue satisfactorily, or ignores the complaint, the consumer is required to identify the appropriate standards body to refer their complaint to. However, this will differ depending on the

¹²² This is especially important given that businesses who have been expelled from a standards body can continue to engage with able to pay consumers, see paragraph 5.62.

¹²³ MCS has acknowledged the complaints management confusion in its [Consumer protection in small-scale renewables, research report and findings from MCS](#).

nature of the complaint, including whether it relates to technical issues, a business's behaviour (such as contract or information provision), or both.

- 5.37 This can place undue burdens on consumers to correctly diagnose the issue and then to determine which standards body to turn to. This is very difficult in practice given, as highlighted in chapter three, green heating products are unfamiliar to many people and they will likely have a limited understanding of whether the problem is, for example, predominantly technical in nature or a contractual issue.
- 5.38 The lack of clarity around responsibilities in the complaints process can also lead consumers to take a 'scatter gun' approach by contacting multiple standards bodies. This may prolong the start of the investigation by the right body as well as delaying implementation of the remedy.

'The installation was done badly and unsafely...The two trade associations involved refer our complaints backwards and forwards between each other and seem to have taken no meaningful action.'

Consumer, Bought solar, England

- 5.39 While the sector has developed guidelines about what types of complaint are managed by different standards bodies, there remains ambiguity in some areas. For example, as shown in Table 5.1, if a green heating product is not performing as expected, standards bodies might have overlapping responsibilities in investigating. Complaints can encompass a range of problems and so numerous standards bodies might be involved in investigating a single complaint. This is likely to compound confusion for consumers and in the worst case could deter them from raising an issue and seeing it through to resolution.
- 5.40 The overlapping responsibilities also create a risk that complaints will fall between standards bodies and/or are handled inconsistently.¹²⁴ Each standards body has its own procedure for complaints management and takes a different approach. There is no protocol for the co-management of cases which fall within the scope of multiple bodies. As a result, it can be difficult to provide consistent outcomes to common complaints in the sector.

¹²⁴ We note for example that MCS has said that feedback collected from consumers suggests there are far too many opportunities for complainants to 'fall between the gaps', with no one able to help them in certain situations. See MCS (2022) [Consumer protection in small-scale renewables, research report and findings from MCS](#).

Table 5.1: Example of standards bodies' overlapping responsibilities for investigating complaints where a green heating product is not performing as expected

<i>Type of issue</i>	<i>MCS Certification Body</i>	<i>Consumer code</i>
Under-performance of the system	X	X
System design	X	
Poor workmanship	X	
System installed was not what was agreed in the contract		X
Inaccurate performance estimate	X	X
Misleading information about the financial benefit of the product		X

Lengthy timescales

- 5.41 The involvement of multiple standards bodies with different remits can mean that complaints, particularly complex ones, take a long time to be resolved. In some cases, disputes are passed back and forth between standards bodies if there is disagreement about which organisation should lead on different issues. There is no target timescale for standards bodies to have completed investigations and issued a resolution within.
- 5.42 One stakeholder told us that complaint investigation timeframes is one of the main issues raised by consumers. It can sometimes take many months for a consumer to receive resolution.

'Issues with performance from installation in May [2]0...Constantly calling the installer & manufacturers technical line. After Christmas 2020, we escalated to a formal complaint. Then it got even harder to get a response. The company finally admitted they had installed the wrong size heat pump. [Certification Body] and [Consumer Code] involved [t]o settle the dispute New pump installed May 2021, had a fault in April 2022 [the business] said they would come out and take a look...- heard nothing...Contacted [the business] to raise a complaint - had no response, so escalated to [Certification Body] again - it took until September with the help of [Certification Body] to get our issues resolved.'

Consumer, bought heat pump, England

No clear and simple route for complaints

- 5.43 There is no clear and simple route for consumers to raise complaints given multiple standards bodies play a role in complaints management.

Stakeholders told us that the lack of oversight often results in communication challenges, prolonged investigation and confusion about who leads on respective matters.

- 5.44 MCS has said that it is planning to take a more active role in the management of consumer complaints and disputes.¹²⁵ In the interim, MCS told us that it has started to triage complaints it receives and to refer them to the relevant certification body and/or consumer code to investigate. We welcome these changes.
- 5.45 We also encourage the sector to give consideration to having a single oversight body for complaints management to help simplify and improve the consumer experience.

Providing practical redress for consumers

- 5.46 A standards body can recommend that the installing business carry out remedial works or provide redress following investigation of a complaint. Failure to comply can result in sanctions being brought against the business, including the prospect of membership withdrawal.
- 5.47 However, only a small number of standards bodies have mechanisms in place to remedy a consumer's complaint if the installing business repeatedly refuses to do so or is no longer a member of the standards body. (See also paragraph 5.53 in relation to the limitations of some IBGs). This is usually done through its own remedial team or by allocating a different member business to undertake the works.
- 5.48 This raises the prospect of some consumers having to deal with an inadequate product for some time and potentially never having the problem rectified. We think it is important that, where feasible, all standards bodies help to remedy a consumer's complaint where the member business refuses to do so or is no longer part of the standards body.

Limitations of financial protections where a business ceases to trade

- 5.49 Standards bodies often require member businesses to provide consumers with financial protection in case the business stops trading and is unable to honour the terms of their workmanship guarantee.¹²⁶ This can provide consumers with additional peace of mind that they will not be left without

¹²⁵ MCS (2022) [Consumer protection in small-scale renewables, research report and findings from MCS](#).

¹²⁶ On top of the installer's workmanship guarantee, the product manufacturer will typically provide a guarantee to repair or replace a faulty item for a certain period of years.

recourse and/or a potentially large bill to rectify any problems. These protections are likely to be particularly important given that most installers in the sector are small businesses (see chapter two).

- 5.50 However, our assessment found there can be significant limitations in some of these financial protections, such as IBGs. In particular, they can be limited in scope and contain important caveats and exclusions that consumers may not expect.

Insurance-Backed Guarantees have unexpected exclusions

- 5.51 Some standards bodies require member businesses to provide IBGs - an insurance policy that covers the original workmanship guarantee provided by the business. If the business is no longer trading, a consumer can make a claim under the IBG for any defects/problems relating to workmanship. If on inspection the insurer determines that the claim falls within the coverage of the IBG, it can arrange another business to carry out works or provide compensation to the consumer.
- 5.52 IBGs can therefore provide important financial protection. However, we found that their level of cover can vary between businesses, depending on which insurance provider they use, and between standards bodies. Some standards bodies allow member businesses to choose an insurance provider for the IBG whereas another standards body stipulates that members have cover with a particular provider.
- 5.53 A number of stakeholders raised concerns about the limitations of IBGs and that consumers were not always made aware of important exclusions. The limitations of some IBGs include:
- Only covering the quality of workmanship as the IBG mirrors the terms of the original guarantee from the business. In this case the IBG would not extend to defects in the design and sizing of products or where products have been mis-sold to a consumer (such as being misled about any performance or efficiency claims – see chapter four). Where a business has stopped trading, the consumer may therefore have limited avenues for remedying such problems.¹²⁷
 - IBGs may be considered invalid by an insurer if the consumer fails to register it within the designated time period and/or cannot submit certain

¹²⁷ For example, the consumer may have to seek redress for a design issue through the business's Professional Indemnity insurance.

documentation. Often the consumer is reliant on these requirements being clearly explained and set out to them by the business.

- Allowing the insurer to make a compensation payment to the consumer rather than carry out works to fix the problem. This could potentially leave the consumer in difficulties eg if their heat pump does not work they may be left without heating until they can find a business which can repair the system (which will require additional effort by the consumer).
- 5.54 More generally, some stakeholders highlighted that IBGs only apply if a member business ceases to trade, and do not help consumers in other circumstances - for example, where the member business refuses to remedy a problem or no longer belongs to the standards body. (See also paragraph 5.47).
- 5.55 Some standards bodies told us that they are looking at alternative mechanisms to IBGs to address these gaps, such as the use of discretionary funds. In particular, MCS is considering the role a remedial 'fund of last resort' could play in addressing problems that the installer business cannot, or will not, fix to tackle what it sees as the limitations and weaknesses of IBGs.¹²⁸
- 5.56 We welcome MCS's proposal as a way of addressing some of the perceived limitations of IBGs. **We would encourage standards bodies to carry out an assessment of the financial protection mechanisms they currently provide to consumers to ensure that they are fit for purpose.**¹²⁹ **We also think there is value in further consideration of the remedial fund or equivalent options by the sector, to help address the issues with IBGs we have identified.**

Deposit protections are not always adequate

- 5.57 Some standards bodies also require member businesses to provide deposit protection insurance to protect consumer deposits if they cease to trade. Our assessment found that some of these policies are time limited to between 60 to 120 days from the date the deposit was paid, after which the consumer

¹²⁸ Another standards body, the Installation Assurance Authority, told us that its own guarantee protects consumers not only if a member business ceases to trade but also where the member fails to honour its obligations and address failures in materials or workmanship. The IAA will step in if the member business does not engage and remedy the failures within 2 months of notification.

¹²⁹ Where standards bodies are part of the TrustMark scheme, we would also encourage them to submit their financial protections for review and approval by TrustMark's independent Financial Oversight Panel. The Panel provides a register of 'approved' financial protection mechanisms for use within the TrustMark scheme.

must contact either the insurer or installer business to request an extension of the cover period (the granting of which is at the insurer's discretion).

- 5.58 Some stakeholders noted that these deposit protection insurance policies had not evolved to reflect current conditions - longer lead times on products and materials has extended the time a deposit could be held before work can commence.¹³⁰ We also found that some deposit protection insurance policies may not cover advance payments beyond the deposit.

Emerging risk: gaps in protection for able to pay consumers

- 5.59 As well as looking at existing issues, we have considered potential, forward-looking risks as the sector continues to grow. We found emerging concerns that 'able to pay' consumers (who self-fund their purchase) have lesser protections than people who use government schemes. As demand grows and more able to pay consumers buy green heating and insulation products, an increasing number of consumers will be less protected.
- 5.60 Anyone buying green heating and insulation products should have the same level of confidence that they are protected, regardless of how they fund the purchase.
- 5.61 However, as outlined earlier in this chapter, businesses that sell and install green heating and insulation products are not required to belong to a standards body unless they operate through a government funding scheme.¹³¹ This means that able to pay consumers may choose a business that is not a member of a standards body.
- 5.62 Able to pay consumers who buy from a business that does not belong to a standards body are not guaranteed the same technical standards (for installation, design and products) or protections. Low consumer awareness about the protections standards bodies offer and unfamiliarity with installer businesses (see chapter three) may increase the risk that able to pay consumers choose an uncertified installer. The risk is further exacerbated by

¹³⁰ A number of stakeholders told us that supply chain pressures mean that there are currently long lead in times between the consumer signing a contract and starting installation. This has led to businesses sometimes requesting adjustment of the original contract to take account of cost increases and/or because they have been unable to secure the intended product brand or model.

¹³¹ For example, TrustMark registration is mandatory for all firms doing work under ECO, while the Boiler Upgrade Scheme and Smart Export Guarantee scheme require that firms installing green heating systems are certified by MCS or an equivalent body.

the ability of businesses to engage with able to pay consumers even if they have been expelled by a standards body for serious non-compliance.¹³²

- 5.63 A number of stakeholders contrasted this to the gas home heating sector where all engineers are required to be Gas Safe registered. Some stakeholders suggested that consideration should be given to making it mandatory for all businesses in the green heating and insulation sector to be part of a standards body to ensure they are meeting the same standards.

Industry and policy developments to support able to pay consumers

- 5.64 We are aware of industry and policy developments that may help to address some of the gaps in protection for able to pay consumers including:
- Some standards bodies have introduced new membership schemes specifically aimed at businesses carrying out work for able to pay consumers. These require businesses to meet minimum technical standards of competency without the need to be PAS-certified.¹³³
 - Several green financing products from mainstream lenders are coming onto the market to support consumers to fund the upfront costs of green heating and insulation products.¹³⁴ Some of these require the consumer to use an installer business that belongs to a standards body, as a way of reducing the lender's risk.¹³⁵
 - Some large businesses moving into the sector are deploying business models that directly employ installer businesses or use preferred installers who are MCS-certified, or by certifying with MCS to oversee an 'umbrella scheme'.¹³⁶
 - UK government is consulting on plans to put obligations on manufacturers of fossil fuel heating appliances (eg boilers) to sell a specified number of heat

¹³² We also found that some standards bodies do not publicise the names of businesses who have been suspended or expelled, or only do so in limited circumstances, leaving consumers in the dark about businesses they may want to avoid. See paragraph 5.29.

¹³³ TrustMark has introduced a 'Licence Plus' scheme to work alongside PAS 2035 to support adoption of its key principles and the IAA has an Able to Pay scheme. These schemes are primarily aimed at businesses that install single lower-risk and simple energy efficiency measures.

¹³⁴ In May 2023 DESNZ announced £4.1m of funding to support a range of green finance projects, including trials of mortgage products to encourage consumers to make their properties more energy efficient. DESNZ [Mortgage rate cut for energy efficient homes under government-backed trials](#) (accessed 22 May 2023).

¹³⁵ For example, Barclays customers with an existing mortgage who want help with the cost of adding green heating or insulation measures to their home are eligible for a 'Greener Home Reward' of up to £2,000 if the work is carried out by a TrustMark registered business. The Coventry Building Society offers a similar 'Green Together Reward' to mortgage customers who have spent at least £2,500 on eligible changes with a TrustMark registered business.

¹³⁶ Under the MCS 'umbrella scheme' a business provides design and installation services to consumers through sub-contractors but is responsible for ensuring that the sub-contractors employed are compliant with the MCS standards.

pumps. Under the proposed plans, these will need to be installed by a business certified by MCS (or another scheme deemed equivalent to MCS in future) to count against the target.¹³⁷

- 5.65 Some stakeholders highlighted that consumers in new build properties with green heating products installed by the developer are at risk of falling through gaps in protection, as developers are not required to use MCS-certified installers.
- 5.66 We understand that where a homeowner moves into a new build property in which green heating products have been installed by the developer, there may be requirements under some warranty and insurance schemes for the developer to use an MCS-certified installer.¹³⁸ We note that UK government plans to introduce the Future Homes Standard (FHS) for new build homes. The FHS will require new build homes to be installed with low carbon heating and high levels of energy efficiency from 2025.¹³⁹

Lack of access to Alternative Dispute Resolution for able to pay consumers

- 5.67 We are concerned that able to pay consumers who use a business that is not a member of a standards body do not have the same level of protections, particularly if something goes wrong. They are likely to have fewer options in terms of pursuing complaints (outside of court) and, where needed, accessing ADR.
- 5.68 ADR is a process that enables disputes between a consumer and business to be settled through an independent mechanism, outside the court system, that is usually free to the consumer. ADR can take various forms such as adjudication, mediation or conciliation and the outcome is generally binding on the business.
- 5.69 Most standards bodies offer consumers access to an approved ADR scheme when the consumer and member business have failed to resolve a dispute themselves and need the input of a third party. The intervention of a third party can save consumers from financial loss and the stress and anxiety of a protracted dispute. It is also generally lower in cost to businesses than having to go through the courts.

¹³⁷ DESNZ (2023) [Clean Heat Market Mechanism](#).

¹³⁸ For example, for a new build home to benefit from the National House Building Council's (NHBC) warranty and insurance cover, registered builders and developers must comply with the [NHBC Standards](#). These standards require green heating products and installers to be certified by MCS or a suitable alternative certification body.

¹³⁹ UK government intends to consult on the Future Homes Standard in 2023.

- 5.70 However, where a business does not belong to a standards body, it is voluntary for them to participate in an ADR scheme. BEIS research suggests that for sectors where participation is voluntary there is little engagement, particularly among SMEs, and that participation rates are as low as 3% in some sectors.¹⁴⁰
- 5.71 Access to ADR is especially important in this sector, where low consumer understanding of green heating and insulation products may mean that consumers are poorly equipped to challenge a business. Unresolved problems can also have a significant impact – for example, a problem with the installation of a heat pump may be expensive to fix and mean the consumer has no heating in their home.
- 5.72 A number of stakeholders highlighted the importance of ADR in the sector and that it should be mandatory for all businesses to be members of an approved ADR scheme. Some stakeholders also suggested that there should be a single, straightforward process for accessing ADR in the sector to help simplify the experience for consumers.
- 5.73 In 2021 UK government consulted on whether to make ADR mandatory in the home improvements sector, having identified it as the second highest for consumer detriment.¹⁴¹ In its response to the consultation, UK government noted it planned to work with the Ministry of Justice (MoJ) to inform policy development. It also set out its intention to require all businesses that offer dispute resolution services to be approved and to strengthen the existing framework to improve the quality and reliability of ADR.¹⁴² These reforms to strengthen ADR are being taken forward in the [Digital Markets, Consumer and Competition Bill](#). In parallel, the MoJ has put forward proposals to increase the use of mediation once a dispute has reached the small claims court in England and Wales.¹⁴³
- 5.74 We welcome UK government's focus on this issue. We propose that UK government should further consider making business participation in approved ADR schemes mandatory in the green heating and insulation sector. It is important that all consumers have access to an approved ADR scheme if they cannot solve a dispute with a business directly, given:
- the importance of the sector to meeting Net Zero;

¹⁴⁰ BEIS (2021) [Reforming Competition and Consumer Policy](#).

¹⁴¹ BEIS (2021) [Reforming Competition and Consumer Policy](#).

¹⁴² BEIS (2022) [Reforming competition and consumer policy: government response](#).

¹⁴³ MoJ (2022) [Increasing the use of mediation in the civil justice system](#).

- the likely risks arising from people's unfamiliarity with these products;
- the significant potential detriment to consumers if they have an unresolved problem; and
- the gaps in protection we have highlighted.

Conclusion: strengthening the standards landscape

5.75 To help ensure that consumers have the necessary confidence and trust that they are protected, it is vital that there are robust and consistently high standards of quality, customer care and business competency, and that these are effectively monitored and enforced.

5.76 However, we have found that the standards landscape is not working as well as it could for consumers. We have identified several concerns which risk undermining the effectiveness of the landscape and where improvements would benefit consumers, including:

- Simplifying the standards landscape to make it easier for consumers to navigate.
- Tackling differences in compliance monitoring and communication of sanction decisions to ensure higher, consistent levels of protection.
- Simplifying confusing complaints processes so that consumers are clear on how to raise complaints and have confidence these will be dealt with effectively and in a timely manner. We welcome sector-led developments to move toward a simpler process.
- Addressing the limitations of post-installation financial protections (in particular IBGs).
- Addressing emerging gaps in protection for able to pay consumers, particularly by providing access to approved ADR schemes.

5.77 From our engagement with standards bodies, there is a general willingness to find ways to simplify the landscape to make it work better for consumers. We have developed a set of five good practice principles for standards bodies to help address some of the concerns we have identified and help produce better outcomes for consumers in this sector as it grows. We will continue to engage with standards bodies to help implement these.

5.78 In addition, we think that there would be significant benefit in UK government considering carrying out a broader, holistic review of the standards landscape to look at how it can be simplified and further improved in the areas of concern we have identified. This is especially important given the sector is expected to grow and become more important to consumers, businesses and the wider UK economy over time. In particular, consideration should be given to the role of ADR across the sector and making this mandatory for businesses, to help address the emerging gap in protections for able to pay consumers.

Good practice principles for standards bodies

5.79 The five good practice principles we have developed set out some practical steps that standards bodies can take in key areas. They are not meant to be exhaustive. We recognise that standards bodies may take different approaches to applying the principles. We have summarised the principles below – [they are set out in further detail in a separate document](#).

5.80 Standards bodies should be mindful that they also need to comply with applicable consumer protection law, the CPRs in particular. The principles do not replace those obligations, but they have been formulated with those obligations in mind and are designed to supplement and complement them. Applying the principles should help standards bodies stay on the right side of the law. Further details are provided in the principles document.

5.81 We are calling on standards bodies to review their current practices against the principles and, where necessary, implement any changes to meet them. We will continue to engage with standards bodies to help take forward and embed these principles.

5.82 The five principles cover the following areas:

1. **Effective promotion:** Standards bodies to actively promote their activities to help ensure consumers understand their scope and purpose and the benefits of using a member business.
2. **Robust vetting and monitoring:** Standards bodies to conduct robust compliance checks on applicants and, on an ongoing basis, their members to ensure they meet (and continue to meet) requirements.
3. **Smooth dispute resolution:** Standards bodies to actively oversee and assist consumer complaints and dispute resolution to make the process as straightforward as possible and to help parties reach a resolution in a timely manner.

4. **Effective use of sanctions:** Standards bodies to ensure that any potential non-compliance is investigated and dealt with as effectively, impartially and quickly as possible. Where appropriate, a sanction decision will be communicated to consumers.
5. **Strong financial protections:** Standards bodies to ensure that consumers' deposits and guarantees are effectively protected and the terms of these protections are made clear to consumers.

6. Conclusions and next steps

- 6.1 Green heating and insulation products are increasingly important in the context of the rising cost-of-living and meeting Net Zero. However, without consumer confidence, there is a risk people are put off from buying these products and progress toward Net Zero is slowed. Consumer engagement is also needed to drive effective competition between businesses, to spur greater innovation and better consumer outcomes.
- 6.2 It is therefore critical that people can trust businesses to treat them fairly and are protected from harmful practices. Businesses also need to comply with their legal obligations, which will help drive consumer trust and confidence.
- 6.3 We focused on three themes to better understand consumer protection in the green heating and insulation sector. We have found that while there is evidence of people having positive experiences of buying green heating and insulation products, of good business practices and protections for people, we have identified several areas of concern in each theme. We also found emerging risks which could develop in future if not considered early on.

Addressing our concerns: key actions and next steps

- 6.4 We have taken several actions as part of this work to help tackle the key issues we found in each of the three themes:
 - a) **Theme one: People's experience of buying green heating and insulation products** – to help address difficulties with accessing clear, trustworthy and digestible information to inform key decisions, **we have produced a consumer guide** to help people consider the key issues and better understand their rights and protections when buying these products.
 - b) **Theme two: Business practices in the sector** – we identified concerns about some businesses making misleading claims about products and greenwashing, as well as about limited transparency of price information. Throughout this report, we have set out **what we think businesses need to do to stay on the right side of the law for the areas of concern we found. We urge businesses to review their practices against these.**
 - c) **Theme three: The standards landscape** – we found that the landscape is complex and confusing for people to navigate. Some aspects need strengthening to better safeguard consumers (eg monitoring, complaints management and financial protections). We have **developed good practice principles for standards bodies** to help raise the level of protections and

produce better outcomes for consumers. Going forward, we will engage with standards bodies to help implement these principles.

We also identified an emerging risk that able to pay consumers have fewer protections, particularly that they are at risk of not having access to ADR.

- 6.5 We will carry out further work on misleading claims in the sector – considering product benefit claims and greenwashing. We intend to develop guidance to help businesses to comply with their legal obligations. We will also consider whether further action, such as enforcement, is necessary.
- 6.6 We have also identified actions for others to help ensure that people are protected and treated fairly and that businesses are meeting their legal obligations. The box below summarises the steps we think are needed.

Action to help improve people's experience:

For governments across the UK

- We welcome work being undertaken by governments to provide centralised information and advice services for consumers. While these are at differing stages of development, we strongly urge each government to prioritise these.

For UK government

- We support and encourage UK government to push on with pilots to provide tailored services to potentially vulnerable consumer groups.

Action to improve business practices: for businesses

- We strongly encourage businesses to review their practices in the light of this report to help ensure they are on the right side of the law.

Action to help strengthen and make the standards landscape more effective:

For standards bodies

- Review practices against the good practice principles and where necessary, implement any changes to meet them – with our support.

For UK government

- We propose that UK government consider making participation in approved ADR schemes mandatory for businesses in this sector.
- There would also be significant benefit in UK government considering carrying out a broader, holistic review of the standards landscape to look at how it can be simplified and further improved in the areas of concern we have identified.

- 6.7 We will continue to engage with stakeholders – particularly, standards bodies and governments across the UK – to progress these actions and further strengthen consumer protection in the green heating and insulation sector, including by engaging with UK government’s Energy Efficiency Taskforce. We will also observe developments in the sector over time and as it grows. If we identify further or additional issues, we will consider intervening.

Appendix A: List of stakeholders who responded to our call for information

Advertising Standards Authority	QASS Ltd
British Occupational Hygiene Society	RB&M
Chartered Trading Standards Institute	Renewable Energy Association
Citizens Advice	Renewable Energy Assurance Limited
Consumer Council for Northern Ireland	Royal Institution of Chartered Surveyors
Consumer Friend	Safe World Insurance Group UK Ltd
E3G	Suffolk County Council
EcoEnergy Ltd	The Heating Hub
Energy and Utilities Alliance	The Home Insulation and Energy Systems Contractors Scheme
Energy Saving Trust	The Insulation Assurance Authority
Energy Systems Catapult	The National Association of Professional Inspectors and Testers
Ground Source Heat Pump Association	Thermal Storage UK
Heart of The South West Trading Standards	Toynbee Hall
Heat Pump Association	Trading Standards Scotland
Heat Pump Federation	Trading Standards South East
Microgeneration Certification Scheme Charitable Foundation	Trading Standards Wales
Microgeneration Certification Scheme Service Company Limited	TrustMark
National Consumer Federation	Twinn Sustainability Innovation
National Insulation Association	United Kingdom Accreditation Service
National Open College Network	University of Exeter Energy Policy Group
Oil Firing Technical Association Ltd	West Yorkshire Joint Services
Ombudsman Services	Which?

Appendix B: Key standards bodies in the green heating and insulation sector

1. This appendix summarises the role of the main standards bodies in the green heating and insulation sector.

Standards bodies for green heating products

Microgeneration Certification Scheme (MCS)

1. **MCS** is a standards body that works with industry to create and maintain technical competency standards that allow for the certification of green heating products, installers and their installations. MCS has over 3,400 businesses that are certified.
2. MCS's Certification Scheme for installers is delivered by six independent **certification bodies**, who are responsible for assessing and certifying installers against the Standards to ensure that they are technically competent. Certification bodies must be approved (accredited) by **UKAS**, the UK's National Accreditation Body, to perform certification.

CTSI-approved consumer codes

3. MCS requires certified-installers to be a member of one of the two **consumer codes** in the sector which have been approved by the Chartered Trading Standards Institute (CTSI) under its [Consumer Codes Approval Scheme](#), namely the **Renewable Energy Consumer Code (RECC)** or **The Home Insulation and Energy Systems Quality Assured Contractors Scheme (HIES)**.¹⁴⁴ Approved codes aim to strengthen consumer protection by delivering higher customer standards. Members are required to go above and beyond minimum consumer law obligations, including abiding by high standards of consumer protection in areas such as pre-contractual information, deposits, contracts and after-sales service, and by providing access to a clear complaints and Alternative Dispute Resolution procedure. Consumer codes monitor and enforce these standards.
4. It is a requirement of a number of government funding schemes that businesses that install green heating products must be MCS-certified (or equivalent), including under the Boiler Upgrade Scheme (which covers England and Wales), the Smart Export Guarantee scheme in Great Britain, and the Home Energy Scotland Grant/Loan scheme.

¹⁴⁴ RECC has around 2,730 members and HIES approximately 640 members.

Flexible Energy Oversight Registration Body

5. The **Flexible Energy Oversight Registration Body** (Flexi-Orb) is a registration body that operates a range of schemes for businesses covering green heating products and installation. It has developed a certification scheme for installers which sets out minimum standards in the design, installation, and handover of home solar products, which is currently being assessed by UKAS.

Standards bodies for home insulation products

6. The **BSI** publishes **PAS 2035/2030** standards for retrofitting dwellings for improved energy efficiency through the use of insulation and other energy efficiency measures. **PAS 2035** covers how to assess dwellings for retrofit, identify improvement options, design and specify Energy Efficiency Measures (EEM) and monitor retrofit projects. Meanwhile, **PAS 2030**, which was redeveloped in conjunction with **PAS 2035**, covers the installation, commissioning, and handover of retrofit projects. The documents are published as a single standard.
7. There are a number of **certification bodies** that certify insulation installers against the PAS 2030 standard, including the Installation Assurance Authority and NAPIT. These certification bodies are accredited by UKAS. There are provisions for certification bodies to assess an installer's technical competency and understanding of the installation of energy efficiency measures and to monitor the quality of their installations against the PAS 2030 standard.¹⁴⁵
8. Although it is not a requirement under the PAS, some certification bodies may also offer additional consumer protections for insulation measures, such as workmanship guarantees that also apply where the installer ceases trading,¹⁴⁶ and access to Alternative Dispute Resolution (either directly through the certification body, or via TrustMark where a certified business is a member).
9. Installers must be certified to the appropriate PAS 2030 standard to take part in government-funded energy efficiency schemes in England, including the Energy Company Obligation (ECO) and Home Upgrade Grant (HUG).
10. There are also a number of bodies that provide approval for insulation product systems (for example, cavity wall systems) following a testing, assessment and approval process.

¹⁴⁵ The provisions which govern how certification bodies assess and monitor installers are contained in PAS 2031.

¹⁴⁶ Where PAS 2030 work is done under government funding schemes, the funding scheme itself may require financial protection to be provided.

Standards bodies for both green heating and insulation products

11. Some standards bodies cover both green heating and insulation products.

TrustMark

12. **TrustMark** is the Government Endorsed Quality Scheme in the UK covering home improvements in or around the home. It aims to provide assurance that registered businesses carry out work to an approved standard.
13. TrustMark works through a network of licensed operators (known as 'scheme providers') to deliver its scheme. Certification bodies and consumer codes are licensed operators in the green heating and insulation sector and commit to ensuring their registered businesses maintain required standards of technical competence (including being MCS certified for green heating products and PAS certified for insulation products), customer service and trading practices.¹⁴⁷
14. A number of Government funded energy efficiency schemes require businesses to be registered with TrustMark to demonstrate compliance with the PAS 2035 best practice standard and to ensure a sufficient consumer protection process and guarantees are in place - for example, the Energy Company Obligation (ECO) scheme in Great Britain. The Home Energy Scotland Grant/Loan scheme for installing certain insulation measures also requires businesses to be registered with TrustMark.

Competent Person Schemes (CPS)

15. For some types of building work,¹⁴⁸ the installation of certain types of services or fittings (for example, the replacement of a boiler with a green heating product or the installation of cavity wall insulation) registered businesses working under a [CPS](#) in England and Wales can self-certify that their work complies with the Building Regulations. If building work is carried out under a competent person scheme, there is no need to submit a building notice or an initial notice or to deposit full plans for that work.
16. CPS are accredited by UKAS. As well as requiring installers to demonstrate that they meet the relevant minimum competence requirements, CPS also provide financial protection for consumers where work is found not to comply with the Building Regulations but the registered installer has ceased to trade.

¹⁴⁷ The TrustMark [Code of Conduct](#) and [Customer Charter](#) set out the standards expected from TrustMark registered businesses.

¹⁴⁸ Building work includes erecting or extending a building, providing or extending a controlled service or fitting in or in connection with a building, and the material alteration of a building or a controlled service or fitting.

17. The Building Safety Regulator oversees the CPS.¹⁴⁹
18. Scottish Government also operates [approved Certifiers of Construction schemes](#) allowing self-certification of certain aspects of construction forming part of a building warrant application as complying with building regulations. The procedures for obtaining a building warrant in Scotland and submitting a completion certificate do not apply to certain defined types of work. Whilst certificates of construction can only be issued where the work requires a building warrant, members of such schemes are required to demonstrate their relevant competence.

Trusted trader schemes

19. There are also 'trusted-trader' type schemes that span multiple sectors, including the green heating and insulation sector. Such schemes include: Checkatrade; Which? Trusted Traders; Rated People and local authority 'Buy with Confidence-type' schemes. These schemes offer varying degrees of quality assurance and protection.

¹⁴⁹ The Building Safety Regulator (BSR) is an independent body established by the Building Safety Act, 2022, and is part of the Health and Safety Executive (HSE).

Glossary

Advertising Standards Authority (ASA)	The UK's independent advertising regulator.
Air Source Heat Pump (ASHP)	A type of heat pump that draws heat from outside air to heat a property.
Biomass boiler	Works in a similar way to a standard gas boiler but uses a renewable material such as wood pellets as fuel.
Bundling	Selling different items ie products and services, together as a package.
Carbon emissions	The release of all greenhouse gases which are harmful to the environment.
Certification body	An organisation that assesses an installing business's compliance with standards.
Citizens Advice	National association of Citizens Advice Bureaux – charity offering independent advice online, via phone and in person.
Competition and Markets Authority (CMA)	The UK's primary competition and consumer protection authority. Helps people, businesses, and the UK economy by promoting competitive markets and tackling unfair behaviour.
Consumer code	A Chartered Trading Standards Institute (CTSI) approved code of practice. Member businesses must comply with standards relating to consumer protection and customer service.
Chartered Trading Standards Institute (CTSI)	Runs the Consumer Codes Approval Scheme and produces guidance for businesses about how they can comply with their consumer protection legal obligations and treat consumers fairly.
Department for Business and Trade (DBT)	A ministerial department of UK government created in 2023, responsible for supporting businesses to grow and export and creating jobs and opportunities across the country.
Department for Business, Energy & Industrial Strategy (BEIS)	Former UK government department responsible for business, energy and industrial strategy policy including the overall responsibility in government for achieving Net Zero. In 2023 BEIS was split into the Department for Business and Trade and the Department for Energy Security and Net Zero.
Department for Energy Security and Net Zero (DESNZ)	A ministerial department of UK government created in 2023, responsible for delivering security of energy supply, ensuring properly functioning energy markets and encouraging greater energy efficiency (amongst other matters).
Energy Savings Trust (EST)	An organisation that promotes energy efficiency and clean energy solutions and provides information and advice about green heating and insulation products to consumers.
Energy Performance Certificate (EPC)	A rating of the energy efficiency of a building.
Green heating products	Low-carbon systems that provide heat, power and/or hot water to homes – covering biomass boilers, heat pumps, solar products.

Ground Source Heat Pump (GSHP)	A type of heat pump that provides heat from pipes buried in the ground to a property.
The Home Insulation and Energy Systems Quality Assured Contractors Scheme (HIES)	A CTSI-approved consumer code and an approved TrustMark Scheme Provider.
Home Energy Scotland (HES)	Funded by Scottish Government and managed by Energy Saving Trust. HES helps people in Scotland create reduce their energy bills, and lower their carbon footprint.
Hydrogen-capable boilers	A boiler which is technically identical to a standard gas boiler but marketed as able to operate with hydrogen gas.
Installation Assurance Authority (IAA)	A Certification Body that assesses businesses against MCS and TrustMark standards. An approved TrustMark Scheme Provider.
Insurance Backed Guarantee (IBG)	A financial protection which allows consumers to invoke the terms of a workmanship guarantee provided by an installing business should it stop trading (within the timeframe of the guarantee period).
Home insulation	Helps reduce heat loss from a property and can be applied under the roof, in the loft, in the gap between cavity walls and on external walls, among other areas.
Microgeneration Certification Scheme (MCS)	Sets standards for the certification of certain green heating products and their installation. MCS certification is required to deploy products under certain UK government funding schemes.
National Association of Professional Inspectors and Testers (NAPIT)	A certification body that assesses businesses against MCS and TrustMark standards. An approved TrustMark Scheme Provider.
Natural gas	The primary fuel source used in the gas network. It is comprised of methane, propane and butane and contributes to carbon emissions when burnt.
Net Zero	A target of zero overall greenhouse gas emissions across an economy or for a company, ie when the amount released into the atmosphere is equal to the amount sequestered (taken in) by various methods. UK Government has committed to Net Zero emissions across the UK by 2050.
Renewable Energy Consumer Code (RECC)	A CTSI-approved consumer code and an approved TrustMark Scheme Provider.
Solar panels	Solar photovoltaic panels that use energy from the sun to create electricity.
Solar thermal	A system which uses energy from the sun to heat hot water.

Standards body	An organisation that sets quality and consumer protection standards certifies or accredits businesses against those standards and/or monitors compliance by businesses in the green heating and insulation sector.
Standard gas boiler	A gas boiler which is technically capable of taking up to 23% hydrogen and is gas safety registered. A standard gas boiler is not marketed in terms of its environmental impact or ability to run on hydrogen.
Trading Standards	A network of local and national offices responsible for enforcing a wide range of legislation, including on consumer protection.
TrustMark	A quality scheme for work carried out in or around the home. Endorsed by UK government.
Warranty	Cover/protection provided by a product manufacturer which guarantees the quality, durability and reliability of a product for a specified period of time.
Which?	A consumer representative organisation. Its functions include raising awareness of consumer rights and offering independent advice.
Workmanship guarantee	A protection provided by a business to a consumer which guarantees the quality of workmanship related to the installation of a product for a specified period of time.